

Reports of the
UNIVERSITY OF CALIFORNIA
ARCHAEOLOGICAL SURVEY

NO. 68, PART III

ETHNOGRAPHIC NOTES ON CALIFORNIA INDIAN TRIBES
III. ETHNOLOGICAL NOTES ON CENTRAL CALIFORNIA
INDIAN TRIBES

C. Hart Merriam

Compiled and Edited by Robert F. Heizer

University of California Archaeological Research Facility
Department of Anthropology
Berkeley
December 1967

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PART I. ETHNOGRAPHIC NOTES ON CALIFORNIA INDIAN TRIBES

PART II. ETHNOLOGICAL NOTES ON NORTHERN AND SOUTHERN
CALIFORNIA INDIAN TRIBES

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ETHNOLOGICAL NOTES ON CENTRAL CALIFORNIA INDIAN TRIBES

WINTOON

Field Work Among the Wintoon, 1903

Nomenkla, Stony Ford, Colusa County

On June 20, 1903, I visited the Stony Ford rancheria which is in dense chemise chaparral, intermixed with plenty of smoke brush (Ceanothus cuneatus), on a knoll north of the river, at the foot of a chaparral covered spur from Mt. St. John, about two miles west of Stony Ford settlement. The rancheria consists of four houses and an earth covered sweat house, about twenty feet long and twelve feet high, with a small entrance on one end through which I crawled on my hands and knees. The fireplace is in the middle.

The chief, Pum-muk-ky, told me that when they catch cold in the winter, they go in and build a fire and sleep there all night.

The houses have pole and brush canopies in front or at one side, or both. The chief and his wife are rather old but still active and bright. They are surprisingly intelligent and kind. They have a daughter with a young baby and husband. Besides these we saw and talked with three old women, all of whom have the chins and lower cheeks heavily tattooed. The usual plan seems to be: three single or double vertical lines on the chin, an oblique line running down from each corner of the mouth (making five), and a heavy double or single zigzag line running straight back (horizontally) from just above the corner of the mouth across the lower part of the cheek. Besides this, two had tattooing on the nose and one on the forehead.

One family is now absent, picking apricots in the valley near Elk Creek.

Pum-muk-ky, the chief, told me that the present rancheria has been built only about twelve or thirteen years. Before that they and many others lived in a very large village or rancheria where the flour mill now stands, half a mile west of the present town of Stony Ford. The people were very numerous when he was a young man—hundreds he says—and a white man who has lived here over thirty years tells me that there must have been a hundred living here for years after he first came, and he has seen two or three hundred at the big ceremonials and dances they had here in early times. The few left here now work on the ranches and go off to the fruit pickings; the women do washing and make baskets.

Pum-muk-ky was making wampum beads of clam shells when we arrived; he was rubbing the edges smooth and round on a flat stone. He was also making a net, of fine fiber which he had wet and twisted, for catching fish. This fiber was exceedingly strong. He showed me masses of it before it was worked up into string. It was in straight skeins, say two and a half to three feet long by an inch in diameter, and wet. It was reddish brown in color, or whitish with a reddish brown tinge. I suppose it is from Indian hemp (Apocynum), although I am not sure.

The mortars are small holes in squarish flat stones, averaging perhaps two feet in diameter, and sometimes set in the ground. They have and use also basket mortars which they set on flat stones. We gave them some beads and other trifles which pleased them and put them in a good humor. One of the women is very old and sick.

June 21: On the way back from Fout's Springs I again visited the Indians at the rancheria on the north side of the river and got a good vocabulary from the old chief Pum-muk-ky, and took photographs of him and the much tattooed old woman. Also had a good talk with them. The chief gave me the names in his language for thirty-four species of trees and shrubs, of which I showed him fresh specimens. The only reason he did not give me more was because I didn't have any more samples.

Klet-win or 'Ket-kla Indians, Cortena Creek, Colusa County

The Indians at the rancheria on the north branch of Cortena Creek told me (June 15, 1903) the name of their tribe is 'Ket, others gave it as 'Ket-klah or 'Klet-klah (name of place). They call their people Win. They live in two places: two families live at the entrance of the side valley coming in from the north where they have two houses and some growing corn under spreading valley oaks in a picturesque spot. The main rancheria is up about a mile and is on a low knoll high up in the valley and surrounded by hills. There are many blue oaks about the rancheria which consists of a number of wooden houses, mainly of split shakes.

There are about seven families here. The men are large and both men and women are good looking. They call the place Wil'-lak (the rancheria) and the main creek Ko-teen'-ah.

Their numerals are the same as those of the Pah-tin on the Sacramento, but about half of their words are different.

Their flour or meal tray sifter (or winnow) is circular and perfectly flat, and very thick and solid. They call it tso-pol and hach-e. Besides this, they all have a large concave meal tray (a very shallow bowl)

which they call *toi* or *toy'-ken-ny*, and also *ken-ne*. Their basket mortar is the largest and flattest (most flaring) I ever saw. They call it *kah-we* or *kaw-we*. It is placed over a flat stone, and the pestle is flat instead of round at the end. Their papoose basket (*to-nok*) is wholly different from those of the Sierra. It is a simple scoop, truncate at the top, where it has a large strong hoop at right angles to the back (fig. 29). The child's head is just under this hoop and something is thrown over it when needed.

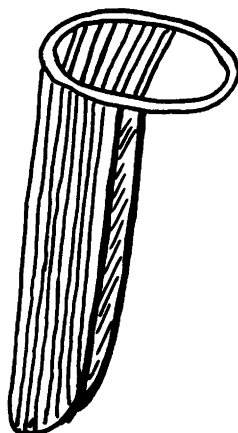


Fig. 29. Klet-win cradle

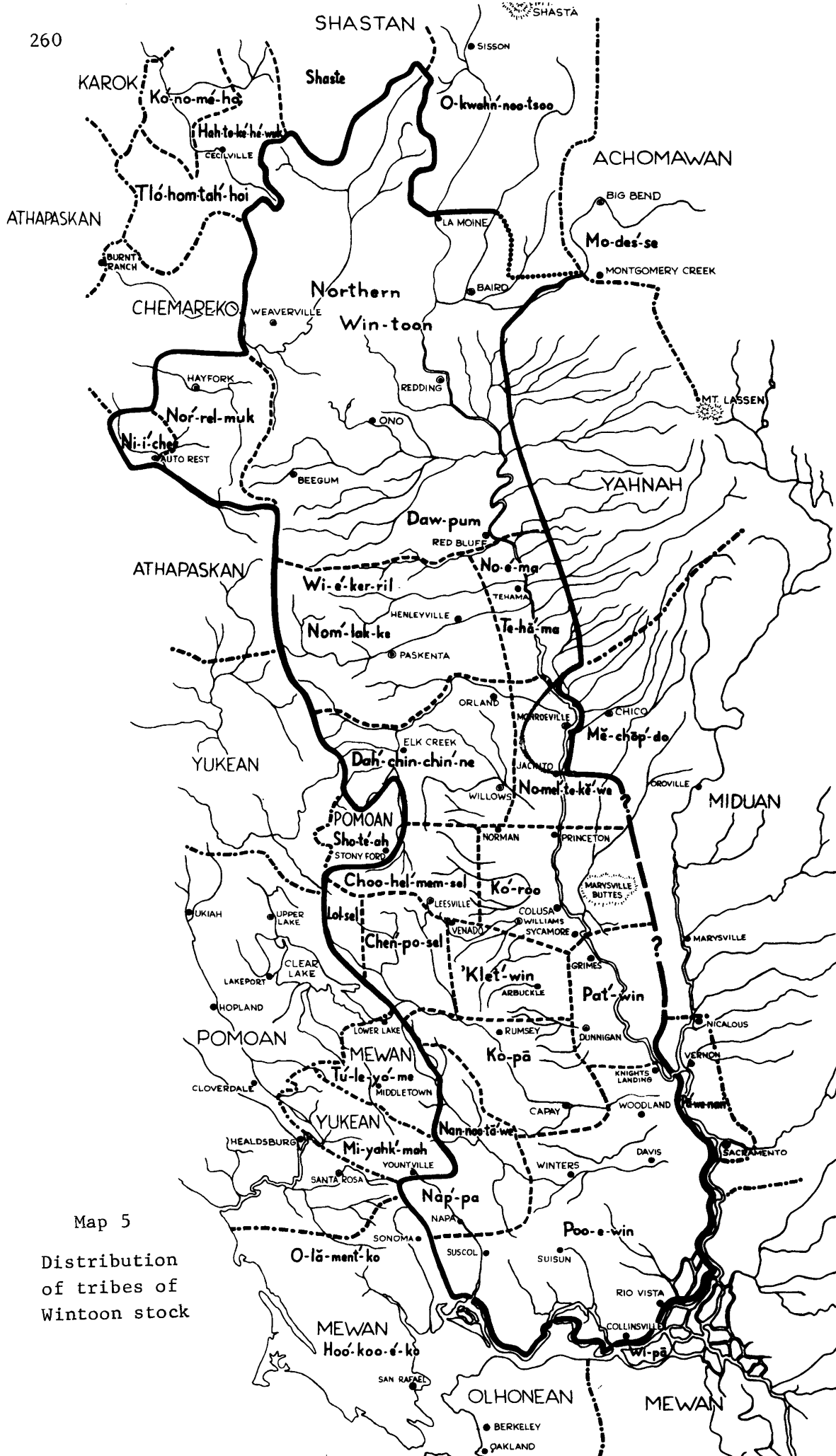
They have more good old baskets than any tribe I have struck in a long time. I got a few choice ones. The land on which they live is now owned (1903) by a man named Henry C. Eakle, who has a very large ranch. The question is, what will become of the Indians when the ranch changes hands?

In their houses I saw hung up a number of skinned bodies of jack-rabbits and ground squirrels for meat.

The men herd sheep regularly for Eakle and also work on the range and on the ranches. Just now they are getting two dollars a day working in the hay and grain.

Classification of Winton Stock

An analysis of the vocabularies of the several tribes of the Winton shows that the stock divides naturally into three major linguistic divisions:



Map 5

Distribution of tribes of Winton stock

(1) Northern division or Wintoon proper, extending from the extreme head of Trinity River, and from North Salt Creek on Sacramento River, thirty miles south of the summit of Mount Shasta,¹ southward to Red Bank Creek, just below the city of Red Bluff.

(2) Middle or Nomlakke-Tehama division, extending along Sacramento River from Red Bank Creek south to within two or three miles of Princeton, and spreading westerly to the high mountains of the so-called Inner Coast Range, better called the Yolla Bolly Range.

(3) Southern division, reaching from two or three miles north of Princeton, southerly to the lower Sacramento River and San Francisco Bay, and spreading westerly to the mountains.

(1) The Northern Wintoon division comprises: the Wintoon proper of the Sacramento and McCloud Rivers region from Slate (formerly Salt) Creek just above La Moine, south to Red Bank Creek, east to include lower Squaw Creek region and lower west side of Little Cow Creek, and thence south a few miles east of Sacramento River, with a minor band called Daw-pum between Dibble and Red Bank creeks.

The Wintu or Num-soos occupying the drainage basin of Trinity River from its head south to the junction of Canyon Creek, and south to the mountains south of Douglas City.

The Nor-rel-muk of Hay Fork Valley, reaching south to the upper waters of South Fork Trinity River, and west to about seven miles east of Hyampom. The southeastern boundary is the mountainous divide between the waters of the Hay Fork and those of Cottonwood Creek.

(2) The Central or Nom-lak-ke Te-ha'-mah division comprising: the Nom-lak-ke reaching from Red Bank Elder Creek south to Grindstone and Stony creeks, and from the eastern border of the plains westerly to the Yollo Bolly Mountains, including the Wi-e-ker-ril between Red Bank and Elder creeks.

The Dah-chin-chin-ne occupying both sides of Stony Creek from the point where it joins Grindstone Creek southward to a few miles below the mouth of Brisco Creek, and still farther south on east side, thus including the Elk Creek—Fruto region, and extending from the western border of the No-mel-te-ke-wis to the Yolla Bolla Range.

¹ It may be well to record the fact that the younger generation of Wintoon, proud that their fathers defeated and nearly exterminated the Shastan Okwanootsoo, now claim the conquered territory all the way to Mount Shasta.

The Te-ha-mah and No-e-muk (No-e-ma), occupying both sides of Sacramento River from four or five miles south of Kirkwood north to the mouth of Red Bank Creek. They meet the Nom-lak-ke on the west and the Yah-nah on the east side of the river.

The No-mel-te-ke-wes, occupying the west side of Sacramento River from a little north of the mouth of Stony Creek south nearly to Princeton, and spreading westerly apparently to within three or four miles of Orland.

(3) The Southern division comprising two subgroups: the Interior and River groups, which are subsequently divided into several tribes each:

(a) The Interior group, comprising the Choo-hel-mem-sel, occupying the western half of Colusa County and a correspondingly smaller area in southern Glenn County where their northern boundary runs easterly from the junction of Stony and Little Stony creeks to a north-south line passing a mile or two east of Sites and four or five miles east of Venado (Mt. House), and thence westerly to the mountains, crossing Bear Valley about three miles south of Leesville. Their territory is broadest in the latitude of Sites and Lodoga, where it reaches westerly to the high mountains of the California National Forest.

The Chen-po-sel, reaching north to the divide north of Hough Springs and holding the North Fork of Cache Creek, Long Valley, and the greater part of Bear Valley all the way south to its junction with Cash Creek, and west to include the Lol-sel. The Lol-sel reached Bartlett Springs and the south-east part of Bartlett Mt. Their western boundary was in contact with the eastern boundary of the Clear Lake Pomo. The Chen-po-sel south of them touch the Tu-le-yo-me.

The Klet-win or Klet-sel of Cortena Valley and Sand Creek, reaching from a little below Williams south to the southern boundary of Colusa County.

The Win-ko-pah of Capay Valley, extending southward from the head of that valley, a few miles north of Rumsey, are hemmed in on north, east, and west by mountainous ridges.

The Na-pah or Nan-noo-ta-we, holding a section of Napa Valley from Yountville to (and including) Napa City, and extended northeasterly over Wooden Capell and Berryessa valleys to the southeastern part of Pope Valley. The western boundary west and south of Pope Valley lies along the east base of Howell Mt., where it abuts against the territory of the Mi-yahk-mah tribe, south of which, between Yountville and Napa City, it spread westerly to the mountains between Napa and Sonoma valleys to Sonoma Creek.

(b) The River group, comprising the Ko-roo along both sides of Sacramento River from a little north of Princeton south to Sycamore and including the Marysville Buttes. The Indians say that the barren part of the flat plain from Delevan southerly to south of Maxwell (and apparently nearly to Williams) was not claimed by either the Ko-roo on the east or the Choo-hel-mem-sel on the west, but was a desolate "No-man's-land" which at intervals formed the battlefield between the two tribes.

The Pat-win, reaching from Sycamore to Knight's Landing, a little west of Dunnigan on the west and a few miles on the east side of the river.

The Poo-e-win from Knight's Landing to Suisun Bay and San Pablo Bay, including the mouth of Napa Valley but not including Napa City.

<u>Divisions</u>	<u>Tribes</u>
Northern:	Winton proper, incl. Daw'-pum Winto or Num'-soos Nor'-rel-muk Ni'-i'-che
Central:	Nom'-lak-ke, incl. Wi-e'-ker-ril Dah'-chin-chin'-ne Te-ha'-mah, incl. No-e-muk No-mel'-te-ke-wis
Southern:	
Interior	Choo-hel'-mem-sel Chen'-po-sel, incl. Lol'-sel 'Klet'-win (Klet'-sel) Win'-Ko-peh' Na'-pa (Nan-noo-ta'-we)
River	Ko'-roo Pat'-win Poo'-e-win

Notes on Winton Ethnobotany

The Winton make use of a large number of plants for food, textiles, and implements.

Among those used for food are: the acorns of no fewer than eight or nine species of oaks, manzanita berries (both Arctostaphylos viscida and A.

patula), the wild plum (Prunus oregana or P. subcordata), choke-cherries (P. demissa), blackberries (Rubus vitifolius), thimble-berries (R. parviflor), serviceberries (Amelanchier), elderberries (Sambucus glauca), gooseberries and currants (Ribes), grapes of the wild grapevine (Vitis californica), and the acid berries of Rhus trilobata. The buckeye nut also is eaten but requires special preparation. Among the numerous plants used for medicine is the feverbush (Garrya).

The long shoots of the sourberry or aromatic sumac (Rhus trilobata) are used in making certain baskets, particularly the large storehouse ones. The straight stems or young branches of the brown dogwood (Cornus glabrata), hazel (Corylus californica), two or three species of willows, and the roots of the yellow pine (Pinus ponderosa) are used in basket making. Hazel and the soft whitish long-leaf willow furnish the long rods for several kinds of baskets, especially baby and storehouse baskets. The Woodwardia fern is used extensively for decoration in basketry, the two long bands in the stem being dyed red by passing slowly through the mouth while chewing the inner bark of the tree alder. The maidenhair fern (Adiantum) also is used for designs; so are porcupine quills, dyed yellow with the yellow dye-weed (Datisca glomerata). Bear grass (Xerophyllum) does not occur on the McCloud, but is bartered for with Trinity River Indians and used extensively in basket overlay and designs.

The yew (Taxus) was the favorite wood for bows. A piece of the wood cut out for a bow but not yet finished is called koo-lool choos, from kool (bow) and choos (stick). The straight stems of the arrow-wood or nine-bark (Physocarpus capitatus) were used for arrows.

The mountain mahogany (Cercocarpus betuloides) is made into digging sticks and used by the women for digging roots of various kinds. The hollow stems of the elder (Sambucus glauca) are used as music sticks, and the curious nuts of the pipe vine (Aristolochia) are used by children in play for blowing.

The milkweeds (Asclepias) are used for making string and rope, and a species of Iris for cord for the fish nets. The inner bark of the tree maple was used for skirts for the women, breechcloths for the men, and bags for storing acorns and dried salmon.

A dull red dye is made by chewing the inner bark of the tree alder (Alnus oregana), and a yellow dye from the Oregon grape (Berberis) called we-mi-el-te, meaning "grizzly bear inside," but the application of the name I did not succeed in finding out.

Winton Foods

The lands and waters of the Northern Winton furnished an abundance of food, of which the chief elements were salmon and acorns. These were carefully dried and preserved for future use.

Deer and quail were plentiful, while in parts of the territory manzanita berries and other fruits, seeds, and food plants were obtainable in large quantities. It was the custom of certain bands to exchange foods with others. Exchanges of this kind were frequent between the Winton of the McCloud and those of the Trinity.

Dried salmon is called noor, when pounded fine it is called di-ve. It is rolled up and put into acorn mush.

Acorns and buckeye nuts are often kept over winter and at the same time freed from their bitter quality by putting them into cold, wet, springy or swampy ground where they are left over winter. In spring they are taken out and eaten. When boiled they are like potatoes.

Another and very different way of preserving acorns, practiced by the Winton Indians of western Tehama County in California, was described to me by F. B. Washington. The acorns were buried in boggy places near cold springs, where they became swollen and softened and turned nearly black in color but remained fresh for years. When needed they were dug out and roasted—never dried or pounded for flour, the mush and bread being always made of dried acorns. White men in plowing have opened up caches of acorns that have lain in these cold boggy places for fully thirty years and found the acorns black but still good.

When preserved dry in the usual way the acorns are shucked as needed.

The northwestern Winton, living on the Great Bend of Trinity River near the mouth of Rush Creek, tell me that the acorns of canyon live oak (Quercus chrysolepis) are sweeter than those of the other oaks. In the fall of the year, the acorns are put in water in a cold spring or a wet boggy place, shells and all, just as they come from the trees, and allowed to remain in the water all winter. In the spring they are sweet and ready for cooking without leaching.

The Winton say that they were "strong on bears." They used to hunt bears and were called "Bear people" by the Nose or Yahnah. They had bear dances in which they wore bearskin cloaks and long duckskin caps decorated with feathers. In war they wore cloaks of bearskin and elkskin, lined inside with fawnskin. While these cloaks were not absolutely arrow-proof,

they deadened the force of the arrow and were thus a protection. They were worn so as to cover the left shoulder and pass under the right arm, giving freedom of the right arm for fighting. The Winton always carried a dagger of elk antler or shinbone in their back hair, to be prepared for close-up fighting.

When men were created it was the Bear who gave man his flat feet so that he could walk erect. The Lizard gave him his split hands so that he had fingers for taking hold of things.

Grizzlies were hunted by the Winton when in their winter dens or caves. Torches were used, and when the bears came out they were attacked with spears pointed with obsidian blades.

The Winton ate bear meat, in which respect they differed from many of the California tribes.

Basketry dye: from acorns a blue-gray stain or dye is made which is used to color certain basket materials. I did not learn how it is prepared.

Nom'-lak-ke Villages Between Elder Creek and Grindstone Creek

South of Elder Creek and North of Thoms Creek

So'-noom-o'-lel-e'-sle (meaning "round rock on top of other rock"). About five miles south of Elder Creek and just over the ridge north of present Paskenta rancheria on Thoms Creek. Big spring there.

Che-chah'-he-i. About five miles south of Elder Creek and north of present Paskenta rancheria on Thoms Creek, not far from So'-noom-o'-lel-e'-sle. Fine spring there called Sah'-waht. People used to go there to dream and to receive power to do certain things, as to make arrow points well, or do anything.

Si'-wi-el'-toi. On McCarty Creek about a mile north of So'-noom-o'-lel-e'-sle.

Si-noi'-toi. On top of low hill by spring about a quarter mile north of Si'-wi-el'-toi.

Ked-do'-hah-pe. On north side McCarty Creek about a quarter mile east of Si-noi'-toi.

Chah'-chah-el'. On branch of McCarty Creek about a half mile above (westerly from) Sim'-me-o-la-le-e-sa'-to-mon. Home of big chief.

Sim'-me-o-la-le-e-sa'-to-mon. On Owens Creek (creek that passes Paskenta store) in a little valley beyond a hill, about one and a half miles above Paskenta store. Owens Creek is called 'Klet-pahl-le, meaning ground squirrel.

Wi-so'-po-mem. On creek which empties into Thoms Creek at Wes'-kes. The old rancheria was at the foot of the mountains perhaps two miles or more above Wes'-kes.

Tahp'-dow. At or near head of McCarty Creek, about one and one-half miles above Si'-wi-el'-toi.

Wen-nem'-ker-ril. About two miles south of Elder Creek.

Ken'-ko-pol. At big spring about one and a half miles south of Elder Creek and a half mile north of Wen-nem'-ker-ril. Big village.

Ker-ril-o-la'-lah. On south side Elder Creek north of Paskenta rancheria.

Noi'-te-kel or Naw-e'-te-kel. About two miles east of big spring at Ken'-to-pul.

How'-um-o-la'-lah. About a mile east of Naw-e'-te-kel.

Bo'-lah-mit. About a mile east of How'-um-o-la'-lah.

Chah'-chah-sah'-he. On or near head of Underhill Creek about two miles north of Noi'-te-kel.

Tahp'-num-wit'-te. On north side of Underhill Creek about two miles east of Chah'-chah-sah'-he. Headquarters of old Nom'-lak-ke Indian Reservation.

Kes-mem. On Underwood Creek northwest of old Paskenta rancheria (which was midway between present Paskenta and Henleyville).

Choo'-la-lool bul'-le. At big spring in gap between high hills directly south of Table Mountain (called Pan'-te-pum).

Bo'-dan-choo-he. On south side Elder Creek at north foot of Table Mountain.

Ke'-loo-dow. On south side Elder Creek about three miles west of Bo'-dan-choo-he.

Ko'-bah-soon-sah'-wahl. At northwest foot of Table Mountain (right at bottom) about three miles west or southwest of Bo'-dan-choo-he. The old reservation road passes close by.

Un-awl'-te. On Digger Creek (tributary to Elder Creek) about two and a half miles west of Ke'-loo-dow, at a big spring. Used to be a ceremonial house there.

On or Near Thoms Creek

Sow'-pum. On north side Thoms (or Bennett's?) Creek, two or three miles above present Paskenta rancheria and on south side of Round Valley road. Was a big chief's rancheria.

Me'-ki-e-we. On Dry Creek at Oak's place about a quarter mile below Oak's house.

Ki'-pom-wi-kol'-li. About one mile from Oak's place, at or near sign at forks of Round Valley and Newville roads.

Tel-wer-ren-te-pe. On south side Thoms Creek about one and a half miles above present Paskenta rancheria (measured from Johnny Martin's house). Across creek from Holt house (a white house).

Son'-te-law. Under big cliff on or near Thoms Creek. Used to be a roundhouse there.

Wes'-kes. About a quarter mile above Johnny Martin's (and Dominik's) house, on other (north) side Thoms Creek, in loop of bend of creek.

Saw'-slos or Saws'los. On north side Thoms Creek about a quarter mile above Johnny Martin's house.

Chep'-dow. On big flat on north side Thoms Creek one mile below present Paskenta rancheria (in sort of canyon between present rancheria and Paskenta). Largest rancheria of all.

[Name forgotten.] On bench on northwest side Thoms Creek opposite Johnny Martin's house.

We'-do-koi. On road from present Paskenta rancheria to forks of road leading north to Paskenta and south to Newville). About a half or three-quarters mile east of present Paskenta rancheria and at foot of big high slick rock cliff (immediately south of cliff). Perhaps a quarter mile west of Bill Haywood's house. Dark soil now marks the place. Big chief lived there and had round house. Named from Wid-dawk'-me, the valley oak (Quercus lobata).

Che'-kum-es-la. On north side Thoms Creek opposite store in present village of Paskenta. Was large rancheria.

Ye-be'-pahs. On north side Thoms Creek about two miles below present Paskenta and opposite a bluff. On Charley Mitchell's place.

Yah'-ka-wel. On north side Thoms Creek about a mile below Ye-be'-pahs. Used to be a roundhouse there.

Pas-ken'-te. On north side Thoms Creek five or six miles below present village of Paskenta and directly across from a bluff on south side. It is on south side of present county road.

In Newville Region (Salt Creek near Tehama-Colusa County boundary)

Nel-et'-te-man. On hill at Newville on north side near present schoolhouse.

So-taw'-kum-loi'-te. In gap at beginning of canyon at Newville, about a quarter mile below Kah'-li-el'. Can still see rocks rubbed smooth by grinding acorns.

Kah'-li-el'. Newville rancheria.

Moom'-ka-wil. On same Salt Creek about a mile or two below Newville.

Tahk'-hah-dow'. On north side Salt Creek near Moom'-ka-wil.

Nuk'-ko-ko. Half a mile below Newville in gulch on John Flood's place.

Pah-kah-ol-toi. Three miles north of Paskenta.

Si'-wa-toi. On south side of Salt Creek from Thomas Flood's place, two and a half miles or more below Newville. Big town with sweat house.

Sa-yo-bem'-me. About a mile below Si'-wa-toi. Graveyard now there.
 Dah'-tim-poo-el'-toi. On Sheldon's place half mile above Salt Creek.
 Chawk'-pum. Just above Dah'-tim-poo-el'-toi.

Poo'-e-win Tribe of Win-toon Stock

Original territory extended from Sonoma Creek on the west to Sacramento River on the east. The northern boundary reached to Sonoma (Tulucay) and Knights Landing.

The only person I have found who speaks Poo'-e-win is a Sonoma Indian man named Philip who works for a German named E. Steiger on a vineyard two and one-half miles south of Glen Ellen and five miles north of Sonoma. On July 9, 1906 I got a good list of mammal and bird names and a fair vocabulary from this man named Philip. Also got from him the above boundaries of the Poo'-e-win tribe, and the following information:

Soo'-e-soon' was the name of a valley and people. Philip thinks the people were Poo'-e-win and that Soo'-e-soon is a Spanish name, but other Indians insist that it is the original Indian name, which doubtless is the case.

The Poo'-e-win were always at war with the Patwin of the west side of the Sacramento Valley north of Knights Landing. The Poo'-e-win called the Patwin above Knights Landing Pa-lon.

The Indians in the upper (northern) part of Sonoma Valley were Kinamaro, same as at Santa Rosa and Sebastopol. There used to be rancherias all along Sonoma Creek from near Madrone Station up the valley.

In the Napa Valley there were at least three languages:

1. Too-loos'-too-e from Suscol up to Napa. There was a Too-loos'-too-e rancheria of Ki'-e-tan'-nah near Napa. (The Too-loos'-too-e, I am told by another informant, were Win.)

2. Wi-ye'-lah (Wi-e'-lah). At and near Yountville and north to about St. Helena. Language entirely different from Too-loos'-too-e. Old chief Caymus (Ki'-mus).

3. Mi-yah'-kah-mah. Head of valley about Calistoga. Language wholly different.

I met today (July 11, 1906) an old Indian man born at Napa but who spent the greater part of his life at Sonoma and who speaks both Win and Poewin. He is living in a little shack by himself on the O'Brian ranch in the hills between Sonoma and Petaluma valleys and about four miles west from Sonoma. His name is Jim.

He told me that the Poewin did not reach west to Petaluma Creek but stopped at Sonoma. Sonoma was the northwest corner of their domain. Thence easterly they occupied the north side of the Bay region to Sacramento River, which they followed up on the west side to Knights Landing. The northern boundary of their territory ran from Sonoma to Tuluka (Napa?) and Ol-ulata (taking in Suscol and Sooesoon) and thence to Vacaville (where there was a big rancheria called Pe'-nia Laguna) and Winters and thence to Woodland and on to Knights Landing on Sacramento River. To the north of the Poewin in Sonoma Valley were the Kanimar'res; in Napa Valley, Capay Valley, and in the hills west of Sacramento Valley (west of the river) were the Win, which he calls Wi'-kam (after an old chief), and also Nan'-noo-ta'-we. The Poo'-e-win name for the Win tribe is Too-loos'-too-e. Jim says his people (Win or Wi'-kam or Nan'-noo-ta-we or Too-loos'-too-e) speak the same language as the Catena (Cortena Creek) Klet-win.

He says Chief Wi'-kom's name was Mem (mem-water), but I could not find out whether Wi'-kom is the man's name or name of a particular band.

There used to be Poo'-e-win rancherias at Sonoma, Napa (village of Tuluka), Olulata, Sooesoon (Suisun), Vacaville, Winter's ranch, and Woodland. Those at Vaca, Winters, Sooesoon, and Woodland were very big.

Nap-pah and Too-loo'-kah were names of rancherias near together in Napa Valley. Too-loo'-kah was a short distance southeast of Napa. An old Spaniard named Ki-tan'-nah (Gaetano?) Juarez took possession of the land on which the Too-loo'-kah rancheria was situated (the asylum is there now).

Some Yokiah Indians were brought down here by the Spaniards.

The Poewin called the Hookooeko tribe of Petaluma region "Tamale Indians."

The big Poewin rancheria at Vacaville was called Pe'-nia Laguna. The big Poewin rancheria at Winters was called Wis-kal'.

The tribe at Yountville and St. Helena spoke the same language as at Calistoga (i.e. Mi-yah'-kah-mah).

The tribe in Berryessa Valley was No'-min.

Too-loos'-too-e tribe of Napa Valley just above Napa was the same as Cortena 'Ket-win or Win. The Wi'-kom chief who used to live near Napa, and whose name (or nickname?) was Mem (water), afterward went to Cortena and, if not dead, is there now. Napa is a Poewin word. So is Tulukay (pronounced Too-loo'-kah).

The Indian chief Caymus (pronounced Ki'-mus), who used to live at the old rancharia where Yountville in Napa Valley now is, was chief of the Wi-e'-lah tribe, which my informant (Jim O'Brian) declares is the same as the Sas-te tribe "up north" and probably Win.

Sus'-kol is a Poewin word and is the name of their place and of the rancharia where Suscol now is.

The Indian family on Bayle's ranch in lower Napa Valley were Poewin. They have been called Callajamanes and Canaumanos.

Is it not possible that the Too-loos'-too-e or Win or Too'-loo'-kah rancharia just east of Napa River was brought there by Spaniards?

Choo-hel'-mem-sel

Milk Teeth

The milk teeth are called e-li'-cho-she. When shed they are put in a gopher's hole to "trade" with the gopher (Thomomys).

Head Net for Men

Ordinary kind, kit-te'-ko; for rich people, buk-cher'-ro; beaded and very valuable, his-se' cher'-ro. During the ceremonies the leader of the dance wears a headdress called poo'-ta, the crown piece of which is of the white down of the snow goose. The occiput piece, called li'-e, projects backward from the back of the head and consists of a dense bunch or large rosette of tail feathers of the magpie, worn horizontally (pointing backward). The leader of the dance also wears on each side of his head a forked feather pin standing out sideways. This consists of two white feathers (sometimes three), each five or six inches in length, attached to a wooden pin.

Head Band

The women wear a broad black and white head band called tip'-pe-lis, made of the dried skins of cormorant and snow goose with the down left on. The skin is rolled (not flat) and is decorated with woodpecker scalps and beads of abalone shell.

Red Feather Bands

The men wear, hanging down from the back of the head, long broad bright scarlet bands, called lil'-loo-pan'-nah-nah, made of quills of the red-shafted flicker.

Ear Decorations

Some of the people wear ear decorations, called bun'-nah-hah. These are straight bones several inches in length, worn horizontally through the lob of the ear. The bones commonly used are those of the eagle and condor. In addition to these, small flower-like rosettes of brilliant feathers are sometimes worn in the ear.

Nose Stick

The nose stick is not worn by this tribe.

Sliver Catcher

For picking out slivers, a small needle-like bone from between the front hoofs of the deer is used. This is called pen.

The House

Houses are called ka-wel. In early times they were made of planks of the digger pine (*Pinus sabiniana*). Another kind of house, called tich'-e ka'-wel, consisted of a framework of poles covered with pine bark and chemise brush, overlaid with earth. The timbers were usually of blue oak.

Sweat House

There was no regular sweat house, but the people took their sweats in the ordinary living house.

Camps

Camps are called poo-chil'. Those used for a length of time had conical bark huts called kah-pah'-lah ka'-wel.

Canopies

The brush-roof canopy has two names, kool and she^{hl}.

Acorn Cache

The acorn cache, used also for pine nuts, is called choo'-bee. It was eight or ten feet high and covered with bark and grass. It stood on the ground. Another kind of cache, called awl'-lah', was a hole dug in the ground, lined with grass and pine bark.

Pinole

One of the most widespread foods of California Indians consists of small seeds which are roasted and eaten. Collectively this food is called pinole, a Spanish name. Among the Choo-hel-mem-sel all kinds of pinole are called ko'-re. When the seeds are pounded and mixed with flour, the mixture is called ko-he and kawt. When wetted and made into a dough ready to eat, it is called yam'-me.

Pinole seeds were usually roasted over coals of the valley oak (Quercus lobata), also often called mush oak.

The ordinary word for eating is baw, but eating pinole is called mool, and also hal-lah'-ko.

Many kinds of seeds are used for pinole, but those of the tarweeds of the genera Madia and Hemizonia are collected in greatest quantity. Following are names of plants given me by the Choo-hel'-mem-sel, as used by them for pinole. Unfortunately the plants were not at hand and not identified.

ten-nek (best)	aw'-lah
too-loo'-e (next best)	hon'-nut
os'-kut	tahp'-tahp
pi-he ^{hl}	ke-wet
te-poot'	kod-doi'-kot
kol'-kol	taw'-kot
min-ne'-wi	chis-sow'-koi
pi'-pi	ko-mon'
shoo ^{hl}	kool-kor'-re
lo'-wa	kot-pi-ye- ^{hl}
ko'-lut	pah'-kah

The Smoke Fan

For smoking out squirrels, a fan, called le-pi', is used to drive the smoke into the hole. It consists of the wings of a screech owl fastened into a split stick, one on each side.

Treatment of Redbud for Baskets

In making and decorating baskets, strands of redbud (Cercis), called lool, are used. The red-purple color of the designs resides in the bark, for which reason the bark must be left on. The branches are cut in the autumn, after the leaves have fallen. If a darker color is wanted, the strands are soaked in water over-night. For the uncolored body of the baskets, the redbud sprouts are cut in the spring when the sap begins to rise, and are heated over fire until the bark begins to pop. It is then peeled off and the wood split into strands of the desired size. These strands without the bark are white.

Tobacco

Wild tobacco, called lawl, was originally made by Se'-deu (Coyote man).

Cremation

Burning the body of a dead person is called eh-pah or es-pah. Burning a live enemy is called bil'-pah.

The funeral pyre is called chah-kel'; the ashes and burned bones, shoo'-dook; the funeral at time burial, ter-re'-che.

The mourning and crying are called wah-too'-per-re. The second mourning ceremony, held at a later period, is called be-le'. Its essential feature consists of the burning of valuables for the benefit of the dead.

The people cry one night, and when the morning star comes up they begin to burn the food, baskets, clothes, beads, feather belts, and other articles brought for the purpose. Two women stack up the articles to be burnt. Before casting the baskets into the fire they dance and sing, holding the baskets in front.

When a person dies, the spirit, mol-low-win, goes south at first, then crosses the Pacific Ocean, and after that goes up into the sky. But the ghosts of bad people stop at the ocean shore and turn into the coyote and other animals.

Thunder is called kim'-me. It originally came from two fawns who went up into the sky and were transformed into thunder. The rainbow is called sahk'-cho-rel (meaning "blood curve").

Chieftainship

The office of chief is hereditary, but it sometimes happens that when a bad man of the tribe is killing the people, the people elect him chief for the reason that when he is elected chief he must quit killing people.

Pestles

The pestle for grinding acorns was long. The pestle for pounding meat was short.

Baskets

Baskets were made completely covered with feathers. Mallard feathers on the bottom, red woodpecker feathers on the sides as well as quail plumes and abalone beads for additional decoration.

Salt

This was gathered from Hill Creek about three miles south of Cook Springs. The creek was dry in the summer and a crust formed on the bed.

Ethnobotanical Notes

Several trees have different names, according to whether they are young or full grown. Thus the common Douglas fir (Pseudotsuga taxifolia) when full grown is bah-tahm', when young mo'-yek; and the valley oak when full grown is hlaw, when young we'-oo. Similarly the acorn of the Blue Oak (Quercus douglasi) while still green is called yar'-te, while after turning dark it is moo-lah'-kah. The wood of the holly buckthorn (Rhamnus crocea ilicifolia) is called se-le'-pi and is used for torches because it burns a long time

The sage herb, kit'-te, an almost universal medicine among California Indians, is used by the Choo-hel'-mem-sel both as a tea and as a wash for measles.

Green grass is called sek; dry grass, poo'-sah.

Indian hemp (Apocynum), called pe^{hl} (or pe^{sl}), makes the best string and thread.

Ethnozoological Notes

The big wolf is called hool. Wolves, formerly common, are now very rare. A timber wolf was seen at Black Butte in the California National Forest in the winter 1923-24.

The golden ground squirrel (Callospermophilus), called maw'-pul-lik by the Choo-hel'-mem-sel, is said to occur on Snow, St. John, and Sheet Iron mountains.

The meat of the pocket gopher (Thomomys), called ki'-e, is given to sick people to eat so that they will not die, the gopher being hard to kill.

The house mouse (Mus musculus) has recently appeared in the country of the Choo-hel'-mem-sel and is called too-loo-kon.

Dogs, called choo'-choo, were not known until the Spaniards came.

The California jay (Aphelocoma), called chi'-et, plants acorns.

Certain animals and plants have names implying the direction in which they occur or from which they are believed to have come. Thus the blue grouse (Dendragapus) is called num'-sah-kah'-ki, meaning west quail, and the great pileated woodpecker (Geophloeus), num ter-rat', meaning west woodpecker, num being the word for west. The smaller woodpeckers are called too-dit'too-dit'. The redbreasted sapsucker is believed to be the male of the hairy woodpecker.

The blackheaded grossbeak (Zamelodia) is called lool, which also is the name of the redbud bush (Cercis).

The proper name of the rattlesnake is te-wel', but it is sometimes called pom shel-li', from pom (ground) and shel-li' (grizzly bear).

The word for fish is teer. The trout is called she'-ah-teer, meaning toothed fish, from she (teeth). The fins of a fish are called tar-bek, meaning "movers."

Hairy caterpillars are called shil-li'shil-li'-men, from shil-li, the grizzly bear.

Ceremonial Dances

All of the dances and all of the songs of the Choo-hel'-mem-sel came originally from Nik'-me, the original rancheria and home of the First People.

Nik'-me was located very near the place now called Mountain House or Venado, on the southern boundary of the territory of the Choo-hel'-mem-sel and close to the northern boundary of the Klet-win tribe. Thus the Big-head dance, the War dance, and all other dances of this tribe originated at Nik'-me.

But the Dream dance, called baw'-le hes'-se, came from the north and did not originate with these people. To this day the Big-head dancer and his headdress are called baw'-lis-sal'-to.

During the ceremony all of the dancers must keep by themselves. They are not permitted to speak to one another or to mix with the other people at all during the continuance of the ceremony. Neither are they allowed to eat meat.

When the dancers are in front of the roundhouse before the ceremony begins, no one is allowed to go in by the front entrance. Then all the dancers gather around the center post and two of them go back and stand on the drum log. At the front end of the drum log (or plank) is a hole that leads into an excavation under the log into which are thrown loose feathers, broken rattles, worn-out parts of the ceremonial costumes, and sticks that fall out of the big headdresses. One of the dancers kneeling down puts his face into this opening and calls four times in a low voice. Then the Chem-mah'-too, who is still on top of the roundhouse, shouts:

Chen'-te pum-te, Sal'-to wen-ne'-we
Down in the earth, Spirit come

Then half a dozen boys, called Yum'-po, who for the first time are allowed to take part in the dance ceremonies, are sent to the Evil springs in Bear Valley. They are not allowed to eat meat and may not drink water except at specified hours. While they are away, the dancers in the roundhouse shout and beat the drum with their feet and dance around the fire, making a great deal of noise.

Then a man called Kah'-nah sal'-to (Lazy Spirit) climbs the center post to the top and gives a loud yell. The boys, now called We-te'-le sal'-to (Running Spirits), who were sent to the Evil springs, answer his shout and start back to the roundhouse. After dancing four times they are again sent to the springs where they remain till noon without eating or drinking. At noon they come back and dance inside the roundhouse. Then a man brings a basket of acorn mush and passes it around to the Yum'-po boys, each of whom dips out and swallows a single mouthful and drinks some water. He dips the mush out with a very small basket called cho-bill', made for the purpose. This tiny basket holds just one mouthful of mush. This quan-

tity is now given to each of the boys three times each day—morning, noon, and evening.

After the ceremony is over the roundhouse has become very hot and everyone is sweating. The boys must now dance around the fire and sing until they are very hot and exceedingly uncomfortable. The old people sit farther off.

Then the Indian Doctor goes to the boys, some of whom appear to have fainted from the continued effort of dancing in the excessive heat. The Doctor takes hold of each boy by the shoulder and if one of them is not sweating, he takes sweat from his own body and rubs it on the boy, who immediately begins to sweat. Then the Doctor, with the help of two other men, takes the boys, who now appear to be exhausted, slaps them on the chest, and takes them outside. If a singer faints or gives out, the Doctor puts a rattlesnake (so-ko'-kil) in his mouth and lets him bite it and then throws the boy outside the roundhouse where he lies on the ground. Then the Fire man, Chah-pah'-rahk, takes a stick eight or nine inches long which is on fire at one end and puts the other end in his mouth and bites it, holding it in his mouth.

When all the boys are outside, lying face down on the ground, water is poured on them. Their mothers, sisters, and grandmothers begin to cry, thinking it dreadful that the boys should be so harshly treated. But they are not so badly off—they are making believe that they are suffering. They now get up and lock arms, two and two, and fall down, and do the same over again. Then they hobble along to the creek, but as soon as they are out of sight run to the river and jump in. After a good bath, they march back to the roundhouse.

Then they are told how long it will be before they will be allowed to eat meat. They may eat fish, acorn soup, and other things, but not meat.

When the time to eat meat finally arrives, the ceremonial dance called yah'-he-yah'-pi (meaning boil dance) is held. It is held out in the woods, not at the rancheria.

Before this the boys must hunt for four or five days, killing rabbits and deer which are hung on the trees till the day of the feast arrives. The night before the ceremony they must dance all night long, then they are given meat for breakfast. Those newly initiated in the dance are not permitted to eat meat for a whole year. If one of them eats meat when he thinks no one will see him, tim'-per-rik, the great horned owl, tells on him.

The War Dance

After all the men have gone into the roundhouse, no man remaining outside and all is quiet, the Chem-mah'-too or Speaker, who ranks next to the Chief, stations himself on top of the roundhouse and in a fairly loud voice invites the spirits of various places and directions to come and be present during the ceremony.

Account of the First Scalp Dance

A man from Mit-chow'-wis on Little Stony Creek went to the rancheria of Lol-sel in Long Valley to trade. The Long Valley people killed him. Then a Lol'-sel man named Tub'-te stole beads from his own tribe, for which offense his own people were going to kill him. But he ran away to Mit-show'-wis. The people there knew what he had done and killed him. This was accepted by both tribes as an offset to the killing of the Mit-chow'-wis man by the Lol'-sel.

After they had killed him they scalped him. This was the first and only time a man was scalped by California Indians. They then called the neighboring tribes to come and hold a War Dance, called She'-he. The scalp was fastened to the end of a pole which was held by a man while the other people danced around it with bows in their hands and arrows in their mouths. After this a Napa Indian named Ben Sed-dow, meaning Big Coyote, took the scalp and carried it to Napa, after which it was not heard from. Ben Sed-dow was himself a Napa.

The Deer and Condor Dances

The Deer Dance (nawp' sal'-to to'-no) and the Condor Dance (mol'-luk sal'-to to'-no) belong to the past. No one living can dance them. The old people are all dead.

The molluk sal-to dance was very dangerous, for if the dancer made a mistake his grandson became sick and bit himself all over the body, wherever he could reach; he threw his arms about and whistled and was in a bad way. The only cure was for the grandfather to dress up in his molluk feathers as if going to the dance. Then he went to a special doctor and employed him to come and cure the boy. The doctor must wear the skin and feathers of the molluk (condor) and no other clothing, and afterwards must destroy this costume by sinking it in a spring of water. When wearing the molluk costume he must not permit the sun to shine on him.

Ko-roo Villages on Mounds

Before the whites made the levees along the river the water never rose higher than the house mounds. These mounds in the north (i.e. Colusa region) were only two or three feet high, but they were higher to the south. They were large in diameter, each having house holes for two or three families. The houses had strong frames of posts and cross timbers laced with willows and tules and covered with earth or clay. Before the white man came the flood waters were not very deep.

POMO

Mah-kah'-mo chum-mi of Cloverdale Valley

Tattooing

Men tattoo across chest and on arms. Women tattoo chin with several vertical lines and a nearly horizontal line from each corner of the mouth outward. The material is soot from burnt pitch (kow'-he) pricked in with a very fine sharp bone needle called tsah-so-mah, made from the small forearm bone of a squirrel.

Ceremonial House

The ceremonial house (ah-mi) has a large heavy center post one and a half feet thick and fourteen to sixteen feet long. The long ridgepole rests on this and supports the roof poles.

Sweat House

The sweat house is thatched with wormweed (Artemisia ludoviciana) and straw, resting on a frame of willows or other slender sticks. The smoke hole (ho-bo-bahn) is directly over the doorway (he-dah-mo) and is a ventilator hole.

Bird Notes

They share a belief with a number of other tribes, namely that the pygmy owl (Glaucidium) kills elk and deer by attacking the anus and tearing the inside of the rectum.

Other tribes believe the owl attacks and tears the scrotum and the testicles of the bull elk; and still other tribes say that it kills by entering the ear and digging into the brain.

The Mah-kah'-mo say that kah-tah'-me-ah-tim, the great pileated woodpecker or logcock is the mother of kah'-tahk, the California woodpecker.

They know that we'-kah, the roadrunner, kills rattlesnakes.

They say that the redbreasted sapsucker is the male of the hairy woodpecker (Dryobates) and call both le'-koos.

Similarly, they believe the red-shouldered blackbird is the male of the Brewer blackbird and both are called tso'-le.

They call the common nuthatch kah-la'-tsat, which they say means scarring trees.

The old people used to put a living cicada (which they call kah-chem'-te-te) into the nose to make it bleed to cure headache.

Carrying Fire

In former days the people used to carry fire from one place to another by means of a small square of thick dry bark from the black oak tree (Quercus californica). This bark burns slowly, forming a glowing coal that was carried in a basket lined with clay. In swimming across rivers, the basket was held above the water.

Arrow Poison

Old people used to prepare a poison for their stone arrow tips, to be used in hunting bears, both black and grizzly, but chiefly grizzlies. The poison was prepared by putting deer livers in rattlesnake dens or by holding them in front of rattlesnakes so that they would be struck. The arrow points were thrust into the liver and allowed to dry.

Rancherias

There were three good-sized villages presided over by a single head chief. One was on the east side of Russian River, the other two on the west side.

Kah-shet-te'-me: on the east side of Russian River just above the present iron bridge south of the mouth of Big Sulphur Creek. There used to be a roundhouse there.

Ah-muk'-ko: about four miles south of Cloverdale, on the east side of Russian River (on the ranch of old Sam Berry) a little above the Swiss Colony. There used to be a roundhouse there.

Kah-lung'-ko: on the west side of Russian River, a mile and a half south of Cloverdale. Site now washed away. The railroad passes over it. There was a roundhouse there also.

Sho-ko-a'h of Hopland, Mendocino County

Plant Notes

Sugar (kah-la'-sap) of the sugar pine (m'la-wa kalle) is used as medicine for what are supposed to be disturbances of the liver. Nuts (bah-ha') of the California laurel (Umbellularia), called bah-hem' kalle, are roasted in ashes and eaten with fresh clover. Leaves of a willow (sh' ko) are used as medicine in fevers. The young leaves are mashed and soaked in cold water which, when drunk, produces vomiting. Gooseberry bushes (tak-ki'-ah koo'-nah kel-le) are used by bears in making nests for their babies. The prickles irritate the bear cubs, giving them a mean disposition. Leaves of the everlasting (Gnaphalium), called kah-ahp'-loo bi'-ah, crushed and packed around a baby's navel string, make it come off in four days. The narrow-leaf iris (Iris macrosiphon or tenuissima), called se-lim', makes the strongest deer snares. The root is used as medicine to hasten the birth of a baby. Wild potatoes (Brodiaea grandiflora), called bab'-bah, are eaten. The bulb of the soaproot (ahm) is still used for washing the hair and is much better than soap. The new sprouts (tu-be') of the tule (Scirpus lacustris), called batch-aw', are eaten in spring, as are also young shoots of the flat tule or cattail, called hahl.

Seeds of both narrow-leaf and broad-leaf Wyethia are used for pinole, called pe-ya'.

Animal Notes

In the beginning Coyote (De-we') named all places and plants. His rancheria was on the mountain called Tom'na-oo. The Coyote People were called Win'-nap-po.

The deerskin robe or blanket used by women is called pe-she-ka-too'. It consists of two deerskins, one whole skin in the middle with a half skin sewed on each side. Deerskins are tanned with the hair on. This tribe did not take the hair off.

Skins of the mountain lion (yem-mawt') were prized for women's blankets.

Skins of black bear (she-op tah'-kahl) were highly valued.

In hunting deer, masks were sometimes worn. In these the eyes were made of pitch (kah-we') from digger pine (Pinus sabiniana).

The oriole is called ki-yoi', the same as cocoon, from its scolding note, which is like the sound produced by shaking the cocoon rattle, called ki-yi'.

The common Brewer blackbird and the red-shouldered blackbird are called by the same name, tsa-lee'. The former is considered the female, the latter the male.

The alligator lizard (Gerrhonotus) and the skunk (Mephitis) are called by the same name, how-bah'-lah, the alligator lizard being believed to be the female of the skunk.

Fish, eels, salmon eggs, and mussels are important elements of the animal food.

Grasshoppers (m'tok sha-ko) were roasted and eaten in times of scarcity of food. Grasshoppers were captured by setting fire to the dry grass in a large circle, the fire spreading toward the center. As the grasshoppers rose to fly away, their wings were burned and they dropped to the ground and were self-roasted.

Tattooing

The ordinary face tattooing of women consists of three straight lines, one vertical on the middle of the chin and one on each side of the mouth, sloping from the corner of the mouth outward and downward. The people say they did not tattoo before the Dream Doctors came, about sixty years ago. The Big Head Dance came at the same time.

The material used in tattooing is the juice of green oak galls mixed with sap of poison oak and rubbed in to make the scratches sore.

Houses

Houses are called chah. They were circular and consisted of a willow frame covered with straw (called kah-shah'-yo).

Ceremonial Feasts and Gatherings

Ceremonial feasts were called mah-ah' kahtch and were said to be given to "appease the gods."

Neighboring friendly tribes were invited: "have big feast; dance four days and four nights; people can't say bad words; good to everybody; all friends; do not want any quarrel; nobody drink anything; everybody feel happy."

There is no invitation string. Instead, a bundle of four small sticks fastened together is sent to the invited tribes. It is sent four days in advance, and one stick is broken out each morning until the day arrives.

Cremation

Called chahtch ho'-no. The dead were cremated. The funeral pile is called chahtch' hom-sek-ki'. The mothers and sisters rub these ashes on their faces. The basket in which the burned bones were kept is called sh'-et'. The spirit or ghost leaving the body at death has two names, koo'-yah and chah-cho'.

Me-tum'-mah of Little Lake Valley

Doctor Who Sucks Pains

There were doctors who bled people and sucked. They made little cuts or slits, called sip-pahn, with a sharp knife of flint or obsidian. They then scraped gently with the blade or with the hand, pressing toward the slits to force the blood out, because man's blood is too rich. They usually did this on the arm or leg, never on the face or chest. It was sometimes done for rheumatism, often to relieve pain.

Pains were often sucked out without cutting the skin, being relieved by sucking the part. In this way the Doctor finds out what is the matter inside. The act of sucking pains is called kaw-o-hah'-min. Working on pains is called kaw-o-do-din.

Not many years ago a white man named Lockhart had a stiff neck and a bad pain in the back of his neck. An Indian woman doctor came and sucked the back of his neck for half an hour. Next morning she came back. He moved his neck all right and had no more pain. He gave her five dollars.

Dances

The sacred number is four. People always dance and sing for four nights and then have the feast called mah-ah'-de-kah. If the dance is ended before the fourth night, bad luck comes.

In preparing for a dance, the Me-tum'-mah of Little Lake Valley paint the chest crossways (horizontally) with four bands of clay red (po) and blue (me-shah'-lah), alternating. Both men and women paint their chests in this way. The bands are from half to three-fourths of an inch in width. Both men and women also paint the cheeks solid red, and paint three stripes on the chin—a long median stripe with a shorter stripe on each side. The permanent chin tattooing of the women is similar: a long median stripe reaching from the lip to the middle of the throat, with a shorter stripe on each side. When dancing, neither men nor women wear any clothing above the waist.

Invitation Strings

The invitation string consists of two separate articles: one, a number of sticks about two and a half inches long and as thick through as a lead pencil. These are tied side by side, and their number agrees with the number of tribes or villages to be invited. One is removed and given to the chief or captain of each tribe or rancheria invited.

The other article consists of a string of small sticks about the size of matches, the number corresponding with the number of days before the feast is to be held—say six at the start, one to be taken off every day until the feast day arrives.

Mourning by Women

Me-tum'-mah women of Little Lake Valley, on the death of a husband or other near relative, bang the hair of the forehead and plaster it in horizontal lines with blue clay (called me-shah'-lah). This is worn until it wears off; the women cry much of the time.

Death Customs

The body or corpse of a dead person is called chah'-she-bah'. The dead were usually burned, but in recent years they are buried. The grave is called chah-mah-mo', from chah, person; mah, ground; and mo, hole. Cremation is called ho-bah'-we'-yin; the funeral pyre, ho-shi'-yu'. The fire dying down toward the end of the burning is called no-se-kahl. The burnt bones remaining are chah-yah'-mah-sit (person bone, charcoal). The fine ashes that are left are called ho-too-lah'. They are put into a tightly woven woman's carrying basket called bu-che'. The mourning ceremony or funeral at the time of the burning is chah-de-bun. The mourning ceremony and crying at a later period (usually a year or two after the burning) is called ka-man-nin', meaning the last sadness dancing. The clothes, hides of bear and mountain lion, blankets, beads, trinkets, and other belongings of the dead are burned or buried with the dead.

Felling Trees and Splitting Planks

They felled trees and split logs by means of a heavy maul and wedges. the maul (called hi-bun-ne') was twenty to twenty-four inches in length and had a big head worked out of hard rock. It was used for driving the wedges. The wedges (called hi-ah') were of elkhorn and were eight to ten inches in length. They were used for splitting and chopping wood and also for felling trees. The method of felling trees was to drive the elkhorn wedge or chisel into the base of the tree by means of the maul. The wedge was thus carried

around the tree again and again, being driven in a little deeper each time, until finally the wood was cut away to such a depth that the tree fell.

Fire Making

The fire drill is made of buckbrush (Ceanothus divaricatus) and the fireblock of either buckeye or elder. These two woods have the most heat of all woods. Holes are made in the fireblock to hold the end of the fire drill, and a little powdered dry redwood bark is put into each hole to catch the spark when the drill brings out the fire.

Houses

All kinds of houses are called chah. The ordinary house was conical and consisted of slabs of bark, usually tanbark oak. It was called she-wah-chah (from she-wah, bark, and chah, house).

Salt

Salt (called she-e') is obtained by the Coast people from a big flat rock between Kabesilla and Chadburne Gulch.

Snares

Snares were much used by the Me-Tum'-mah of Little Lake Valley for capturing game. Those for small game were called se-lim-te, while the large rope snares for the deer were called se-lim-kah-she. In both cases the cords and ropes were made of iris, called se-lim. Snares for small game were attached to spring poles, but for deer and other large game no spring pole was used but a frame of light poles was erected, over which the noose of the snare was spread.

Ground Oven

Cooking holes were much used. They were called kah'-be-mo-ho (from kah'-be, rocks; mo, a hole; and ho, fire). They were about three feet square and were used for cooking deer meat, salmon, roots, and other foods. The bottom of the hole was lined with smooth flat rocks, the sides plastered with yellow clay. A fire was built in the hole and allowed to remain long enough to heat the rocks very hot. It was then removed and the hole swept clean, after which the articles to be cooked were placed on the bottom and covered with green grass and earth. Foods cooked in this way were cooked a long time and retained their juices and flavor.

Basket Traps for Quail

Quail were much used for food, and large numbers were caught in basket traps called nah-ko'-e. They were eight or nine feet in length and were made of young willow sprouts. A low brush fence three or more feet in length was built in places frequented by the quail. At intervals in this fence small gaps were left, in each of which was placed one of the basket traps. The quail were driven slowly toward the brush fence, which they followed until they came to one of the openings, when they went into the trap.

Rabbit Nets

Rabbit nets, called wi'-te-bi'-ah, were used for netting jackrabbits (ska-ko'-de). They were in the shape of a pouch three and a half to four feet in length and were set on rabbit runways with the mouth held open by sticks. When the rabbit ran in and butted against the far side, the opening was drawn tight so he could not escape.

Nets were also used for capturing squirrels, wood rats, quail, and grouse.

Basket "Blind" for Hunting

The brush hut or "blind" for hunting is called tsaw'-e-chah (or twoi'-e chah). It consists of a roughly woven bottomless basket four or five feet in height and is easily carried from place to place. It is of openwork so that the person sitting inside can see to shoot out in any direction. A mat of ferns or grass is placed on the ground inside for the hunter to sit on.

Sugar Pine

The nuts of the sugar pine (shoo'-ya kal'-le) are good eating. The gum or resin of the sugar pine (called be-yoot'-koo-e) exudes from wounds or bruises on the tree and is easily scraped off. It is a good medicine for diarrhea and fever, but must not be eaten in too large quantity.

Grasshoppers

Roasted grasshoppers are eaten straight and also are pounded and stirred into acorn mush.

Grasshoppers are usually caught in the following manner: a large circle or ring of fire is built in an open grassy place in summer when the

grass is dry. As the fire spreads towards the center, the grasshoppers attempt to fly through it and their wings are singed off, letting them fall into the burning stubble, so that their bodies are thoroughly roasted. Some of them are eaten just as they fall, others are pounded and mixed with acorn mush.

Relative Values of Acorns for Mush and Bread

The Me-tum'-mah Indians of Little Lake Valley say that the acorns they like best for bread and mush are those of the tanbark oak (Lithocarpus densiflora) and black oak (Quercus californica), both of which are oily, rich, and well flavored. The one they regard as next best is the white oak (Q. garryana); next to that, the canyon live oak (Q. chrysolepis). The acorns of the valley oak (Q. lobata) are the poorest of the five, making hard bread. They are not used when the other acorns can be obtained.

Acorn Bread

Acorn bread (called kah-to') is baked in the ground ovens already described. After the remains of the fire and ashes have been cleaned out, the hole is lined with the long leaves of the soaproot (Chlorogalum), on which the acorn dough is spread. It is then covered with another mass of soaproot leaves and overspread with earth. The best acorns for bread, and also for mush, are those of the tanbark oak and the black oak. These are very much better than those of any of the other oaks.

Lunch Bread

Another kind of bread, called lunch bread, is made from acorn mush of the tanbark oak or of the black oak, which, after cooling in water, is spread on a flat rock close to the fire. When the front side is done, it is turned and the other side is baked.

Acorn Preparation

Acorns soaked in a cold spring over winter are called mah-ah' kah-nim'. In the fall of the year the ripe acorns are put into baskets which are sunk in a big hole about four feet deep in the mud of a spring or a springy place, and allowed to remain over the winter. In the spring of the year, usually in April, they are taken out. The bitter has then all gone so that they do not have to be leached. They are shucked and pounded into flour which is cooked in baskets in the usual way. The mush and bread made from it are extra good and are called a "high dish," mah-ah'-kah-nim' (the name meaning "food made good").

In cooking acorn mush in the big baskets, the paddle (called sha-yu) used for stirring the mush has a flat blade for about eight or nine inches, above which it tapers into the handle.

Grizzly Bears

Grizzly bears (boo-tah-yu) were common in the land of the Me-tum'-mah. Ordinarily they were let alone. But there were brave men, called chah-bah', who used to fight them with clubs. My informant, when young, remembers several men who were badly scarred in combats with grizzlies and several who had one hand and wrist bitten off. Also one or two with one side of the face torn off. The grizzlies, if suddenly disturbed, always charged, but if given the trail or seen at a little distance would usually move off without molesting the man. When met on a trail, the bear always stood up and kept his eyes on the man. If the man ran, the bear chased him; if the man backed away quietly, the bear moved on without pursuing.

Grizzlies are a "kind of human being." They sit down like a man and stand up like a man. They get up and walk on their hind feet like a man and take things in their hands like a man. They have been seen catching salmon with their hands.

A long time ago one of the old people saw four grizzly bears playing the grass game. They were on a small flat; it was in early spring. They were sitting two on each side. They clapped their hands together and pointed their fingers, first on one side and then on the other, like so many men.

In fighting bears, the brave bear hunters of the Me-tum'-mah tribe used clubs of mountain mahogany (Cercocarpus), called mush-shoo-hi. They are five or six feet long, with a knob on the end two or three inches in diameter. The bear hunters always carried this club and also bow and arrows. It was the practice of the men who hunted the grizzlies to strike the bear on one of its paws, whereupon he stood erect. The man then struck him with his club on the end of his nose—never on the head. After fighting the bear in this way, he was finally killed with the bow and arrow. But the bear often wounded the hunter and sometimes killed him.

Soo-ma-chah', the Hairy People

The Me-tum'-mah say that a long time ago, before the Indians came, there were hairy people, called soo-ma-chah' or su-ma chah. They were about the size and shape of our people but were covered with wool. They could not talk, only motion with their hands. They hunted with bows and arrows and spears, and got their living in the same way that Indians do. We are not sure whether there were any females among them. They finally disappeared about the time the Indians came.

Ko'-o chah', the Poison Man

Ko'-o chah', the Poison Man (from ko'-o, poison, and chah', man), was not a real doctor but a bad man. The people know who he is and try to look out for him; nobody likes him. Sometimes they kill him. He goes around in a crowd in a sneaking way and touches people with his finger, on which he has put some kind of poison powder. In a day or two the person touched becomes sick; sometimes he dies.

World Maker

They believe in a World Maker whom they call Do-man or Mah-do'-nah. He lives in a good place called Oo-ye'. Making the world and people is called mah-do'-din.

The Poison Spider

The poison spider (Lathroedectus) has a red spot under his belly which means that he is stingy of fire and always lies on it. He is called ho-me-kot, meaning fire spider.

Tribe List

Me-tum'-mah or Me-tum'-ki Po-mah (their name for themselves). A Pomoan tribe inhabiting Little Lake or Willits Valley, the name of which in their own language is Me-tum'-ki (called 'Be-tum'-ki by Pomoan tribes on Russian River and Clear Lake).

The territory of the Me-tum'-mah extends northwesterly from the site of the present town of Willits to a little beyond the saw-mill at Northwestern Mill and thence to the coast, which it reaches at Cleone Creek (in their language La-koo'-nah be-dah'), or possibly at Pudding Creek, extending thence south to Little River, thus including the Fort Bragg, Noyo, Caspar, and Big River coast region which was called Bul-dam or Bool-dah.

The Me-tum'-mah proper did not claim the eastern part of Little Lake Valley from Willits to the mountains and Tomki Creek; this was the territory of a closely related band called Sho-mul po-mah. Neither did they claim the northern part of Little Lake (now a tule marsh) and the adjacent northern part of the valley, for these belonged to the band known as Buk-kow'-hah, regarded by the Me-tum'-mah as a distinct tribe.

The name Me-to'-mah chut'-te was applied to all Me-tum'mah villages in Me-tum'-ki or Little Lake Valley.

Rancherias in Little Lake Valley

The name Me-to'-mah chut'-te was applied to all Me-tum'-mah villages in Me-tum'-ki or Little Lake Valley.

There were four important permanent winter villages containing about six hundred people. These were: Cha-bo'-cha-kah chut'-te, Po'-kah-chil' chut'-te, She-o'-kah-lan' chut'-te, and Tsah-kah' chut'-te.

Cha-bo'-cha-kah chut'-te, meaning blue grouse water village: a very large rancheria with roundhouse, two or three miles west or northwest of Willits, between Willits and Northwestern Mill (just above Frost's ranch) and about a quarter mile from Po'-kah-chil' chut'-te. Between forty and fifty households could be counted on the site of this village.

Po'-kah-chil' chut'-te, meaning red clay hanger rancheria: about two miles west of Willits and a quarter of a mile southwest of Cha-bo'-cha-kah' chut'-te.

She-o'-kah-lan' chut'-te, meaning side hill village: about a mile west of Willits. Big roundhouse there.

Tsah-kah' chut'-te, meaning green village: on Willits Creek near Northwestern Mill, on road to Sherwood. Big roundhouse there. Northwestern limit of Me-tum'-mah tribe. My informant, Joseph Willits, was raised there.

Chum'-kah-til, meaning pines on edge of water: summer camp less than a quarter mile north of Willits. Formerly small pond there.

Kaht-se'-yu or Kah-tse'-yoo, meaning end of water: old summer camp about one and a half miles south of Willits and about a quarter mile from Bechtel Ranch, between Bechtel's and Willits.

Buts'-ah-tsa chut'-te, meaning cascara village: summer seed gathering camp about a mile west of Willits and the same distance south of She-o'-kah-lah', on a hillside on the road to Fort Bragg.

Kah-i'-kah chut'-te, meaning raven spring village: about two and a half miles from Willits on the road to Sherwood; an old orchard there now. The old village was two hundred to three hundred yards south of the first house (going from Willits toward Sherwood). There was another village of the same name on the same road farther north, in Sherwood Valley.

Kah-ba-paw-all chut'-te, meaning rock pool camp: summer camp about a half mile north of Willits on new highway. Formerly there was a little pool or pot-hole in a big rock there which was blasted out by the highway.

Kah-be-shal chut'-te, meaning boiling water village: about a mile south of Willits on Bechtel Ranch, on present highway. Two bands or divisions of the tribe met there, the Kah-shi'-da-mal' po-mah and the Tan'-nah-kom po'-mah.

Yah'-mul chut'-te, meaning friendly village: summer camp and dancing place in the valley one and one-half miles southeast of Willits. Shared by both the Me-tum'-mah and the Sho-mul' po'-mah.

Tan'-nah-kum chut'-te, meaning hand pond village: about three or three and a half miles east of Willits. There was an extra large round-house here, holding more than two hundred people. Belonged to Sho-mul' po'-mah.

Sho'-tse-yu chut'-te, meaning east end camp: about two miles east of Willits. Belonged to the Sho-mul' po'-mah.

Mah'-ah-hi'-tum chut'-te, meaning food stick standing village: big summer camp a half mile east of Bechtel's place and one or one and a quarter miles southeast of Willits, in the flat of the valley close to the hills on the east side. There was a big dance house here, consisting of a brush fence five or six feet high, without a roof. Several tribes met here to dance and have a good time, camping here for three months, from June to the end of August.

Buk-kow'-hah chut'-te, meaning dam mouth village: at extreme north end of Little Lake, close to present highway. Belonged to the division called Buk-kow'-hah po'-mah (of upper Outlet Creek).

Tsam-mom'-dah chut'-te, meaning sour creek village: on Davis Creek, five miles westerly from Willits on the road to Big River. Permanent all the year rancheria, belonging half and half to the Me-tum'-mah and the Bul-dom'-po'-mah. A white man named Bob Ralston took up a ranch there and poisoned the Indians by putting strychnine on meat. Those who were not killed removed to Me-tum'-ki Valley.

Me-tum'-mah Rancherias on or Near Coast

No'-yo chut'-te, on the beach between Fort Bragg and Noyo (on north side Noyo River, two to three hundred yards back from tidewater).

No'-bo-dah' chut'-te, on Hare Creek (no-be'-dah), about three-fourths of a mile back from coast and east of county road.

Kah-de'-yo chut'-te, on coast midway between Noyo River and Fort Bragg.

Kah-bah be'-dah chut'-te, on small creek of same name on coast about one mile north of Pudding Creek.

Ki-ye'-tel chut'-te, on south bank Pudding Creek, on top of bluff about sixty feet back of tidewater.

Yah-kah'-le chut'-te, at foot of Bald Hill, about one mile north of Pudding Creek and same distance from Cleone. Site of old rancheria; present rancheria there now.

Kah-le dim'-mul chut'-te, at Fort Bragg.

Hram-fo

Dress and Ornament

Men wore the hair net, stol'-le. A headdress of red flicker (Colaptes) feathers, called bo-kot-tat-ka-nah, is worn in dancing by the men only. The women wear another kind, called tip'-pe-lis, of axillary feathers of hawk.

They have long strings of handsome beads made of long cylinders of an opalescent shell, strung at intervals with large cylinders (one and one half to two inches long and half an inch in diameter, some more) of red clayey stone with irregular patches of white in it, which they call fawl-hoo'-e-yah (the red stone, fawl), and which comes from hills northeast of Lower Lake. This is "Indian gold." They make large beads also from a brown stone called hoo-weed, which comes from some miles south of Lower Lake, from a place the name of which sounds like Mamking Valley.

They paint their faces with red, white, and black paint. The red (fawl) and white (kes'-sit) are made from soft stones they get in mountains east of the lake. The black, kau baht, they make from charcoal of a soft wood, generally poison oak. The same charcoal is pricked into the skin in tattooing. The tattoo marks are called us-soon'.

Baskets

At Sulphur Bank, Clear Lake, I found the Hram-fo Indians making baskets of the following materials:

Digger pine (Pinus sabiniana). Ribbon-like split strands of young growth used for body material and called ho'-sool.

Redbud (Cercis occidentalis). Split strands peeled for body material; some bark left on for design material (red).

Aromatic sumac (Rhus trilobata). Rods with bark on (a-yeb) used for coarse baskets, fish baskets, and coarsest kind of burden basket.

Cladium or Carex roots used for body material. I recorded set'-se for Cladium and seh-che' for Carex, but I suspect an error. They may be the same or seh-che' (or su-che') may be common willow (Salix).

Willow (Salix argophylla). Called un-nob'-bah (or un-nob'), and used for body material.

Sedge (Carex). Called tse-kol-hi, Fine split root, used for blackish design material in fine baskets.

Many baskets have quail plumes of valley quail woven in. The plumes are called hreh or hra. The quail is called kahk.

The red crown feathers of the California woodpecker (Melanerpes) are extensively used in basket decoration. The red feathers are called trahn; the bird is called ka-lahts'-ahts.

Sun baskets, completely covered with feathers of red woodpecker crowns, have the dance design marked in feathers of other colors (fig. 30). During the ceremonies in the ceremonial house they are kept filled with pinole for the dancers.

Abalone bangles on baskets are called wil'-too-lah (abalone shell, wil'-to).



Fig. 30. Hramfo dance design on feathered baskets

Shell Money

Several women and one man were making wampum of clam shells as at Lower Lake. In drilling the disks, each is held down by the tip of the index or middle finger of the left hand, while the drill is operated by the right hand, which grasps the crossbar.

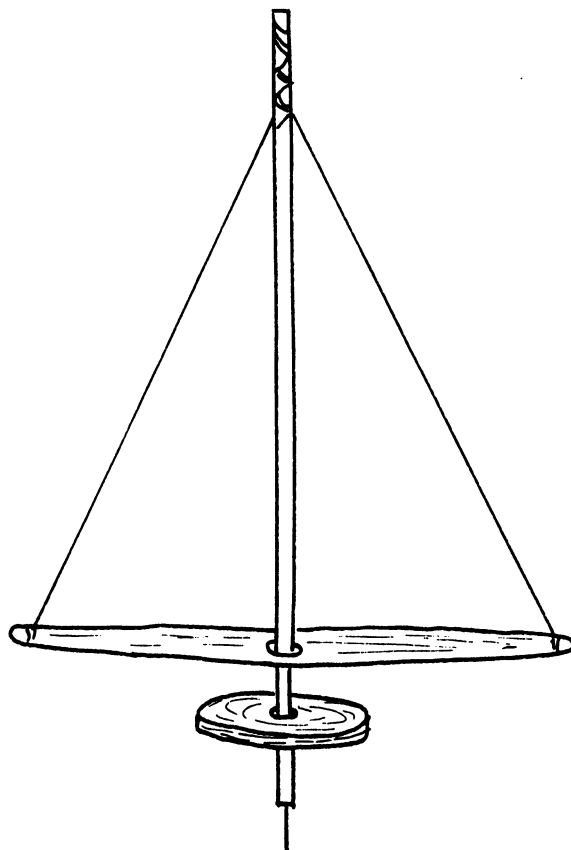


Fig. 31. Hramfo pump drill. Total length, 32 inches; length of crossbar, 17 inches; diameter of disk, 4.5 inches.

Figure 31 shows a wampum drill for drilling shell money of Washington clam shells.¹ Drill point is now made of a steel file, formerly of flint. The drill is called hoo-e-yab'-se. The rubbing stone is soo-ko'-kah-be. Wampum is called hoo'-e-yah. An old woman with a small hatchet blade chops the clam shells into small, more or less squarish pieces, which she afterwards trims into approximately circular disks by chopping off the corners

¹ The pump drill was introduced to the Pomo about 1876. See J. W. Hudson, A So-called Aboriginal Tool, Amer. Anthrop. (n.s.), 2:782, 1900. [Ed.]

and angles against a soft stone. She then does the preliminary rubbing on a stone to wear off the projecting ribs or striae. The man then takes each disk separately and drills a hole through its center with the drill by pressing the crosspiece and letting it rebound from the coil of the string. This keeps the drill whirling rapidly. The disks are then strung on a wire (formerly strong string), and rounded and polished on margins by pressing with the hands against a flat grinding stone and moving like honing a large knife.

Obsidian

They used to get their obsidian for arrowheads from a hill near the east shore of Clear Lake, south of Sulphur Bank between Lower Lake and Sulphur Bank, but apparently nearer Sulphur Bank. This would make the place not more than ten miles north of Lower Lake and likely not so far. I visited this place in 1906. The obsidian outcrop is extensive and is mainly just south of Borax Lake, south of Sulphur Bank ridge.

Cemetery

There are several graves a short distance east of the settlement (east or northeast). Each is enclosed in a rectangular fence, mostly north or south, and the more recent ones are covered with a sheet of white cloth pinned down to the ground with or without plants growing up through or around the edges. In one case an extra large plant of the so-called turkey mullein (*Eremocarpus*) grows up through the middle of the sheet and spreads out upon it. In another case the sheet had a border of points cut on a greenish cloth and a middle strip of the same material, with diamond-shaped holes cut into it (fig. 32).

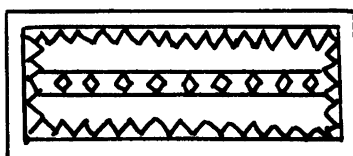


Fig. 32. Cloth grave cover of the Hramfo.

Village and Activities

At the time of our visit (August 18, 1906) to the Hram-fo on Cache Creek near Lower Lake, four or five men and seven or eight women and a few children were living in their summer houses among and under the oaks near the river. Some were under a large rectangular canopy about twenty feet long and seven feet high, with a flat roof of poles and brush and canvas, called top-pes-sah.

Others lived in a nearly circular brush shelter without roof but with tall willows and brush to form a side enclosing about three-fourths of a circle, perhaps fifteen to eighteen feet in diameter. The brush was set so as to arch in at the top, affording shade all day—the opening being at the north.

They were making and had on hand elegant feather baskets, sun baskets and other baskets of various kinds. The fish basket, called 'hah-mu-cha, is set down in muddy water over fish (fig. 33) and has a hole in the top through which hand is inserted to take fish out. Same kind was seen among Kulanapo at Kelseyville Mission.

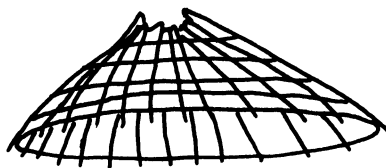


Fig. 33. Fish-catching basket of the Hramfo.

Yokiah Pomo

The word Pomo means red clay, a substance much prized by several divisions of the tribe. This red clay was mined by the aborigines. There is a mine of this kind in Potter Valley, another in La'-mah (called Lema by the whites) Valley. The red clay was used chiefly for mixing with acorn flour to make acorn bread. The clay was dissolved in water and the finely ground acorn flour was mixed with it, giving it a flavor and a color desired by the Indians. Ordinary earth or ground is called mah.

Clothing and Ornaments

In the early days the men had blankets called steet, made out of the skins of cottontail rabbits. The women had deerskin robes called pe-she' ka-too.

Deerskins were tanned to make them soft but the hair was not removed. Such tanned deerskins with the hair on were called shes-te.

No belts were worn except during ceremonies and dances. There were two kinds: a bead belt called nah-kaht; and a belt called sh'boo', finely woven and decorated with the red feathers of the woodpecker's head and quail plumes. These were very costly and were worn only by the rich.

Moccasins were not worn by either men or women.

There were no hats.

Ear pendants, called smah'-che'-ah kol-le, were worn on occasion. They were of curious construction, consisting of the leg or wing bone, five or six inches long, of a large bird, usually the turkey buzzard, and were finely carved or engraved. They were decorated at both ends with quail plumes and tufts of bright red feathers from the crown of the California woodpecker. They were suspended horizontally from a hole in the lobe of the ear.

Hunting

The Yokiah built small brush blinds called p'sh-ah-chah close to small springs in order to shoot with bow and arrow such animals and birds as came to drink. One of their men in this way killed seventy-five California woodpeckers in one day.

The implement for polishing arrows is not a stone but consists of two sticks.

The sling for throwing stones is called um' she'-uk and consists of a small piece of buckskin attached to a cord of sinew or plant fiber. Curiously enough, the same term applied to a plant means wilted.

Snares were used for catching birds and animals. The bird snare is tahm-nahm, the deer snare is ba-de'-uk. Usually several deer snares were set together. They were made of Indian rope and were very strong; so strong, we are told, that they sometimes caught and held bears. The act of snaring was called um' nahm'.

Food

Acorns and other kinds of food were kept in very large storehouse baskets called e-tet. They stood on a low scaffold called ho'-chom.

The acorn leach is called ah' a-oo-mo; the act of filtering acorn meal, sh'a-oo.

In years of scarcity of food, toasted grasshoppers are eaten. Grass fires are set in large circles and as the fire burns toward the center, the grasshoppers wings are singed so that they drop into the burning grass and are slightly roasted. They are then fit to eat.

Miscellaneous

Pipes were called sak-kah-kah'-be. They were straight and made of the wood of an ash tree.

Wild tobacco, called sak-kah', was usually carried in weasel-skin bags called sak-kah' ho'-lah, meaning tobacco sack.

Nets were called yet. They were carried in the hand or hung on the side. These were additional to the large carrying baskets worn on the back.

The word for entrance, dah, appears to imply movement along or entrance into some place. Thus it is applied to a doorway, the gate opening in a fence, a trail, and also to the sun.

The word for ashes is no, but in the case of the falling of ashes and burnt leaves from a large fire, the word is no'-te (from no, ashes; and te, the small wooly feathers of birds commonly known as down).

The word yah has several meanings: bone, strong, we (or us); and also denotes action, as in the sentences, "A bear killed him" (pt'tar-rah yah moo-to koon), "The woodpecker is hammering" kah-tahk yah he-to-to), and "He put out the fire" (mool s'bow-ki yah).

The Yokiah appear to have no specific word for hungry. They say mah-ah chum-dahl', meaning I am dying for food.

The sugar pine does not grow in Russian River Valley, but grows in a cool place high up in the Miyakma mountains between Ukiah and Clear Lake.

Secret Societies

In the old days there were certain people or secret societies called Yum'-tah or Yom'-tah. Usually there was only one in a tribe, sometimes one in several neighboring villages. This person knew the sacred ceremonial songs of the cult. There is still an old Yo-ki-ah woman who knows part of these secret formulas but will not tell them even to an Indian of her own tribe.

Religion

Every year in early spring, usually about the middle of April, the Yo-ki-ahs gave a feast to appease the gods. When questioned as to who these gods were, no very definite answer was received. They seem to believe in a supreme power called Kaw-mahm-mahl, meaning the universe.

They addressed the sun saying, Dah-chah'-del-moo'-to, meaning the sun that's moving above us.

They also addressed the ocean and sacred birds. There are two sacred birds; namely, tah'-tah, the falcon, and kah-tah'-kah, the California woodpecker, both of whom are appealed to in their songs. The songs run in this wise: "Give me the strength of your heart and of your nose."

The people had confidence in the supernatural powers of du'-we, the coyote. Du'-we was regarded as the creator; he was uncle of tah'-tah, the falcon.

Dream Religion

Fifty or sixty years ago (date forgotten) a new religion was brought in from the East and extended as far west as Stonyford at the base of the Inner Coast Range in Colusa County. Where it came from is not positively known, but it is said to have come from the Sioux Chief, Sitting Bull.¹ During its prevalence the Doctors who preached it said that a terrible wind was coming—a wind so strong and violent that it would destroy all living things. They said that the only way to avoid it was to dig underground refuges. Under their direction, large sweat houses about fifty feet in diameter and ten feet in depth were dug out of the ground, and the roof was laid flush with the ground. They were entered by means of a tunnel thirty or forty feet long which sloped gradually from the surface of the earth to the floor level of the sweat house. The religion taught by these Dream Doctors was a fake religion and had nothing to do with the original religion of the people.

Original Ghost Dances

In the genuine Ghost Dance (called Koo'-yak-ke), the old chiefs used to meet together in one of the ceremonial houses. It was their custom to smoke four times before saying a word so that they would have time to think before speaking. In trivial matters they spoke quickly, but in discussing serious or religious matters they spoke with great deliberation.

Mortuary Customs

The dead were burned, not buried. The dead person, called chah-kah-low', was wrapt in his best and most valuable skins and wampum. An excavation called chah-ho' mo (person's fire hole) was dug and the wood for the

¹ This was the second Ghost Dance wave of about 1890. [Ed.]

funeral pyre was arranged in it. The burning of a dead person is called chah-ho'-na-o. The mourning ceremony at the time of the burning is called ho-chah moo-low, meaning fire, persons go around—the mourning relatives going around in a circle.

The spirit or ghost of the dead person is known by two names, koo'-yah and chah' doo-wel. The ghosts remain on earth. The burnt bones and ashes of the dead, called chah yah (person's bones) are not preserved in a basket or otherwise. After burning the body, the mother and sisters rub ashes of the burnt person on their faces, but a widow is not required by the Yokiah law to do this.

Red Mountain

There is a red mountain east or southeast of Ukiah. It is called Mah-ke sit-tel dan'-no, meaning Red Earth Mountain. The ordinary word for red is tahs, but red earth is mah-ke'-sil. The term ke'-sil is not applied to any red except red earth.

Songs

Most of the songs of the Yo-ki-ah tribe came from the Nicasio Indians of Marin County (the Hoo'-koo-e'-ko tribe).

Furthermore, when describing his songs and ceremonial dances to a Tuolumne Mewuk (William Fuller of Soulsbyville), my informant, Stephen Knight, learned to his surprise that some of them are very similar to those of the Mewuk.

The explanation is that the Me'-wuk of the Sierra and the Hoo'-koo-e'-ko of the Coast belong to the same stock, having been connected around San Francisco Bay in the distant past. The fact of striking resemblances indicates a great antiquity for these songs and ceremonial performances.

Bo-yah

Invitation String

The Bo-yah of the coast strip from Navarro Ridge south of the mouth of Gualala River tell me that their invitation string consists of a series of small sticks, usually eight or ten in number, each about two inches long, strung together. The number of sticks corresponds with the number of days between the sending of the invitation and the date of the coming ceremony. The messenger breaks off one stick each day until the string is

delivered, after which the recipient does the same until the date of the ceremony arrives.

Doctors

The doctors of the Bo-yah Pomo were called bah-too', and, when treating the sick, were in the habit of making four emphatic motions, at the same time counting aloud, which they did in the following words: once (ti'-to oo'-le), twice (kaw'-e oo'-le), three times (se'-bo ool), four times (doo'-koi ool').

Food

Small fish are driven into net by dragging a bush or brush weighted with small stones fastened with twisted hazel sprouts. The net is called shah'-bi-yak.

The Bo-yah say that the way to cook slugs is to stick the point of a slender stick through the head of the slug and pinch off the tail end and pull out the insides through the hole. Then, by means of the slender stick stuck through the head, they hold the slug over the coals in the heat of the fire until it is roasted. It is then good to eat.

Miscellaneous

Newly made bows and arrows are darkened by rubbing charcoal, powdered and mixed with soaproot clue, on the wood. Bows which are smaller and less strong than deer bows are used for small game, rabbits, ducks, and other birds. They are called duck bows, ke-yahn' hi-shin.

The sweat house is called shah-ne. It is a conical structure built of big timbers stood on end. It has one large center post.

The wife makes a sun basket and gives it to the husband or to a relative of some one recently deceased. The husband gives it to his mother or sister.

MIDOO

Editor's note: A selection of brief accounts of field work among several Midoo tribes from 1902 to 1906 is presented here to give an impression of the nature of Indian settlements on the western slopes of the Sierra Nevada during this period.

Field Work Among Miduan Tribes

Ne'-se-nun of American River region

On September 8, 1902, in the afternoon, although the heat was excessive (over 100°), I hired a team and visited two Indian camps, one in Todd Valley, three miles west of Forest Hill, the other at Yankee Jim, three miles north of Forest Hill. There are two families at each place. Both camps are in the yellow pines and blue manzanita, with no digger pines in sight.

At both places the Indians live in rough board houses built a long time ago. Besides these, at the Todd Valley camp there is a circular house for their ceremonials, similar to the round house on the ridge north of Murphys (Calaveras County), except that the Murphy houses are really circular, while this one is many-sided but looks circular from a short distance away.

The family living at the round house was away—the men (father and son) cutting wood and the women washing gold on North Fork American River.

About half a mile away I visited the house of the widow of the chief (who died this summer). She is perhaps 40 years old and has her chin tattooed in vertical lines (5 or 6 I think). She has a boy 14-15 years old.

I bought of her three fine large (and one smaller) baskets for cooking acorn meal mush, one small mush bowl, and one very small roundish basket. She is a good basket maker. She has a Paiute winnower (te-ma).

About the middle of next month (October), I was told, the various bands of these Indians are planning to hold the annual Mourning "Cry" near Kelsey, between Georgetown and Placerville, Eldorado County.

Then I drove to a small country settlement known as Yankee Jim and turned west, and on a knoll a quarter of a mile away came to the camp of the two families of Ne'-se-nun Indians living there. One family consists

of a very old woman and her husband, nearly blind. They were shucking and splitting black oak acorns when I saw and photographed them.

The other family consists of an old woman, a middle-aged couple, and three girls (from 16 to 20) and one boy of 12. (I learned afterward that the three girls were visiting here and live in North Fork American River one mile south of Colfax.) They also were shucking and splitting acorns and making bread. In both cases the old woman was splitting the acorns open (the shells) by hammering them between stones, one resting on the ground (8-10 inches across), the other held in her right hand. I bought both of the striking stones as both are fashioned, though very differently. One is like a small pestle; the other is roundish, narrower on top, and notched for finger grasp in hammering. The woman who did the pounding tossed the clean shucked acorn into a broadly scoop-shaped basket (with a handle) which they call pah-ti. Then another person (in one case the very old man; in the other, one of the girls) split the green acorn meat or nut in two lengthwise with the fingers, and tossed the split halves into another pah-ti. They were now ready to be dried before pounding into meal. All of the acorns were green. They had several bushels just gathered.

I got at this camp a fine, large cooking bowl and half a dozen old baskets, and a curious rattle, besides the stones already mentioned. The rattle belonged to the very old man and consists of a slender stick about 15 inches long with two large cocoons attached to the upper end. The cocoons are loaded so that they rattle when the stick is shaken.

Close by the house a small roughly oval place was fenced in, to keep out the stock. Inside the fence is a grape arbor, and under the arbor is the mortar for hammering acorns, hollowed out of a large rock. Beside it was the very old and large burden basket (mal-la) which I purchased.

At this camp were a lot of sugar pine cones (for which they had gone farther up the mountains), still partly green but full grown and nearly ripe. These they roast just a little in the fire and then split open lengthwise with a strong large knife, exposing a row of the large nut-seeds on each side of the long axis.

The man at the head of this camp told me his name is Hunter Bill. He and the others were very polite. The people here say all these Indians are good hard-working honest people, self-supporting and respectable.

In the good old days before the white man came, the Sierra foot-

hill Indians used in summer to go practically naked; and even now, where they consider themselves safe from intrusion, they wear about the same clothes.

When I reached the Ne'-se-non camp at Yankee Jim this afternoon, the very old woman already mentioned as shucking acorns with the blind old man had on only a dark skirt and was absolutely naked from the waist up. Her long pendant breasts hung down nearly or quite to her thighs as she sat on the ground. When I began to talk to her she reached and put on a thin black waist. So far as I have observed, none of the Mu-wa, Ne-se-nun, or Wiktchumne women wear underclothes—merely a thin outside gown or dress, usually of black, with nothing under it. The men usually wear a shirt and overalls.

Between Sierra City and Downieville

September 28, 1906. The Downieville people tell me that no Indians ever inhabited the region I traversed today, but that in the early days parties of Indians from the Lower Yuba region (Midoo) used to come up every summer and visit the Sardine Lakes, and other lakes in the mountains hereabouts and catch and dry fish which they took back with them.

The Washoo Indians never went west of Sierra Valley.

No-to'-koi-yo of American Valley

September 30, 1906. At the point where Spanish Creek leaves the north side of the valley, a tongue of meadow penetrates the forest, reaching to the actual base of the pine-clad hills. These hills, facing the southwest, present the hottest slope about the valley. Here I found a small settlement of Midoo Indians, the only Indians I have seen in this region. Only two families remain here.

It is interesting to note that the Indians, as is their custom, have selected the warmest and driest place on the borders of the valley for their home—a place that receives the maximum of sunshine—while the whites have put their town, Quincey, on one of the coldest and dampest places, which receives the minimum of sunshine.

October 1, 1906. The Indians I met yesterday told me of another small camp (two families in the pine forest about a mile west of their place, and half a mile or so north of a tongue of the valley which pushes north at this point, the tongue next west of the one where Spanish Creek leaves the valley. So on my tramp today I went to the place and found only one Indian and his wife. The man's white name is Chandler Jim. He tells me his tribe

(the northeastern Midoo of Dixon) ranges northerly to Big Meadows and Mountain Meadows and easterly to Sierra Valley, the western part of which belonged to them and the eastern part to the Washoo. On the south they extended to the mountains between Middle Fork, Feather River, and North Fork Yuba River. Their western boundary I did not learn. He said they took in Buck's Valley and reached "down the road toward Oroville."

I took all the trees and shrubs I could find to his camp and got their names in his language. Also showed my Fuertes series of bird paintings, and a lot of photos of mammals, reptiles, and insects, and got their names. Also got a fair general vocabulary and hints of a lot of interesting animal myths.

The acorn crop is a failure this year and the Indians are collecting and drying large quantities of manzanita berries (Arctostaphylos patula), which are large black berries. These they pound in mortars and eat without other treatment.

This Indian tells me that in 1894 he and others of his tribe were allotted lands, 160 acres each, which are now included in the Plumas Forest Reserve, and that the Supervisor in charge has forbidden the Indians to cut wood for sale on their own lands. This seems hard, particularly as there is hardly any other way by which they can earn money here to purchase supplies and clothing.

There used to be a large settlement of Indians at the place where Chandler Jim lives—on a small pine flat having a small spring of its own. And again it is worth noting that they selected a warm, well-drained, sunny spot in the pine forest near the valley, instead of living on the damp, chilly valley floor.

I stayed so late, and the distance was so far, that I didn't get back to Quincy till an hour after dark—but I had the benefit of the nearly full moon.

Ne'-se-non of Colfax region and Bear River

September 10, 1902. I visited three camps of Ne'-se-non Indians: (1) on ridge south of Colfax in edge of canyon of North Fork American River; (2) on road north about a mile from Colfax; (3) on northwest side of Bear River on grassy hills about 4 miles from Colfax.

There are small round houses at each of the camps, some with door flush, others with entrance drawn out into a passage. At the Bear River camp there is a large round house for the big times—dances and fandangoes.

I picked up a few baskets in each of these camps and got the following notes and vocabulary from a woman ("Charlie's wife") in the American River camp south of Colfax. She is a good woman, middle-aged, talks English well, and makes good baskets. She also had some old ones which I of course got.

She told me that she and her people are Ne'-se-nons, not Homas, and that while the majority of their words are the same as those of the Nevada City Ho'-mah, many words are entirely different. She regards the two as different tribes. Where the language differs, her words are in nearly every case the same as those of the Ne'-se-non at Todd Valley.

In the camp one mile north of Colfax, I found a couple of bushels of newly gathered nearly ripe cones of ponderosa pine, doubtless to be fired for the seeds.

In all of the three camps visited today, the Indians had winnowing baskets and open-work burden baskets made by the Washoes and Piutes—mainly Washoes. The same is true of the Ne'-se-nun camps in Todd Valley and at Yankee Jim, visited a day or two ago.

In the Bear River camp and the camp one mile north of Colfax I saw many baskets of fresh acorn mush.

Ne'-ce-non village near Nashville

December 2, 1904. Visited the camp, about six miles from Nashville and at an elevation of about 2000 feet, of an old Necenon Chief whose name is Charley Hunchup. He is a large, heavy, intelligent man but complains of being sick. His wife is much younger and was taken when a little girl and raised by Hunchup. Hunchup also has a widowed sister, a very good looking woman past middle life. Two old women and an old blind man complete the inhabitants of the old settlement which formerly was of large size. The graveyard is near on the east. There is a large circular ceremonial house of the usual form, and the people live in three small board houses. The place is a gently sloping warm exposure in smokebush (Ceanothus cuneatus) chaparral with digger pines and many oaks about. It is called Koot'-bah, and is the southernmost settlement of the tribe. The Konne or Mu-wah have their northernmost settlement between Middle and South Fork of Cosumnes, and at Grizzly Flat. Hunchup's people have rather broad flat faces for Indians and the feature is marked also in some of the half-breeds, a number of whom (and some white men with Indian wives) live scattered over the hilly country between Nashville and Hunchup's camp.

I was at Hunchup's a little after one o'clock and the women cooked

dinner for me without being asked. They had good bread and butter, beans, and coffee, besides basketsful of acorn mush, of which I ate some.

The women wear the hair straight down the back and sides of the head. They are the ordinary size and plump as a rule, with large but not prominent breasts.

For sore throat they chew leaves of the blue oak (Quercus douglasii) with a cotton-like growth (red or white) and little pimples on the underside of the leaf. It is as bitter as quinine and cures sore throat in a few minutes.

A tea of mistletoe from the oaks they give women in labor to make the delivery prompt. They use many other plants for medicinal purposes but I was not with them long enough to learn about them.

The North Fork of Cosumnes River they call To-sim-e-nan-in-se'-o; the Middle Fork, Ko-mo'-din-se'-o.

South Fork American River (just north of Placerville) they call To-sim-se'-o (meaning north river).

A distant white peak in the Sierra (possibly Pyramid Peak) they call Ko-wim-me-a-man'.

The Sierra as a whole, including the foothills in which they live, they call We'-pi-yam-man.

Their name for their tribe, including all the bands from here north, to and including those on North Fork of American River, appears to be Ti'-nan; and their word for people throughout this region is Ne'-ce-non (or Nis-se-non).

They call the Mu-wa (next tribe or stock to the south) Ko-ne. I got a fairly full vocabulary from them, including names of mammals, birds, reptiles, insects, trees, and shrubs.

They had a number of rather good old baskets, some of large size, and I brought all I could carry in a large heavy nest on horseback. Got the names of the designs on these. Gave them presents of beads, tobacco, stockings, and old clothes.

They have no children at all, and very few dogs and cats. But a half-breed boy of 12, named Jodie Highland, rode in on horseback and I hired him to go with me for the rest of the day as pilot over trails

through the forest. He is a bright clean-looking boy and knows all of the birds of this region.

Darkness overtook me when about two-thirds of the way back, so I had to ride down the steep canyon slope with my big heavy bundle after dark, and ford the river also, which was not pleasant, for it was a deep rapid stream. As the horse knew the ford and I didn't, I trusted entirely to him and gave him loose rein.

December 3, 1904. Collected a lot of plants and took them to an old Ti-nan or Necenon woman, wife of a white man named Franklin, who lives 1.5 miles above Nashville, on the river. She calls herself Mrs. Adeline Franklin. She is a large, heavy, broad-faced woman of a little over fifty and a full-blood. I took her photograph alone and with a little grandchild, and also with a large three-rod coiled basket three feet high which she has recently finished for Dr. J. W. Hudson of Ukiah.

Got names of plants from her and checked up the vocabulary I got at Hunchup's camp yesterday (in part), but had to quit before noon as she had to cook dinner for her husband and I had to go back to the mines and get ready for the 2 p.m. stage, which I took to El Dorado, arriving just after dark—a distance of only 8 miles but road hilly and muddy. Came by the eastern or Union Mine and Martinez Creek road instead of the Logtown Road by which I went to Nashville.

This Union Mine road is the same one I took out when here last year. In spite of the steep hills, it is interesting on account of the chaparral through which it passes, which is much richer in species than that along the other road. The richest part is for a couple of miles on both sides of Union Mine, mainly in Martinez Creek valley.

Hunchup's rancheria

December 2, 1904. The Indians at Hunchup's camp discriminate the species of manzanita. Both Arctostaphylos viscida and A. mariposa abound from their camp down to the canyon at Nashville. They call A. viscida ko-to and ko-tum-chah (chah meaning tree, being a terminal applied to all trees and shrubs). A. mariposa they call muk-kus. They say A. viscida has whiter or yellower and usually smaller leaves, smaller stems, smaller and better-tasting berries which are sticky, and is a smaller bush. A. mariposa they say is bigger as a whole, has bigger and bluer leaves, larger stems, and larger berries which are not sticky and are not so good eating as those of A. viscida. They pound up the berries of both kinds and eat them without cooking.

They treat berries of Rhus aromatica in the same way. They eat many other seeds and roast most of them.

They have a number of small portable mortars which they did not make. They have still a few warm blankets of twisted rabbit skin.

Their coarse scoop basket (pat-ti) has a handle and is shaped like our tin dustpans, the same as at American River. This form is distinctive of the Tin-nan or Necenon tribe.

The burden basket they call koi'-yah.

The big three stick coiled cooking baskets they call moo-kum (big) pullus; the small mush bowls, nan-ni-pul-lus or moi-yum (small) pullus.

The flattish circular winnower is soo'-loo.

Their round choked-mouthed coiled baskets they call muk'-ka-le and say that formerly very many of them were made with covers, to hold seeds and trinkets.

The old storehouse basket for food they call che-pa.

The single-rod coiled bowl is wit'-che.

This is the headquarters for the deep cooking baskets (three-rod) with straight flaring sides and attractive designs in black and fern rood and red redbud bark (fig. 34). These are the moo'-kum pul'-lus. I measured some that were three feet high on the side. They have some Washoo shaped winnowers.

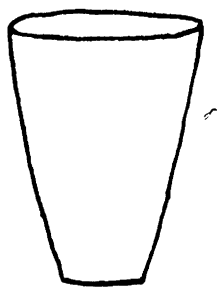


Fig. 34. Deep coiled cooking basket of Necenon.

The Necenon Indians here (Hunchup's camp) recognize Quercus morehus as a species of oak and call it hah-maht' (or hah-mah'-tum chah). Their names for the other oaks are:

Q. <u>lobata</u>	pah-lahm'-chah
Q. <u>douglasi</u>	pik-keem' chah (or oe-keem)
Q. <u>californica</u>	pah-hahm' chah (or simply pah-hah)
Q. <u>wislizeni</u>	bah-bah'-kum chah (or bah-bahk)
Q. <u>chrysolepis</u>	wi'-am-chah (or wi-ah)
Q. <u>morehus</u>	hah-mah'-tum chah (or hah-maht')

Kum-mo'-win

Kum-mo'-win territory, centering along North Fork Feather River, extended westerly to Berry Creek, Mountain House, Merrimac, and Pea Vine Rancheria (two miles north of Merrimac), but not quite to Stanwood. The southern boundary lay south of South Fork Feather River, from Bangor to Challenge. South of this were the Tahn-kum. Bidwell Bar, Buffalo Ranch, Enterprise, Swedes Flat, Bangor, Challenge, New York Flat, Buckeye House, North Star House, Sunset Hill, Stringtown, Forbestown, and Winthrop House all belonged to the Kum-mo'-win. The northern boundary ran from a little south of Bucks Ranch, easterly to the northern loop of Middle Fork Feather River near Nelson Point; the eastern boundary appears to have been the divide between Nelson Creek on the west and the valley of Middle Fork Feather River between Sloat and Clio, leaving Mohawk in the territory of the Notokoiyo. The Kum-mo'-win reached west to or nearly to Oroville, but not quite to Stanwood or Grizzly Hill; northerly not quite to Bucks Ranch; easterly to Strawberry Valley and Bluenose, but not quite to Mohawk; and southeasterly to Buckeye.

Informant states that Morrystown, Downieville, Camptonville, and Poker Flat were not theirs.

From Oroville westerly were the Sa'-win.

Downieville and Camptonville belonged to Tahn'-kum.

The line between the Kum-mo'-win and the Tahn'-kum passed just south of Wyandotte and Bangor.

The salt springs at Wheatland belonged to the Auburn-Colfax tribe, called Tan-ku by the Kum-mo'-win, who used to go there to get the salt mud, which had to be cooked to get the salt. If caught, there was war.

The Kum-mo'-win say they don't understand the talk of the Colfax and Auburn people.

Houses

The ordinary houses were bark huts five or six feet high. the covering was the thick bark of the ponderosa pine.

Roundhouses

The covering of the roundhouse was of two kinds of bark resting on a stout frame. Cedar, which is very strong, was laid on first. This was covered with the thick heavy bark of the ponderosa pine to keep out the storm and rain.

In the dances both men and women wore on their foreheads narrow bands of fur, of weasel or otter skin.

Nuts

Acorns were the principal food but many other kinds were eaten. Nuts of pepperwood or laurel (Umbellularia), which are very bitter, were buried in mud for a long time to take out the bitter.

Dogs

In early days the people had two kinds of dogs—coyotes and cross foxes. These were caught young and tamed. Both were easily tamed and made good pets. But after the white men came they would catch chickens and kill little pigs. Coyote dogs would never bite their masters but would bite other people.

This information from George Martin at Enterprise, Butte County, July, 1930.

Mi-chop'-do

The Mi-chop'-do occupied a small area on the flat, open floor of Sacramento Valley in the Chico region, from Sacramento River on the west to the foothills of the Sierra on the east; and from Koo-sel (Cu-sel) Lagoon and Rock Creek on the north to Jacinto on the south, a distance of only eighteen miles, thus including the city of Chico and the towns of Durham, Dayton, and Nord. East of Chico they claim only a few miles, stating that the settlements of Magalia, Yankee Hill, and Cherokee were within the territory of the Ti'-mah or Foothills tribe.

Their villages were rather numerous notwithstanding the small size of the area; no fewer than twenty-three are enumerated in the accompanying list. Of this number, twenty were inhabited during the life-time of the informant. Each had its own chief and its own roundhouse (ko'-me). The roundhouse had six posts—two large main posts and four smaller. There was only one door, which was on the west side, and so low that people had to bend low or crawl to get in and out.

The Mi-chop'-do were in contact with several tribes: on the west were the Winton No-mel'-te-ke'-we; on the northwest, the Winton Poo'-emuk or Te-ha'-ma; on the east and south were tribes of their own stock (Midoo).

As with the Winton, the surrounding tribes were not designated by distinctive tribal names but by names indicating direction: thus, Oi-dim'-mah, north people; Yam'-mah-nim'-mah, east or mountain people; Kah-nah'-mah or Kan-ni'-ah, south people; Ho'-nam-mah or Hon'-nok, west people, also called Me-ni'-nah-mi'-doo, other side people, meaning on the other or west side of Sacramento River.

Ethnozoology

Grizzly bears were common in the tules. They never left the tules but were exceedingly dangerous to Indians going in there. Many Indians were badly hurt and some killed by them. They would always attack.

There were no black bears in the open country except the water bear (woo-too'-ne) which lived in the water and in holes in the river banks. A baby placed near or opposite the hole would cry and woo-too'-ne would come out so the Indians could kill it.

The black bear of the mountains is called hah-hah'-bo; the brown bear of the mountains is moo'-de.

There were two kinds of mountain lions, one called pa-koo'-ne, and the other, he-le'-te. He-le'-te had a very long tail with which he used to rope deer. He did not eat the deer, but was followed by the big wolf (hoo'-le) which used to eat the deer killed by he-le'-te.

Elk and antelope were abundant on the plain.

In the long ago the first land was at Durham. Here grew an oak tree which bore all kinds of acorns—acorns of the valley oak, live oak, and others. This tree was cut by whites a few years ago when clearing for the railroad. After this, many of our people died.

Preparation of Acorn Food

Members of the Mi-chop'-do division of the valley Midoo living at Chico say that acorns intended for thick soup or mush are gathered green, and that the resulting mush is nice and white, while acorns intended for bread are allowed to ripen on the trees and are not gathered until fall. The dough made from them is much darker in color.

Acorn bread is prepared in the following manner: a fire is built in a shallow excavation in the ground (not nearly so deep as the ordinary cooking hole used for baking meat and fish) and when the ground is sufficiently hot, the fire is removed and a layer of sycamore leaves spread over the ashes. Then the acorn dough, wrapped in other large leaves of the sycamore, is placed upon it. This is covered with more sycamore leaves, on top of which are laid the hot stones. Then the mass is covered with earth and allowed to cook until it begins to sink—a sign that the bread is ready.

This information recorded at Chico, November, 1919.

Villages on Sacramento River

The word hoo'-loo-kah, meaning village, should be added to each of these names.

Se-dow'-we. In northeast side of loop of Sacramento River, southwest of Kusal Lagoon, 2-1/2 miles northwest of Chico Landing and 1/4 mile below Hamilton Bridge.

Sook'-soo'-koo. On east side Sacramento River opposite Kusal and California islands and west of Kusal Slough 1-3/4 miles north (or north-northwest) of Chico Landing.

Pe-dow'-kah. On east side Sacramento River opposite Munroeville Island.

Tsa-ne (or Cha-ne). At Monroeville on west side Sacramento River. Properly belongs to Winton Noemuk but shared with Mitchopdo. Called Tse'-no or Tsen'-no by the Noemuk and Cha-no by some of the Chico Mitchopdo.

Soo'-noos. On east side Sacramento River south of Parrot Landing and on Parrot Grant.

Baht'-tche (Bah-tse or Baht-ze'). On west side Sacramento River at Jacinto. Belongs properly to Winton Noemuk but said to be shared by Mitchopdo.

Villages at Chico or between Chico and Sacramento River

Bah-hahp'-ke. On Bidwell Ranch at present Indian village in northwest part of Chico. Word means straight tree.

Bah'-he-yu. On Sandy Gulch Creek about 1/2 mile above its junction with Big Chico Creek and about 3 miles west of Chico.

Yu'-dow. On south side Big Chico Creek opposite mouth of Sandy Gulch Creek.

O-tah'-ke. On Big Chico Creek about 1/2 mile below mouth of Sandy Gulch Creek.

Pah-kem. On west side junction of Mud Creek with Big Chico Creek.

Villages Northeast and East of Chico

Wah-nah'-tahm. On south side of Sandy Gulch Creek about one mile northeast of Chico and on east side of highway.

Tse'-lim-mah. On north side Big Chico Creek, 3 or 3-1/2 miles northeast of Chico (opposite State Forest Station).

Villages East of Chico

Yow'-koo. On south side Big Chico Creek perhaps a mile above Tse'-lim-mah.

Pol-mot. At Bidwell Spring 6 or 7 miles east of Chico.

Tsoo'-lam se-we. On little Chico Creek apparently near Boness Ranch (location uncertain).

Yum'-mut-to. At Forks of Big and Little Butte Creek 7 or 8 miles east of Chico.

Villages South of Chico

Mitch-op'-do. About 4-1/2 miles south of Chico on small creek (Sap-sim se-we) sometimes called Little Butte Creek.

Wil-lil'-lim. Half or 3/4 mile southwest of Mitchopdo on same creek.

Es'-ken'-ne. On west side Butte Creek half mile east of Durham (on south side of road).

Sap'-se. About half mile southeast of Dayton (5-1/2 miles south of Chico), on Sap-sim se-we.

Ki-dak'-to. Short distance (say 1/4 mile) east of Sap'-se.

Pe-tut'-taw. About a mile south of Dayton and 1/2 or 3/4 mile southwest of Sap'-se. This and the two villages mentioned just before were not inhabited in the lifetime of the informant, Jack Frango (1923).

Ne'-ce-non

In general the Middle Fork of the Cosumnes River was the southern boundary of the Ne'-ce-non territory, but west of Mt. Orcum and about a mile west of the post office at Aukum, a point extended south past Plymouth to the north side of Dry Creek, about three miles northwest of Ione, which was the extreme southernmost point occupied by this tribe. This extension is likely to be new and recent. North of Ione, Latrobe, Forest Home, Shingle Springs, and the entire Placerville country were all Necenon lands. They met the Mewuk at Aukum and on Dry Creek. The old Necenon rancheria called Lok'-low (meaning plain) near Dry Creek was on a knoll just north of and across the present road from the clay shed at the Q. ranch. This was both the southernmost and the westernmost point occupied by the tribe. Here they met the Me'-wuk, whom they call Ko'-ne. The place and people at Gold Hill on the American River are called Chah-pah'-mus-sy; the name of Hunchup's place and band between the North and Middle Forks of the Cosumnes River is Es-nah-kah'-mus-sy; the place and people at Mud Springs or Eldorado in Eldorado County, west of Placerville, is called Ono-cho'-mah or O-ne-cho'-mah-mus-sy (information from Amanda Oliver, wife of Casus Oliver of Buena Vista rancheria, but originally from Sold Hill, Eldorado County

Tobacco

Wild tobacco of both species (Nicotiana attenuata and N. bigelovi) is cultivated about many of the old rancherias. At the Aukum rancheria near the South Fork of the Cosumnes River, which I visited in August, 1907, the large flowered species (N. bigelovi) was common, and an old woman had already picked a quantity of the large leaves and had spread them out to dry. Some of the leaves that were completely dry she had pounded ready for smoking. This tobacco is called kah'-su.

In exploring the bottom land along the north side of American River about nine miles east of Sacramento, August 20, 1907, I found wild tobacco (N. attenuata) profusely abundant and growing unusually rank and tall—as high as my head or higher. It grew in greater abundance and covered a larger area than I had seen elsewhere, covering many acres of waste land in so dense a growth that it was impossible for a person to walk without getting stuck up with it.

It is doubtless self-seeded from the aboriginal tobacco garden of the Notomusse at the nearby rancheria of Kahdemah, for it was the custom of the Indians to grow tobacco about their villages. I have seen the same thing, only on a less extensive scale, as far south as the head of Caliente Creek in Kern County, at a New-oo'-ah settlement near the present post office called Piute.

Mortar Holes

The deep ones in the big rocks they found originally and did not make themselves, but they have always been used for pounding acorns. At Butte Flat, above Pleasant Valley, Eldorado County, on the north side of the North Fork of the Cosumnes River is a large flat rock containing hundreds of mortar holes. The Indians say that these mortar holes "have always been here."

Arrows

The southern Nissenan made their best arrowshafts of wild syringa (Philadelphus), the wood of which is strong, but sometimes contains a pith. A point of hard wood was inserted into the pith hollow.

Portable Mortar

Old people whose teeth were worn off or gone could not chew meat. It was the practice to pound fresh meat for them on the flat bottoms of the portable mortar stones. Dried meat is always pounded before boiling in the regular mortars. The bone awls are sharpened on whetstones. For this purpose the flattened side of a portable stone mortar is sometimes used. I have seen such a mortar in the possession of a Necenon woman (Amanda, wife of Casus Oliver) at Buena Vista. She refused to sell it for any price. This mortar is flat on the bottom for pounding fresh meat for toothless old people, and has a small pit in the bottom for holding the point of the acorn when it is hit to remove the hull.

Nis'-sim Pa'-we-nan

Editor's note: In part these notes duplicate Dr. Merriam's account, "How I Came to Locate the Nissim Pa'-we-nan of Poosoone," in Part I, page 60, of this monograph.

The Nis'-sim Pa'-we-nan (often spoken as Nis'-se Pa'-we-nan) inhabited Sacramento and Feather rivers territory from a little south of what is now the southern edge of Sacramento City, northward nearly or quite to Sutter's Hock Ranch, some miles above the junction of the Bear and Feather rivers—a distance in an air line of only forty miles, but very much further along the curves of the rivers.

Villages

From Sacramento City to the junction of Feather River all their

villages were on the east side of Sacramento River, but from the mouth of Feather River northward they occupied both sides of Feather River and the angle between the two rivers to a point only a short distance below Sutter's Hawk [Hock] Ranch.

The villages earliest known to the whites were Poo-soo'-ne on the north side of American River near its junction with the Sacramento, and Wal-lok on the east side of Sacramento River opposite the junction of Feather River—a place until recently called Vernon, now changed to Verona.

Their villages from the south northward were Sah'-mah (just south of present Sacramento City), Yah-man-na'-poo (on north side of American River about a mile from its mouth), Poo-soo'-ne (north side of American a mile above its junction with the Sacramento), O-pok-i-ki, We-se-nah, Wal-lok, Hol-lo-wi, Nah'-wah, Kot'-chuk, Yo'-kol, Hawh-hawk, Lim-man, Ol-las, Hol'-lah, and Yo-kul'-me (names in their own languages).

The Pah'-we-nan were water people. They lived on the banks of the large rivers and were constantly swimming back and forth. They were notorious swimmers and divers and were never known to drown. At the same time, for traveling long distances on the Sacramento and Feather rivers, they made some dugout canoes and many tule boats. They did not go far into the interior. In fact, the breadth of the river strip claimed was nowhere more than three or at most four miles except in the northern part, between the Sacramento and Feather rivers.

Food

Their food consisted chiefly of fish, mussels, water birds, roots, and seeds. They rarely ate meat of mammals although they sometimes killed elk in the tules and antelope on the edge of the plain. Although deer and bear were common in their territory, they never ate the flesh of either, nor did they eat rabbits. The grizzly bear was common and was regarded as an enemy.

Dress

The men were naked except for a narrow breech clout; the women, except for a short apron or skirt of tules. They wore neither hats, moccasins, nor clothing of any kind. They neither made nor used blankets of deer, rabbit skin, or other kind of fur, but did make large and handsome robes, called che, from the feathers of aquatic birds, chiefly ducks and geese. Some of these were made of the long feathers of the wing and tail by tying the quill ends firmly together between two strings and fastening the resulting strips together.

The blanket (che) was made in the following manner: long poles were stuck in the ground. A strong cord of milkweed fiber was doubled and stretched along between the tops of the poles higher than a man's head so that the person at work had first to stand on something in order to reach. The large feathers of the double cord rows were tied securely by the quill ends and fastened to the long double cords with small twine of the same material, milkweed. These cords were stretched horizontally so that each row was placed immediately below the one above. When the first long row was completed, another was made and tied to it and so on till the blanket or robe was finished. When laid on the ground or on a person's back the feathers stood up nearly at right angles to the under-structure for all were fastened by the quill ends only. These robes were very full and deep and handsome.

For quivers they used skins of the fox, coon, bobcat, and cub bear.

The sole survivor of the Nis'-sim Pa'-we-nan tribe who could speak his language was an old man known to other Indians as "Blind Tom of Poo-soo'-ne." I visited him in November 1905, and several times afterward. He was of medium height; his complexion was very dark. He was painfully bashful and very deliberate in his replies to questions. All the first hand information here given was obtained from him.

At that time there was still another member of the tribe—an old woman who lived in a houseboat anchored in the Sacramento opposite the mouth of American River. She was Blind Tom's sister but did not speak her language, having been taken when a little girl from Poo-soo'-ne to No-to'-musse. I obtained from her a No-to'-musse vocabulary; it proves to be a dialect of Nis'-se-non.

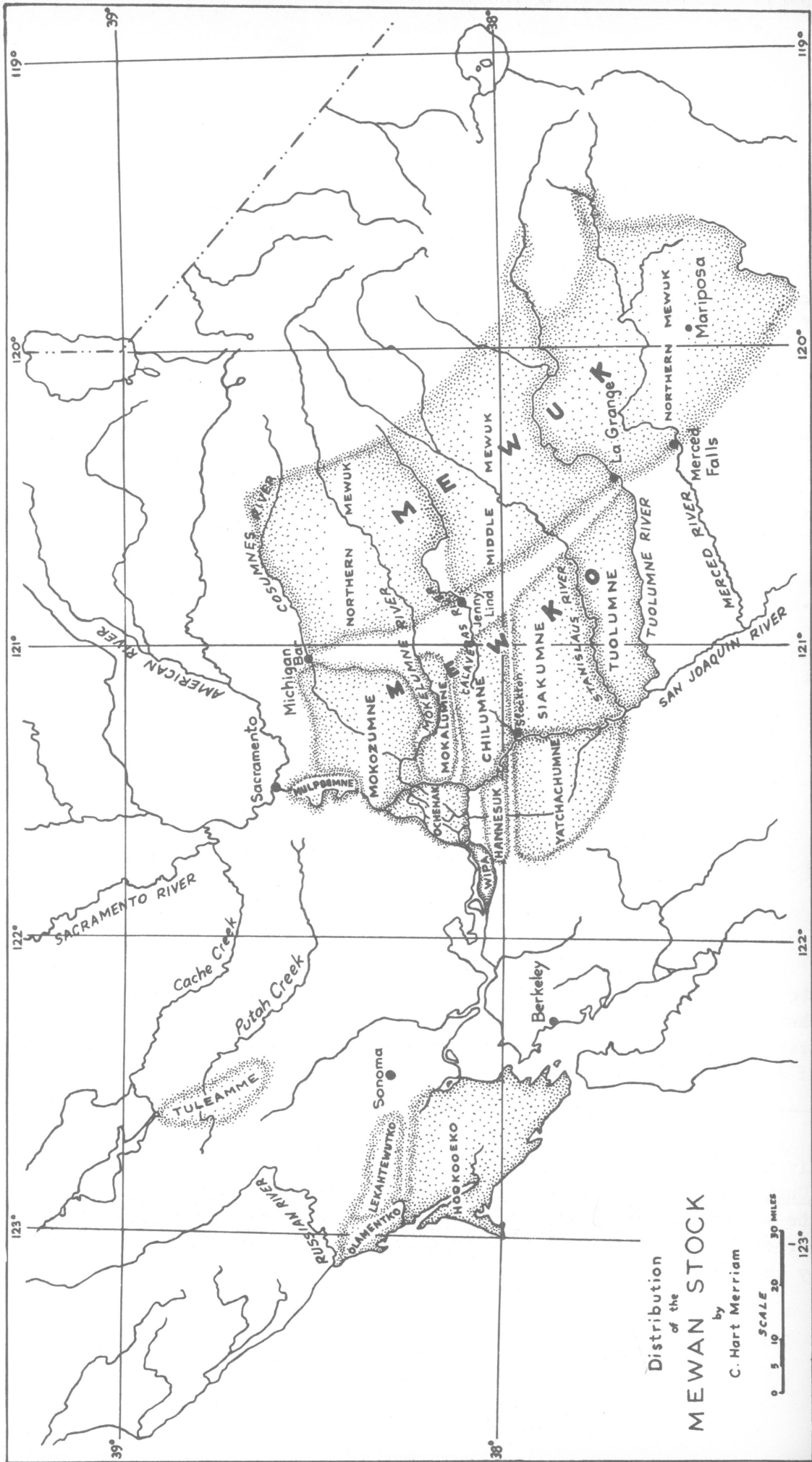
ME-WUK

Editor's note: Dr. Merriam was much interested in tribes of the Mewan stock. In 1907, he published an article on the distribution of this stock, Distribution and Classification of the Mewan Stock of California (Amer. Anthropol., vol. 9, no. 2, pp. 338-357, 1907),¹ and from this the following table and map (map 6) are reproduced.

<u>Stock</u>	<u>Family</u>	<u>Subfamily</u>	<u>Tribe</u>	
ME'-WAN		Me'-wuk	Northern Me'-wuk	
			Middle Me'-wuk	
			Southern Me'-wuk	
	Me'-wuk		Mew'-ko	Hul-poom'-ne
				Mo-koz'-um-ne
				Mo-kal'-um-ne
				Chil-lum'-ne
				Si-akum-ne
				Tu-ol'-um-ne
	In-ne'-ko		Hoo'-koo-e'-ko	O'-che-hak
				Wi'-pa
				Han-ne'-suk
				Yatch-a-chum'-ne
				Tu'-le-am'-me (or O'-lā-yo'-me)
			O'-la-ment'-ko	
			Le-kah'-te-wut'-ko	
			Hoo'-koo-e'-ko	

The following notes refer to one or the other divisions listed in the above table. Over the years Dr. Merriam changed his spelling of Me'-wuk and their divisions. Earlier versions, e.g. Mew'-wah, Mu'-wa, etc., have been preserved here. These notes possess a flavor which would be quite destroyed if edited, and give us a picture of Indian life at that time.

¹ One year later, S. A. Barrett reported on field work among the Miwok divisions in his article, The Geography and Dialects of the Miwok Indians (Univ. Calif. Publs. Amer. Archaeol. and Ethnol., vol. 6, no. 2, 1908). At the same time, A. L. Kroeber discussed the differences between Merriam's and Barrett's findings in, On the Evidences of the Occupation of Certain Regions by the Miwok Indians (ibid., vol. 6, no. 3, 1908).



Distribution
of the
MEWAN STOCK
by
C. Hart Merriam

SCALE
0 5 10 20 30 MILES

Map 6. DISTRIBUTION OF THE MEWAN STOCK.

Field Work Among the Me'-wuk

Chowchilla Me'-wuk at Wah-sam'-mah

October 11, 12, 1905. From Raymond to Ahwahnee stage station (now Was-sam'-mah, its proper Indian name), the buckeye (Aesculus) is abundant. It is called oo'-noo by the Mew'-wah Indians and is always used for the fire drill. How the fire was originally brought and put into it forms the theme of some of their most interesting myths.

In the course of my walks in this interesting region I visited two Indian rancherias—one inhabited by a single family (father, son, and son's wife), and the other deserted except for the graves of the dead. The latter is Wah-sam'-mah (or Was-sam'-mah) proper and was once a large and prosperous village of the Chowchilla Mew'-wah tribe. It is on a knoll on the east side of Wassamma Creek, about half a mile below the Ahwahnee Hotel. A large ceremonial house (roundhouse) remains, and close by is a big granite rock full of mortar holes. There are about 26 of the holes (most of them deep) in a long low flat rock near the roundhouse, and others in the neighborhood.

The old graveyard is still used. Mr. Gillespie tells me that when the former chief died two or three years ago, the Indians came and burnt the old ceremonial house and built the present one in the same place. When they had a "big time" here, they killed a beef and cut it in two and hung it on a scaffold in front of the roundhouse. I saw the scaffold, which is still standing. On certain occasions the Chowchilla Indians still come here to perform certain ceremonials.

The inhabited rancheria (called Hitch-a-wet'-tah) is three miles above Wassamma (nearly north or northwest). It also is on an old site with mortar holes in the rocks and a good spring close at hand. Several of the beautiful chrysolepis oaks grow here and are prized by the Indians. The present chief lives here. From him and his sons I got the names of a lot of animals and plants and places, and other words. These I afterward checked and verified with a half-breed named Johnny Gibbs (whose young wife is a Chuck-chancy) who lives a couple of miles up the road.

A noticeable feature of the Indian camps here and elsewhere in the foothills so far visited by me this year is the absence of children. I have seen none at all. A few years ago there were many.

The Chow-chilla Mew'-wah (the southernmost division of the great Mew'-wah stock or family) range south to Fresno River and north to or a little beyond Merced. They reach up the mountains (east) to Wawona and Yosemite, and down (westerly) to a point about five miles below Grub Gulch, eight or nine miles above or east of Raymond.

Southern Me'-wuk of Summit House

October 14, 1905. Took the up stage to Summit House (about 8 miles) where I got out and walked about 8 miles, and caught the down stage halfway between Summit and Raymond. Crossed a high hill or ridge southeast of the road and made a long circuit through the valley between it and Indian Peak and then struck out westerly.

On a commanding point in a valley about a mile and a half east of Summit House (saloon) and a mile south of the road, and perhaps two or three miles due south of Indian Peak, is the remnant of the westernmost rancheria of the Chowchilla Mew'-wah. I found there (besides the graveyard) only an old woman and a little girl of 10 and a boy of 10 or 12. These are the first and only Indian children I've seen in the foothills this year. As it was nearly noon when I struck their camp, I stayed and they gave me jackrabbit, beans, stewed grapes, and bread for dinner—all good.

Southern Mu'-wa of Mariposa

On the afternoon of September 17, 1902 I visited 3 Indian camps near Mariposa. One is one mile up the creek (north); another $1\frac{1}{2}$ miles; the third about 2 or $2\frac{1}{2}$ miles and considerably east of the creek. The first consists of a couple of houses and a tall hut (round) and contains apparently three families. The second comprises a small rough house in which the old mother lives, and a larger and better house inhabited by her son and his wife and 4 children. It has an orchard, garden, barn, and front yard and is enclosed by a fence. The third comprises a man and wife and several children, and consists of a fairly good house and garden with peaches, etc.

They gave me the numerals and a few words. The numerals are exactly the same as those of the Bull Creek Mu'-wa except that s was sounded like h, so that 5 was pronounced mah-ho'-ka instead of mas-so'-ka. I later found that ma-ho'-ka is the regular way of pronouncing the word in the Mariposa and Chowchilla regions and south to and including the small Mu'-wa camp on Fresno River near Fresno Flat.

At the upper camp they were pounding in a stone mortar the red berries of Rhus trilobata which they say they use for a sour drink in hot weather.

They also make cider of manzanita berries, and use the Chowchilla openwork bowls (too-poo'-lah) to filter the juice through, the basket retaining the broken berries.

They call this country Chowchilla and call themselves Chowchilla Mu'-wa.

They now make few if any good coiled baskets, but have many (several dozen) Fresnos, and some made by the middle Mu'-wa of the Sonora region. The best they refused to sell at any price, but I got a set of their work baskets and a superb old hettal type basket made by the oldest woman long, long ago. They make many straw baskets of the ribbed-trinket basket style, with string ribs ornamented with wool or frayed red flannel or flannel and quail plumes, like some I got at Sonora only more so.

In two of the camps this afternoon the Indians were roasting the massive cones of the digger pines. They put them in the fire long enough to burn off the thick sticky resin with which they are heavily coated. This serves a double purpose, getting rid of the sticky gum and at the same time toasting the nuts a little.

They have sacks of fresh green acorns of the black oak (Quercus californicus) which they call te-la'-ly, which they were splitting and getting ready to make into acorn mush and acorn bread. Some of the big cooking baskets now have a little acorn mush in them.

The wife of the chief of the Mariposa Mu-wa has a superb large semi-globular narrow-mouthed basket, with bold design in black, made by her grandmother who lived on Bull Creek but is now dead. The name of this basket is toy'-you. I offered her \$30 for it, but she positively declined to sell it because it was given her by her grandmother. It is a very choice basket and should be secured later.

They have many grass-splint baskets with vertical stitches of thread or twine, and with design in red flannel (frayed) and plumes of valley quail. Some are small bowls (5 to 8 inches in diameter), and some are small-mouthed and depressed. Both forms are called koh'-tee.

On September 18, 1902, I rode on horseback to the pine woods northeast of Mariposa. Two or three small camps of Mu-wa Indians are scattered along the hot dry overlapping strip of Upper Sonoran and Transition Zones in and beyond the basin above mentioned. They were shy at first, but soon talked freely and gave me a lot of information about their food, baskets, and basket materials. They opened bags of small flat blackish seeds they call too-you or pinole, and manzanita berries (eh'-yeh) of which they make cider. They also opened and threw down on the ground for me to see, several large sacks of coils of split willow strands and bundles of rods, for baskets. They have been most industrious and showed me the kinds the rods came from, so I could make sure of the species.

In making the 3 kinds of coarse openwork baskets known as che-kah-lah (burden basket), cham'-ah (broad shallow scoop), and ching'-go (deep

spoon-shaped scoop with handle), the rods used may be either Ceanothus integerrimus (oh-hoo'-ne) or C. cuneatus (pi-wah). The split strands for twining the rods together are of black oak, Quercus californicus (te-lay'-ly), mostly young shoots which have great strength. The rods used in the fine coiled baskets may be either syringa, Philadelphus lewisi (pull'-le) or sour bush, Rhus trilobata (tum-mah), or Ceanothus integerrimus (oh-hoo'-ne).

The outside strands in their coiled baskets they call "willow" of two kinds: sak-kal (or suk-kal) and tap-pah-tap'-pah. The former surely is a willow; the latter I believe to be the redbud (Cercis occidentalis). The black used for the design is the split root of the brake fern (Pteris aquilina) which they call lu-nah'.

They had one small basket made of the Tulare marsh root, Mariscus cladium, which they call pa-wee-sah.

They asked me if I was hungry and offered me some beans and tomatoes and other truck, and were very kind and polite.

Today I drank some manzanita cider (made from the berries of Arctostaphylos mariposa). It is in color and flavor like the very best apple cider, only much better. It is less sweet than new-made apple cider and is slightly more acid and slightly paler in color, and is cooling and delicious. I saw it made. The process is very simple. The berries are merely broken or mashed a little, not ground fine at all, and sprinkled with water and then placed in an open work bowl-basket called too-poo'-lah (sometimes the ordinary broad scoop cham-ah is used). Then the woman, after washing her hands, sprinkles water with her hand over the crushed berries and keeps on doing this until all the good has leached out. The too-poo-la meanwhile rests on two sticks placed across the basket or other vessel which receives the delicious juice as it filters through. This juice or cider is perfectly clear, not clouded at all. It is called e-soo'-tak, and the manzanita is called a'-yeh.

These Indians now have many sacks full of newly gathered but green acorns of the black oak which they are preparing for food. I watched two of the women crack and shuck and split the acorns. Sitting on the ground, each has two stones: a rough stone 5 to 6 inches in diameter with a flat-tish pitted top, on which the acorns are stood, one at a time, point down (and held between the left thumb and finger); and a smooth globular stone 2 to 3 inches in diameter held in the right hand and used as a hammer to strike the upturned butt-end of the acorn to split the shell. The empty halves of the shells are then dropped on the ground and the acorn itself is split in two lengthwise with the fingers, and the halves (still green) are

tossed into a large shallow openwork scoop basket called cham'-ah (the a in cham sounded like a in jam). At one camp several bushels of these split acorns were spread out on a cloth over a frame, and some on a roof, to dry.

The cham'-ah baskets are used regularly for this purpose, and also for split peaches and figs and other fruit laid out to dry. The most usual material for the rods of the cham-ah is the smoke brush (Ceanothus cuneatus), which they call pi-wah.

All of these Indians impress one by their uniform kindness. They are kind to one another, to their dogs and cats (of whom they have large numbers), and to their chickens. Everywhere at the Indian camps one is astonished at the tameness of the hens and chickens. They come up close and stand around so near that it is easy to put your hand on them. If one attempts to shoo them away, they simply look at him in surprise but don't show any inclination to move on.

Southern Mew'-ah of Chowchilla

On September 19, 1902, I left Mariposa at 7 o'clock and reached Chowchilla hill (crossed the ridge, alt. 3000 feet) about 10:30. Descended a little—say a mile—and took a poor road to the right for about a mile, where I left the team at a shack belonging to a "squaw man" who has a large batch of children and a number of hogs. Walked 1½ miles along the north side of Chowchilla Canyon to an Indian camp and returned the same way.

My visit to the Chowchilla Indian camp, though brief, was interesting. Two families live there, both Mu'-wa (they call it Mew'-wa). Both men and one of the women were away gathering acorns, leaving one woman and three children at home. From this woman I got lunch (white bread baked in Dutch oven and made without baking powder, tortillas, and raw tomatoes), and several baskets and a small vocabulary.

These Indians have a board house for winter, and a large garden with corn, beans, melons, peaches, etc. They live under the oaks in the edge of the chaparral some 20 rods from the house. Their beds are elevated on pole frames, and they have erected strong pole scaffolds or broad shelves about the height of my head from the ground. They have several excellent springs.

The woman had a vertical straight tattoo line under the middle of her chin and apparently two lighter ones on the right side, and a strong and long zigzag tattooed line running out from each side of the mouth.

In Chowchilla Canyon, about ½ mile from the fruit ranch and on the south side of the canyon (alt. 1500-1600 feet), is an Indian camp—a single

house owned by a Chowchilla Mu'-wa (pronounced by them Me'-wah) man. His mother is living there with them. His wife is a Chuck-chancey from the Fresno River country. They had a great quantity of black oak acorns newly gathered. Several bushels of these were already split and spread out to dry, and both women were busy opening acorns on my arrival. They cracked the shells by hammering between stones in the manner already described. But most of the acorn meats they left whole instead of splitting through the middle as usual. There were four children about, one a sucking baby.

These Indians have a lot of baskets, mostly coarse, but some good. Among them are some from Sonora, some from Mono Lake (Paiute), and two or three handsome large bowls of the Tulare root and made by Chuck-chanceys. These they would not sell at any price.

They have a type of basket I have never seen except at Mariposa and Chowchilla. It is of twined weave, with a curious double-wove bottom, and a handle which may be either fixed or hinged (fig. 35). It is a coarse basket with simple design, made by leaving on the red bark of the willow or redbud on certain strands. They call it pum-pum-mist and cham'-my-ah.

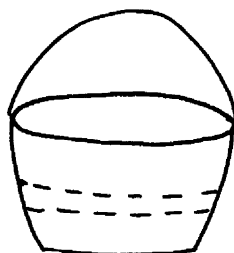


Fig. 35. Twined basket with handle.

Another new type I bought (new here, but I got one like it only deeper near Murphys) is a pocket of openwork rods. It is called hoop-pah-lo. The one I got is a very old one with a cloth patch on the bottom.

A very small and plain rather coarsely made coiled basket I got off the old woman also; she calls it so tan-o. It is sub-globular.

They had a lot of chamah baskets of different sizes and also too-too-las and che-ka-las and het-als of their own make, and several Paiute te-mas and one small good Paiute bowl which I bought.

A big flat rock close to the house is full of mortar holes (saw-seh) with the old time combination pestle and rubbing stones (kaw-wah-che) strewn about. Other mortar holes, single or a few in a place, may be seen in

neighboring rocks. Obviously the place is one of the ancient strongholds of the Chowchilla Me'-wah.

Both women had bone awls.

The skins of gray foxes (Urocyon), bobcat, and deer hung on the house. In their garden were corn, beans, squash, tomatoes, &c.

On September 21, 1902, I got up early and walked a mile and a half (3 for the round trip) to a small Indian camp near Fresno Creek. The Indians (man and wife and 3 children and an old woman) call themselves "Fresno" Indians, but in reply to my questions said they were Mew-wah. Their numerals and words are identical with those of the Chowchilla and Mariposa Mu'-wa. They have a lot of ordinary baskets, such as I have previously described and got, but no fine ones.

They gave me the meaning of two very common designs on baskets made in this region. The horizontal simple zigzag going part way (or all the way?) round a big bowl basket represents a water snake and the common horizontal band made up of two series of triangles, the points of the upper and lower alternating, represents the king snake (fig. 36).



Fig. 36. Southern Mew-wah basketry designs.
Top, water snake; bottom, king snake.

Southern Mu'-wah of Bull Creek

On September 16, 1902, I visited three camps of Mu-wa Indians at Bull Creek. One camp consists of the house and garden (corn, squashes, beans, &c.) of the Austin family, and is on Bull Creek about a mile below the settlement and has no road leading to it. The family consists of Austin, his full-blood wife and 4 children (2 girls and 2 boys). The wife has her chin tattooed vertically, and has also lines leading away from the corners of her mouth. This family is not in the habit of visiting Yosemite. All of the others spend part of the summer there. The other camps are a short mile above the settlement—one (Capt. Paul's) on a little hill, the other (Pete Hiliard's) on the flat nearby, among the ponderosa pine.

At these latter camps I was interested to see that with the single exception of a very, very old woman named Callomena (Capt. Paul's sister) I know the whole outfit, having met them in previous years in Yosemite Valley. In fact, Capt. Paul and Pete's family only just came down from the valley last week. Living with Pete and his wife and children is a small slender youngish woman whom I saw in the valley last year. She is the wife of Indian Brown and has a young baby.

Capt. Paul is now an old man but still fine looking. His daughter Julian, whom I also knew in the valley, is here with him. Fat Nancy, whom I have known in Yosemite several years, lives here, also, but is now in the valley. She will come out before long. These people tell me that all of the Yosemite Indians come out and down the river to winter. Besides these who winter on Bull Creek, others winter at Hites Cove or on the Merced below Big Meadows. Yosemite Mary winters at Hites Cove. Pete tells me that the very old woman from the camp below Indian Canyon (whom I have known several years) died last winter or spring.

Pete tells me that the word Mu'-wa, which we use as a tribal name, is really not so, but in their language simply means Indian—any Indian. We use it in a general sense for all Indians who use the word for Indian. He says they have no tribal name for themselves.

He says A-wah'-nee is their old name for Yosemite Valley, and applies to the place, not the Indians. That is, it is not the name of a tribe or even a clan, though it may be used geographically as Awahnee Muwa, meaning Yosemite Indians.

The language of these Indians is essentially that of the Sonora Mu'-wa, although many words differ—some, even, among the numerals.

The place (locality) where old Capt. Paul lives they call So-pen-che; hence many Indians call Paul So-pen-che. (So-pen-che is the name of mountain mahogany, Cercocarpus.) Pete used this as an illustration of the fact that in his tribe men are often named after the places where they live. A new igloo-shaped hut has been built at Paul's camp.

Middle Mewuk at Big Creek

July 28, 1903. On leaving Groveland we drove northeast about two miles to a Muwa Indian rancheria on Big Creek, where I got a vocabulary. The old rancheria occupied the summit of a bare hill near Deep Creek, but all that remains of it are a couple of houses and a rather new circular ceremonial house (built for the mourning ceremony or big cry). This circular building has a conical roof with a protected hole at the apex for

the escape of smoke. It has also a protruding entrance. There are no uprights or poles or anything inside except a bare fireplace in the center, around which the mourners sit on the ground in a circle.

There appear to be three families left. They speak a dialect slightly different from that of the Yosemite (Ahwahnee) and Mariposa Mu-wa to the south, and from that of the bands on the north side of the Tuolumne (at Sonora and Carters or Cherokee). One family has moved across the road from the original rancheria on the hilltop to be near a small spring, the water of the creek being spoiled by mining blue-clay and slime.

Got one very old coiled basket with ladder design repeated four times. It was partly full of acorn mush.

Middle Mewuk, Big Trees to Murphys, Calaveras Co.

August 24, 1900. As soon as we reached Murphys (about 4:30) we drove to a permanent camp of Mew'-ah Indians near the big cave (Moaning Cave) a mile or so north of Murphys. Here on a rather steep and narrow ridge we found the camp, which consists of half a dozen wretched hovels made chiefly of old waste lumber and odds and ends, with one or two open shelters simply roofed over, without sides. Only 6 adult Indians were there and 4 of these were very old—probably 80 or more. Two very old men, one blind, live in the open shelter wikiup with a very old woman. Another old woman who lives in a hut alone lost her husband last week and is dreadfully dirty. Her face looks as though smeared with blood which had been allowed to dry and had been partly rubbed off. She had locked herself in her hut and I had great difficulty in getting her to open the door.

The only other inhabitants of the camp were a middle-aged man, apparently a half-breed, and his wife and children. The man talked enough English to act as interpreter and his ma-ha-le is a fair looking middle-aged woman with an enormous shock of black hair which stands out on each side of her head. She was nursing an absolutely naked boy baby and had several others toddling about her.

The Mew-wah Indians are living in filth and squalor, and have the usual contingent of dirty dogs, mostly yellow or brindle. They had a few peaches, but appeared to be living almost wholly on acorns of the black oak (Quercus californicus) which is common in this locality. They also eat the nuts of the digger pine (Pinus sabiniana) which is also common here. But they cannot begin to get the pine nuts in the quantity they need, while the acorns are inexhaustible.

I saw no unshucked acorns, though there may have been plenty hidden

from sight. I saw fully a bushel of dried split (half) acorns—split lengthwise—in baskets, and other baskets full of pounded acorns, and others still of the finely powdered acorn meal. I saw also one basket containing about a gallon of a rather liquid acorn meal mush. The stuff looked like finely ground wheat mush made very thin, but with a slightly bluish cast. The basket it was in, although rather roughly made and apparently not water-tight, did not leak at all—I picked it up and looked at the bottom. It and the other mush baskets were smeared with the acorn mush until completely covered inside with an impervious paste, and outside with the accumulated filth of years. They had a few very fine baskets and a lot of old rough ones. I bought a dozen, including all but one of the good ones. The one in question the old woman in mourning would not sell for \$5.00. Among those purchased is one grand large spreading basket, very old and dirty and slightly broken on the edges. I also got a carrying basket (cornucopia-shaped) and several mush and acorn baskets. Also one beautiful "shaker" basket which is circular and shield shaped and different from any other I have seen. They had also the ordinary "shaker" like the "tsing" baskets of the Washoes.

I got one very finely marked new basket of a rounded shape from the old woman in mourning.

These Indians are very poor and I undoubtedly left more money in their camp than they had seen for many a day.

I have been told by several different people at Big Trees and at Murphys that the old chief "Yakie" of these Digger Indians died about a year ago and that his people buried with him a wonderful lot of splendid baskets—the very best in the tribe. The large baskets, too big to go in the grave, were cut in two and buried with the others and with his gun and other belongings. This is undoubtedly true, I have it from so many sources.

Some of the huts are rectangular but most of them are roughly circular. Clumps or bunches of willow wands of which the baskets are made hang on the walls inside.

Middle Me'-wa of Bald Rock Rancheria

August 20, 1903. Got from the Me'-wa Indians at Bald Rock Rancheria (where about ten families live) a fairly good list of names of animals and plants. There is one large subcircular ceremonial house (with low conical roof shingled with shakes) similar to those at Murphys, Groveland (Big Creek), and other places; 2 or more houses of similar form; a conical bark covered hut with projecting entrance; and a half a dozen or more ordinary rough board houses. Several white men are living here with squaw wives, at

least two and I suspect others. Found acorn mush in baskets in all the homes visited. The baskets are mainly coarse (1 rod and 3 rod coil) and are made mainly of Ceanothus cuneatus, called pi'-wah. There are also some old "Fresno" baskets here, several Nishinam, and one superb large deep cooking basket made by the "Hangtown" (Placerville) Necenon, for which they want \$50.00.

Visited the Me'-wa Rancheria near Cherokee on August 21, 1903 and verified the vocabulary I got yesterday at Bald Rock.

One of the families at Cherokee is preparing to give an acorn feast tomorrow and I got there in time (7:00 AM) to watch an old woman cook two large baskets of acorn mush. She put 4-6 large hot stones in each basket and stirred the stones with a ladle so they would not rest long enough in one place to burn the basket.

She took the stones out of the fire with two sticks (not with a loop stick). When the mush was done she took the hot stones out with a ladle—lifted them one at a time and tilted it over the edge of the basket and let it drop into a basket of water held close under, in which they were rinsed and then pitched back into the fire. The rinsing water, now rich with mush from the stones, was emptied into the mush bowls—each holding about a bushel. When the mush or soup (consistency of thick bean or pea puree) was cooled, a number of small and middle sized bowl baskets were filled and put aside to cool. A small one-rod basket was used as a dipper.

Only old—very old—baskets of their own make were used. The cooking baskets were large, deep, and rather coarse (3 rod) bowls called him-mah, ornamented with simple designs. The baskets filled were 3 rod coiled bowls called pul-le'-sah. The basket used as a dipper was 1 rod coiled bowl called keng-ah-kah'. A somewhat larger and shallower 1 rod bowl is called kay-wy'-you.

Some of the 3 rod coiled bowls of old-time make have very little design but are extraordinarily hard and strong and compact and well made. They are of digger pine (Pinus sabiniana) sprouts. I have one I got at Grapevine Lodge a mile west of Sonora a year or two ago.

I saw also some loaves of acorn bread (called oo-la'). Some were cooked, others standing in a basket of water waiting to be cooked. They were like large thick pancakes in form. Some they called ma-soo'-tah (instead of oo-la'), but I did not find out just how they differ. They are sweet, while the oo-la' is slightly sour. The mush or soup they call nup-pah.

There are many circular winnowers here (het-tal'-ah), mostly made by the Mariposa and Chowchilla Me'-wa. There are also a few of the deep round openwork bowl baskets made at Chowchilla for filtering manzanita cider. These Indians call them o-wy'-you and use them also to gather acorns in, hanging them on the arm.

A big rock on a stream between Cherokee camp and Tuolumne station has the top pitted with about twenty mortar holes. There are also plenty of mortar holes in rocks about Cherokee Camp, and others at and near the Bald Rock Rancheria.

Saw a woman and her little girl both wearing necklaces unlike any I have seen before. They consist of small bundles (each say 1.5 inches long and .25 inch thick) of a form of sage (Artemisia ludoviciana) simply tied with thread and strung on a string about 2.5 inches apart. The woman told me her eldest daughter died a few months ago and she and her remaining child are wearing these to keep disease away.

The Me'-wa apparently make one type of conical burden basket—of open slender rods brought together in couplets at alternating crossings of the transverse strands. As small seeds would fill the interspaces, the baskets are coated with a white mucilaginous paste from the soaproot (Chlorogalum pomeridianum). This species is regarded as poison and never eaten, but an allied but much smaller species is eaten.

As before noted, both species of blue manzanita occur here (Arctostaphylos viscida and A. mariposa). In A. viscida the bracts, berries, and pedicels are glandular, viscid, and sticky, and the terminal twigs and leaf stems are conspicuously glandular-pubescent. In A. mariposa all these parts are smooth-glabrous. I was surprised to find that the Indians discriminate them. They call A. viscida a'-yah and A. mariposa muk'-ka-zoo'. The berries of both are edible and used for cider, some preferring one, some the other. They say muk'-ka-zoo' makes darker cider with stronger taste.

The Me'-wa women go bareheaded. They have fine heads of straight black hair which hangs down over the sides of the head and rests on the shoulders and back. When in mourning they cut it off rather short.

The Paiute and Washoo women always wear handkerchiefs (usually red) on their heads, but these Indians never do. Most of them are good looking.

There seem to be 8 or 10 families at Cherokee and about the same number at Bald Rock. Many of the men (most of them) are now away at work.

Several of the women are making baskets to sell, but nearly all are perverted. By this I mean that the old styles are not preserved, but both form and design are varied to suit the wants of the miserable purchasers. Many baskets are made in imitation of choke-mouth Washoos, and the designs are absurd. The tendency is not only to overload with design, but to put as many different designs as possible on each basket. And only a few of the designs are those of their own tribe.

Middle Me'-wa of Jamestown

August 22, 1903. Ran across two rancherias of Me'-wa Indians I didn't know were there. One is close to the railroad (on south side of track) nearly 2 miles west of Jamestown, and consists of 2 houses and apparently the same number of families. The women there told me it was established there 19 years ago.

The other is a large and attractive village of ten or a dozen families and ceremonial houses, some distance north of the railroad track and directly under a lava headland of Table Mountain a little more than 2 miles west of Jamestown. It is on a most commanding elevation from which the outlook is peculiarly comprehensive and attractive, covering the yellow grass valley of Woods Creek and the golden hills on both sides, dotted with blue lakes and digger pines, with timbered mountains in the distance. The background is the black basalt mesa known as Table Mountain and long famous as the birthplace of the Calaveras skull and of Bret Harte's poem on the Society of the Stanislaus.

As in all the camps I have visited lately, the old women were busy cooking acorn soup in large baskets—boiling the soup by means of hot stones. They are in a good humor because of the bountiful crop of ripening acorns this year. At the large rancheria I got 2 beautiful old Fresno baskets of large size.

Was told that 2 families of Indians live about a mile and a half below San Andreas, but I didn't have time to go to see them. One or two also live near Sheep Ranch, but no others this side of Murphys until Mokelumne Hill is reached.

Middle Mu'-wah of Bald Rock Rancheria

September 25, 1903. Took a large bundle of plants to the Mu'-wa Indian camp near Bald Rock where we stayed some time, checking up vocabulary and getting names of plants and animals.

These Indians believe there is a spirit which they call oo-le'-us, which remains in the body about 4 days after death and then departs and becomes a ghost or devil (soo-les'-ko). Some are good, others bad. They eventually go to the ocean and cross on a long pole to a ceremonial house (hang'-e) where they dwell.

During the 4 days in which the oo-le'-us remains in the corpse, the children in camp are required to keep quiet and not to go out.

Manzanita berries are crushed and wetted and eaten raw. Of the various acorns, those of the blue oak (Quercus douglasi) are sweetest. Seeds of Madia elegans (called e'-lah), tarweed, are roasted with hot coals in a kay-wy'-you basket and then pounded or rolled into flour (called too'-you) and eaten dry. It is one of the staple foods.

In years when the acorn crop fails, the Indians follow down the rivers and dig up the huge roots of a kind of water lily on which they subsist.

These Indians play a game of ball called am'-tah, in which the buckskin ball, pos-ko (stuffed with deer hair or fine shavings from basket materials), is caught by the women in a spoon-shaped basket called am-mut'-nah. Each woman carries a pair of these spoon-shaped paddles (of which I obtained a pair), one in each hand, and covers the ball with one after catching it with the other. She then runs away with the ball while the naughty men try to kick it out of her spoon!

I got here also a slender basket pocket called chim-koo-loo' for carrying the bone awls (chil-ah) used in making baskets; and a large storehouse basket (that will hold a couple of bushels or more) called hoo-pa-loo, and used for storing pine nuts, hazel nuts, and seeds of Madia elegans. It is made of slender vertical rods held together in alternate couplets by the transverse strands, and is coated with soap-root paste to fill the interstices and make it tight. The [pointed] bottom rests in a depression in the ground filled with bits of pine bark. Sometimes it is stood up in a small bowl basket. The open top is closed by a bowl basket turned upside down over it.

Grindelia camporum (the fresh buds) is used extensively as a medicine for blood disorders and is highly esteemed. Artemisia lucoviciana (in one of its numerous forms) is also much used as a medicine.

Northern Mewuk of Rich Gold Rancheria

The camp on the ridge at forks of road 1.5 miles east of Rich Gold

Gulch post office is a melancholy affair. It consists (August, 1903) of a large old time ceremonial house (for the mourning for the dead) with a brush canopy shelter outside in which the solitary survivor lives.

There is also an empty house nearby, all the occupants having died. The place is a bare grassy ridge commanding the surrounding country. The poor old woman told me that the ko-chah-me or mourning house had been much used for many years, for once many of her people lived here, but now all are dead. The survivors had assembled here to mourn and cry after each death—of various relations' sons and sons' wives, and daughters and daughters' husbands, and finally of her own husband. Here she lives absolutely alone, mourning for her people and waiting for her turn to come. I never saw a more lonesome human being—living alone as she does, in solitude, and fully 13 miles from the nearest Indians who can come to see her (from West Point, for those at Mokelumne Hill, 7 miles away, are too old to travel). She is too old to go far for food and the time must soon come when she will begin to starve. Just now she has some recently gathered manzanita berries and a bushel or more of last year's acorns. Most of the acorns are split and stored in baskets. Besides she has some acorn meal and a couple of baskets of acorn mush or jelly. Probably the Indians at West Point will bring her a fresh supply as soon as they are ripe.

She had 2 large circular slightly concave basket trays called hoo-le-tah, like the circular winnowers (het-tal'-a) but larger and deeper (one 21 inches, the other 21.5 inches in diameter) which were heaped up with split acorns. Originally they may have been gambling trays. I bought both. She had also several large cooking bowls, including one Fresno Bowl, for making acorn mush; and a few small bowls, the best of which I got. Her condition is pathetic and pitiful.

Northern Mu'-wa of Mokelumne Hill

The present remnant (August, 1903) of the old camp at Mokelumne Hill consists of two houses on the saddle of a high ridge a mile east of town. The inhabitants are an old man and his two sisters, both old and feeble. The man is a fine looking old fellow, rather deaf, but otherwise well preserved. Close by is a large area of chaparral, mainly manzanita (Arctostaphylos viscida), smoke brush (Ceanothus cuneatus) and small post oak (Quercus wislizeni). For fuel he used the butts and trunks of large smoke brush, the wood of which is hard and red.

There were a few baskets here and several of the small stone mortars and pestles, one of which I bought.

The old man told me how all his people except himself and his sisters had died, and how the other Calaveras County Mew'-wa villages had dwindled or disappeared since the white man came and took possession of the country.

While I was at this camp one of the old sisters came in tottering under the weight of a load of manzanita berries she had just gathered. She was scantily and shabbily clad and bare-legged and bare-footed.

Southern Mewuk

Two Classes of Villages

Among the Mewuk are two classes of villages: (1) those in which the "Royal Families" or families of the chiefs reside; and (2) those inhabited solely by the common people. Several or many of the latter are tributary to each of the former.

Those of the first class are of much consequence. Their names dominate the surrounding country and are used by the inhabitants of the adjacent minor villages instead of their own local names—to designate the people and place to which they belong. Hence, if a resident of a minor village is asked the name of his tribe or the place where he lives, he gives the name of the village to which his village is tributary, instead of that of its actual name. Thus, Chowchilla is the name used not only by the inhabitants of the rancheria of that name, but also by the people of all the villages of the Chowchilla-Mariposa region.

The head chief or chiefs of the villages of the first class are called Hi-ah'-po and belong to the Hi-am-po-ko or royal families and are men of high standing, power, and influence in the tribe, and are recognized as head chiefs by the tributary villages.

The position of head chief is hereditary and may descend from either the father's or the mother's side, and may rest on either a man or a woman.

The annual or other important ceremonies, such as the "cry" and the "fandango" are given at the big ceremonial house of the principal villages only.

Ceremonial Houses

The old-time roundhouses, called hang'-e, were made of slabs of bark set up vertically and were not so large as the more modern structures. In the old days the diameter rarely exceeded 35 or 40 feet and often less. Some

of the modern ones are 50 or even 60 feet in diameter. The large one at Was-sam'-ma accommodates at least 200 people. When the big ceremonies are held a great many people are invited, not only from their own tribe but also from the Chuk-chan-sy and Mono.

Sweat Houses

The sweat houses of the Chowchilla Me'-wuk were 10 or 12 feet in diameter. They were circular and the fire was in the center. The fuel consisted of small dry sticks. There was a very small smoke-hole. The doorway was small and low and was closed after each person entered. Several persons sweated at the same time, lying flat on the ground. After sweating sufficiently, they would plunge into a nearby pond or stream and then return immediately to the sweat house where they would lie quietly until the fire burned out and the sweat house cooled to near the temperature of the outside air. They did this in order not to catch cold.

Acorn Caches

The acorn caches, called chuk'-kah, were vertical cylinders about 3 feet in diameter and 6 or 8 feet in height. They were placed on scaffolds erected for the purpose. These scaffolds were usually 8 to 10 feet high and at least 6 feet in width by 10 in length. Several of the caches or chuk-kahs were placed in a row on each scaffold.

Mourners

At the burning of a husband, father, or other near relative it was customary for the women in olden times to burn off the hair, as at that time they had no shears or knives with which it could be cut off. The hair was always buried and never left where it could be seen or where birds could get it for their nests.

Birth Customs

The placenta (afterbirth) was always buried by an old woman, usually the woman who attended the mother when the baby was born. When the cord came off, it also was buried, never burned.

Miscellaneous

Between Fresno Crossing and Grub Gulch was a large rancheria and an old burying ground. An old chief or sub-chief named Bull Head died at Cold Spring (How-wi'-ne) and was burned there. The Indian known as Francisco, who spent his latter years in Yosemite Valley (where he drove a team for the

hotel company), came originally from the Mariposa rancheria on the edge of the plains.

Cooking Buckeye Nuts

The way to cook oo'-noo (buckeye nuts) is to bake them in an earth pit with hot stones for about two hours. Then the nuts are shucked and mashed with the end of a big stick or club (like we mash potatoes). Then the crushed nuts are put in a leaching basin and cold water is poured on all day long from morning to evening. The meal is then ready to be eaten without further treatment. (Observed at Merced Falls.)

The Autumn Ceremony of the Southern Mewuk of Yosemite

The last ceremony I saw was on the night of October 10, 1910. The performers (dancers) consisted of four men and three women, all in costume. Both men and women wore flicker headbands with two tufted rods sticking upward and forward, one on each side of the head. The men were naked except for breech-cloths and bead-work belts; in their hands all but one of them carried bow and arrows and a gray fox-skin quiver. One carried tufted wands.

At this ceremony there were present Chief Kelly and one or two others from Kalarow near Mariposa, and also a few Paiutes from Mono Lake.

They sang during the performance. The various motions, the stamping on the ground with the bare feet, the bending of the bodies forward, and the loud expiratory breathing were essentially the same as those I have repeatedly observed in ceremonies of this tribe and of their relative, the Northern Mewuk.

The women, like the men, wore flicker headdresses and bead belts, but unlike the men carried in their hands a handkerchief or a piece of cloth held by the upper corners. They swayed their bodies from side to side while singing in the usual way.

The dance is called kal-ling-ah. Normally a clown called wah-cho-la takes part in this ceremony. He wears a tail, acts funny, and mimics the dancers. He carries a carved wooden bird's head in his hands, and helps himself to anything he takes a fancy to about the camp. In early times in connection with this ceremony there was a dance very early in the morning before eating, and another at 4 or 5 o'clock in the afternoon, but the main one was always held at night, after dark. The early morning dance was called poos-ne.

This ceremony is said to be one of the oldest held by the tribe. People

with children were afraid to dance it, and threw pieces of money and acorn meal into the fire.

Chief Kelly made the address. On the night of October 10, 1910, the ceremony was broken up by rain before it was entirely finished. The ceremony closed at ten o'clock.

Girls' Puberty Rite

The first menstruation is called he-ha'-moo. The girl must not eat meat or fish then, or at any subsequent menses. Water is heated in a big toi-yu basket and the sage herb (kitch'-ing) is put into it, after which the girl is bathed all over and a big basket placed over her head. An old woman of the opposite side (Land or Water) does all this and afterward receives the head basket as a present from the girl's parents.

After the first menstruation the parents give a feast called ko-teh', the Puberty Feast.

If a menstruating woman eats fish, her husband might fish and fish and fish but can hardly ever catch one. And on no account must she ever taste deer meat when menstruating.

Hand-game Songs

The Yosemite Indians, like most northern California Indians, delight in the hand-game, which they always play in connection with the autumn ceremonies.

In playing the hand-game two men side by side sit facing two women who also sit side by side, all sitting cross-legged on the ground, singing continuously. The side having the two sticks (men or women as the case may be) sing without ceasing while swaying their bodies and shaking and crossing their hands until called, when they throw the sticks on the ground in plain view of all present. Then they stop singing. The opponents remain silent, resting, while the opposite side is playing and singing.

Mythical Beings

The Ah-wah'-ne Muwa say that Ah-ha-le, Coyote Man, stole the morning star, Too-le, and made it into the sun; also that Ah-ha-le put fire in the oo-noo tree, where the people always go to get it when they want it.

Ul'-le are big things like big monkeys. They have faces and bodies much like men, but very long slim legs and long slim fingers and nails. They

make tracks something like a frog, only very large. They live in the rocks.

At night they come out and shout like people only sharper, and run over the mountains and valleys and across canyons, showing a light.

Beliefs about Bears

Bears are not animals but a special kind of people, a good deal like us. Bears sometimes dance. They stamp the forefeet in the dust or on the ground a while and then stand upright and dance, holding the hands up in front, like people. They are very smart and understand our language.

Nose Hole

Old women still carry the old-time hole through the septum of the nose. In speaking of this to Old Mary in Yosemite in August, 1910, she ran a straw through her hole to show me.

The old people say: If you die without this hole in your nose you will turn into a fish, but if your nose is perforated for the Kun-no'-wah you will go on all right.

Marriage

Parents used to arrange marriages of their children when yet much too young for marriage. The parents would give presents to one another.

The parents of the boy would show respect for the girl by not looking directly at her or speaking to her; those of the girl treated the boy in the same way.

When old enough to marry the young man gave presents to the girl, and if she accepted he went to her house and slept with her and remained for at least a year. After that he could bring her back to his parents or take her to a home of his own, or anywhere he liked.

A man must never marry a woman of the same side. If he belongs to Ah-ha'-le (water), he must take his wife from Oo-hoo'-ma-te (land) side. Even now, if a man and woman of the same side marry, everybody laughs at them.

Fate of an Unsuccessful Doctor

When I saw Kal-a-pe-na in 1901 she was said to be about 90 years of age, and was said to be the wife of old "Capt. John." She did not remain in the valley winters, but went down the river to Hites Cove for the cold season.

In the San Francisco Chronicle of September 5, 1903, it was stated that an old Paiute woman from Mono Lake visiting in Yosemite Valley died during a ceremonial dance on August 27, and that Kal-a-pe-na, being the Indian doctor in charge, failed to save her. It was stated further that this being the third consecutive death under her charge, she was condemned to die.

Origin of the Name Yosemite

The original name of Yosemite Valley is Ah-wah'-nee. The name Yosemite was given it at the time of its discovery in 1851, by L. H. Bunnell, and is derived from the Indian name for grizzly bear, which, in the language of the tribe inhabiting this region (the Ah-wah-ne'-che or Ah-wah'-nee Mu'-wa, and their neighbors the Chowchilla Mu'-wa) is O-soo'-ma-te or O-ham'-i-ty. The following slightly different pronunciations of this name have been given me by different Indians of this tribe: Oo-hoo-ma-te, O-ham'-i-ty, Oo-soo'-ma-te, O-so'-ma-te. In former years the Yosemite was a favorite resort of the grizzlies and one was killed there by the discovering party. The historian of this lawless party, A. H. Bunnell, states that the Indians used to destroy them by lying in wait on a rock or in a tree commanding a frequented trail. When a bear had been wounded, the dogs were turned loose on him and soon brought him to bay, when he was dispatched with arrows or spears. In such cases there was less danger to the hunter whose approach was disregarded by the bear, his hams having been so bitten by the dogs that he dared not run for fear of a fresh attack.

Acorn Preparation

September 8, 1900. Near the mouth of Indian Canyon, in a rocky place among the black oaks (Quercus californica), and in plain sight of the majestic South Dome, is a small camp of Yosemite Indians. There are only 2 or 3 lodges—wretched hovels of boards and brush—and at the time of our visit only 2 Indians were at home, an exceedingly old and sickly man and an old but hard-working woman who was cracking acorns. She sat or squatted on the ground with one of the big openwork cornucopia carrying baskets which they call che-ka'-lek (wo'-na of the Paiutes) by her side. This basket was half full of acorns with the shells on and lay on the ground on her left, the opening facing her left side. In front of her, with the openings facing her, and close to the other basket, was a large deep bowl basket containing the shelled acorns. Between the woman and the latter basket was a stone on

which she cracked the acorns. She picked out one acorn at a time from the large basket on her left with her left hand, stood it bottom down on the rock, and with a small stone in her right hand struck it on the small end, splitting the shell and usually the nut also, lengthwise. She then tossed the nut into the basket in front of her, and took another acorn out of the che-ka-lek basket, and so on.

She had a beautifully perfect, closely-woven circular flat basket, called at-tell, on which to shake the powdered meats, which I had great difficulty purchasing later.

I photographed her in the act of cracking the acorns, and also photographed a pair of the curious acorn caches close by. These caches consist of large upright receptacles made of boughs of trees and woven about and attached to 4 or 5 upright poles, with a large post directly under the center to support the weight.

Each cache is about 3 to 3.5 feet in diameter and 5 or 6 feet high above its bottom, which is about 3 feet above the ground. It is made mainly of willows, lined with branches of the silver fir (Abies concolor), with the needles on and with branches of the yellow pine (Pinus ponderosa) hanging from the top with the tips down to keep out the rain in winter. Some of these have other stuff put on the top (old boards and so on) to help keep out the rain. Nearby we found a rock with 8 or 10 holes in it made by the Indians for pounding the acorns with stone pestles. Some of these holes are small and unfinished, but most of them are about 5 inches in diameter at the top and taper in a steep cone to a depth of 6 or 8 inches. They have been used for generations.

From this camp we walked across a field of splendid black oaks (from which the acorns are obtained), past another small camp with 2 or 3 acorn caches, to the large camp on Yosemite Creek where we found 3 women and several children and 3 acorn caches which I also photographed. These women had a number of moderately good baskets for which they wanted unreasonable prices—so I did not purchase. They also had plenty of trout and suckers drying, and their baskets contained acorn mush porridge or acorn meal in dough wads or rough rolls.

Middle Mew'-wah of Tuolumne (Bald Rock Rancheria)

All people were once animals. People came from the following animals:

Salmon (but no other fish)

The smallest lizard, pe'-chik-kah (but no others)
 The water salamander, ah-pahn'-tah
 The frog, wah-tuk'-si-e (but not the toad)
 Yellowjacket, mel-lang-i-u (but no other insect)
 The grizzly bear, u-soo'-mah-te (but no other bear)
 Coyote (but not fox or big wolf)
 Deer (but no elk)
 Gray tree squirrel, ma-wa (but not other squirrel and no chipmunk)
 Bat, too-be'-se-se

People never came from elk, coon, mountain lion, bobcat, fox, timber wolf, skunk, otter, badger, marten, civet (ring-tail), mole, porcupine, groundhog, ground squirrel, chipmunk, gopher, mice, rats, rabbits, snakes, larger lizards, toad, fish (except salmon), insects (except yellowjacket).

All people were classed in two great categories, according to whether the animals they came from lived on land or in the sea. These "sides" were called respectively the land side and the water side. In common usage the bluejay (ti'-es-moo) or the deer (oo'-wah) stood for the land side, and the frog (lo-tah) for the water side. When a stranger visited a village the first question asked him is whether he is ti'-es-moo or lo'-tah. This is true today in Mariposa also, where they ask of os-sa'-le or ti'-es-moo.

A man or woman cannot marry in the same side, but must always choose from the opposite side. So also in playing games.

All the children, boys and girls, take their father's totem; if he was a gray squirrel they all are gray squirrels also.

It seems at first a most curious fact that os-sa'-le the coyote is classed as a water animal. He is the only land animal classed on the water side. This is probably on account of his supposed ancient origin from the sea. His relatives, the dog and fox, are classed with the other land animals.

People came from certain trees—black oaks and sugar pines as well as from animals. But the Tuolumne Mew'wah say that they did not come from the rocks, in which respect they differ from the northern Me'-wuk. People who were trees are naturally classed on the land side.

Chiefs

The head chiefs (hi-ah'-po) are hereditary and always belong to what are termed as the "Royal" families.

The succession usually falls to the oldest son, but many fall to a daughter. Women head chiefs were not rare, particularly if the women were good and kind and had good dispositions.

There is only one head chief for the entire tribe. This was true of all three divisions of the Sierra Me'-wuk.

The minor chiefs or "speakers," called ya'-yu-che, were merely chiefs of subordinate or tributary villages and were chosen by the people, by the inhabitants of the village, and were not members of the royal families.

They could not build a ceremonial house (hange), although a visiting member of the royal family might build one in the village of a ya'-yu-che and hold a fiesta there.

If a mourner wants to give a "cry" ceremony he must ask the chief to call it, but is expected to furnish most of the food &c necessary.

Old "Capt. Bill" at Bald Rock, whose real name is Hung'-e-we-ah, belongs to the royal family of head chiefs, and is a very intelligent man.

Division of People into Sides

The people are divided into land and water sides, as in the case of the Southern Me'-wu. The bluejay, deer, and bear are commonly mentioned as standing for the land side, while the frog, water-dog, and coyote are the usual representatives of the water side. Coyote, as with the Southern Me'-wu, is the only land mammal attributed to the water side.

Totem

The person's protector or "totem" is called soo-lah.

Invitation String

Some time before a ceremony is held, invitations are issued to the chiefs or head men of the neighboring villages. The invitation string (always carried by a special messenger) is a knotted cord called soo-te'-lah. One knot stands for each day from the time the string is delivered. Some of the Indians speak of it as "same as newspaper."

Grizzly Bears

In the country about Bald Rock there used to be lots of grizzly bears, and they were dangerous and used to kill people. The Me'-wah used

to hunt them by putting men on stands along the trails and driving the chaparral where the bears stayed daytimes.

Each Mewuk village had its own hunting ground. The Bald Rock Mewah hunted as far east as Coopers, above Strawberry.

Ear Ornaments

Ear ornaments were worn. One kind, called choo'-ka-la, consists of a bit of abalone shell hung from the lower lobe of the ear. Another kind, called soo'-li-yu, consists of a straight piece of stick about two inches in length worn horizontally through the lower lobe of the ear. Sometimes these sticks are engraved and beautifully decorated in black, white, and red. The middle part is white, and the end that is thrust through the ear is black; the front end that projects in front of the ear is bright red and consists of a tuft of brilliant red feathers from the red head of a woodpecker. This decorated kind of ornament is called tah-a-nah.

Paints

Red paint, called muk-ka, is made from the inside of a gnarl of a yellow pine tree. It is a deep lasting red. White paint is called wal-lahng'-ah-su, and is made from a "chalk-like white lava" (a rhyolitic tuff) occurring on Table Mountain. Black paint, called yat-too'-be, is made from black sand; another kind is called he-kah'-ne.

Tattooing

The women tattoo their chins with one, two, or three vertical lines; the number is said to have no significance. The material used in tattooing is soot from burnt wormwood (Artemesia ludoviciana).

Another kind of tattooing is employed for the relief of rheumatic and chronic pains and is practiced by both men and women. In these cases the tattooing is done immediately over the painful spot.

Arbors or Shades

There are 2 kinds: those called ku-chah'-poo, in which the brush and branches with the leaves attached (usually of the laurel, Umbellularia) are arched over, meeting or intertwined at the top; the other kind, called lah-mah'-nah, consisting of 4 or 6 posts with a flat leafy canopy on top.

Substitute for Boats

The rivers are not large enough to make it worth while to use dugouts or boats. In crossing from one side to the other, swimming was the usual method, but sometimes a swimming log, called ho-ko'-na was used.

Purse

A purse for wampum and other valuables is a bag called muk-ko-o, made of the skin of a wildcat. Sometimes the skin of a fisher is used instead.

Dipper and Spoons

The people had no gourds or dippers but used a small basket called poo-luk'-kah; for spoons they used shells of the river mussel.

Implements Used in Cooking Acorns

The 2 long sticks used to take the hot stones off the fire and put them in the cooking basket are called pe-ne'-tah. The looped stick used to lift out the hot rocks and also to stir the acorn mush while cooking is called sah-wi-ah. In addition to the sah-wi-ah, a flat paddle called tahl-lah-pah' is sometimes used for stirring the mush while cooking.

Tripe

The small intestines or marrow-guts of deer were cleaned and cooked by boiling in a basket with hot stones. This kind of tripe is called choo'-ka-too.

Bumblebee Honey

Bumblebee honey, called kon'-noo, was eaten.

Salt

Salt, called koi'-yo, was obtained from what is locally known as Salt Peak, which is near Blood's on the road above Calaveras Big Trees. It was also obtained by barter with the Mono Lake Paiutes.

Musical Instruments

During the various ceremonies there is singing, drumming with the feet on a hollow log, called too'-mah, shaking of cocoon rattles (suk'-ko-sah'), blowing of bone whistles (soo-lep'-pah), playing on flutes of elderwood with holes on one side (loo'-lah), and beating the air with elder music sticks (tah-kah'-tah).

Water Dog

The small spotted salamander with red or orange belly (Diemyctilis torosus) common in streams and pools is called ah'-pahn'-tah. Among the First People he was a powerful chief. Every time you kill one it will rain.

Pronouns and Possessives

The pronouns and possessives are difficult and confusing, particularly the pronoun him which perhaps is the most difficult of all. It is rarely used without first mentioning the name of the individual referred to, and its form differs according to the distance of the person spoken of. Thus, he (him, she, or her) present is neh'-eh; while he (him, she, or her) absent is naw'-sung.

The word for father is up'-po. His father, if present, is o-pwee'-sah; if absent, naw-sung-u-poos. The term mother is ut'-tah, but if the mother is spoken of in her own family, it is ut-tah'-te.

Enemies

The Tuolumne Me'-wu disliked fighting and had few enemies. But the Po'-tahs, a related band living at Springfield on Mormon Creek about a mile below Columbia, were "scrappers" and now and then made raids into the Calaveras and Amador regions to steal girls. Then there would be fighting and the Tuolumne Me'-wu in self defense had to join the Po'-tahs.

Wars with the Mono Paiutes

The Tuolumne people were in the habit of visiting Leland Meadows in the High Sierras for the purpose of gathering sunflower and other seeds and greens. While the women were thus occupied, the men would go hunting. The Mono Lake Paiutes knew this and used to go there and attack them. This resulted in a sort of warfare which continued for many years.

Measures of Value

The Tuolumne Mewuk had two standards of value: One, called an'nah, consisting of a string of small spiral sea shells a little less than 6 feet in length (measured between tips of fingers of outstretched arms); the other, called loo'-ah, a string of clamshell-disk wampum about 33 inches in length (measured from midline of chest to tips of fingers of one out-stretched arm). The strings of loo'-ah therefore were only half the length of those of an'-nah, but their value was 5 times greater. In other words, in strings of

equal length, the string of loo'-ah had 10 times the value of the string of an'-nah. These values, converted into equivalents in United States currency, as given by the Indians, are:

One 6 foot string of an'-nah, \$1.00
 One 3 foot string of loo'-ah, \$5.00

Cooking Holes or Ground Ovens

There are two kinds of cooking holes in earth or ashes: (1) called ho-po'-ah. The ordinary way of cooking meat, fish, and tubers is to bury them in hot ashes. They are first wrapped in large leaves and are then buried in the hot ashes and more hot ashes are put on top. (2) called o-lik'-kah, the ground oven, consisting of a hole dug in the earth, the bottom lined with flat stones on which the fire is built. When the stones and earth are hot, the fire is removed. It is used for cooking greens, not meat or fish. The greens are put in and water is sprinkled on them to make steam. They are then covered with a layer of leaves and earth and are steam-cooked.

Sweat Houses

These sweat houses are rather small but larger than the individual sweat houses of many California tribes—big enough to accommodate 4 or 5 people at a time. They are constructed of bark supported on poles and covered with earth. The fire is in the middle and there is no smoke-hole. To avoid smoke the fire is fed with bundles of small dry twigs, mainly of manzanita brush. There are no hot rocks, water, or steam. The persons taking the sweat lie down lengthwise on both sides of the fire.

Sinew Bows

A glue made from the bulb of a small species of soaproot (Chlorogalum) called pal-low'-tah is used for fastening sinew on the backs of the sinew-backed bows.

Tuberculosis Medicine

A plant called wen-na'-poo-doo, about a foot in height, having a small purple flower, is a wonderful medicine for coughs, particularly in cases where part of the lung is solidified. The plant resembles the mountain pennyroyal (Monardella odoratissima), but has no odor and is smooth. A tea is made from it by steeping in the usual way. It has no bad taste and should be drunk frequently. Marvelous cures have been reported, one under the care of a city physician who had X-ray photographs made before and after the treatment.

Eye Medicine

Roots of goldenrod (se'-we-tah) make a tea of wonderful value as an eye wash. The wife of my informant had an opaque spot over the pupil of her eye which caused dimness of vision amounting almost to blindness of that eye. An oculist was consulted but was unable to improve the sight. Then an old woman of the tribe asked why she did not try the eye medicine made from the roots of the goldenrod. This was tried and the spot began to clear up and in a short time sight was completely restored.

Uses of Wormwood

The so-called wormwood (Artemisia ludoviciana) is one of the standard medicines of the Tuolumne Mewuk. It has two functions, medicinal and magical. In medicine it is used both internally as a tea and externally as a wash and a poultice. It is also used as a disinfectant to wash the bodies of the mourners after funerals—after the burning or burial of the dead. This is said to keep away the ghost spirit or devil, soo-les'-ko.

For the same purpose, little bundles of the plant, a couple of inches in length and approximately a quarter of an inch in diameter, are strung on a string and worn around the neck of an orphan child for some time after the death of the parents. This serves to keep the ghost away and also prevents sickness.

Maple Charcoal

Dead coals from maple (si'-e) are rubbed on a flat stone or metate and the powdered charcoal, called hook-koo'-nah sik'-ka, is sprinkled abundantly on a leafy species of lupine (wah'-tuk-sah) or wild cabbage which is then eaten as a cure for indigestion or gas in the stomach.

Among various tribes in different parts of California I have found that the sage herb was used either as a medicine or to ward off disease.

Treatment of the Dead

Formerly cremation was the usual if not the only method of disposing of the dead, but at present grave burial is the rule. The corpse is called cham-moo'-sah; the pyre, la-kah-tu; the ashes and burnt bones of the dead, wu-ka-ah; the basket in which the burnt bones are preserved, so-tan-no. The funeral or mourning ceremony at the time of burning or burial is called pet-ti'-yooop; the mourning ceremony (the "cry") held a year or so later, yum'-me. All the mourners are called naw'-chet-took; those closely related, loo'-wah-zuk.

In cases of grave burial, the place and grave are called mus-si'-yah. The corpse is wrapped with the knees flexed and the head bent forward, and is buried in a sitting position.

The spirit or ghost of the dead (also spoken of as "devil" or "evil spirit") is called soo-les'-ko. When departing from the body with the last breath of the expiring person, it is called hen'-nah-soos, meaning "wind going out." The place where the ghosts of the dead live is called al-a-moo'-te. This word is not ordinarily spoken, but is used by the speakers in referring to the earth and the place where the ghosts of the dead go.

E. L. McLeod tells me (July 1905) that he happened to be at Chicken Ranch Rancheria when the old woman chief lay dead and had not yet been buried. He saw there a dozen strings of small shells from Santa Cruz which they were going to bury with her. Each of the dozen strings was from 6 to 10 yards in length.

When the big owl hoots somebody is dying. He himself is somebody's ghost.

Birth and Infancy Customs

If the first teeth of a child are carefully taken and put into a gopher hole, the permanent teeth will come quickly and grow in strong and good.

Northern Mewuk

The territory of the Northern Mewuk begins on the Middle Fork of the Cosumnes River and extends southerly to, or a little beyond, Calaveras Creek. Its eastern boundary runs southward from Grizzly Flat to a point a little west of Big Trees, passing a few miles east of the present settlements of West Point and Railroad Flat. The easternmost settlement in the Mokelumne River region was Pek-ken-soo, about 4 miles east of West Point.

The mountain country claimed as hunting territory by the Mewuk extends only about ten miles east of the villages. Beyond this they say that the country belongs to the Washoo, whom they call He'-sa-tuk, meaning "up east people" (from he'-sum, east). They call the Paiute Koi'-vu-wak or Koi'-aw-we-ek, from their fondness for salt (koi'-ah).

The western boundary follows the lower border of the open forest of digger pines and blue oaks from near Michigan Bar, southerly, passing a little

west of Forest Home to May (near Carbondale), and thence a little west of Ione, Buena Vista, Lancha Plana, and Comanche. The southern boundary is not so clearly defined, but lies a little south of a line drawn from San Andreas to Mountain Ranch (otherwise known as Eldorado) in Calaveras County.

Following are the names and locations of some of the villages of the Northern Mewuk:

Tam-moo-let-te-sa, near Oleta
 Omo, at Omo Ranch
 No-mah, at Indian Diggings
 Chik-ke'-me-ze, at Grizzly Flat
 Kun-nu'-say, at West Point (also called Mas-sing wal-le mas-se)
 Pek-ken'-soo, 4 miles east of West Point
 Ha-e'-nah, at Sandy Gulch, 2 miles south of West Point
 Saw'-po-che, at Big Flat, 5 miles west of West Point
 Witch-e-kol'-che, near Rich Gulch (also called Ahp-pan-tow-we-lah
 at West Point)
 Me-nas-su, 1 mile east of Mokelumne Hill
 Ta-woo'-muz-ze and Yu-yut-to, on Government Reservation, 4 miles
 northeast of Jackson
 Pol-li'-as-soo, at Scottsville, 1½ miles south of Jackson
 Yu-lo'-ne, at Sutter Creek, where town of Sutter Creek now is
 Yu-le, at old mill, 1 mile west of Plymouth
 Chuk-kan'-ne-su, at Ione
 U-poo'-san-ne, 1 mile south of Buena Vista
 Hoo-tah'-soo, about 1 mile west of San Andreas

The villages of the Northern Mewuk are of two classes: (1) those in which the families of the head chiefs—the Hi-am-po-ko or Royal Families—reside; and (2) those inhabited solely by the common people. The position of head chief is hereditary, and may descend from either father or mother to the eldest son (or in some cases to a daughter). The head chief, called Hi-ah-po by the Northern Me-wuk (or, if a woman, Mi-ang-ah), is a person of standing, power, and influence in the tribe, is recognized as head chief by the tributary villages, and must always be a member of a royal family.

The chiefs or speakers of the minor villages, called Le-wah-pe by the Northern Mewuk and A-oo-che by the Middle Mewuk, are chosen from the common people and have no authority save in their own villages.

The villages of the first class are of much consequence: they are the places where the principal annual ceremonies are held; their names dominate the surrounding country and are used by the inhabitants of the

adjacent minor villages—instead of their own names—to designate the people and place to which they belong. Thus, if a resident of a minor village is asked the name of his tribe or home he gives the name of the head village to which his village is tributary. But this is not all, for the name of a village of the first class is applied not only to the village itself, to its inhabitants, and to the inhabitants of the minor villages tributary to it, but also to a definite tract of country, often of considerable size, constituting the domain of the tribe. Thus Ah-wah'-ne, the principal village in Yosemite Valley and home of the great chief Teniah, was also the name of the valley itself and of the inhabitants of all the villages, more than a dozen in number. Chow-chil'-lah is a similar case. The name is that of a village of the first class, situated in Chowchilla Canyon. It is applied also to the inhabitants of all the tributary villages, of which there were many, and to a large tract of country dominated by these people, a tract reaching from Fresno Creek on the south to Merced River on the north.

These primary divisions were the political, social, ceremonial, and geographical units of the Mewuk; their importance therefore can hardly be overestimated. Whether they should be regarded as tribes or subtribes is of less consequence. For the present I prefer to consider them as subtribes, though by no means disposed to quarrel with those who would hold them as tribes.

The tribal divisions I have adopted are based on similarity of language, it having been ascertained that while each village unit has dialectic peculiarities of its own, all of the village units may be assembled in three closely related linguistic groups.

The Yosemite Indians didn't smoke until the Paiutes from Mono Lake showed them wild tobacco and taught them how to use it. Wild tobacco of both species (Nicotiana attenuata and N. bigelovi) is cultivated about many of the old rancherias. At Auburn Rancheria, near the South Fork Cosumnes River, which I visited Aug. 8, 1907, the large flower species (N. bigelovi) was very common and an old woman had already picked a quantity of the large leaves and spread them out to dry. Some of the leaves that were completely dry, she had pounded ready for smoking. This tobacco is called kah-su.

Northern Me-wuk at West Point

While sitting talking (September 17, 1905) with the chief at his place I saw an old man from Railroad Flat ride up and dismount and walk straight to the rear of the roundhouse where an old woman had died 2 or 3 weeks ago. The chief told me to listen as the old man had come to cry. I looked at my watch; it was 4 o'clock. The old man began in a low voice a

low wailing howl, not unlike the wailing of a small dog, only much lower. As he cried he put his arm around the daughter of the dead woman and patted her on the back. After keeping this up at intervals for half an hour, always in the same low key, he came over to us and handed the chief a milkweed cord about 10 inches long knotted with seven knots, indicating the number of days before a mourning ceremony (commonly called the "cry") will be held at his place at Railroad Flat. The chief must untie one knot every day, and when the last one is untied he will know it is time to go to the cry. The old man had a number of these strings and gives one to the head man of each Indian village.

The daughter of the dead woman, a young woman about 22, has painted a red mark on each cheek.

The cry for the old woman probably began Sept. 24. I was not there, but Ed McLeod, who visited the place while the Indians were gathering, told me that they had hollowed out a manzanita bush near one of the houses as a receptacle for gifts for the dead. They had cut out the middle part of the manzanita and stiffened the outer branches by interlacing with splints and sticks and had put a binding around the outside, leaving a large cavity. Into this had been placed the clothing and other presents brought by the mourners to be burned.

Chief Eph

The chief of the Northern Me'-wuk is a full blood, living at the West Point Rancheria in Calaveras County. His "civilized" name is Eph. He is chief of all the Indians from Cosumnes River south to San Andreas and El Dorado in Calaveras County.

Besides being chief, he is the singer and keeper of the dance. He sings 5 kinds of dance songs.

Mu-le is the name of the song sung at the acorn feast in the fall.

He ordinarily sings in a ceremonial roundhouse called hang'-e. Another man behind him beats time with his feet on a hollow log or a plank over a hole. The dancing is called kol-la-ah.

His old roundhouse or "fandango" house was 40 to 42 feet in diameter. He says that in olden times they were dug down a few feet and earth covered and had the same name, hang'-e.

The territory of his tribe extends from the north side of the South Fork of the Mokoz-zumne River (Cosumnes) south to El Dorado and San Andreas

in Calaveras County, but does not quite reach Sheep Camp, the Indians at Sheep Camp being the same as the Muwa at Murphys, Angels, and Sonora.

On the west his territory extends to Buena Vista in Amador County which is south of Ione.

On the east, it extends hardly at all beyond West Point, 5 to 10 miles east only, the mountains of the Sierras belonging to Washoo.

When at West Point (Sept. 18, 1905) Chief Eph told me that his 17 year old son had stolen his wife. The boy and the wife were both there, but not living in the chief's home. The wife is a young woman about 24 or 25. She is the daughter of the old woman who died 2 or 3 weeks ago. The old man said he didn't like it but was not "mad" and was not going to do anything about it. The boy came and was with us fully half the time I was there and helped answer my questions. The girl was there also, but only once came near enough to join in the talk.

A year later (in Oct. 1906) I met the same woman at the ceremony at Railroad Flat. She was then living with another son of Eph.

Bear Hunting

The usual way of hunting bears was for a number of men to go out and fire the chaparral in which the bear or bears were hiding, while one or two men climbed trees on the far side and shot the bears with arrows when they came out. These arrows were sometimes poisoned with rattlesnake venom or spider venom.

All the men except those with bows and arrows carried fire sticks and no weapons. They surrounded the brush except on the side of the shooters, and set fire to it. The grandfather of Chief Eph Jackson of West Point, while hunting in this way, was killed by a grizzly. He had climbed down out of the tree to get a better shot when the bear rushed him. He ran back and swung himself up into the tree, but before he got out of reach of the grizzly, the bear sprang up and seized his leg and dragged him down and bit his chest and killed him. His companions rushed up and killed the bear with their arrows, but it was too late, for the old man had been mortally wounded and died.

Preparing Sugar Pine Nuts

At West Point (August 25, 1903) I watched an old woman preparing nuts of the sugar pine. The cones, still green, containing nuts which were as yet hardly ripe, were roasted for a short time in the fire, after which they

were removed and split lengthwise with a knife, making it easy to get at the nuts between the scales. The nuts were then shucked and the meats removed and pounded in a small portable mortar. The nut flour thus made was used for soup.

Nuts of the digger pine are not made into soup but are roasted and eaten as nuts. Great quantities of them are eaten. They do not grow at the elevation of West Point but are brought up from lower down in the foothills.

Creation Beliefs and Puberty Rites

The first man (or people), Hoi-yah'-go, was made by Oo-soo'-mah-te, the bear.

All people (Me'-wuk) were once animals. The animals that most commonly turn into men are the bear, gray squirrel, coon, lizard, deer, eagle, yellowjacket, and also certain rocks and the black oak, te-la'-le.

When a rock or animal turns into a man, it (the process of transformation) is called oot'-neh.

Eph, Chief of the Mewuk, came from a gray squirrel; his father from a bear; his son from a lizard; his son's wife from a deer; and the old blind woman living here, from a yellowjacket. No people ever came from coyote or fox. These animals take care of and feed the person who has come from them.

A boy at puberty goes to the woods and wanders about (hang'-e-lah) like a lost man for days, or even as long sometimes as 2 weeks, without food except what raw green stuff he finds in the woods. By and by, when asleep, he sees (or dreams he sees) the animal he came from and that animal feeds him then and throughout his life. If the animal fails to feed him and he eats cooked home food, he dies.

Beliefs

The meadowlark (yu'-kah-loo) is a bad bird; the Indian does not like him. All the time he says: "Me'-wuk ut-tud'dah (Me-wuk no good), Me'-wuk tuk-tuk'-ko (Me-wuk stink)."

A long time ago the first(?) Indian died and a small lizard (pe-la-lit-te) was going to make him come to life again. The lizard had previously given man five fingers. But meadowlark (yu'-kah-loo) said (as above), "Me-wuk no good, Me-wuk stink, throw him away."

Pe-la-lit-te and Suk'-ka-de are the 2 lizards. They gave Me-wuk 5 fingers and have always been good to Me'-wuk. Sometimes lizards turn into Me'-wuk.

The West Point Mewuk say that deer sometimes turn into oak trees as well as into people. Lizards of 2 kinds, pe-la-lit-te and suk'-ka-de, sometimes turn into Mewuk (people).

Good Indians at death turn into the great horned owl (too'-koo-le), bad Indians turn into the barn owl (et-ta'-le).

Mountain lion (he-le'-jah) used to twist his tail around a deer he killed and carry it off on his back.

The old acorn holes in the rocks were made by oo-soo'-mat-ti, the grizzly bear, and by hoi-yah'-go, the first man (who himself was made by the bear). The Me'-wuk found the holes ready-made and used them for pounding acorns.

The small black spider (po'-ko-moo) is poison and sometimes scratches people with its long claws and the least scratch makes a poison sore. The poison is sometimes put on arrow points to make them kill quick. This spider (Lathrodictus mactens) has a red spot underneath.

Northern Me'-wuk of Oleta

The rainbow means that a baby is born. Whenever a rainbow is seen, everybody knows that another baby is born.

A woman often addresses her husband as sok'-keh, friend.

Meadowlark (Sturnella) talks very bad, says nasty words. Is a bad bird.

In leaching acorn meal, warm water is used for black oak (te-la'-le) and live oak acorns, and cold water for the blue oak.

The umbilical cord is put under the baby in the papoose basket (kik'-ki) and put in loosely so that it can fall out when the woman is carrying the baby on her back so she will never know where it fell or where it is. The afterbirth is buried.

Dick Edward says the Northern Me'-wuk didn't lay stress on the water side and land side like the Southern Mu-wah, but they used the terms kik'-

ku-mud-de (water side) and wal'-le-mud-de (land side).

The Oleta Mewuk say that some people come from dogs, some from the black oak (te'-la'-le), and others from the hills. All the children take the father's side and father's animal.

The big (head) chief is always hereditary, and the office passed from father to eldest son, sometimes to the daughter.

The northern or Oleta Me'-wuk apply the name kis-se to two species of water grass. One grows along rocky stream borders in the mountains and is a sharp-edged sword grass and its root is of no use. The grass is used for making mats. The other water grass grows below in the valley and its root (soo'-le) is the body material used in making many baskets. The latter of course is Cladium.

Northern Mewuk of Buena Vista Rancheria

The old man, Oliver, told me that the Me'-wuk Kon'-ne tribes always buried their dead in graves dug in the ground, that they never buried in caves and never burned the dead. The tribes living north of the Cosumnes River (Necenon or Te-ce-me-non as he called them, meaning north people, and allied tribes) always in former times buried their dead.

Northern Mewuk of Railroad Flat

The mourners, both sexes, are called loo'-wah-zuk. Widows and widowers are called we-koo'-ma.

When the cry is held, if a mourner has lost a husband or wife within a month or two of the time of the cry, he or she is not expected to accept his liberty at that time but continues a mourn till the cry of the next year. A mourner who accepts liberty at a cry within 2 or 3 months after neath of a near relative is not well thought of by the people.

The brush houses at Railroad Flat, used during the cry and dance of Oct. 1906, are of simple construction. They are circular in ground section but not enclosed all the way round, each having a north and south opening. They are made by taking advantage of 2 or more growing manzanitas and small (young) black oaks, and filling the gaps between them by setting in the ground large leafy branches of manzanita, black oaks, and mountain lime oak which are held in place by a long slender horizontal pole fastened to the uprights about 4 feet above the ground.

The tops of the branches are arched in toward the center but do not meet. They are high enough for a person to stand upright without touching his head to them. They afford shade and some protection from inquiring eyes.

The preparation for the cry had evidently been going on for some time, and, apparently owing to lack of sufficient means at Railroad Flat, a family from West Point seemed to have charge of hospitalities.

A few days before the ceremonies began, 2 resident old women (from Railroad Flat) took \$40.00 worth of gold dust to the store and traded it for flour, sugar, tea, coffee, crackers, and the like. Besides, they had a large store of acorns which they made into acorn flour, and began cooking the day before the ceremony began.

When the guests first arrived they were given places in the outer circle of the roundhouse and an ample meal of cooked food—including buckets of coffee and tea—was carried in by the hostess and placed before them.

During the ceremony at Railroad Flat in October 1906, I was told by the Indians that in the early days some of the chiefs of the valley tribes had a feather cape or robe of the large feathers of the California condor (mol'-luk-kah) which reached to the ground. The condor blanket was called kook'-si-yu. It was worn only at the ceremonials and at the same time a headdress of feathers of the golden eagle (we-pi-ah-gah) stood up high on the head. The robe and headdress made the man look like a giant.

Storage and Cooking of Acorns

The acorn caches (called chah'-kah and too-le'-lah) at Railroad Flat in Oct. 1906 were large, standing upright with a small pine tree between them. One was about 6 feet high, the other about 12 feet high. Each was about 4 feet in diameter and had a strong framework of 6 upright posts planted in the ground and reaching up to the top. Besides, each received additional support from the trees between them. But the main use of the tree was to lessen the rain that fell on the caches.

In each interval between the upright posts were 4 or 5 slender vertical willow holes (about one inch in diameter) starting at the top and curving in at the bottom to rest on a common central support, consisting of one block or section of a tree 8 or 10 inches in diameter and about a foot high. The vertical posts and sticks were bound firmly together by horizontal bands of grapevine and hazel, placed about 10 inches or so apart. At the bottom was a grapevine loop. The inside was lined with cedar boughs, inside of which was a species of Epilobium, and there was a thick cover of the same material, with Libocedrus boughs on top.

The filter or leach used to leach the bitter out of the acorn meal is about 4 feet in diameter and about 10 inches to a foot in depth. It is placed on a slight elevation and is made of dry leaves and fragments of bark scraped up under bushes of Ceanothus and manzanita in the chaparral thickets. The greater part is leaves of the manzanita.

There were two in operation at the same time at the rancheria at Railroad Flat Oct. 9-12, 1906. A coarse cloth (gunny sack) was spread over the filter to receive the meal which was carefully wetted and patted. Then a branch of cedar was laid on top and the water (warmed first in a basket of hot stones) was poured on the cedar branch to spread it evenly and not wash the meal. In one case, the leach itself (just under the cloth) was lined with Libocedrus boughs.

In leaching the acorn meal, a green branch of incense cedar is laid on top of the wetted meal to spread the water and break its force as the water is poured on to wash out the bitter. The water is first warmed in a large basket by means of a dozen hot stones (each 5-7 inches in length). The water is dipped out of the big basket with a smaller basket, holding about a gallon, and poured upon the cedar branch, the foliage of which is very dense.

The leaches varied from 3 to 4½ feet in diameter. There were 3 of them in use during the ceremonies at Railroad Flat in early October. They were near together, all within 10 feet of the central fire at which the stones were heated and the acorn mush cooled. The leaches were about one foot thick (or deep) and were made of chaparral leaves and bark scraped up under the bushes of manzanita and Ceanothus. Some had a layer of Libocedrus on top.

The Handgame (hin-wah)

Game played with 2 bones of mountain lion, one plain, the other wrapped, and pitched in a broad ring near each end. The bones are called put'tah; the wrapped one is os'sah, and the plain one, nung'-ah, or man. The counters are called hil'-lah. They consist of 10 slender arrow-like sticks 18 inches in length and rather sharp at one end. The original name of the wrapped bones was hin'wah, which is now the name of the game.

A special man acts as the counter and sits between the players, a little to one side. He holds the 10 sticks and tosses to the successful player each time. The players sing all the time, without ceasing. Various tunes and songs are sung. One of the commonest is: ho-wen'-nem-han'-hee'-nah, repeated again and again. One of the players sings, the other side resting. In this case there were invariably two pairs of players, all men,

two men on a side squatting side by side. They sometimes grasped a handful of pine needles from the floor in each hand and buried the bones among the wisps of needles. At other times (or other players) they merely passed the bones back and forth in front and behind the back, and then folded their arms quietly while continuing to sing and sway the body.

The head chief announced the game and said they could go ahead and play about noon the following morning of the wash (which concluded the mourning ceremony). The game continued most of the time, day and night, after this. Money passed freely and changed hands. Fifty-cent pieces were used.

Mortars

In 1905 the Mewuk at Railroad Flat rancheria were using ancient mortars which they had found. The tall mortar (fig. 37) with straight sides is called um'-meh, and measures 11.5 inches in height; the greatest diameter (at top) is 11.25 inches, diameter at bottom is 8.5 inches; depth of cavity is 8.5 inches. It was being used to pound manzanita berries (a'-yeh).

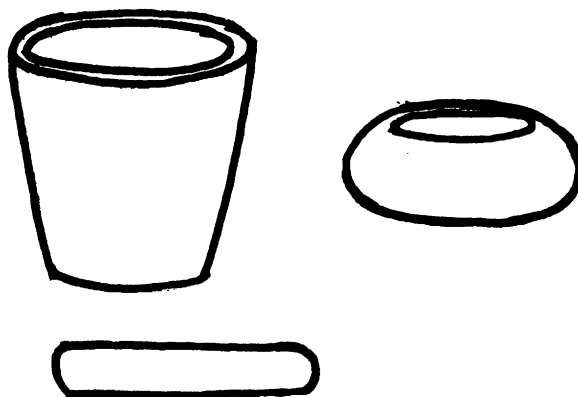


Fig. 37. Ancient stone mortars and pestle being used in 1905 by the Me-wuk at Railroad Flat rancheria.

Hoo-koo-e-ko of Bodega Bay

Nov. 21, 1905. Tribe living off Bodega Bay. Territory extends along coast from Duncan Point on north to a point on east side of Tomales Bay between present towns of Valley Ford and Tomales. Inland (to east) they reach only to Freestone.

The so-called "Indian Mound" on a high hill in the redwood forest west of Occidental was a large camp used in late summer and fall for gathering acorns of the tanbark oak, and for hunting.

The only inland village of the Olamentke (Hoo'-koo-e) was at the Russian settlement of Bodega—a long adobe about a mile from the present town and one-quarter mile from the present creamery.

This is the tribe of Indians and half breeds on lower Russian River called Wad'-da-ga-nu or Bo'-da-ga-nu, which means simply Bodega people. The Bodega Indians originally had rancherias all around the bay, including a large one on the spit or bar towards its west end. Their territory reached easterly not quite to Freestone (Po-tow'-wah yo'-mah), and on the southeast was bounded in part by Valley Ford Creek.

The only full blood member of this tribe now living is the half-brother of my informant (Bill Smith of Bodega Bay). He regards the Freestone people (Po-tow'-wah yo'-me or Lek'-kah-te'-wut) as a distinct tribe, though speaking a related language. An Indian named Joaquin who lives at Charley Hop's ranch near Stewart Point may be a Bodega Indian.

For a long time Capt. Smith of Bodega (village) had a big rancheria on his place, a couple of hundred yards west of the old Russian adobe house. There were several hundred Bodega Indians here.

When Captain Claussen first settled at Drakes Bay about 33 to 34 years ago (i.e. 1871 or 1872) Indians were numerous on Tomales Point and all along the west side of Tomales Bay. About 20 years ago Captain Claussen took a "school census" and then found about 60 Indians living on the west side of Tomales Bay from a point about 6 miles north of Inverness, northward to the point. They lived by fishing and hunting and were great clam diggers and eaters. They annoyed the white settlers more or less (doubtless for good reason and in retaliation for brutal deeds), and about 18 years ago C. W. Howard, the owner of most of the land on the side west of Tomales Bay, ordered his men to evict them. The men went there and tore down the Indians' houses while one of their number stood ready with a gun to punish any Indian who might resent the destruction of his home. As a result most of the Indians crossed the Bay and scattered and soon became practically extinct. There are still, he says, a few half breeds on the west side near Marshall, but he doubts if there is a single full blood left—or a single person who can speak the language.

Billy Smith of Bodega Bay said that he once visited Kotena rancheria when a lot of Colusa Indians had gone there to trade, and they had a "big time." The Colusa Indians (Pat'wins or Pah'-tins) brought bear skins to

trade for shell money, feathers, belts, baskets, and white man's money. Each bear skin had a mark on one of the fore claws showing its value. They had a big dance and the dancers wore magpie skins with the long tails dangling from the back of the heads of the dancers.

Ethnobotany

Achillea (wo'-we'). Highly virtuous for cuts and wounds. Leaves bruised and bound on. Also tea, for distress in stomach and lungs.

Artemisia ludoviciana (put'-to-put'-to). Leaves bruised and kept on cuts and sores. Good for sore-backed horses. Tea mildly cathartic; good for indigestion.

Heracleum lanatum (poo-loo'-te). Young stems peeled and eaten raw. The root is an excellent poultice for swellings, soften in hot ashes and mash up and put on swollen place. It will get well or break. Good for mumps.

Angelica hendersoni (lo-kot'-te). Young stems eaten raw, same as poo-loo'-te. Made into tea as cure for mussel poisoning which, without it, is often fatal.

Rhamnus californica (kawt-teh). Tea from bark and leaves. Cathartic.

Salix dasioplis, willow (te'-wut). The bark is stripped from young branches and boiled. Good for fevers. Also cures measles.

Dryopteris rigida arguta, fern (oo'-took-oo'-took). The bunch of roots is boiled and made into tea. Cure for vomiting and spitting blood and other internal bleeding.

Sambucus glauca, elder (to-to'-lah). Flowers and root used for medicine.

Beliefs

All the birds were first people once, and all people came from birds, from owls, eagles, hawks, quail, ducks (mallard in particular), bluejays, woodpeckers, and all kinds of birds. Every person was once a bird. Mek-mek's wife was a mallard. No Olamentke people ever came from any animal (i.e. mammal). The meadowlark is a gossip and we don't like him.

The Wi'-pa, a Mocozumme Subtribe

The only full blood living in 1905 was an exceedingly old woman named E'-non-nat-too-ya'. Her name in Spanish is Pow'-lah [Paula]. She lives near Pleasanton with her daughter, Maria Reyes, who is the wife of a Mexican or Chilenean, G. Reyes. The daughter talks the language but doesn't know all the words.

The original home of the tribe was an island (No'-yooop) between the Sacramento and Joaquin Rivers—probably the west end of Sherman Island or neighboring islet near Antioch. She says the village was south of the Suisun (Soo'-e-soon') country and her people's territory reached to the Bay. It was only a little way from the rancheria to the "Big Water." Next on the north or northeast or near the Sacramento River, lived the O'-che-hak people (probably only a rancheria name) whose language differed only slightly—she could understand it. Next on the east, across 2 rivers, were the Mokozumme, whose language also was so near like hers that she could talk with the people.

To the south or southeast, on or near a big river, lived the Han'-suk whose language likewise differed only a little. The Hool-poom'-ne (or Hool-poom'-man-ne) lived to the northeast on the east side of the Sacramento River, but just where she doesn't know. They spoke her language and another language also.

Among the Wi'-pa, the wife of the chief used to wear a feathered blanket which was very rich and handsome. This blanket was called mo-soo'-pah. It was made of the feathers of wah'-o, the snow goose, and se'-nah, the mallard.

Some of the men had robes of bear skin, called oo'-e-yoom. Most of the people had blankets of rabbit skin, called lek-kah'. Both men and women had cloaks of tules (called po-so'-wan) which reached down to the waist and which they wore in bad weather. At dances and ceremonious occasions they wore finer and longer ones which reached down to the knees, both in front and back, and were ornamented with red and white beads of their own make. Neither sex wore hats or moccasins. After the Spaniards came, the men learned to make a kind of sandal (called so-lo'-meh) to protect the bottom of the foot. Both sexes wore belts called loo'-tah and pah'-chah to hold up their garments. The men wore a breech-clout called yut-tah; the women, a short tule skirt called pe-sah'-lah. On occasions the men wore a necklace of bear's claws, called ah-ki'-ah soo'-naht; the women, a necklace of shells called hoo'-la. On ceremonial occasions the women wore also a headband about one and one-quarter to one and one-half

inches in width made of small shells strung and sewed together, called pu-che; shell bracelets called now-woo'-tah; ear pendants called so'-mi; and both sexes wore a nose bone three to three and a half inches long called pe-la'-ke.

Both sexes painted for dancing: the women painted the face only; the men the face, body, and legs.

The shell necklace and ear pendants rattled when they shook together and made a noise in dancing.

(Information recorded at Pleasanton, California, Nov. 26, 1905.)

Remnants of Mewko Tribes Living near Pleasanton

On November 5, 1910 I visited the rancheria between Pleasanton and Mrs. Phoebe Hearst's place. The Indians told me that the old Wi-pa woman who used to live there and from whom I obtained some important myths had died a little over a year ago.

I talked with two Indian men belonging to Mewko tribes. One is called Joe Avencho or Joe Guzman, the other Joe Benoko. Joe Guzman lives at Pleasanton rancheria where his father lived before him, and speaks a Mewko dialect close to Wi-pa.

Joe Benoko, and his father before him, lived at Sunol rancheria and belong to the Han-ne'-su tribe. He is not sure however as to whether or not the Han-ne'-su territory reached westerly from the San Joaquin valley to near Sunol, or his father's people moved into the Sunol country from the valley. Neither can he define the Han-ne-su territory with any definiteness for the reason that his father never took him around it. Irrespective of this, stumbling upon this man was important as he is the only Han-ne'-su (or Han-ne'-suk) man I have ever met, and doubtless the only one still alive. His language confirms what the old Wi'-pa woman told me several years ago, namely, that the Wi'-pa and Han-ne-su spoke closely related languages and could in the main understand each other. They are really very close. Indians almost always exaggerate their dialectic differences.

There is still a chance, if one had time and a smattering of Spanish-Mexican, to obtain valuable facts from the few remaining Indians at Pleasanton. Most of them belong to tribes or bands of the Mewko family. Of this important Mewan family I have already obtained material from members of

three tribes: Wi'-pa, Han-ne'-su, and Wel-wel-he' (or Wel-wel-le-he'), all living at Pleasanton. To the latter belongs the wife of a Poo'-e-win Indian named Mike McGill, but she and her mother were early captured by the Spanish and taken to San Jose to work as servants. Mike McGill is a Poo'-e-win, but doesn't remember much. There is also here Mrs. Angela Colos, a so-called "Costano," whose mother came from San Lorenzo on San Francisco Bay and whose father was a Ko-re-ak'-ka. Her language is the same as was native to Santa Clara.

Joe Guzman (or Joe Avencho) is the father of Ben Guzman who was killed two years ago by falling off of a wagon, and whose wife (Nettie) is a Mokelumne and has married again and lives at or near Comanche.

The Guzman family belongs to a Mewko tribe and talks almost the same as Wi'-pa. They have lived for two or three generations near Pleasanton and pretend to not know much of their language. They say however that their language is somewhat different from that of the Han-ne-su, which latter had a rancheria near Sunol, now represented by Joe Benoko of Sunol who works from ranch to ranch, usually from Pleasanton to Livermore. I found him at a grape ranch near Pleasanton, November 5, 1909.

The Indian whose white name is Mike McGill tells me that he is a Poo'-e-win and was born on Cayetano (Gayetano) Juarez' place at Too-loo'-ka, a little southeast of Napa City. He says there used to be a rancheria called Yak'-koo-me between Cayetano's place and Napa, and that its inhabitants were different from the Poo'-e-win tribe. Later he lived near Pacheco (between Pacheco and Clayton), northwest of Mount Diablo. His wife belongs to a Mewko tribe the name of which she gives as Wel-wel-he'.

Ti'-nan or Koz'-zum-me Villages

Chief Hunchup tells me (December 1904) that his people (Nis-se-nan tribe) reached westerly only to the lower edge of the timber (digger pine and blue oak forest belt). Their territory included Latrobe and Wi'-me-sa-pa-kan (a little below Latrobe), and ended along an irregular line passing southerly from Salmon Falls (Yaw'-dok) on the South Fork of the American River to Michigan Bar (pā-lah-mool = water oak) on the Cosumnes River.

Below (west of) the Nis'-se-nan were numerous rancherias of tribes speaking a widely different language, the Mo-koz'-zum-me. These tribes the Nis'-se-nan called Ti'-nan, meaning "West People." They extended from Slough House on Deer Creek (and adjacent parts of the Cosumnes River) down to the Tules. (The Pā'-we-nan Poo-soo'-ne call the Mo-koz'-sum-me tribe Kaw'-so, according to Blind Tom.)

Hunchup gave me the following Ti'-nan rancherias and locations on or near the Cosumnes River:

Yoom-hoo'-e: rancheria at place now occupied by graveyard on knoll near present Slough House (1 mile below Cosumnes post office).

Yaw'-mit: rancheria on east bank of the Cosumnes River, directly across from Sheldon's Ranch.

Lool'-le-mūl: rancheria on Deer Creek near Sheldon's barn.

Soo-ke'-de-de: rancheria on east side of the Cosumnes River, 1.5 miles below Yaw'-mit.

Mi'-ǎ-man: rancheria on east side of the Cosumnes River, 3 miles below Soo-ke'-de-de.

Low'-we-mūl: rancheria on west side of the Cosumnes River opposite Mi'-ǎ-man.

Choo-yoom'-kǎ-dut: on west side of the Cosumnes River, one mile below Mi'-ǎ-man.

Kah-kahm'-pi: on west side of the Cosumnes River, .5 mile below Choo-yoom'-kǎ-dut.

Soo'-poo: on west side of the Cosumnes River, 3 miles below Choo-yoom'-kǎ-dut.

Too'-koo-e: on west side of the Cosumnes River, 5 miles below Soo'-poo.

Chah'-woo: on west side of the Cosumnes River, .25 mile below Too'-koo-e.

OLHONEAN

Editor's note: Dr. Merriam labeled the language stock which is otherwise known as Costanoan, as Olhonean. He recognized three tribes of this stock: (1) Hoo'-mon-twash (around Monterey); (2) Moot-sun (around San Juan Bautista Mission); and (3) Kah-koon' or Room'-se-en (around Carmel). There were undoubtedly more dialects; Kroeber suggests tentatively that there were at least seven.¹ Little is known of these people aside from information contained in historical accounts of the late eighteenth and early nineteenth centuries, as may be judged from the brief chapter accorded them by Kroeber.² The information here is therefore welcome as a substantial addition to the ethnographic record of these people.

On September 26, 1902, Dr. Merriam discovered, near Mission San Juan Bautista, an aged Indian woman named Barbara Salorsano who told him that her tribe was called Hoo'-mont-wash. From her he purchased a roughly-made, circular winnowing basket, two-thirds of which was of split willow (hitch-hitch) and one-third of shredded bark or tule (ter-has-san). The following information on basket names was recorded:

Large cooking bowl, she'-win
 Smaller bowl (kind uncertain), wal-lah-hin
 Small mush bowl, ruk-shoon
 Burden basket, loop-pe'-yoo
 Circular winnower, tee-pe'-re
 Papoose basket, trol-less

The following is a direct copy of Dr. Merriam's notes.

Barbara's father was a Hoo'-mont-wash and his people occupied San Juan Valley long before the Padres came. It was their original home. They also ranged up to the west side of Salinas Valley to Soledad. The Indians of Santa Cruz, she says, belonged to Har-de-on tribe. The Santa Cruz people were called in Hoomontwash, A-guas-mas. The Indians of San Jose and Santa Clara (Clarenos) spoke a different language and wore long hair. She does not remember the tribal name. Their language was related to Hoomontwash. Cho-chan-ya was the term for the people beyond Santa Cruz.

The Indians of Monterey were called by the Padres, Carmelanos. They were called Ah'-ches'-ta-quas, and their language was very different. Her mother came from the Merced River below the mountains (i.e. in the valley)

¹ See p. 403 for end notes.

and belonged to a tribe called Ke-trach-ey, speaking a wholly different language from that of the Hoomontwash. Her father was a Hoomontwash, and it was his language, not her mother's, that she learned and still speaks.

Barbara's sister at Gilroy told me that the tribal name of the Carmelanos is Wen'-yah-wren, and that their language was generally understood by her people (the Hoomontwash), although many words were entirely different. She says part of the numerals given me by Barbara as Hoomontwash are really Wen'-yah-wren.³ The two tribes were brought together at the missions and it is probable that the vocabulary obtained from old Barbara contains many Carmelano words.

The Santa Cruz tribe (Hor-de-on) lived in a field called Indian Potrero, near where the powder mill at Santa Cruz now stands. The tribe is now said to be absolutely extinct except for a single old woman named Rosa Arsola who lives at Gilroy. I called on her on November 4, 1904 and found that she does not know any words of her own language, having been taken by the Padres when only three years old. Barbara says her people (i.e. Hoomontwash) called the Hordeon people A-guas-was or A-kwas-was.

[On July 6, 1906, Dr. Merriam visited two old Indian women, Mrs. Beviana Torres and Mrs. Jacinto Gonzales, who spoke the Kah'-koon or Room'-se-en language. In the week of July 27-30, these women told Dr. Merriam that they belonged to the tribe which the Spaniards called Carmeleños because of their attachment to the mission at Carmel, but that they originally came from a place the Spaniards called El Sur where they lived on the coast in a single large rancheria, called by themselves Kah'-koon-ti-rook, and that they called their tribe Kah-koon. Ed.]

The Kah-koon named the mission settlement at Carmel Kar'-men-ti-rook', the terminal syllable "rook" meaning house or rancheria. Their language is the same as that of the A-ches'-tah who formerly lived where the town of Monterey now stands, but differed somewhat from the Room-se-en who lived in the interior to the southeast, apparently around Tassajara. The rancheria at Sargent's Ranch on Carmel River was called Tap-per as well as Sargent-a-ruk.

The Kah'-koon of Sur and Carmel made only twined baskets. They cooked mush in a large conical basket (she-win) and poured it out to cool in a bowl-shaped basket called te-pe-rin, out of which the mush was dipped and eaten in small mush bowls, called poo-shoot te'-pe-rin. A small subglobular choke-mouth basket was called hraps, larger baskets of this kind were called sho-to-kos. The Kah-koon winnower and roaster was called war'-sin; the baby basket, she'win; the seed paddle, och'-a-nun.⁴

Room'-se-en and Kah'-koon tribes always had dogs.

In old times houses were made of tule or brush and were big enough for two families. They were circular in plan and conical. The brush used for houses was called tat'-e-mak and wit-ten; tule (Scirpus) was called roks.

The dance place (tok) was a long oval area enclosed by a brush fence; it contained three fires with an open space in the middle for the dancers. A white flag (shoopk) was attached to a pole and set in the ground.

Mescal, which grows at Sur, was an important article of food. The plant and root were both called sah'-o; the stalk, koop. The root was roasted in pits before being eaten.

They painted the face only with black and white paint; red was not used, nor did they tattoo the face. The witch-doctors used to put on bear skins with teeth and claws loaded with poison to do harm.⁵

The Kah'-koon believe that the world was made by the eagle, coyote, and hummingbird.

Tobacco came from seed first planted by coyote. Tobacco was taken as an emetic. It was also smoked. Tobacco leaves (sow-we-nan-ne) were prepared by pounding in a small mortar.

The berries of the small species of manzanita (Arctostaphylos pumila) were used to make cider; the bark of the large species (A. tomentosa) was peeled off, kept dry, and when needed pounded into powder and made into tea for hemorrhage of the lungs.

The Kah'-koon (and Room'-se-en) used for money in old (i.e. pre-Spanish) times white stones "with blue patches or reflections," found at Pico Blanco. The stone was called pach-kah-lah-che'-pil.

Nettle root was steeped to make a tea drunk for consumption, and if a person had rheumatism the part of the body which hurt was "patted" with the nettle (apparently a counter-irritant).

For colds the feet were soaked in a hot bath of a decoction made from elder flowers, manzanita leaves, and mallow. A tea of elder flowers was drunk to cure colds.

A tea of the leaves of Heteromeles arbutifolia was drunk "for

suppression of menses or irregular menses of girls" because it "cleared the blood."

Tea made from the bark of Rhamus was a cathartic; the ripe berries were made into a jelly and applied to sores.

The Kah'-koon and Room'-se-en bows were strung with sinew and the arrows were wrapped with sinew.

Baskets were ornamented with abalone shell pendants, quail plumes, and woodpecker scalps.

Thunder was said to be caused by the winds fighting, and when it thundered people used to shout and yell.

The doctors used both herbs and magic and did both harm and good. If they wanted to harm a man they took the penis bone (pe-leu) of a coyote and dug with it into the place where a man had urinated and mixed some herbs in and left the penis bone sticking in the ground. The man was soon taken with pains in the bladder and grew worse and if the coyote bone was left in the urinated ground, he was soon dead. But if the doctor is called and wants the man to recover he takes the coyote penis bone away and the man gets well. The doctors also kill by poisons (called es). For this purpose they use rattlesnake poison, human saliva used with (they declined to state what), lungs of turtle and frog, and some other things. They used to load bear claws with the poison.

The Kah'-koon formerly killed large numbers of sea otter which were abundant at Sur and used their fur for clothing. Sleeveless shirts, skirts, and blanket capes were made. The sea otters lie on the kelp (es-ken) offshore, and the Indians called the kelp "sea otter beds."

[A second miscellaneous lot of notes in Dr. Merriam's files of the Olhonean stock was contributed by J. P. Harrington. On April 5, 1922, Harrington sent Merriam a "Montereyano" vocabulary which is given below. Merriam acknowledged its receipt in a letter of April 12, 1922, from which the following extract is taken. Ed.]

"Your vocabulary I see is from a nephew of Beviana Torres from whom and from Jacinta Gonzales I obtained several hundred words and other matter in July 1906—16 years ago. Señora Torres told me that she came from the old rancheria at Sur, the name of which was Kah-koon tah-rook' and she said that her language was the same as the A-ches-tah of Monterey.

"I have just compared the number of words in your vocabulary with the

same words in mine, and find as a rule excellent agreement, although there are some discrepancies. For instance, for tree, you have tish, while I have mo'-yor. For elk, you have che-rech, while I have te'-yook. For abalone, you give the Spanish name; they gave me oo^{ch}-ch. For the numeral 4, you have u-tin-ta, while I have two forms, o'-chit-tim and oo'-trit-tim. For hat you have purps; they told me they never had any hats. For pipe, you have ka-nush, while I have hoo'-rup. For wind you have guth, while I have tar. For night, you have mur, while I have or'-pe-tro. For crazy,, you have ru-pi-yast, while I have mah'-se-est. For lazy, you have e-loh-sest, while I have oo'-ne-yoost.

"The marine animal your informant calls cho-hen is too much for me. It may be a holothurian. However, I am writing Dr. Walter Fisher by this mail, giving him your description and asking if he knows what it is. Will let you know later.

"The snake given as li-san is the common garter snake (genus Eutania). Your wa-kach is the common big toad that comes about the house evenings.

"Your to-mins seal is the sea lion (genus Zolophus).

"You have sirh for eagle. I have seer for the bald eagle and seuker for the golden eagle; but was not able to get a fair series of bird and mammal names owing to the circumstance that old Señora Torres did not know or did not remember their names.

"You give tach as 'a kind of hairy rat.' The nearest I can come to this is topk, the pocket gopher.

"You have en-sen as the name of the blackberry, while I have en-nem. You have ho-mun for wolf. Does not the name suggest a kind of big cat, as bobcat is hom? And is it not doubtful whether these people ever knew anything about the true wolf as distinguished from the coyote?

"It makes me a little faint to see that you have adopted Kroeber's Spanish names for Indian tribes, using 'Montereyano' in place of 'A'-ches-ta.'"

[In September, 1929, Harrington was again at Monterey working with a few survivors, and on this occasion found Ascensión Salorsano de Cervantes, an old and dying woman who was the daughter of Barbara Salorsano, the Hoo'-mont-wash informant that Merriam had talked to in 1902. Ascensión was buried at San Juan Bautista on February 1, 1930. A series of long and interesting typewritten letters from Harrington to Merriam (under dates of

September 16, October 22 and 26, November 5, and December 3, 1929, and January 5, 1930) are filled with information. In his letter of October 22, Harrington says about Ascensión to Merriam, "She is your informant. You gave me her name and address," and further on, when referring to lists of plant, animal, and village names which he had already sent, "You do not need to send the lists back, since I have the originals here. You are at liberty to do anything you want to with these names, and nothing would please me better than to have you publish them under our joint authorship." In view of this statement, the Harrington-Merriam information derived from Ascensión Salorsano de Cervantes and attributable to Monterey (i.e. Hoo'-mont-wash) is presented herewith. Ed.]

Hoomontwash Animal Names

Mrs. Cervantes is unable to give any word meaning animal in general. Hi-tsha-mis is a pet of any kind; kan-hi-tsha-mis, my pet.

Mammals

'Eh, ground squirrel. Young or baby ground squirrel is called by the special term, shyi-tshi-knə. Eh-se-na, to go to get ground squirrels.

Hi-reh, wood rat. The kind that makes nests of sticks.

Hu-tshek-nish, dog. No special word for puppy could be obtained.

O-res, bear. She knows no name for the grizzly bear and does not know if they ever occurred in this region.

Pe-nyek, house cat. She agrees that the Spanish people introduced the cats, but says the Indians had this name for them, which is strange.

Ram-mes, weasel.

Ri-nya, a "rat" of darkish color. They are born out in the grass. She does not seem to know the animal well. What is it likely to be? She denies that it is a kangaroo-like rat.

Sik-kot, gopher.

Shya-shyran, raccoon.

Shyol-lon, mouse. She says if they did not have the kind of mouse that infests houses in old times, the name meant some similar mouse.

Tam-ma-la, mountain lion.

Ta-tshin, a kind of "rat" that has back of bluish gray color, belly white, "spots" on shoulders, good sized ears that stand up, runs so fast that a man on horseback cannot overtake one. They live in the sandy places along the bed of the San Benito River. Called tusas in Spanish.

Tih-shyin, the smaller skunk species.

Tiw-yen, antelope.

Ti-wu, elk.

To-ro-ma, wildcat.

To-tre, deer. Says they knew only one kind of deer. The fawn was called by the special name pu-kuy.

Tshe-yes, jackrabbit.

Trim-me, whale.

'Um-muh, wolf.

Wak-shyish, coyote. Young coyote was called by the special name ri-suy.

We-ren, brush rabbit. After a long discussion decided that we-ren is the darkish small brush rabbit and that yu-ren is the cottontail.

Ya-wi, the larger skunk species.

Birds

Bird of any kind is called hu-mus. She also remembers another general word for bird, mu-shyek.

'At-tratr, the yellow-billed magpie.

Ha-ra-wu, the wild pigeon. Described as the acorn eater of the Santa Cruz mountains.

Hu-mu-nya, hummingbird.

Hu-nu-nu, mourning dove.

Kaw-le-pat, night hawk.

Kul-yan, blackbird. She knows only one name for blackbird species and claims the name applies to any species.

La-lak, wild goose. Says it applies to any kind of wild goose and describes the Canada goose.

Pi-luk-yan, swallow. Makes mud nests.

Si-rih, gold eagle. Says white headed eagle is called the same (which is unlikely).

Sok-sok-yan, oreole.

Ti-wi-tyuk, killdeer.

Tu-res, sandhill crane.

Tshi-rit-min, lark.

Truy-lun, buzzard.

'Ut-tyuy, roadrunner.

Was-sa-ka, condor.

Yu-ran, mudhen.

Ka-ka-ri, raven.

Sa-ray, crow.

Of hawks she knows only four names, and I have tried again and again to get descriptions. Kak-nu is evidently the prairie falcon or duck hawk. He is a great personage in the myths. Siw-ker is described always as the biggest hawk there is, the one that lives in the plains getting rabbits, rats, etc. Fat shape, agrees at times that it has a red tail. 'E-ley-min is the name she likes to translate as "chicken hawk." Slim-looking when seen flying from underneath. "They fight with chickens much." Tshi-lis-kan, a smallish hawk species that hovers stationary in the air. Watches for rats or the like to come out of their holes as it hovers.

'A-shyit, evidently the California jay. At any rate a jay species that does not have a crest. The only name of jay species that she knows.

She knows only two names of woodpecker species. Pa-ra-tyu is bigger, tshu-ru-tu is smaller. Both have red on head. Twi-wak is the flicker.

Hu-mis, great horned owl. Tsha-hi is applied by her to any good sized owl species without "horns." She knows, but tantalizingly forgets, the name of the ground owl.

Snakes

'Ip-pih, rattlesnake.

Ko-treh-wa, gopher snake.

Lis-sok-wa, greenish water snake.

Li-son-wa, water snake species. Appears to confuse this hopelessly with the lis-sok-wa.

Lizards

He-se-lu, lizard species.

Me-her-wa, lizard species, hopelessly confused with he-se-lu. These two are small species.

Tu-hir-wis, described as a great yellowish lizard, a foot and a half long, fond of wild blackberries.

Turtle

'Aw-nitsh-min, any turtle, according to her.

Amphibians

Puk-kuk-min, toad.

Wak-ratsh-min, big bullfrog, such as "San Francisco people" eat the legs of.

Hoo-soo, fresh water eel.

Fishes

Hu-yi, any fish. Huy-ni, to fish. Huy-ni-na, to go to fish.

Hu-ra-ka, salmon. The kind or kinds caught in the San Benito River.

Kol-kol, sucker.

Sturgeons, bullheads, surf-fish (exactly like those caught in the ocean surf), trout, "minnows" with a little spine projecting from each side, "jobets" (Spanish, panzoncitos) four inches long with fat, silvery belly, pike, and introduced carp and catfish also occur in the San Benito River. Of these she does not know the names.

She knows a name, pay-sar, which may be the pike, though her description is not as I would describe it.

She knows a name, shyel-le, which she describes as a fresh water sardine. She denies that it is the minnow or the panzoncito, and I cannot imagine what it is then. "Exactly like sardines of the sea."

Insects

Mu-mu-ri, housefly.

Pi-tshi-na, Jerusalem cricket.

Po-lo-kitsh, grasshopper.

Por, flea.

Shyiw-lu-luk, butterfly.

Pin-nan, yellowjacket.

To-yo, bumblebee.

Tshol-tshol-wa, cricket.

'Un-tshush-min, pinacate (black stink-beetle).

Ant species are: 'ot-trow, large red ant; posh-koy-min, small black ant.

Of the louse race she knows ka-hay, headlouse; rah, bodylouse; re-trem, nit; and sa-kar, another word for nit, as far as she knows fully identical in meaning with re-trem (would there be two kinds of nits conspicuously different from each other?).

Tick species are: sa-tar, the common big woodtick; and win-si-ri, a tiny tick that burrows under the flesh.

Spiders

She forgets the word for ordinary spiders and remembers only the word ku-tye-lu, tarantula.

Molluscs

Of molluscs she knows only hak-kaw, salt water mussel; and hash-yan, which means red, or perhaps black, abalone, or perhaps both, or perhaps merely the shell.

Worms

Ka-resh is a worm. Ka-resh-te, it is wormy. Li-tuk-wa, angleworm.

Hoomontwash Plant List

'E-ne-na, wild blackberry. En-se, to go blackberrying. Apparently 'En-sen, tribe name, means blackberrying place.

Hi-sen, wormwood. Apparently this is the common large wormwood species.

Huy-huy, cut-grass or bunch-grass. Described as a grass that grows in bunches, a few inches high or sometimes higher, the blades of which cut one's hands. Roots run underground connecting bunch with bunch. It grows in the sand, especially around Watsonville. The roots of this grass are said to have been the chief material used in Hoomontwash basketry. The roots are split and the splints are trimmed and scraped. Several kinds of basket are woven of them (see list of kinds of baskets to be sent later). Hy-hu-na, to go gathering these roots.

Ku-tris, angelica. Called Indian celery.

Lo-po-tok, dock. The seeds were eaten.

Mom-mo, a plant with small seeds from which a very savory pinole was made. She never saw the plant and knows the name only from hearsay.

Mo-noy, jimsonweed. It was much used for producing visions.

'O-we-na, "wild pink." Described as a wild flower that looks like a carnation pink.

Pat-tih, chia.

Por-por, cottonwood.

Pu-ru-rish, hierba del oso. A bush with poisonous black colored berries.

Raw-su-na, "wild carrot." Said to have a white root and a top the same as anise. Grows only in the mountains. A much prized food.

Sa-pah, a plant with red flowers and minute black seeds which are made into a delicious, oily pinole. It grows only a few inches high, mostly under the trees in prune orchards. Called pil in Spanish.

Sa-wa-na, a plant called in Spanish "pitahayita." A thorny bush with round fruit, apparently a kind of gooseberry.

Si-rak, hazel bush. Sir-ka-na, to go to get hazel nuts.

Sok-ko-tchi, bay tree. Sok-tcho-na, to go to gather bay nuts (pepper nuts).

Te-na, a kind of "Indian potatoes." The people went forty miles from San Juan to get these. The plant has roots like sweet potatoes, but only one and a half inches in diameter, and slender leaves. Does not know the color of the flower. Mrs. Claudia Corona, a daughter, knows these and would be able to identify them by making a special trip to the Pacheco Pass region.

Tum-muk, a plant that grew in the water, has big, wide leaves and white flowers. The Indians ate the stalks.

Tshat-tya, buckeye.

Tshut-tus, the only manzanita species that she knows the name of. I can get no description except that it was the common manzanita from which cider was made.

Trus-kes, a plant growing a foot and a half high with a yellow flower, with which the Miller and Lux land beyond the Hollister bridge used to be yellow. Pinole was made from the seeds.

Tyot-tyo-ni, holly. The seeds were toasted and eaten, after they had been sweated.

'U-ner, "wild onion." Said to look just like a garden onion. War, the wild onion species called in Spanish "cacomite."

Yarkas, tarweed. The seeds were made into pinole.

Yukun, madrone.

So-ro-kwa, said to be applied to either one of two small wild sunflower species, both of which are said to be called camer in Spanish.

To-row, larger amole (soaproot) species. To-ro-wis, smaller amole species.

Knows only three names of oak species: yu-kis, live oak; rap-pak, small live oaks that grow around Monterey; ar-keh, "black oak" (at least called roble negro in Spanish), the large oaks such as grow in the town of Gilroy.

Knows three names of clover species: ki-ritch-min, muren, and ro-reh. Says all three of these have white or red flowers, all three have the edge of the leaf black. They are distinguished only by the size, mu-ren being the smallest, ki-ritch-min, larger, and ro-reh the tallest.

Ro-kos is the big round tule; shyip-ru-na is the edible root of the ro-kos. Ka-mun is tulito. Ha-le is cattail. Lup-pe is possibly the three-cornered tule.

Hi-re-ni is the pine species that grows all around Monterey. Sak is the piñon.

Hop, redwood.

Of willows she knows: tar-ha-san, the common willow species that grows all along the Pajaro River; ri-pin, willow with thick curly bark.

Hee-lock, moss on rocks or perhaps green "scum" on water.

Tow-hah-nah, nettle (any species).

Tow-ka'-lee, a gooseberry species having black colored berries.

Ah-sah-kwah, the common edible mushrooms (did they have these in aboriginal California?).

Chow-rish-min, yerba buena.

Choo-toor, a manzanita species (she says it is the "common one around San region," now what kind could that mean?).

Pi-soo, an ashy-leaved tree that looks like a willow and grows where willows grow, called jarilla in Spanish.

[The following are ethnographic extracts of the late 1929-early 1930 correspondence from Harrington to Merriam, written while the latter was securing information on Montereyano (= Hoo'-mont-wash = Monterey Costanoan) linguistics and ethnography from Ascensión Cervantes in the last few months of her life. Ed.]

I. September 29, 1929

"I do not know when I have been so delighted as I was to get your splendid long letter of the eighth, so brimming full of information of every kind to check up upon. As I look back on it, all I can think is that it is in keeping with the occasion, which is a very remarkable one. Here at 11:55 (when the death bell rings at 12:00) I have succeeded in unravelling all the San Juan language, analyzing all the works, and snatching them from the very brink of the grave to save for the world forever. The informant is none other than your old informant, Ascencion Cervantes, whom you interviewed at Chittenden, and whose mother, Barbara, you worked with at Gilroy years ago. As I write, Ascencion's daughter Claudia is in the room and was present when you visited Barbara. The memory of these people is very good.

"The work on the San Juan is not only going to straighten out that dialect grammatically but the others (i.e. Costanoan) as well, for they are all very closely related, surprisingly closely. I am so crazy about this work that I am not only going to stay here all the fall but all winter as well, if they will only let me, and so you can come down to fit in with your plans at any time. I can even come up and get you if you so desire, since it is only half a day's run in the car. Hoo-mon-twash is a directional name, from hoo-moon, a point of the compass, I do not yet know which but there will be a way to find out, I feel sure (see below). To this is added the locative -tah, meaning 'at,' and to this again the ending -was, meaning 'pertaining to,' so that the whole word means 'one at the ---- (west, east, or whatever it may be).' The plural is hoo-mon-tak-was, using -tak instead of -tah.

"Moot-soon is also a tribe name, not a village name as you can tell from the way it is handled in the language. If it were the latter, one would have to call one of the villagers Moot-soon-tak-was, but this is

never used. It is a tribe name, and this is further proved by the way Ascencion contrasts it with Wat-roon, Pahh-seen, and so forth.

"She has given several brand new tribe names never before recorded, among these the To-ho'-lo, 'otra nacion que hablaba lo mismo que los de San Juan,' and the name of the tribe that lived at Las Aromas, the old Indian name for Gilroy (Koo'-loo-lis-tak) and from Fremont Peak (Toyo'tak); two splendid myths (one about a onelegged children-eater, the other about a great snake that preyed on people in the Santa Cruz Mountains); and absolutely unique names and information about material culture objects, games, basketry, and dances.

"Astonishing as it may seem, she says your Yak-shoon' are nothing other than the Tulare Indians of the far Tachi Lake, and that this is the Salt Lagoon near Monterey—must be a mistake for that or else the word refers to a salt lake in general, which she doubts. She knew your name, Wen-yeh-ren, instantly, but cannot locate it.

"The list of rancheria names from the old San Juan mission books was too much for her, with a few exceptions, but she will know names of the class that you obtained from living Indians and will be able to translate and locate them. O-res-tak is at Oso Canyon, near Gilroy. Pahh-seen is at Paicines, San Benito County. Other names on the list are so long out of use or in such distorted spelling in the old mission books as to throw her off the track. She knows, of course, Ow-si-mah, and says they lived in the hills to the left as one goes from San Juan to Watsonville along Riverside drive that is on the south side of the Pajaro River. She says the Ausaima grant lying far to the east may indicate something, but that the above information is what her father and mother told her. Both her father and mother were San Juan Indians who married early, lived together all their lives, and died in 1912, the mother 84 years old and the father 82, the father only two weeks later than the mother and broken-hearted over her death, both in the month that carries away the California Indians most often, the month of March. They talked San Juan language together all their lives and that is how old, sick Ascencion knows it. Popeloutchom and Ysley she can make nothing out of. As it is, she knows almost half of the list and with further study I can get something out of almost every one of the remaining words. The names from the Santa Cruz Mission books she can also make a little something out of, though they are a different dialect. The great bulk of Santa Cruz words she can recognize and analyze. Her memory is exceptional, and her knowledge of Spanish like that of an educated person. Her teeth are in perfect condition as far as pronunciation goes and she can therefore distinguish between 's' and 'sh,' which would be impossible with the average aged informant.

"I have information that the Esselen should be spelled Eselen, and that they were Indians of the Tasajara Hot Springs, Agua Zarca, the Arroyo Seco, and the region north of Santa Lucia peak. Work among Ensenes at Jolon confirmed this, although the informants (Tito Encinales and Maria Encinales) have no knowledge at all of tribe names to the north, but knew that a different language prevailed straight north of them and that it was not Carmeleno.

"Ascension thinks that Wayusta, the Punta de Pinos, means place of the enemies. We-lel was Eselen and Soledad.

"The name is Syach-wen, and means where it (something that has been closed for a long time) is opened (e.g. a course in a stream).

"Wah-ran-ee-tak means 'at the cut place.'"

II. November 5, 1929

"I have just today learned the meaning of your tribe name Hoomont-wash. It means the westerners, in Spanish 'los ponientenos.' I am so excited and pleased that I have at last got the meaning of this important old name, which is a real tribe name, and the only proper designation of the San Juan tribe. Why the dialect and nation was called thus is not hard to guess; the region about San Juan marks the western extent of this language."

III. December 3, 1929

"It is rare that anything gives me pleasure such as did the receiving of your letter of Nov. 11. And it came most timely. I started at once asking Ascencion Cervantes the many questions which that letter suggests. The pressure of the work has been terrible on me since the informant is rapidly going down hill, and is so weak now that she can barely turn over in bed unassisted. But she is still able to talk, or rather whisper, although each attempt to whisper is likely to bring upon her a short spasm of coughing which ends in spitting frothy material into a cloth. A wheezy condition of her lungs set in three weeks ago which the doctor say will probably last until death, which he expects will occur some time in January. Even under such conditions as these I work from two to six hours a day with her. It is a strange fact that her mind is not yet impaired in the slightest and the sicker she becomes, the better she remembers the words of her childhood. When she goes will vanish the last source of San Juan linguistic information. It is for this reason that I still hope you may be able to find the place names that you recorded from this language. You showed me your Josefa Velazquez vocabulary, or at least I think that that was the one it was, and it had in it a few place names, one for the Santa Cruz mountains,

the name of some place by Hollister, and similar names. I remember this as distinctly as if it was yesterday. It would be of extreme, unusual importance if these names could be read to Ascencion before she dies, to get her reaction and pronunciation, translation, etc. Do try to corner these and shoot them out here before it is too late, for she will know them and by going over them make an addition to knowledge. I have a very complete dictionary here and already carry several hundred words and forms in my memory. I may be dreaming and perhaps saw the place names in the Josefa Gonzales Monterey vocabulary that you showed me. I promise to never use these names in any way, but hope that you will publish them, and when you do you could add such more definite locations, meanings, or translations as Ascencion may be able to give, explaining that I asked your informant further about these names for you in 1929. Ascencion understands and translates practically every word of such Monterey vocabularies as have been published in a truly admirable way.

"Your letter has yielded many new animal names and has furnished the clue to the correct identification of others:

Mammals

Ri-nya is indeed the short-tailed meadow mouse. Darkish color, lives in fields only, she says. What you say has nailed this for all time.

She says your po-koo-e, fawn, is absolutely wrong, it is poo-koo-e.

Two words for coyote were current at San Juan. Wak-shyish is the Moot-soon word, and your mah-yan she knows just as well (hooray) and says it was the word at other rancherias, and notably at Soledad, where it was the only word in use. It is a difference in dialect or subdialect.

The important animal names I did not get, fox, badger, mole and bat, engaged us long. She absolutely does not know the first two names. The last two she knows: mole is mor and bat is wir-es-kan.

She knows only one form of the word for bear, namely o-res. She told a story that fills two pages of writing about how Don Juan Chevaría had a she bear in a cage at his place at San Juan when she was a girl in the fifties. It was caught in the region. It was the same color as other San Juan region bears were, a yellowish color, and that kind grew very big. That she bear was in a cage so small that after a while it got so big that its body filled the cage, so that the poor bear could not turn around in the cage. One night it bent the bars and made its escape.

Birds

She instantly agrees that hoo-moos is any bird, while mu-shyek is a bird that sings in the early morning, called pájaro madrugador in Spanish. It is gray colored, with some black on its body and does not have a yellow breast. How pretty they sing. It stays around houses very little. They came from Sierra de la Panocha. Is this the mockingbird?

She claims that at-tratr is the true name of the magpie and knows it well. She does not know your ho-mo-yah, hard as she tried.

Crow is sa-ri.

Meadowlark is tshi-rit-min (3 syllables only).

She agrees that the siw-ker hawk species has its tail 'a little red,' but rather reluctantly.

The tshi-lis-min is small, the el-la-min much larger and has a whitish tail, and longer. She also adds that the el-la-min is striped.

Hoo-mis is the great horned owl, chah-hi the barn owl, wal-len a similar owl to the last, and wa-che-che the tiny ground owl (your letter prompted her memory, she knows the name well).

Quail is hek-sen. Kingfisher is --- (ten minutes of search has failed to dig up the word, it is buried somewhere in my recent notes). When I told her there is a bird called 'pájaro capitan' or 'capitan' in Spanish she became indignant and said that whoever says that tells lies. She says that in all her experience with the Spanish language she has never heard of this bird name. So perhaps it is a name not in use in California, or this particular part of California.

The identification of the nighthawk is all right. I showed her a picture of one, and the regular Spanish name is tapacamino, for they have a way of lighting in one's path and thereby telling one that bad luck awaits him if he continues on that path.

Reptiles

She distinguishes vaguely between le-son-weh and le-sok-wah.

Esh-sha-loo and ma-ha-ru-ah she describes with nicety exactly as you do. The tu-hir-wis are yellowish with little flakes of dark color and eat blackberries, they are very large.

Fishes and Mollusks

Shyel-le` is a small fish in the San Benito river that shines as it turns, 4 inches long. Shi-yal is the freshwater mussel--she knew it well the instant I read your name to her. Hak-kaw is the black saltwater mussel, not the clam at all. The clam she knows well in several species, but does not remember the Indian names since she is not a coast Indian.

She recalls hos, olivella, adding another important name to our lists.

Insects

She does not know the Indian name for dragonfly, cicada or scorpion. Mosquito she gave, the name is mislaid. I will send these mislaid names later, to hunt them all now will take my time from work with her and its preparation.

Plants

Sak is the pine (Pinus coulteri and perhaps P. sabiniana) that bears the edible pine nuts sold in the grocery stores. Some of them grow in the Gavilan range south of San Juan.

A long struggle failed to make it clear what lup-pe is. She insists that ha-leh is cattail. I drove over to the esteros and got specimens and with the result that ro-kos is the round tule, ha-leh is cattail, koo-moon is a tough tulito that grows two feet high, and patr is a very fine soft tule-like grass that grows where water has stood and which was used by the Indians for sleeping on.

Tobacco is mat-trer.

"Ascencion says Hoo-mont-wash is the name of the tribe. It means westerners, as explained in my recent letter to you. This is very important.

"Whatever the name moot-soon is, it certainly is not the name of the village which stood at the site of San Juan Mission, for the earliest baptisms were not from there. That early writers, such as Taylor, have called moot-soon a village name, means nothing. And in the mission records of San Juan all such names are classed as village names, even the name au-si-ma! Ascencion absolutely does not know whether it is a tribe or a village. But she knows the word. She thinks one surely would not say: kan Moot-soon, I am a Mutsun, but kan Moot-soon-tak-wash (plural Moot-soon-tak-wash-mak), I am one of Moot-soon. I do not see any way to ever find out.

"Pedro was Ascencion's tío político, her uncle by marriage. She says he was a pure San Juan. She knows the name Wen-yah-ren well. The mission books are full of baptized Wen-yah-rens. Ascencion laughs at the idea of the Wen-yah-rens being from Carmel Bay. They are from the vicinity of San Juan Mission. The Carmel Bay Indians are Kar-men-ta-ruk-kah-wash, and this name is half Spanish, the first two syllables being Spanish (from Hebrew!).

"She has given me the following place names:

Te-ren-tak, meaning at the spring, was a village close to San Juan Mission somewhere.

Ar-choo-soon (compare ending of Moot-soon!) was another.

Po-sel-min-tak was another large village.

Ri-chi-nu-ma another. Means where they 'speech' at fiestas.

Hi-nis-tak, meaning at the wormwood.

War-ma-pat-ka.

Oo-law-tak.

Tok-tak.

Sas-at-ka.

O-ho-lo-nu-ma.

Te-lam-ni, a San Joaquin valley tribe.

Wal-kem-ni, ditto.

Chow-si-la, ditto.

Nop-trin-tri, ditto.

Kop-cha, ditto.

Oo-nyee-hi-ma, a San Juan rancheria, large.

O-res-tak, meaning the place of the bears. A big village. Probably at Canyada de los Osos, near Gilroy.

Ip-pih-tak, la Sierra de las Viboras. Meaning rattlesnake place. A peak in the Pacheco ranch. I hope to visit it later and then will be able to give exact location. Old Indian name. Ip-pih, rattlesnake.

Wach-ron, Castroville Indian. Some lived on the beach there. some in the hills. The latter were called Pa-ra-nit-ka-wash.

Koo-koo-noo, a San Joaquin valley tribe.

Kit-trah-ti, ditto.

E-yoo-lah-wash.

Pahh-shyeen, the Paisin tribe, lived about Tres Pinos.

Si-bil-am-ni, a San Joaquin valley tribe.

Hoo-troo-koos.

Au-si-mah. Although the name of these appears on the San Felipe grant, north of Hollister, Ascencion declares that the country of the Au-si-mahs was in the wooded hills south of the San Benito River and downstream of San Juan. Barbara pointed out to her once, when they were on the road going downriver to Watsonville, where the Au-si-mah country was.

Wo-wal, a San Joaquin Valley tribe.

No-tu-wa-litr, ditto.

Kal-len-tah-rook-wash, Indians living somewhere about Castroville.

Hew-che.

Noot-noo-too, a San Joaquin Valley tribe.

Poy-to-kish, the great rancheria that stood on the plain of San Felipe. The Roman fathers erected a chapel there, the site of which might be difficult to determine now, and a cemetery, so that if a person died there and could not be packed across the river to San Juan because of high water, he would not have to be dug up again to be buried in consecrated ground.

Lap-pet-ka.

Ho-yi-ma, a San Joaquin Valley tribe.

Ow-al-kim-ni, ditto.

Sis-ka.

Ti-pi-sas-tak.

Pa-kat-ka.

Shyoo-rik-nu-ma.

Ha-shyar-tak.

Hoo-ris-tak, the Juristac grant, near Gilroy.

Mil-yak-nishy-tak.

E-chan-tak.

Yel-moos.

Aw-kis-tak.

To-yoh-tak, Fremont Peak. Means at the place of the bumble bees.

Kool-yis-tak, Gilroy. Means at the place of the elbow.

Ak-kas-tak-wash, San Jose and Santa Clara Indians. Meaning northerners.

Kah-koon-tak-wash, Salinas Valley Indians, literally southerners.

Yak-shyoon, San Joaquin Valley Indians, general term applied to any tribe. For the special tribe names of that region that she knows, see above.

"Such is the pitiable material on tribe names and place names that Ascencion can furnish. Most of the names that she knows, she cannot locate, and she explains why this is as follows.

"When the Spanish established the mission at San Juan the Indians were not taken by surprise as they were at some missions, but had long spied on conditions at Monterey and were determined to resist. For several years the Indians of that region lived in the hills, having abandoned their rancherias, and fleeing whenever the Spanish soldiers came to capture them for settling at the mission. This broke up the knowledge of place names badly so that even in 1830 it would have been difficult to get thorough information on the place names of San Benito County. Furthermore, the unbaptized Indians were in league with the San Joaquin Valley Indians who used to make horse stealing raids on the ranches, and would even come down through the chimneys of adobe houses at night and murder families of Spanish and baptized Indians. These Indians when they caught a baptized Indian would cut a strip of skin off of his back and tie it around his neck and tell him to go and tell the Spanish that they did it.

"There are still a few other tribe names and place names in the notes that are not given above, and to hunt them now might take hours and duty calls to prepare questionnaire material diligently for asking Ascencion while asking is still possible. There are also etymologies for some of the names given above that I cannot find. If I wait longer to try to make the list more perfect, it will take time from these last few precious days. But I will send them as soon as I get the notes filed and in order. I had imagined there would be a long period during which Ascencion could work a little each day. It now appears that she is going to sink fast, and will be dead in a very few weeks. The situation worries me very much. I am anything but through with her. It will be a great loss of information when she dies, even if I succeed in working with her a little for say another month.

"The basket list I will send by separate letter, today if possible. The baskets are made of 'cut-grass' roots, which is most curious. I have

some seven or ten basket names, and can probably find most of them without too long a hunt. The days and evenings are not long enough to keep up with the daily work. My eyes ache night and day."

IV. January 5, 1930

"She knew Ko-trah-tak, Hollister, as soon as it was read to her. She volunteered that indeed that is the old Indian name of Hollister and means the place of the gopher snakes, the old name that her mother used to use. We-leh-lish-mo is all right too and apparently means the place of salamanders. Sheh-tcho-tak, Pacheco Peak, made her remember Pik-nah-chee, the Pinnacles, and so she went from triumph unto triumph, getting every name on your list except for the Santa Cruz Mountains, which she did not know because it is in another language (namely, the Santa Cruz language). Also, every one of the tribe names. The name of the Salinas Indians, Ensen, means wild blackberry. She still sticks to her guns that the Wen-yeh-ren have nothing whatever to do with the Carmel Indians, your direct information to that effect notwithstanding. I have also every one of your Carmel place names and will write them out for you as soon as I get a breathing spell from this nightmare of the last few weeks of work with a very sick woman. The doctor guesses that she may last until March; she may go much sooner. I am trying to be on the safe side and ask while she is still askable.

"Nothing that remains to be done with her is of more importance than straightening out the baskets. Ascencion's list stands as follows:

Hom-ron, an openwork basket shaped like a dishpan.

Loop-yoo, a packbasket. Pointed at base.

Rook-shoon, a narrow-mouthed trinket basket shaped like a bowl but with a small mouth.

Til-lay, a basketry jug for keeping drinking water, shaped like the Piute basket jugs. Small neck.

Sah-wee, a crudely made basket pointed at the base, used for picking wild blackberries, etc., and made of tule or anything they can pick up near at hand.

See-wen, a large, openwork winnowing basket or possibly a closed tray or basket. She knows the word but is very hazy about what it designates.

Tip-rin, the common winnowing tray.

Tip-shin, a basket the size and shape of a dishpan, used for many purposes.

Wahl-heen, a basket shaped like a shovel, one end round, the other straight across, used for winnowing, etc.

Wahr-sahn, another kind of tray, something like a tip-rin."

Montereyano Vocabulary⁶

The following was recorded chiefly from Tomas Torres, nephew of Vivana. The orthography is Spanish but sh has its English value. Received from J. P. Harrington, April 10, 1922.

ne-ya, now, today

char-way, tomorrow

u-wik, yesterday

a-ra ak ish-men, the sun has risen

a-ra a ish-men, the sun has set

rum-sen-ta, in the north

or-pe-tro, night

or-pe-tro ish-men, moonlight, "night sun"

yo-kom, hail

se-remps, ice

cha-pur, lake

chu-pel, mountain

e-cher, iron, metal

pu-tru-usk, corn, maize

tish, stick, tree

es, plant

ma-chan, dog

ta-tra-ki ma-chan, coyote, lit. "wild dog"

mu-kyamk, man

la-chyamk, woman

iu-sen la-chyamk, to love a woman

ni-mink, kill him!

che-rech, elk

au-nen, turtle
nu-mer, fly
wo-men, wing
he-rips, feather
ka-oltr, my shoulder
ka-awish, my chin
ka-katrk, my nape
ka-pa-yan, my thigh
ka-ku-lush, my elbow
ka-she-tel, my lips
ka-shim-pur, my eyebrows
ka-pi-tin, my belly
pa-ke-le, wood tick
katrs, bite it!
hork, swallow it!
um-an, hummingbird
ats-yamk, girl
ka-mesh-ma-yisp, I shall kiss thee
ka-wash-satr, I shall roast it
ka-ittr-kan, I am hungry
ka-wa-tin ta-ruk, I am going home
in-ka-che, why?
pol-pols, spotted
in-way, when?
in-ka-te, how do you do?
in-ta, what?
ka-wash-lik, I am coughing
Ta-rak-tai-ruk, God
si, water
ye-chem, devil
si-nyamk, boy

mus, breasts
 a-pan, my father
 a-nan, my mother
 ka-ha-win, my wife
 i-kle-sya, church (from Spanish)
 ama, people
 a-ni-ya-wa-tin, ka-uk, where are you going, my friend?
 ka-ls-ku-nim, I am dying
 mi-sih, it is pretty
 ka-muk, my son
 ka-is-wen, my daughter
 ka-tau-sing, my brother
 ka-tan, my sister
 ka-utr, my head
 A-chis-ta, Monterey
 mak-wa-tin-in A-chis-ta, let's go to Monterey
 kak-si, whiskey, lit. "bitter water"
 Kar-men-ta-ruk, Carmelo church site
 ha-kau, mussel
 ha-tach, sea urchins
 au-lun, abalone (from Spanish)
 esh-hem, seaweed
 u-rak, salmon
 sar-ti-na, sardine (from Spanish)
 tu-ra, earth, country
 u-ri, forehead
 hin, eye
 lask, tongue
 sit, tooth
 hork, throat [same as "swallow it!" above]
 is, hand

ta-kuch, leg
ko-ro, foot
chach, bone
tut-lun, buzzard
ka-si-re, my heart
pa-chan, blood
ya-yar, chief
pa-chu-wat ya-yar, the captain is coming
ka-u-chis, my utensils, my belongings
ku-char, spoon (from Spanish)
murts, it is dark
chor-kost pi-re, it is a dry year
i-ney, road
kau-tak, at the beach
ku-tay, light the fire!
eh, ground squirrel
we-ren, cottontail rabbit
cheis, jackrabbit
li-san, snake species (forgets which kind)
iph, rattlesnake
ris-kan, bird
moth, egg
hi-reh, woodrat sp.
ek-sen, quail
sirh, eagle
pah-last, white
kar-sist, black
yur-chist, red
i-sak, big
pu-shut, small
eu-shon, old man

le-she-hem, old woman

la-kust, dead

e-he, much

e-he ter, mucho frio (Sp.)

e-he tank, mucho calor (Sp.)

im-ha-la, 1

u-tis, 2

ka-pes, 3

u-tin-ta, 4

ha-le-is, 5. The last syllable, -is, means "hand"

ti-wis, flower

ti-wi-nin, it blossomed

ka-tols, my knee

kas-kai ka-tola, my knees ache

in-ka-te rak, what is your name?

hom, wildcat

pa-chu-i-nan, it is raining already

kurk, pinole (Sp.)

sho-to, fire

kar, smoke

e-he kar, lots of smoke

cho-hen, an animal that lives in the sea, 7 inches long, has red skin outside, has no shell, only its backbone (Sp. espinazo), is hard and tapers, but all the rest of the animal is like meat (Sp. carne), has no Spanish name, was eaten by the Indians. Does not know whether it was free-swimming or attached, or anything about its habits of life; not a fish but an animal in a class by itself, rather uncommon, considered as food by the Montereyano Indians; a curious animal

chi-re, ashes

tot, meat

aks, salt

te-wen, acorn mush

tu-mir, good tasting, savory

kak, bitter
 o-res, bear
 tih-shin, skunk
 kak, crow
 tu-kum, horned owl
 wa-kach, toad sp., not sure what kind
 ru-ruts a-hin, he has downcast eyes but sees people
 kah, head louse
 rah, body louse
 tip-tit, short
 yech-mist, wicked (cf. ye-chem, devil)
 pi-na, there, yonder
 chi-ya, here
 chi-ya ka-ta-war, here I am
 kwe ro-tey, there is not, there is none
 hu-ya, there (used in pointing out an object)
 amp, who?
 amp nu-wi, who is it?
 ka, it is I (ans.)
 unh, snottle, mucus
 ya-un-hust, it is
 e, yes
 am-hai, so eat
 wi-chup, run!
 ina-kish-chit, let's dance
 chu-nuy, to sing
 ech-nen, to sleep
 rich, to speak
 ka-su-mit, give me!
 mat-yan, money
 kas-ka-mot mat-yan, lend me (some) money

si-na mu-kyamk e-he mat-yan, that man has much money
 tap-re, above, on top
 win-muy pi-re, under the ground
 kok, tail
 ur-kan, mortar
 war-shin, tray-basket
 shi-wen, a basket with pointed bottom used for straining acorn meal
 pe-neks, house cat
 rin, mouse
 me-ne, grandmother
 kas-kas-a-ki por, a flea bit me
 por, flea
 heks, mountain lion
 hu-nush, turtle dove
 m-----, horned toad (cannot quite recall)
 ch-----, whale (cannot quite recall)
 me-hel, white substance in corner of eyes
 lo-kest, cross-eyed
 purps, hat
 shoh-lust, cowardly
 li-tust, having only a few teeth, having gaps in one's teeth
 och-kost, deaf
 an ro-tey, where is it?
 in-ta ro-tey, what is it?
 ruk, house
 wa-ruk, his house
 wa-shum, wild grapes
 en-sen, blackberries (not a tribe name!!!)
 an-tus, another
 por-por, cottonwood
 tach, to kick

yet-ka-mesh-li-ki-nin, I am going to hit you (with a stick)
 tach, a kind of hairy rat, gray colored, 4 inches long exclusive of tail
 E-chi-lat, San Francisquito
 Hu-nu-kul, the hill where the fort is near Monterey wharf
 Sir-hin-ta, a place (but cannot remember where)
 ko-teps, shoes
 ka-nush, pipe
 sa-wans, tobacco
 po-lo-kus, grasshopper (not at all certain of the word)
 lark, goose
 yu-run, duck species
 ka-kun, hawk species (cannot remember which kind)
 hek-chost, strong
 ka-en-shem, I am old
 pan-de-rank, star
 tuhs, day
 mur, night
 meich, cloud (not sure of the form)
 wa-chos, river
 puth, wind
 pa-chu-mun puth, the wind is blowing
 to-mins, seal (does not know which species)
 ho-mun, wolf
 i-chin, hole (e.g. of ground squirrel)
 ki-net, a species of fish (forgets which kind)
 la-wak, long
 mak, we
 ku-we, no
 pi-re, (1) world, (2) year
 ka-tar, my cousin
 ku-ka-tu-man-hin, I cannot walk

chi-yis, walking stick
ka-yi-na, chicken (from Spanish)
ki-ni-la, bullhead fish
te-mets, shark
ka-mer-sens, my nephew
ka-ri-chis, my buttocks
ru-pi-yast, crazy
e-loh, lazy
e-tsa-yap, shut up!
tri-trap, get ready
cha-kyuls, horse
kar-sist cha-kyuls, a black horse
kash-u-mi si, give me water!
a-ni-yit-men, where do you come from?
pi-na a-chap, he is crying
ka-iu-sen tars, I wish to urinate
tar-sis, urine
ka-la-kun, I shall die
ka-him-sun, I am dizzy
u-kesh, to drink
i-ne-me-iu-sen u-kesh, do you want a drink?
u-ru, to take, to seize
ku-ro-tey si, there is no water
i-rek, a stone
in-ha-nin, to be sick
im-ha-la tralk, a dollar
wa-a-hin-in, it burnt up
reks, guts
i-mey, all

Notes

- ✓ 1. Cf. S. M. Broadbent, Rumsen I: Methods of Reconstruction. International Journal of American Linguistics, 23, 275-280, 1957.
2. A. L. Kroeber, Handbook of the Indians of California. Bureau of American Ethnology, Bulletin 78, Washington, D.C., 1925, pp. 462-473.
3. The numerals recorded at Gilroy on Nov. 5, 1904, are:
- | | |
|-----------------|-----------------------------|
| 1. hem-itsh'-ah | 6. nak'-tche (or nok'-tche) |
| 2. ooch'-hin | 7. trahk'-tche |
| 3. kap'han | 8. ti-et'-men |
| 4. oo'-jit | 9. wah-tsoo |
| 5. par'-roo-wis | 10. tan'-sa-te |
4. Some confusion evidently exists about the correct names for types of baskets; compare with Hoomontwash list given on p. 371.
5. Apparently a reference to bear shamans, for which see S. A. Barrett, Pomo Bear Doctors, University of California Publications in Archaeology and Ethnology, 12, 443-465, 1917; and A. L. Kroeber, cited in note 2 above, references listed on p. 971.
6. For a linguistic analysis of this dialect see S. M. Broadbent, cited in note 1.

YOKUTS

Field Work Among Yokuts Tribes, 1902-1904

1. Tah'-che Indians near Tulare Lake

June 4, 1903. About six miles southeast of Lemoore I passed a small Indian settlement belonging to the Tah'-che tribe. Some of the Mexicans call this settlement Santa Rosa. There appear to be six or seven families living in small rough board houses near the road. Besides the houses they have brush shelters, and some of them have large oval tule dwellings. One of these is 35 to 40 feet long and perhaps 8 feet high. Huge tule mats (12 to 15 feet high) are spread over a framework of willow poles, leaving a long slit-like narrowly oval opening at the top. The tule mats are not wicker-work or woven, but are made of the large round tules placed side by side and held in place by twining a cord of some kind at frequent intervals. The fires are inside and smoke escapes through the large oval opening at the top. There are also large tule mats on the ground for sleeping on and for sitting on in the day time. The Indians told me they used to build these houses in long rows. The door is at one end, and some of them are partly open on one side also. These Indians tell me that their original home extended from the present town of Lemoore westerly to west of Kings River, south to Tulare Lake and along the east shore to Cross Creek. They had a large settlement where Lemoore now stands, and their old burying ground is still in use a few miles south of Lemoore.

I found both men and women friendly and freely communicative, and photographed two groups of them. Two of the women had babies only two or three days old. One of the mothers (a young girl) was still on her tule mat on the ground with her baby laced in a papoose mat beside her. The papoose baskets or cradles are the simplest I ever saw. They consist of a small and rather narrow mat of tules on which the baby is laid. The sides of the mat are then brought up on each side of the baby and laced across the baby. The name of one of the girls is Lah-le, of the other, Re-na.

While I was with them three boys came in with bows and arrows and dogs, and a jackrabbit they had just killed.

The basketry is interesting and all of it is coarse. I am convinced that they make no fine baskets and never did. They showed me a number of good coiled baskets of the so-called Fresno and Tulare styles, some very, very old, others new, which they told me they bought from Indians in the mountains—some on Kaweah River, others near Centerville. Now, owing to the demand for baskets, these Tah-che or Yokut Indians are making crude imitations of the Tulare style of baskets—some large, some small. Most of

them are of Tulare root (Cladium) and the black in them is fern root (Pteridium) which they buy from the Sierra Indians. They showed me some first attempts, and some made by women who had been making them for two or three years and can now produce fair ones. But their own primitive baskets are excellent if coarse, and several are quite different from any I have previously seen.

The coarse openwork scoop baskets are common and of several sizes. They call them hal-i (same as the Chuckchancys). They are now drying blackberries in these baskets. They have an excellent deep twined bowl which they call chaw't.

They tell me they used to cook in canteen vessels called ke-wesh, not in baskets.

On a subsequent visit to these Indians (on October 4) I saw a papoose frame like some I have seen among the Wiktchumne Indians. It is a forked stick with crossbars, against which is fastened a narrow mat of tules. The accompanying sketch (fig. 38a) is very crude and from memory, as I had not time to sketch it while at the camp.

They make a water bottle of twisted tule-like material not pitched or coated on either side. This bottle they call ah'-ch; the material they call pah-tah-an. The big tule they call po-mok. They make a very simple circular winnower of coiled small tule, held in place by radiating lines of string. They call this winnower chok'-to-koi.

Got samples of all these kinds. Got also a very good old choke-mouth (not bottle neck) basket which they called mo-kel-ah (meaning woman) and said it was made here, but I suspect it came from the Sierra. It is shaped somewhat like this (fig. 38b). I did not see any burden baskets, but they have them and call them an-ash. They call the seed paddle (which I did not see) so-posh-ah.

I asked them about the Na-toon'-a-ty Indians and they corrected my pronunciation of the name to Noo-toon'-a-ta and said all but two or three are dead. They used to live where Kingston now is.

In one of the houses was a pan of mashed and wet manzanita berries (ah-troo) which they get by trade with the Indians of the mountains. They call manzanita cider tre-ma-kun-na.

Some of the Indians were drying blackberries in the big openwork scoop baskets (hali).

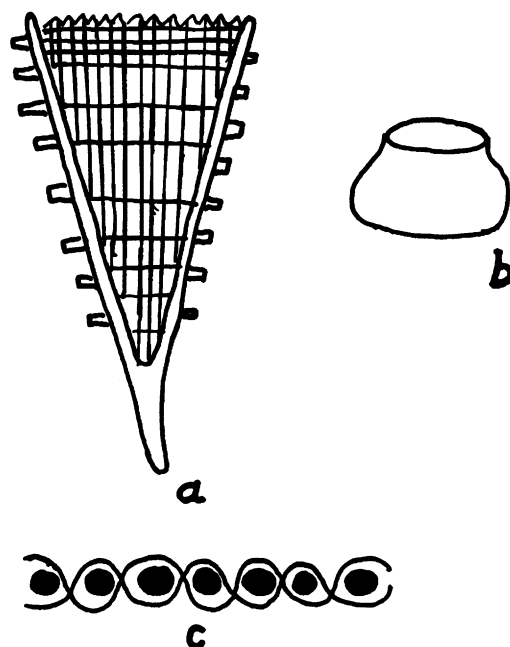


Fig. 38. Tah'-che tribe. a, cradle; b, choke-mouth basket; c, weave of twined tule mat.

Some of the men wear beards. One old woman had on a necklace of mixed white wampum and red Venetian beads, with a circular piece of abalone shell in front.

2. Tah'-che. Tulare Lake Region

1904. Visited the little eighty acre settlement of Tah'-che Indians northeast of Tulare Lake and got a number of additional words for my vocabulary of this rapidly vanishing tribe. Also photographed an old couple, and their oval house of tule mats (pl. 35; fig. 39a). These mats are nicely made and the tules are held in place, close together, by cross strands about ten inches apart. The cross strands wind in and out as shown in the sketch (fig. 38c). Two strands are used, one on each side. In the diagram I have separated the tules to show the cross strands. In the mats the strands are drawn in tight and the tules press one another closely, leaving no interspaces.

The top and bottom of the mats are turned in (bent over) and the ends caught by cross strands. The sides of the mats usually have a braided border or "finish."



Plate 35

Tah'-che Yokuts mat-covered house, Tulare Lake region

Besides the mats used as sides or walls for the houses, there are many others used as carpets, beds, partitions, and so on. Many of these are better made than those used for house walls, and have the cross-strands nearer together. Some of them are only 4 inches apart; others have them 4 inches at one end and 8 or 10 at the other, the interspaces gradually broadening. The mats are of various sizes, but 6 feet wide by 8 or 10 or 12 in length are common. Each rod is a single round tule running from top to bottom.

The baskets and water bottles of these Indians are of tule, except the coarse openwork scoop-shape baskets (called hah-li) which are of slender willow rods. The baskets I have previously described.

When I was here before (June 4) I saw several young babies bound on small tule mats (fig. 39b). This mat is sometimes fastened on a frame made of a forked stick—the point of the main branch sharpened to stick into the ground, the forks connected by cross sticks, exactly like those used by the Kern Valley Indians, the Wiktchumne, and several other tribes. One Indian told me that when the baby cried they could often divert it by running a stick up and down over the projecting ends of the cross sticks, making a musical (!) noise.

Apparently there are about half a dozen families of these Indians altogether, perhaps not so many. The two men at home today are both old and both are sheep shearers. One had his face pitted by smallpox, and his Spanish name is Alphonse. The other is still older and differs from most

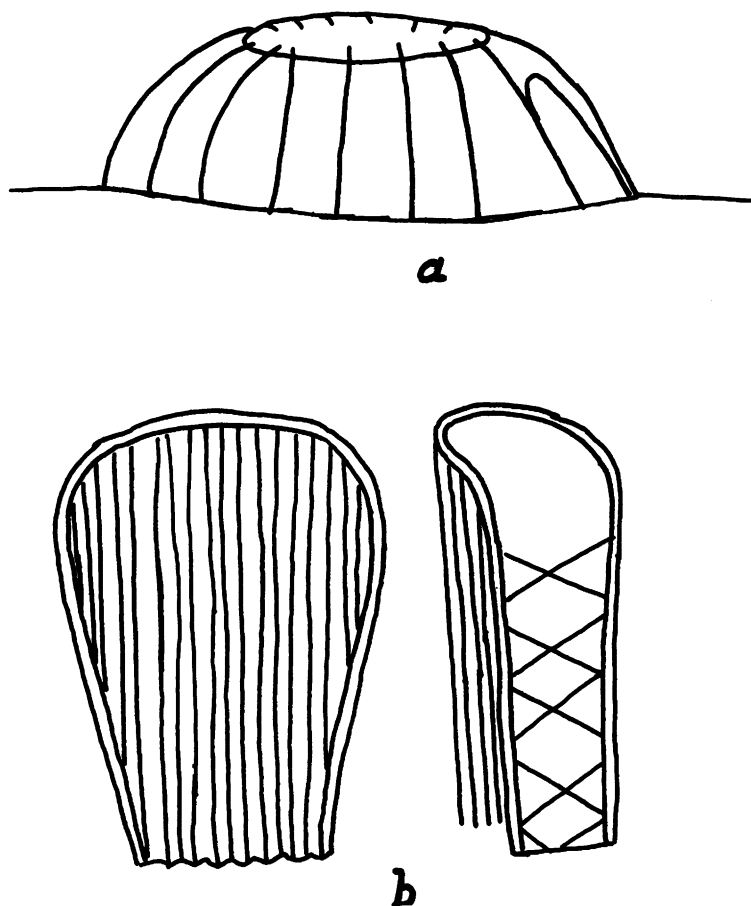


Fig. 39. a, Tah'-che house frame made of willow poles (cf. pl. 35); b, baby cradle made of tule matting.

Indians by having a beard. He is a fine looking old fellow and his wife is a kindly full-blooded Tah'-che woman.

They tell me they never cooked in baskets, but in clay vessels they used to make. They formerly made many blankets of rabbit skins for winter use. At one of the houses a square canopy for shade was roofed with a big tule mat instead of brush. The old Indians told me they formerly made hats of tule, which were worn by both men and women.

When these men were young, elk and antelope were common here, and beavers were abundant in the lower part of Kings River and in the northern part of Tulare Lake (perhaps in other parts, I neglected to ask). The Indians said the beavers built lots of "sweat houses"—a very good name for their lodges.

3. Witchumne

August 5, 7, 1902. There are said to be three camps of Witchumne Indians near Lemon Cove, about two or three miles within the foothills. I visited two camps of Witchumne Indians on the north bank of the Kaweah River. Members of the lower camp told me that they had never inhabited the country where Visalia now stands, but rather occupied Lemon Cove Valley and the area of the Kaweah River Valley. According to Stephen Barton and George W. Stewart, the Witchumne claim to have originated at or near a big rock known as Homer's Nose, between the canyons of the east and south forks of the Kaweah River, by union of Wolf and Eagle. The Witchumne say they used to number fully five thousand but have died off until only five or six families or forty individuals in all remain.

Each of the two camps visited consisted of a winter house roughly made of boards, a stone chimney, and a brush shelter or canopy to protect one from the sun. This structure was situated 15 or 20 rods from the river, while quite close to the river bank in a narrow fringe of trees was a brush shelter.

In addition, the upper camp has a low dam of loose stones which raises the water a foot or two and makes a shallow pond. Here clothes are washed, and fishing is done with a long handled spear made by winding two sharpened steel wires on the end of a slender pole. In a little nook close to the river they have a garden in which tomatoes, watermelons, corn, and beans are grown.

These two camps have a few crude baked-clay pots for cooking. They appear to be something new and the techniques were probably taught them by the whites. The largest are 6 or 7 inches in diameter.

On August 6 I examined ten mortar holes which had only recently been uncovered in the lime rock on top of a quarry. They were buried under six inches to a foot and a half of soil and were unknown until a few days ago when the quarrymen uncovered them. They are about nine inches in diameter and ten inches in depth.

About three weeks ago I came across a large number of mortar holes at Redstone Park, thirty-four miles from Visalia. Indians used to abound here as is shown by the circular depressions marking ancient camp sites and the mortar holes mentioned. In one place, about one and a half miles above the Redstone house, I counted twenty-five mortar holes in one flat-tish rock, and dozens of others scattered over other rocks near-by. Pestles and grinding stones abound, averaging at least two to every mortar hole. They are large and flat at one end for rubbing, and taper like a cone to a smoothly rounded end which is used for hammering acorns in the

mortar holes. All the mortar holes are symmetrical and smoothly polished. They average eight to nine inches in depth and eight inches in diameter just within the top, whence they taper to about three or four inches at bottom. I found a few fragments of blue and brown pottery here but no arrow points.

October 7, 1902. I revisited the upper Witchumne Indian camp on the north side of the Kaweah River about a mile or a mile and a half above the Lemon Cove bridge. My informant gave the following information about the tribes and villages of this region in his boyhood. The related tribes or subtribes which spoke nearly the same language as the Witchumne were the following groups:

Yokut or Yokul. These Indians had a large village five miles from the Lemon Cove side of the present site of Exeter and were considered good and friendly.

Kaweas. A large town on Venice Hill on the plain between this Witchumne camp site and Visalia was their home. They were classed as good Indians by my informant.

Huich-oi-you. These people lived on Mill Creek and were good Indians, speaking nearly the same language as the Witchumne.

Languages which the Witchumne could not understand were spoken by the following peoples:

Ta-dum-ne. These people had a big town where Visalia now stands and were described as bad Indians by my informant.

Choi-nook. A village where Farmersville is now situated was the home of these bad Indians.

Choo-nut. These bad Indians had a village on what is now Fisher's ranch.

Tah-che. The Tah-che lived at Tulare Lake and were bad Indians.

Bo-see-you. These Indians lived at Squaw Valley and were viewed by the Witchumne as being bad.

Che-osh-she-shoo. Drum Valley was the home of these good Indians.

Two Piute tribes were known to the Witchumne: Wuk-sa-chi, who lived at Eshom Valley and Mill Creek, and were good Indians; and the Bah-do-sha

who lived at Three Rivers and were friendly Indians.

Witchumne men are of ordinary size; the middle-aged women are short and fat. The old women, while by no means slender, are much less fat than the middle-aged. Apparently the fat is taken on during the child-bearing period, and they have many children.

My informant described the Witchumne method of catching elk, sho-koi. Slipnose snares were set for them in their trail and caught them by the legs. The snare was attached to some kind of a spring pole.

4. Chuk-chancy

September 22, 1902. On the way from Fresno Flat to Coarse Gold Gulch I passed and stopped at two camps of Chuk-chancy Indians.

Five miles from the first camp is a camp called Picayune. Here there are about six or seven rough board houses and a few brush huts. In an open field of wild oats, in which the houses are located, is a flat rock about ten feet in diameter in which are the mortar holes (tin-nil) now, and for ages, used by this camp. There are two dozen holes, deep and shallow, and a lot of combination pestles, say. They are of various lengths and differ also in diameter of the distal end. A few are like ordinary pestles, but the majority have a small end shaped to fit the mortar hole and a large end which is broad and flat and serves as a rubbing or grinding stone. The rock is enclosed in a brush but fifteen feet in diameter.

An old woman at the Picayune camp from whom I purchased a basket of acorn soup called the basket nah-cheech. The soup was made of green acorns of the blue oak. They say that those of the black oak are better. The acorns are too green to be cracked by hammering between stones, therefore they open them with their teeth. The meats of the acorns, when the shucks have been torn off with the teeth, were tossed into the open-work scoop baskets called hah-li.

On some frames nearby they were drying figs and small tomatoes, cut in transverse slices. Some were spread on hah-li and paw-e' baskets, others were on sticks of the drying frame.

Cho-e-nim'-ne. On the south side of the Kings River, beginning at the mouth of Mill Creek and extending easterly along the river for about a mile or a mile and a half, is a beautiful piece of flat land surrounded by high mountains. Here on the east side of Mill Creek and a mile above its mouth was the ancient village of the Cho-e-nim-ne tribe, of which the only survivors—three men and three or four women and a few small children—live now near the east end of the flat.

The Cho-e-nim'-e are closely related to the Cho-ki'-min-ah of Squaw Valley. They speak the same language and make the same kind of baskets.

5. Tule River Reservation

October 6, 1903. Hired a team and drove from Portersville to the schoolhouse on South Fork of Tule River (on the Tule River Indian reservation), where I expect to stay a day or two. There is no Indian Agent now, only a school teacher and his family (M. J. Snowden and wife and wife's father and mother). They gave me a room in the schoolhouse to sleep in and I take meals with them in a poor little house nearby—a house of only two rooms and a kitchen-dining room shed attachment in the rear.

The entire Reservation is rugged and picturesque. The river valley is narrow and winding, with only very small areas of reasonably flat ground—ground that can be cultivated—between the bold hill slopes which rise suddenly on all sides. The largest levelish area is a beautiful little basin of perhaps seventy-five acres about a mile above the schoolhouse. It is occupied now by two or three families of Indians and is partly cultivated—beans being the principal crop, though some corn and grain are grown also.

There are now about twenty families of Indians having homes on the Reservation. Some of them are now away shearing sheep, others are picking fruit.

I spent the day walking about the valley and talking with a family of Indians named Immeterio who lives a mile above the schoolhouse. Secured from them the names in Yokut of a lot of trees, shrubs, and animals.

October 7. Spent the day tramping in upper part of valley and in getting information from the Indians. Visited a big boulder in the River (So. Fork Tule), near the last Indian's house, known as Painted Rock or Painted Cave. It is a big rock on the north side of the river, its south side overhangs and the resulting open cave is partly closed by masses of fallen rock. The roof of the cave (or underside of the overhanging part of the big rock) is covered with curious Indian paintings of animals, made long before the discovery of the place by modern Indians. In this connection, it is worth recording that the upper flat or basin of this South Fork Valley, near Painted Rock, was discovered by old Chico, a Kern Valley Indian, apparently not more than fifty years ago. It was not then inhabited by Indians. The Indians now call it Te-wel-lal'.

Besides the paintings on the roof of the cave, there are a few on

the sides, and traces of some may be seen on the east side of the big rock but these are now faint from weathering. The paintings are in red, orange, white and black. Most of them represent animals, some of which are obvious, others obscure.

Those easily recognized are lizard, tree-toad, turtle, centipede, beaver, coyote, and bear. Of these the bear is most conventionalized; the centipede, tree-toad, lizard, and beaver are best done.

About fifty feet west of the cave is a big flattish rock on whose top are about forty old mortar holes (called te-nel by these Indians). About an eighth of a mile lower down the valley is another rock containing about the same number of mortar holes, and nearby a small one containing fifteen or sixteen. Outside of the Reservation (west of it and near the river, a mile or two below the Reservation line) I noticed, when coming in yesterday, a big rock with a large number of mortar holes on top. There doubtless are many others in the neighborhood, all made by Indians antedating the present.

On the south side of the valley, opposite Painted Rock and Te-wel-lel flat, rises a rugged and picturesque mountain whose precipitous summit is turreted and finished with a central knob or peak. This mountain is covered with oaks, buckeyes, and chaparral. The Indians call it kit-til'-man.

The river at Painted Rock is full of huge boulders and the place is remarkable for its beauty and the views it commands. Evidently in bygone days it was for generations the chosen home of a departed race.

The Indians now inhabiting the valley belong to several tribes, and in most cases are hybrids—their fathers and mothers belonging to different tribes. Thus the principal old man at the upper rancheria (on Te-wel-lel' flat), whose Spanish name is Juan Immeterio, came originally from the Bakersfield Plain. His father lived at Buena Vista Lake south of Bakersfield and was chief of the Haw'-met-wel'-le tribe. His mother came from Poso Flat and belonged to the Pal-la-a-me tribe, speaking a very different language. Juan's daughters have married boys of mixed blood from adjacent tribes. Juan himself married (about thirty years ago) a daughter of Chico, chief of the Kern Valley (South Fork of Kern) Indians of the Wah-lik-nas'-se tribe. And so it goes throughout the valley.

The old Tule River Reservation was on the north side of the main Tule about four miles from the present town of Portersville. On my way up I saw its adobe ruins in the edge of the cottonwood forest of the river bottom. White men wanted the land and the Reservation was moved up into the mountains, an old story.

While many of the Indians on the present Reservation remember more or less of their own languages (usually more or less mixed with Spanish), they have come to speak a common language which Juan Immeterio calls Yow'-wel-man'-ne, and which doubtless is somewhat mixed.

I was unable to learn the exact location of the tribe originally speaking this language (in other words the Yow'-wel-man'-ne tribe), but they lived on the plain below the foothills and east of the line of marshes formerly connecting Buena Vista and Tulare (or Tah'-che) Lakes. Juan told me later that the Yow'-wel-man'-ne originally lived on Bakersfield Plain, near where the town of Bakersfield now stands.

Juan uses this name in a supertribal or "Nation" sense, for all the tribes south of Fresno River and north of Tehachapi and Ft. Tejon—tribes speaking related dialects whose numerals are nearly the same. It is thus the equivalent of southern Yokut, as used in a general sense.

Among most of these tribes the word for people is Yo-kut. Juan gave me the following names of tribes and subtribes:

Tule River at entrance to Mt.: Noo-chan-ich

White River near present Toll House: Se-kow or Sik-kow

Deer Creek: Che-te'-tak-no-as'-sa

East side Bakersfield Plain near foothills: Al-tow

On Kings River above the Tah-che (which he pronounces Takche): Na-toon'-a-to, Wa'-cha-kut, Wim-ma-lah-che or We-mil-che.

He says the Kern Valley people were a very different nation (which I found out last year), speaking a wholly different language, and that there were several subtribes or rancherias of which the only ones he could remember were Wah'-lik-nas'-se (to which his wife belonged) and Sin-nal-is'-sah. To these I can add Pa-kan'-ne-pul, and the band living opposite Onyx in Kern Valley, whose name they gave me last year as Te-bot-e-lob-e-la.

Juan gave also the following geographical names, all in the Yow-wel-man-ne language:

Tulare Lake: Ta'-che

San Joaquin Plain about Bakersfield: Tso-law'-win

Tule River (the main river): Pal'-loo

South Fork Tule: Te-sa-a-o-pin (rising sun)

Deer Creek: Hoi-in-il-ka

Poso Flat: Sik'-it-e-pah

Big Black Mt. on White River: Kel-se

Kern Valley (on South Fork Kern): Pe't-nan-noo

Walker Basin: Ye't po; in Kern Valley language: Yat-pa

The tribal name of the Indians on upper Kelso Creek and Piute Mt. (whom I visited last October, a year ago) he gives as Kow-a'-sah. He says the name Tehachapi (which he pronounces Tah-ha'-ch-pe) is a place name in the Kow-a'-sah language, and that the Tehachapi Indians belong to the Kow-a'-sah tribe. This confirms what I learned from them last year.

Last year the Kern Valley Indians told me that they called the Kelso Creek and Piute Mt. Indians Kah-wis. This of course is the same name, spoken slightly different, as Kah'-wis-sah and Kow'-a-sah are obviously the same word spoken by different individuals; particularly, as is too frequent, if one does not speak clearly and is reluctant to repeat.

The Paiute Mt. Indians call themselves New'-ah or Noo'-ah or New-oo'-ah. This is their word for people, which, as with the Paiutes, is Neu'-ah or Neu'-ma.

The Shoshonean tribe calling themselves New-woo'-ah are the ones called Kah-wis'-sh (or Kow-a'-sah) by the Yokut and Tu-bot-el-ob'-e-la tribes.

Among the Tule River Reservation Indians who came from the plain the children and young people of both sexes are good-looking. The girls, like the Tache girls of Tulare Lake, have low foreheads with some short hair on the upper part and sides. The hair of the head is long and straight and very black, and rather coarse. They marry early—usually at or before sixteen—and several who have been married several years still look and act like young girls. Those I saw under twenty-three had no babies, but this may be only an accident.

All the Tule Reservation Indians have rough board houses, but most if not all live in summer in rectangular brush shelters, open on one side. Some of them cultivate grapes and peaches and plums as well as beans, corn, wheat, and white and sweet potatoes. But they lack persistent continuous industry and attention to details, and need sympathetic supervision and encouragement. They are excellent sheep shearers and go out to shear sheep at each shearing. For this work and fruit picking they are always in demand. But like most Indians they cannot resist liquor, at least some of

them can't, and most of them get drunk at intervals and fight and often kill one another.

Juan's wife, who as before stated is a Kern Valley (South Fork) woman, has a most extraordinary development of the bump of order sequence, and classification. While getting a vocabulary from her she several times interrupted me to scold at my arrangement of the words, and also at the way I write them down on the page. She wanted them written in vertical columns with plumb edges, and wanted me to ask the words in what she considered proper logical sequence! She had a classification of her own for birds and mammals, for parts of the body, for baskets, for household things, and for ideas in general. Her preternatural acuteness in this direction made her at times quite pesky, and she said my illogical and unnatural sequence was "enough to drive anyone crazy." She waved and whirled her arms in all directions to show how badly mixed up I made her feel.

Luckily I couldn't translate all the choice names she called me. But in spite of the shocks I gave her nervous system and the contempt she showed for my idiocy, she finally calmed down and answered all she could of my questions and invited me to stay to dinner (which her daughters cooked). I stayed of course and had good bread and tortillas and tea and sweet potatoes, and meat. One of the girls has a live Bassariscus [raccoon] for a pet.

6. Kosho'-o

October 30, 1903. From the dilapidated remains of the old Millerton schoolhouse at the foot of Table Mountain I followed a rough uphill road northeasterly about a mile to the top of this remarkable plateau—a great flat lava uplift which, broken in places, stretches for miles along the San Joaquin River, forming the salient feature of this picturesque region. The name of the place at the foot of the mountain where the old schoolhouse stands is Ot-ho, referring to the circumstance that some time ago a man was killed there by a falling rock which hit him on the back of the head.

At the time of my visit a few Pit-kah'-te and Kosho'-o Indians were fishing on a stretch of the river from Pullasky upstream for a mile or so. They were spearing salmon and drying them for winter use.

At the top is a little house in which an old Kosho'-o Indian woman was living. Her husband is a white man named Matthews now (1903) seventy-eight years old. I spent the day there, remaining till dark and eating dinner with her. She is a very intelligent woman and gave a fair vocabulary of the Kosh-sho-o language and much information about her people.

She said that the name of her place is Ti-a-choo, meaning "gateway at the top," this being the natural gap at which to climb up over the edge of the high plateau. The main Indian village, Wal-loo-low (where only two or three families remain), is about half a mile northwest from her place.

The Indians now living on Table Mountain are Kosho'-o, Pit-kah'-te, Toom'-nah, and Chuk-chan'-sy. The Chukchansy country is north of the San Joaquin River, extending north to Fresno Creek.

The Pit-kah'-te or Pitkatche inhabited the plain and lower San Joaquin up to Pullasky (the name of which has since been changed to Friant).

Another tribe or subtribe, called Tomnah but speaking the same language as the Pit-kah'-te, lives on the south side of San Joaquin River a little above Pullasky. Mrs. Matthews' grandmother was a Toom'-nah but she speaks of the tribe and language as Pit-kah'-te. Her father was a Kosho'-o. She speaks both languages.

Many Kosho'-o words, including the numerals, are essentially the same as in Chukchansy, while many others are entirely different. Among these the Kosho'-o word for people is mah'-ye, while the Chukchansy word is Yo'-kutch. The Kosho'-o therefore must stand as a distinct tribe. They are on the verge of extinction.

The Pit-kah'-te also are now nearly extinct. The Kosho'-o originally inhabited and possessed the Dry Creek and Sandy Creek country and Auberry Valley. Their chief village, Loom'-tow, was on Black Mountain (called by the same name) on the east edge of Auberry Valley, about eight miles northeast or east-northeast of the Millerton place. The name of Auberry Valley is Tahl'-low.

Another tribe, named Woh-kee'-che and closely related to the Pit-kah'-te, lived on the south side of San Joaquin River lower down. They are now extinct.

Table Mountain is a high lava plateau cut through by the canyons of the San Joaquin and tributary streams, leaving steep-sided flat-topped mesas for many miles both up and down the river. These mesas vary from a few rods to a few miles in extent. They are topped with lava rim rock. Outstanding remnants may be seen far down toward the plain. This tableland was the ancient home of the Toom-nah tribe. They call it Sis'-loo, while the Kosho'-o call it Shish-il. The Toom-nah adopted it as a tribal emblem and represent it around the top of their coiled baskets (fig. 40).



Fig. 40. Toom-nah tribal emblem representing Table Mountain.

The peregrine falcon (Falco mexicanus) nests on the rock cliffs of Table Mountain. The Indians are dreadfully afraid of it. They call it Yi'-yil, referring to the black marks on its cheeks. This mark is a tribal emblem of the Kosho'-o and Toomnah. They weave it in black on their most precious baskets and during the ceremonies paint it on their cheeks. The name of the falcon is the same in four Yokut languages: Kosho'-o, Toomnah, Pit-kah'-te, and Chukchansy.

The Indians say that about ten or twelve years ago (about 1890) several young men, wishing to show that they were not afraid of the falcons, climbed the cliffs to rob one of their nests. The nest was in a bad place, hard to get at. One of the young men finally succeeded in reaching it, but his hold on the face of the cliff was insecure, and just as he got there one of the old falcons dove down at him with great force, striking him on the head and knocking him off. He fell to the rocks below and was killed. Since then, no Indian has disturbed these falcons and the fear of them has become even more deep-rooted.

7. Hol'-ko-ma

Cole Spring (Pine Ridge), October 25, 1903. Camped on a knoll close to an Indian camp owned by an Indian named "Jackson." Ate supper with the family after dark, and as they had no light but a low flickering fire had to take a good deal on faith. The wife washed cabbage for me, cooked it a short while, and served it green. It was the best cabbage I ever ate.

The region is one of unusual ruggedness and interest. Cole Spring and a couple of Indian settlements occupy a saddle on a high basin of irregular form and somewhat hilly, on top of a sag in Pine Ridge which rises abruptly on the north in a huge double-domed granite shoulder called Pi-you-mi. At the foot of this dome (south base) is a small Indian village of the same name.

Rush Creek comes out of Pine Ridge and cuts obliquely through the eastern part of the saddle-like plateau and then drops abruptly off on the east and falls into a wonderfully beautiful basin called by the Indians Yo-in-e-wit, and by the whites "Fandango Ground." It is forested with oaks and digger pines and is occupied by a settlement of Hol'-ko-ma Indians, the same as those on the saddle above.

Big Creek Valley, called by the Indians Stah'-quah-wet, runs south into Kings River.

October 26, 1903. The Indians living at Cole Spring (the name of the upper basin or irregular plateau at top of saddle) belong to the Hol'-ko-ma tribe and are closely related to the Owens Valley Paiutes, as I find on taking a vocabulary. One of the camps is on the edge of the high granite bluff overlooking Fandango Ground, the basin of Rush Creek. All of the Indians have been gathering acorns and have large quantities drying on high rocks and also on platforms 7 or 8 feet high erected for the purpose. One platform has at least twenty bushels spread out upon it. They are turned every day to prevent moulding and to cause them to dry more evenly.

The old women at all the camps are busy all the time cracking and shelling acorns and attending to the meats. They stand an acorn on a stone, holding it point down between the finger and thumb of the left hand, and crack it by striking it on the blunt end with a small stone called tah-go-e. The meats, which fall into two equal halves, are called poo-soo-ip.

When the acorn shells are too green to split, they are torn off by the teeth, and the meats are then called pah-tse-nap'. In both cases they are spread out on high rocks or platforms to dry. As soon as dry they are shaken in the snowshoe-shaped winnowers (Paiute style) to remove the red skin, which blows away like chaff. The winnowers (to'-too) are held in both hands by the sides, the big end held toward the body, while they are given a sudden chuck by means of which the heavy meats strike against one another and knock off the dry skins. The dry clean meats are then stored in large baskets and sacks. Some are at once put into the mortars and pounded into flour, which is sifted in either snowshoe-shaped or circular winnowers and then put on the "filters" or "leaches" where the bitter is washed out. Some of the filters are on the ground, others on low platforms 2 by 3 feet high. In both cases they consist of chips or bark covered with sand, with the edge turned up to form a conspicuous rim. They are thus broad shallow cups, 3 or 4 feet in diameter. A cloth is usually laid on them (in place of the aboriginal tule or fiber mat), and then the flour or meal is put in and wetted and plastered over the bottom, and baskets of water are carried and poured on, the water filtering through and escaping, until the bitter is washed out. Then the meal is rolled into masses. Part is at once cooked in baskets by means of hot stones (making thick mush, waw-koi-ě-ke'-bă, or thick soup, ya-mun'). The rest is spread out on rocks to dry, where it forms whitish half curls.

Groups of mortar holes (pah'-hah) are common on the big granite rocks, usually in commanding positions, and those in use are arched over with brush to afford shade to the workers—who almost invariably are old women.

Here, as at Eshom Valley, the favorite brush for shelters and canopies of all kinds is the so-called California laurel or pepper tree (Umbellularia)—probably for two reasons, because the Indians like the smell, and because the leaves hang on a very long time. The leaves of this tree (or bush, as it usually is in the Sierra) are full of an aromatic oil and when burned give off a delightful fragrance. Sometimes the fresh leaves (green) will burn readily when lighted with a match, so full of oil are they. The odor of the freshly crushed leaf is too overwhelmingly strong and can hardly be endured close by.

As soon as the whole (uncracked) acorns are sufficiently dry, they are cached for winter in dome-topped cylindrical casings of small brush, bound round with bark ropes of Fremontodendron californicum and covered over with grass mats.

They are usually placed on strong platforms 6 or 7 feet high, called an-nat'-te-tsā-nan', but are sometimes built on high rocks (boulders) with small stones underneath the cache. The caches themselves are called an-nā-so-nan' and so-nah'-wā. They hold from five to ten bushels apiece.

The Indians have gathered acorns of the valley oak (Quercus lobata) and blue oak (Q. douglasi) as well as the black oak (Q. californica); the latter is the favorite and the one they store most of. They call its acorns we'-ah; those of Q. lobata, so'-to or sō't; of Q. douglasi, yuk-kah; of Q. wislezeni, chik'-ke-no; of Q. chrysolepis, tsā-hah'; of Q. breweri, sah-kahp'.

Besides acorns, they have gathered quantities of manzanita berries (ap-po-so') and sour berries (Rhus trilobata, which they call tā-kah'-te), and various roots and small seeds.

Ben Hancock, who has lived in this country about forty years, tells me that when he came here there were about 500 Indians (Ko-ko-he'-bas) living in Burr Valley, a few on Sycamore Creek, 600 or 700 at Cole Spring (Hol'-ko-mas), and about the same number (also Hol'-ko-mas) in Fandango Ground and in Haslet Basin.

He says a very large village was stretched along the south side of Kings River two or four miles below the mouth of Mill Creek, and for half a mile the dome-grass covered houses nearly touched. There were also large

villages on Dry Creek, and one between the forks of Kings River some miles above Dry Creek. The tribe at the Forks is now extinct.

The Burr Valley tribe was scattered by the whites, and only one old woman and her two half-breed sons are known to exist and they are now down on Dry Creek.

Yokuts Doctors

Ben Hancock, who came to the Kings River country about forty years ago and has had a series of squaws of different tribes for wives, has lived for many years at his present place, in a little basin on the west side of Sycamore Creek. His present wife is a young and pretty half-breed, Ko-ko-he'-be, from Sandy Hill or Grigsby rancheria. The previous one, who still lives close by, is a Hol'-kom-mah. I photographed both of them.

Hancock tells me that when he first came here (from Kentucky or Tennessee) there were no medicine men or doctors among the mountain tribes, the "Mono" (Holkoma and Ko-ko-he-be), but there were several among the Kings River Indians—particularly at the mouth of Mill Creek (Cho-e-nim'-ne tribe) in the Squaw Valley (Cho-ki'-min-ah subtribe). These doctors visited all the neighboring tribes and had great power over them.

About 1865 (or between 1865 and 1868) a much dreaded doctor named Cha-kar'-te went from Kings River up Big Creek and visited a village of Toi'-nitch Indians on a mountain east of Dry Creek, about six miles from Kings River. Here he took possession of all the young women—about fifty—as his wives, and sent all the men away. The men were dreadfully afraid of him and went over to the Chuckchancy country (north of the San Joaquin) and got a band of Chuckchancys to come back with them to kill Cha-kar'-te. The Chuckchancys killed him and cut him in small pieces. From that day to this the village has gone by the name Chakarte. Its last male inhabitant died at an advanced age a few months ago and his old squaw moved away to the village in Haslet Basin.

For a number of years three great doctors from Kings River country (two from the mouth of Mill Creek and one from Squaw Valley) ruled the surrounding region. The one from Squaw Valley (tribe Cho-ki'-min-ah) was named Push Lily. He was a large powerful man with a large head and rather flat nose. He died only a few years ago at an advanced age. The two at mouth of Mill Creek (Cho-e-nim'-ne tribe) were Wah-to'-ka and "Tom" (Tom's Indian name Hancock did not remember).

Doctor Tom was the finest looking man of the three. Wah-to'-ka (or Waw-to'-ka) was the ugliest of the three and a large powerful man.

In the course of time jealousies arose which grew until 1878, when it came to be understood that either Wah-to'-ka or Tom and Push Lily (the two latter being close friends) must die. So in that year Wahtoka, intending to get ahead of the others, set out on a tour of the neighboring tribes and villages to get the votes of the chiefs as to whether Doctor Tom and Push Lily should be put to death. To his surprise and chagrin the vote was against him. On his way home he passed Hancock's place and stopped and told Hancock he would never see him again as he was going to die. On reaching his home at the mouth of Mill Creek, Dr. Tom and Push Lily in some way knew immediately which way the vote had gone, and at once visited him and killed him and cut him up.

Push Lily was the most influential and best liked Doctor of recent times.

Tale of the Doctors

Only three years ago (in 1900) Robert Johnstone of Visalia (who is with me on this trip) chanced to be at Cole Spring (Pine Ridge) one night when a sick man died at the camp on the bluff overlooking Fandango Ground. While the man was dying the men at the camp danced and chanted around a small fire a few rods away and the women sang a low lament, musical and sweet, around the dying man. At the same time a Paiute who was visiting the camp faced toward different points of the compass and made an impassioned address, calling on the Coyote and the various other mammals and birds to save the sick man.

Meanwhile the doctor, who saw that there was no longer any chance of the recovery of his patient, set out for his home on Kings River.

Soon the man died. His relatives held a council and decided that the Doctor must die. The Doctor's brother was present and heard this. So he took another Indian and horses and set out immediately after the Doctor, whom they overtook some miles below. They told him that he must die and asked him whether he would rather take poison or be killed by the "Mo-nos" (Holkoma). He answered that he preferred poison, which he promptly took, and died at once.

This was told me separately by both Johnston and Hancock, and also by a half breed who knew all about it. All of the big doctors are now dead.

Another Doctor was killed a few years ago because he was believed to have "blown his breath up over a hill to kill an entire family." The Indians still believe that the old doctors could kill people by blowing up over a hill at them at night.

Hancock says that the Kings River Indians considered themselves superior to the Mountain Indians (Holkoma and others). The Mountain tribes had no doctors.

There are two unfortunate things which hurt the Indians of this region: whiskey and personal hatreds. White men sell them whiskey and get them to gamble and trade horses and get their money. Then many of them are afraid of one another and are continually in dread of being poisoned. Most all of the "Monos" hereabouts believe that "Jackson" has a deadly poison which will kill anyone it touches, even without scratching the skin. They say he got it from a Tulare River Doctor.

They are said to have a powder which they make from some plant, which has remarkable healing properties when applied to bad sores. The whites claim they have seen several cancers cured by it, but have been unable to learn what the plant is.

Wiktchumne Notes

Use of salt grass (Distichlis spicata). The salt grass when dry is placed on a dry hide or a large piece of canvas or cloth and beaten for a long time until the tiny black salty specks on the stem and narrow blades fall off and collect on the cloth. This material is kept in bottles or jars (formerly in baskets). When needed for medicine it is put in hot water and boiled until it forms dark reddish-brown gum. Informant remarked that it should be "cooked like gravy until the gum comes."

It is said to be a wonderful cure for bad colds and for loss of appetite. A piece of the gum the size of a silver half dollar is put in the mouth and allowed to melt, to be repeated when necessary.¹

Use of Jimson weed (Datura meteloides). Jimson weed is believed by all the Indians of the San Joaquin Valley region and southern California to be powerful and valuable medicine. The Wiktchumne call the plant tahng-i; the narcotic drink, tahng-yu'-sah. It is used both internally and externally.

¹ See p. 438 for end notes.

I was told by Mrs. Ichow, an old Wiktchumne woman from Kaweah River near Lemon Cove, that for internal use the root is boiled and the liquid taken under direction of an Indian Doctor. It is said to be a sure cure for inflammation of the bowels (appendicitis), and is used for other diseases and also as a ceremonial narcotic.

The tea is drunk only once. "It is a very particular medicine." When all is ready, a bowl of acorn soup is taken before sunrise, the patient waiting for the sun to come up before drinking the "tahng-yu'-sah," the dose of which is about half a pint. The drink is measured by an Indian Doctor or other old man "who knows how," so an overdose will not be taken. Then a nurse is set to watch the patient so he will not get hurt while under the influence of the drug. The nurse strokes the shoulders, arms, and body of the patient with the wing or tail of an eagle and then strokes himself in a similar manner. This helps drive or wipe off the sickness.

After the intoxicant effects have worn off, acorn mush is the exclusive food for exactly one month—no meat of any kind and no fat or grease is permitted during this time. When the month is up, all the diseases the patient has had—"all the sicknesses that have been stroked" with the eagle feathers—go away together "at the same time," and all kinds of food may be eaten as usual.

Mrs. Ichow told me that a man who was partially paralyzed was cured by it and enabled to walk as before. A poultice made from the roots and leaves boiled together was applied daily for a month.

Noo-toon'-a-ta near Lower Kings River

At the ranch of the Burris brothers near Kings river I was told by one of the brothers that until three years ago their ranch was the headquarters of a small band of Noo-toon'-a-ta (or Noo-toon'-a-ka) Indians, the sole survivors of the tribe. Four or five years ago the old chief, called by the whites "Butler," died. Then three or four survivors, comprising a man called "Jake" and his wife and very old mother, and possibly one other, left the ranch and have been camping at various places since. Their present whereabouts, if they still live, is unknown.

Years ago these Indians had settlements all along Kings River from about Kingston up.

In the early days, Mr. Burris told me, the oak area spreading out from Kings River was taken possession of by hog men, who fattened their hogs on the acorns. These hog men decided that the Indians, then numerous, were eating too many acorns, and determined to drive them away. This they did

in the dead of winter, driving them north like hogs, to some place selected for the purpose, which is believed to have been near Fresno River. They were driven and rushed along without mercy—men, women, and children, old and young—and hundreds fell by the way and were killed or died. Some escaped and finally returned, but their caches of acorns had been seized and fed to the porcine hogs by the human hogs, and the poor Indians soon perished, doubtless assisted by the whites.

It happened that at this time a white settler named Whittimore lived on Kings River and employed several Indians on his ranch. The hog men demanded that these Indians be given up. Whittimore refused to do this, as they had proved honest, and faithful servants; as a result he was killed by the hog men and his Indians taken.

This story, which is doubtless true, is in harmony with what we already know of the treatment of Indians in nearly all parts of California by the early whites. (June 5, 1903)

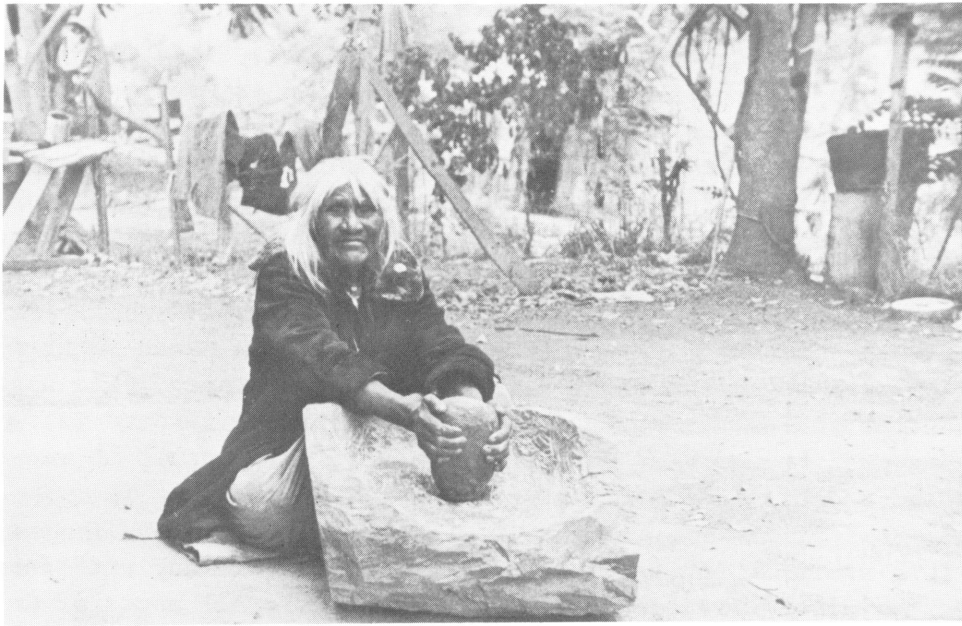
A Too-hook'-mutch Wooden Mortar

Mrs. Jane Waley has a large portable wooden mortar (pl. 36) the like of which I never saw before. She calls it so-kaw'. It is a section cut out of a big black oak tree and measures about two and a half feet in diameter by six or seven inches in thickness. The wood is exceedingly hard and tough. It is surprisingly heavy—so heavy that a man can hardly lift it. It has been laboriously hollowed out, leaving a flattish cavity nearly two feet across and four inches in depth. In the middle of the bottom is a shallow circular cup-shaped hole, about an inch deep and five inches in diameter, which holds the acorns while being pounded—the main part of the bowl catching the flying acorn fragments. This peculiar mortar is for winter use inside the house, the tribe having no portable stone mortars.

Yokuts Duck Hunting and Balsas

Tulare Lake Duck Hunting and Balsas²

Vast numbers of mallards and other ducks made their nests near the shores of Tulare, Buena Vista, and Kern Lakes. These waters are also the resort of many varieties of migratory ducks. These birds furnished a large supply of food to the Indians with which this region was once populous. Many of the modes by which the birds were captured were so ingenious as to excite the admiration of the early white settlers. One in universal use was



a



b

Plate 36. Wooden mortar of the Too-hook'-mutch tribe, 1930.

as follows: The Indian shelled a quantity of acorns, and, wading out to the edge of the tule (Scirpus lacustris), scattered them where the water was from six inches to a foot in depth. Here, after a few days, the ducks resorted in flocks. The Indians having ready as many willow poles about ten feet in length as he proposed to use, forced their ends into the mud among the roots of the tules. To the upper end of each pole was fastened a piece of string about three feet long, formed into a slip-noose. Above the slip-noose was tied a toggle, also of willow, about four inches in length. He now bent each pole so that the upper end reached the water. He then forced into the mud at the point where the willow pole reached, another piece of willow, bent into the form of an ox-bow. He then placed on the mud an acorn, partially peeled, so that it might be seen through the water. One end of the toggle was made to rest on this acorn, the other against the bend of the willow ox-bow. The slip-noose was now carefully spread in a circle on the mud at the bottom, the acorn, with one end of the toggle pressing upon it, being in the center.

Setting all his poles in this manner, and scattering a few peeled acorns in the vicinity of each, he retired. When a duck attempted to seize an acorn against which a toggle rested, the effort would release the toggle, the spring of the pole would draw the noose about his neck and suspend him noiselessly in the air. It was almost impossible for a duck to escape if it attempted to touch the acorn on which a toggle was resting.

The margins of Tulare and Kern Lakes were once covered with large and small islands of tules. The channels between these islands were favorite feeding places for ducks and geese.

It was also a common custom for an Indian to gather small bundles of tules and fasten them about his body so as to completely conceal all of his person above the waist. He would then wade into the water. At a very short distance he would closely resemble a small tule island. Gradually and quietly he would approach a flock of ducks until he could kill one or more with his arrow.

It is said that frequently many of the more expert Indians would thus go among a flock of ducks, and seize them by the feet and hold them beneath the water until drowned.

Catching Ducks at Buena Vista Lake

An old Too-lol-min Indian woman who used to live at Buena Vista Lake told me (July 1905) of an interesting way her people had of catching ducks and fish wholesale in Buena Vista Lake; and J. V. Rosemeyre gave an identical description of the same thing, witnessed by him in the early fifties on Kern Lake.

Ducks and geese wintered by thousands on both lakes. The Indians used to make "tule-poles" by cutting the long tules and fastening them together in cigar-shaped bundles six or eight inches in diameter, like those used in making their tule boats—"balsas." Hundreds of these were stood up side by side in shallow water and tied together so as to form two long serpentine fences leaving a winding passageway three or four feet wide between. This passageway (enclosed waterway) led to a circular chamber, also made of tule poles, twelve to fifteen feet or more in diameter and covered over on the top with a tule mat of rather coarse and open construction.

Both ducks and fishes would swim along the narrow winding waterway in great numbers and freely enter the circular enclosure, the walls of which were arranged in such a manner that when once within it was well-nigh impossible to get out.

The Indians would go in and kill the ducks by the hundreds and scoop up the fishes in basketfuls. When troops were stationed at old Fort Tejon in 1851 to 1861 the Indians supplied them with ducks caught in this way.

For their own use the Indians dried vast numbers of ducks and fishes and kept them through the winter and spring.

A favorite method of cooking ducks and mud hens (Fulica) was to imbed them in a ball of adobe mud and bake them over hot coals in a cooking hole in the ground.

Tule Boats³

The Indians in the Lake region of the Tulare Valley found the Tulare and Buena Vista Lakes to abound in fish, water fowl, fresh water clams, and the flag's starchy root. To gather this plenty they used tule-stalk boats. These tule stalks grew in great profusion everywhere and could be readily found from sixteen to eighteen feet in length.

When these Indians wanted to make a boat or a "balsa" as it was called, they sent the women to cut the longest tules they could find. The stalks were gathered out at one place and spread out to dry. When these tule stalks were sufficiently dried many green willow withes were gathered. Poles as long as the contemplated boat was to be were peeled of their bark and were hardened by heating in the fire.

The women then took the dry tules and laid them smoothly on the ground, strung out to the length of the proposed boat, which was usually sixteen, eighteen, or twenty feet. Butts were lapped at the center; the roll tapered from a large center to pointed ends.

The small green withes were then wound tightly around the bundle, commencing at the center and then at twelve inch intervals for the entire length. A large number of such bundles were made; the actual number depended on the capacity of the boat they proposed to construct. Two bundles were then laid side by side and bound tightly. Other bundles were bound to these until a platform the size and shape of the bottom of the proposed boat was formed. Another layer was formed in the same way and attached to the bottom platform. A pole was bound to this bottom platform on each side of the boat. These two poles were bent so as to bring their ends together at bow and stern. These poles were securely bound with green withes so as not to be seen on the outside of the boat. The poles caused the boat to be stiff and unyielding when a great weight was placed either in the bow or stern. Layer after layer was constructed and bound together until the boat was capable of supporting a great weight in the water. The outside was carefully trimmed of all projecting ends. The boat when finished was a compact mass of tule stalks and was smooth and trim. It rode the water very well and could be handled as securely and easily as any boat. When not in use it was drawn out the the water and allowed to dry. By careful use it could be made to last a long time.

Indian Tribes and Languages Found at Tejon

Nov. 10-12, 1905. By the hardest kind of pressing work, talking with a number of different Indians speaking different languages, and going over the ground a second time to check up errors, I have secured the following most important original information as to the locations, names, and tribes of the various rancherias of this region as they were in the early days. While it is not absolutely complete, and while a few discrepancies remain, I nevertheless feel that I have done a good job of rescuing this material from oblivion, for in most instances the one or the other representatives of a tribe are the sole survivors and when they go all knowledge of their people will be lost.

1. Tol-chin'-ne (or Tol-chin'-nin). Tejon Canyon rancheria (at mouth of Tejon Canyon—same place where all the Indians live now (1905). Closely related to New-oo-ah and Chemeweve.

2. New-oo'-ah. Tribe in mountains from Tehachapi to Piute Mt. Several here, at Tejon, but language so close to Tol-chin-ne that the two at most are only subtribes.

3. Ke'-tah-nah-m'wits. A "Serrano" tribe commonly called (by themselves and others) by the nickname Ham-me-nat, which in their language means "what is it." Also called Ak'-ke-ke'-tem, the name of their rancheria

at "El Monte" on Tejon Creek, two or three miles below the Tol-chin'-ne at mouth of Tejon Canyon. Their proper name for themselves appears to be Ke'-tan-na-moo'-kum.

4. Too-lol'-min. Yokut tribe at Kern and Buena Vista Lakes (also called Too-lum'-ne).

5. Tin'-lin-ne. Tejon Viejo ("Old Tejon" of Tejon proper). Yokut tribe, same as Yowelmane. Rancheria on Ranch Creek.

6. Tash'-le-poom'. Chumash tribe at San Emigdio. Closely related to Santa Barbara Chumash.

7. Kah-wen'-gah. Tribe formerly at Cahuenga and Tehunga. (Close to Tong-va of San Fernando Valley and San Gabriel.)

8. Kas-tak'. Chumash tribe at Castac Lake and at mouth of Uvas (or Fort) Canyon. Very closely related to Ventura tribe. At Castac they called themselves Sa-sa-man-ne (Chumash).

9. Tong-va. Tribe formerly at San Fernando. Same as San Gabriel. (May include Kah-wen-gah.)

10. Wah-tak-nas-se. Tribe in Kern Valley near Kernville (Tubotelobela).

Rancherias

1. Tejon Viejo (Old Tejon). Tribe, Tin'-lin-ne (Yokut). Three miles southwest of present Tejon Ranch ranch house, on the creek next west of the creek which passes the Tejon ranch house. In 1856 it was an immense rancheria Mrs. Rosemeyre tells me.

The tribe originally living at Tejon Viejo called themselves Tin'-lin-ne, from Tin'-leu the place (tin'-leu is their name for badger).

The neighboring tribe Too-lol'-min (of Kern and Buena Vista Lakes) called the place (Tejon Viejo) Tah'-ahl, and the rancheria Ah-kok'-e Tah-ahl', and the people Tah-ahl' chah-ahtch-ah-kok'-e.

The name of the creek (and canyon from which it comes) which passes Tejon Viejo is, in the Too-lol'-min language, Tah-ahl' so'-pah. It, according to the old Indians at Tejon, was the original (and they insist the only) Tejon Canyon. They say the white men have shifted the name to the second canyon east; that is, to the present Tejon Canyon.

Mrs. Rosemeyre says that the Serrano call this tribe Pah'-pah-ve'-a-tam.

2. Las Tunas. Three and a half to four miles above Tejon Viejo on same creek. In Too-lol'-min language:

The place: Nah-pin'-tah (meaning "the Tunas")

The rancheria: Ah-kok'-ke Nah-pin'-tah

The people: Nah-pin'-tah choi'-chah'-ahtch

This was not an aboriginal rancheria but was established by a San Emigdio Indian (father of "Nancy," my informant) at the time when the Government was overcrowding the old rancherias by bringing in Indians from various quarters. It was inhabited by several tribes—Emigdio, Kastak, Yowelmanne, and perhaps others.

3. Caporal Monte. Tribe, Tin'-lin-ne (Yokut). In the small grove of cottonwoods where the lower ranch house (now occupied by Lopez, the head vaquero) now is, a mile and a half below Gen. Beale's adobe ranch house (headquarters) and likewise on the west side of the same stream, Ranch or Pass Creek. In the Too-lol'-min language:

The place: Pal'-lew cha-pan'-na

The rancheria: Ah-kok'-e Pal'-lew cha-pan'-na

The people: Pal'-lew cha-pan-na chah'-ahtch

The tribe: Tin'-lin-ne (same as at Tejon Viejo)

In the Emigdio and Ventura language the Ranch Canyon (el Paso) is Sah-mes (sah-mes means "a pass").

4. El Monte. Tribe, Ke'-tan-a-moo-kum or Ke-tah-nah-mwits (Mohinean). On (present) Tejon Canyon Creek two miles north or north-northeast of Tejon Ranch house and about three miles below Tejon Canyon rancheria. The old rancheria was on the west (or southwest) side of the oak and cottonwood forest called "El Monte," the old burying place in the timber.

It belonged to and was occupied solely by the Ak-ke-ke-tam tribe (commonly called Ham'-me-nat'). Their proper name for themselves appears to be Ke'-tan-a-moo-kum. In their own language:

The place: Mum'-num-pe

The tribe: Ak'-ke'-ke-tam or Ham'-me-nat or Ke'-tan-nam-moo-kum

In Too-lum'-ne (Too-lol-min) language:

The place: Chah-pahn'-na
 The people: Chap'-pahn-na chah-ahtch
 The tribe: Ham'-me-nat'

In Tin'-lin-ne language:

The place and rancheria are both Yow'-leu
 The people: Mi'-ah-him-tal'-lap ("shooting people")

5. Tejon Canyon Rancheria (Rancheria El Cañon). Tribe, Tol-chin'-ne (Chemeweve, Nuwuwah). At mouth of present Tejon Canyon, five miles northeast of Tejon rancheria. Always a large rancheria. Belonged to the Tol-chin'-ne tribe (subtribe of Piute Mt. Nuwuwah). In their own language:

The place: Tol'-teu
 The people or tribe: Tol-chin'-ne (or nin)

In Too-lol'-min language:

The place: Tsa-sus (meaning dog)
 The rancheria: Tsa'-sus tah-ahl'
 The people: Tsa'-sus tah-ahl' chah'-ahtch

The language is said to be the same as that of the Tehachapi or Ow'-wah-tum Nuwuwah.

In Ke'-tan-na-moo-kum Ah'-ke-ke'-tam (= Ham'-me-nat) the name of Tejon Canyon rancheria is Koo'-tse-tah-ho'-ve.

At present, and for some years past, this is the only rancheria in the Tejon-Bakersfield region.

6. Comanche Creek⁴ Rancheria. Tribe, Tol-chin'-ne or Nuwuwah (Shoshonean). At foot of mountains at head of narrow valley (first creek and canyon northeast of Tejon Canyon). In Too-lol'-min language:

The place: Ko'-koo'-kow
 The rancheria: Ko'-koo'-kow tah-ahl'
 The people: Ko'-koo'-kow tah-ahl' chah-ahtch

In Tin-lin-ne language:

The place: Ka'-it-il-lik or Ka-too-il'-kah
 The tribe was the same as at Tejon Canyon and Tehachapi

7. Tehachapi Valley Rancheria. Tribe, Ow'-wah-tum Nuuwah (Shoshonean). Near "Old Town," about two and a half to three miles west of present town of Tehachapi, and on floor of valley on the creek. In their own language:

The place (Tehachapi Valley or Basin): Ta-hatch'-a-tum-ban'-dah

The rancheria: Ow'-wah-tum Nuuwah av-ven-nah

The people: Ta-hach'-atum'-ban Nuuwah

The tribe: Ow'-wah-tum Nuuwah

At the Tejon, the Hammenat and Too-lol'-min people call their tribe Ah-koo-toot'-se-am and use the name in a sense broad enough to include the subtribe on Upper Caliente Creek and Piute Mountain.

8. On and near head of Caliente Creek (in the mountains). Tribe, Nuuwah (Shoshonean). The people call themselves Nuuwah and are not more than a subtribe of the Tehachapi stock. In Ak'-ke-ke'-tam (= Ham'-me-nat) language:

The place: Hi'-hin-ke-ah'-ve

The people: Too'-tse-am (or Toot'-se-am), which obviously is an abbreviated form of Ah-koo-toot'-se-am, the name for the same tribe in the Tehachapi Valley.

9. Kern Valley (within the mountains and near Kernville). Tribe, Toobotelobela. The Toololmin call the Kern Valley place and people Wah-tak'-nas-se.

Mrs. Rosemeyre told me that the "Serrano" Indians call the Kern Valley Indians Tu-va-pe-a-tam (or Tu-vah-pe-a-tum) meaning pine nut eaters, and that the Tongva from San Gabriel call them To-to'-vah-vit.

A member of the tribe (Cha'-ko) living in Kern Valley told me several years ago that the name of the tribe is in his language Tu-bah-te-lob-e-la, also meaning "pine nut eaters."

10. Pozo Flat (in the foothills on Poso Creek). Tribe, Pal-lah-we^{ch}-e-am. Mrs. Rosemeyre says that the name of the tribe in their own language is Pal'-lah-we^{ch}-e-yam and that they were called by the same name by the "Serrano." Their language she says is different from all the others.

11. Bakersfield. Tribe, Yowelmanne (Yokut). In Too-lol-mon and Tin-lin-ne the place and people are called Pal-la-yam-me (or Pal-leh-yam-me or Pa-low-yam-me). The tribe is Yowelmanne.

Mrs. Rosemyre told me that the "Serrano" call the place and people Patch'-ah-mi^{ch}-ko-pe-a-tam, which means "the place where the water comes from." These people were the "Tularenos" of the Spanish Mexicans.

12. Kern Lake (now dry). Tribe, Too-lol'-min (Yokuts). In their language (Too-lol'-min, same as at Buena Vista Lake):

The place: Kah'-we
 The rancheria: Ah-kah'-ke-kah'-we
 The people: Kah'-we-chah'-ahtch
 The tribe: Too-lol'-min

In Tin-lin'-ne language (of Tejon Viejo) Kern Lake is called Hal'-low or Pal'-low, the name of the "honey dew" or "panoche" scraped off the cane (Pragmites) which grew there in great abundance.

13. Buena Vista Lake. Tribe, Too-lol'-min (Yokut). In their own language (Too-lol'-min):

The place: Too-lum'-ne
 The rancheria: Ah-kah'-ke Too-lum'-ne
 The people: Too-lum'-ne Chah-ahtch (or Ah-kah'-ke Too-lum'-ne-chah-ahtch)
 The tribe: Too-lol'-min (or Too'-lol-min'-nah)

The Tin-lin'-ne also call the place Too-lum'-ne and the tribe Too-lol'-min. The San Emigdio (Tash'-le-poon) Indians likewise call the place Too-lum'-ne, but call the people Hool-koo-koo Too-lum'-ne.

14. Goose Lake. In Too-lol'-min language:

The place: Sho'p Kah'-we
 The rancheria: Ah-kah'-ke Sho'p Kah'-we
 The people: Sho'p kah'-we chah-ahtch

In Tin'-lin-ne language:

The place and people: Fah'ahs

According to Mrs. Rosemyre they call themselves Too-lam'-a-yam and the "Serrano" call them Too-nah'-me-ah.

There is a difference of opinion as to the tribe. The old Too-lol'-min woman, Nancy, says they were Too-lol'-min and the same as her own people; Maria Via Real [Villareal] who speaks Tin'-lin-ne says they spoke

Tinlinne or Yowelmanne, while Mrs. Rosemyre says their language differed from all others.

15. Pasto Rio (11 to 12 miles south of west from Tejon Ranch house, beyond Las Tunas). Tribe, Tongva(?). In Too-lol'-min language:

The place: Che'-po'-we-oo
 The rancheria: Ah-kah'-ke Che-po'-we-oo
 The people: Che-po'-we-oo toi-chah'-ahtch

Old Vadeo, who lived there several years, says the tribe was the same as the Indians at San Fernando (who came there).

16. Canada de las Uvas (or Cajon de las Uvas). Fort Tejon Canyon. Tribe, Kas-tak (Chumash). The rancheria was at the mouth of the Canyon and was a large one. In the Too-lol'-min language:

The place: La-pew (or La-peu)
 The rancheria: Ah-kah'-ke La-peu
 The people: Lap-pe-u-toi' chah-ahtch
 The tribe: Kas-tak (Chumash), same as at Castac Lake and nearly the same as at Ventura

In Tin'-lin-ne language the place is La'-pow and the people Lap-pa'-mah-ne.

17. Kas-tak (at north side of Castac Lake). Tribe, Kas-tak (Chumash). In the Too-lol'-min language:

The place: Sahs (meaning eyes)
 The rancheria: Sahs' ah-kah'-ke
 The people: Sahs' toi' chah'-ahtch
 The tribe: Kas-tak (almost the same as the Ventura)

In their own language they call themselves Sah-sa-mahn-ne. The Spaniards called them Castanos.

18. Tacuya Canyon (two or three miles west of Las Uvas or Fort Canyon). Tribe, Kastak (Chumash), same as at Castac Lake and mouth of Las Uvas Canyon. In the Too-lol'-min language:

The place: Ta-koo'-e (or Ta-koo'-yu)
 The rancheria: Ah-kah'-ke Ta-koo'-yu
 The people: Ta-koo'-yo toi-chah'-ahtch

In the Emigdio (Chumash) language the people are Hol-koo'-koo Ta-koo'-e.

19. San Emigdio. Tribe, Tash'-le-poom Koo-koo (Chumash). In their own language:

The place: Tash'-le-poom
The people: Tash'-le-poom' Koo'-koo'

The place name (Tash'-le-poom or Tash-la-poom) has been adopted by the neighboring tribes, Too-lol'-min, Tin'-lin-ne, and Hammenat. In the Too-lol'-min language:

The rancheria: Ah-kah'-ke Tash'-le-poom'
The people: Tash'-le-poon Chah-ahtch

The tribe is closely related to (if not the same as) the Santa Barbara tribe (Chumash).

20. Temploa. Tribe, Too-lol'-min (Yokut). In their own language (Too-lol'-min):

The place: We'-ah-wi'-ling-al
The rancheria: Ah'-kah'-ke We'-ah-wi'-ting-al
The people: We'-ah-wi'-ting-al chah-ahtch
The tribe: Too-lol'-min (same as at Buena Vista and Kern Lakes)

A neighboring rancheria (exact site not known by me) was called Wah'-pe-et by both the Too-lol'-min and Tin'-lin-ne.

Ethnographic Notes Secured from Indians at Tejon, 1905

Elder (Sambucus glauca) is much used by the California Indians. The Serrano and San Gabriels (Gabrielino) tribes eat the berries dry, or cook them in winter. The leaves are bruised and applied to burns. The pith is cooked and a tea from it used as a purge by the San Gabriels, who call the medicine hoo-tah-ah-shoon'. The flower is made into tea and was used as an emetic called by the Serranos ho-quat-ah-hon. The pith is pushed out and the hollow wood used for flutes and pop-guns. The branches are split in half and used for making bows for small children.

The Tongva of San Gabriels (Gabrielino) made wild tobacco into cakes by boiling it and then cooking and evaporating it to a kind of dough. Wild flax (pah-se'-e in Tongva, pah'-he-natch in Serrano) was pounded or ground

into pinole; it was also used as a poultice. Yerba santa was used by the Serranos and San Gabriels for sweating. They covered the head and inhaled the vapors of hot tea and also drank the tea. Sunflower seeds were used for food by the Tongva as well as by the Piutes. Atriplex leaves were made into tea and used for a cathartic by the Serranos who called it kah-katch.

Artemisia lucoviciiana was used as medicine by the Serranos and San Gabriels as well as by most other tribes.

The Serrano and Tongva used to make ladders by tying cross sticks to a pole by means of rawhide thongs. The Tongva used to make smoking pipes of clay. The Tongva men used to wind their long hair in a knot and thrust a stick through it. Among the Serrano and Tongva the women wore small coiled basketry hats. Both the Serrano and Tongva painted their faces with red and white paint made of earth. The Serrano tattooed their faces some, but the Cahuilla did this much more. Both Serrano and Tongva played a game with ten sticks as well as one with two sticks; the Serrano, in addition, played dice. Both tribes made large basketry waterbottles holding five gallons or more. Antelope were once very numerous in the San Gabriel Valley.

Mrs. J. V. Rosemyre of Tejon tells me that the Indians of that region make a potent emetic of the leaves of a white flowered species of Lobelia which is common on the Kern plain in the spring. It is called saw-koon or so-koon in Tin-lin-ne. The leaves are carefully dried and then pulverized and made into a hard mass which to the naked eye looks like a hard root. Some of it is scraped off with a knife and snuffed up the nose as a remedy for acute cold in the head. But its standard use is as an emetic. Some is whittled off the cake and put into hot water and made into a strong tea. The fingers are dipped into this and put back into the mouth several times until vomiting occurs. In the old days, Mrs. Rosemyre says, it was common after a hearty evening meal to see a group of men sitting around their fire uncomfortable from sweating, and sucking their Lobelia-dipped fingers until relieved.

Mrs. Hunt, daughter of Mrs. Rosemyre, an old Tongva woman of Tejon, told me that the medicine men of the Ke'-tan-am-moo-kum tribe (sometimes called Hammenat) who were called Tsah-tr, were endowed with supernatural powers. Besides this they were known to make terrible poisons, and knew antidotes for some poisons. They had a powder they put on peoples' clothes which made the victim sneeze and sneeze followed by a bad cold. This powder was called poo'-yu-muk'-kit. They used rattlesnake poison and the poison of the black widow spider, and a still more potent and dreaded poison made of human saliva mixed with something unknown to her which

killed by touch. The "big doctor" watched and got a little of the saliva of his intended victim where he saw him spit, and took it and mixed something with it and kept it until the time arrived, and then merely touched the person with it, and the person had an awful headache and felt bad in his heart, and his heart got very bad and he had chills and soon died.

Notes

1. See R. F. Heizer and H. Rapaport. Identification of Distichlis Salt Used by California Indians. Southwest Museum Masterkey, 36:146-148, 1962.

2. Copied by Merriam from an article by B. B. Redding in Californian, November, 1881. Reprinted here for comparison with the following note (p. 427).

3. From the manuscript account written by John Barker of Bakersfield and given to Merriam by Mrs. G. H. Taylor of Bakersfield in July, 1905.

4. Named Comanche Creek from a Comanche Indian who came in with a band of sheep in the early days. He attacked his companion, a white man, with a knife, and the white man killed him with his knife. He is buried there.

SHOSHONEAN

Field Work Among California Piutes, 1902-1903

Editor's note: Printed below are four accounts of field work among the Nim (a tribe of Monache Piute); the Ko-ko-he'-ba (also of the Monache Piute stock); the New-oo'-ah (a tribe of the Southern Piute); and mixed Wikchumne (Yokut) and Tu-bot-e-lob-e-lay, a stock of Kern River area.

Nim of the North Fork of San Joaquin River

On the morning of October 4, 1902, I walked up North Fork Gulch a couple of miles and crossed an east and west ridge on which there are two camps of so-called Mono Indians. An old "Mono" man who told me his name is Che'-pah is head of the two camps on the knoll in North Fork Gulch. He told me of the death of sons and daughters and brothers and sisters, and says the Indians are going very fast—"all die pretty soon." He remembers when the first white man came. He pointed to a big pine on the ridge and said he was a small boy and up there with his father when they saw the first white man and were afraid. The white man gave them bread.

He calls his people Nim or Neum and says they came over here from the east side of the mountains a long time ago because they were afraid of the soldiers. He says they came through Mammoth Pass and by way of the Minarets. He says he has a brother living at Bishop. He says the "Monos" occupy the San Joaquin canyon on both sides (in this region), and that there is one camp called Keough Ranch near Crane Flat on the way from here to Fresno Flat.

A very old-time small oval thin stone bowl they put on the coals for cooking meat stew and other things (and which they prize very highly) they call too-pik-we-tua. They had a large one over a foot in diameter, and a small one. The latter I finally bought, though with difficulty and at a high price.

The light yellowish strands they use for the outside winding stiches of their finest baskets, when they do not use tule root, they call se-be-tush. They say it grows higher than this in the mountains and as they had no leaves I am not sure what bush it is.

They call the Chuck-chan'-ceys (living to the north) Wah or Woah; and the Indians living south beyond the high ridge south of the San Joaquin, Ko-ko-he'-bahs.

All of these Mono Neum Indians are living in houses. At the second camp, however, besides two houses, is a genuine conical bark hut with slightly protruding entrance. At both camps large quantities of shucked acorns were drying on cloths on the ground and in large open work scoop baskets. They have also baskets full of the ground and leached acorn meal with all the bitter washed out. They call it kah-wah-nah, which is essentially the same word as the Mono Paiute name for their closely woven burden basket (ka-wo-nah).

At both camps I found several large and some small baskets full of the newly made acorn mush (ek-ke'-vy) made from the acorn of the black oak (we-up').

Old Che'-pah told me that in former times his people kept watch at the breeding places of the golden eagle, and every spring got the young and raised them by hand, catching them rabbits, squirrels, quails, and so on for food. When the eagles were full grown and in good plumage they took them to neighboring tribes and placed them on the ground in the camp. The head man of the camp to which a live eagle was brought had food set before the newcomers and gave them anything in camp—horses, baskets, beads, money—anything and everything they wanted. It is hardly necessary to add that golden eagle plumes are prized by nearly all Indians, and are worn on ceremonial occasions, dances, and war parties.

Old Che'-pah said his people used to make many rabbit skin blankets, like those now made by the Piutes and some other tribes.

He could not give me words for light and dark, or for day, except the morning, which he called tab-oo-hat. Water and river are both pi'-ah.

They make cord of the tough bark of Fremontia, which is common here (wat-si'-ve-ah).

They keep quantities of sour berry—the acid coated red berry of the squaw bush or aromatic sumac (Rhus trilobata)—which they crush and put in water to make a cooling drink, and of which they are very fond. They also make manzanita cider like the Mu'-wah.

They gather quantities of the small black seeds of tarweed (Madia elegans) by beating out with a paddlespoon (cheek-oo) into another basket. These seeds they call orn or pinole. They roast them by shaking with coals in a basket and eat them either alone or mixed with manzanita berries and acorns and pine nuts.

In a walk I took in late afternoon I struck another camp in the chaparral a couple of miles north, on the west side of the stream (North Fork). It consisted of a couple of rough brush shelters and three women and three children. They were engaged actively in shucking acorns and had stacks drying. They also had some leached acorn meal and a big bowl basket of acorn mush.

Among their baskets was a small and fine one, beautifully made, with rattlesnake bands above and below, with a horrible band of Arabic numerals between, and crosses of brilliant dyed fibers, green and red—the worst monstrosity I have yet seen in Indian baskets, though I've seen two others decorated with our numerals.

In the camps visited this morning are many good old baskets and some new ones. I bought about a dozen.

October 5, 1902. I got up before daylight this morning and walked two miles north (across North Fork) and onto the second camp of Mono Nim Indians, which I reached long before sunup. Carried my heavy camera and plates and photographed the cedarbark covered hut (tor-no-ve) with five women and a lot of baskets about. Got the camera set up and the baskets arranged and women paid (four bits a piece or two dollars and a half for the picture) and had to wait some time for the sun to rise so as to have light enough.

The women showed me another old stone cooking dish just like the one I got yesterday only somewhat larger and fully five inches deep. As they wanted twenty dollars for it, I left it—reluctantly. They have two kinds of coarse rod scoop baskets which they call respectively yet (or yat, or yet-ta) and chem-my'-ah. They are very much alike, differing slightly in the way the rods are worked in at the big end. The yet-ta is generally of peeled rods; the chem-my'-ah of unpeeled red rods.

They got breakfast while I was there and made coffee and big tortillas, which they cooked on a flat stone. They had lots of acorn mush. They had four or five children (all young) and lots of dogs and cats. They asked me to come again next year.

After leaving their camp I returned by way of old Che'-po's camp and photographed him and his wife and his son and son's wife. Then walked fast and ran the remaining mile to North Fork and reached the hotel at 7:45 am.

Got a fine old large cooking basket with water snake vertical and horizontal design from old Che'-po's wife, who says she made it long ago.

There are numerous camps of Mono (Nim) Indians in the region about North Fork, and South Fork (so-called) of North Fork; and between North Fork and the San Joaquin River, and on the sloping north side of the canyon. On the way across I visited two and got some good baskets at each. The first was the camp of Pomona, widow of the old chief. She lives on the south side of the road about three and a half miles from North Fork and right where the branch road turns off to cross the San Joaquin.

The second was on the cross road about five or six miles from North Fork and nearly half way down the canyon. At both, quantities of shucked acorns were drying and fresh acorn mush was plentiful in the cooking baskets.

At the lower camp was a pile of just roasted cones of digger pines with a pile of the thick scales just hammered off with a stone and a chem-ey'-ah basket half full of the roasted nuts. At this camp I got a white braided carrying band which they call pab-bo and several interesting baskets, one of which is deeper than broad, with vertical sides and quail plume (or grasshopper leg) design, and looks like some of the Lake Co. baskets. The old woman called it soy-on, but I am not sure that this does not refer to the design (or red color of the design), or that the basket was made here.

Valley of the South Fork of Kern

October 15, 1902. There are many Indians in the Valley and they are both interesting and perplexing. I saw today members of four tribes, two of which regularly resided here; the other two are intrusions from Tejon ranch and from the Kaweah Wikchumne.

One family of the native Indians lives four and a half miles or so above Kernville, on the main Kern. The old man of this family (named Che-ko) was accused of witchcraft and burned alive two years ago. An old woman on Canebrake Creek was also accused of being a witch and died.

I remember when in this region eleven years ago that a young girl (only sixteen) was killed for a witch. And only two or three days ago when at Piute Postoffice I was told that one of the old women there—the best basketmaker of her tribe—was accused of witchcraft and would doubtless be killed.

The man at the ranch where I am stopping tells me that two or three years ago an Indian he knew passed on horseback with a gun and told him the old woman at Canebrake was a witch and he was going to kill her. The ranch man told him that if he did the whites would hang every Indian in the valley.

So he turned and went back. But all this is a digression.

Of the native Kern Valley Indians, the lowest camp on South Fork of Kern River is about six miles above the Fork of Kern, on the north side of the river, and is known as Cason's Camp. Here I found two adult women, one young woman and several children. I got from them a small vocabulary and a few work baskets. As they, and most of the Indians here, speak Mexican instead of English, I had difficulty in getting the needed information.

Visited another camp (a single family) about three miles up from the river on the south side, in Petersen Canyon. Here they have a grape arbor and peach trees and garden and a fine spring, and a cabin. Here they are said to have killed an Indian boy recently for fear he would tell who the Indians were who burned old man Che-ko.

Also visited of these same Indians a family threshing beans in the bottom, and the main rancheria on the north side opposite Weldon postoffice and about two miles back from the river. There are four or five houses at the rancheria, mainly adobe or upright poles and adobe plastered between. The Jesus ranch is of this kind, thatched with tules. Nearly all of the roofs are of tules and some of the houses also. By this I mean that several rectangular houses with ordinary sloping roofs are covered entirely and solely—sides, roof and all—with tules, over a framework of poles. There are also rectangular brush-huts, usually without roofs, close by most of the houses.

Besides those mentioned, I visited the ranch of Bill Che-ko, who lives on the north side of the river directly opposite Onyx. He has an adobe brick house and also a tule house and is the most intelligent Indian I have met in the valley. He checked up my entire vocabulary and said it was "all right" and "good." But he could not give me a satisfactory name for his tribe. He says they call themselves, and other Indians call them, Te-bot-e-ka-kan-o or Tu-bot-e-lob-e-lay, which simply means "piñon nut eaters." He says piñon nuts (Pinus monophylla) form and always have formed an important part of their food, and he pointed out to me a mountain east (or a trifle north of east perhaps) of his house from which he and his family have just returned from a pine nut expedition. He says the trees on this mountain are mainly nut pines, which they call ta-bat-tul, or simply te-boy.

But an Indian at the rancheria told me their tribal name is Nanow; and the two women at Casus' Camp told me it was Pah-kan-e-pull—so what can one infer? I understand Bill Che-ko to say that they are a branch of the Shoshonees, but of this I am not certain.

Che-ko's wife has a superb waterbottle with braided sage brush bark

rope cork which I bought, and a beautiful finely made bowl not quite finished, with a row of men and women and many turtles on it, which I bought and which she will finish tomorrow although she cannot complete it according to her original plan, which was to have two rows of men and women. I shall speak of this tribe as the Kern Valley Indians. They tell me the Indians living up on Kelso Creek belong to a totally different tribe which they call Kah-wis, and they consider them a branch of the Paiute Nation.

They say that the family living at Canebrake Creek belongs to still another tribe—the Cosos—of which they are the sole survivors in the valley. Formerly there was a large settlement of these Indians on the slope back of where Robert's ranch now is, about five miles above (east of) Onyx. All are now dead. A few still exist at Coso in Inyo Co.

A Wikitchumne woman from Kaweah River (Lemon Cove) married a Kern Valley Indian and is living here now. She brought her Wikitchumne boy (about sixteen) who is working at the Weldon Ranch, where I talked with him. About eight Indians ate dinner with us at Weldon—they are working on the ranch. Several of the Kern Valley Indians are said to own and work good ranches here.

They have dogs and cats and chickens and doves in abundance and all of the usual tameness. At "Jesus" Camp doves and chickens walked over my feet and between my legs while I was talking with the Indians.

New-oo'-ah

October 12, 1902. I visited two Indian camps (one-half mile and two miles north easterly from Piute) of a tribe of Indians I have never met before. They call themselves No-woo'-wah or New-woo'-ah. In these camps were newly killed mountain quail and valley quail. The latter are common all about and I saw the young boys shooting them with small .22 caliber rifles. The mountain quail they told me they kill on Paiute Mountain above the mine.

The upper camp is over the ridge and is obviously a very old Indian home. It consists of a ranch with garden and fruit trees—mainly apple. There is a good adobe house inhabited by two families. The house is in two parts separated by a partition. The Indians told me it was built by Indians a long time ago. A few rods away is an interesting hut, about eight feet high and ten in diameter. It is oval and has a frame work of slender poles fastened together at the crossings with bark withes or thongs. There are both upright and horizontal poles, and the upright ones curve over and down instead of sticking up at the top. The entire hut is covered with large

round rushes, made into a coarse mat which completely covers the framework, leaving an entrance in front which opens into a small brush enclosure. The hut may be a sweat house. In it I found several burden baskets and a couple of resin spoons, for pouring the hot pine resin on the water bottles to make them waterproof. These I bought, along with several other rough work baskets and a fairly good hat bowl.

The burden baskets are rounded off at the bottom like those of the Wikchumne, not long and pointed as in most tribes.

Besides the rough baskets—the utensils of the tribe—these Indians make the most beautiful and perfect bowls and bottle-necks of the so-called Kern type. They sell them for twenty to thirty dollars a piece. They have several now partly done in each camp. Instead of using the tulare root (Cladium mariscus) for the body of the basket they use a finely split yellowish-white willow strand (Salix lasiolepis) which they call su-be. The designs are spirals of hour-glass form or of overlapping rectangles in black and red—usually broad red centers with black borders or border lines. The red is of two kinds—a bright red which they say is the bark of the same willow (su-be) at certain seasons, and a dark purple-red which they say is the bark of a "cactus root" from across the mountains. They call it soo-too-vy. It is the root of Yucca arborescens. The black is not the Pteris root so universally in use farther north, but the pod of Martynia, which they call teb-oo-ah-noo. The baskets I saw are:

burden baskets (large and close)	on-ne-ay
burden baskets (small and coarse)	wo-ney
scoop (shape of Chama)	yat-too-tsy (or yat-toot)
seed paddle (with handle)	tan-nik-koo
small bowl used for hat	ah-koot-sy
circular winnower (like het-al)	sag-go-tsy
water bottle	ot-so-zy
resin spoon	san-nah-que-ah but sy

Besides the above, they told me that the large bowl for cooking acorns (which they had none to show me) they call mur-ru-wuz-zy; and the papoose basket, koh-noots-sy.

They showed me an unfinished bowl which appeared to be a half made bottle-neck. In its unfinished condition they call it na-ha-cup-py. They say by and by when finished it will be se-var-run-gy.

The material of body of basket, finely split strands of yellowish willow (su-be). This material appears to be the same as that used by the Panamints for the body of their best baskets, and in both cases can be told

by the feel—fine filaments projecting which the fingers recognize in passing over.

Light red willow (Salix lasiolepis) bark, su-be (used in designs, same name as when peeled).

Black design (Martynia), teb-oo-ah-noo (or teb-oo-ah-noo-bah).

Dark purple red ("cactus" root), so-too-by (Yucca arborescens).

Grass for grass coil, se-pumb-by (Epicampes).

The old woman was cooking acorn mush in a tin pail, for lack of a cooking basket! This is the worst I ever saw.

They make a great deal of money by selling their bottleneck and bowl baskets, which are among the most valuable and command the highest prices.

The soap root brush (wah-nee-jah) made by these Indians has a longer handle than usual.

They make large cakes of native tobacco (Nicotiana attenuata) of which I bought one for a dollar fifty cash and some beads. The tobacco grows abundantly along the creek bottom near the lower camp. When dry they pulverize it very fine by rubbing with stones. It is then compressed into a very compact mass, and (apparently) coated with some varnish-like material on the outside. The outside is black; the inside, brown. Some of the cakes are rectangular; the one I got is an irregular mass (roughly oval) evidently shaped by hand.

Ko-ko-he'-ba of Sycamore Creek Valley

October 28, 1903. Spent the forenoon in Sycamore Valley. In afternoon rode a horse up north two and a half or three miles from Hancock's and climbed up into a great amphitheatre on the southeast face of Burr Mountain, to a small remnant of the original Ko-ko-he-ba tribe. The place itself is named Ko-ko-he-ba, and the tribe doubtless was named (as usual) from the place. The Indians commonly pronounce the name Ko-ko-he'-b. The place is high up on the mountain side and commands a grand view to the south and east, over Sycamore Valley and down and way across Kings River to the high mountains lost in the hazy distance. The mountain about their home is forested like the rest of the country with oaks and digger pines. We found stone chimneys of houses burnt after their inhabitants had died.

Two old women, two young women (daughters of the old ones), and one baby (five all told) were the sole inhabitants. Probably one or two men live here but are away.

The women talked essentially the same language as the Holkoma of Cole Spring. They were busy shelling acorns and had already built a pair of fine caches on a high rock. Close to their houses is a big rock containing a lot of mortar holes, sheltered from the sun by a brush canopy.

The acorn caches here are unfinished, lacking the outer covering and cap of grass, which keeps out the rain and snow. They are made of bundles of fine brush stood up vertically and held in place by bands of bark of Fremontodendron californicus, which these Indians call wish-beb'-a. The whites in this country call Fremontia "slippery elm." The bands average one and a half inches in breadth and there are six or eight on each cache. The cache is called so-nah-wa. Each holds eight or ten bushels of acorns. One is larger than the other. Saw two others just started on separate rocks.

The women at Ko-ko-he'-ba had a lot of conical blunt, pointed burden baskets (wo-no) of the second or middle style of weave, ornamented by one or two bands near the big end, just like those of the Hol'-ko-ma and Cho-e-nim'-ne.

They also had a number of the Paiute style of snowshoe-shaped winnowers, which they call to-a-too—the same as the round ones, implying that the Paiute kind are a comparatively recent invasion, for if they were here originally they would surely have a distinctive name. On the other hand, these Indians are clearly of Paiute origin. This would seem to imply that they came across the mountains into this region before the Owens Valley Paiutes (from whom they undoubtedly came) had these baskets. It is a curious case and not yet clear to me.

The Ko-ko-he'-bas talk essentially the same language as the neighboring Hol'-ko-mas, although the two consider themselves distinct tribes. The Burr Valley Indians (now extinct save one old woman) were Ko-ko-he'-bas.

The boundary line separating the territory of the Kokohebas from that of their near neighbors on the east (the Holkomas) runs southerly or perhaps south-south-easterly from a large mushroom-shaped granite boulder on the west side of Sycamore Valley, perhaps half a mile below (nearly south or southwest from) the Kokoheba village and a mile and a half (approximately) north from Hancock's house. This rock they call too-po-ge. I visited it. It has no marks on it but is said to be known to all Indians of this part of the world. In directing Indians from a distance to points in this region it is said they

are told to first go to this rock and then proceed in such and such a direction to destination.

At the Ko-ko-he'-ba village high up on the mountain side, visited by me today, the women have large quantities of split acorn meats, recently shelled, spread out to dry on the rocks. They have also plenty of acorn mush recently cooked in the large basket bowls. Both large and small basket bowls are full of it.

They have two large leaches, where the bitter of the acorn meal is leached out.

One old woman was winnowing the split acorn meats to get rid of the red skin which when dry comes off readily. She did it in a big snow-shoe shaped (Paiute style) winnowing basket, keeping the broad butt end toward her body and grasping the sides (where broadest) with her two hands. She put in five or six quarts of meats at a time and tossed them up by giving the winnower a series of slow jolting vertical shakes. Every time the heavy meats came down they caused the winnower to bow down in the middle, and the friction of the meats against one another rubbed off the red skins, which the wind carried away like chaff.