

## **UC Merced**

### **Journal of California and Great Basin Anthropology**

#### **Title**

Achumawi and Atsugewi Fishing Gear

#### **Permalink**

<https://escholarship.org/uc/item/5645k98j>

#### **Journal**

Journal of California and Great Basin Anthropology, 12(1)

#### **ISSN**

0191-3557

#### **Author**

Richards Barter, Eloise

#### **Publication Date**

1990-07-01

Peer reviewed

# Achumawi and Atsugewi Fishing Gear

ELOISE RICHARDS BARTER, California Dept. of Parks and Recreation, P. O. Box 942896, Sacramento, CA 94296.

**D**URING a collecting trip for the Field Columbian Museum of Chicago in 1902, John W. Hudson acquired gear used by the Achumawi and Atsugewi for fishing. In 1986-87 the Pit River Tribal Council and the California Department of Parks and Recreation collaborated to protect the unique stone fish traps or weirs at Ahjumawi Lava Springs State Park in northeastern California. This paper, describing the fishing equipment collected by Hudson, is supplemental to information on Pit River fishing practices compiled from ethnographic sources and recent interviews (Evans 1987; Dreyer and Johnson 1988). As the Chicago collections are not easily accessible, emphasis is on unpublished material rather than literature review.

## JOHN W. HUDSON AND THE FIELD MUSEUM

John Wilz Napier Hudson (1857-1936) was born in Nashville, Tennessee, where he was educated as a physician (Redwood Journal 1936:1). In 1889, Hudson arrived in Ukiah, California, to practice medicine. He had been

interested in antiquities in his native state. In his practice in Ukiah he made many visits in the country and he soon became interested in the Pomo Indians, there being many villages of Pomo near Ukiah and in the adjoining county of Lake. This interest in the Indians led him to acquire a good working library on Anthropology [Dorsey 1900].

Hudson's interest in the Pomo may have been reinforced by his marriage to Grace Carpenter Davis in 1890. She was a professionally trained painter from a well-educated, socially-conscious pioneer family (Grace

Hudson Museum 1986) and was commercially successful as an artist specializing in portraits of Indian children and older people (Abel-Vidor 1983). It appears that sale of her paintings provided a major part of the Hudson income for many years.

John Hudson amassed a fine collection of Pomo artifacts. Encouraged by correspondence with anthropologists at the Bureau of American Ethnology in Washington, D.C., he pursued serious study of the Northern and Central Pomo, preparing numerous unpublished works on the Pomoan languages (Abel-Vidor 1983:3). By 1895, Hudson no longer practiced medicine, concentrating instead on his Pomo studies (S. Abel-Vidor, personal communication 1987). In 1897 he negotiated the sale of his personal Pomo collections to the Smithsonian Institution, and shared notes on the Pomo with Otis T. Mason (Holmes 1900:175-176).

Hudson met and assisted George A. Dorsey, Curator of Anthropology of the Field Museum, while Dorsey was collecting Indian material in northern California in 1899. The association was important to both of them. A year later Dorsey hired Hudson as an Assistant Ethnologist for the Field Museum to travel throughout California making

such collections among the different stocks and tribes of California as you are instructed to make. . . . Each specimen is to be accurately labeled, giving tribe, locality, native name, use, price etc. . . . Each collection is to be made as complete as possible. . . . You will also use your utmost endeavor to have made to order copies of those things which have ceased to exist and which are necessary for the complete and proper representation of the life of any given tribe [Dorsey 1901].

Hudson collected for the Field Museum from 1901 through 1904. He spent time each year in Chicago cataloging the material from the previous season. Altogether, more than 3,500 artifacts from 20 tribes were accessioned and described on catalog cards.

Differences between Dorsey and Hudson concerning publication and field notes, as well as a change of focus in the Field Museum's world-wide collecting policy, terminated Hudson's work in 1905 (Barter 1987). Hudson prepared a typed version of his original notebooks. Its 357 legal pages are untitled and include no dates and few place names. Hudson's daily handwritten field notebooks from 1901 to 1904 are in the archives of The Grace Hudson Museum of the City of Ukiah, California. These are dated and contain itemization of expenses, artifact collection numbers, native words, and occasional drawings, legends, and music. These notebooks are richer in detail than the Field Museum typescript, although the latter sometimes elaborates on a theme.

At the turn of the century, the Field Museum utilized North American linguistic stock classifications as a major part of its ethnographic identification information. Generally, these were the terms proposed by Powell in his 1891 linguistic map (see Heizer [1966] for a discussion of turn-of-the-century views of linguistic divisions). Hudson included in the Palaihnihan stock the people he called At-su-ma-wi (Fall River), Basiwic (Big Valley, Lassen County), Hamawi (several localities in Modoc and Lassen counties), and unnamed groups near Burney and Montgomery Creek. In a journal entry from Burney Valley, September 24, 1902, Hudson commented:

The Hat Creek people are a part of the Pit River Family, Plainihan [sic] stock, and were considered the strongest and most warlike portion of these people. They were almost continually at war with the Dixie Valley to the east, and to such venturesome Maidu who

should cross the range to the south. They kept in subjection all the tribes of their own who happen to come down the river. In the case of war, they were expected to do the fighting.

The dialect differs slightly from that of Fall River, but radically from that of Big Valley; also from that of the Hat River and Dixie Valley. These latter seem to be entirely alien stock wedged in here in very early times by the stroke of fate.

Every tribe along this river, of different stock, are polyglot and seem to understand every other language spoken within one hundred miles of them. This seems to have been necessary from the fact of intertrade and intermarriage [Hudson 1902a:September 24; 1905:270-271].<sup>1</sup>

### FISHING AND FISHING EQUIPMENT

Hudson spent three weeks in late August and September, 1902, collecting from Palaihnihan peoples. Of the 220 cataloged artifact entries, eleven relate to fishing equipment. Nine items are from the Fall River Achumawi, while two without tribal designation are from Burney and Montgomery Creek. In addition to the collected equipment, scattered notes relate to fishing and river-related activities and vocabulary.

The first notes relating to fishing activity are from Eagle Lake.

This is the site of an ancient volcano. Lava, cinders and pumice, both fresh and ancient, are the only soils. . . . Walked over a lava bed of very recent flow in which were charred pine trees still standing, which goes to confirm the Indian story of the recent eruption. This lake has but one feeder, Pine Creek. Like Tahoe these shores were scenes of great aboriginal activity, though no tribes had permanent homes here.

Fishing occupied the time of visiting bands, and these indians tell me that no people were permitted from the southern country, Washoes or Maidu, to fish at this lake; that there was an armed truce from the earliest times and that the presence of one of these foreign tribes in early days always meant a battle as intruders, and they were driven back to their own territory. It is extremely doubtful that the Maidu came this far north across the mountain chain

and the sterile lava beds. It is about forty miles from this lake to habitable ground in Plumas County, and I do not believe the Maidu would venture to this distance merely to catch fish, especially as their own fishing was then as now as good as can be found in northern California [Hudson 1902a:August 28; 1905:259-260].

From Eagle Lake, Hudson traveled by stage or horse and buggy to Bieber, Adin, Pittville, Fall River (Fall River Mills), Burney, and Montgomery Creek. He spent time near Fall River and Tule (Big) Lake. Except as noted, the Palaihnihan fishing gear described was collected as "At-su-ma-wi" from "camps west of Fall River," "up Fall River 12 miles to two lone camps near the head of the Tule River," and a "camp west of Fall City." No further description of the camps was included. The sellers and artisans were not listed by name. Most articles cost between \$.50 and \$1.50, although a drag net was \$4.00. Hudson's botanical identifications of materials appear correct, and are retained.

Hudson wrote detailed narrative descriptions only when he was particularly interested in a tribe or activity. Unfortunately, Achumawi fishing was covered in a most cursory way. Hudson probably did not observe fishing, but simply collected paraphernalia and asked about its use.

### Tule Blinders, Sandals, and Leggings

A set of tule blinders, sandals, and leggings used during fishing are included in the collection. Hudson (1905:266) explained that "fish were usually speared at night by means of a campfire, and the spearman wore blinders to protect his eyes." These blinders, *la'tiki e'* or *la ti'ke*, were "bound on temples of fish spears man to keep light from dazzling the eyes" (Hudson 1902b:September 14). There is no information that would indicate the relationship of the spear fisher to the light source.

The blinders (FM 58684) are a pair of tule trapezoids connected by a stiff oval

headband (Figs. 1 and 2). Each blinder is made of unprocessed tule, and is 24.8 cm. long, and 11 cm. across at the widest point. The tule is held together by a twined wrap at the narrow end (worn nearest the head), and reinforced by a simple weave into five groups about 7 cm. from the narrow end. This provides a flare. These bunches are bent back at the wide end, so that there is no unfinished edge, and secured by weaving two selvage strands of tule through the ends. A circular headband of three-ply braid, 18 cm. in diameter and 1 cm. wide, is inserted through the edge of each blinder. It is strengthened with a wire insert. Although the design is simple, the object is well made. No raw ends of tule show, and the tule headband is braided tightly so that the wire shows only where it is twisted to secure the ends. There are no obvious signs of wear. Hudson often commissioned native craftsmen to make examples of items that interested him, so possibly these were never used.

There are also sandals and leggings for use in "cold weather especially when wading in icy water" (Hudson 1902a:September 19; 1905:267). The tule sandals (FM 58575, Fig. 3) are 35 cm. in overall length. The tule is not secured on the toe ends, leaving a 14-cm. fringe. A snug fit for the heel is achieved by tightening the wefts at that end, resulting in a shoe-like heel piece. The weft threads are alternately tight and loose on each selvage edge, resulting in staggered loops on the side of the sandal. It appears that the sandals were bound onto the feet by lacing through these loops.

The leggings (FM 58575) are fragile and could not be unwrapped for complete inspection. They are made of tule, and are 25 cm. long by 34 cm. wide. Like the blinders, the tules are bent at the edge of the legging so that there are two layers, with a heavy two-ply cord along the end. A finer string (cedar

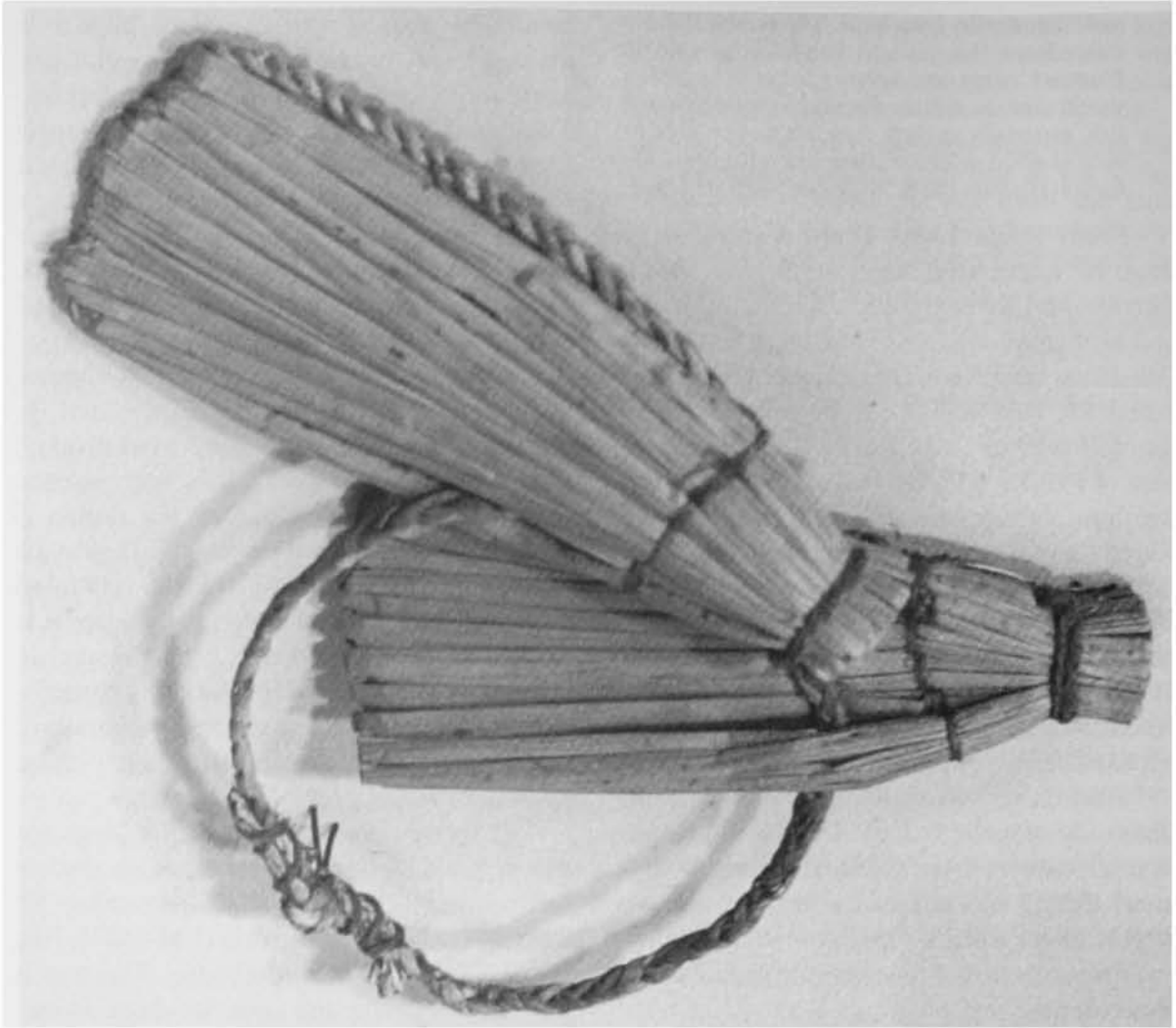


Fig. 1. Tule bladders (FM 58684) to keep light from the eyes during spear-fishing, each eyepiece length 25 cm.

bast?) is woven through the selvage of the leggings, with the weft left loose on the selvage. It appears that this treatment provides loops through which the leggings could be lashed in place.

### Baskets and Nets

Hudson collected several nets, which he cataloged as fish dip net, drag nets, and seines. A large, scoop-shaped, open-twined basket (Fig. 4) was used as a "fish dip of skunk hazel wood, basket for small fish, *dat sis tei*" (FM 58632); Hudson's skunk hazel probably was *Rhus* sp. This basket measures

approximately 125 x 90 cm. Two border elements, averaging 1.5 cm. in diameter, are lashed together with tulle to form a roughly circular frame. The mesh is formed by twining unpeeled sticks of varying diameters (0.2-0.8 cm.) together with tules, then lashing the whole to the frame. The resulting mesh averages 1 x 3 cm.

Two nets, called "seine purse" or "drag," of *Apocynum* fiber are listed in Hudson's notebooks. The one cataloged into the collections appears to be a version of a dip net (Curtis 1924, XIII:136) or weir net (Evans 1987:19).



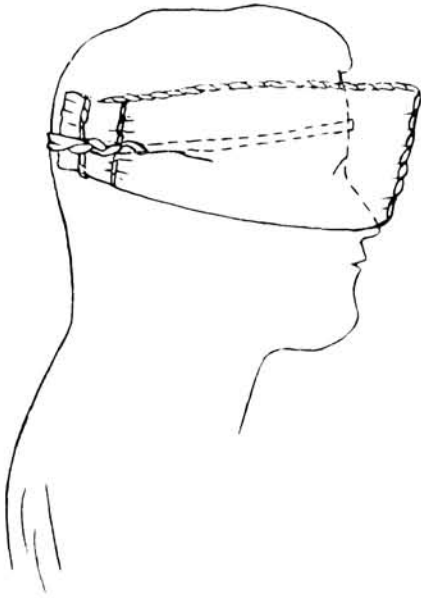


Fig. 2. Tule blinders (FM 58684), showing end weave and probable position during use. Drawing by Christina Savitski.

The available net (FM 58598) is an open-ended rectangular bag measuring 140 x 220 cm. and constructed of fine, two-ply twist cords less than 0.1 cm. thick. The bag is wider than it is long, and does not appear to be tapered. Each mesh is 3 x 3 cm. The opening of the bag is closed by two cords, each centered and threaded through the top mesh of half the bag. Each cord, estimated to be 230 cm. long, is two-ply twist 0.4 cm. thick. One is red-brown, the other tan. The ends of the reddish cords are tied to those of the tan cords. The distinctively colored neck cords may have assisted in placing the net in the desired position, especially if it were held in place by the force of water (Evans 1987:20).

A drag net, *ke'law*, made of *Apocynum* fiber was used with a long pole from a boat. While this item (FM 58631) could not be located in the collection, Hudson sketched it on the catalog card (Fig. 5).

Another unpublished description of Achumawi fishing equipment appears in Harrington's 1931 Achumawi notes. His informants told of the *k'ila'u* or *'ayahawysuma*, a big kind of net.



Fig. 3. Tule sandal (FM 58575) used while fishing in cold water; 35 cm. long.

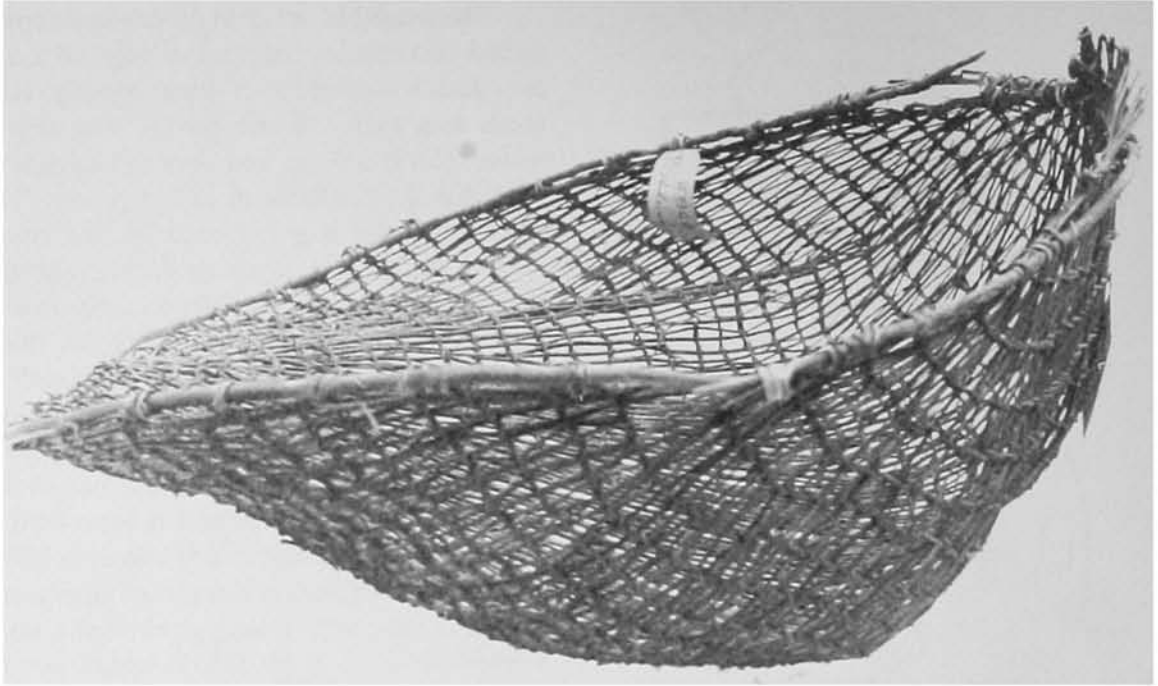


Fig. 4. Basket (FM 58631) used as a fish dip; width 125 cm.

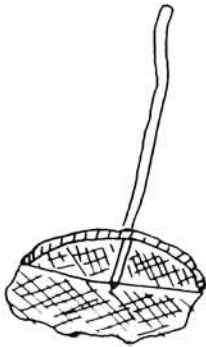


Fig. 5. Hudson drawing of drag net (FM 58631); no size given.

This is the long one. It is weighted with rocks along the bottom. The net is about 4 feet long. Two men hold it, one man swims. Sucker, trout get caught in its meshes. It is a gill net. Get a pile of trout two feet high at one netting. For using [it], they build a little fire at night and fish with it all night. If hungry, roast and eat some of the fish [Harrington 1984:Rl. 35, Fr. 98].

### Fish Spears and Fishhooks

Hudson mentioned two types of fish spears, single- and double-pronged spears for sucker or other shallow-water fish and double-pronged spears with removable barbs for salmon. Unfortunately, discrepancies in Hudson's records blur the distinctions in use.

The only fish spear (FM 59895-2) currently in the collection is double-pronged, utilizing two flexible willow shafts with a bone barb attached to each (Fig. 6). The bone points, which are not particularly sharp, are attached with windings of fine sinew, possibly waterproofed with pitch. The prongs are inset into a shaft and again reinforced with windings of fiber. The proximal end of the shaft is cut off bluntly, perhaps indicating that the entire implement has been shortened. The overall length is 87.3 cm.

The catalog card for FM 58595 and cross-referenced field notes describe a sucker or shallow-water spear: "*La pu'ts* barbs for end of suck spear, points of deer bone, prongs of

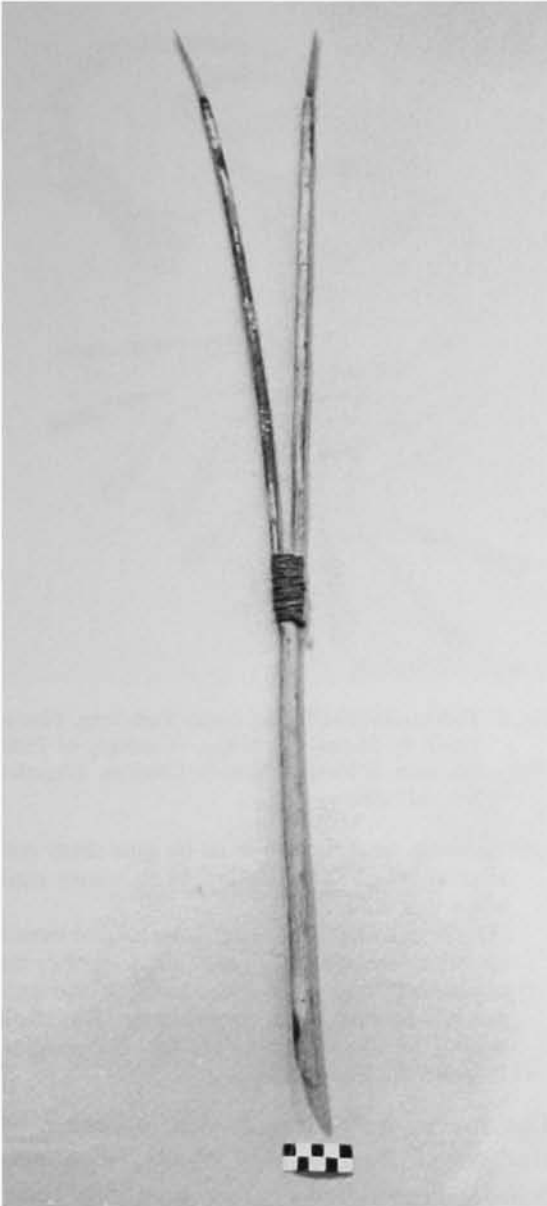


Fig. 6. Fish spear (FM 58595-2) with double prongs; length 87.3 cm.; scale 5 cm.

willow.” The illustration on the catalog card (perhaps the missing FM 58595-1) shows a single barb set into a shaft and reinforced with windings. Hudson listed the entire device as 19.5 in. (49.5 cm.) long.

The field notes indicate that Hudson collected a “pctcu’la [sic] salmon spear with two

removable barbs.” Cross references between the field collection numbers and catalog cards indicate this is FM 58586, barbs for fish spear, which is missing from the collections.

Hudson’s notes also describe a single-pronged fish spear that was made of fir, sometimes twenty feet long. It was never cast from the hand, but used to jab the passing fish (Hudson 1905:265). This was called a *La’su*, although a “Ju’tsi fish spear, bone point” is also listed (Hudson 1902b:September 14).

Three items cataloged as fish barbs (FM 58721-2, -3, -4) may be points for fish spears. One set is pictured here (Fig. 7). A set consists of two barbs on an *Apocynum* line. Each point is set in a tapered shank of wood, the proximal end of which is hollow. A sharp point is inserted into the narrow distal end of the shank, and wound for reinforcing (and attaching the line) with two- or four-ply twisted fiber and pitch. In two instances the sharp point is bone (-2, -3); in the third (-4) it is iron. The corresponding field notes list these as *pcteu’la* used with salmon spears, and add that fish spear barbs with iron points are “exactly as aboriginal, iron excepted” (Hudson 1902b:September 15).

A set of nine fishhooks (FM 58596) consist of “barb on bone, shank of sage wood, string of apocynum” (Fig. 8). Each hook is made of two pieces, with the bone barb attached to the wood shank at a 45-degree angle with winds of fine twisted string. No pitch was observed. Each hook is on a separate string. The hank is wound for storage, and it is not clear how the hooks were ganged.

These were described by Hudson as

*Ta pa’mi*, fishhooks made of bone, double pointed and tied in the center. They were baited with minnow and left all night in the stream like a trout line [Hudson 1902b:September 14; 1905:265].





Fig. 7. Fish barbs, or points for fish spears (FM 58721-2); each barb 11 cm. Photograph by James Balodimas. Courtesy of Field Museum of Natural History, Chicago. Negative No. A111681.

### Mussel Harvesting

Near Burney, Hudson noted a technique for collecting mussels that was new to him.

A heavy roundish basket was suspended to the neck and used by divers to collect mussels. This river is so cold and swift that the diver sets a pole against its bottom and a friend placing his weight against it holds it in place while the diver descends the pole to the bottom, gathers material quickly into his basket and returns in safety [Hudson 1905:271].

In his field notes, Hudson called this basket *ha lu' la pen kun*, and said it was used as a pack basket for seeds as well as by divers for mussels (Hudson 1902b:September 24).

J. P. Harrington described the practice of mussel gathering in more detail than did Hudson. Pit River Achumawi used a small round net called a *haphwa'ma*, or possibly a *phiyu'ly'i* or *puli'ly'i*.

Rosa [Charles] and Grt [Grapevine Tom] say man puts a rock on his neck as a weight, hanging this *haph wa'ma* sack on in front, and dives for mussels, does this in winter time



Fig. 8. Fish hooks (FM 58596); hooks 5 cm. long. Photograph by James Balodimas. Courtesy of Field Museum of Natural History, Chicago. Negative No. A111682.

throwing mussels into it as he gets them one after another. Mussels are *fat* in winter time when it is cold.

[The man collecting mussels] sweats and sweats in [the sweathouse] and then grabs his *haphwa'ma* and goes down to river and gets mussels in cold water in which an [American would] be afraid to wet his feet [Harrington 1984:R1. 35, Fr. 342-343].

The mussel-harvesting basket collected by Hudson at Burney (FM 58681) is a pot-bellied, constricted-necked container constructed of willow in an open twine (Fig. 9). The bottom is flat and reinforced with stronger elements. A decorative band is woven below the neck. Long leather loops are threaded through the weave. The height is 28 cm., with the belly flaring to 41 cm., and the neck aperture 22 cm. It is not clear how the basket fit on the diver. Figure 10 shows the leather straps as they are today. Perhaps the main strap went over the neck, suspending the



Fig. 9. Basket (FM 58681) for collecting mussels; scale 5 cm.

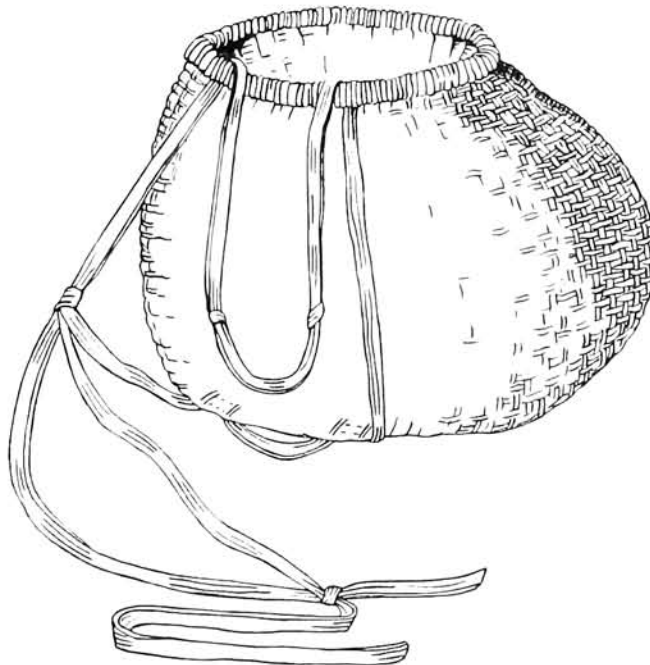


Fig. 10. Sketch showing arrangement of straps on mussel collecting basket (FM 58681). Drawing by Christina Savitski.

flat side of the basket against the chest. An arm through the smaller loop would have added stability.

There is no information on the use of a "shell harvester basket" (FM 58670) Hudson collected at Fall River (Fig. 11). It may have been used for nuts with shells rather than shellfish. The shell harvester is roughly hemispheric in shape, with a loop handle made of twisted cloth and fiber. It is slightly flattened on one side, but it is not clear whether this is the result of construction, use, or storage. The basket is 30 cm. high and 28 cm. in diameter, and made of an open twined weave from serviceberry shoots.

Unfortunately, Hudson did not discuss the mechanics of fishing, or customs and social organization relating to it. He had a camera with him during this trip, but no photographs of fishing have been located.

Missing information is a common frustration when analyzing late eighteenth- and early nineteenth-century field notes and collections. These items, however, represent a point on a continuum between the archaeological record and present-day practices. Fishing continues to be an important activity



Fig. 11. Shell collecting basket (FM 58670); height 30 cm. Photograph by James Balodimas. Courtesy of Field Museum of Natural History, Chicago. Negative No. A111683.

among the Achumawi, as it was in prehistoric times. In spite of the gaps in Hudson's 1902 documentation, the objects he collected illuminate the persistence of traditional fishing tools and practices among the Achumawi.

#### NOTE

1. The Field Columbian Museum became the Field Museum of Natural History. For stylistic reasons, Field Museum and the abbreviation FM is used to refer to both names. When the FM typescript and the Grace Hudson Museum manuscript notes include the same information, the typescript is quoted and both sources are cited. If there are significant differences, or additions, the manuscript material is italicized. Typographic errors and mistaken spellings in common words have been corrected. Hudson's Achumawi is reproduced as nearly as possible here.

#### ACKNOWLEDGEMENTS

The Field Museum of Natural History, Chicago, and the Grace Hudson Museum, Ukiah, gave permission to study the Hudson artifacts and notes. I appreciate the assistance of James VanStone, Christina Gross, and Janet Miller in Chicago, as well as that of Suzanne Abel-Vidor, Sandra Metzler, and Belle Hicks of Ukiah.

#### REFERENCES

- Abel-Vidor, Suzanne  
1983 *The Sun House*. Ukiah: The Sun House Guild.
- Barter, Eloise Richards  
1987 *Collections of Dr. John W. Hudson from the Vicinity of Lake Oroville State Recreation Area*. Report distributed by the California Department of Parks and Recreation, Sacramento.
- Curtis, Edward S.  
1924 *The North American Indian: Being a Series of Volumes Picturing the Indians of the United States, and Alaska*, Vol. 13. Frederick W. Hodge, ed. Norwood MA: Plimpton Press.
- Dorsey, George A.  
1900 Letter to F. J. V. Skiff, Director, Field Columbian Museum, December 25, 1900. On file at the Directors' Archives, Field Museum of Natural History, Chicago.
- 1901 Letter to J. W. Hudson, January 3, 1901. On file at the Department of Anthropol-

- ogy Archives, Field Museum of Natural History, Chicago.
- Dreyer, William R., and Keith L. Johnson  
 1988 Archaeological Investigations of Stone Fish Traps at Ahjumawi Lava Springs State Park, Shasta County, California. Report prepared for the California State Department of Parks and Recreation, Sacramento.
- Evans, Nancy H.  
 1987 Traditional Ajumawi Methods of Utilizing Sacramento Suckers at Ahjumawi Lava Springs State Park. MS on file at the California Department of Parks and Recreation, Sacramento.
- Grace Hudson Museum  
 1986 Grace Hudson Museum - The Sun House. Pamphlet distributed by the Grace Hudson Museum, Ukiah, CA.
- Harrington, John P.  
 1984 John P. Harrington Papers, Vol. 2: Native American History, Language and Culture of Northern and Central California. Washington: Smithsonian Institution, National Anthropological Archives.
- (Microfilm edition, Vol. 35. Millwood, NY: Kraus International Publications.)
- Heizer, Robert F.  
 1966 Languages, Territories and Names of California Indian Tribes. Berkeley: University of California Press.
- Holmes, William Henry  
 1900 Anthropological Studies in California. Washington: U.S. National Museum Report for 1900:155-185.
- Hudson, John W.  
 1902a Notebook XV. Accession 22541, on file at the Grace Hudson Museum, Ukiah, CA.  
 1902b Notebook XVI. Accession 23516, on file at the Grace Hudson Museum, Ukiah, CA.  
 1905 Typescript of field notes. Department of Anthropology, Historical Archives (A11-F2), Field Museum of Natural History, Chicago.
- Redwood Journal  
 1936 Obituary of John Hudson. January 26. Ukiah, CA.

