

## A STUDY OF THE MATERIAL ASPECTS OF

### NORTHEASTERN MAIDU BASKETRY<sup>1</sup>

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The excellence of California Indian basketry has long been recognized. The Climax area for this basketry, represented by the Pomo, has been intensively studied by Barrett (1908). Another highly developed center is that of the Maidu. Pomo basketry is an elaboration of existing basketry traditions, while that of the Northeastern Maidu was probably brought about by the fusion of various traditions. Northeastern Maidu basketry is equal to that of the Pomo in craftsmanship and perhaps in diversity of types, but it is not as ornate--although it is certainly pleasing esthetically.

The purpose of this paper is to make a brief survey, to be used in conjunction with Dixon's work on designs (Dixon, 1900), of Northeastern Maidu basketry. This paper, for supplementary purposes, will deal with material aspects, emphasizing such topics as basket use, techniques of manufacture, motor habits, and use of the environment.

#### Field Work

Field work for this paper was conducted from January 19th to February 1st, 1957. Interviews were held with eight Maidu Indians. Six of these were Northeastern Maidu. The accounts of three in this group were used in the preparation of this paper. Marie Potts of Sacramento, California, was my chief informant. Information received from the other informants was primarily for corroboration.

Mrs. Potts is highly sophisticated and is acquainted with some anthropological literature on the Maidu. Due to the sparsity of literature on Maidu basketry I doubt if appreciable bias was caused by reinterpretation of written ethnographic accounts. However, some effect was noted, e.g., her account of the procedure of splitting willow coincides closely with that of Dixon (1905). Due to her sophistication leading questions could occasionally be asked with profit, as a time saving device. Interview time was paid for. Information was volunteered with enthusiasm and she was anxious to have data on the Maidu recorded. She did extensive work on coiled baskets in my presence, allowing direct observation of this technique. Although she also demonstrated twining procedures, direct observation of this technique was of a cursory nature. Her skill in twining is limited.

Major discrepancies in information were limited to recent introductions. In this paper I weighed the accounts of my informants against published accounts and available museum specimens.

#### Types

A basic need of all societies is the use of containers. Important uses of containers are the preparation and serving of food, storage, and transport. In central California nets and rigid-textiled receptacles--or baskets, are used as

containers. Particular container needs are fulfilled by using specific types of baskets. By correlating basket use, form, and pertinent linguistic data, these specific basket types can be isolated for the Northeastern Maidu (Plate 1, Table 1)<sup>2</sup>

An unfinished basket is a hójja; a finished basket a loló. A large coiled basket with flaring sides is used for stone-boiling (Plate 1a). The flaring sides provide a large orifice, facilitating the addition of heated stones. The stones are lifted into the basket by a looped stick or wooden tongs. Stirring with a wooden paddle prevents the basket from being burned by the heated stones. Smaller coiled baskets are used as dippers, and as eating and drinking bowls (Plate 1b).

Globose baskets (Plate 1d) may be coiled or twined, and are used for storage. Large storage baskets are coarsely twined. These are common in areas where the acorn granary is not used. Closely twined baskets with constricted necks, and covered with pitch for waterproofing, are water bottles. Ornamental baskets are decorative and may store luxury items.

Circular plaques and coarsely woven baskets are patá. Circular plaques are usually coiled (Plate 1e), though coarsely twined ones (Plate 1g) also occur. A large circular plaque used as a plate is a watá. A smaller circular plaque, used for sifting and parching, is a bátky. Sifting is accomplished by tilting the basket at a sharp angle and vibrating it by tapping the edge with a stone. This causes the coarser meal to shift downward toward the lower edge of the basket. It is then shoved out and reground. Parching is accomplished by shaking a plaque containing live coals or a heated stone together with the material to be parched. Meal is swept off a sifting basket with a soaproot, Chorogalum pomeridianum (Ker.) Kunth, brush or a pine cone petal brush. Oval and subtriangular baskets are walét. Closely twined ones are used as winnowers and parchers; open twined ones as sifters and occasionally they are filled with pine needles or leaves and serve as leaching basins. Oval, open twined baskets with handles have a specific term which I was unable to obtain from my informants (Plate 1h). They are used as seed beaters and for whipping seeds into burden baskets (see below).

A large conical-shaped basket is used for carrying loads. It is supported by a buckskin carrying strap, haká, attached at three points about two-thirds up from the base. This basket type is called a burden basket. An overlay twined burden basket is a woló, and is used for transporting seeds, etc. (Plate 1i). Occasionally a piece of buckskin is attached to the basal point to prevent wear. An open twined burden basket is a lúku\* (Plate 1j). It is used for transporting firewood, acorns, etc., and for catching fish in rivers<sup>3</sup>.

Other rigid textile forms include caps, zolé; mortar hoppers, wapýni; fish traps, míkki; and cradles, týty.

#### Techniques of Manufacture

Manufacturing technique often determines basket type. Baskets that hold water are coiled, overlay twined, or close twined with a covering of pitch. Baskets used for food preparation are coiled, coiled baskets being more durable than twined ones.

When a basket is to be manufactured the first step is the processing of materials that have been harvested and stored. These materials are soaked and scraped to make them smooth and even for basket weaving. The quality of a basket is judged primarily by its evenness. If the soaking container is small, materials may be tied into a loose overhand knot for compactness. A piece of obsidian is used for scraping<sup>4</sup>. Foundation materials are scraped differently than thread materials. Scraping foundation material is called waʔá. The scraper is held with the thumb and index finger of the right hand; the foundation material is held by the left hand near the body and passes under the scraper and between the middle and ring fingers. Scraping is away from the body.

Scraping thread materials is called ʔíhej. The scraper is held with the thumb and index finger of the right hand. The thread is held by the left hand and away from the body, the material passing over the middle finger and along the side of the scraper. Scraping is toward the body. Buckskin may be put over the middle finger for protection.

Basketmaking is called hís. Two techniques are employed, coiling and twining. Most coiling is 3-rod foundation (Figure 1b; Mason, 1904, pp. 253-4, fig. 50), although 1-rod foundation (Figure 1a; Weltfish, 1930, p. 434, fig. 8a; cf. "single-rod", Mason, 1904, pp. 250-1, fig. 46) is used for "temporary" baskets (Plate 1c). The work surface faces the basketmaker. The coil proceeds in a counter-clockwise direction of manufacture, whether the work surface is convex, flat, or concave<sup>5</sup>. On coars work, lazy squaw stitching (Notes and Queries, 1951, p. 274, fig. 3), that is the inclusion of two or more coils in a thread loop, occurs. Split-stitching (Weltfish, 1930, p. 462; cf. "furcate coiling", Notes and Queries, 1951, p. 273, fig. 1a) of the non-work surface occurs in practice, though it is unintentional (Figure 1c). It is caused by adding stitches as the basket expands. Borders are finished by simple wrapping.

The Center Point Spiral start (Figure 1d; after Balfet, 1957, fig. 4) is used in coiling. The foundation is started by wrapping maple shavings. Foundation rods are gradually inserted in staggered fashion until three are bound. To finish off the coil, the reverse procedure is followed. The butt end of the rod stalk (end toward the ground during growth) is the end inserted.

Ideally threading materials are inserted by passing them between the two outer, topmost rods and the lower innermost rod. They are then threaded around the rods, the three in the coil being bound with the uppermost rod of the previous coil. To insert the thread between this rod and the remainder of the coil, an awl, hískym bá, is used. It is made by splitting the metapodial of Rocky Mountain Mule Deer, Odocoileus hemionus, var. hemionus, Raf. The proximal extremity is ground to a point on coarse-grained rock. Occasionally deer ulna awls are used for finer work. Fresh bone is superior for awls due to its toughness and pliability. Buckskin wrapped around the finger serves as a thimble.

Material to be used in the basket is kept submerged in water until used. The basket is liberally moistened during its manufacture. Loose ends on non-worked surface are twisted or rubbed off when the basket is dry.

Two twining techniques are used, simple 2-strand twining (Figure 1e: Mohr and Sample, 1955, p. 348) and simple 2-strand twilled twining (Figure 1f; after

"2-strand diagonal twining", Ibid., p. 348; cf. "diagonal twining", Mason, 1904, pp. 234-5, fig. 20, and "twilled twining", Weltfish, 1930, p. 473, fig. 10; also "zig-zag twining", Funkhouser and Webb, 1929, pp. 94-5, fig. 55, "twined openwork", Mason, 1904, fig. 17, and "honey comb twining", Balfet, 1957, p. 9). The basket is held upright and twining proceeds in a clockwise direction. The weft is given a Z-twist and leans downward (Figure 1e, f).

The Radial Bunch Warp start (Figure 1g; after Baumhoff in Balfet, 1957, fig. 3, no. 3, cf. "standard", p. 4) is used for fine twining; the Radial Bunch Warp Stratified start (Figure 1h; after Ibid., fig. 3, no. 4) for coarse twining. As twining proceeds, additional warps are added. Twine work is finished off by a coiled rim. On coarse twined tapered surfaces several warps may be incorporated in one stitch. The Simple Spiral Wound Composite finish (Ibid., fig. 4) is used to complete twine work.

For openwork, warp face twining (term applied to textiles by O'Neale, 1948, p. 159) is used. Warp face twining is accomplished by spacing the weft element on the warp foundation. This technique differs from true openwork twining where both weft and warp elements are spaced (see Plate 1e, h, j).

Overlay twining is practiced; the overlay material is given a full twist and overlays both the inside and outside of the basket.

Dixon (1905, fig. 47a) illustrates a wickerwork<sup>6</sup> seed beater from the Northwestern Maidu area. However, none has been documented in the Northeastern Maidu area. Wickerwork technique is used on coarse basket ware, but is probably a recent introduction.

Baskets are made when needed. They are manufactured by women (excepting fish traps, which may be manufactured by men also) when spare time is available. Assuming that one works full-time, i.e., during daylight, an average basket can be produced in 10 to 14 days. A person, on the average, will produce six baskets a year. A total of 19 baskets were counted in one Northeastern Maidu household.

### Materials Selected

The technique employed to manufacture a basket often determines which materials are selected to be used. Certain materials are more suitable for one technique than another. Tables 2 and 3 list the materials that are selected for basket manufacture.

The most esteemed willow is Salix argyrophylla, Nutt. (Dixon, 1905, p. 145; cf. Merrill, 1923, p. 239 fn.), although other species are extensively used. According to my chief informant the "best willow" is river willow with small pith hearts and gray foliage. Squirrel willow is no good due to its brittleness.

To provide contrast for decoration, bracken fern root and sometimes redbud with is dyed black by acorn staining and by burying in the ground. Porcupine quills are dyed yellow by boiling them with wolf moss, Evernia vulpina, hamsim bati. Quills dyed red with berry stain are imported from the north.

Table 2. Materials Incorporated in Baskets

Material	NE Maidu Name	Part Used	Use in Technique of Manufacture
Big Leaf Maple ( <u>Acer macrophyllum</u> , Pursh.)	dâpí	withe	coil thread, coarse twine warp and weft
Black Oak ( <u>Quercus kelloggii</u> , Newb.)	hâmsi	withe	rim
Bracken Fern ( <u>Pteridium quillina</u> , var. <u>lanuginosa</u> , Bory.)	súllala	root	decorative coil thread, decorative overlay twine
Deer Brush ( <u>Ceanothus integerrimus</u> , H&A)		withe	overlay twine weft base
Douglas Fir ( <u>Pseudotsuga taxifolia</u> , Lamb.)		twig	coarse twine warp
Incense Cedar ( <u>Librocedrus decurrens</u> , Torr.)	mâni	root	overlay twine warp, overlay twine weft base
Maidenhair Fern ( <u>Adiantum pedatum</u> , L.)	lopípi	stalk	decorative overlay twine
Redbud ( <u>Cercus occidentalis</u> , Torr.)	lyli	withe	coarse twine, coil thread (peeled), decorative coil thread (unpeeled)
Salt Tule ( <u>Scirpus acutus</u> , Muhl.?)	bám kúpky	stalk	overlay twine warp (upper portions only)
Slough Grass ( <u>Carex barbarae</u> , Dew.)		blade	coil thread, overlay twine weft base
Squaw Grass ( <u>Xerophyllum tenax</u> , Nutt.)	çítaka	blade	overlay twine
Western Service Berry ( <u>Amelanchier alnifolia</u> , Nutt.)	sobá	withe	rim
Wild Cherry ( <u>Prunus demissa</u> , Walp.)		withe	overlay twine weft base
Willow ( <u>Salix</u> spp.)	çúpi	stalk	coil foundation, coarse twine
Yellow-Haired Porcupine ( <u>Erethizon epixanthum</u> , var. <u>epixanthum</u> , Brandt)	çóním pó	quill	decorative overlay twine
Yellow Pine ( <u>Pinus ponderosa</u> , Dougl.)	bybý	root	overlay twine warp, overlay twine weft base

Slough grass does not grow in Northeastern Maidu territory and may be traded in from the lowlands. The sparse occurrence of maidenhair fern requires that quantities of it must be obtained from areas further north. Service berry and black oak withes are transported from lower altitudes.

Certain basketry materials that grow in the Northeastern Maidu area are not utilized, although in nearby areas they are. These materials are hazel, Corylus rostrata, Ait., var. californica<sup>7</sup> and squaw brush, Rhus trilobata, Nutt. (Merrill, 1923, map. 5). Hazel is lighter than willow, but willow is stronger. This factor probably affected selection.

Table 3. Extraneous Basket Materials

Material	Parts Used
Abalone ( <u>Haliotis</u> spp.)	shell (beads and pendants)
Acorn Woodpecker ( <u>Balanosphyra formacivora</u> , var. <u>bairdi</u> , Ridg.)	scalp feathers
Bluebird ( <u>Sialia</u> sp?)	scalp feathers
Bullock Oriole ( <u>Icternus bullocki</u> , Swain.)	scalp feathers
California Red-Winged Blackbird ( <u>Agelaius phoeniceus</u> , Nel.)	wing feathers
Clam ( <u>Saxidomus nuttallii</u> , Con.)	shell (beads)
Common Mallard ( <u>Anas platyrhynchos</u> L., var. <u>picta</u> , Dougl.)	tail curls
Meadowlark ( <u>Sturnella neglecta</u> , Aud.)	scalp feathers
Sierran Mountain Quail ( <u>Oreortyx picta</u> , var. <u>picta</u> , Dougl.)	topknots
Western Robin ( <u>Planesticus migratorius</u> , var. <u>propinquus</u> , Ridg.)	scalp feathers

#### Gathering and Preparation

Maple and willow are burned to get new shoots. New shoots are collected one or two years later. Burning is accomplished by heaping leaves against the base of the tree and igniting them. New willow shoots have less "knobs" if picked at first sign of sprouting. If bunch grass is filled with trash, it is burned to get new shoots. Burning is done in the fall.

Roots of certain trees are stronger than those of others and these trees are noted. Specific basketmakers have rights to the roots of certain trees. Roots are farmed, those from a certain section of a tree being collected, while those of another section are not collected until a later time. Bracken fern roots are

often found in dumps, rotten logs, or soft dirt.

A digging stick, sewé\*, is used to collect roots. Roots are severed with a knife, čámmi, probably made of obsidian. If no knife is available, roots are severed by pounding a segment of the root with a rock. Roots taken are about 3 to 4 feet long, and 3 inches in diameter. Maple withes are about 4 feet long and "as thick as a thumb".

Roots, maidenhair fern, and deer brush are harvested after the snow disappears. Willow is harvested in the spring before the foliage sprouts. Wild cherry and bracken fern are harvested any time.

Foundation materials are made up in bundles, butú. A willow bundle is about four inches thick in basal diameter and contains around 250 stalks. Squaw grass, deer brush, and wild cherry bundles are about two inches in basal diameter. One piece of the material is used for binding and is spiralled in a counterclockwise direction, loops being formed at both ends for anchoring (Figure 11).

Thread materials are made up in rolls, wanyáni. A roll of maple is about nine inches in diameter and three inches thick. The binding is spiralled in a counterclockwise direction.

It takes about two hours to gather and process materials if the location of the desired plants is known. Six to eight bundles are made in one sitting. A year's supply, consisting of about 25 bundles, is collected.

Materials might not be completely processed on the spot, but may be transported to shelter. If this is done, all waste materials are burned at the gathering area. Materials are transported with a buckskin carrying strap. The strap is threaded through the bundles, rolls are strung on it, and surplus materials are lashed on. The shoulders support the strap during carrying unless free hands are needed. The strap is then supported on the forehead. When bundles and rolls are all made up they are stored by hanging them out of the way, indoors.

The act of splitting stalks and removing pith centers is jodá. Willow, maple, and tree roots are heated by holding them directly over a fire, putting them in hot ashes, or by exposing them to the sun. The fire may be located at the gathering area. Drying is complete when the skin cracks. This makes splitting and skin scraping easier. The skin is scraped off willow stalks immediately after picking and drying. If this is not done, the skin will harden.

After heating, the stalk is split. Splitting is initiated by rubbing the stalk end with the fingernail or a sharp tool. When the split is started, the end of one split is held in the teeth, and the end of the other by the right hand. Splitting is continued by pulling the ends apart. The left hand is then placed at the juncture of the split and is used as a guide to determine the thickness of the split stalks. If the left hand pushes the stalk away from the body, the split stalk anchored by the teeth will become thicker at the expense of the split stalk anchored by the right hand. If the stalk is held close to the body, the reverse occurs.

Only the two inner layers of the bracken fern root are used. Pith is removed from the willow and maple withes as they are split. Waste products are used as fire fuel.

Maple withes and tree roots are split into quadrants. Parallel slices are then made, starting on one of the previously split quadrant surfaces (Figure 1a). Willow is split into thirds (Figure 1b). This may be due to its small diameter, or to facilitate rod fitting in coil foundations.

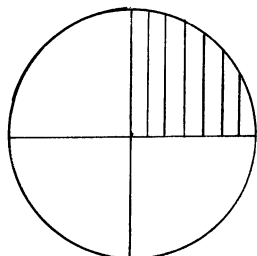


Figure 1a

Maple and Tree Roots

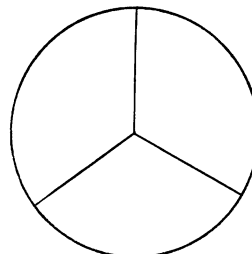


Figure 1b

Willow

#### Manufacturing Traditions

By correlating basket type, manufacturing technique, and selection of materials, several manufacturing traditions can be isolated for the Northeastern Maidu. The most important tradition is coiling. Basket types common in this tradition are cooking baskets, dippers, circular plaque sifters, and plates. Obviously the manufacturing technique is distinctive--coiling instead of twining. Materials selected for manufacture are willow, maple, redbud, bracken fern, and slough grass.

A second tradition is overlay twining. Basket types common in this tradition are storage baskets and burden baskets. Mortar hoppers and caps are also overlay twined. The manufacturing technique is twining with an overlay covering. The basket bases are not overlaid. Materials selected for manufacture are pine and cedar roots, willow, squaw grass, tule, deer brush, wild cherry, slough grass, maidenhair fern, bracken fern, and porcupine quills. Oak and service berry are used for basket rims.

A third tradition is close twining. Basket types common in this tradition are water bottles and subtriangular winnowers. Pitch is used to waterproof the water bottles. The manufacturing technique is twining, often using the 2-strand twill technique. The principal manufacturing material is willow.

A fourth tradition is openwork twining. Basket types common to this tradition are seed beaters, subtriangular and oval sifters, and burden baskets. Fish traps are also openwork twined. The manufacturing technique for this tradition is identical to that of the close twine tradition except that the warp face twining feature is added. Willow is the manufacturing material.



A fifth tradition is coarse work twining. Basket types common to this tradition are large storage baskets, circular plaques, and various recently introduced forms. The manufacturing technique is twining, though on a crude level with few refined conventionalizations. The wickerwork technique is also used. Materials selected for coarse twine manufacture are willow, maple, redbud, and douglas fir.

### Sources

The Northeastern Maidu, due to their location (Map 1), served as a melting pot for basketry traditions. Their basketry appears to have been derived from three sources. A basic sub-stratum is central California in origin. It is represented by two manufacturing traditions, coiling and openwork twining. Central California coiling is 3-rod foundation and proceeds in a counterclockwise direction, in contrast to Yuki coiling which is often rod and welt and proceeds in a clockwise direction of manufacture. The wickerwork technique, if present in the Northeastern Maidu area, is also of probable central California origin due to its occurrence in Pomo and Northwestern Maidu territory (Kroeber, 1925, p. 415).

With this basic sub-stratum, influences from northern California appeared. Two manufacturing traditions were introduced, overlay twining, and coarse work twining. Overlay twining is the full-twist type of northeastern California (Weltfish, 1930, p. 477).

In apparently quite recent times influences from the Great Basin have intruded. These influences are similar to the central California traditions, and therefore are not as obvious as those from northern California. The only new manufacturing tradition is close twining. The use of 1-rod foundation coiling for temporary baskets and the appearance of subtriangular and oval openwork sifter types occurs. Also, the Northeastern Maidu cradle form is similar to that of the Great Basin.

This fusion of basketry traditions makes the Northeastern Maidu the most diversified basketmakers in California, although the Pomo show greater elaboration of basketmaking techniques.

## APPENDIX I

### Informants

Marie Potts, Sacramento, California. Born 1895 at Big Meadows. Northeastern Maidu mother; Caucasian father. Lived with her mother and maternal grandmother until their deaths in 1910. Is Publicity Chairman for the Federated Indians of California.

Salina Jackson, Oak Grove, California. Born 1873 in Genesee Valley. Northeastern Maidu mother; Welsh father. Is a skilled basketmaker.

Ina Jackson\*, Feather Falls, California. Born 1876 in Genesee Valley. Is sister of Salina Jackson.

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\* Married name. Both sisters married Jacksons.

### NOTES

1. Research for this paper was financed by a grant from the Department of Anthropology and Sociology, University of California at Los Angeles. I wish to acknowledge the assistance given to me by S. A. Barrett, William A. Lessa, Clement W. Meighan, and Francis A. Riddell for their advice and guidance; S. A. Barrett, Robert A. Littlewood (who also did the photography), Francis A. Riddell, and Joan Seibert who aided me in the field; Marie Potts, my chief informant; and William Shipley who transcribed the Northeastern Maidu terms used in this paper.
2. All Northeastern Maidu terms are transcribed in a phonemic system based on Shipley (1956). Only restricted meanings that apply to basketry are attributed to the terms used. The author is responsible for all terms designated by an asterisk (\*).
3. A lidless creel-shaped "fish basket" was also reported. This basket type may be a Maidu adaptation of the Atsugewi scoop-shaped fish basket (Garth, 1953, p. 149). However, it is probably a copy of a recent western introduction.
4. Fragments of glass are now substituted for obsidian.
5. Kroeber (1925, pp. 414-5) relates coil direction with outside surface. The writer believes that coil direction can be better described by relating it to the work surface. With this approach a one-to-one relationship can be made between coil direction and motor habits.
6. The term, "wickerwork", is well established in English basket terminology (Mason, 1904, pp. 228-30). In general usage it often confuses technique of manufacture and basket appearance. A more precise term for this technique would be "woven wattlework" (Balfet, 1957, p. 10, fig. 2).

7. Kroeber (1925, P. 415) and Dixon (1905, p. 145) state that the northern Maidu use hazel. Barrett (1933, pp. 236-7) and Merrill (1923, p. 225, map 3) indicate that hazel is not used. I obtained negative responses from all my informants.

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## BIBLIOGRAPHY

Balfet, Helene

- 1957 Basketry: A proposed classification (Trans. and Prefaced by M. A. Baumhoff), Reports of the University of California Archaeological Survey, 37:47: 1-21.

Barrett, S. A.

- 1908 Pomo indian basketry, University of California Publications in American Archaeology and Ethnology, 7:3: 133-308.
- 1917 The Washo Indians, Bulletin of the Public Museum of Milwaukee, 2:1: 1-52.

.....and E. W. Gifford

- 1933 Miwok material culture, Bulletin of the Public Museum of Milwaukee, 2:4: 117-376.

Beals, Ralph L.

- 1933 Ethnology of the Nisenan, University of California Publications in American Archaeology and Ethnology, 31:6: 335-414.

Dixon, Roland B.

- 1900 Basketry designs of the Maidu Indians of California, American Anthropologist (ns), 2:2: 266-276.
- 1905 The Northern Maidu, Bulletin of the American Museum of Natural History, 17:3: 119-346.

Funkhouser, W. D. and W. S. Webb

- 1929 The so-called "ash caves" in Lee County, Kentucky, Reports in Archaeology and Anthropology, 1:2: 33-112, Lexington.

Garth, Thomas R.

- 1953 Atsugewi ethnography, Anthropological Records, 14:2: 129-212.

Kroeber, A. L.

- 1925 Handbook of the Indians of California, Bureau of American Ethnology, 78, Washington.

Mason, Otis T.

- 1904 Aboriginal american basketry: Studies in a textile art without machinery, Report of the United States National Museum 1901-2, 2:171-548, Washington.

Merrill, Ruth Earl

- 1923 Plants used in basketry by the California Indians, University of California Publications in American Archaeology and Ethnology, 20:13: 213-242.

Miner, Horace

- 1936 The importance of textiles in the archaeology of the eastern United States, American Antiquity, 1:3: 181-192.

Mohr, Albert and L. L. Sample

- 1955 Twined water bottles in the Cuyama area, American Antiquity, 20:4:1: 345-354.

Notes and queries in anthropology

- 1951 Royal Anthropological Institute of Great Britain and Ireland (6th ed.), London.

O\*Neale, Lila M.

- 1948 Textiles of pre-columbian Chihuahua, Contributions to American Anthropology and History, 9:45: 95-161, Carnegie Institution of Washington, 574

Shipley, William

- 1956 The phonemes of Northeastern Maidu, International Journal of American Linguistics, 22:4: 233-237.

Voegelin, Erminie W.

- 1942 Culture element distributions: XX northeastern California, Anthropological Records, 7:2: 47-251.

Weltfish, Gene

- 1930 Prehistoric North American basketry techniques and modern distributions, American Anthropologist, 32:3:1: 454-495.

## EXPLANATION OF ILLUSTRATIONS

### Plate 1 - Maidu Baskets (not to scale)

- a. Coiled Cooking Basket from Big Meadows, Plumas Co., Calif. Owned by Marie Potts. Photographed January 29, 1957. UCLA Neg. No. 1291.
- b. Coiled Dipper owned and made? by Ina Jackson, a Northeastern Maidu from Genessee Valley, Plumas Co., Calif. Photographed January 31, 1957. UCLA Neg. No. 1321.
- c. 1-Rod Coiled "Temporary" Basket from the northern Sierra Nevada area. Collected by E. L. McLeod 1892-1905. UCMA Spec. No. 1-20881. Photographed February 1, 1957. UCLA Neg. No. 1340.
- d. Coiled Storage Basket from Big Meadows, Plumas Co., Calif. Owned by Marie Potts. Photographed January 29, 1957. UCLA Neg. No. 1292.
- e. Coiled Plaque from Plumas or Tehama Co., Calif. Collected by E. L. McLeod 1892-1905. UCMA Spec. No. 1-20879. Photographed February 1, 1957. UCLA Neg. No. 1339.
- f. Openwork Subtriangular Sifter bought from "Old Ann" in Indian Valley, Plumas Co., Calif., 1930. UCMA Spec. No. 1-53984. Photographed February 1, 1957. UCLA Neg. No. 1304.
- g. Coarse Work Twined Plaque made by Daisey Baker, a Northeastern Maidu from Genessee Valley, Plumas Co., Calif. Photographed January 31, 1957. UCLA Neg. No. 1314.
- h. Seed Beater collected by A. L. Kroeber at Quincy, Calif. June 8, 1913. UCMA Spec. No. 1-17335. Photographed February 1, 1957. UCLA Neg. No. 1338.
- i. Overlay Twined Burden Basket made by Marie Davis, a Northeastern Maidu from Genessee Valley, Plumas Co., Calif. Photographed January 31, 1957. UCLA Neg. No. 1317.
- j. Openwork Burden Basket collected by A. L. Kroeber at Quincy, Calif. June 8, 1913. UCMA Spec. No. 1-17332. Photographed February 1, 1957. UCLA Neg. No. 1346.

### Table 1 - Northeastern Maidu Basket Types

### Figure 1 - Manufacturing Techniques

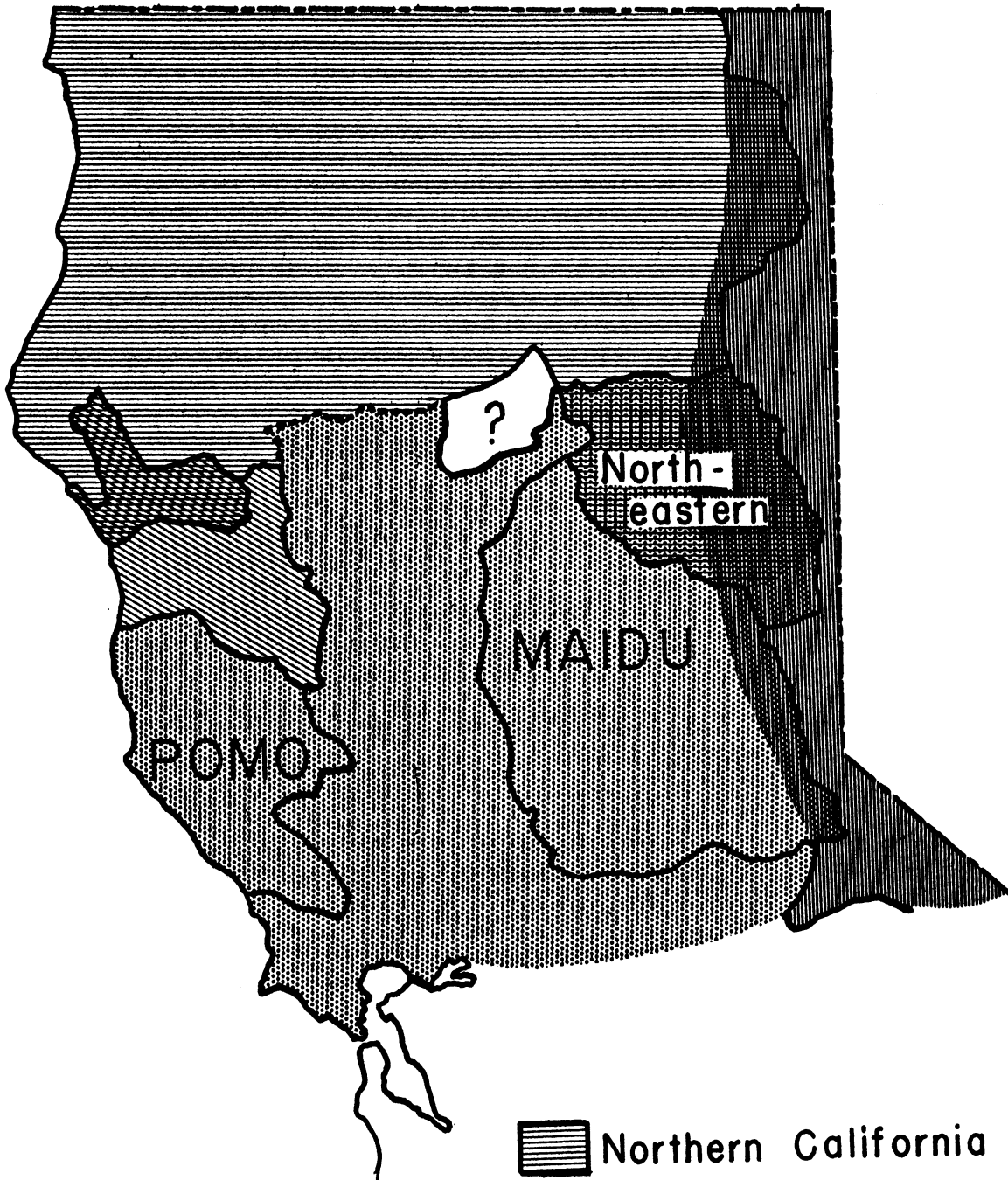
- |                    |                              |
|--------------------|------------------------------|
| a. 1-Rod Coiling   | d. Center Point Spiral Start |
| b. 3-Rod Coiling   | e. 2-Strand Twining          |
| c. Split-Stitching | f. 2-Strand Twilled Twining  |

Figure 1 - Manufacturing Techniques (continued)

- g. Radial Bunch Warp Start
- h. Radial Bunch Warp Stratified Start
- i. Bundle Binding

Map 1 - Northern California Basketry Complexes (based on Weltfish, 1930, fig. 2, p. 456).

\* \* \* \* \*



Map 1.





-  Northern California
-  Central California
-  Great Basin
-  Yuki



Table 1 - Northeastern Maidu Basket Types

Form		Manufacturing Tradition	Northeastern Maidu Name	Approximate Size Range	Use
Side View	Top View				
		Coil	loló	40-70 Cms.	stone-boiling
		Close Twine		15-25 Cms.	dipping, eating, drinking
		Overlay Twine Coil		15-30 Cms.	water storage
		Coarse Twine	patá	20-50 Cms.	storage
		Coil		5-20 Cms.	trinket storage
		Coil Coarse	bátky watá	70-100 Cms.	storage
		Coil		35-50 Cms.	sifting, parching
		Coil Coarse	watá	50-80 Cms.	serving
		Openwork Twine		40-80 Cms. (width)	sifting, leaching
		Close Twine	walét	45-60 Cms. (width)	winnowing, parching
		Openwork Twine		30-50 Cms. (length)	seed beating
		Openwork Twine	Is designated.	45-70 Cms.	transporting seeds, etc.
		Close Twine			
		Openwork Twine	woló	45-70 Cms.	transporting acorns, fire-wood, etc.; fishing
		Openwork Twine	lúku*		

Table 1.

Figure 1 - Manufacturing Techniques

- a. 1-Rod Coiling
- b. 3-Rod Coiling
- c. Split-Stitching
- d. Center Point Spiral Start
- e. 2-Strand Twining
- f. 2-Strand Twilled Twining
- g. Radial Bunch Warp Start
- h. Radial Bunch Warp Stratified Start
- i. Bundle Binding

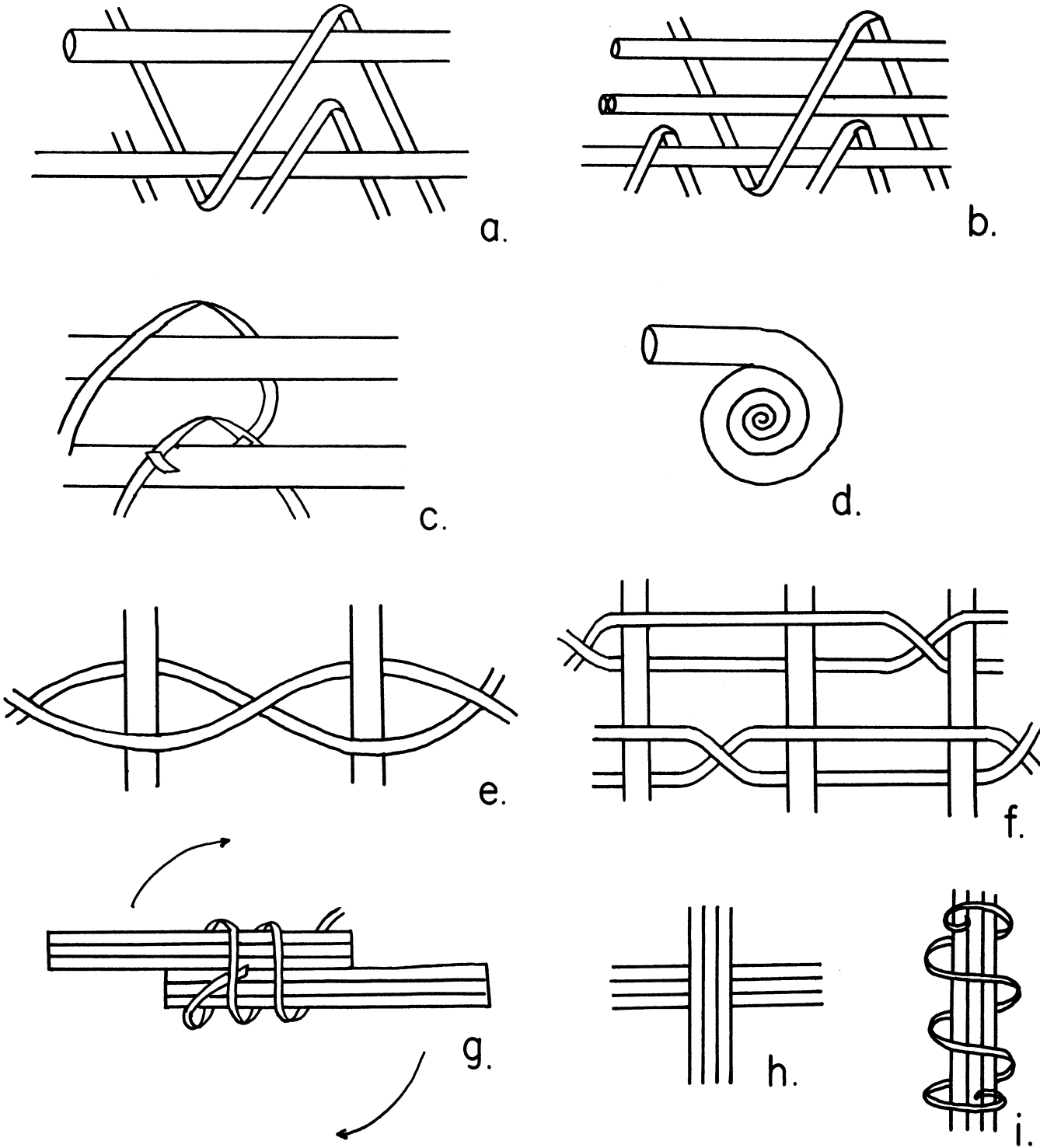


Figure 1.

Plate 1 - Maidu Baskets (not to scale)

- a. Coiled Cooking Basket from Big Meadows, Plumas Co., Calif. Owned by Marie Potts. Photographed January 29, 1957. UCLA Neg. No. 1291.
- b. Coiled Dipper owned and made? by Ina Jackson, a Northeastern Maidu from Genessee Valley, Plumas Co., Calif. Photographed January 31, 1957. UCLA Neg. No. 1321.
- c. 1-Rod Coiled "Temporary" Basket from the northern Sierra Nevada area. Collected by E. L. McLeod 1892-1905. UCMA Spec. No. 1-20881. Photographed February 1, 1957. UCLA Neg. No. 1340.
- d. Coiled Storage Basket from Big Meadows, Plumas Co., Calif. Owned by Marie Potts. Photographed January 29, 1957. UCLA Neg. No. 1292.
- e. Coiled Plaque from Plumas or Tehama Co., Calif. Collected by E. L. McLeod 1892-1905. UCMA Spec. No. 1-20879. Photographed February 1, 1957. UCLA Neg. No. 1339.
- f. Openwork Subtriangular Sifter bought from "Old Ann" in Indian Valley, Plumas Co., Calif., 1930. UCMA Spec. No. 1-53984. Photographed February 1, 1957. UCLA Neg. No. 1304.
- g. Coarse Work Twined Plaque made by Daisey Baker, a Northeastern Maidu from Genessee Valley, Plumas Co., Calif. Photographed January 31, 1957. UCLA Neg. No. 1314.
- h. Seed Beater collected by A. L. Kroeber at Quincy, Calif. June 8, 1913. UCMA Spec. No. 1-17335. Photographed February 1, 1957. UCLA Neg. No. 1338.
- i. Overlay Twined Burden Basket made by Marie Davis, a Northeastern Maidu from Genessee Valley, Plumas Co., Calif. Photographed January 31, 1957. UCLA Neg. No. 1317.
- j. Openwork Burden Basket collected by A. L. Kroeber at Quincy, Calif. June 8, 1913. UCMA Spec. No. 1-17332. Photographed February 1, 1957. UCLA Neg. No. 1346.

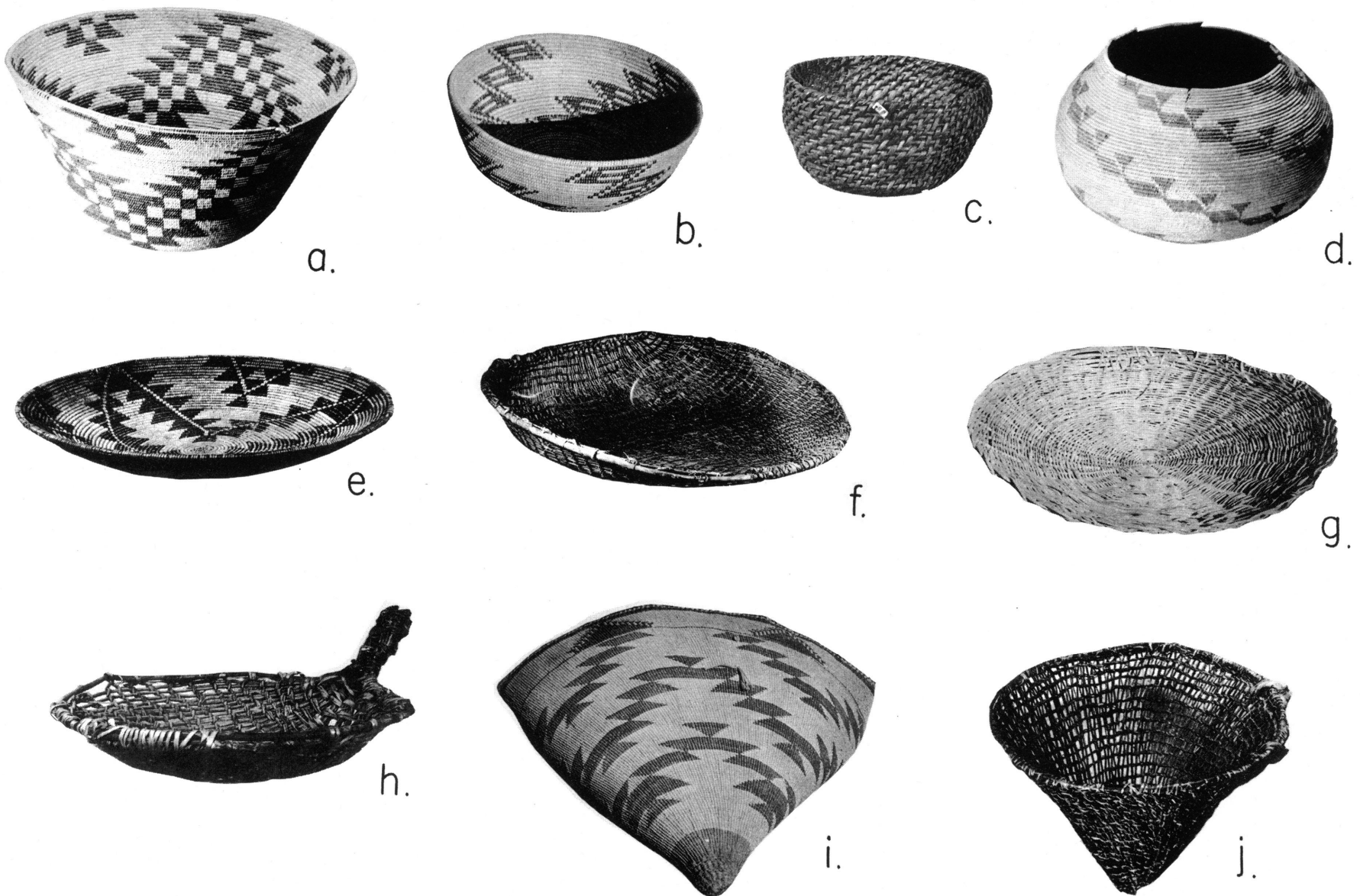


Plate 1.