

We have, again, a little pipe no larger than some cigarette holders. (Fig. 66.) Except in its diminutive size and simplicity it might have served as a model for the three to be next described, or for the type specimen mentioned at the head of this list. Length,  $2\frac{3}{8}$  inches; greatest width, three-fourths of an inch; depth of bowl,  $\frac{7}{8}$ ths of an inch. (See Powers, Fig. 43.)

They likewise use a tapering pipe of hard wood,  $12\frac{1}{4}$  inches long,  $1\frac{5}{8}$  inches wide at the larger end. What may be called the stem is  $7\frac{3}{8}$  inches long. The other portion is carved by a series of octagons and chamfers which give to the specimen quite an ornamental appearance. (Fig. 69.) The bowl is  $\frac{7}{8}$ ths of an inch wide and 2 inches deep. This example has been smoked a great deal, being charred very much in the bowl. (Collected by Livingston Stone. Compare Figs. 2 and 5, Plate IX, Dr. Abbott's paper in Wheeler's Survey West of One Hundredth Meridian, Vol. VII.)

Other beautifully finished pipes of the same type, evidently turned in a lathe to please the Hupa fancy, are kept with the greatest care in leather pouches made for the purpose. (Figs. 71, 73.) They are made of different woods highly polished. The remarkable feature is the bowl of serpentine set in a tapering shouldered socket at the wide end of the stem, and the whole turned and polished. The bowl is a conical cavity in serpentine.

The next example consists of a pipe and case. The pipe has a stem shaped like a club or ball bat, and a bowl of compact steatite. In general features pipes of this class resemble the cigarette holder, and they are found among the Utes and Mohaves, as well as in the mounds.

When it is remembered that many Indians recline while smoking, it will be seen that this is the only sensible form of the pipe for them.

Their tobacco pouches of basket-work are ovoid in form and hold about 1 quart. (Plate VIII, Fig. 67.) They are made of twined weaving in bands of brown and checkered grass, so common in the basketry of the Klamaths as to be typical. Six buckskin loops are attached to the rim of this basket in such a manner that their apexes meet in the center of the opening. A long string is fastened to the apex of one loop and passed through all the others serially to close the mouth of the pouch. Height, 6 inches; width of mouth,  $2\frac{1}{2}$  inches.

#### BASKET-MAKING.

The basket-making of these Indians belongs exclusively to the twined pattern of weaving, as that of the more southern California tribes belongs to the coiled type. (Fig. 74.) (Smithson. An. Rep. Pt. II. p. 299, and pl. XVIII, XIX.)

From willow twigs and pine roots, says Mr. Powers, they weave large round mats for holding acorn flour; various sized, flattish, squash-shaped baskets, water-tight; deep conical ones of about a bushel capacity, to be carried on the back, and others to be used at pleasure as drinking-

cups or skull-caps (Plate —, Fig. —), for only the squaws ordinarily wear anything on their heads, in which latter capacity they fit very neatly. (Powers, Cont., III, 47.)

In carrying her baby or a quantity of acorns, the squaw fills her deep conical basket and suspends it on her back by a strap which passes loosely around it and athwart her forehead. (Powers Cont., III, 47.)

The Round Valley Indians make their baby cradles of splints running up and down. A hood-shaped awning covers the face and also keeps the baby from rolling out. Formerly new-born children declared defective by the medicine man were put to death. On the birth of a male child the father goes on a hunt and does not return until he has secured much game. This is to make a mighty hunter of the baby boy. The basketry at Round Valley Reservation is made of the root of a shrub which grows in swampy land. Mr. N. J. Purcell says that they gather great bunches of this root, which they keep soaked in water until it is needed for use. The roots are deftly split, and the inside scraped with a sharp stone or, recently, with a knife. The ribs are formed of a tough twig, and the coiled sewing is done by means of a needle made of antler or bone. This form of coiled weaving is unknown at Hupa Reservation, the twined pattern being used exclusively. It should be noted that the Northern Tinné or Athapascan employs the coiled method altogether.

Mr. Purcell narrates a tradition of the Ukie Indians of Round Valley Reservation which is connected with their basketry.

Once upon a time everything was a vast body of water, over which all was darkness. Hovering over this expanse in the darkness was a large white feather, the embodiment of one of their spiritual beings, that finally becomes weary and lights down into the water. Here was a whirlpool in which the feather is carried around so rapidly that a great foam is formed, which grows larger and larger until a floating mass is aggregated; of this the feather spirit forms the land.

Still all was dark, and the feather goes around among all the worlds to look for light. On visiting one of these he was taken sick and was carried by the hospitable inhabitants to the sweat-house. Here his eyes became dazzled by the brilliant light, and on looking up he beheld several beautiful suns hanging from the roof. The inhabitants one day going off on a great hunt left two old men to wait on the sick visitor.

These nurses fell asleep and the feather spirit carried off one of the suns in a basket. Though hotly pursued he arrived safely home with his prize. He carried it far to the east and set it low on the ground, but this position did not suit him. So he moved it again and again, and continued to move it about until our day.

The pretty jar-shaped baskets in our collections, covered all over with feathers, are made by coiling and catching in the shaft of a bright-colored feather under each stitch. It was in one of these baskets the sun was carried off by the feather spirit.