

southward to produce a twilled pattern over the entire surface of the vessel (Figs. 27, 28). A slight exception to this statement is the ornamentation on the brim of the Haida rain-hat. It occurs again in Mexico and among the Cherokees, Choctaws, Chetimachas, and in South America. A moment's reflection will show that the administration of the three-ply method of the Makahs is a derivation of the plicate or twisted sort. If either strand of a twist, the inner or the outer, be drawn straight, the plait will become the fish-trap pattern. In most of the Makah baskets the straight piece is laid inside the uprights, but there are examples in which it is laid outside resembling the regular plaited stitch. The Indians of this coast prior to the advent of the white man made heavy and beautiful blankets of the wool of the Rocky Mountain sheep, and of the hair of animals killed in the chase, dyed in different colors. The patterns are all geometric, and are, in fact, woven mosaics, each figure being inserted separately by twisting two woof threads backward and forward around the warp strands. Scarcely ever does the twine extend in stripes all the way across the blanket in a direct line.

Like the Haidas the Makahs prepare a great many forms of basketry for trade. A great variety of colors is used in the decoration. The hatch surface, produced by the use of three strands in weaving, gives to the basketry of this type a very unique and pleasing effect. Fig. 25 represents a common specimen of Makah basketry.

Fig. 29 shows a bottle covered with ornamental basketry. In the bottom the radiating warp is inclosed in the twined weft. The warp threads are carried over the surface of the bottle, crossing each other and producing rhomboids, after the manner of the Japanese basketry. The twined coil (Fig. 31) connects the crossings of the warp threads. This is a very interesting specimen, inasmuch as the bower or fish-trap style is replaced by the regular twined weaving of the Indians farther north.

Figs. 32, 33 represent a specimen from the Clallams, which seems to be an example of commerce. The coil is sewed on conveniently, and the ornamentation upon the sides is produced by laying the straw or quill of different color upon the regular stitching, and sewing it on one stitch over two original stitches. This is a very beautiful and strongly made specimen.

#### OREGON AND CALIFORNIA TRIBES.

Along the western coast of the United States from Puget Sound to Lower California are many separate stocks of Indians, quite easily recognized by the material and ornamentation of their basketry, but following two fundamental structures—the twined and the whipped coil. Some of these tribes are called Diggers because they subsist on roots, seeds, etc. It would be more reasonable to call them "basket Indians." The Klamath and the McLeod Indians of Northern California use the twined method, making water-tight and flexible baskets of great beauty (Fig. 34). The ornamentation is produced by the alternation of black