

ARCHAEOLOGY.—*Hopewell type pottery from Louisiana.*¹ F. M. SETZLER, U. S. National Museum. (Communicated by JOHN R. SWANTON.)

Owing to the fact that up to the present time only two vessels have been found south of the Ohio River² which are recognized as belonging to the Hopewell culture in the Upper Mississippi Valley,³ it seems highly important to bring to the attention of archeologists a general description of the pottery vessels and other artifacts discovered in the east central part of Louisiana, near Marksville.

The pottery and associated artifacts herein described were excavated by Gerard Fowke during his explorations in the Red River Valley of Louisiana, February–May, 1926. No illustrations or description of the specimens appear in his final report⁴ though in the preliminary report⁵ a few were reproduced.

Analysing the restored vessels from Mounds 4 and 8 in the Marksville Works, we find the following variations of and resemblances to the Hopewell pottery: (Fig. 1) One vessel may be considered typically Hopewell because of such features as the cross-hatched band and bisected cones just beneath the rim. The decoration on the body of the vessel consists of smooth bands outlined by incised grooves. The area outside the bands is roughened uniformly by means of the roulette, and a conventionalized eagle is outlined on each of the four lobes. (Fig. 2.)

We also find two flat bottom bowls decorated on the inside and outside of the rim with triangular notches. A constriction near the middle of each cone-shaped vessel divides the decoration into two distinct parts. The figures on the lower half have been outlined by incised grooves forming conventionalized birds, the head of each suggesting the eagle. The area outside the smooth bands has been roughened by means of the roulette. The motif on the upper half is again outlined by incised grooves and consists of heart and pear-shaped

¹ Published by permission of the U. S. National Museum, Smithsonian Institution. Received October 28, 1932.

² MOORE, C. B. *Jour. Acad. Nat. Sci. Phila.* 13: 286–88. *figs. 3, 4, and 5.* 1908.

³ For a detailed description of Hopewell characteristics, see: MILLS, W. C., and SHETRONE, H. C. *Exploration of Hopewell Group. Certain Mounds and Village Sites in Ohio.* 4: pt. 4, 297–305. 1926; SHETRONE, H. C. *Culture Problems in Ohio Archaeology.* *Amer. Anthropologist.* n. ser. 22: No. 2, 144–172. 1920; SHETRONE, H. C. and GREENMAN, E. F. *Exploration of the Seip Group of Prehistoric Earthworks.* *Ohio Archaeol. and Hist. Quart.* 40: No. 3, 343–509. 1931.

⁴ FOWKE, G. *Archaeological Investigations.* 44th Ann. Rep., Bureau of American Ethnology, Pt. 2, 405–434. 1928.

⁵ FOWKE, G. *Archaeological Work in Louisiana.* *Smithsonian Misc. Coll.* 78: No. 7, 254–59. 1926.

objects and meandering or curvilinear bands which have been polished. The rest of the area is uniformly roughened by means of the roulette.

On a fourth vessel the manner of outlining by deeply incised grooves and the zigzag roughening bears resemblance to the aforementioned



Fig. 1. Hopewell vessel, probably from Mound 2 of the Mound City Group near Chillicothe, Ohio. Originally in the collection of Dr. Edwin Hamilton Davis. Reproduction of a drawing from *Sketches of Monuments and Antiques; found in the Mounds, Tombs and Ancient Cities of America*, p. 49, The portfolio of Dr. Davis' collection is in the manuscript room of the Bureau of American Ethnology.

ones. However, the band of decoration below the rim is radically different from the typical Hopewell design, yet it is closely comparable to that on one of the other vessels. This jar also has lightly incised parallel lines running at a forty-five degree angle which probably indicate an incomplete cross-hatched design such as is found on the typical Hopewell jars.

Another vessel too has the characteristic smooth bands outlined

with grooves while the rest of the surface is roughened. Instead of the typical cross-hatch and punctate design below the rim, it has only the line of punctates or bisected cones while the area directly above it, which is usually cross-hatched, is smooth.

Still another vessel has the beginning of what appears to be the

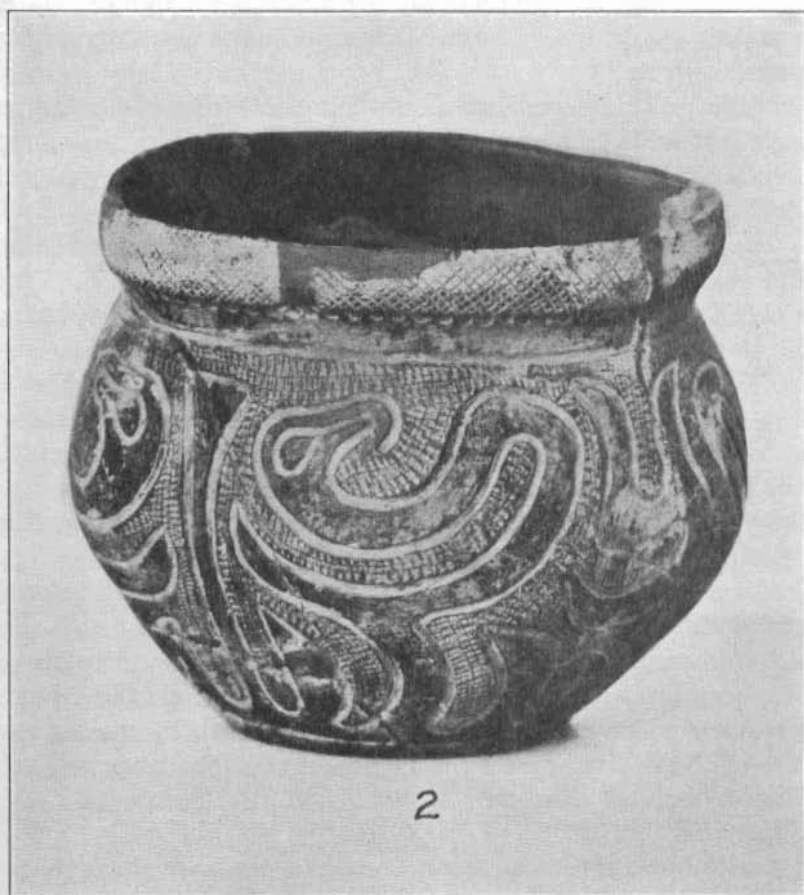


Fig. 2. The most typical Hopewell vessel from the Marksville Works. From Mound 8. Dia. $3\frac{1}{4}$ inches; H. $4\frac{1}{2}$ inches. U. S. Nat. Mus. Cat. No. 331688.

cross-hatched design below the rim, but the area around the neck differs from any design found on the typical northern Hopewell specimens. This consists of a series of three parallel grooves one inch long and a series of nine indentations, three rows of three each, made with a blunt instrument. The fact that this vessel was found associated with the typical Hopewell vessels from Mound 4 would seem to be sufficient evidence that it belongs to the same culture, although it em-

bodies an entirely different method of decoration, i.e., the concentric grooves with narrow polished bands between. The method of decorating vessels with concentric grooves and smooth narrow bands, although it differs radically from the typical Hopewell, was found on one miniature vessel to form two conventionalized eagles. This conventionalized eagle design certainly resembles the designs on the more typical Hopewell vessels from Marksville, as well as on numerous Hopewell objects.⁶

This analysis indicates that all of the vessels from Mounds 4 and 8 of the Marksville Works show a definite relationship to each other and some of them closely resemble vessels from the Hopewell culture in the Upper Mississippi Valley.

Associated with the pottery in Mounds 4 and 8, Mr. Fowke found the following artifacts: Monitor or platform pipe of clay, $3\frac{1}{4}$ inches long, $1\frac{1}{8}$ inches wide and $1\frac{3}{4}$ inches high at the bowl. The diameters of the bowl measured from the outside in each case are $1\frac{1}{8}$ and $1\frac{1}{2}$ inches. Fragmentary base of another platform pipe, $2\frac{1}{2}$ inches long and $\frac{3}{8}$ inch wide. Three projectile points. Sandstone rubbing or smoothing stones. Impressions in clay of a vertically plaited matting, consisting of over-two-under-two technique.⁷

The platform pipes and matting imprints are outstanding characteristics of the Hopewell culture in the north.

A tabulation has been made of the decorated vessels and sherds illustrated and described in various publications⁸ dealing with the excavation of mounds in the Upper Mississippi Valley recognized as having been built by Indians possessing Hopewell characteristics.

It seems obvious from such a tabulation that the most outstanding feature of the decoration on the Upper Mississippi Hopewell vessels

⁶ For other examples embodying conventionalized eagle designs, see: MILLS, W. C. *Exploration of Mound City Group*. Certain Mounds and Village Sites in Ohio. 3: pt. 4, 354-359. figs. 60, 61, 62, 63, 64, 65. 1922.

⁷ For similar matting from an Ohio Hopewell mound, see: MILLS, W. C. *Op. cit.*, 382. fig. 81.

⁸ WILLOUGHBY, C. C. *Turner Group of Earthworks, Hamilton County, Ohio*. Papers of Peabody Mus. Amer. Archaeol. and Ethn., Harvard Univ. 8: No. 3. 1922; MOOREHEAD, W. K. *Hopewell Mound of Ohio*. Field Mus. Nat. Hist., Anthrop. Ser. 6: No. 5, 75-178. 1922; MILLS, W. C., and SHETRONE, H. C. *Exploration of Hopewell Group*. Certain Mounds and Village Sites in Ohio. 4: pt. 4, 79-305. 1926; SQUIER, E. G., and DAVIS, E. H. *Ancient Monuments of the Mississippi Valley*. Sm. Contrib. to Knowledge. 1: 187-190. 1848; MILLS, W. C. *Exploration of Edwin Harness Mound*. Ohio Archaeol. Hist. Quart. 16: No. 2, 113-193. 1907; SHETRONE, H. C., and GREENMAN, E. F. *Explorations of the Seip Group of Prehistoric Earthworks*. Ohio Archaeol. Hist. Quart. 40: No. 3, 343-509. 1931; MILLS, W. C. *Exploration of Mound City Group*. Certain Mounds and Village Sites in Ohio. 3: pt. 4, 245-406. 1922. *Exploration of the Tremper Mound*. Idem 2: pt. 3, 105-240. 1917. *Exploration of Seip Mound*. Idem 2: pt. 1, 1-57. 1917; MCKERN, W. C. *Wisconsin Variant of the Hopewell Culture*. Milwaukee Public Mus. Bull. 10: No. 2, 185-328. 1931.

and sherds is that surfaces of 31 show bands of various dimensions outlined with deeply incised grooves and the areas between or outside the grooves uniformly roughened either by roulette, zigzag, punctate or cord marks. Nineteen of the illustrations show that the area just below the rim of the jars has been decorated with incised cross-hatched lines and an encircling line of bisected cones. The forms vary, there being 12 bowls, 11 jars, and 2 vases. There are five examples of supporting feet. Seven jars are shaped with four lobes—the predominant style—one with six, and one with three lobes. Twelve have round bases, seven have pointed bases, and five have flat bases. No applied pigment is used for decoration.

With regard to the decoration on the vessels and sherds from Mounds 4 and 8 in the Marksville Works, we find that 9 of the 12 restored vessels have bands outlined by deeply incised grooves, and the bands or the remaining parts of the vessel were uniformly roughened—on three specimens by means of the roulette, three by concentric grooves or bands, two by means of zigzag lines and one by the punctate method. On four of the jars the area just below the rim is decorated with cross-hatched incised lines and the encircling line of bisected cones. Thus far a similarity is obvious. The tempering used in the Marksville pottery differs radically, however, from that common to the northern Mississippi type. In the former, either pulverized potsherds or particles of hard clay are used; in the latter, grit or shell. The bases of all the Marksville vessels, so far as could be determined, were flat. Four of the Marksville vessels are bowls, four vases, three jars and one is unique. Only one is four lobed.

This comparison between the Marksville and the recognized Hopewell wares shows a close similarity and one of the vessels from Marksville is a type identical with northern Hopewell. Independent invention of so complicated a technique of decoration where there is such striking similarity would seem impossible. Further investigations may throw additional interesting light on the distribution of the Hopewell Culture. In Ohio, where the center of this highly developed mound building culture is located, no evidence has been found which enables anthropologists to say to what ethnological or linguistic group these Indians belonged. It would seem from the above facts that Louisiana, Mississippi, and perhaps Arkansas must be considered in the distribution of Hopewell traits. These similarities in the south may be due to commercial intercourse but, nevertheless, they are important.