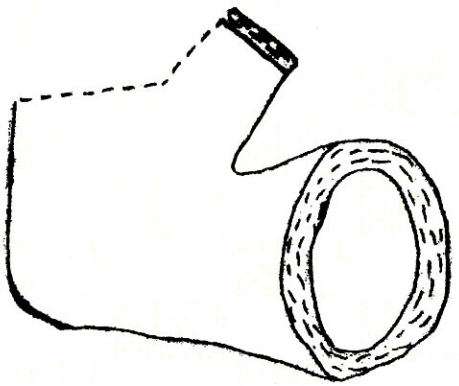
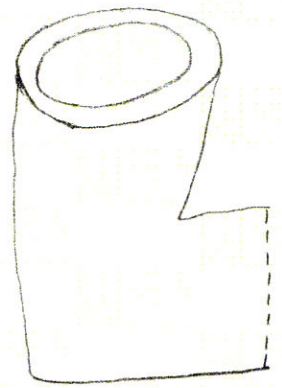
Figure A-25. *Clay pipe of unusual thickness. Restored. Note the tempering material.* Courtesy TARL, UT-Austin, cat. number 1S-92-119A.

have flared somewhat and that the rim of the bowl was only 7/16" from the upper rim of the stem. The stem hole is conical and would not seem to readily lend itself to the insertion of a reed or other separate item. On the other hand, the stem is so shaped that it could scarcely have been smoked without an auxiliary stem. A rough sketch of the pipe follows.



The stem of a trade pipe was also found nearby.

At a depth of 19" in north edge of the mound was a clay pipe of the elbow type. No decoration; shell tempered. The diameter of the bowl was as follows: outside, 1"; inside, 9/16". Stem partly missing, so that length uncertain. Bowl and stem approximately same size. Shaped like certain elbow pipes from Wood County, Texas (found by Goliad crew).



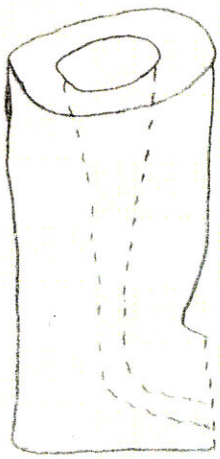
At a depth of 18" was a pipe made of steatite or soapstone of a grayish color [Figure A-26]. A piece was missing from the bowl and another from the stem, but the specimen was easily reconstructed in the field. The pipe has a round, half-spool shaped bowl and a triangular stem with the rear end curved upward like the bow of a boat. Height, 2 3/8"; length, 1¾". Diameter of bowl outside, 1¼"; diameter of stem, 1". Stem hole, 9/16" in diameter. The shape slightly resembles that of a metal tomahawk pipe. Probably Indian workmanship; but faint striations suggest the use of metal tools.

At a depth of 40", in the N.E. part of the mound, was the bowl of a clay pipe of the elbow type. The clay was heavily tempered with shell. Outside diameter of bowl was 1 5/16"; inside diameter, 5/8". The wall is quite a bit thicker than those of the other pipes from this site. The bowl-hole was conical. Stem missing. (Specimen found by the Goliad crew.)

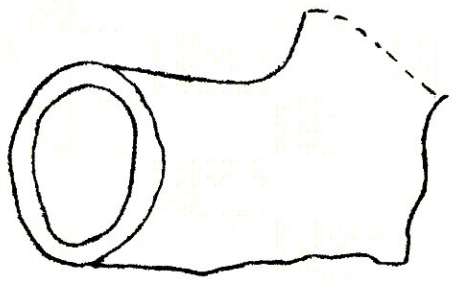
Another bowl of a clay pipe came from a depth of 22" (found by Goliad crew). Height of bowl, 2"; outside diameter at top, 1 7/16"; inside diameter, 5/8". Shell tempered. Apparently of elbow type. No encrustation or other evidence of smoking.

Figure A-26. *Pipe made of soapstone (steatite) of a grayish color. Found at a depth of 18 inches in the midden deposit. The marks of metal tools may be seen. The shape slightly resembles that of a metal "tomahawk pipe" used by traders in some regions.* Courtesy TARL, UT-Austin, cat. number 1S-92-122.

From a depth of 25" came part of a pipe stem 1½" long and 1" in diameter. Shell tempered. Part of another stem and most of a pipe bowl, found near eastern edge of the mound, were also shell tempered.



At a depth of 16" was found a clay pipe with most of the bowl missing. It is of Indian manufacture, shell tempered, no decoration and somewhat crudely made. The broken bowl reveals a black encrustation about 1/16" in thickness. The large stem is complete and strikingly like those of certain pipes found in N.E. Texas. Outside diameter of the stem is 1 1/8" and inside is 11/16". The stem hole maintains approximately the same size for a distance of 13/16", at which point it abruptly decreases to 1/8". At the base of the bowl is a ridge running halfway around and protruding 1/8". The shape of the stem was as follows:



There is evidence of asphalt on the outer surface [Figure A-27].

At a depth of 29" was another clay pipe, small and slightly trumpet-shaped. It is whole except for about ¼ of the stem which has been reconstructed. Height, 1½"; length, 1½"; outside diameter of bowl, 7/8"; inside, 5/8"; outside diameter of stem, 13/16"; inside, 3/8". Shell tempered and fairly well-made. It gives the impression of having been made in tubular form and then bent while still plastic [Figure A-28]. Inside the bowl is an encrustation of black material, resulting, no doubt, from continued smoking.

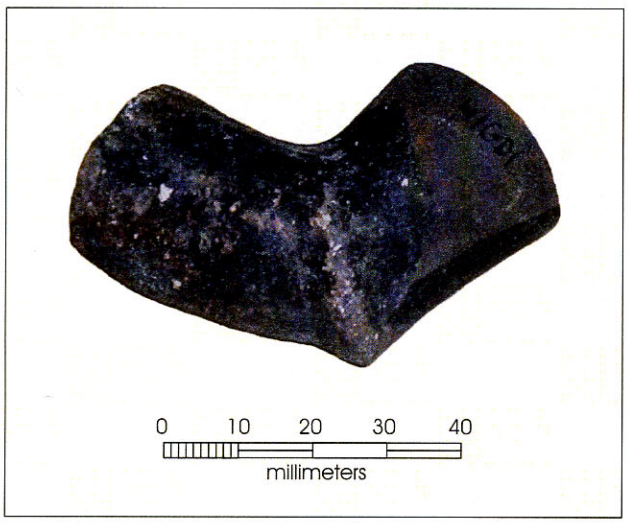


Figure A-27. *Crudely made, shell tempered, clay pipe (restored). Black encrustation in bowl.* Courtesy TARL, UT-Austin, cat. number 1S-92-119B.

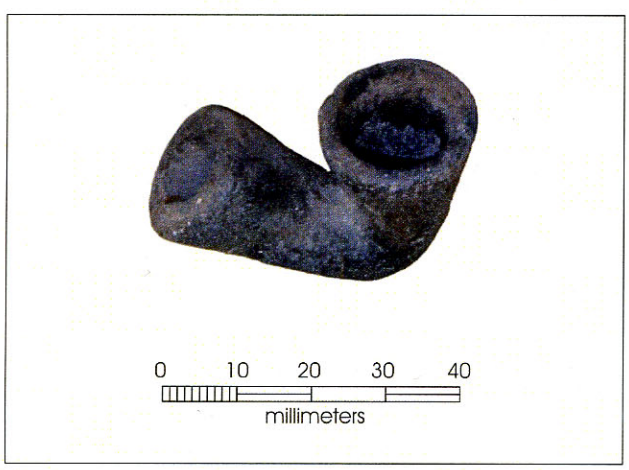


Figure A-28. *Small clay pipe, slightly trumpet-shaped. Shell tempered and fairly well made. Black encrustation in bowl of pipe.* Courtesy TARL, UT-Austin, cat. number 1S-92-120B.

What appears to be the bowl of a tiny pipe was found at a depth of 6". It is made of clay, shell tempered. The back and sides are flattened; and an incised line runs around the bowl ¼" from rim. Height of bowl, 1 1/16"; outside diameter ¾"; inside, 3/8".

Bowls: Judging from fragmentary vessels recovered, and from potsherds observed, it would seem that the bowl was the moat common type of earthenware vessel of Indian manufacture at Aranama Mission. Of five broken bowls found was one easily restorable. The others have numerous parts missing. The finds of earthenware vessels of Spanish manufacture are recounted elsewhere in this report.

Near the northwestern edge of the mound were found (by the Goliad crew) some 12 or 15 small fragments of the same vessel. The thing of interest about the find was the presence of two large handles. One, complete and attached to a fragment of the vessel, was about ¾" in diameter, semi-circular in shape and attached to the body of the vessel after the manner in which handles appear on modern cups. The ware was of yellow clay, shell tempered, crudely made and not polished or glazed. The heap of potsherds rested immediately beneath a pile of buffalo bones, at a depth of 10". The second handle was broken, but all present. All the fragments found would not combine to make more than one-fourth of the original vessel.

The most unusual and important find made at this site consisted of a badly broken bowl; found at a depth of 18", with fragments scattered for a distance of some two feet [Figure A-29]. In a fire pit, with charred bone adhering to a few sherds. Shell tempered. The vessel was reconstructed in the field [Figure A-30]. It is 8½" in diameter and 4½" tall. No decoration. It is of a fairly well-fired, blackish clay. It bears a resemblance to certain undecorated vessels from burial sites in Northeast Texas.

About 2/3 of a tiny but thick bowl of yellow clay came from a depth of 18". From 15" came about ½ of another tiny bowl.

About ½ of a medium-sized bowl was found inverted and crushed, at a depth of 6" in north side of mound (Goliad crew).

A badly fragmented bowl or pot was encountered at a depth of 25" [Figure A-31]. The fragments (several hundreds in

Figure A-29. *An earthenware bowl, broken and scattered, as found at a depth of 18 inches in excavations. Note the animal bones at the extreme right.* Courtesy TARL, UT-Austin, photo 41GD1-7.

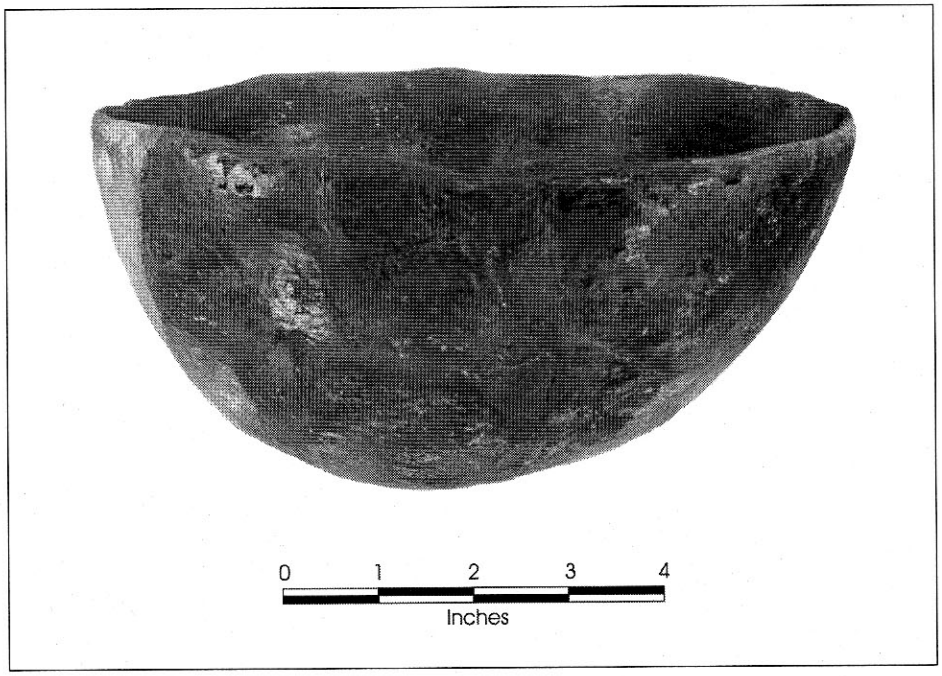


Figure A-30. *Earthenware bowl restored from fragments. Found at a depth of 18 inches in midden deposit.* Courtesy TARL, UT-Austin, photo 41GD1-39.

Figure A-31. *A badly fragmented vessel in midden deposit at depth of 25 inches.* Courtesy TARL, UT-Austin, photo 41GD1-8.

number) were very small, the largest being some 2" x 3" and the average about 1" x 1". It has two handles, one of which was unbroken. It appears that about one-half of the vessel is missing.

Potsherds: The potsherds in the midden deposit here are very numerous, the quantity per square yard being about the same as in the average N.E. Texas midden deposit at a large campsite. The quantity here, however, is not as great as at the L. L. Winterbauer site, Wood Co.; A. C. Saunders site, Anderson Co.; or Mrs. Minnie Garrison site, Wood Co., Texas. Unlike the coastal region, the potsherds here in the Aranama midden are not so small and badly fragmented. Their average size is about 2½" x 3½" with many as large as 4" x 5". This situation also corresponds closely with that in N.E. Texas.

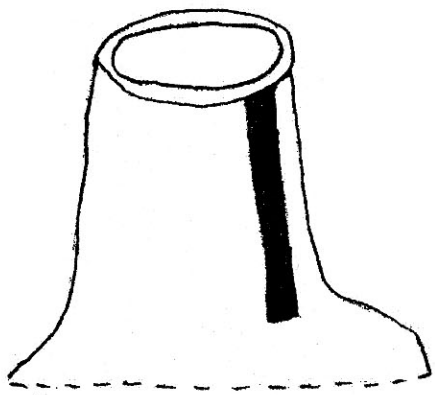
In addition to European pottery bearing a glaze on both sides, there appear occasional potsherds bearing a glaze on one side only; the other side appearing identical with pottery of Indian manufacture. This combination raises a question as to whether or not the Spaniards taught the Indian potters the art of glazing, and whether, in applying the newly acquired technique, the Indian potters retained a part of their old methods.

Two potsherds bearing holes drilled halfway through suggest two possibilities: (1) The sherds broke and the drilling was abandoned; (2) Holes purposely drilled halfway for inserting a bail to the vessel, perhaps using a bail from a Spanish bucket.

It is also worthy of note that very few potsherds found in the Aranama mound bear asphalt; while a considerable number of those found at San Rosario Mission, only a few miles distant, have a coating of asphalt on one or both sides—just as is the case at Webb Island and many other Texas coastal sites.

A probable explanation of the differences lies in the fact that the Karankawas (Carancoguases), who are credited with having made the small scrapers and the coastal pottery that bears asphalt, had a number of members of their tribe in the San Rosario Mission, while none of them was in Aranama (Espíritu Santo) Mission.

From a depth of 10" came the neck of an earthenware bottle. The neck, which is 1¾" long, is crudely made of yellow clay, tempered with shell. The outside diameter at the rim of the neck is 1"; but the neck flares rapidly as it goes down. At the point where the neck broke there is evidence of a handle on each side. Running vertically from just above the handle to the rim was a stripe or band painted in asphalt. There was a like stripe on the other side. (Goliad crew). The shape of this clay bottle neck is suggestive of a modern glass bottle neck.



The white, flaky tempering material, which shows so prominently in many sherds, was at first though to be crushed shell. But, on more careful examination under a small 10x glass, it seems probable that the temper may be bone or crushed limestone. Some of the Spanish bricks from this and the San José Mission at San Antonio disclose the same small white lumps as found in the pottery. This would seem to suggest crushed limestone—as the Europeans likely would not have used shell or bone. A fairly white limestone is to be found along the river bank near the mission. Laboratory tests should be made to determine definitely whether this tempering material is shell, bone or limestone.

The finding of Spanish influence in the ceramic art as practiced by the Indians at this mission causes one to wonder if the nomadic, non-pottery-making Indians served by the San Saba Mission, near the present town of Menard, may have been taught by the Spaniards to make pottery. (A survey of San Saba Mission and test trenches in the midden there would show whether they made pottery and answer the question.)

Note: A surface survey at San Saba Mission, made 8/17/34, showed potsherds of both Indian and Spanish origin and some evidence of partly glazed ware. But no pot handles were found at San Saba Mission. [signed A.T.J.]

Handles on Vessels: Vessels with handles seem to have been more numerous here than in most parts of northeast Texas. This statement is based on the relative number of handles to potsherds here as compared with other sites. The handles here tend toward the semi-circular "tea-cup type" of modern times; and strongly suggest Spanish influence, although the workmanship is unquestionably Indian.

The handles show to have been attached by pressing the ends of the handle through, or almost through, the side of the vessel; then flattening or "bradding" the ends of the handle and smoothing the spot over, while the clay was slightly plastic. Several handles with the ends stripped and a rim fragment showing the hole from which a handle was removed by breakage of the vessel all confirm the use of this method of attachment of handles. The handles vary from ¼" to ¾" in diameter and from 1" to 4" in length. While most of the handles were curved, a few consisted of straight lines with sharp angles.

A good sized fragment of a pot rim, with a handle attached horizontally—instead of vertically—and tilted slightly upward, came from a depth of 8". The upper edge of the handle was only ½" below the rim. The handle was made after the fashion of handles or hand-grips on crockery churns and jars of pioneer day—except that instead of being attached to the vessel for the full length, this handle was fastened only at the ends and had a hole about ½" in diameter between the center of the handle and the side of the vessel. The ends of the handle had been pressed into the side of the vessel and bradded, as in all other cases at this site. (Found by Goliad crew.)

From a depth of 54", near the center of the mound, came a rim sherd showing a round hole slightly less than ½" in diameter. It seems to originally have contained a pot handle—that was not well "bradded"—and pulled out.

A pot knob, or leg, straight, 3" long and ¾" in diameter, with shell tempering, came from a depth of 8" in north edge of mound. It seems to have been attached to edge of rim and protruded upward rather than outward. (Goliad crew.)

One pot handle of clay was horizontal and tilted upward like copper handles found in the mound. It was not "bradded in" like other clay handles, but simply held by cohesion, being kneaded onto side of vessel just beneath rim. (Goliad crew.)

One handle was like others except for a groove on top and running length of handle.

One handle in horizontal position and tilted downward came from depth of 12".

Two small conical knobs, resembling legs on an iron kettle, found in mound. These suggest clay vessels on legs and raise a question as to whether the one described above may not also have been a clay pot leg.

Several Spanish pot or cup handles found are almost identical with those of Indian manufacture, and tend to show the origin of the Indian pot handles.

A total of 57 clay pot handles, 3 of copper and one of iron, was secured by U. of T. from this site [Figures A-32 and A-33].

On 11/5/33 several clay pot handles were found at San José Mission near San Antonio. They are identical in every respect to the ones found at Goliad [Figure A-34].

At a depth of 30", and 12 feet inward from the south edge of the mound, was part of the rim of a large copper vessel, with a heavy copper handle bradded to the rim and protruding upward 3". Handle is ½" in diameter.

Types of Vessel Rims: Four types of vessel rims have been noted among the potsherds. They are: (1) curved slightly inward, rounded and somewhat thinner than balance of vessel; (2) rim on same angle and same thickness as adjoining portion of vessel, some rounded, a few flat edge; (3) curved slightly outward, rim about same thickness, usually rounded but sometimes flat; (4) an unusual bevel-edge, ¼" to ½" slope, and flaring slightly outward with edge about one-half thickness of balance of vessel.

Did Indians Mend Vessels?: Several potsherds unearthed in the midden deposit seem to suggest efforts on the part of the Indians to mend broken vessels.

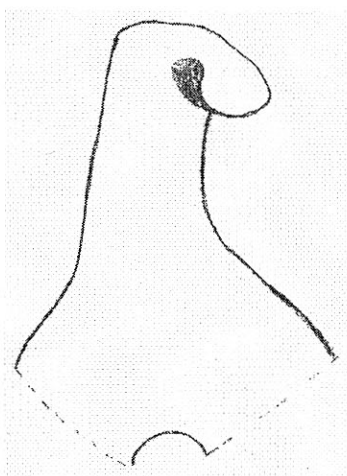
One such find was of a potsherd bearing seven small drilled holes near the edge. Presumably they were used to "sew" that fragment to another by means of small thongs.

The other suggestion of pot-mending was in the form of four potsherds bearing a thick coat of asphalt about ½" wide around the edges of the break on the inside. One of them also had asphalt on a part of the edge itself, as if it had been used as a cement.

Strengthening the impression made by these finds was still another, consisting of a sherd with a very thick application of asphalt about ½" wide around both the inside and outside of the edge. No holes, however.

Ladle: A small earthenware ladle, from a depth of 14", was in perfect condition [Figure A-35]. Its total length is 2¾" which includes a pointed-end handle ¾" in length. Depth slightly less than 1". Yellow clay. Not polished but fairly well made. Real Indian work. Similar ladles come from Bussey Collection, Shelby Co., and from J. M. Riley Farm, Upshur Co., Texas.

Vessel Rest or Stand: What resembles a crude bird effigy came from a depth of 18". It shows to have been made of yellow clay, tempered with a small quantity of crushed shell and some coarse gravel. A crudely shaped "head" resting on a long, wide neck, at that time, seemed to label it as a bird effigy. Workmanship is very crude. At the base of the "neck" are two broken portions with an unbroken central part. Length of neck, 2½"; width at base, 1½"; at top of "head", ½". This object bears slight suggestion of a duck head. It is shaped about as shown in the following drawing and photo [photograph and artifact could not be located].



On November 5, 1933, while searching for Indian pottery at San José Mission near San Antonio, I met A. J. Madlem, who lives on the mission grounds. He is in charge of repairs and restoration to buildings and grounds, and has a collection gathered as a result of such work. Among other specimens was an earthenware object triangular in shape and with a slight knob at the ends of the three legs or projections. Its

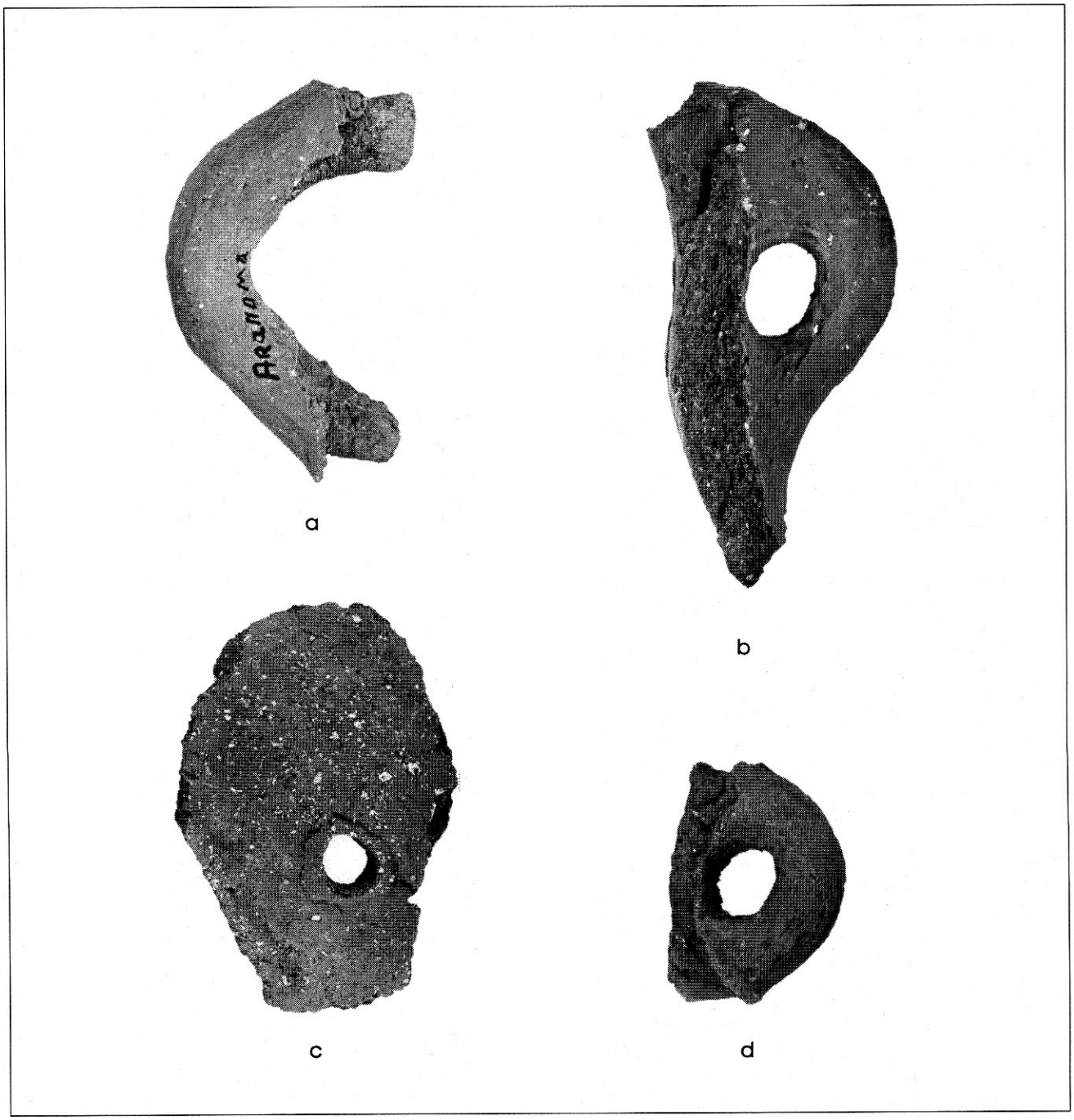
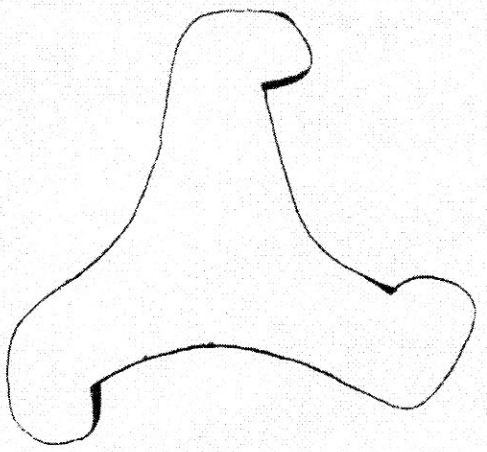


Figure A-32. *Pot handles showing method of attachment to vessel. The ends of handle (a) were inserted in holes in the vessel (c) then flattened or "bradded" while plastic (d) and finally rubbed down and blended into complete handle (b).* No scale. Courtesy TARL, UT-Austin, photo 41GD1-52.

Figure A-33. *This type of handle shows evidence of Spanish influence and is distinctly different from the handles of prehistoric pottery in East and Northeast Texas.* Courtesy TARL, UT-Austin, photo 41GD1-48.

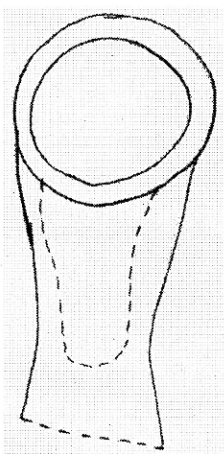
shape is as follows: length, 2⅞"; thickness, ⅝"; crudely made; bottom and top sides flat.



On seeing this object, it immediately became certain that the broken specimen excavated in midden mound at Aranama Mission at Goliad was the same type of article.

The top of each knob is slightly worn and two of them show evidence of a glaze, on the tip only. It was probably used as a rest or stand on which to place hot (?) vessels. It may have been made by Indians under Spanish influence.

Candle Holder (?): At a depth of 4", near center of the mound, was the bowl (?) of a clay pipe-like article of Indian manufacture. Crudely made of yellow clay end tempered with shell and gravel. The bowl, if such it be, is 2½" tall, 1¼" outside diameter and ¾" inside diameter at top. It tapers gradually from top toward the bottom for 2", then begins to flare outward again. The hole is 1⅛" deep and conical in shape. The inside is somewhat charred. The hole does not continue as in a pipe. This may have been an earthenware candle holder, with lower portion broken off.



Pottery and Stone Discs: No pottery disc with a hole in the center, such as frequently found in midden deposits in northeast Texas, was found in the Aranama mound.

But there was found one disc, some 2" in diameter and without a hole, ground down from a fragment of European glazed pottery. (Found by Goliad crew.)

A disc of unbaked clay 1¼" in diameter and ½" thick, with no hole, from depth of 22".

Another disc, of Indian pottery, scarcely 1" in diameter, and without a hole; and a third, also of Indian pottery, about 2½" in diameter, broken and without a drilled hole, were found in the north-central part of the mound. Both had edges worn smooth. (Found by Goliad crew.)

Three small discs not drilled. One copper disc 2" in diameter with ¼" hole in center. A stone disc 1¼" in diameter from depth of 12". Half of another stone disc, with drilled hole, came from 32".

A pottery disc 3" in diameter had no hole; depth 24".

Total of 19 pottery and 5 stone discs [Figures A-36 and A-37].

A few discs of stone and pottery identical with those at Goliad were found at San José Mission, San Antonio.

Game Pieces or "Marbles": Of interest as possibly having been used in games are two "marbles"(?), one of fired clay 1" in diameter; and the other of stone slightly larger and bearing a small smooth pit about 1/10" deep [Figure A-38]. Depth 18".

Arrowpoints and Spearheads

Projectile points of the following shapes and kinds were found [Figures A-39 and A-40].

Evidence of Food

In the midden deposit were found hundreds of buffalo bones, some bones of ordinary cattle, a few of deer, rabbit and turkey. A very few oyster and clam shells were present; and freshwater mussel shells were likewise scarce, as compared to prehistoric sites in Central and East Texas. Snail shells in the midden were also very scarce. Few fish bones were found.