THE ABLE SITE, KAPYONG, KOREA

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The archeology of Korea is a little-known subject to most American students. During the years when Korea was under the domination of Japan, Japanese archeologists made a beginning in this field. However, to judge by the limited literature available in English, the Japanese concentrated their efforts on the sites of the capital cities during the early dynasties of Korea. These are mainly in the valley of the Yalu River on the border of modern Manchuria, though other centers were explored in the vicinity of Pyongyang in the north and Kyongju in the south. These were sites of capitals existing during the sovereignty of the Chinese Han dynasty over Korea and during the period of the Three Kingdoms, roughly the period from 200 B.C. to 900 A.D. These sites are marked by impressive burial mounds and some architectural remains. Studies of the coastal shell heaps and the pit-house villages of the interior seem to have been largely neglected in favor of the more spectacular sites.

Cornelius Osgood (1951: Chaps. 10 and 12) has summarized the early history of Korea and describes the level and conditions of life during each of the periods and in each part of Korea for which records exist. His history is based on various sources including translations of Korean, Chinese and Japanese annals. Doctor Osgood's book is highly recommended as an introduction to the history and culture of Korea.

The archeological work described in this article is largely of a salvage nature, but it hints at what could be found if more thorough investigation could be undertaken in this area. This report is published in the hope that qualified students going to Korea may revisit this site, or others like it, and undertake a more thorough study.

The Able Site is located about forty miles northeast of Seoul where the Kapyong River, five miles above its confluence with the Pukhan River, flows westwardly through a valley approximately four hundred yards wide. On the south, the hills abut on the river while on the northern side a sandy terrace over three hundred yards wide lies between the river and the hills. This terrace is about fifteen feet above the normal stage of the river and has obviously been farmed as rice paddies for many years.

Military operations in the Kapyong valley during the years 1951-52 resulted in the construction of a tent camp on a portion

of the terrace lying between the main valley road (military road 17-A) and the river. The digging of foxholes in this camp revealed numerous potsherds throughout the topsoil. Examination of a series of these foxholes revealed that at least five had been dug through ancient pit dwellings. These could be identified by the concentrations of sherds and masses of charcoal buried as deep as thirty-six inches and exposed in the side walls of the foxholes. In those foxholes not penetrating house pits, the thickness of the topsoil was in no place greater than twenty-one inches. The subsoil was a yellowish sand overlying gravel, so that disturbances of the subsoil were easily distinguishable due to the quantities of intermixed charcoal and humus. Numerous house pits indicate the location of a village. The site has been named the "Able Site" from the first letter of the Army's phonetic alphabet at the time the site was found. The area map, Figure 1, shows the location of the site and the surrounding terrain.

In one foxhole could be detected the edge of one of the pit houses. A part of the foxhole had been dug into undisturbed subsoil, while the remainder had been cut into the former house pit, thereby indicating one side as well as the floor of the house. Protruding from one side of the foxhole were a few sherds showing freshly broken edges. Examination of the soil thrown out of the hole produced some of the missing sherds. Troweling into the side of the foxhole revealed the majority of the sherds of a vase-shaped jar, vessel #1, lying on its side and badly crushed. This vessel lay directly on the floor of the house, with the upper side thirty-four inches from the surface of the ground. The floor of the house was thirty-six inches from the surface and was composed of packed sand, charcoal and clay one and one-half inches thick. This floor rested directly on clean gravel. Immediately behind vessel #1 and resting upright at the same level was vessel #2, intact but badly cracked.

As time permitted, the floor of the house pit was uncovered and the side walls of the pit were revealed. Two adjacent sides were completely uncovered and a trench five feet wide was carried across the pit until the opposite wall was reached. These excavations showed the house to be roughly rectangular, seventeen by twenty-one feet. The corner found was gently rounded. The entire house could not be uncovered due to lack of time. At one point, a disturbance caused by construction of a later house obliterated the older outline. The later house disturbance yielded most of the sherds of a large vessel (#8) at a depth of fourteen inches

from the surface. This vessel was definitely not part of the contents of the older house, but was saved anyway.

In the corner of the house about four feet from each wall was a large hearth. This feature was circular, four feet in diameter and consisted of a layer of boulders four to six inches thick imbedded in a matrix of clean, white clay. The center of the hearth was fire-reddened, and some of the boulders were fire-cracked. The sandy subsoil beneath the hearth was fire-reddened to a depth of two inches. Directly on the hearth and scattered through the soil around it was the majority of the fragments of two large vessels (#4 and #5). These were intimately mixed and apparently had been broken at the same time.

Adjacent, but some three feet from the hearth was vessel #3 lying on its side (Figure 2). The top of the vessel was twenty-three inches below the surface and four inches below the level of the subsoil. Inside the vessel was found approximately one pint of charred fruits, identified by Egbert H. Walker, U.S. National Museum, as probably the Manchurian crab apple (Malus manshurica). This fruit is called "patpe" in Korean and is still eaten by the rural population. The exterior of the vessel was soot-blackened and the floor beneath the pot was fire-reddened. Above the vessel at the level of the subsoil was a large section of a charred log. This log, seven inches in diameter and thirty-two inches long, was one of many pieces of charred wood encountered in the digging. No pattern could be detected from these finds, but they undoubtedly represent parts of the house roof structure. A section of the large log was preserved for Carbon 14 testing in order to date the house pit. The specimen was tested at the University of Michigan-Memorial Phoenix Project Radiocarbon Laboratory under the direction of Professor H. R. Crane. This was the Laboratory's sample numbered M-303, and an age of 1700± 250 years was obtained.

In the soil near the hearth were found fragments of clay tubes showing glazed portions indicative of exposure to fusing temperatures. These, apparently, were used in the reduction of iron ores to "sponge iron." Scraps of iron slag and unidentifiable iron objects prove that some iron-working activities were conducted in or near the house. The tubes are incomplete, but the fragments indicate a tube three to four inches in diameter having a central perforation about one inch in diameter (Figure 5c). One end of the tube shows contact with intense heat, and some iron slag adheres to the glazed fragments. It appears that the tubes were used in the smelting process, probably as nozzles for a bellows or other draft-producing device. Similar tubes and slag were

found in proto-historic house pits in the north of Honshu, Japan, associated with pottery which appears closely related to that found at the Able Site (MacCord, 1955:155-6).

Scattered through the soil adjacent to the hearth were found additional sherds which have enabled us to reconstruct two additional vessels (#6 and #7). Other artifacts found in the soil filling the pit house are (numbers in parentheses are those of the U.S. National Museum):

1 fragment of polished slate
2 polished slate projectile points (404387)
1 pottery sherd, circular and perforated centrally (404389)
3 pottery disks, unperforated
1 stone disk, centrally perforated (404388)
1 broken stone disk (404385)
1 pottery disk bead
1 polished celt (404386)
2 fragmentary whetstones (404388)
2 iron fragments, unidentifiable

No postmolds were found in that portion of the house floor uncovered, though a search for such features was made.

Description of Artifacts

Vessel #1 (404367) is a vase-shaped bowl having a flat bottom, expanding sides, constricted neck, and flaring rim. The over-all height is eight and one-half inches, and the oral diameter is four and one-quarter inches. The base if entirely plain and is four inches in diameter. The rim top is rounded in cross section. Coarse grains of granitic sand comprise the tempering material used. The colors both inside and out range from yellow through red and buff to a grayish brown. Surface finish is smooth and entirely lacking in decoration. Irregular striations on the neck parallel to the rim seem to be the result of smoothing the plastic clay with the fingertips.

Vessel #2 (404368) (Figure 3a) is a "bean-pot"-shaped bowl of the hard, gray stoneware, known to Japanese archeologists as Twaibe. This bowl was made on a potter's wheel and is uniform in color. The bowl is four and one-quarter inches high and has an oral diameter of three inches. The flat base is entirely plain and is four inches across. No decoration of any kind is found on this vessel. The rim is everted and has a gently rounded upper edge.

Vessel #3 (404369) is a large, flat-bottomed bowl with an incurving rim. The paste is tempered with coarse sand and flakes of mica. The color is predominantly buff and gray, with some reddening of the basal area. The base is plain and measures six inches in diameter. The over-all height of the vase is fourteen and one-half inches, and the oral diameter is nine inches. The rim is rounded in cross section.

Vessel #4 (404370) is a large vase thirty-one inches tall and twenty-one inches in diameter at the top. The bottom is rounded, while the neck is slightly constricted. The sides are from seven-sixteenths to nine-sixteenths inches thick and are well-baked. The clay is tempered with minute flakes of mica. In color, the ware varies from white through gray, buff, and brown to black. The lower portions are cream-colored with irregular patches of brown, orange, and red, apparently due to irregular firing and to heating during use. Many of the sherds were soot-blackened prior to being washed. The outer surface of the neck is smooth with faint vertical striations, while the inner surface shows horizontal striations. The body of the vessel is completely covered with rectangular indentations apparently made by paddling with a malleating tool bearing a grid which had been incised with grooves spaced seven to the inch. The rim, of which only one small piece was found, flared outward forming a right angle with the neck. The rim top was square in cross section and protruded one-half inch outward. No handles or other appendages were noted.

Vessel #5 (404371) is unusual, having all the appearance of a bowl, except that the bottom consists of a gratelike grille of clay, instead of the normal bottom (Figures 4a and b). The vessel is apparently not wheel-made, but is well-baked, gray ware resembling Iwaibe ware. The upper half of the outer surface is covered with irregularly-spaced, incised lines parallel to the slightly flaring rim. Spaces between the lines are filled with vertical or diagonal incised lines. The lower half of the vessel, including the grillwork, is covered with impressions of a cord-wrapped malleating tool. The height of the vessel is eleven inches, while the rim diameter is twelve and one-half inches. The grille bottom is made up of seven ovate holes surrounding a central perforation one inch in diameter. These perforations were made subsequent to the forming of the pot but prior to its firing. Two handles, one of which is missing, were originally on opposing sides of the vessel four inches below the rim. The handle found is a two-inch long protuberance "riveted" to the

vessel wall. The handle is one and one-half inches thick at the rivet, but tapers to one inch at the tip, which is penetrated to a depth of one and one-half inches by a triangular, tapered hole punched from the outside, giving the handle a teatlike appearance. The fragments of this vessel were found intimately mixed with those of vessel #4, and it appears that vessel #5 is the upper half of a "double boiler" affair, of which #4 is the lower half.

Vessel #6 (404372), a small bowl having a flat bottom, rounded sides, constricted neck, and everted rim (Figure 3b). The over-all height is four and one-half inches, while the oral diameter is three inches. The base is plain and is two and one-quarter inches in diameter. The ware is tempered with quartz sand and flakes of mica. The vessel is undecorated, and the surface is smoothed. Colors are buff, brown, and black.

Vessel #7 (404373) is similar to vessel #6 but is somewhat more crudely made. The flat bottom is plain, two and three-quarters inches in diameter. The height is six inches, and the oral diameter is four inches. Colors are gray, buff, and black. The rim is more nearly straight than is that of #6, and the lip is more rounded.

Vessel #8 (404374) is a large, round-bottomed bowl nineteen and one-half inches high. The maximum diameter of the body of the bowl is seventeen inches, while the constricted neck is six inches, and the strongly flaring rim is eight inches across. The ware is the hard, gray Iwaibe made on the potter's wheel. It appears that the bowl when first made was too plastic to be handled, as the bottom and one side are strongly depressed. This deformity, however, did not prevent the vessel from being fired and used. The upper portion of the bowl is entirely smooth, except for the circular striations resulting from the shaping process. The lower portions of the outer surface are covered with impressions resembling the weave of coarse cloth. Since these impressions are not continuous, it is probable that they were made by the use of a cloth-wrapped malleating tool. The bottom surface is reddened, apparently due to repeated exposure to cooking fires.

Miscellaneous sherds recovered from the fill of the house pit comprised eleven bases, fifty-eight rims, and several hundred body sherds. Of these, only the bases and seven of the rims were removed to the United States (404379). Two distinct types of ware can be distinguished among the sherds found, Iwaibe and a ware closely resembling the ware known in Japan as Haji. The Haji type is coiled, crudely made, coarsely finished, usually

undecorated, and yellow or red in color. Bases of this ware are usually plain, and have diameters of from two to four inches. The rim sections show that the vessels had constricted necks and flaring rims, rounded in cross section. The outer surfaces are usually plain, though occasionally one will show vertical striations due to having been scraped prior to being fired. One crude lug-handle, three-fourths inch in diameter and one inch long, is the only appendage noted on this ware. Iwaibe ware seems to be less plentiful in the housepits than the Haji ware and it possibly may represent imported or purchased ware in contrast to a cruder, homemade Haji ware.

Miscellaneous sherds collected from the other foxholes on the site are predominantly of the Iwaibe type. None shows glazing, a trait which appears in Korea about the Ninth Century A.D. A few sherds are of the Haji type, and a few show cord-impressions and poor firing reminiscent of some of the Jōmon Period (Neolithic) wares of Japan.

The celt found (404386) (Figure 5b) measures six and three-fourths inches long, two and three-fourths inches wide, and is one and three-eighths inches thick. It is made from a fine-grained diabase.

The slate projectile points (404387) have short, square tangs and are illustrated in Figure 5a.

One fragment of polished gray tuff (404385) may be a broken ornament, but its incompleteness precludes definite identification. A broken disk of reddish tuff (404381) is two and one-quarter inches across and one-quarter inch thick. A complete stone ornament (404388) made of mica-schist is shown in Figure 5d. It measures two by two and one-half inches across and is one-quarter inch thick.

One perforated disk of pottery (404389) is shown in Figure 5e. It is two and one-eighth inches in diameter and one-quarter inch thick. It is made from a sherd of mica-tempered pottery bearing an incised decoration similar to that found on vessel #5. Three other disks made from potsherds are unperforated, more crudely rounded and measure, respectively, two and three-eighths inches, one and three-eighths inches, and one inch in diameter. The use of such disks is problematical. The single clay bead found is a disk one inch in diameter and three-sixteenths inch thick. It is perforated by a minute hole approximately one thirty-second inch in diameter.

Two fragments of stone showing use as whetstones (404388) were found. One of these is made of a fine-grained sandstone,

and the other is made of a fine siltstone.

Conclusions

The importance of the Able Site lies in its demonstration of the survival of Neolithic tools, weapons, ornaments, house types, and pottery techniques in a period when the users also knew of iron, the potter's wheel, stone construction, and, inferentially, gold, bronze, and other metals. The cruder implements are identical to those described by Bishop for the Neolithic of North China.

Vessel #5 with its perforated base finds counterparts in the Shang Culture at Anyang, China reported by Creel (1937), though at Anyang they are sometimes made of bronze. These vessels were used with a lower vessel as "steamers" for cooking rice and other foods.

A further significance of the Able Site with its date of approximately 200 A.D. is the number of traits shared with the culture of the same period in Japan. These include rectangular pit dwellings, Iwaibe and Haji pottery, and iron smelting processes which used a clay tube of identical shape, size, and appearance. Presumably the same traits will be found over much of the region north of China and fronting on the Sea of Japan when this region is explored archeologically.

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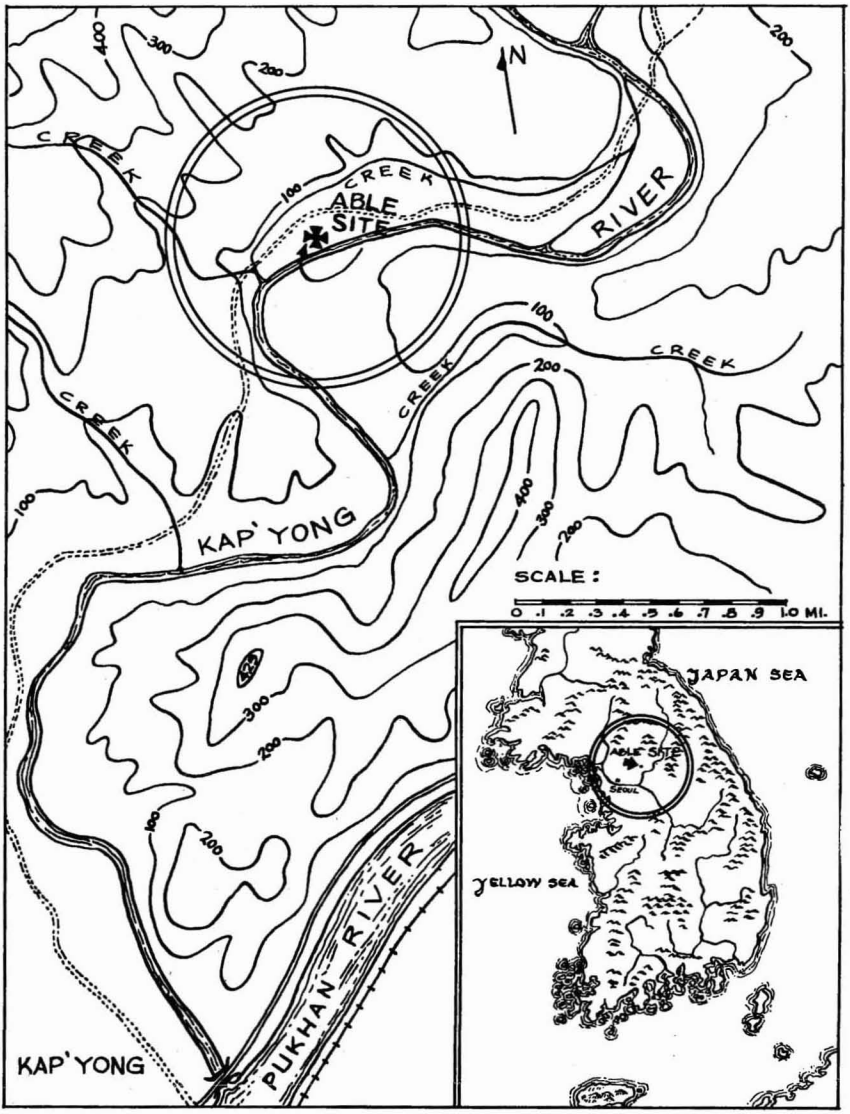

Fig. 1 Location and environs of the Able Site

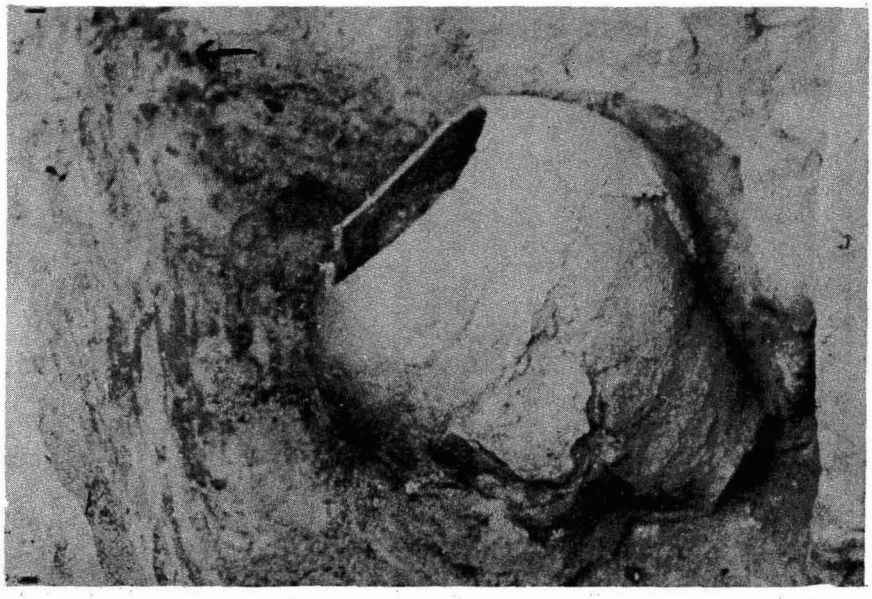

Fig. 2 Vessel #3 as found. Arrow points to charred log. Photograph by author.

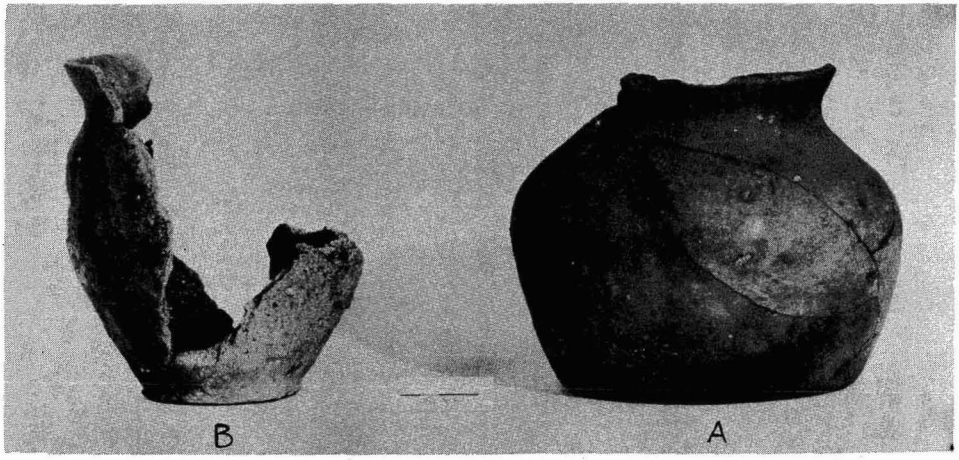

Fig. 3 a Vessel #2
b Vessel #6 (Smithsonian Inst. Neg. #43303)

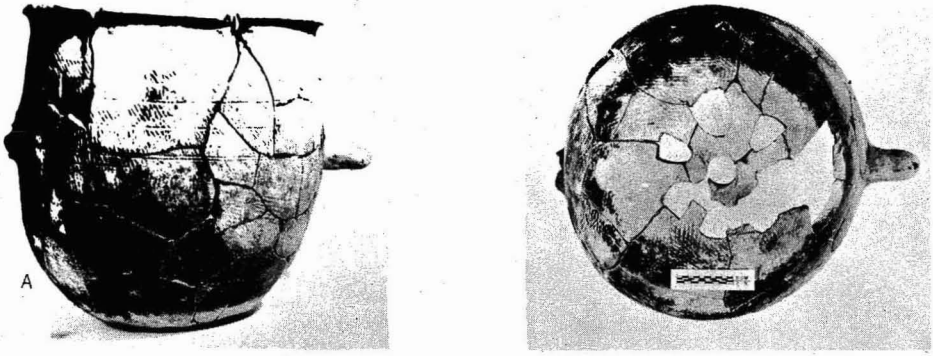

Fig. 4 Vessel #5: (a) side view, (b) bottom view.
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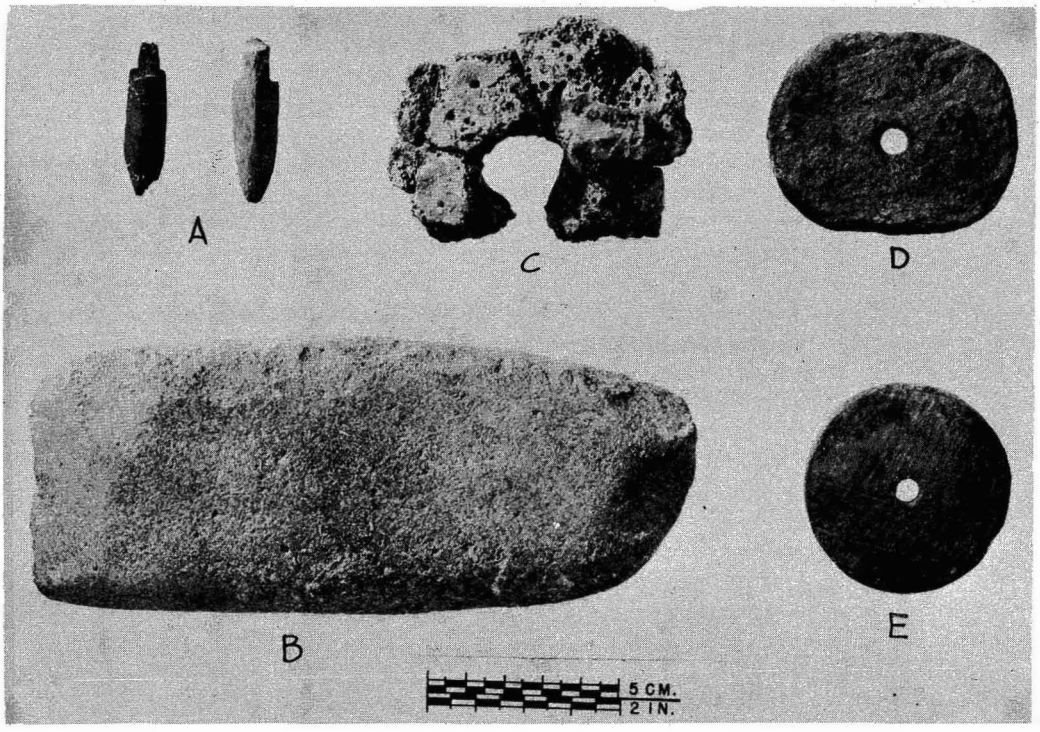

Fig. 5 a Polished slate arrowpoints b Stone celt
c End of clay tube, showing glazing
d Perforated stone disk e Perforated clay disk
(Smithsonian Inst. Neg. #43303-C)