
SMITHSONIAN INSTITUTION
Bureau of American Ethnology
Bulletin 157

Anthropological Papers, No. 44

The Cerro de las Mesas Offering of Jade and Other Materials

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THE CERRO DE LAS MESAS OFFERING OF JADE AND OTHER MATERIALS

By PHILIP DRUCKER

INTRODUCTION

In the course of the National Geographic Society-Smithsonian Institution archeological investigations at the site of Cerro de las Mesas, in Veracruz, Mexico, in 1941, Stirling encountered an impressive offering of jade objects at the foot of a large mound through which he was driving a cross-section trench. He has described this find briefly in a popular article (Stirling, 1941). The present writer also mentioned this offering in his report on the ceramics of the site, pointing out that in view of the pottery associations, including both sherds contained in the mound mass and cache lots of vessels placed with burials in the mound, the jade cache was probably to be reckoned as belonging to the Lower II horizon (Drucker, 1943, pp. 11, 79). After that time we often discussed the desirability of making a detailed study of the jade objects, but, as with the weather, we did nothing about it. Finally, in the spring of 1952, Stirling arranged that the writer should make a brief trip to Mexico, to the Museo Nacional where the collection is housed, to study it. The present report is based upon that study.

Through the courtesy of the Director of the Museo Nacional, Dr. Eusebio Dávalos H., the writer was able to examine and compare the jade specimens, both those in the storage vault and those on exhibit in the halls. It turned out, however, that the entire lot was not available: there were a few pieces which had been sent on loan to various local museums, etc. However, the bulk of the material was in the Museo Nacional, and it is believed that there are very few significant features or types among the unavailable specimens (which consist mostly of earspools and beads, according to the inventory prepared by Lic. Valenzuela in 1941 when the lot was received by the museum). A few pieces only will be described from photographs made in 1941 rather than from the 1952 study.

The writer wishes to express his gratitude to Arq. Ignacio Marquina, Director of the Instituto Nacional de Antropología é Historia, to

Sr. Eduardo Noguera, of the same organization, and to Dr. Eusebio Dávalos, Director of the Museo Nacional, for authorizing access to the collections and for providing every facility for studying them. Thanks are also due to Dr. W. F. Foshag, of the United States National Museum, for information on the mineralogy and source of the jadeites.

THE CERRO DE LAS MESAS OFFERING MATERIALS

The purpose of this paper is primarily descriptive, and to get on record some information about the Cerro de las Mesas jades. With as few sizable lots of jade objects firmly placed in space and time as there are—Monte Albán, and from the recently published reports, Uaxactun, Nebaj, and Kaminaljuyú are the sources of the principal exceptions—detailed comparative studies of Mesoamerican jade are not likely to be very rewarding. In certain cases similarities to materials from other sites or regions can be pointed out, but no very definitive conclusions can be drawn from these few comparisons. Similarly, certain peculiar forms may be, for all we know, distinctive local styles or they may be imports from some other archeologically little-known region. Or some of the peculiar forms may be cultural sports, of no particular significance.

Even after we have descriptions of a good number of jade collections whose proveniences are known, jade is likely to prove a difficult material to study. Not only were jade objects traded widely in Mesoamerica, but as has been shown repeatedly, some pieces were preserved a long time—as heirlooms perhaps, or treasures, or possibly even as objets d'art. A temporal placing of a piece of jade does not mean the same as the assignment of a ceramic type or trait to some level; all it gives us on the jade is a possible cut-off date for the type. Olmec jade figurines provide a neat example of difficulties of this sort that one may encounter. The objects are of course readily recognizable from the stylistic standpoint. Present evidence suggests the period, or at least principal period, of their manufacture was the Pre-Classic Middle Tres Zapotes-La Venta horizon (a prolonged Urban Formative phase immediately preceding the Classic Upper Tres Zapotes). Yet a few objects of this type occur in the cache at Cerro de las Mesas, presumably traded from the nearby Olmec region, in a period believed on other grounds to have been roughly contemporary with Upper Tres Zapotes. Consequently, if these various suppositions are correct, the objects had been made quite some time before they were buried under the steps at the front of the mound. They were kept pretty carefully, too, all this time, for they have no nicks or other signs of rough use. The Cerro de las Mesas data by themselves would mislead us entirely. As a matter of fact, the basis for the belief that the

Middle Tres Zapotes-La Venta period was the one in which the objects were made derives mainly from their occurrence plus their close stylistic kinship with the monumental sculpture at the one-period site of La Venta.

The several hundred specimens in the cache include a considerable number made of what appeared to be one or another variety of jadeite, or blends of jadeite and albite, all of which I designate "jade," using the term in its loosest sense. However, I may easily have classed as "jade" a number of materials really quite different mineralogically. The second most abundant material is a soft, dull-surfaced tan to buff stone with lustrous streaks or areas of white and green. A fairly sizable proportion of the small figurines and figurine heads, as well as of the beads, are of this material. It was surmised at first that this stone was decomposed or altered (burned) jadeite. However, Dr. Foshag, who saw color transparencies of these pieces, along with brief descriptions, suggests they are probably calcite with inclusions of quartz and chlorite. There are a few objects of serpentine, a small number that may be of chloromelanite, basalt, and what Foshag designates meta-diorite. It would be beyond the scope of this paper and my competence to attempt to discuss the varieties of jadeite represented in the collection from a mineralogical standpoint. Foshag's study of Mesoamerican jadeites and related materials, when available, should clarify a great many problems of both mineralogical and cultural import.

FIGURINES

The figurines from the cache are quite varied stylistically. Only a few of them can be assigned to known art styles. In another way also they form a rather heterogeneous lot, for some of them are perforated for suspension either as pendants or beads. However, it seems preferable to describe all the objects which have been carved into representative forms together, no matter for what purpose they may have been designed, since after all we can only speculate as to the function of many of these objects.

Olmec figurines.—Two of the figurines in the lot are very obviously Olmec in style and a third, a figurine head, probably belongs to the same school of art. The first of these is a small figurine carved in the full round of translucent bluish-gray jade (pl. 27). It is almost uniform in color with no mottling. It stands 12.1 cm. high, its maximum width is 7.6 cm., and maximum thickness (back to extended hands), 4.4 cm. In every respect the treatment is typically Olmec. Head-and-face outline is characteristically rectangular with elongated flat-topped head and heavy, squarish jowls. In profile, deformation of the head is clearly indicated. The eyes are elongated blunt ellipses

formed by drilling a series of contiguous holes with a small solid drill. Presumably they were intended to contain inlays as did the eyes of certain figurines from La Venta. Nose and mouth are framed by a continuous line that extends from the sides of the broad nose to the corners of the mouth. The nostrils are represented by two connecting conical pits. The everted upper lip is directly below the nose; the corners of the mouth are marked by drilled pits. Ears are typically elongated ridges at the sides of the head, quite simplified, and are perforated with connecting conical drill pits. The body conforms to the usual Olmec stylistic standards combining both realism and considerable simplification. The principal muscular masses on the shoulders, chest, back, and thighs are plainly shown. The limbs are disproportionately short. The hands and feet have been simplified to blunt, rounded forms with grooves marking off the fingers and toes. The general proportions of head and body suggest that it may have been intended to represent an infant. In many respects this is an outstanding product of Olmec art.

The second Olmec figurine is a small standing figure of pale yellowish-green serpentine with black inclusions (pl. 28, *a*). The figure portrayed apparently is that of a hunchback, although viewed from certain angles it looks as though it may represent a man carrying a load on his back. The over-all height of the figure is 7.0 cm. Like the preceding, the Olmec stylistic characters of the carving are most obvious. It differs from the first figurine in that the eyes are shallow, sawed semilenticular grooves. They were apparently not intended to hold inlays. Vertical lines connect the sides of the nose and the edges of the mouth. Two intersecting conical perforations form the nostrils and two more drilled pits mark the corners of the mouth, separating the heavy, squarish upper lip, which begins just below the nose, from the lower lip. The head outline is elongated with squarish heavy jowls. The ears are elongated, simplified to rectangular form, and have biconical perforations through the lower tips. The arms, hands, legs, and feet are simplified. The surface of the stone of which the figurine is made is only moderately polished. It will be recalled that the series of figurines from La Venta included a number of serpentine and similar soft stones, as well as those of jade.

The third object, one which is less certainly of Olmec style is one in the form of a small skull of light gray-green opaque jade, finished with a moderately high polish (pl. 28, *b*). The specimen, although very highly stylized, very obviously represents a human skull. One suspects that the theme may have been suggested by the original form of the stone, and the design was adapted to utilize this original form to the maximum. This, if true, is quite unusual in Olmec art,

at least in the examples currently recognized as pertaining to that style. The eye sockets are represented by two very shallow round-bottomed, drilled pits. A pair of wide shallow grooves diverge from the base of the rounded lump that represents the nose, swing in wide regular curves up the sides of the head, and end in short spirals just over the eyes. The mouth is indicated as a lenticular area formed by shallow sawed grooves, bisected by a similar sawed line and crossed by five vertical lines to indicate teeth. The back of the object is a smooth vertical surface. Two gradually tapering perforations near the rear of the upper portion of the head intersect, presumably for suspension, and another pair of conical perforations, one from the under side of the chin and one from the back, also intersect to provide another suspension point. The reasons for suggesting that this piece may be of Olmec origin are: (1) The bold simplicity of style; (2) the type of jade, which resembles some of that from La Venta; and (3) the fact that a few examples of representations of skulls, both in pottery and carved of rock crystal, have been found at La Venta itself. The over-all height of the object is 7.3 cm., maximum width 4.2 cm.

Zapotecan (?) figurine plaque.—A small flat specimen, which might actually be classed as a plaque rather than a figurine except that it is not provided with perforations for suspension, is carved with a figure stylistically very similar to the "Danzante" figures of Monte Albán (pl. 29 and fig. 2). The material of which it is made is opaque medium-green jade with olive-brown spots. The object is 9.2 cm. in length, 5.9 cm. in width, and 1.0 cm. thick. The face of the object bearing the carving is very highly polished but not flat, having a slight concavity in its lower half. The back is unworked and unpolished. The figure is formed by sawed lines, cut in asymmetrically, that is to say, the cuts are not vertical, but have a steep face bordering the area outlined with a longer flatter slope away from the emphasized area, as though the sawing had been done at a slant. The personage is portrayed in a posture suggesting violent movement, with head thrown back and legs doubled up under him. The eye is formed by a shallow, broad drill pit. The nose and mouth shown in profile lack the framing lines and heavy everted upper lip of the Olmec style. There is a small shallow drill pit at the corner of the mouth. The personage wears an elaborate earplug with a flowerlike pendant, as well as a belt and breechclout. Swirling spirals on the head suggest an elaborate hairdress. The whole concept of the figure reminds one very strongly of the aforementioned Danzante figures, particularly in the strength of depiction combined with the rather rubbery-looking, impossibly jointed limbs. Despite the anatomical disproportion and poor drawing, the figure gives the impression of a very

sophisticated style. On the back of the object at a point just below the back of the head a small drill pit was begun, but not put completely through.



FIGURE 2.—Zapotecan²(?) style figurine plaque.

Figurines of "crossed-arm style."—Two pieces in the cache, while not too similar stylistically, are interesting because of their resemblances to the figures with crossed arms described by Thompson from the El Baul region of Guatemala, and a fragmentary shell figurine from Nebaj (Thompson, 1948; and Smith and Kidder, 1951, fig. 19, c). The first was a rather large, somewhat crude figure of diorite (?) which was found lying on top of the objects of jade (pl. 30). It is the one referred to as a "monkey figure" in my report on the ceramics of the site (Drucker, 1943, pl. 58, c). It strikes one as being rather crudely made, the eyes being simply deep hollows apparently pecked out, the nose a flattish triangle, and the mouth an ellipse from which the center had been pecked out. On the back of the head a hairdress is suggested. The arms shown crossed over the breast are simply long flat strips set out by cutting away the material immediately adjoining. The sexual organs are indicated, an unusual feature in any of the regional art styles. The whole figure is angular and poorly proportioned. The feet merge into a rounded block of

stone, which suggests that the object was either unfinished or else intended to be embedded in some plastic material as an architectural ornament. The figure is approximately 40.5 cm. high. The surface of the stone is rather rough; no attempt was made to smooth or polish it.

The second object of this general style is a small jade figurine just under 6.0 cm. long (pl. 31, *f*). The material is a light gray-green. The back is irregular and only moderately polished. The figure is indicated by a series of sawed lines which have been given slight relief by the cutting away of adjacent areas. The eyes are ellipses transected by horizontal sawed slits. The nose and mouth are formed by a large triangle extending from between the eyes to the base of the face, two transverse lines representing the base of the nose and the mouth. The arms are crossed over the breast. Three fingers are indicated on each hand by sawed grooves. At the base of the figure, a transverse sawed line seems to indicate the bottom of a kilt or skirt. The feet are simply indicated. A transverse perforation made by two intersecting gently tapering drill holes, goes through the neck of the figure from side to side. It was obviously drilled before the lateral notches were cut in at the base of the head to separate head and shoulders. It may be that this object originally had a different form and was reworked into the figurine. Two pairs of intersecting conical perforations, one pair at the side and back of the head and the other at about the waist on the right-hand side of the figure, provide additional means of suspension.

I am by no means certain that these rather crudely portrayed figurines with the similar posture actually have any significant relationship, but the possibility that they may have should not be overlooked.

Unclassified figurines.—There are a considerable number of figurines and figurine heads from the cache which as yet cannot be classified as belonging to any specific local style or time horizon. It is to be hoped that eventually some may be culturally identified. For the present they will be described and tentatively grouped on certain arbitrarily selected stylistic traits, which perhaps may turn out to have regional and/or temporal significance. The first such group will be one characterized by the use of relatively high relief for depicting some or all of the features. The first such figure is a rather large specimen 22.0 cm. high, of a light greenish-gray stone mottled with white, probably meta-diorite (pl. 32). It represents an individual in a standing posture wearing an elaborate necklace and ornamented belt and breechclout, with long hair hanging down the back. The eyes are long elliptical slits made by drilling a series of contiguous holes with a small hollow drill and breaking out the intervening partitions.

The form of the eyes suggests that they might have been intended for the insertion of inlays of other materials, as were the eyes of many Olmec figurines. The other facial features show a fair degree of realism. The large nose is boldly carved, the ears are simplified vertical strips at the lower ends of which elaborate earspools are indicated by double hollow drilling. The mouth is a wide shallow ellipse, the corners of which are marked by hollow drill pits. The necklace is indicated by a series of circles made with a fairly large hollow drill and ends in a large rectangular pendant on the figure's chest. The belt ornament is a wide rectangle with rounded corners and a hollow drilled circle at its center. The belt, breechclout, and the figure's long hair are indicated by parallel sawed lines. The body and limbs of the figurine are much simplified in treatment. In many respects this figure seems vaguely reminiscent of the Olmec style, but specific details of treatment make clear that it does not belong to that style. For example, the forehead, nose, and mouth, and particularly the space between the nose and upper lip are non-Olmec. The degree of simplification of body and limbs is much greater in Olmec figurines and significant detail of muscular masses is suppressed, and, finally, the use of the hollow drill is, so far as known, not to be found in Olmec art.

Another fairly large figurine, not of jade but of a dark-green stone with black streaks, possibly chloromelanite, is stylistically somewhat different, but is done in a fairly bold relief (pl. 33). The face is surmounted by a headdress in the form of the muzzle of some animal. The eyes are large pyriform depressions in which no traces of drill pits remain. The earspools are large incised circles with pits made by a small hollow drill at their centers. The nose and mouth are fairly realistically carved although the four teeth shown between the partly opened lips are disproportionately large. The body of the figurine has been so much simplified as to lack most anatomical detail. The hands which meet over the person's belly appear to be holding some object. The fingers and toes are marked with short sawed lines. The lines separating the upper arms from the sides and separating the legs are made by broad shallow sawed lines rounded off by subsequent polishing. In profile the body is quite flat, and in low relief. The figurine stands 20.4 cm. high, 6.7 cm. wide, and has a maximum thickness of 2.7 cm.

Another object in which fairly high relief was used by the carver is a little head of a brownish material containing streaks of dark and medium green, probably calcite with quartz and chlorite (pl. 31, *g*). The outline of head and face is that of an inverted triangle with heavily rounded corners and a slight notch at the top of the head. Raised masses at the two corners of the head suggest simplification

of the headdress. The eyes are fairly large circles formed with a hollow drill, and give a staring owl-like effect. The nose was laid out by sawing a triangle with its base at the mouth, its apex between the eyes. It was then carved into a high arched beak-like form. The corners of the mouth were marked by pits made by a small solid drill and connected by sawed lines. In profile the head has a bulging forehead, a deep, wide, sawed groove across the region of the eyes and the jutting beak-like nose previously mentioned. Two sets of intersecting conical perforations drilled from the sides and the back of the head provide points of suspension, one at either side. The height of the head is 4.2 cm., maximum width 3.3 cm., maximum thickness 1.6 cm.

Another category of figurines and figurine heads, all decorated with flat low relief appears to include two stylistic groups or subgroups, but whether these possible stylistic differences have real significance as to time or place of origin is unknown. In one of these styles the mouth and nose (rarely the nose alone) are represented by a simple flat triangle sawed out so that the apex is between or just below the eyes of the figure. The treatment of these features is reminiscent of that of the Teotihuacán type figurines from Monte Albán III (Caso, 1938, p. 9), except that the Cerro de las Mesas specimens entirely lack the strong relief of those from the highland, and might better be said to have been drawn rather than carved. In the other style the nose is formed by a continuation of the lines which encircle the eyes so that these lines descend downward and outward and are joined at the base by a horizontal saw cut, much in the fashion of the Early Classic jades from Nebaj (Smith and Kidder, 1951, pp. 33 ff.).

An example of the triangular nose and mouth style is one made from half of a large bead which was sawed through, leaving part of the biconical perforation clearly shown on its back (pl. 34, *g*). The features are indicated by a series of shallow sawed slits, two at each of the eyes. A sawed triangle with three horizontal cross lines represents the nose and mouth. It is possible that this specimen was just being laid out for more elaborate working and was not finished because the saw cuts are quite shallow. It is made of an opaque light gray-green jade, the front of which is moderately well polished and the sawed back only slightly less polished. Two biconical drill holes perforate the sides of the head near the top. In one of them the bridge at the edge of the perforation has been broken out. The length is 3.8 cm., width 2.9 cm., thickness 1.5 cm.

A quite similar specimen, the eyes of which are marked by three horizontal saw cuts and the nose and mouth once more by a triangle with transverse sawed lines at its base, is pierced transversely for suspension by two biconical drill holes which enter at either side near

the top (pl. 34, *d*). A small notch at the center of the lower edge and two small notches on either side suggest that the object may have been reworked from some other form. Its over-all height is 4.5 cm., maximum width 3.2 cm., and thickness 1.2 cm.

Another figurine representing a complete figure is made from a dense black stone, possibly basalt, and was one of those in which the original form of the pebble was very slightly modified (pl. 35, *a*, *a'*). It represents a standing figure with the arms folded across the belly. A horizontal line sawed just above the face presumably marks the hairline. The eyes are each formed by a single horizontal sawed slit, the nose and mouth are formed by a triangle with transverse lines across the base to indicate the mouth parts. Some cursory saw lines seem to indicate the legs, the feet of which are little protuberances probably left from the original unworked form. The back is unworked except for transverse lines at point of neck and waist. The lower part of the figurine retains the original irregular surface that slopes away sharply toward the feet so that the figure cannot stand upright.

Another small standing figure, likewise of a dense black stone, possibly a fine-grained basalt, in a similar posture except that the hands appear to be holding something, gives a faint suggestion of Olmec influence in its treatment (pl. 35, *c*, *c'*). The eyes are two horizontal sawed slits but an attempt had been made to give a more realistic treatment by a slight modeling of the cheeks just under them. On the back of the figure sweeping sawed lines mark off arms, waist, and legs. Feet and hands are delineated in a highly simplified fashion. The length of the object is 9.5 cm., width 3.0 cm., maximum thickness 1.6 cm.

A third small standing figure representing much the same posture strikes one as being perhaps the crudest of the whole lot (pl. 35, *b*, *b'*). It is made out of a dense olive-green stone. Encircling sawed lines indicate the neck, the upper and lower edges of the folded arms, the waist, knees, and feet. The head is simply the rounded end of the original pebble, with two small drill pits for eyes and a triangle for nose and mouth. There is no indication of ears or earpools, or any modeling whatsoever. The hands are separated by two slanting sawed lines, and fingers are represented by horizontal sawed lines. Two deep notches sawed vertically from either side mark off the legs. The length is 6.2 cm., width 2.7 cm., thickness 2.1 cm. There are no perforations for suspension or attachment.

A small head perforated at the upper end by connecting transverse conical drill holes also has mouth and nose made by a sawed-out triangle with three transverse saw cuts at the lower edge to indicate base of nose, lips, and mouth (pl. 34, *h*). The eyes are sawed ellipses with wide sawed lines transversing them horizontally. The elongated

oval pebble from which this head was made was otherwise slightly modified and is not polished. It is 4.9 cm. long, 2.6 cm. wide, 1.8 cm. maximum thickness.

A small flat pebble which appears to be olive-green serpentine is framed by a rectangular border made by sawed vertical lines on the sides and a horizontal one across the upper edge that seems to represent hair (pl. 34, *b*). The eyes and mouth are irregular ellipses set off by sawed lines; the nose is simply a flat triangle, set off by sawed lines. The height of this object is 2.8 cm., width 2.7 cm., and maximum thickness 0.7 cm.

Two small beads, one of which is a thick ellipse in outline but fairly regular in form, and the other of which is so irregular as to suggest a small pebble, as slightly worked as possible, have faces carved on them in essentially the same fashion as the preceding figurines (pl. 36, *b*, *b'*, *c*, *c'*). The one of regular shape has elliptical eyes and two joining arcs that suggest eyebrows. The nose and mouth are formed by a triangle, the sides of which do not quite meet at the top. Two large abruptly tapered perforations transect the object from side to side, joining at or near the middle. The maximum height of this object is 2.5 cm., maximum width at perforations is 2.1 cm., thickness is 1.7 cm. The smaller irregularly shaped bead has eyes indicated by three slightly slanting parallel sawed lines on either side of the triangular nose. A saw cut at the lower edge is connected with a drilled hole from the rear of the object.

A very flat figurine head of mottled brown and bluish material is approximately rectangular with rounded corners in outline (pl. 34, *c*). The face is framed by a sawed line. The sides and top on the outside of the sawed line are cut by short saw lines to give the effect of either hair or a feather headdress. The eyes are irregularly shaped areas outlined by saw cuts and transversed by horizontal slits. The nose and mouth are formed by a single triangle, as described above. Two roughly made ellipses with drill pits at their centers indicate ear-spools. Three perforations from front to back were made with conical drills and provide means of suspension or attachment. The dimensions of this object are height 4.1 cm., width 4.5 cm., thickness 0.9 cm.

A small flat irregular fragment of jade was slightly modified by means of a few saw cuts into a small figurine (pl. 34, *f*). Two round raised areas accentuated by saw cuts form the eyes. The nose was laid out in the form of a triangle. The mouth is an irregular ellipse with a small drill pit at the center. Shallow sawed lines appear to be meant to indicate the arms, waist, and feet. A sort of round tab projects from one side and it has been notched at its edge by three saw cuts. A biconical perforation penetrates from front to rear along-

side the head on the winglike side, and two drilled holes intersect from the other edge and back. The height of this object is 7.0 cm., maximum width 3.3 cm., and the thickness varies from 0.3 cm. to 0.8 cm. In profile it is quite irregular.

Another small head distinguished by the use of hollow drill work is of opaque dark-green jade, highly polished on its convex front surface and moderately polished on its flat back (pl. 31, *c*). The outline is oval, the top being the wider end. The features are marked by a series of sawed lines for the most part. Hair or hairdress is indicated by angular U-shaped figure. The eyes are shallow oval pits whose lower margins are accentuated by arcs, apparently made with a hollow drill, that give an effect reminiscent of representations of Xipe. This, incidentally, is the only figurine of the triangular nose-mouth style to show evidence of the use of the hollow drill. The nose and mouth are formed by a triangle sawed out so that its apex lies between the eyes and its lower margin is transversely by three sawed lines which mark the base of the nose and the two lips. Three pairs of intersecting conical perforations, two at the sides of the head above the level of the eyes and one at the base of the chin, provide points of suspension or attachment. This object, although much simplified in treatment, differs from the others just described in giving an impression of excellent workmanship and sophistication of concept rather than crudity. The over-all height of the object is 4.7 cm., width 3.4 cm., maximum thickness 1.7 cm.

There are a smaller number of figurines of the second style, in which each line across the tops of the eyes is extended downward to outline one side of the nose, the two lines joining to form a single continuous one.

A small flat piece of pale-green jade, roughly rectangular with round corners and outline, has roughly elliptical sawed lines to represent the eyes (pl. 31, *a*). The nose is formed by an extension downward and outward of the outlines of the eyes, and the mouth is encircled with an ellipse. Transverse lines cross the eyes and the mouth. Vertical sawed lines at the top appear to indicate hair. Three small biconical perforations, one at either side and one a little bit off center below the mouth, pierce the object from front to rear. The height is 2.7 cm., width 2.9 cm., and the thickness 0.6 cm.

There are two examples of figurine heads with slightly more realistically depicted noses, though in both cases in the same general fashion, by extending the lines about the eyes. One of these is a flat slightly irregular fragment of pale grayish-green mottled jade (pl. 31, *b*). The face is framed by sawed lines which join at the top to form a rough rectangle. Various curving saw cuts around the edge indicate an elaborate headdress. The eyes are encircled by sawed lines and tran-

sected by horizontal sawed grooves. The bridge of the nose is formed by extending the lines around the eyes downward and slightly inward. Near the bottom small semicircles have been sawed out to suggest wide flaring nostrils. The form thus suggests the "T-shaped" noses of certain Early Classic Nebaj jades. The mouth is sawed out and almost rectangular in form, a biconical perforation piercing it from back and front. Two small perforations at the sides intersect with two from the back. One of these side suspension points is broken out. The height of the object is 2.6 cm., maximum width 4.5 cm., and thickness 0.3 cm.

The other figurine with well-defined nostrils was made by a piece of calcite (?) (pl. 31, *e*). It seems to have a fairly elaborate headdress, although one side of the head has been broken off. The eyes, as in the preceding example, are roughly sawed ellipses. The nose is made by continuing the lines around the eyes downward and inward and near their base the wide alae are carved out somewhat irregularly. Some sawed lines below the face suggest an elaborate necklace. Other sawed lines suggest a belt and legs. The feet of the figurine are broken off. The front side retains a medium polish; the back is smooth but not polished. It shows the remnants of two sawed planes cut from opposite directions to leave a small septum which has broken off. The present height of the object is 6.6 cm., maximum width 3.1 cm., and thickness is 0.4 cm.

A small head made of a thin flat fragment of calcite (?) with white and green inclusions, has most of its features indicated by curving sawed lines (pl. 31, *d*). The nose is outlined by a continuation of the lines which curve around the eyes and are then brought down to meet the sawed line separating the mouth from the straight bottom of the nose. The eyes themselves are irregular ellipses outlined by sawed lines, and each transversed by a single sawed line. The mouth is represented by a similar sort of ellipse. The face is framed by a raised band left around it, broken at several points by lines which appear to indicate hairdress and earspools, and a profile face in the upper left corner, easier to see in the photograph than on the actual specimen. The earspools are marked by circles cut with a hollow drill. Three small semicircles, apparently made by applying a hollow drill at an angle less than 90° to the surface of the stone, occur at three points on the raised band. Two perforations near the upper end of the head and formed by intersecting conical perforations drilled from sides and back provide means of suspension. The object has a maximum height of 3.6 cm., width of 3.3 cm., and maximum thickness which varies a little over the entire object of 0.7 cm. The back of the head and face are neither polished nor decorated.

A small irregular pebble of mottled light and medium green jade is

similar to the preceding in that most of the features have been set out by sawed lines and a hollow drill has been used at certain points (pl. 34, *a*). The object has been made from a small pebble apparently little modified from its original form except for the fact that it has been sawed down one side. The face itself is framed by a more or less angular raised band marked by sawed lines. At top center five short vertical sawed lines appear to indicate hair or some sort of hair ornament. The eyes, as in the preceding head, are very irregular ellipses with horizontal sawed lines across their centers. Similarly, the nose is indicated by continuing the sawed lines that encircle the eyes downward and outward and joining them at the bottom by a transverse sawed line. The mouth is an irregular ellipse. The separation between the lips is marked by a short arc which may have been made with a hollow drill, and the lower lip is set off with a similar short arc. The earspools are circles made by a hollow drill with shallow single perforations at or near their centers. Two perforations at the upper end are formed by intersecting pairs of conical drill pits put through from back and sides and at the bottom tip a connecting biconical perforation was drilled through from front and back. This rather crudely made little piece has a fair degree of polish on its front surface. It has a maximum height of 4.7 cm., width of 3.6 cm., and a maximum thickness of 1.8 cm.

Another small figurine which shows not only the head but a complete if somewhat stunted figure, made of an unidentified olive-green and buff stone, is shown standing with the hands brought together across the belly (pl. 34, *e*). The eyes are delineated by sawed ellipses, none too regular in form, and horizontal slits sawed across the middle. The nose was made by continuing the lines encircling the eyes downward and outward and ends abruptly in a horizontal sawed line. The corners of the mouth are marked off with arcs made by using a hollow drill at a slanting angle. Similarly made arcs represent the shoulders and two more outline one of the hands whose fingers are represented by two horizontal saw cuts. A slight raised area on top of the head suggests a topknot and the face is framed by a sawed line. Conical perforations are drilled in from the sides of the neck and intersect with similar pits drilled in from the rear. Aside from these suspension holes the back is not worked. The stubby legs are indicated by sawed arcs and a sawed notch separates the feet. The height of this object is 4.3 cm., width 2.6 cm., and maximum thickness 1.4 cm.

The remaining figurines and figurine heads are all rather aberrant among the materials from the cache. One is a head or face that looks as though it may have been broken from the complete figurine, since the back is rough and rather battered (pl. 36, *d*). It is made of a

very dark green stone which is probably not jade. The eyes are formed by slightly raised areas ringed by two shallow ellipses. The nose was laid out as a triangle and shaped in rather high relief, tapering from the sides to a rather narrow crest or bridge. The mouth has shallow drill pits at the corners and is somewhat squarish in outline, suggesting possible Olmec influence. The cheek bones and cheeks are well modeled in low relief. Under the rounded chin there is a slight recess to indicate the neck which continues up as a groove along the sides of the face to the top of the head. Intersecting conical pits were drilled from sides and back. The present height of this object is 5.3 cm., maximum width 4.0 cm., thickness 2.5 cm.

A very crude little object made of a compact dark olive-brown stone has what may be interpreted as a highly stylized face at one end, almost directly over two short stubby legs (pl. 37, *c*, *c'*). Three horizontal lines, one close to the top, one about the middle, and one just above the stubby "legs," are cut into the object. At the upper end just below the uppermost line, two moderately deep horizontal cuts appear to represent the eyes, and between and below them is a raised triangular area which suggests the nose. The surface of the stone alongside and below the nose has been cut away nearly to the edge, leaving a narrow border, perhaps to represent hair, along either side. The back of the figure is unworked except for the central encircling line which continues all around. The length is 5.2 cm., width 3.5 cm., and thickness 2.0 cm.

A small flat piece of jade, medium grayish green in color with white mottling, was worked into a simple little figure suggesting a human form in profile (pl. 36, *a*). A sawed line ending in deep notches on either edge represents the neck of the figure. A short distance above that a deeply sawed notch suggests the mouth and a series of shallower saw cuts from the edge apparently are meant to indicate the base of the nose and the eye sockets. A shallow drill pit represents the eye. A transverse line sawed across farther down the body of the figurine represents the waist and a little notch on the bottom suggests that the figure is intended to be shown in a kneeling or squatting posture. The obverse is plain but polished. There are no perforations. The over-all length is 8.3 cm., maximum width 3.1 cm., thickness 0.7 cm.

A fragment of very bright green jade with a medium polish represents a foot and looks as though it may have been broken from a large fairly elaborate specimen (pl. 37, *d*, *d'*). Viewed from above, it is nearly rectangular in outline with slight constrictions toward the heel. Three sawed lines at the tapered toe represent the four toes. These lines are continued on the underside. Transverse sawed lines mark off the areas of the sole of the foot. The craftsman apparently

made one peculiar error, for a high area that presumably was meant to represent the ball of the foot is immediately adjacent to the heel and a depression was carved out, for what should be the instep, between the toes and the raised area. The length of the object is 4.6 cm., width 2.0 cm., thickness (to the edge of the break) 0.9 cm.

A few pieces in the collection appear to have been intended to represent animal forms. One interesting specimen is made of serpentine in the form of a small fish (pl. 37, *a*, *b*, *a'*, *b'*). The eyes are formed by moderately deep circles cut with a hollow drill. Sawed lines at the edges of the mouth and around the gills give the object a more realistic appearance although actually it is highly stylized. It is drilled from end to end, that is, from mouth to tail, by means of two tubular drill holes which intersected just over 6 cm. from the mouth, or roughly two-thirds of the way back. These holes are about 1 cm. in diameter and have a very slight taper toward the base, presumably due to added wear during the drilling process at the upper part of each shaft. The holes almost fail to meet, having an overlap of about half a centimeter. Subsequently the object was sawed in half longitudinally. Whether this was done because the drill holes did not meet properly cannot be determined. The object is 9.1 cm. long and 4.7 cm. in maximum width. The original thickness prior to sawing was apparently a little under 2 cm.

A small piece of pale-green jade was made by cutting what must have been a fairly good-sized cylindrical bead in half longitudinally (pl. 37, *e*, *e'*). The remaining piece is slightly less than a half cylinder in cross section. The lower end was broken off and repolished. A few shallow saw marks outline slanting elliptical eyes, the line across the muzzle, and what seems to be an indication of nostrils at the lower broken end. The top two biconical perforations, one on the face side, provide means of suspension and are connected by a sawed groove. The general effect is that of an animal head, but it is impossible to try to guess the species represented. The present length of the object is 5.1 cm., the width is 1.8 cm., and the thickness 0.8 cm.

A small buff-colored pebble, probably of serpentine, was slightly modified into the form of an animal head, possibly that of a dog (pl. 49, *h*). Shallow drilled pits indicate the eyes. A transverse biconical perforation runs from side to side at the base of the ears and another perforation goes through the lower lip and into the saw cut that represents the mouth. The length is 5.4 cm.

A small carving representing a fairly realistic turtle, made, as I recall, of basalt or possibly diorite, and painted red, was found in the offering, but I did not find it with the collection in the Museo Nacional, and by some strange oversight no pictures of it seem to have been made in 1941.

Two small representative objects of materials found with burial materials in Mound 30 may be added to our list, although they do not properly belong with the cache. One of these was a small carving, possibly made from half of a subspherical bead, representing a monkey head (pl. 52, *a*, third row, middle). It has the characteristic wide crest on the head and protruding mouth parts. The eyes are small shallow drill pits. A transverse perforation runs through from side to side near the top of the head and two pairs of intersecting conical perforations connect sides and back just below the midpoint. The height of the object is 1.8 cm., the maximum width is 1.8 cm., and the thickness is 1.3 cm.

The second little jade pendant from Mound 30 represents a highly stylized cicada (pl. 52, *a*, third row, middle). It is of bright-green jade with light-green mottling. In outline it is nearly elliptical with slight notches at the sides of the head and the base of the wings. Shallow saw cuts suggest the thorax of the insect, and two very shallow drill pits near the upper rounded end, the eyes. A transverse biconical perforation pierces the object from side to side at about the level of the eyes. This little piece is well polished. Its length is 3.1 cm., the maximum width is 1.6 cm., and the thickness at the upper end is 1.0 cm.

A little pebble of light-green jade was very slightly modified into a form that vaguely suggests the head of a wood duck (pl. 49, *h*). A slight projection at one end was bisected with a saw cut to suggest the beak, and a few light cuts on the other end suggest the feathers. A transverse biconical perforation runs through from side to side. The length is 2.9 cm., the width 1.8 cm., and the thickness 1.2 cm.

PLAQUES

There are a number of objects among the materials from the cache whose use is not known but which suggest by their more or less flat form and laterally balanced perforations that they were intended for suspension, perhaps hanging from necklaces like some of the objects portrayed on the various stelae. These pieces are grouped here as "plaques."

The first of the plaques is a small trapezoidal object of very light translucent green jade with a faint mottling of light green and white (pl. 38, *a*, *a'*, and fig. 3). The two upper corners are decorated with highly simplified animal heads in profile, formed by a very few sawed lines and with circular depressions made by a hollow drill to represent the eyes. The sides and lower edge of the stone is marked off with a border formed by a lightly sawed line. The central portion between the heads is also decorated with an angular pattern of sawed lines.

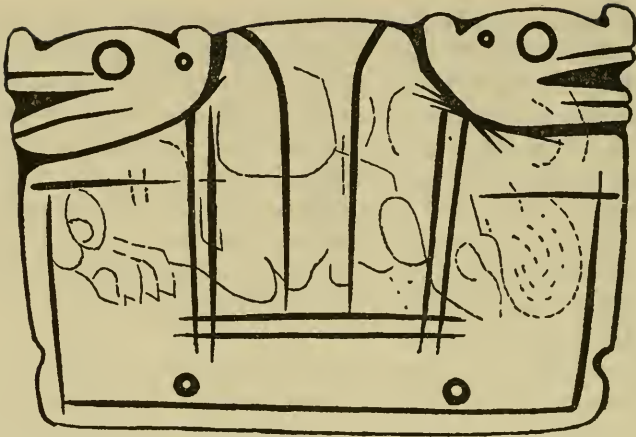


FIGURE 3.—Original design on plaque shown in plate 38, *a, a'*.

Four perforations equally spaced, two at the top and two at the bottom, provide means for suspension or attachment. These perforations are biconical, drilled through from front and back. The front of the object, that is the side bearing the design, is well polished. The undecorated back has only a medium polish. This piece appears to have been a fragment of a larger plaque, the original design of which was ground down when the object was given its present form. Faint traces remain of an engraved face which was almost entirely removed in the reworking. This face is too faintly delineated to be photographed, in fact it is very difficult to see at all except in just the right light. Stylistically this previous engraving seems to have a strong Mayoid flavor. Figure 3, from a drawing made by Covarrubias, brings out this character clearly. It may be noted also that several indentations along the edges of the plaque appear to be remnants of perforations originally drilled for suspension or attachment of the object. The piece measures 8.4 cm. along the top and 7.4 cm. along the bottom; one side, that on the viewer's right, is 5.6 cm. long, and the other side is 5.3 cm. In cross section the object is a narrow ellipse, 0.75 cm. being the maximum thickness.

A second plaque is a narrow flat object of medium dark-green jade (?) with flecks of light green (pl. 40, *c, c'* and fig. 4). It is decorated on both sides and the outline has been slightly modified into a form suggesting a conventionalized fish of some sort. On one side the decoration has been applied by means of sawed lines, the margins of which are more nearly vertical on one side than on the other, which serves to accentuate the particular area outlines. The figure has an irregular but almost round eye, and beginning below the eye a gaping mouth with up-curved snout. Curving lines behind the eye suggest

gill openings. However, the head might be that of almost any stylized reptile or monster. Its identification as a fish is based on the abrupt breaks at top and bottom of the silhouette, a little more than two-thirds of the way back from the head, which give the effect of the ends of the dorsal and ventral fins of the fish, and the pair of protuberances at the very end which suggest the fish's tail. The surface of the object is fairly flat and the edges are rounded off rather sharply. On the opposite side is a lightly but accurately engraved design which may also represent some sort of fish. This pattern is turned just the opposite way to the more heavily carved pattern on the other side, that is, the belly of this fish lies on the same edge of the plaque as the back of the other one. The upper edge as seen from this view (or the lower edge in relation to the other side) is pierced by two biconical perforations situated one on and one just inside of a sawed line along one edge of the figure. This specimen, like the preceding, may perhaps be a reworked fragment of some much larger object. The maximum length of the specimen is 13.9 cm., the maximum width is 4.8 cm., and the maximum thickness is 0.7 cm.

A small object carved in the form of a dugout canoe is included among the plaques because on its base it has a set of four biconical perforations drilled through from base and sides to intersect, thus

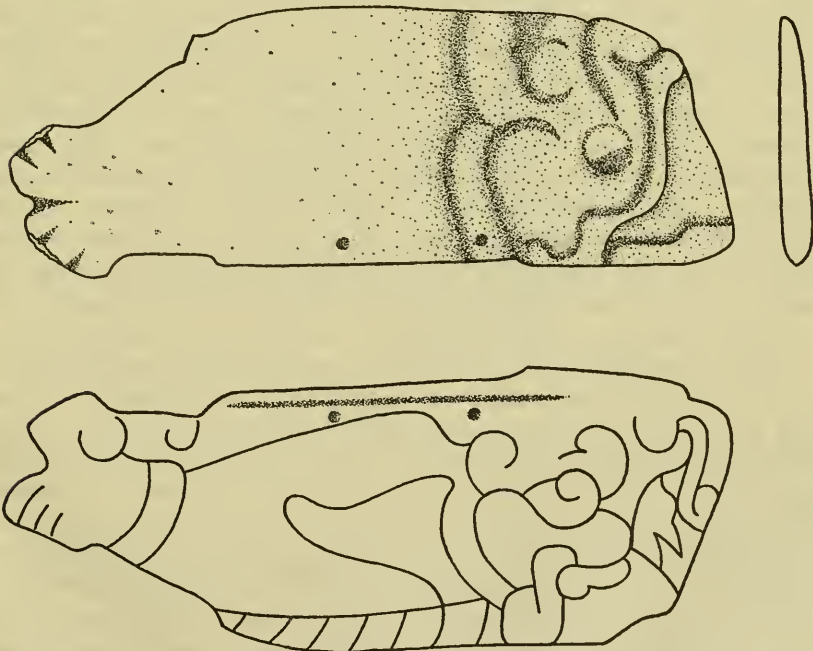


FIGURE 4.—Two sides showing incised designs of fish plaque. Cross section through head of plaque.

providing a means of suspension or attachment (pl. 38, *b*, *b'*, *b''*). The object is made of translucent dark-green jade with a strong bluish-gray cast. The stone appears very similar to that from which the Olmec figurine was made. The "canoe" is roughly rectangular in plan viewed from above. The platformlike ends are of the same width as the central part of the object but are relatively thin, then merge abruptly into the "hull." It is worth noting that real dugout canoes in use today in many parts of southern Veracruz are made with very similar wide flat projecting bow and stern. The central part of the canoe is hollowed out into a roughly rectangular depression. The flat projecting bow and stern bear between the margins formed by extension of the gunwales engraved patterns which are beyond a doubt conventionalizations of the Olmec Jaguar-monster (fig. 5). The eyes in each case slope toward the center and have the form of narrow ellipses containing small circles to represent the pupils. A pronounced V-shaped notch has been cut from the upper edge and has its apex almost between the eyes. The mouth of each of these heads has a raised angular upper lip bordered on its lower side by a line to represent teeth and fangs, and finished off at the bottom with a characterized lower lip whose outline parallels that of the upper lip. As indicated, the two heads are as nearly identical as freehand drawings can be. It may be entirely fortuitous, but the Olmec figurine previously mentioned is of just the right width so that its feet fit snugly into the "canoe" and it stands up very solidly in the little vessel. Whether these two pieces were actually made to fit together or not, the stylistic features of the sharp clean engraving on the canoe indicate that it is of the same art style as the figurine. The upper surface and sides are highly polished. The base is smoothed but not polished. The specimen has a maximum length of 20 cm. and a maximum width across the gunwales of 5.6 cm. The flat bottom of the "hull" is 10.4 cm. long by 5.0 cm. wide and has a depth of 2.3 cm. on one side and 2.35 cm. on the other. One of the projecting ends is not quite level, rising to a height of 2.5 cm. on one side at the end.

Another vessellike object of jade is in form almost rectangular with rounded corners, though there is a very slight taper toward the ends. It is of medium-green jade and well polished front and back. One side of the specimen is hollowed out into a shallow ellipse approximately 0.6 cm. deep. A biconical perforation at one end just outside the margin of the excavated area and the other at the midpoint of one side just within the excavated area apparently were intended for suspension. The back of the object has two old partly ground down saw cuts transversed to the main axis of the piece. The specimen is 15.9 cm. long, 8.0 cm. in maximum width, and 1.1 cm. in maximum thickness. The face or excavated portion appears to have been quite

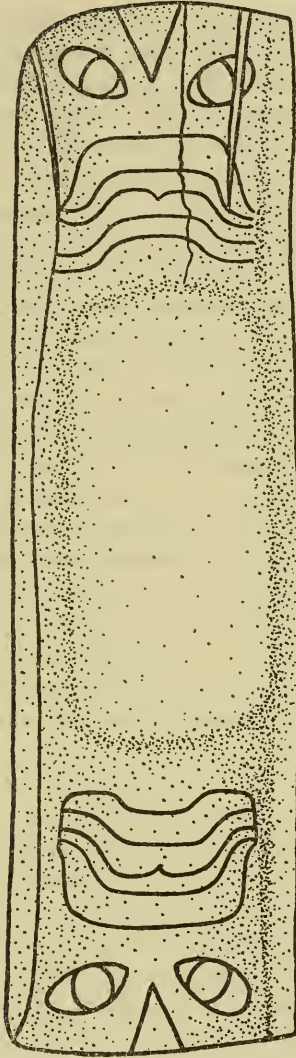


FIGURE 5.—Jaguar-monster designs on "canoe" plaque.

flat prior to the hollowing out of the depression. The back is regularly convex.

A large flattish perforated object suggests in its form that it is a part of an ornament or shallow vessel of some sort whose original form was intended to be that of a clamshell (pl. 40, *a*, *a'*). One end of the specimen is rounded off with a fairly regular arc; the other end has been sawed off, the cut being made from both sides until only a narrow septum remained which was snapped off. Upper and lower

edges are worked into gently rounded borders of varying width. One of these borders widens rapidly near the sawed off edge, apparently to indicate the hinge of a shell of a clam. Lightly sawed lines along and across this border serve to accentuate the hinge. In cross section the object again simulates the form of a clamshell, being hollowed out at a more abrupt angle on the hinge side, raising through a more gentle curve toward the lip edge. The back of the object curves abruptly at the edges and flattens out into two longitudinal planes formed by two original saw cuts which did not quite center on each other. A number of perforations were drilled through the object. Two perforations close to the edges about two-fifths of the way from the rounded tip were drilled through from front to back. A third perforation in the center of the sawed edge is formed by a pit drilled from the concave face which intersects one drilled from the edge. Two more perforations occur on the concave side of the object and are formed by pairs of intersecting conical pits drilled from edge and back. The jade from which this object is made is medium green in color with a grayish cast and is mottled and streaked with light and dark grayish-green areas. The piece has a maximum length of 19.6 cm., a width at the sawed edge of 10.0 cm., a maximum thickness of 1.7 cm., and the excavated portion has a maximum depth of 0.7 cm. This specimen is considerably larger and less well made than the jade plaque in the form of a clamshell from the columnar basalt tomb at La Venta.

Another object which appears to be a fragment of a pendant in the form of a clamshell is shown in plate 36, *e*. It is made of opaque medium-green jade mottled with dark green and with areas having a brownish tinge. One side is quite flat from edge to edge and undecorated although it has quite a high polish. The other side has some very slight relief carving and a few lightly sawed grooves that appear to simulate the hinge portion of some clamshell. The outer and lower edge has been modified into at least four lobes. The upper edge on which the hinge is located is almost straight. The piece has been broken off just to one side of the hinge. On the right-hand edge almost at the juncture of the first and second lobes is a biconical perforation passing from side to side. The maximum length of the object is 6.8 cm., the maximum width (across the hinge) is 6.5 cm., and the maximum thickness is 1.1 cm.

Another plaque approaches in form a long narrow rectangle with rounded corners (pl. 40, *b*). Near the middle of the round axis it is slightly constricted, having a wide shallow saw cut across each edge. This constriction is accentuated by a sawed line across the face. In side view the object tapers very slightly toward one end which rounds off from both sides to a blunt edge. It thus vaguely suggests a celt

in form, although celts from this part of Mexico are not normally so thin and flat. The end opposite the blade is perforated at the midpoint, a conical perforation from the edge intersecting another from the back. The perforated end is decorated with a very simple design consisting of two transverse sawed lines and four short longitudinal lines. Between the transverse lines are three circles, one of which is not quite complete, made with a hollow tubular drill. Two incomplete circles made in the same fashion are found on the blade-half of the piece. The undecorated back is less highly polished than the front. Near the blade end of the object is the remnant of a drill pit, indicating that the present specimen was sawed off a larger specimen or piece of jade. One edge also shows the remnants of a narrow septum between two saw cuts. The specimen is 16.0 cm. long by 5.2 cm. wide, with a maximum thickness of 1.3 cm.

Another object of very light green translucent jade with white mottling and streaks of medium-green color is rectangular in form with slightly rounded corners (pl. 48, *i*). The edges are fairly evenly squared off. Two biconical perforations 1.9 cm. apart at the approximate center of one of the long sides were made by drilling from the edge and one face. On the lower edge (assuming that the edge with the perforations would be the upper one when the object was suspended) are the remnants of the drill hole and some well-ground-down saw cuts. The object is moderately well polished over all. It is 9.1 cm. long by 3.0 cm. wide and has a maximum thickness of 0.7 cm.

EARSPOOLS

Among the materials studied there were a total of 36 large jade flares for earspools, and some fragments of others. The original inventory of the cache materials includes 12 more (including several fragmentary pieces) which were not accessible at the time of my visit, having been loaned to regional museums, etc. However, the 36 pieces available pretty well cover the entire range variation of types and subtypes.

Preliminary examination of materials indicates that more information must be assembled before we can work out an entirely adequate classification of earspool flares. The basic typology used here is that defined in the Kaminaljuyú report (Kidder, Jennings, and Shook, 1946). However, certain variant forms were found which have been classed as subtypes. It is not certain at present whether these subtypes are significant or not; that is to say, whether they actually have either a regional or temporal significance. For that reason the present classification is offered purely as a tentative one, pending the appearance of more typological studies from Mesoamerica.

It is worth commenting that a number of earspool flares from the

cache, in fact a considerable number, are so large and heavy that I am inclined to doubt that they could have been actually worn in the ears. Several possibilities suggest themselves: they may have been worn in masks or headdresses; they may have been used to adorn large idols; they may have been a sort of symbolic treasure to be displayed in rituals; or they may have been deposited in the cache before they were actually finished. In a number of the pieces the necks are very roughly drilled out by means of heavy biconical perforations that just barely meet and which leave thick, heavy walls (see pl. 41, *d, e*). Most of these same specimens are polished only on the face of the flare, the back and necks being only smoothed, or at most, very slightly polished.

Type A flares, as defined by Kidder, Jennings, and Shook (1946) are "connected by a comparatively narrow face curving gently into a wide throat . . . face approximately circular in outline." There were 10 specimens of this type available, among which there was only one obvious pair (pls. 42, *a, g*; 44, *b, c, g, i, k*; 45, *a, b*). The face diameters of the eight unpaired pieces range from 3.8 cm. to 6.5 cm.; the necks tend to be proportionately longer than those of the other varieties of flares, six of the eight having a height/diameter ratio of 0.34 and above. Of course it is not impossible that this difference is only apparent in view of the small sample, for the other two flares of this type were definitely short and stubby with a height/diameter ratio of 0.18 in both cases. All but two of these flares (one of the short ones and one of the long ones) had two diametrically opposed perforations drilled through the necks. The only pair in this group have broad shallow designs sawed into the faces. The designs consist of four equally spaced pairs of concentric angular U-shaped figures (pl. 45, *a, b*). One is slightly larger, having a face diameter of 10.2 cm. This same piece has a longer stem, with two diametrically opposed perforations. The smaller piece looks as though its stem had been cut down just below the level of the perforations.

Type B earspool flares as defined by Kidder, Jennings, and Shook (1946) are those in which the "face is relatively wide and tending to be flat rather than curving, breaks abruptly into the neck with but little throat." Kaminaljuyú flares, on which this type is based, are also characterized by an extremely irregular facial outline. The goal seems to be the maximum utilization of colorful stone rather than any regularity of pattern. There is only one specimen from Cerro de las Mesas which conforms to all the characteristics of this type. A variation which we may designate tentatively Variant 1 of Type B has the same essential character of the wide, flattish face at right angles to the plane of the stem, but the outline of the face is approximately circular. This is the most numerous form in the lot of ma-

terials from the cache. There are 16 specimens of this variety, including 2 pairs (pls. 41, *a, b, d, e*; 42, *e, f*; 43, *d, e, f*; 44, *a, e, h, j*). The size range of this group in terms of face diameters varies from 4.1 to 10.4 cm., 11 of the pieces having a face diameter 6.9 cm. or larger. The height/diameter ratio ranges from 0.20 to 0.45 with a majority of the specimens being 0.34 or less. It is not entirely clear whether this ratio is actually significant, since some of the specimens show clear evidence of having been partly broken off and reground. Three of these pieces have no perforations in the necks, one has a single perforation, sawed through horizontally, and the rest have two diametrically opposed drilled perforations (except for one broken specimen in which only one drilled perforation remains).

A second variant, Variant 2 of Type B, is a similar form in which the outline of the face is rectangular with rounded corners (pls. 42, *b, c*; 43, *a, b, c*; 45, *d*). In a few instances the corners have been rounded off until the outline is very close to circular, and perhaps if we had a sufficiently large sample it might be found that this rectangular variant merges imperceptibly into the form with the circular face, and hence the two would have to be combined. In one case in the present series the facial outline is definitely elliptical rather than rectangular. There are 11 examples of this variant of Type B in the series studied. Included among these is a pair, obviously cut from the same piece of stone, which have imperforate throat disks, neatly cut and wedged into place (pl. 45, *d*). (The throat disk of one of these flares has come loose and is lost at present, but photographs taken at the time of the finding of the cache show it in place very clearly.) The facial dimensions of these specimens range from one measuring 5.6 by 5.2 cm. to a large badly broken example which originally must have measured about 10.6 by 11.8 cm. Aside from the one large flare from which the neck had been broken, all but one of the series had two diametrically opposed drilled perforations in the neck. All but one specimen had a height/diameter ratio of 0.34 or less, but since the necks of several specimens appear to have been broken off and reground, this ratio may not be particularly significant.

SMALL FLARES

The cache includes a few pieces similar in form to the earspool flares, but of markedly smaller size (pl. 46, *a-j*). It is impossible to say whether these were simply small earplugs or parts of earplugs, or whether they were parts of elaborate assemblages that went with the large flares in some fashion. There are 10 such specimens. Two of them are definitely a pair, being of very nearly the same size and almost certainly cut from the same stone. Each has a biconical

perforation near the lip of the flare and both are much alike in general form. The disk diameter of both pieces is 3.4 cm. and both have an over-all height from face to stem of 0.9 cm. Another one of these objects has two pairs of diametrically opposed incisions in the rim of the flare. Its general proportions are about the same as those of the two preceding specimens. Only one of these small flares has two diametrically opposed drilled perforations in the stem. The general pattern suggests that the small flares were used differently from the large ones. The stems in all but three instances are proportionately much shorter than those of the large flares.

DISKS

There are several large disks of jade with a sizable central perforation. It is quite possible that these may have been backings for earspools although there is no direct evidence to corroborate this suggestion. One of the most elaborate is a specimen of light-green jade of approximately 8.4 cm. diameter with a central perforation of 4.9 cm. diameter (measurements derived from comparison with specimen of known size in same photograph). The central perforation is slightly off center and one side of the outer circumference is straight (pl. 45, *c*). Engraved about the specimen in a broad shallow well-polished type of incising are two figures which suggest highly stylized alligators.

A number of the other large undecorated disks of this type are fairly obviously large earspool flares whose stems have been cut off. Four of these pieces have two diametrically opposed biconical perforations through them in addition to the large central perforation. Size ranges from 7.7 to 9.0 cm. in diameter, the central perforations being from 2.4 to 4.9 cm. across. In cross section the disks are nearly flat, except for the original taper of the edge of the flare (pl. 46, *k, l*; 47, *a, b*). Five others of approximately the same size lack such side perforations altogether. Two of these are very obviously a pair and appear to have been cut from the same light grayish-green translucent pebble (pl. 47, *c, f*). Both are slightly elliptical in outline and about 0.9 cm. in average thickness. Maximum diameters are 8.0 cm. in both cases. Both have one highly polished face and rough unpolished backs. Three other pieces of the same general type appear to have been cut down from Type B earspools of the variety in which the flare is rectangular in plan with rounded corners (pl. 47, *d, e*). There are also three small disks ranging from 2.7 cm. diameter to 4.1 cm. with relatively large central perforations (0.9 to 1.8 cm. diameter), which correspond very closely in form to the small flares, and which are probably small flares from which the necks have been cut (pl. 48, *a-c*).

In addition to the disks with large central perforations, there are several small disks with small drilled holes at their centers. Three of these are fairly round in outline with diameters ranging from 3.1 cm. to 3.6 cm., thicknesses from 0.4 to 0.5 cm. Two are of jade and are moderately well polished although they show on one face two sawed planes (pl. 48, *e, f*). The third appears to be of quartzite (?) and in addition to the small biconical perforation at the center has a single conical perforation 1.0 cm. out from the center (pl. 48, *o*). A fourth object of similar type is a piece of jade with two parallel straight sides and the rest of the outline round with a very small center perforation (pl. 48, *d*). The distance between the straight sides is 4.1 cm. and the maximum diameter across the rounded sides is 4.5 cm.

Three other small flat objects of jade roughly elliptical in form have conical perforations at their centers and conical radial perforations drilled from the opposite side from that in which the center perforation is made. These objects range from 1.9 to 2.4 cm. in maximum length and from 0.3 to 0.4 cm. in thickness.

There are four small imperforate disks and two similar objects whose form more nearly approaches that of a rectangle with rounded corners (pl. 46, *m-p*; 49, *f, g*). The largest of the disks, though not quite regular in shape has an average diameter of 7 cm. and is 0.6 cm. thick. Both faces and the edge are moderately well polished. Two other disks are very obviously two halves cut from the same piece of opaque grayish-green jade. The polished faces are flat from edge to edge; the unpolished backs taper off in convex curves. The diameter of the two halves range from 5.5 cm. to 5.6 cm. One of the pieces is 0.7 cm. thick, and the other has a maximum thickness of 0.9 cm. The smallest disk is quite round in outline. This may have been the throat disk which originally was found in one of the pair of earspool flares found with throat disks in place. One of the imperforate rectangular objects is 4.3 cm. long by 3.9 cm. wide with well-rounded corners. One side is highly polished; the other side has two sawed planes with an irregular break at their juncture. The maximum thickness is 0.6 cm. The smaller of the two rectangular objects is 2.3 cm. long by 2 cm. wide, again with well-rounded corners. One side is very highly polished and the other is rough. Maximum thickness is 0.3 cm.

Earspool manufacture.—While the collection reveals little new data on jade-working techniques, there are a number of the flares for earspools that were carelessly or poorly made, or apparently were not quite finished at the time the offering was assembled, which between them show clearly the steps in the process of manufacture. This statement must be qualified slightly, for there are two possible

sequences in which these steps could have been applied, but it is probably noteworthy that either possible procedure differed from those used by various Maya, as reported by Kidder, Jennings, and Shook (1946, p. 124) and in the Nebaj report (Smith and Kidder, 1951, p. 39, fig. 6), and seem to duplicate the Teotihuacán method. Figure 6

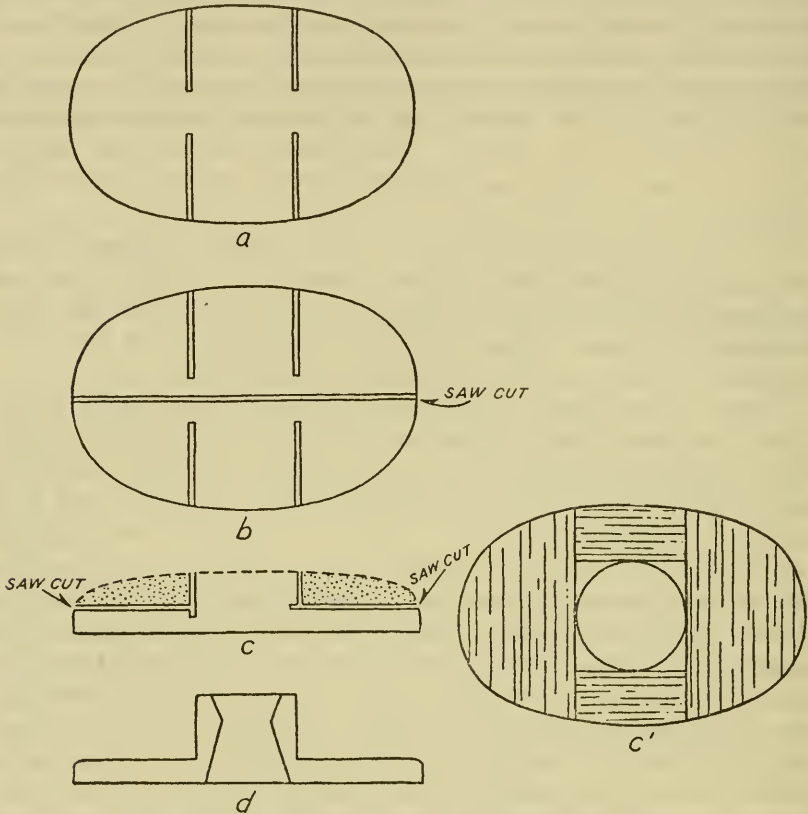


FIGURE 6.—Steps in manufacture of earpool flare.

shows in schematic fashion what are believed to be the steps in the manufacture of a pair of jade flares. In *a*, the nodule of jade (perhaps already trimmed to a fairly even circumference) was drilled less than halfway through from both sides with a heavy-gage hollow drill: The cores thus left formed the necks of the two flares. The next step was probably that of sawing the nodule in half, as in *b*, although step *c*, involving sawing out the material between the back of the flare and the neck could have been taken at this time. Most important is that, in every flare in the offering on which indications of work methods could be seen, the horizontal sawing was done in four cuts. A little rectangular platform left from the junction of the cuts at the base of

the stem can be seen in various specimens (pls. 41, *a''*, 42, *c''*, 43, *c'*, *b'*). It may also be noted that the lapidaries who made the Cerro de las Mesas flares were not the most accurate of artisans. In a number of cases one or another saw cut went too far, leaving a deep cut on the base of the stem; in others, the hollow drill cut went too deep, or the nodule was not lined up properly either during the drilling or sawing the piece in two, for one side of the drill cut is deeper than the other. The next step was the drilling out of the throat, by means of two conical drill holes, the larger and deeper in every case in which indications remain being that from the face. The final step or steps consisted in reaming out the throat, thinning and polishing the lips of the flare, etc. It is of course possible that the sequence of steps, as indicated earlier, may have differed slightly, beginning with step *b*, sawing the nodule in two, then performing step *d*, drilling out the throat, and following up with steps *a* and *c*, in that order. In any case, the difference from the Maya methods is probably significant.

Discussion of earspool flares.—The discussion of earspool flares and other parts, or presumed parts of earplug assemblages from Cerro de las Mesas, brings out a number of points of difference in form, method of assembly, and even of manufacture of the pieces from those, for example, of highland Guatemala and other parts of the Maya area. The variants of the Type B flares show more kinship with Mexican highland forms, particularly, I believe, to those from Teotihuacán. We have no positive information on the assembly of the earplugs, but there are the significant negative data: the absence of the sort of backings found at Kaminaljuyú and Nebaj. The absence of shell and shell-and-mosaic backings at Cerro de las Mesas cannot be attributed to poor preservation, for, owing to peculiar soil conditions, shell and other calcareous materials suffered very little damage in the ground. If the disks with large central perforation actually had anything to do with the earplugs, something we can no more than guess at, they may have been backings, but were of a type quite different from the Guatemalan ones. Because of the way in which the offerings were dumped into the pit, it is not possible to tell whether any of the long perforated cylinders of jade were parts of earplug assemblies or not. It may be noted however that there are relatively few such pieces (which for descriptive purposes have been included with the "tubular beads"), so presumably if the tubular elements were used with earplugs at all, such use was rather infrequent. The manufacturing processes appear to relate more closely to those of Teotihuacán, at least if the few specimens recovered by Linne are really typical of that Highland complex (Linné, 1934). Linné's figure 279 shows a fragment of earspool flare apparently broken during manufacture; the throat was obviously being drilled out by means of two conical perforations (the

specimen itself seems to have been intended as a Type B variant with round outline). His figure 281, although neither the linecut nor the text make clear whether the throat was drilled biconically or not, shows use of hollow drill in cutting out the neck, and the same four horizontal saw cuts as noted in the Cerro de las Mesas specimens to remove the material between back and neck. The finished specimen, incidentally, was an example of the Type B variant with rectanguloid outline.

CEREMONIAL PERFORATORS (?)

A number of elongated pointed objects, or fragments of such objects, were found which resemble the "ceremonial perforators" (perhaps for ear, nose, and lip-piercing?) from La Venta. These specimens are shown in plates 49, *a-c, e*; 50, *a-d*. Four complete objects of this type were found in the cache. Two have expanded bases or handles, one having a slightly irregular bulbous end marred by a deep transverse saw cut. The handle tapers rapidly into a slender point, cylindrical in cross section. The other specimen has a flattened wedge-shaped handle that merges abruptly into an irregular, roughly cylindrical point. The former piece is 14.6 cm. long, the latter, 13.6 cm. The remaining complete pieces are even more similar in form. Both are evenly cylindrical for most of their length. At the "handle" end, they taper sharply to a blunt squared-off end. The points are worked down with more gradual tapers. Two rather short specimens suggest in their form reworked broken tips of similar objects (pl. 49, *c, e*). Both are elliptical in cross section, not cylindrical. One has two deep conical drill pits near the reworked end, as though it had been intended to be perforated for suspension (pl. 49, *e*). A third reworked specimen looks as though the shaft had been ringed with a rather wide saw, then cut off square with a narrower one, leaving the end with a short steep bevel (pl. 49, *a*). The remaining pointed object has a quite cylindrical cross section and an irregular break at the handle end (pl. 49, *b*).

CELTS

There were very few celts among the Cerro de las Mesas jades. One of these, short and stubby, with a slanted bit, suggests considerable use and regrinding (pl. 49, *k*). A second example is long, flattish, and quite thin, being elliptical in cross section. It is 20.7 cm. long by 6.2 cm. in maximum width, and has a maximum thickness of 1.4 cm. Another example, this time a smaller one, presumably of a slightly different function, has a biconical perforation just back of the bit. Like the preceding, this piece is rather flatter than the usual Mesoamerican celt and in addition tapers abruptly to a small pointed poll.

It is 7.5 cm. long, 2.2 cm. wide, and has a maximum thickness of 0.8 cm.

One of the more unique pieces in the collection is the decorated celt shown in plate 36, *f*. The poll has been worked into a birdlike head with a heavy down-turned beak reminiscent of that of the Olmec Bird-monster. The outline has been accentuated by sawed lines above and below the back and alongside the upper end. The area just below the decorated head or between poll and bit has a very marked cavity which perhaps served to make the lashing more rigid. Two cylindrical perforations run transversely across the long axis of the celt in the same plane as the bit, one just above, the other just below the concave surface (fig. 7). Presumably these two also serve for lashing purposes, although it is possible the celt was made to be worn on a two-strand necklace, and not hafted. In general style

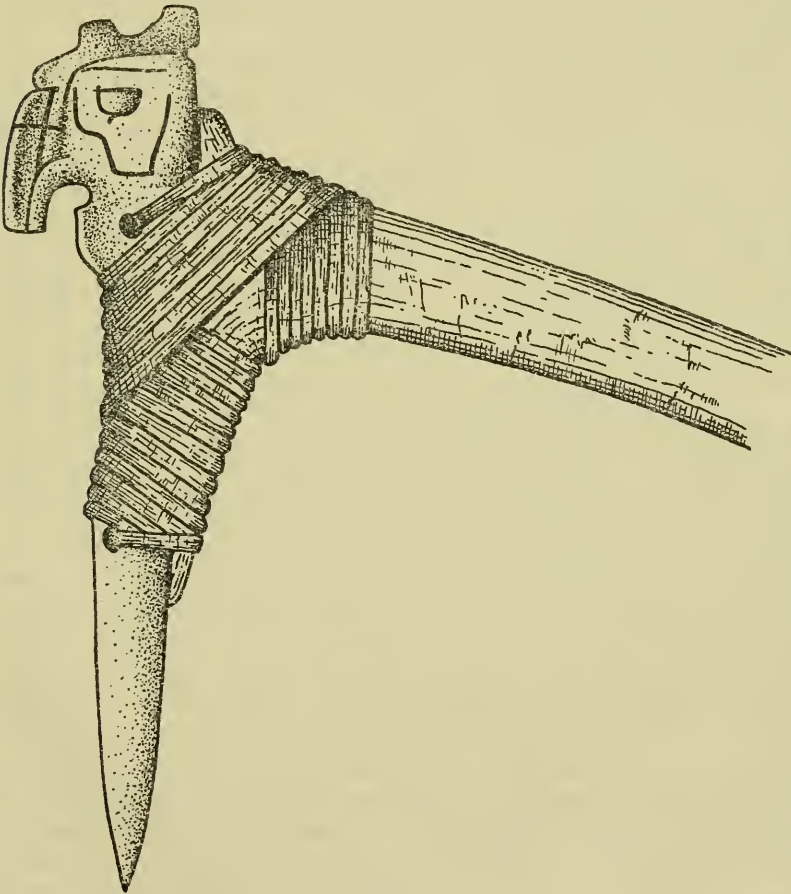


FIGURE 7.—Suggested hafting of decorated celt.

this piece is unquestionably Olmec, although no exactly similar objects have been found among Olmec remains; this piece probably was a trade object, made to be used for ceremonial purposes. It is made of dark-green jade with a pronounced bluish cast, somewhat mottled, and definitely blue in tone at the bit end.

Four other celts were found which I could not locate in the collections. Among them was a neatly made celt of alabaster, with greenish tones. Valenzuela's inventory gives its dimensions as 9.7 cm. long by 4.0 cm. wide.

BEADS

Beads of various types, totaling 303, were examined. In the cache, the beads did not occur in any definite patterns or rows, but apparently were thrown in unstrung, so we have no information on the way in which they were used. There does not appear to be anything very distinctive about the forms represented; most of them are fairly common throughout Mesoamerica.

Irregularly shaped beads.—There are a good many beads which are little more than pebbles, ground smooth, polished, and drilled. They vary all the way from quite irregular shapes to a form approximating that of the ubiquitous subspherical bead. I am not completely satisfied with the way in which I typed these specimens; a check of the photographs suggests that some poorly made subspherical specimens—examples with a flat side, or small irregularity left from the original surface—were included which probably should have been counted with the subspherical beads. As a matter of fact it is very difficult to draw a hard and fast line between the two classes, since they more or less shade into each other, although extreme specimens of either type are quite obviously distinct. However, the photographs are not adequate material on which to base a revision of the original classification, so it will have to stand. Plates 51 and 52 show the range of the irregular or "pebble" forms. A total of 126 pieces was included in this category, although a more liberal treatment of the subspherical type would probably reduce this number by at least some twenty-odd. In size the pieces range from one with a maximum diameter of 3.1 cm. to a specimen whose greatest diameter is 0.9 cm. There is considerable variety in the type of stone used, only a relatively few being of what we regard as jade of high quality. A number are of other types of stone, chiefly calcite, with quartz and chlorite inclusions, and serpentine. Two rather flattish pieces are of a pale blue and white material that suggests turquoise (or amazonite?) in appearance. There is one group of about 30 pieces that may have formed a single string, since they are all small in size, are of mottled green and white jade, and are quite highly polished. The drilling

pattern of this entire type, if it can be regarded as such, is very consistent, for 110 of the 126 pieces are drilled biconically, so that the perforations intersect close to the middle of the stone; in eight cases only is the intersection of the two drill pits markedly to one side or the other, and in eight instances only was the bead drilled with a single conical hole.

Subspherical beads.—There were 57 beads of fairly regular to quite regular form. In size they ranged from one whose greatest diameter (at right angles to the axis of the perforation) was 4.1 cm. to three beads whose maximum diameter was 1.1 cm. As in the preceding group, these specimens varied considerably both in color and polish. Only three had conical perforations; the rest were all drilled from both sides (biconically), and in all these cases the two drill pits met at about the center of the piece.

Gadrooned beads.—Beads with sawed cuts or arcs down the sides, parallel to the perforation, are really a subvariety of the subspherical type (pl. 52, 2 left-hand specimens in third, fourth, and fifth rows). There are seven of this form in the cache materials. The depth of the sawed lines varies greatly. In two instances, the lines are very light. Possibly they were not finished when deposited. The rest have pronounced grooves: one small bead, in fact, being cut away to the point of being cross-shaped in plan (pl. 52, third from left in fifth row). There is one of these beads in which the grooves are slightly spiraled clockwise. There are four beads with four grooves, one with five, one with seven, and one with three (these are spaced as though four were planned, however). All but one have biconical perforations. Sizes range from 2.3 cm. in maximum diameter (transverse to the perforation) to 1.5 cm. in the same dimension.

Tubular and "barrel-shaped" beads.—While these two forms may be differentiated at some sites, they grade into each other in the Cerro de las Mesas series (pls. 53, 54). Several of the long, well-made pieces that would ordinarily be classed as "tubular" show a very slight taper toward either end; a few of the "barrel-shaped" specimens have but slight taper, and, partly because of the rather wide openings of the perforations, appear to have square-cut ends. There are 33 definitely tubular specimens, 9 intermediate ones, and 52 that conform to the definition of the barrel-shaped type. Incidentally, most of the last-named are in a group quite evenly graded in size and all of which are of calcite (?), suggesting that they may have been a single lot. A fragmentary specimen, larger than the rest, is of alabaster. In addition, there are 14 short stubby pieces with square-cut ends which seem more like modifications of one or the other of the foregoing types than of the subspherical form.

There are several decorated pieces in the tubular series. One of these (pl. 53, top row, left, and fig. 8) has a highly conventionalized face indicated by sawed lines and drill pits. The bead is 5.5 cm.

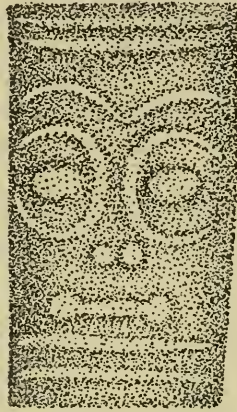


FIGURE 8.—Decorated tubular bead.

long, and 1.2 cm. in diameter. Three specimens are decorated with lines that run in spirals down the long axis. (These are described from photographs, not the actual specimens.) The first, a massive piece 8.9 cm. long and 2.3 cm. in diameter, has four (?) wide grooves alternating with an equal number of narrow ones, spiraling in a clockwise direction. The lands bisected by the narrow grooves are about twice the width of the wide grooves. The rate of twist is about one complete turn in seven diameters. The second bead decorated with a spiral is encircled by two (?) lines that proceed in a counterclockwise direction, and appear to twist at the rate of about one turn in two and a half diameters. This specimen measures about 6.8 cm. in length, and about 1.6 cm. in diameter. The third, 4.5 cm. long, and 1.0 cm. in diameter, with slightly slanting rather than squared off ends, has a closely spaced pair of lines, circling in a clockwise direction, that made a complete turn in less than two diameters. Five specimens have encircling grooves about one or both ends (pl. 53, middle row). The most elaborate of these, a bead of brownish color (calcite apparently), 5.6 cm. long and 1.1 cm. in diameter, has two wide shallow, somewhat irregularly cut grooves at each end. Two other pieces, also of calcite, have, respectively, one and two narrow grooves cut about one end. A fourth bead, a short stubby one, has a wide shallow groove at the middle, and the fifth is constricted at the end, probably having been cut off from a longer bead.

An approximation of the type of tubular bead with flared end occurs in the collection (pl. 53, bottom row, left). It is 6.6 cm. long.

It differs from the Kaminaljuyú examples of this type (Kidder, Jennings, and Shook, 1946, p. 113), in that there is no pronounced taper from the flared to the opposite end. The greatest diameter at the flare is only 0.6 to 0.7 mm. greater than that of the maximum diameter near the other end. Hence, this might conceivably be an imitation of the flared-end type, but patently was not made of a core cut out with a hollow tubular drill as the Kaminaljuyú pieces are believed to have been made.

Two specialized beads, both of which are of the transitional group, have multiple perforations. One of these, of light grayish-green jade with pronounced crystalline structure, has a hole drilled at either end (1.5 mm. from one end and 3 mm. from the other), both of which intersect the longitudinal perforation along the main axis of the bead, at an angle slightly greater than a right angle. The specimen is 2.9 cm. long, and 1.5 cm. through the maximum diameter. The other bead has a single large perforation drilled vertically to intersect the longitudinal perforation, just to one side of the longitudinal midpoint. This piece is 2.5 cm. long, and 1.1 cm. through its greatest diameter.

One of the short tubular beads (this particular piece has rounder sides than most, but is proportionately longer and much flatter on the ends than the subspherical forms) has two pairs of small shallow drill pits spaced close together about its circumference, and a light saw cut below the pits, as though it had been undergoing the initial steps of carving when put in the cache.

Miscellaneous forms.—Two beads have a definitely angular outline, although with rounded corners (pl. 52, *a*, fourth row, right).

MISCELLANEOUS OBJECTS

Among the miscellaneous objects is a flat thin blade with serrated edges formed by sawing slanting lines from one side only (pl. 48, *k*). The form suggests a blade or projectile point, but the piece is probably a stylized, not very realistic copy of a sting-ray spine. The material is dark-green jade, moderately well polished on both sides, 7.6 cm. long by 1.9 cm. wide, and carrying a fairly even thickness of 0.3 cm.

Two peculiarly fashioned rectangular objects are without a doubt a pair, whatever they may have been. Just how they were meant to be used is not known. They are almost exactly of a size and are of the same opaque pale-green jade mottled with small areas of medium-green color (pl. 39, *a*, *b*). The stone is so much alike that they must have been sawed out of the same piece. Both are long narrow rectangles in form. The long sides are very nearly parallel but the ends are not quite square. The face of each piece shows traces of two planes formed by two longitudinal saw cuts that did not quite center. Each piece has a perforation about 2 cm. long drilled in from either

end. These are slightly tapering holes that average a little over 0.7 cm. diameter at point of entry. At either end of both pieces other holes were drilled in from the face to intersect those just described. Between these perforations in the face a longitudinal saw cut was made in each piece, being cut through quite deeply; in fact, in the case of one specimen it very nearly goes through. The cuts curve, being deepest at their centers, and indicate a rigid saw, not a cord saw, was used (fig. 9). A cord could be strung through each piece

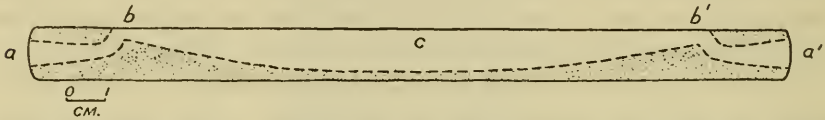


FIGURE 9.—Cross section of rectangular slotted objects of jade. *a, a'*, Large-bore drilled holes at ends of object; *b, b'*, drilled holes entering flat face at slight angle, and intersecting with *a* and *a'*; *c*, longitudinal sawed slot, partially intersecting *b* and *b'*.

longitudinally without showing on the surface. The objects give the impression of having been tools rather than ornaments despite their moderate over-all polish. It should be mentioned that one of them is considerably battered here and there along the edges and on one end. The other has no corresponding nicks. Both of the pieces have a maximum length of 19.5 cm. and a width of 4.4 cm. One has a maximum thickness of 1.4 cm. and the other of 1.3 cm.

Another object of unknown use is thin and flat, and has the form of a slightly irregular ovoid. It is of opaque dark-green jade mottled with very dark-green areas and small light-green spots. It is quite even in thickness and the edges are evenly rounded. At the narrower end it has a biconical perforation. Down the center is a long string-sawed slot 9.4 cm. long and 0.4 cm. wide with a short transverse slot joining the longitudinal one at the middle. The short slot is 1.2 cm. long. The object is moderately well polished all over. It has a maximum length of 15.7 cm., is 7.3 cm. across the wide end and 5.7 cm. across the narrow end, and is 0.7 cm. thick.

A small object of calcite (?) with inclusions of quartz and chlorite is of an elongated semilunar form (pl. 49, *l*). At the ends, a little nearer the straight than the curved edge, are two large conical perforations. One face of the object is quite flat; the other is asymmetrically convex, being thickest near the curved edge. At the center of the curved edge is the remnant of a conical drilled pit which did not penetrate all the way through the stone. The object is 7.7 cm. long, 2.1 cm. in maximum width across the flat face, and 0.6 cm. in maximum thickness.

A rodlike object of the same material has three sets of three encircling grooves, two wide ones with a narrow one between them,

above the ends and middle (pl. 49, *m*). The back of the object is slightly irregular and the grooves do not go clear across. Two pairs of intersecting conical perforations, one at either end, were drilled from top and back edges. This object is 8.0 cm. long, 1.6 cm. wide, and 1.1 cm. thick.

A small flat pendant of opaque blue-green jade is 2.3 cm. long and 1.7 cm. wide (pl. 48, *h*). The general outline is approximately rectangular. It has a conical perforation near one end and a shallow drilled pit halfway down along one edge. Six shallow saw cuts tapering from the edge toward the central area of the stone give a form suggesting a highly conventionalized bird. The sawed face is highly polished and the other face has only a moderate polish. The thickness is 0.3 cm. Another pendant is a small very highly polished piece of green jade whose original form was apparently approximately that of a trapezoid. It has a small biconical perforation close to the narrower edge. It is 2.5 cm. long.

There was an imperforate sphere of pale greenish alabaster found among the offering. I apparently overlooked it in assembling the materials for study at the Museum. Valenzuela's list gives its diameter as 5 cm.

A small rodlike object of light-green jade flecked with medium green was apparently made or broken from some larger object (pl. 49, *d*). Sawed grooves encircle the ends, one a short distance from one end, the other right at the point of fracture. Both ends are rough and unworked, although the rest of the specimen is moderately well polished. The cross section of the piece is elliptical, and one side retains traces of two longitudinal drilled holes which just barely intersected. These were made prior to the cutting out and working down of the present specimen. The length of the object is 6.5 cm., the width at maximum diameter is 0.9 cm., and the minimum diameter is 0.7 cm.

DISCUSSION

The foregoing, and I fear somewhat wearisome, descriptions of the specimens from the offering, bring out a few significant points. One of these is the need for more detailed typologies of Mesoamerican artifacts of jade and similar materials, especially those from controlled excavations, if we are to be able to make useful comparative studies, define regional styles, and recognize trade pieces when we see them. The great bulk of the objects from the offering are either of what appear to be ubiquitous forms, or else types that cannot be related with any certainty to other regions or epochs. Some of these may eventually prove to be Central Veracruz or even Cerro de las Mesas specializations, others may turn out to be imports. The few

pieces that we are able to identify will be discussed in the following paragraphs.

Olmec specimens.—Cerro de las Mesas, of course, was *not* an Olmec site, although it is situated close to the northwest boundary of the Olmec region of southern Veracruz and western Tabasco. There are actually rather fewer definitely Olmec style pieces in the offering than we might expect to find among the neighbors of those skilled lapidaries. Two figurines, the canoe-shaped "plaque," the decorated celt, and perhaps the death's head, exhaust the list, unless the so-called "ceremonial perforators" are discovered to be an Olmec trait (they have not yet been reported from other regions, although three similar objects of jade, two of which are bipointed and one of which has one sharp and one blunt tip, come from Teotihuacán (Gamio, 1922, pl. 121). The plaques in the form of clamshells suggest another parallel, although it must be noted that we found evidence of a cult associated with shells and other marine forms at Cerro de las Mesas. It also appears that most of these pieces should be attributed to the La Venta (Middle Tres Zapotes) phase of that culture, since as far as we know now, that rather long period represented the florescence of the pure strain of Olmec art. However, ceramic and figurine cross checks between Cerro de las Mesas and Tres Zapotes indicate that the horizon designated Lower I at the former site was contemporary with at least part of the Middle or La Venta phase, and Lower II, from which the offering comes, was coeval with Upper Tres Zapotes. Hence the pieces must have been kept as heirlooms for a considerable length of time before they were placed in the offering pit beneath the stairway of the mound. The esteem in which the specimens were held, if they really were treasured all that time at Cerro de las Mesas, as well as the scant number of them, reemphasizes a point Stirling and I have been making ever since the Cerro de las Mesas dig: not only was that site not Olmec, but it seems to have had relatively little contact with Olmec culture throughout the contemporary periods.

Highland influence.—Similarities of certain ear-spool flare types and methods of manufacture to published specimens from Teotihuacán have been mentioned. If the assumption is correct that the highland pieces used for comparison are typical, we have additional corroboration of the ceramic evidence that indicated that highland (Teotihuacán, and later Mixteca) influence was the predominant one during the history of the site. Some archeologists are coming around to the view that perhaps Teotihuacán culture itself was derived from the Gulf Coast, but the fact that in post-Teotihuacán times Cholula lacquer polychrome ware was either imported in some

quantity or was duplicated at the coast site, and strongly influenced the local ceramic pattern, might be taken as a hint that there was an old, well-established route of communication and diffusion from highland to the coast. The Danzantelike figurine plaque may well have been imported via the same route from its Oaxacan place of origin, if its style has been correctly identified.

Maya and Mayoid specimens.—Aside from the nearly obliterated engraving, which seems to have a definite Maya flavor, on the small plaque, there are no pieces that can unhesitatingly be singled out as representing Maya art. Yet many of the small flat pendants in figurine form (both heads and full figures), in a nebulous way remind one of small anthropomorphic pendants from the Maya area, particularly those in which the nose is formed by a continuation of the lines marking the tops of the eyes, or the eyebrows. If one compares them with, for example, the small flat heads in the Rossbach collection (Lothrop, 1936, especially figs. 58 and 59), or with some of the Nebaj specimens (Smith and Kidder, 1951, figs. 52 *a, c, g*; 53 *b, c*; 58 *c* (3)), a generic similarity may be noted. Common traits, in addition to the subject matter, include the use of small flat, often odd-shaped pieces of stone; carving in very low relief—actually, drawing is a better term, for there is little or no third dimensional representation; the cuts are wide and shallow, and the lands between them of even height; the hollow drill was frequently resorted to for marking circles and arcs.

If these objects in the Cerro de las Mesas offering are simply trade objects, and none was made locally in imitation of the exotic pieces, they indicate little actual Maya influence, and there probably was very little, except in the most indirect manner. None of these figurine-pendants are unfinished, as though they were in process of manufacture (locally), when the offering was made. In this they differ from the earspool flares believed to be of Teotihuacán type, which were interred unfinished, the throats incompletely reamed out, etc., suggesting that at least part of their manufacture may have been carried out at the site itself, following techniques prevailing in the highland.

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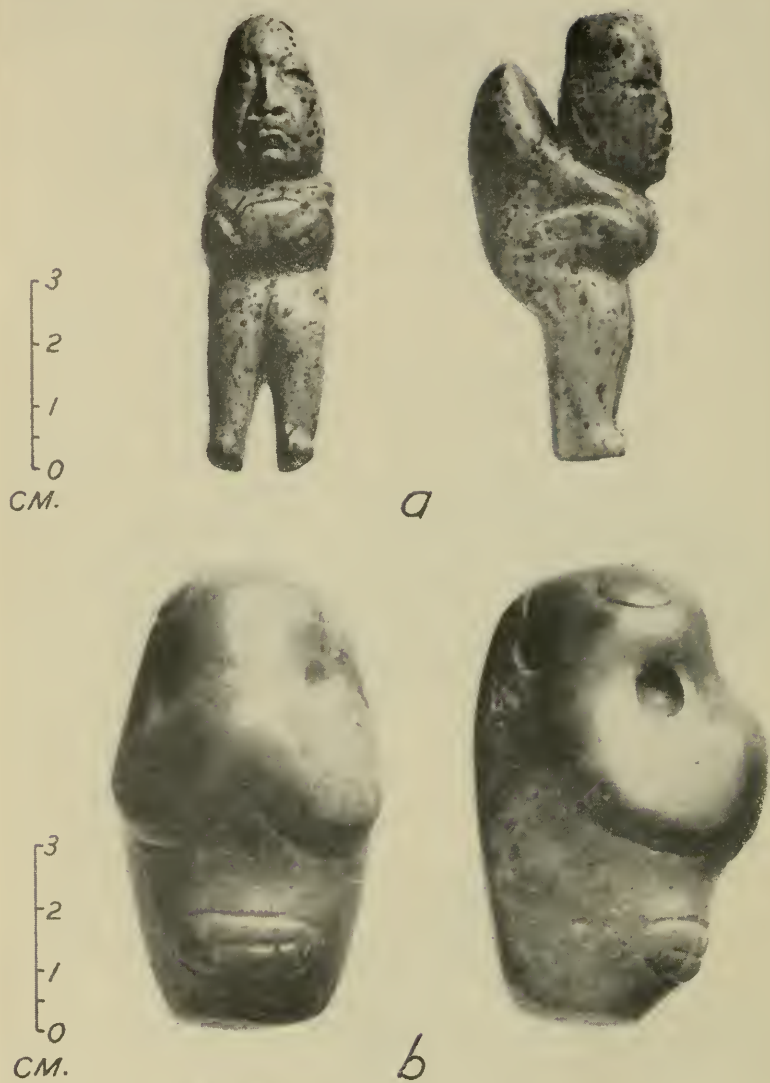
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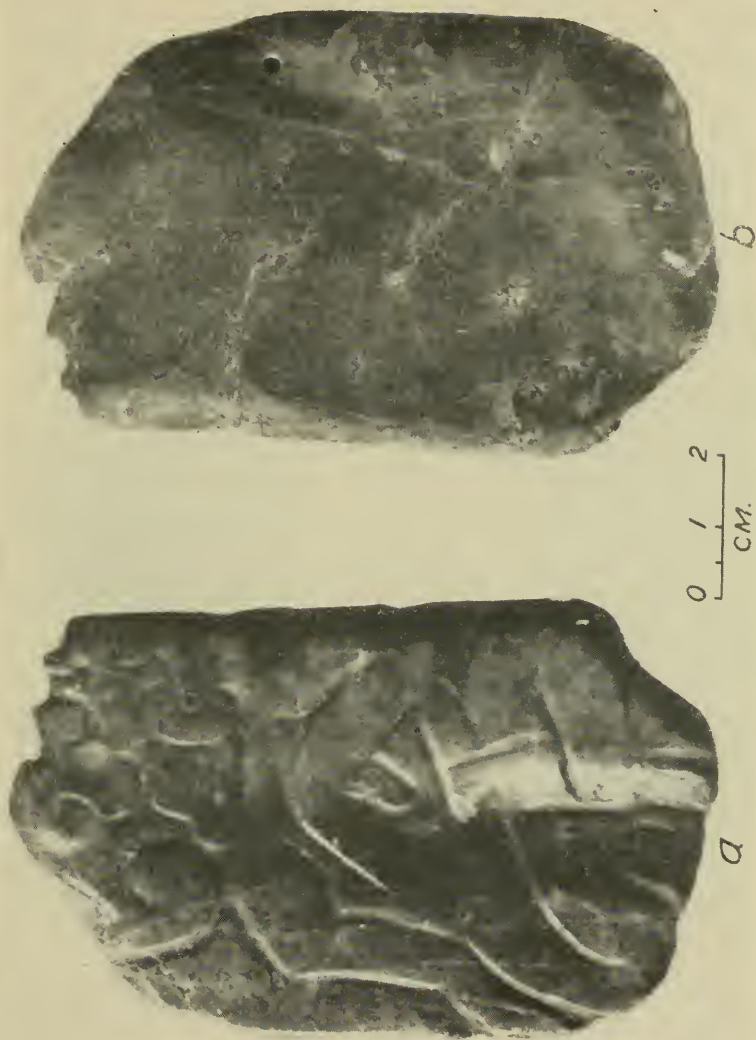
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Front, side, and rear views of Olmec figurine.



a, Olmec figurine of hunchbacked (?) personage, of serpentine; b, Olmec (?) style skull pendant.



a, front, and *b*, back of Zapotecan (?) style figurine plaque.



0123
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CM.

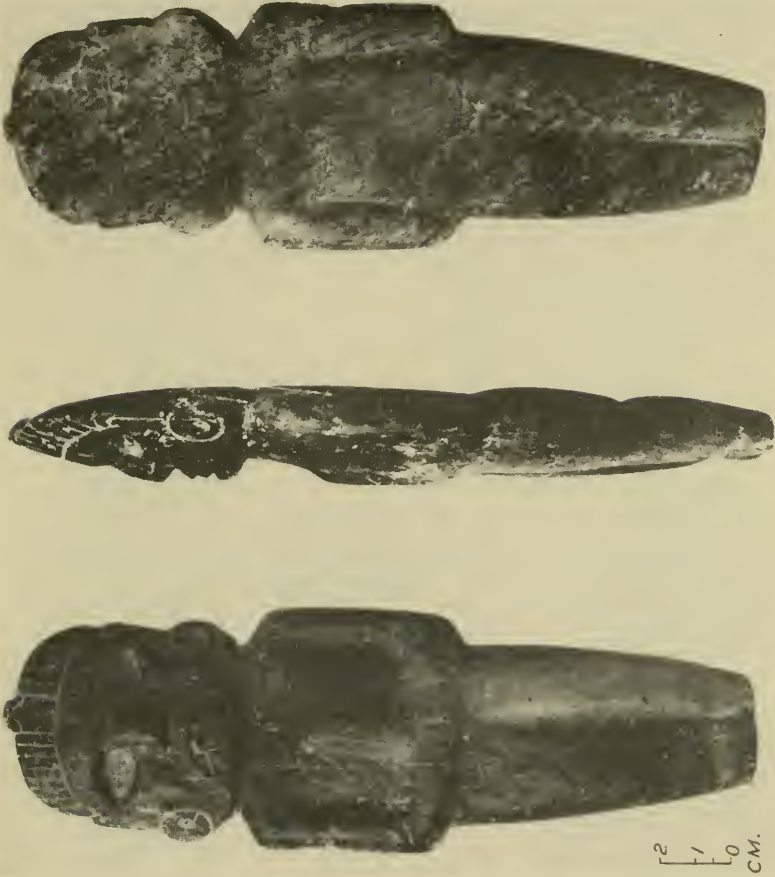
Large figurine of "crossed-arm style," of diorite (?).



Small jade figurines and figurine heads.



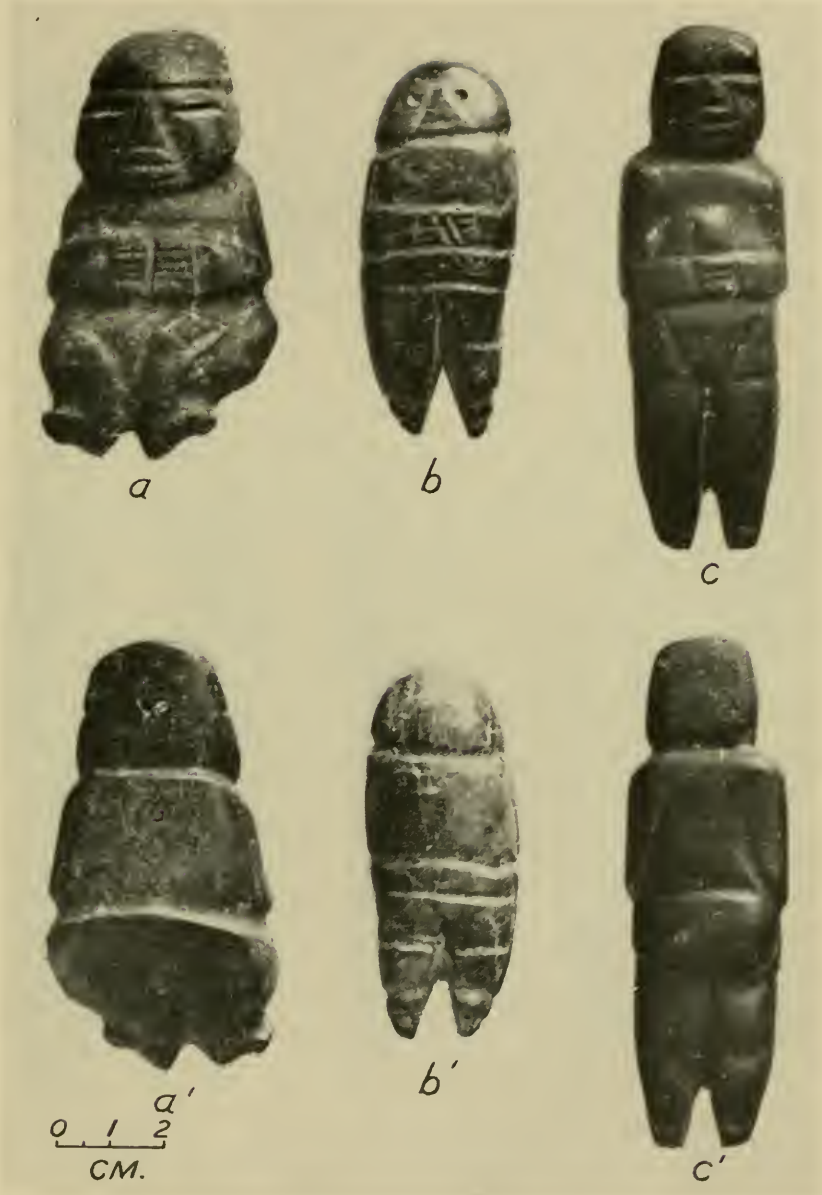
Front, side, and rear views of stone figurine.



Figurine of dark-green stone: front, side, and rear views.



Small jade figurines and figurine heads.



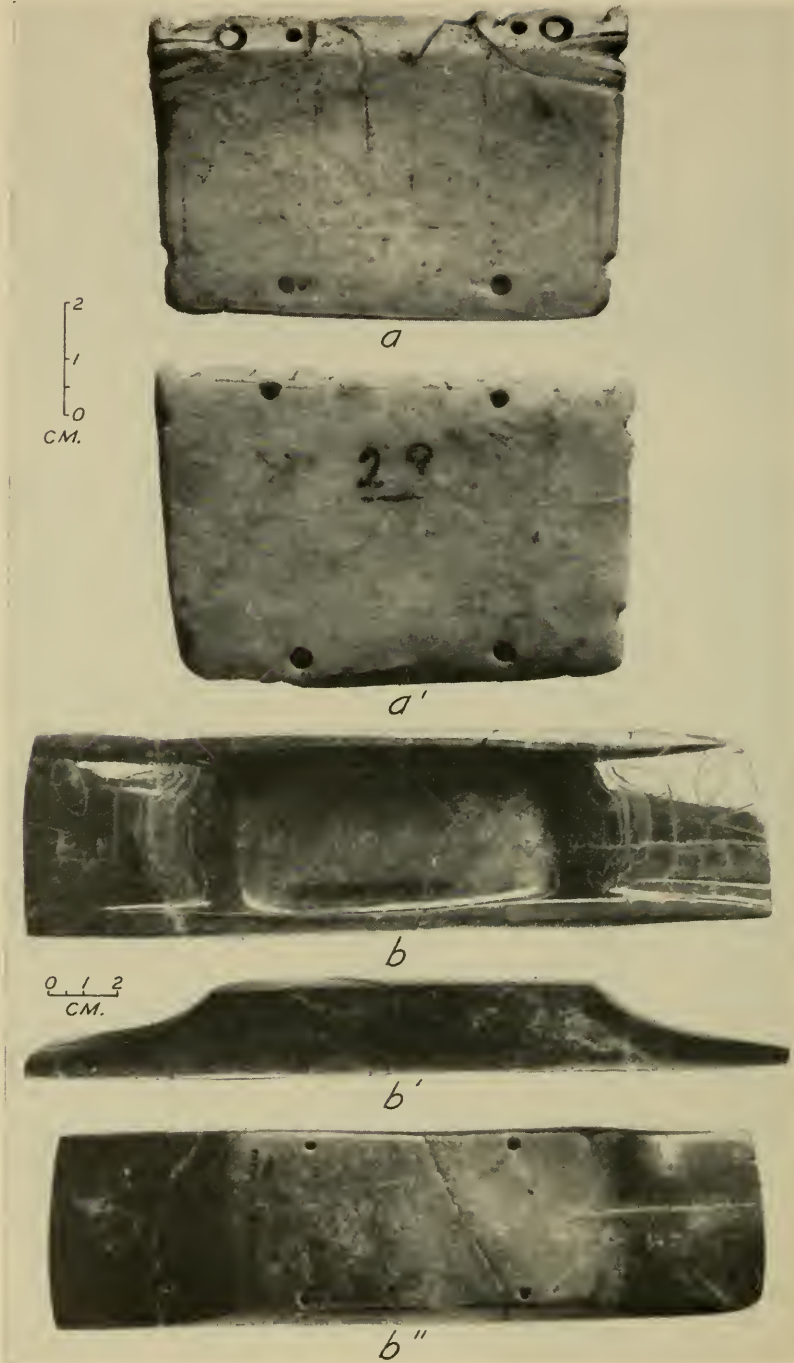
Miscellaneous figurines, front and rear views.



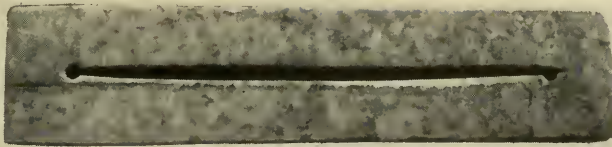
Miscellaneous jade objects. *a*, *a'*, crude figurine; *b*, *b'*, *c*, *c'*, figurine beads; *d*, figurine head; *e*, fragment of clamshell-shaped plaque; *f*, *f'*, *f''*, decorated celt.



Miscellaneous figurines. *a'* and *b'* are views of *a* and *b* turned upside down to show back (inner) surfaces.



Plaques. For original design of *a*, *a'*, see figure 3. *b*, *b'*, *b''*, Olmec "canoe" plaque.

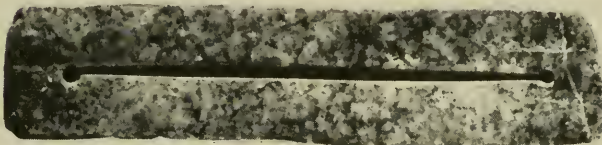


a

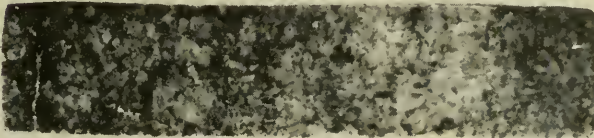


a'

0 1 2
CM.



b

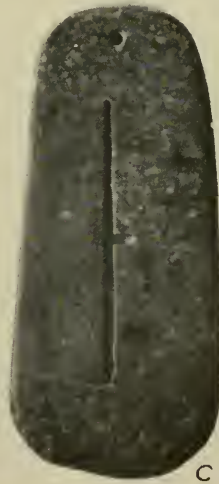


b'

0 1 2
CM.



c



c'

2
1
0
CM.

Plaquelike objects of unknown use (both sides of each of the three pieces are shown). *a* and *b* are of nearly identical size.

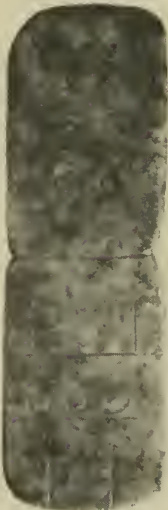


a



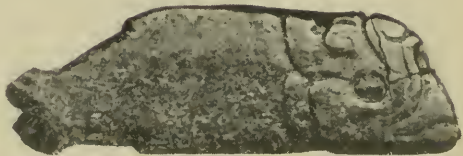
a'

2
1
0
CM.

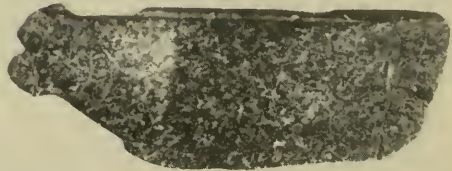


b

2
1
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CM.



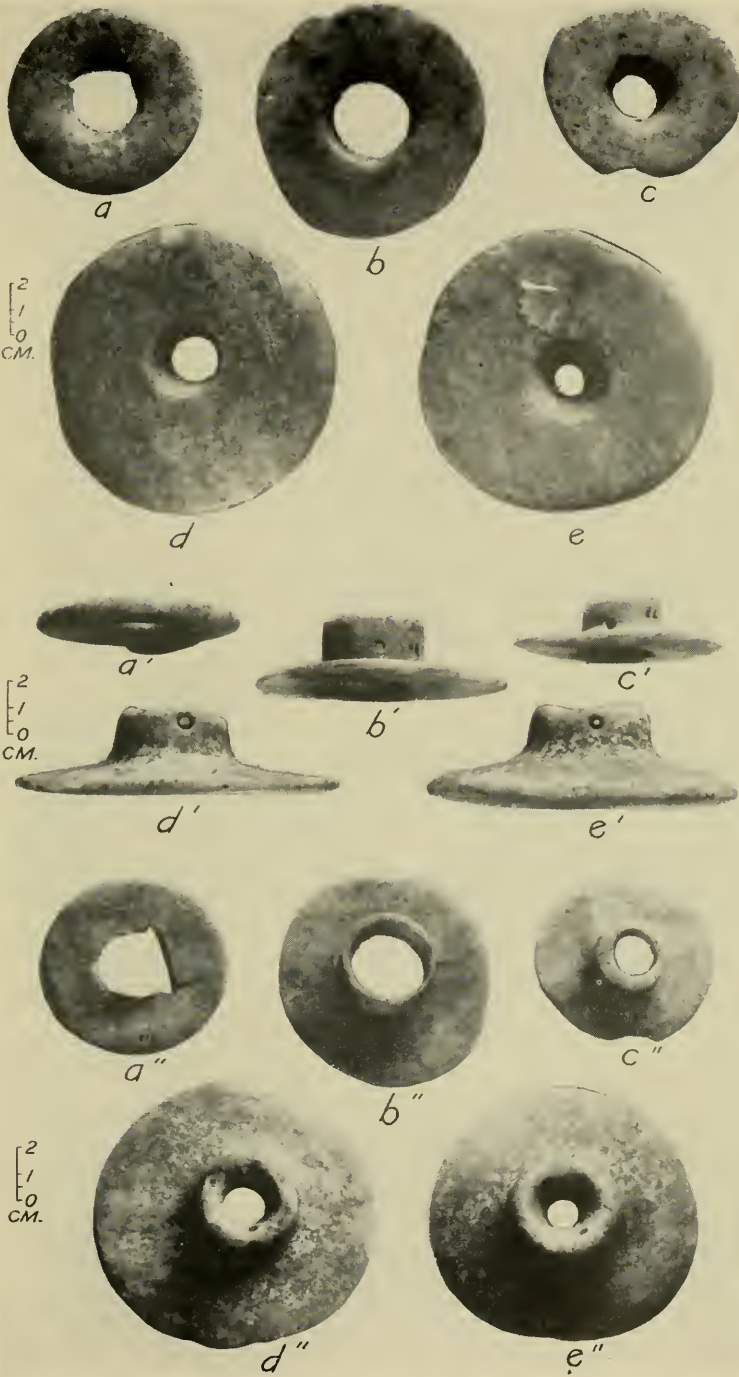
c



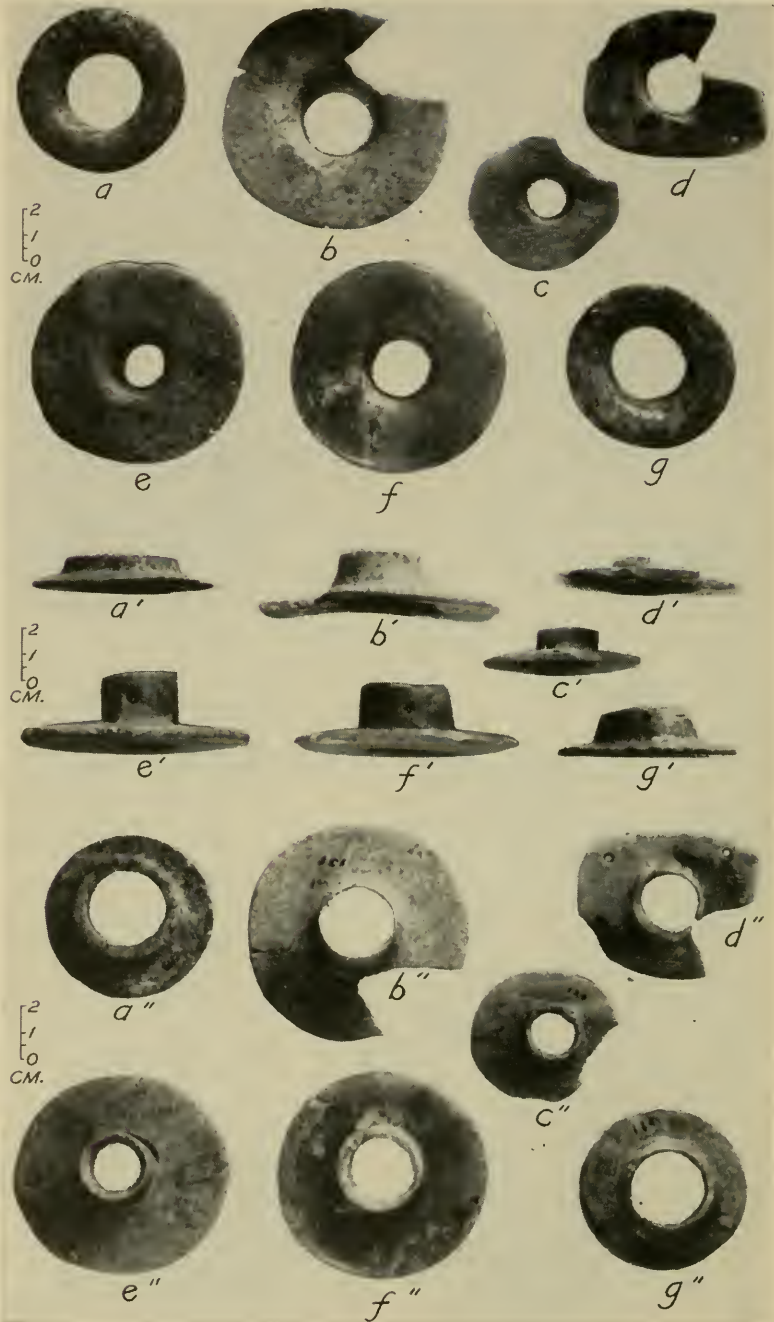
c'

2
1
0
CM.

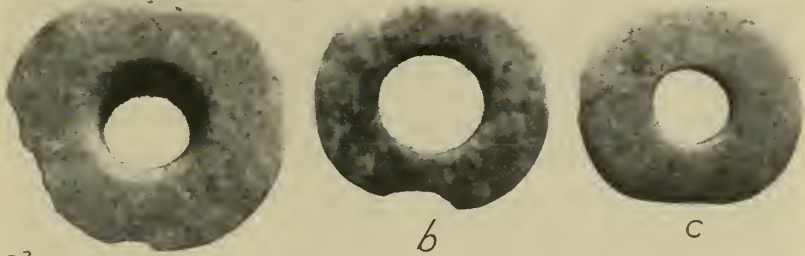
Plaques. *a*, convex, *a'*, concave, sides of clamshell-shaped plaque. Obverse of *b* is smooth and plain.



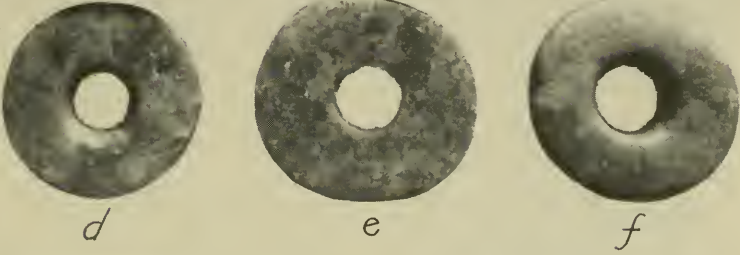
Earspool flares. (In pls. 41-54 the prime or primes after a letter indicate other views of the same specimen designated by the same letter.)



Earspool flares.



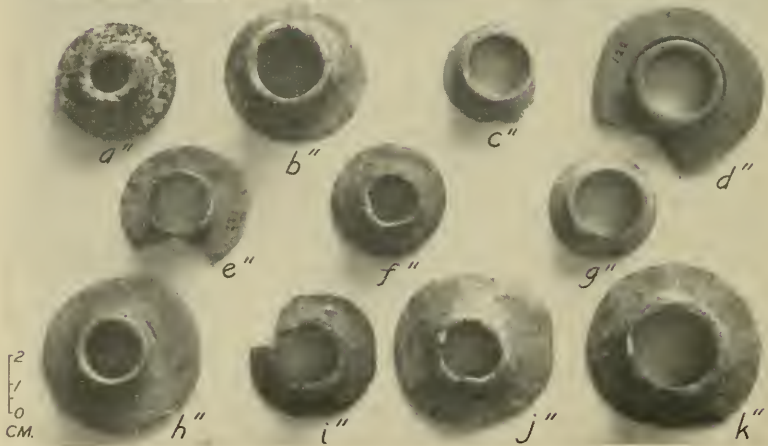
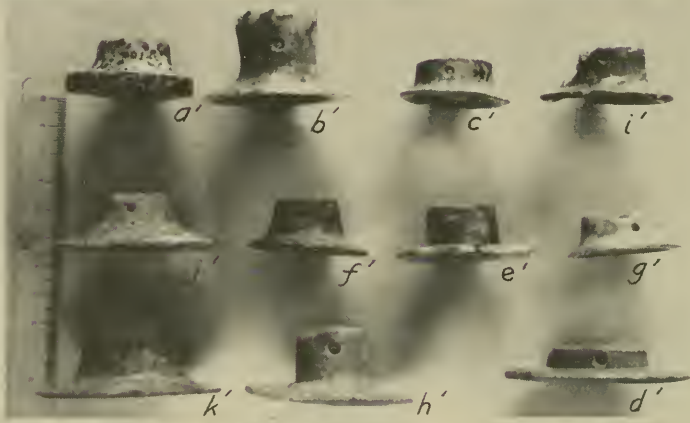
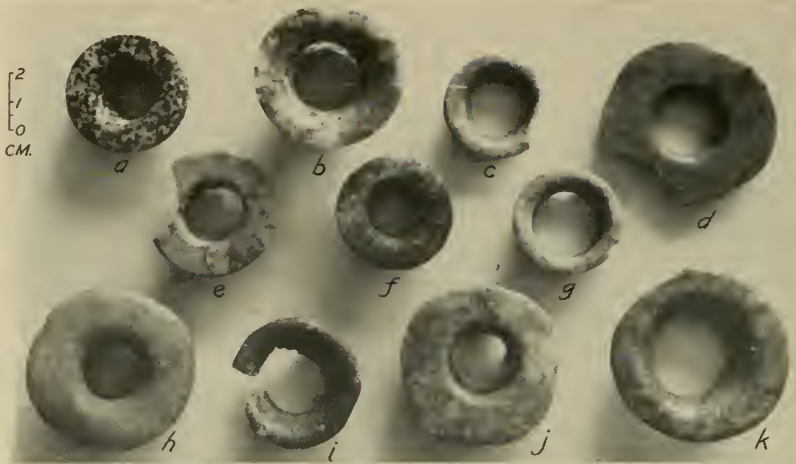
2
1
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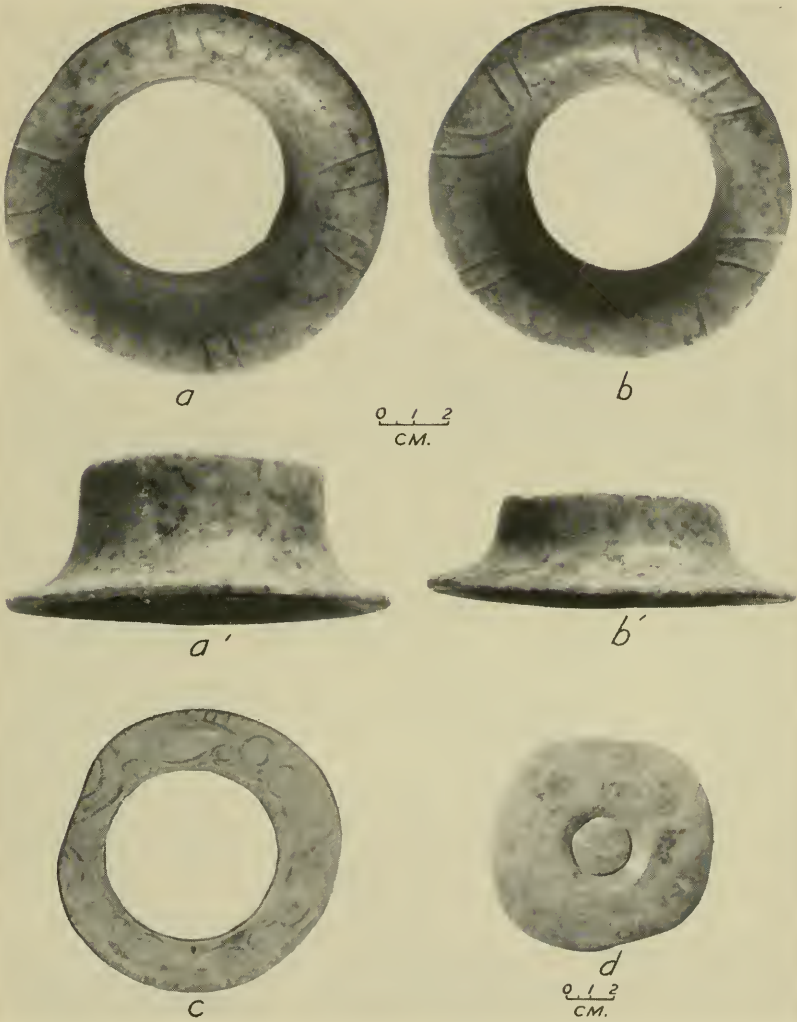
2
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CM.



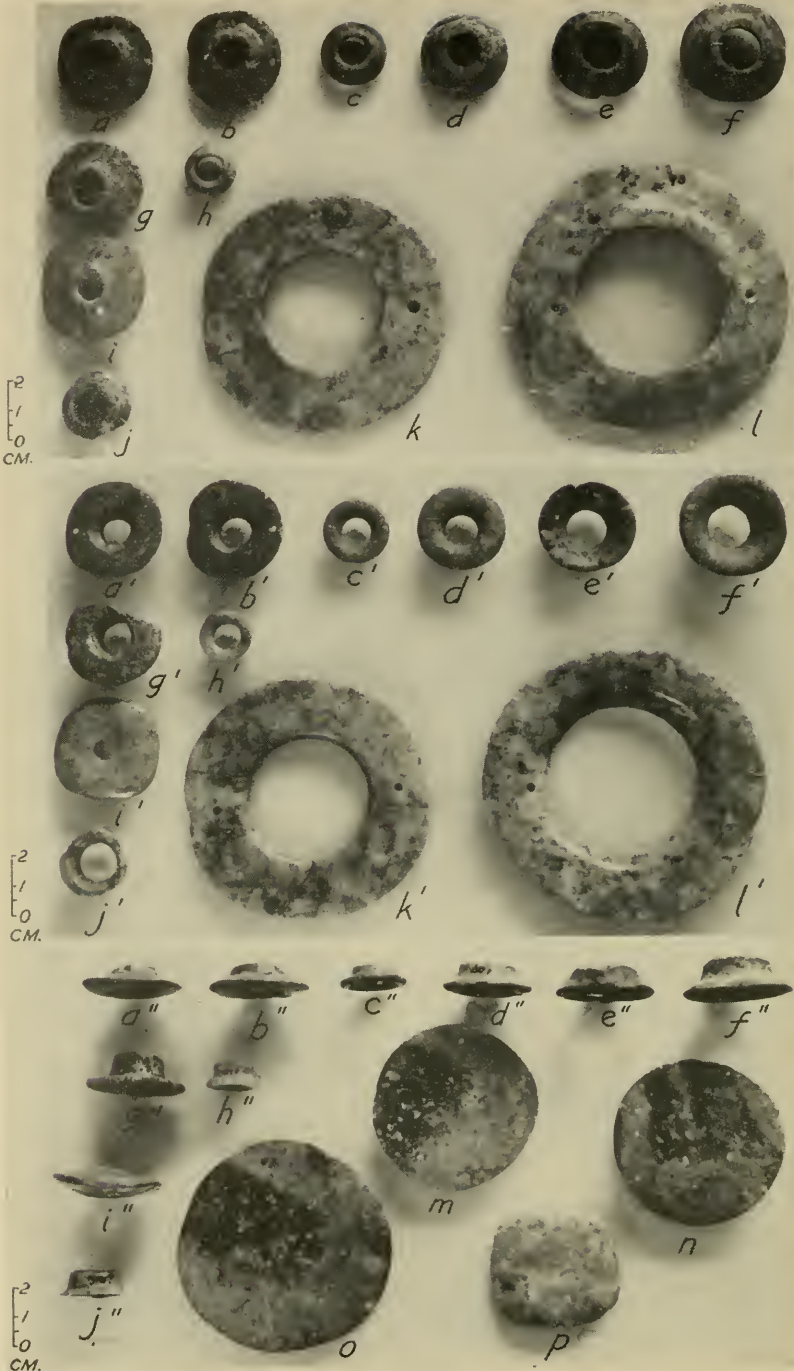
Earspool flares



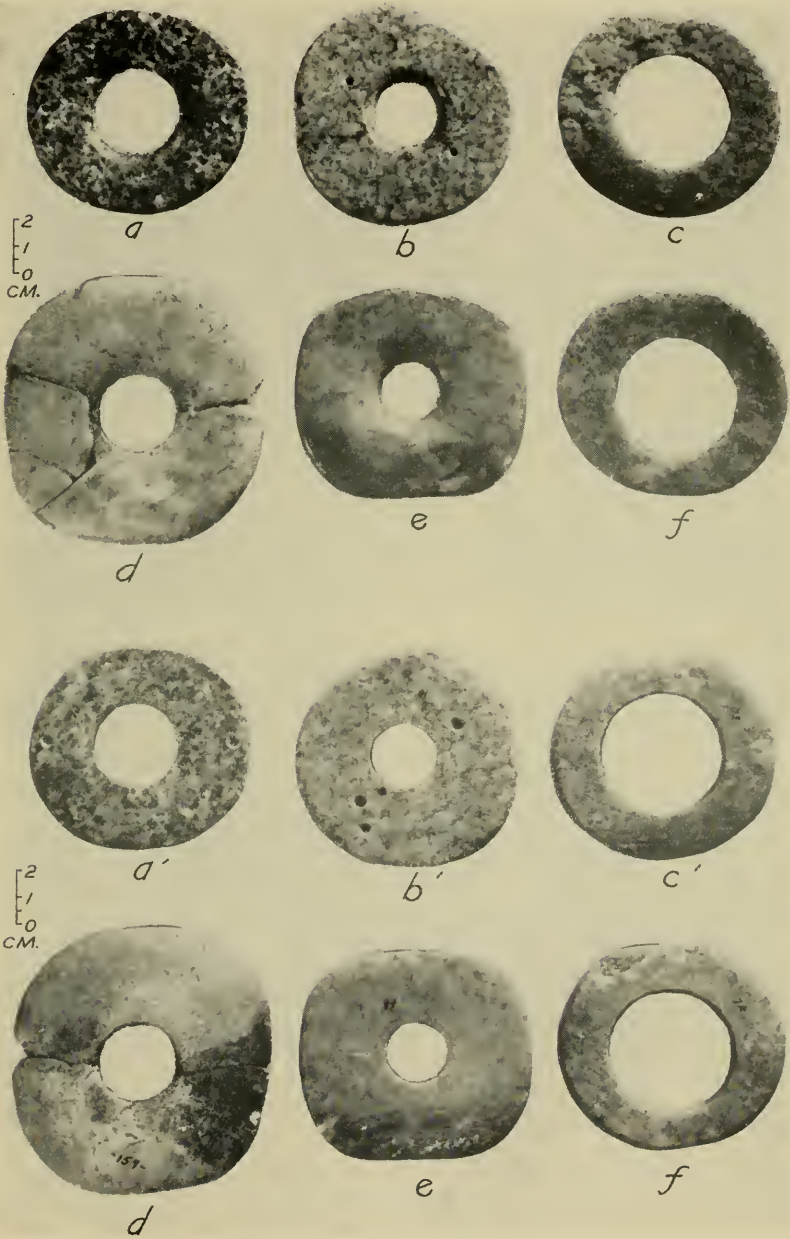
Earspool flares. (Note that, through the writer's error, the order of specimens shown in side view (middle photograph) was altered.)



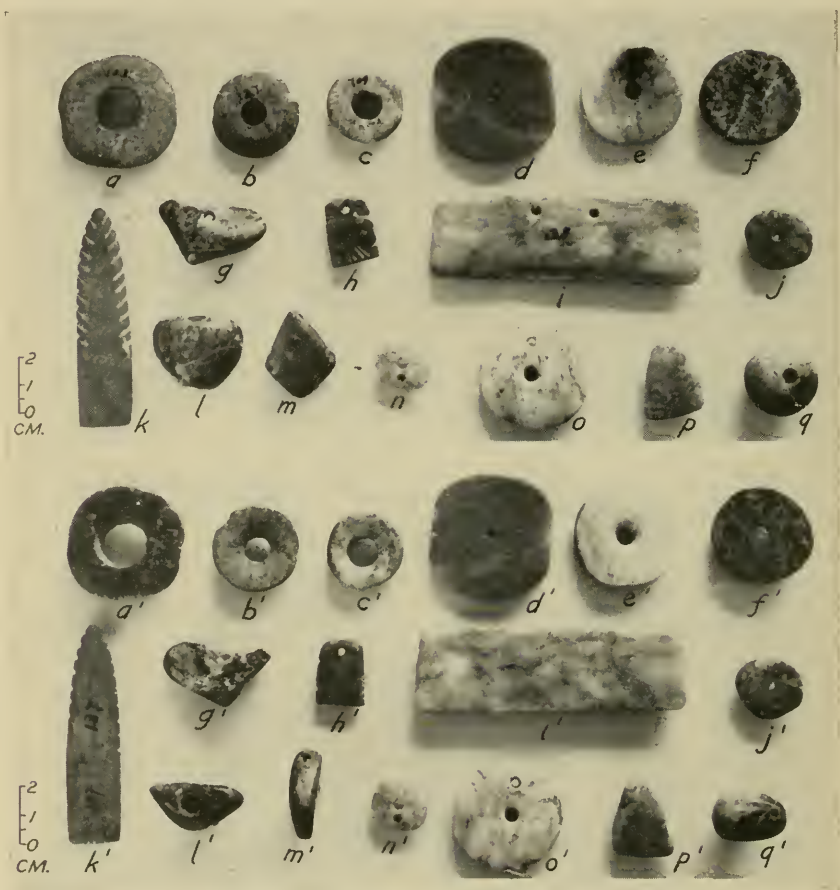
Earspool flares and decorated perforated disk. *a, a', b, b'*, pair of decorated earspool flares; *c*, decorated perforated disk; *d*, one of pair of earspool flares found with throat disk in place. (*c*, Courtesy National Geographic Society.)



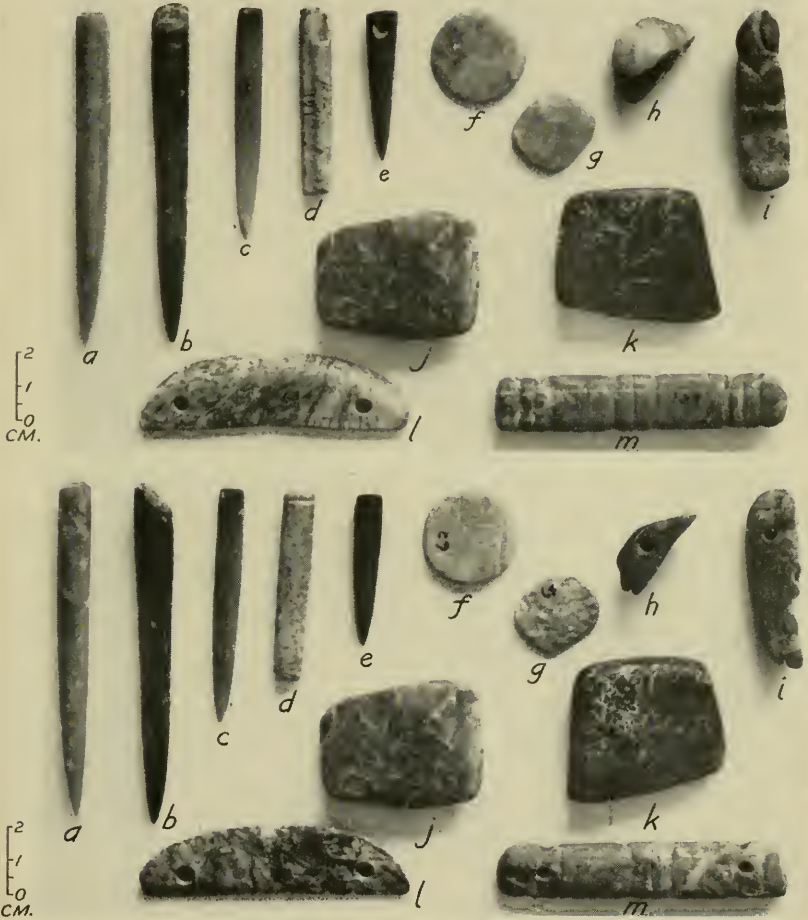
Small flares, perforated disks, and imperforate disks.



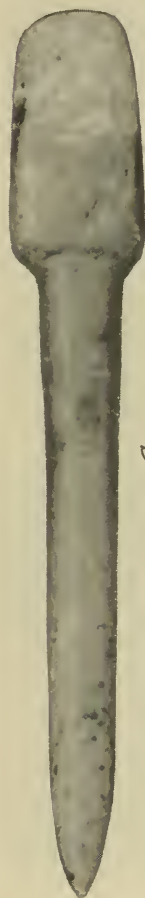
Disks with large central perforation.



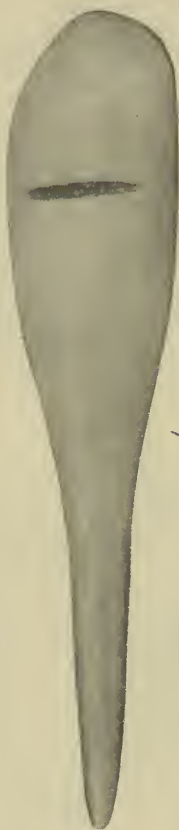
Miscellaneous objects.



Miscellaneous objects. Lower group shows different view of same specimens indicated by corresponding letters in upper group (primes inadvertently omitted in makeup).



a



b

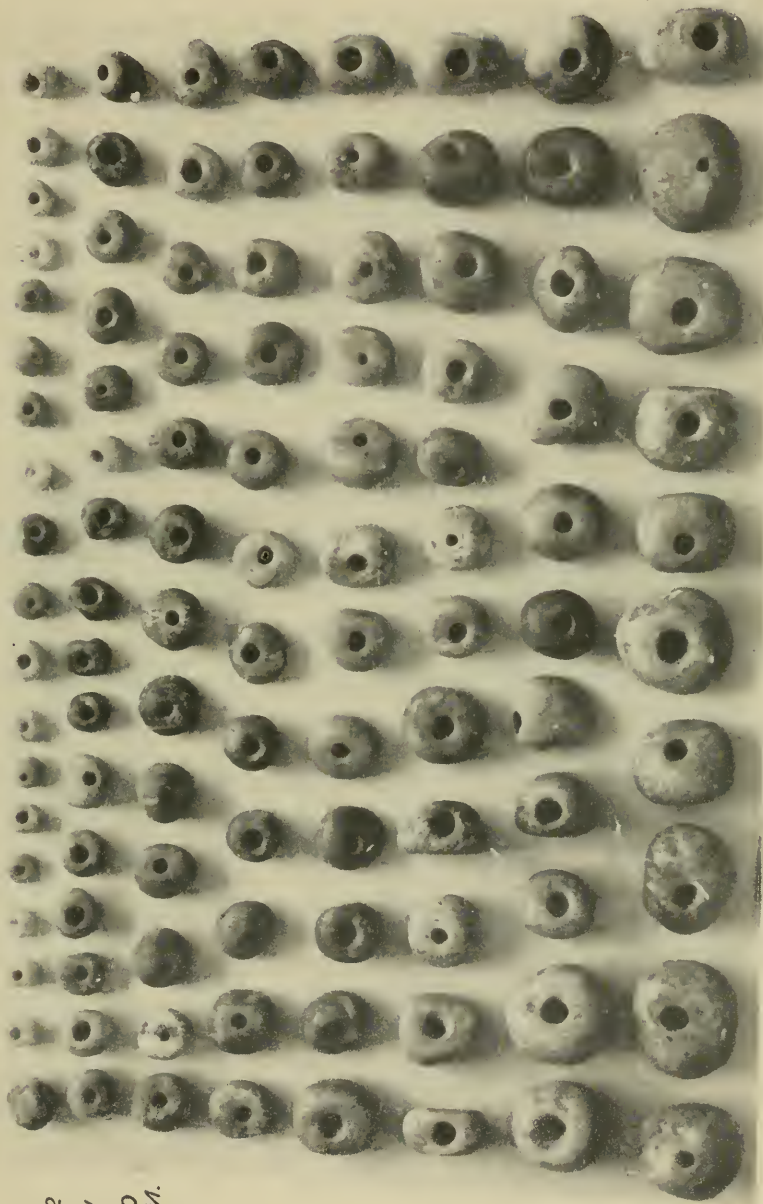


c



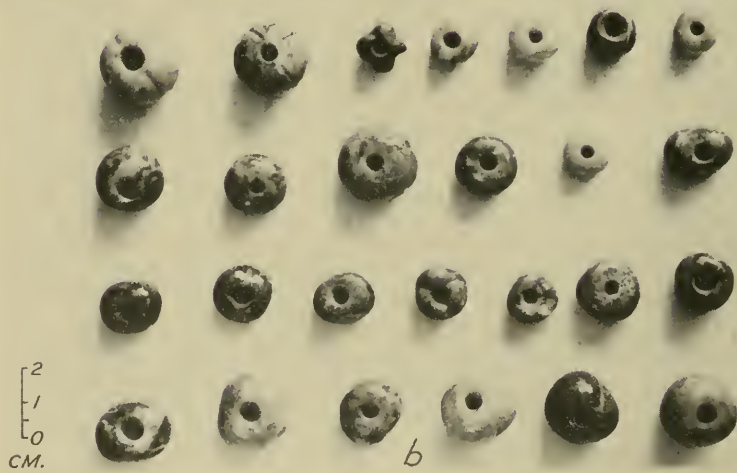
d

Ceremonial perforators (?). (Courtesy National Geographic Society.)



2
1
0
CM.

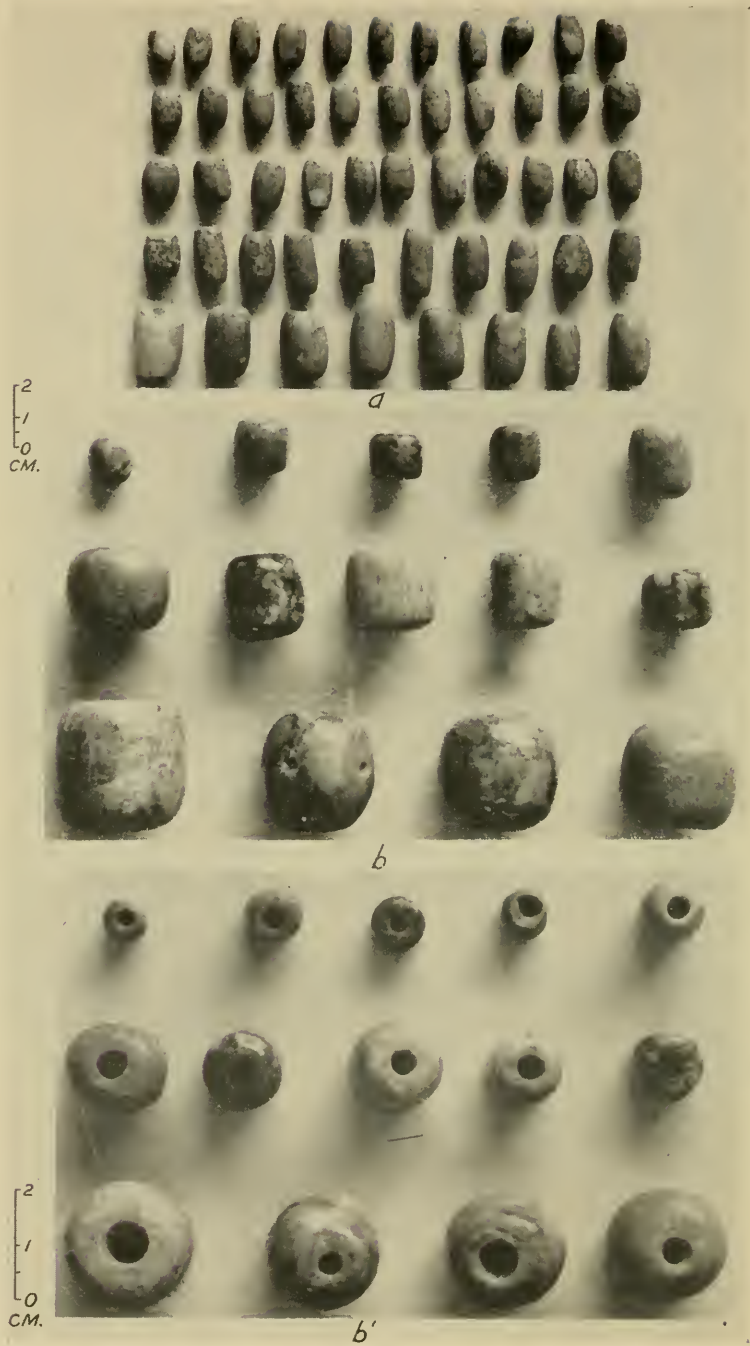
Subspherical and "pebble" beads.



Subspherical, gadrooned, tubular, "pebble," and miscellaneous bead types.



Tubular and barrel-shaped beads.



Barrel-shaped, and short tubular beads.