

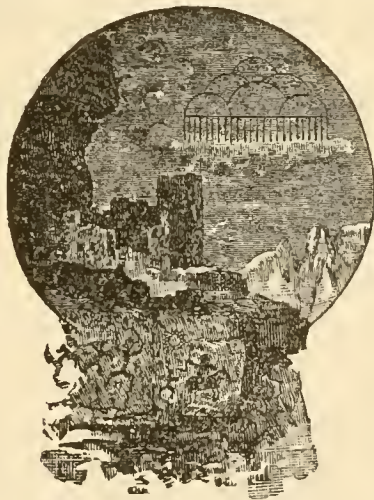
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SMITHSONIAN INSTITUTION
BUREAU OF AMERICAN ETHNOLOGY
BULLETIN 170

EXCAVATIONS AT LA VENTA
TABASCO, 1955

By PHILIP DRUCKER, ROBERT F. HEIZER
and ROBERT J. SQUIER

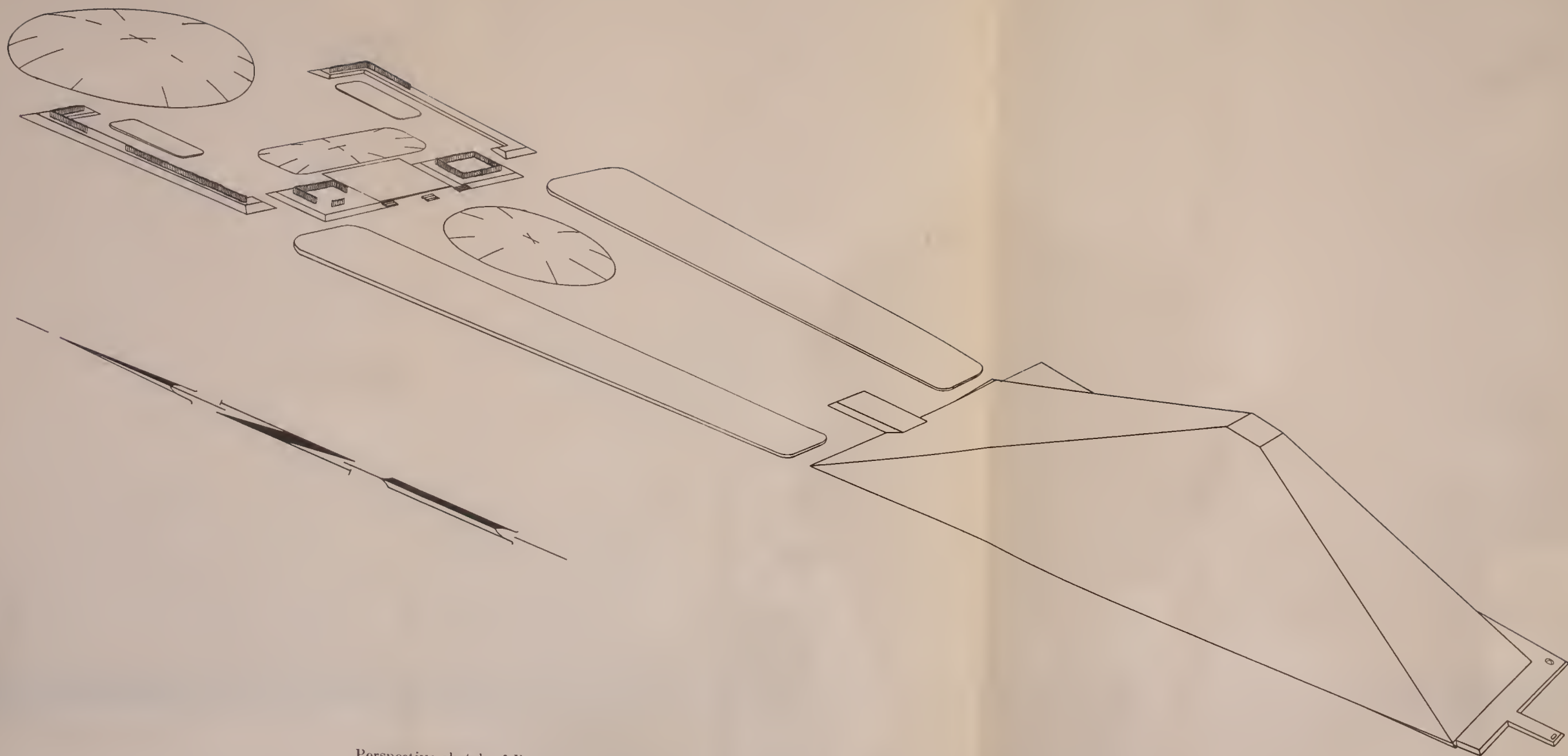
With Appendixes by JONAS E. GULLBERG, GARNISS H. CURTIS
and A. STARKER LEOPOLD



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Perspective sketch of Pyramid and Complex A of La Venta site. (For identification of structures, see figs. 3 and 4.)

LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
BUREAU OF AMERICAN ETHNOLOGY,
Washington, D. C., June 27, 1957.

SIR: I have the honor to transmit herewith a manuscript entitled "Excavations at La Venta, Tabasco, 1955," by Philip Drucker, Robert F. Heizer, and Robert J. Squier, with Appendixes by Jonas E. Gullberg, Garniss H. Curtis, and A. Starker Leopold, and to recommend that it be published as a bulletin of the Bureau of American Ethnology.

Very respectfully yours,

M. W. STIRLING, *Director.*

Dr. LEONARD CARMICHAEL,
Secretary, Smithsonian Institution.

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EXCAVATIONS AT LA VENTA, TABASCO, 1955

By PHILIP DRUCKER, ROBERT F. HEIZER, and ROBERT J. SQUIER

INTRODUCTION

During the dry season of 1955, a National Geographic Society-Smithsonian Institution-University of California archeological expedition carried on extensive excavations at the Olmec site of La Venta, Tabasco, Mexico. This site, one of importance in its day, is of considerable interest archeologically and has been the scene of several studies in recent years by the National Geographic Society-Smithsonian Institution research program in southern Mexican archeology: (1) M. W. Stirling's initial visit in 1941, during which he obtained data on a number of large stone monuments; (2) Drucker's work in ceramic stratigraphy there in 1942, and his preliminary tests of certain structures, in the course of which he encountered some interesting offerings; and (3) Stirling and Wedel's more extensive tests of structural areas in 1943, in which they uncovered numerous offerings.¹ While these early projects had made available a fair amount of information on the site, none of them had thrown much light on patterns of construction, or architecture—if one can speak of architecture with reference to masses of piled-up clay. The simple reason for this was that at no time was there an adequate labor force available to get any conclusive results from the tests of the structures, which always turned out to be larger than the excavator anticipated. In 1941, Stirling had only a few days available to clear and photograph the monuments; in 1942, Drucker had about 3 weeks at the end of his ceramic tests to put his 8- to 10-man crew on the structures; in 1943, Stirling and Wedel had but 18 to 20 men available. It was therefore resolved that we attempt a climax dig in the 1955 season, with a labor force adequate to move enough dirt to yield some conclusive results. We envisioned the project as one involving among other things the physical handling of stone columns and monuments and a large quantity of earth—large, at least, by

¹ These three seasons of work have been reported on by Stirling (1943), Drucker (1952), and also in a series of popular articles written for the National Geographic Magazine by Stirling (September, 1940; November, 1942; and September, 1943). Drucker's "La Venta, Tabasco; a Study of Olmec Ceramics and Art" (1952) is hereafter cited "LV."

hand-labor methods, without heavy equipment. We attempted to allow for this by estimating the yardage that should be moved in what we believed to be the most important complex of the site, computing the man-days of labor necessary, and dividing this by number of working days in a season. This method, which admittedly involved considerable guessing, gave us 50 men for 100 working days. By great good luck, this size force turned out to be about right to accomplish what we had set out to do.

Through the generosity of the National Geographic Society, funds were made available to undertake the project. Melvin M. Payne, senior assistant secretary of the National Geographic Society, has been, from the beginning of the work through the completion of this report, most helpful, and a large measure of credit must go to him. The University of California and the Smithsonian Institution contributed to the project, chiefly in the form of scientific personnel and equipment. We were able to work at La Venta from mid-January to the latter part of May 1955. The actual excavations were carried on from the beginning of February to mid-May; the initial 2 or 3 weeks were devoted to building camp and clearing the jungle from the part of the site we intended to work in; the last couple of weeks were devoted to filling in our excavations and to breaking camp. Technical personnel included, in addition to Drucker and Heizer, who were in charge of operations, Ing. Eduardo Contreras, assistant archeologist of the Instituto Nacional de Antropología e Historia, and Robert J. Squier, research assistant in archeology, University of California.

During planning, preparations, and actual fieldwork, there were numerous persons who gave us invaluable assistance—usually just when we needed it most. To them we wish to offer our very sincere thanks. Mention has been made of the National Geographic Society, which, through its Committee on Research, made the project possible. In Mexico, the wholehearted cooperation of Arq. Ignacio Marquina, former director of the Instituto Nacional de Antropología e Historia, Dr. Eduardo Noguera, former director of Monumentos Prehispánicos, and other officers of the Instituto, and Dr. Eusebio Dávalos H., former director of the Museo Nacional de Antropología, enabled us to arrange for necessary permits, to process our collections at the end of the season, and to have access to study materials. T. H. Englesby, general services officer at the United States Embassy, Mexico, helped us immeasurably also, especially in matters relating to official communications. A grant to aid in preparation of report was made by the Institute of Social Sciences of the University of California, and for this we acknowledge our appreciation. In 1957, while engaged in a check study of the La Venta materials, we were

assisted by Dr. E. Dávalos, present director of the Instituto, by Dr. Luis Aveleyra de Anda, now director of the Museo Nacional, and Dr. Ignacio Bernal, present director of Monumentos Prehispánicos.

During the actual fieldwork our time was pretty fully occupied with crew supervision, mapping, study of stratigraphy, note taking, photography, and the like. The result was that at the field camp little detailed study of small artifacts was possible. Drucker spent some time in Mexico City after the excavations were closed down studying the collections. Heizer and Squier, in Berkeley, prepared the photographic and line-drawing illustrations and completed the study of selected materials loaned by the Museo Nacional. Sr. Contreras, who served as assistant during the excavations, worked as assistant archeologist on the University of California Archaeological Survey in 1956-57, and while in Berkeley drew most of the figures and profile plans. In December 1956, when the descriptive text sections were all written, we received the radiocarbon dates for the site. At this point it seemed desirable to check over the 1942, 1943, and 1955 collections from La Venta, and to learn more of the apparently contemporaneous cultures of the highland. The National Geographic Society was good enough to supply funds for Squier and Heizer to spend 2 weeks in January 1957 in Mexico City in order to carry out this study.

Throughout the work Dr. M. W. Stirling, director of the Bureau of American Ethnology, and Melvin M. Payne, senior assistant secretary of the National Geographic Society, have been most helpful and encouraging. In the field, we were obligated for innumerable favors to officers of *Petróleos Mexicanos*, including especially Ing. J. J. Nettel Flores, general superintendent of the zone; Ing. Hugo Contreras, Ing. J. Echeverría, assistant superintendent, Ing. Roberto Rodriguez Montes, Ing. Ignacio Zavala Torres, and many others. These people solved many of our transportation and logistic problems for us, and even put some heavy earth-moving equipment at our disposal. In one connection or another, Mrs. Irmgard Weitlaner Johnson, Mrs. Carmen Cook de Leonard, Mrs. Beatriz Barba de Piña Chan, and Dr. Walter Taylor were good enough to assist us. Many other persons did us favors that made the work go smoother; though we cannot list them all, to each we express our gratitude.

METHODOLOGY

Prior to going into a discussion of our methodology, it will be well to explain our division of labor and responsibilities. Heizer devoted full time to actual archeology; Drucker, because of his greater familiarity with the Tabasco culture pattern and Spanish, divided his time between this and "housekeeping" chores such as labor supervision and camp operation. Both also shared the maintenance of the photo-

graphic record, with assistance from Squier. Contreras supervised special projects, and assisted with the camp and crew maintenance. Squier was responsible for the maps and diagrams, in addition to giving the photographic assistance mentioned. At the conclusion of the work at La Venta, Drucker and Contreras classified and studied the season's collections at the Museo Nacional de Antropología. In the preparation of this report, Drucker provided rough drafts of certain sections, which were edited by Heizer and Squier, who wrote the remainder and coordinated the two sets of material.

The excavations at La Venta were carried out principally with picks and shovels, wheelbarrows being used to get the dirt out of the way. What with the size of the features that we intended to test, and the toughness of the clays of which they were constructed, La Venta was no place for a camel's-hair brush and a grapefruit knife. When possible, we tried to strip off layers of clay that appeared to be units. However, the clays did not lend themselves very well to stripping. Once a horizontal surface had been sun dried it became extremely hard and could not be scraped. Therefore we made an effort to note any indications of intrusive pits, and were able to do so in many cases, but depended primarily upon vertical sections for our analysis of structural phases. To assist in preparation of the report, and to check our field notes and diagrams, we made a considerable number of kodachrome pictures of our trench walls that showed structural successions. After a wall had been exposed for a few days the brightly colored clays dried and faded to dull nondescript reddish-buff hues. In many cases, however, by spraying a wall gently with an ordinary garden knapsack sprayer, the colors could be restored for recheck and for photographic purposes.

One of our major problems was the removal of the 4 to 5 feet of the gray drift sand which covered most of the Ceremonial Court area. We had hoped to be able to clear off a considerable section of the Court in order to excavate it. We began by moving the drift sand overburden in the northeast corner of the Court. The job was extremely dull and in many ways was a great loss of time. There were no artifacts in the drift sand in this part of the Court, except a very infrequent nondescript sherd or two. It was true that close to the lower margin of the sand we encountered a great mass of fragments of basalt columns, and in addition some piles of serpentine blocks which will be discussed later on. Other than this, there was no archeology involved in the moving of the sand. Due to the courtesy of the officials of the Mexican Oil Co., we eventually were loaned a bulldozer, which operated for approximately 24 hours, altogether, for us. With this assistance we were able to strip off the rest of the drift sand overburden in the northeast quadrant of the Court.

Even more useful and labor saving to us, was the removal of the 1943 back dirt which formed a tremendous long pile along the margins of the north-south trench. Finally, being reasonably sure that there were no major artifacts in the way, we had the bulldozer cut a strip eastward from the north-south trench, cutting through the wall on the east side of the Court at a point just south of where Stirling and Wedel had made their east-wall excavation. This trench, for a matter of convenience, did not run quite perpendicular to the centerline of the site. However, it was only a few degrees off and gave us a much longer section of the Court. In fact it gave us an east-west cut halfway across the Court, which we might not have been able to get had we been forced to depend entirely on hand labor.

Our method of locating points was by triangulation from any two of three arbitrarily established datum points. These points, as selected, had no particular relation to the features of the site, but rather were chosen on the basis of giving good visibility. Datum 1 was a computed centerline point on top of the basalt column tomb (Feature A-2-a). Datum 2 was northwest of Feature A-1-e on top of a very slight elevation formed by a 1943 backdirt pile, and Datum 3 was on top of Mound A-3. Elevations of features, structural levels, offerings, etc., were also taken from these datum points and subsequently, simply as a matter of convenience, converted to the Datum 2 elevation. In beginning our stripping of the drift sand in the northeast quadrant, we had attempted to stake off squares to control our excavation, and to give us fixed points of measurement. It proved to be impossible to keep the stakes in the soft drift sand, which continually caved away; consequently we reverted to the method of triangulating all locations from our datum points and no longer bothered with stakes and squares. It is necessary to mention that our excavations, almost from the first, never had the neat appearance that we would have liked. The banks of sand overburden gave us a great deal of trouble. They were continually slumping in until we sloped them back approximately to a 60-degree angle. By the time everything had caved in that wanted to around the margins of our excavations and we had sloped the sand walls back, we had some rather ragged looking outlines around the upper portions of our excavations.

We were also faced with problems in connection with very deep trenches that we knew we would have to dig in the clay of the structures. Where the clay fill had been mixed with the right amount of sand by the original builders, it was fairly stable even in the nearly vertical faces. Where the clay contains little or no sand, it seems to dry back a certain distance into the wall and form a cleavage plane

between the dried outer surface and the moist inner portion. After a short time large quantities of this material are likely to drop into a trench. We also found that in some cases there were thick massive layers of clay fill overlying the fill with lenses of rather loose sand. Whether this latter type of fill represented in ancient days the sort of modern construction where much more sand is put into the concrete than specifications called for, we do not know, but in any case these sand lenses were quite dangerous because they would trickle out and leave large masses of clay above them suspended in midair. As a solution, we consistently sloped the walls of major trenches outward and in some cases, as in the deep trench in Mound A-2, we stripped off several feet of clay fill leaving wide platforms on the edges of the trench before going clear down to the bottom. As a result, we had no serious problems, or accidents, from cave-ins.

During the entire season we gave considerable thought to the problem of conservation. The structures built of clay obviously do not lend themselves to conservation, or restoration, in the same way as do those that are built of stone. In any case we found it necessary, in order to excavate some of the structures at all adequately, to dig them entirely away. However, we were able to accomplish the following: the basalt columns on and around Feature A-1-e were diagrammed and numbered, and the number was chiseled on each column to make possible the eventual reconstruction of the feature. The Jaguar mosaic mask, which we found in the season's work, was similarly diagrammed and numbered. The numbers in this case were painted on the edges of the stones, and the entire quantity of stones was shipped to the Museo Nacional de Mexico, where it has been reconstructed by Sr. Contreras in the patio precisely according to the original design. Two of the smaller and better new monuments (Nos. 19, 23) were also shipped to Mexico City. Stela 3, which had slumped forward so that it lay at a very steep angle, showed what appeared to us as indications of possible fracture along the back. We believed that the heavy weight of the top, tilted as it was, might easily snap this splendid monument in two; therefore, we excavated a pit behind it, and with the assistance of the bulldozer set it up straight. The new monuments discovered south of the Pyramid, since they were in poor state of preservation and could not be moved, were reburied when we left the site.

THE SITE OF LA VENTA

The site of La Venta (fig. 1) was described in some detail by Drucker (LV, 1952). The present section will attempt only to amplify certain details on the basis of our more accurate knowledge gained in 1955, and will correct certain minor errors in the earlier account.

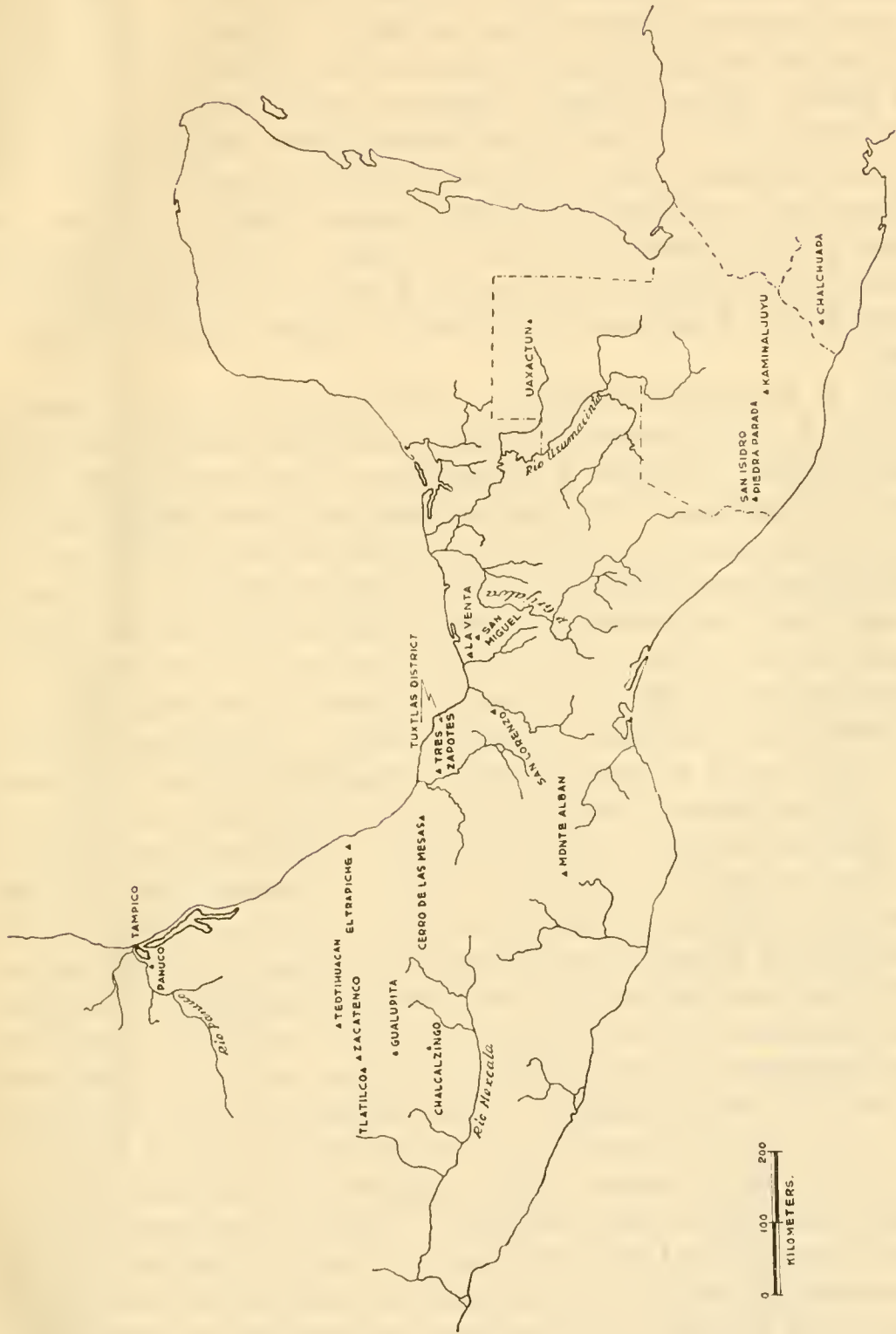


FIGURE 1.—Map of southeastern Mexico showing sites mentioned in text.

The island structure (fig. 2), surrounded by swamps, is shaped approximately as indicated in the sketch map in the earlier description. However, Drucker's estimates of its size were in error. According to a map made available by officers of the oil company, the maximum length of the dry land area is just under 2.8 miles (4.5 km.) rather than between 3.5 and 4 miles (between 6 and 7 km.) as previously stated (LV, p. 6). The dry land mass is also somewhat narrower than was estimated. Its maximum east-west dimension, close to its northern end, is a little over a mile (approximately 2 km.) and its average width is about 0.75 mile (1.2 km.). The earlier estimate indicated a maximum width of nearly 4 km. and an average width of about 1.5 km. The area of the island is approximately 2.1 square miles.

Most of the work during the 1955 season was concentrated in Complex A, the Ceremonial Court area, lying just to the north of the Pyramid. In figure 3 the positions of the larger stratigraphic profiles are indicated. The features here were constructed along the crest of a long, narrow, low ridge that runs in a north-south direction for something over 2,000 feet. South of the Pyramid the ridge comes to an end, and then across a low depression, another ridge of similar size and shape continues its general direction. In the area of the Ceremonial Court (fig. 4) the original crest of the ridge seems to have been rather less than 200 feet in width. On the west it drops away fairly steeply to an eroded gully, some 20 feet below the present crest. On its eastern side it dips very gradually for a few feet and then levels off to form a wide flat area. The Ceremonial Court is built directly across the crest of this ridge. Its general area is marked by the tips of rows of vertically set basalt columns (pl. 1), as described by both Drucker and Wedel (LV, *passim*). In 1955 we re-measured the area outlined by the columns, estimating just as Wedel did the location of the southeast corner of the rectangle. According to our measurements, the columns bound an area of 188 feet east-west, and 135 feet north-south. These columns are set into the inner edge of a buried brickwork wall. As presently reported, there are gaps in the row of columns which suggest that this phase of construction was never entirely completed. The clay wall itself does not entirely surround the Ceremonial Court. There is a gap on the north side between the end of the wall and the east side of Mound A-2. At this point, the wall and floor were ornamented with stones very carefully placed in the position which suggested to us that this was probably an entry. We did not excavate on the west side of Mound A-2, but we assume that a similar entryway occurred there. In the center of the south side of the Court there was no continuous wall. Instead, there was a flat-topped "forecourt" which extended outward

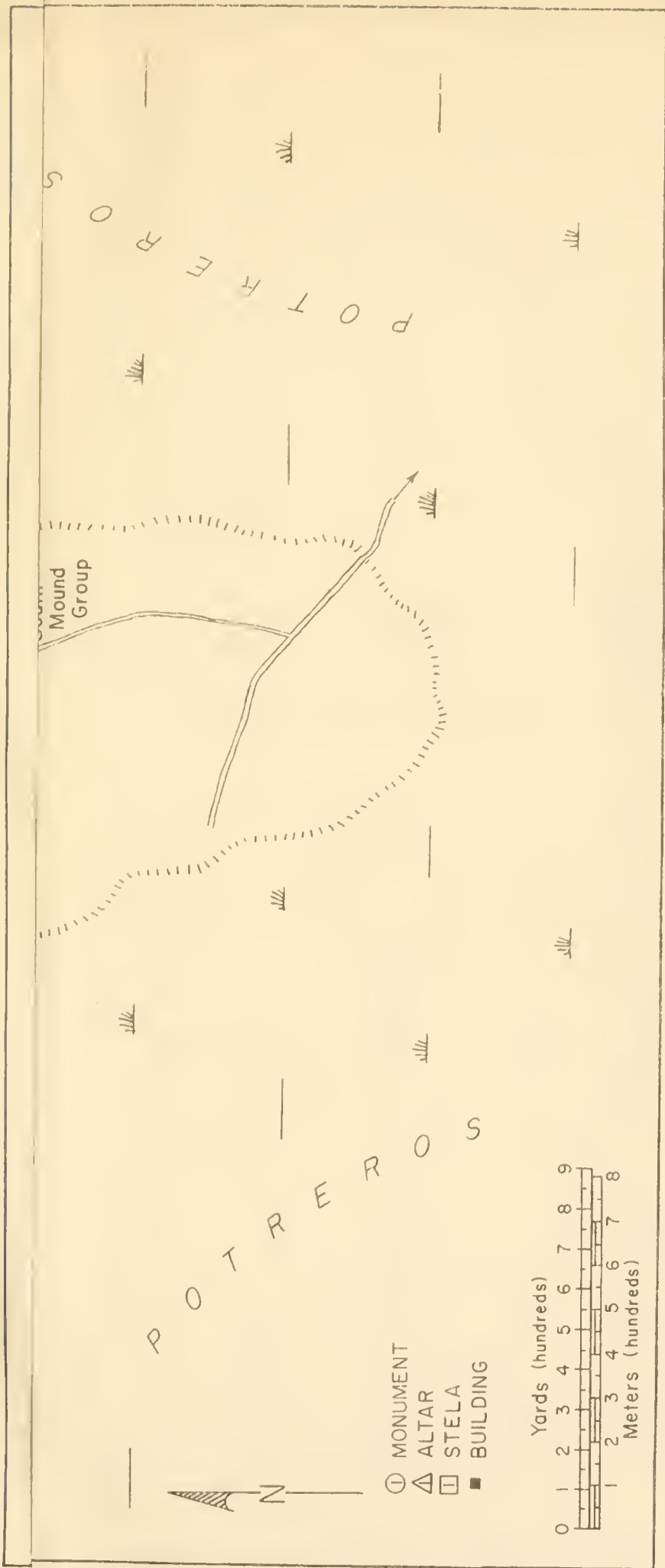


FIGURE 2.—Map of La Venta island showing roads, camps, and archeological features.



Figure 2.—Map of La Venta island showing roads, camps, and archaeological features.

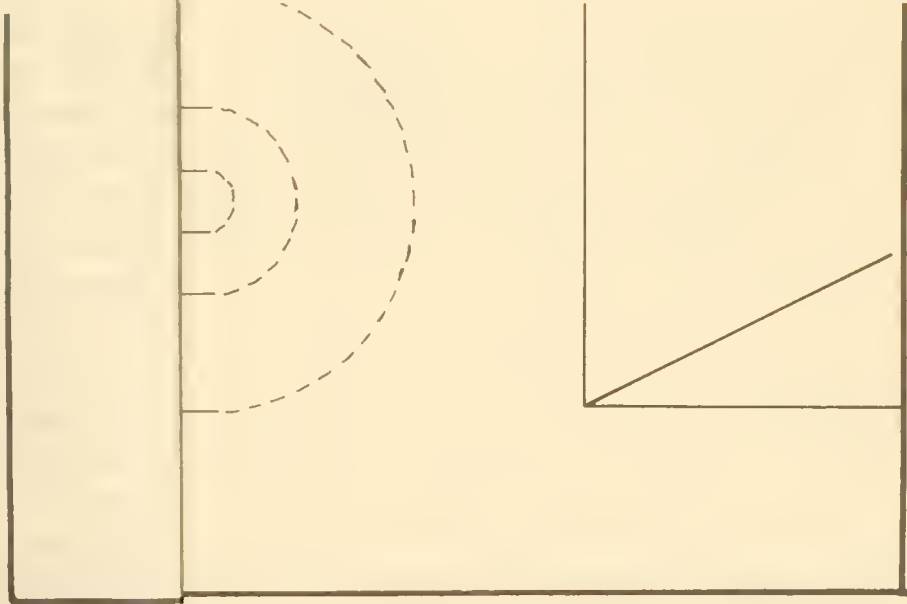
south along the centerline of the Court. The forecourt was flanked by two low platforms, each of which was crowned by a rectangle of vertically set basalt columns, with horizontal "bracer" columns laid along the bases of the vertical ones. The Southeast Platform was excavated by Stirling and Wedel in 1943. This was the feature in which they found the very elaborate mosaic of serpentine blocks representing a jaguar. The Southwest Platform was more completely excavated by us in 1955. Most of the features, or subfeatures, of Complex A are arranged symmetrically, but there is one small structure marked by a row of six vertically set columns between the Southeast Platform and an extension of the line of the columns forming the east wall of the Court. Wedel's tests in this area (LV, pp. 60-61) suggest that this was a small feature, and probably represents a late modification of the original plan of the Complex. There is no comparable feature apparent on the surface in the southwest corner of the Court. Inside of the clay wall, and behind the Southeast and Southwest Platforms, there was a level open area. We found this area to consist, in cross section, of layers of sand and clay, which we considered to represent the fill placed to raise the general level of the Court. Each layer of this fill was capped by a series of thin, fairly regular, layers of clay and sand, usually of quite distinctive colors, which we interpret as floors. These floors do not run exactly level, as will be brought out. They appear to have been very slightly inclined, or specially modified to allow for adequate drainage. The floors are interrupted by three low platforms in the south-central, northeast, and northwest areas of the Court. All of these stood approximately 2 feet above the general Court level at the final stage of construction. The Northeast Platform, which was completely exposed by us, had a maximum north-south length of 54 feet, and width of 22 feet. It was of irregular plan. The basic outline would appear to have been a rather blunt-ended ellipse. The corresponding platform in the northwest corner of the Court was not completely uncovered. As will be brought out in the proper place, our investigations indicate that these platforms had extremely specialized functions during the use of the site.

Our nomenclature of the features of the site will continue and extend that originally proposed in the 1952 report (cited throughout as LV). According to the original plan, Complex A includes all the structures in the main portion of the site north of the Pyramid, to the northern edge of Mound A-2. Sub-unit A-1 comprises the Court itself, including all attached and contained structural features. These features we have designated in the following manner:

Feature A-1-a: The enclosing wall around the eastern, western and most of the northern sides of sub-unit A-1.

Feature A-1-b: The fills, floor levels, drainage systems, etc., of the general Court area.

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- - - - Excavated 1942-43
- - - - Excavated 1955
- - - - Complex A centerline
- ⊞ Offerings found 1942
- ⊠ " " 1943
- ⊙ " " 1955

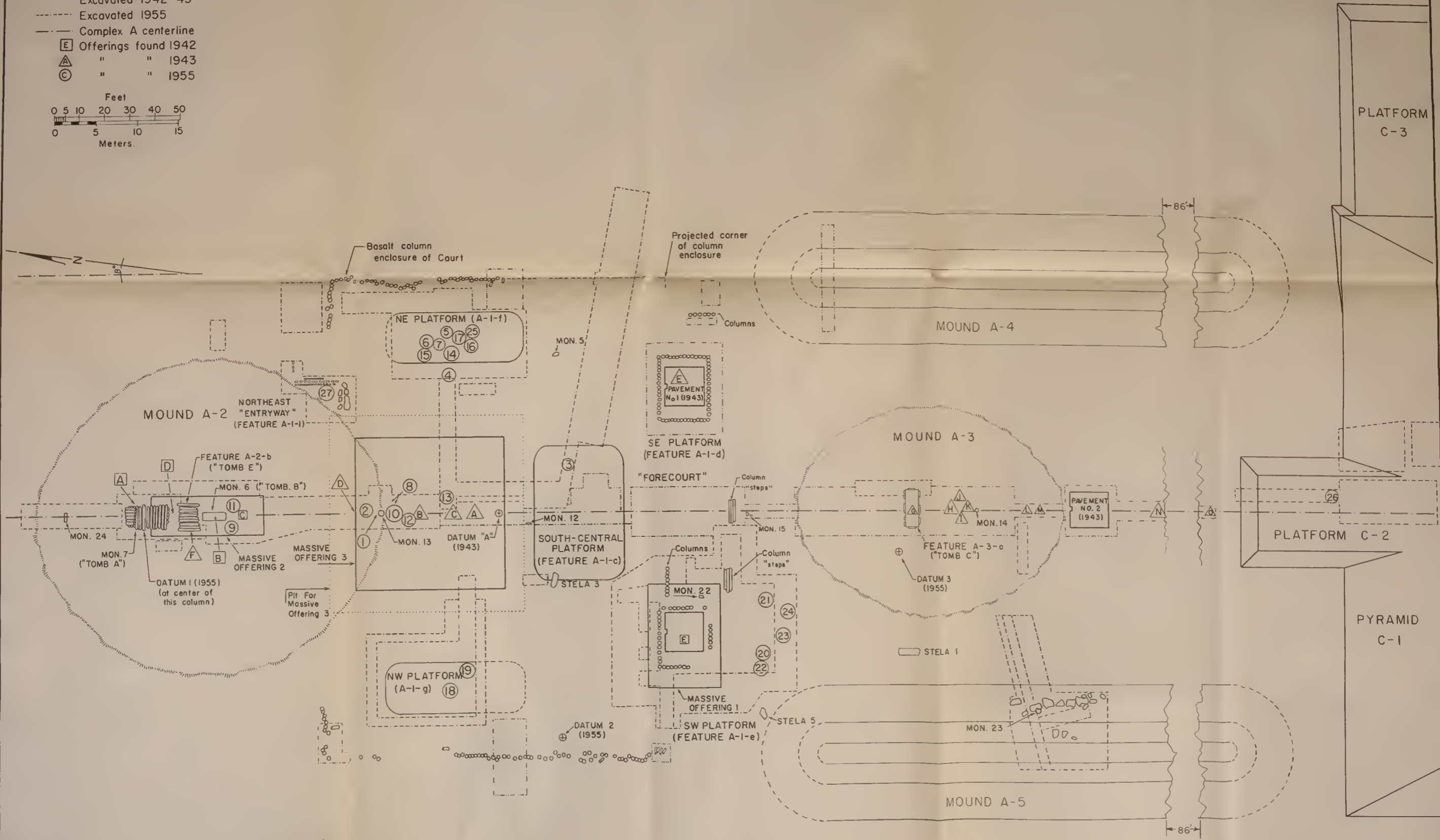
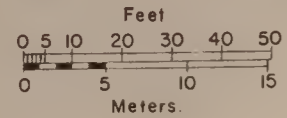


FIGURE 4.—Map of Complex A, La Venta site, showing alignment of platforms, mounds, excavated areas, cuts for massive offerings, features, monuments, etc.

Feature A-1-c: The stepped platform on the south-central side of A-1. This was the structure referred to in earlier publication (LV, p. 28) as the "stile," and here as South-Central Platform.

Feature A-1-d: The Southeast Platform.

Feature A-1-e: The Southwest Platform.

Feature A-1-f: The Northeast Platform.

Feature A-1-g: The Northwest Platform.

Feature A-1-h: A massive offering intruded into the center of the Court area of A-1-b and consisting of six pavementlike levels of serpentine blocks.

Feature A-1-i: The Northeast Entryway.

The platform mound just north of sub-unit A-1 was designated A-2. Excavations showed that this feature in reality consisted of a succession of low stepped platforms built one over the other, during a series of elaborations and rebuildings of the site. The original platforms here appear to have been set so that their centers lay to the north, outside of A-1. However, as they were increased in size in subsequent construction phases the platforms grew to the south so that finally the toe of the platform mound was at, or in, the area of A-1. Platform mound A-2 contained a number of features designated as follows:

Feature A-2-a: Tomb of basalt columns.

Feature A-2-b: A deposit of horizontally placed columns and offerings (Wedel's "Tomb E").

Feature A-2-c: Sandstone coffer.

Feature A-2-d: Massive offering intruded through structural layers of mound and consisting of single pavementlike layer or serpentine slabs.

Other sub-units of Complex A are small, elongated mounds, earlier designated A-3, A-4, and A-5 (LV, p. 35). These structures are situated so that their long axes run approximately north-south and they are located between A-1 and the Pyramid.

The Pyramid itself is designated as Complex C (fig. 5). The Pyramid proper (and it should be noted that the form of this structure is very obviously pyramidal when the bush is cleared from it) is designated as sub-unit C-1 (pl. 2). Because we were able to do more clearing in 1955 than in previous seasons, and because the areas alongside Complex C were not as densely grown over as in the past, having been cleared off recently, we were able to measure its size somewhat more accurately than had been possible heretofore. The Pyramid proper, C-1, proved to have a north-south dimension of 420 feet and an east-west of approximately 240 feet. The top stood at a height of about 103 feet from the uppermost constructed clay surface in the Ceremonial Court (A-1-b). The height of this Pyramid previously reported by Stirling and Drucker (LV, p. 8) was a measurement given us by a surveyor for the oil company. However, he measured the Pyramid from a point immediately to the west of it, which was slightly lower than the uppermost clay level in the Ceremonial Court.

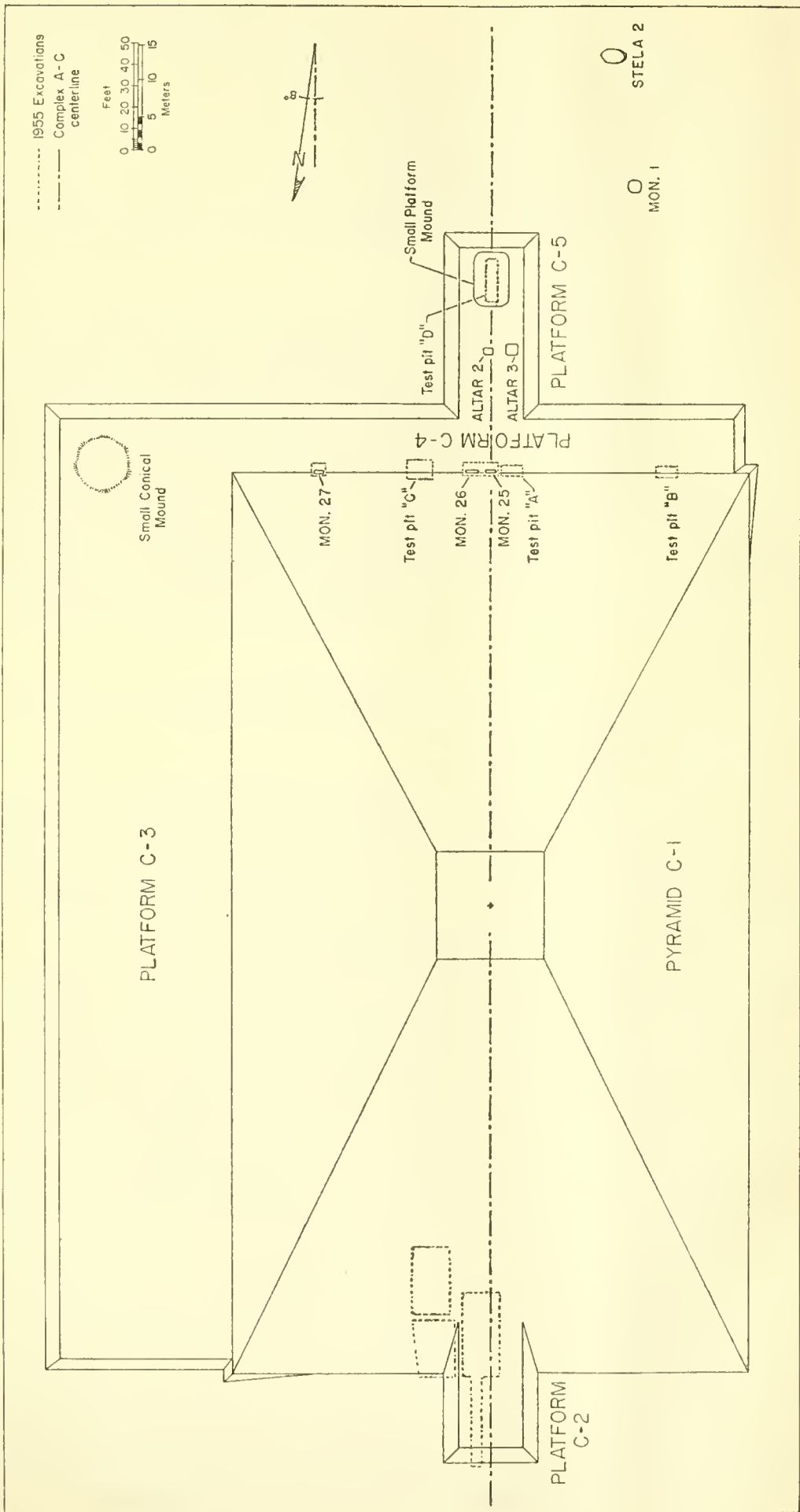


FIGURE 5.—Map of Complex C, La Venta site.

Sub-unit C-2 was a small platform which extended out northward from the center of the north face of the Pyramid proper for a distance of some 60 feet. Its original width could not be determined accurately because one side of it had been very heavily eroded. It was probably originally in the neighborhood of 30 feet wide, and had a maximum height of about 12 feet. C-3 is a very large level platform about 80 feet wide, which runs along the entire east flank of the Pyramid. Its height varies somewhat because of the irregularity of the ground surface on which it was constructed. At its southern end it is approximately 15 feet high. On its southeastern corner there is a small but prominent conical mound about 4 feet high, and 20 or 25 feet in diameter. Sub-unit C-4 was a narrow platform that joined C-3, and runs in east-west direction clear across the southern face of the Pyramid. It is between 20 and 30 feet wide and continues at the level of C-3. Its average height above the ground surface is about 15 feet.

Sub-unit C-5 is a long narrow platform that extends southward from C-4 on the centerline of the Pyramid itself. It is 80 feet long, 30 feet wide, and 15 feet high. On its extreme southern end there is a low elevation, possibly a small platform mound, which at present is a foot or two high. It is quite conspicuous, however. There is no platform apparent along the western side of the Pyramid proper. The platform reported there by Drucker (LV, p. 8) proved not to be a platform at all, but a steep bank resulting from the erosion of an old skid road, apparently worn down in the days of mahogany cutting at La Venta.

To describe the site adequately it is worth while to make some mention of the centerline, which was noted in the previous report as a feature along which all of the structures and monuments were oriented. We were able to check on this line more accurately in 1955. To do this we laid off an arbitrary line which appeared to pass through the centers of a number of prominent features. These features included A-2-a (Monument 7; a computed center point on the top) through the center of Monument 13, and through a computed center point on top of the Pyramid C-1. This same line was also found to pass approximately through the center point of a number of other features, such as Monument 24, the cist of sandstone slabs in Mound A-3, and in addition passed through the center of a series of small offerings over the two massive offerings A-1-h and A-2-d. The line also appeared to bisect these last two named features. According to our 1955 measurements, this line had a direction of 344° per magnetic compass. According to the best source available to us (USAF World Aeronautical Chart No. 644, "Tehuantepec Isthmus," corrected to

1955) the 1955 magnetic variation of the compass in this region was $8^{\circ}0'$ E. Therefore, the direction of the line is 352° true.

We never managed to find time to run a line through the jungle to the north to the vicinity of Altar 6. We plotted an estimated position of this monument some 400 feet to the west from the centerline. Due to the distance, dense brush cover, and the rough terrain between the edge of the air strip and this monument, it was very difficult to determine the monument's precise location. A similar altar is reported on or near the extension of the site centerline (fig. 2).

We were able to extend the line for a short distance southward from the crest of the Pyramid. In doing so we found that it passes between Altars 2 and 3, which are situated on sub-unit C-5. Altar 2, however, has been tipped over and may have been moved slightly out of its original position. We attempted to determine the position of Altars 4 and 5 by holding flags over them and estimating their distance. Altar 5 as plotted is situated about 10 feet west of our extended line, and Altar 4 approximately 140 feet to the east of it. These two monuments, back to back on either side of a low ridge, if actually in the position in which we plotted them, are not as far off the centerline as they might seem. A computed centerline from a point midway between them is only 2° west of the centerline of the site. It is also possible, of course, that our reconstructed centerline may not be quite in accord with the one originally planned because of errors introduced by our computations.

Leaving aside all questionable cases, a glance at the plan of the site indicates that a considerable number of structures are either directly on the centerline (this would include C-2, C-5, A-3, Feature A-1-c, and Mound A-2) or else form pairs to the right and left of it, equidistant from it. Paired features of this type include Mound A-4 and A-5, Features A-1-d and A-1-e, and Features A-1-f and A-1-g. We are consequently convinced of the reality of this centerline as a significant feature in the planning and original layout of the site. The matter of its precise orientation raises a problem. We have not looked into this matter in any detail, and simply mention here a few alternative possibilities which might account for the orientation of the centerline at La Venta. For one, the northerly orientation may be pure chance or accident and have been determined by the alinement of the natural clay and sand ridge upon which the site is built. For another, some fixed star in the first half of the first millennium B. C. which then occupied the approximate position of Polaris today may have been the point of alinement. For a third, the centerline could represent a perpendicular to an east-west orientation obtained by observation of the rising or setting sun on a particular day in the Olmec calendar (cf. Macgowan, 1945, p. 118).

Whatever the specific reason which impelled the builders of La Venta to orient the centerline along 8° west of true north, we feel that it is significant that the majority of Mesoamerican sites are built on north-south alinements, and from this conclude that the La Venta Olmec were early participants in this widespread practice. This whole problem is one in urgent need of exploration.

For the sake of simplicity in our work at the site and in the present report, we use the site directions rather than true compass bearings. Reference to "north" in the text and figures means site-north (352° true), and other directions, east, south, and west, correspondingly, are derived from the orientation of the site.

EXCAVATIONS IN 1955

THE COURT WALL (FEATURE A-1-a), COURT FLOOR (FEATURE A-1-b), AND EAST HALF OF SOUTH-CENTRAL PLATFORM (FEATURE A-1-c)

The most readily visible aspect of the Ceremonial Court before excavation began was the discontinuous series of stone columns (pl. 1) which, if their lines are projected, formed a rectangle measuring 135 feet north-south and 188 feet east-west. The centerline of the site which is the line of sight from the midpoint of the tomb (Feature A-2-a) to the midpoint of the top of the Pyramid, runs squarely through the middle of the enclosure, each north-south column line being equidistant from the centerline.

The excavations of 1943 had removed some of the columns, and Wedel's count is more accurate than one in 1955 could have been. He states (LV, pp. 36-37) that

along the west side, beginning at the southwest corner, 53 columns were visible above ground [i.e., protruding above the surface level of drift sand]; then came a gap of about 8 m. where no columns were evident, followed by another series of 12 and a corner column. From this, the northwest corner, 12 columns could be counted in a continuous row extending eastward. From the northeast corner, going west, another series of 12 or 13 columns were visible. None could be seen throughout most of the extent of the north wall line of the Court, that is, between the two short series running east from the northwest corner and west from the northeast corner. Proceeding southward from the northeast corner along the east wall of the Court, there were 34 visible columns plus gaps that would accommodate perhaps three to six more. Here the row ended; limited tests along the line which should have been marked by columns yielded only negative results. No stones could be found at or near the point where the southeast corner of the Court should have been, or westward from that point along what was evidently the south side of the Court area.

Along the south side of the Court were the Southeast Platform (Feature A-1-d) and the Southwest Platform (Feature A-1-e), each of which was surmounted by a rectangular palisade of basalt columns. The first of these was excavated and described by Wedel in 1943, the

second was dug by the 1955 expedition and is detailed elsewhere in this paper.

As will be set forth later in discussing the Northeast Entryway (Feature A-1-i) of the Court, it is clear that the line of basalt columns did not originally form a continuous row across the north edge of the Court, but the short rows terminated about 19 feet from the northeastern and northwestern corner columns. The small discontinuities of the column line running south of the northeast corner were, we found, due to the tops having broken off below the surface, for when the drift sand was cleared away we found the stubs in place as well as the upper detached segments lying nearby. The southern end of the column line along the eastern side of the Court we believe is lacking; if ever present the columns had been removed anciently.

The basalt columns themselves are natural in origin and exhibit five or six sides, one of which is characteristically wider than the others. This wider surface was commonly smoothed down by rubbing in order to accentuate its flatness, and it was this surface which was the facing surface in the particular construction features where the columns were employed. Ordinarily, and this is the case of the columns bordering the Ceremonial Court, the wider surface faced inward. We may suppose that this was for aesthetic effect, because it gave a distinct impression of a flat-surfaced wall where, if column sides of variable widths had been indiscriminately selected, the visual impression would have been that of an ill-fitted and irregular vertical wall face.

Wedel in 1943 ran two test trenches into the enclosure line. These he calls the "East Trench, A-1" and "West Trench, A-1" (LV, pp. 44-49). The latter, more extensive than Drucker's earlier wall test (LV, pp. 32-33), ran through the midpoint of the north-south row of columns forming the west side of the Court enclosure. Here, under the upper gray drift sand, Wedel found the columns embedded in a flat-topped wall with its inner facing surface standing almost vertically. An end-to-end row of dressed rectangular basalt blocks was set along the inner edge of the flat-surfaced wall. Outside the columns he noted under the sand a red clay cap over an unfired adobe brick wall with a steep slope, and at its lower edge a row of facing blocks (whether basalt or serpentine is not stated).

The only point at which we dug through the wall line of the Ceremonial Court was in the east-west trench cut through the eastern half of the Court by the bulldozer. This was about 37 feet south of the end of the string of columns running south of the northeast corner of the Court and about 30 feet south of Wedel's "East Trench A-1," which was still visible as a depression.

The east-west bulldozed trench ran from just east of the centerline of the site through the east half of the South-Central Platform (A-1-c) across the Ceremonial Court and through the projected line of the north-south row of columns outlining the eastern side of the Court (fig. 6). We will here treat the trench as one excavation unit, though the deposits which it exposed comprise three major components: (1) the South-Central Platform (A-1-c) toward the west end of the trench (fig. 7); (2) the floors and fills of the Court area proper (fig. 7); and (3) the wall enclosing the Ceremonial Court (fig. 6). Since these three components are together involved in the history of the building of the Court and its features, the following discussion will treat the various layers in their historical sequence and relationship as they were deposited to become elements of the Court.

In the following list small-letter designations are assigned to layers and components of the Ceremonial Court (Feature A-1-b), the South-Central Platform (Feature A-1-c), and the wall enclosing the Ceremonial Court (Feature A-1-a). In the following discussion the various layers and components will be referred to by their letter designation (cf. figs. 6, 7), and after the description is concluded the relationships of the various layers and components will be discussed.

(a) Natural soil formations:

Surface deposit of gray drift sand

Preconstruction gray drift sand

Clay subsoil

(b) Intrusive pit filled with (d) clay

(c) Trench dug through layers (d)-(i) for columns

(d) Massive red clay cap (an artificial structural deposit like all those earth components listed below)

(e) Intrusive pit filled with red and yellow clay

(f) Old-rose colored floor series

(g) Pink, purple, and red clay fill

(h) Mottled pink sandy clay fill

(i) White sandy floor series

(j) Rectangular dressed basalt facing blocks

(k) Unfired adobe clay bricks laid in red clay mortar

(l) Yellow and pink clay fill of platform (Feature A-1-c)

(m) Cinnamon-colored floors and surfacing for platform (Feature A-1-c)

(n) Red clay ridge or embankment outlining Court

(o) Buff and brown water-sorted sandy floor series

(p) Sand and clay fill lying on clay subsoil

(q) Red and white sandy clay block

The earliest construction effort consisted of removing the gray drift sand (a) which lay upon the massive compact yellow clay subsoil. The purpose of this sand removal operation was apparently to secure a firm and stable surface on which to build the Court floors and structures. This careful preparation of the surface implies a well-

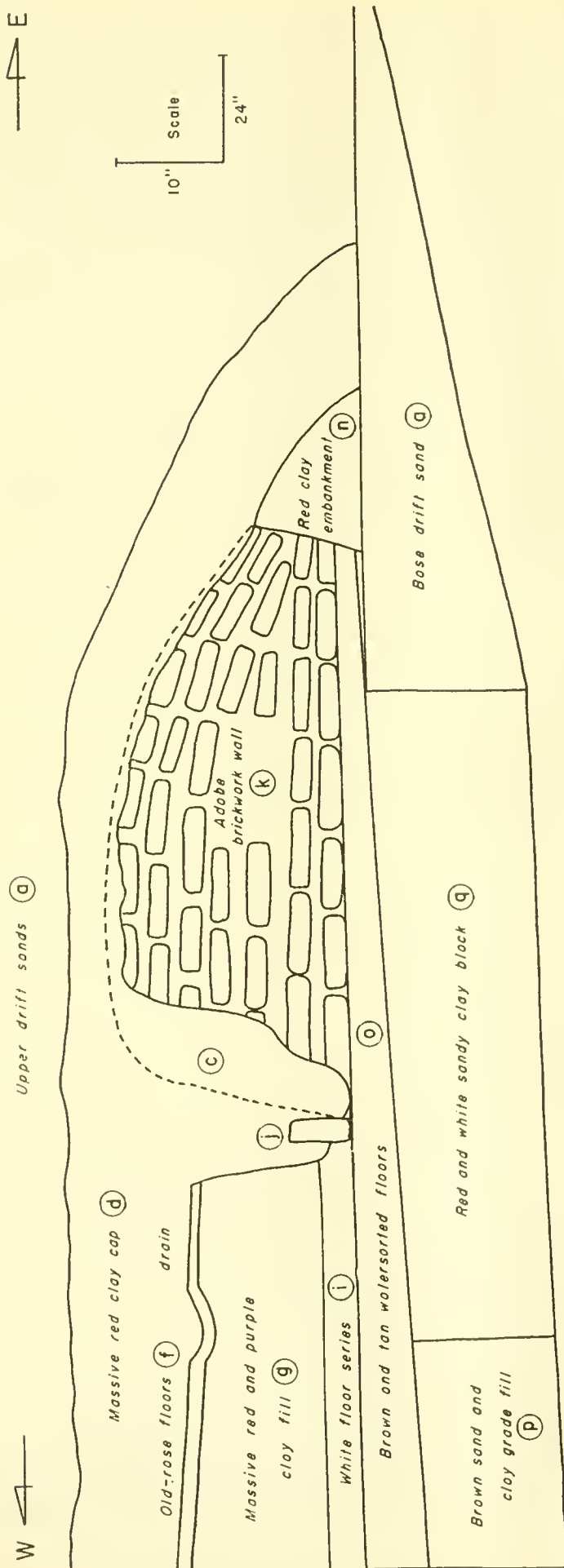


FIGURE 6.—Section through east wall of Ceremonial Court.

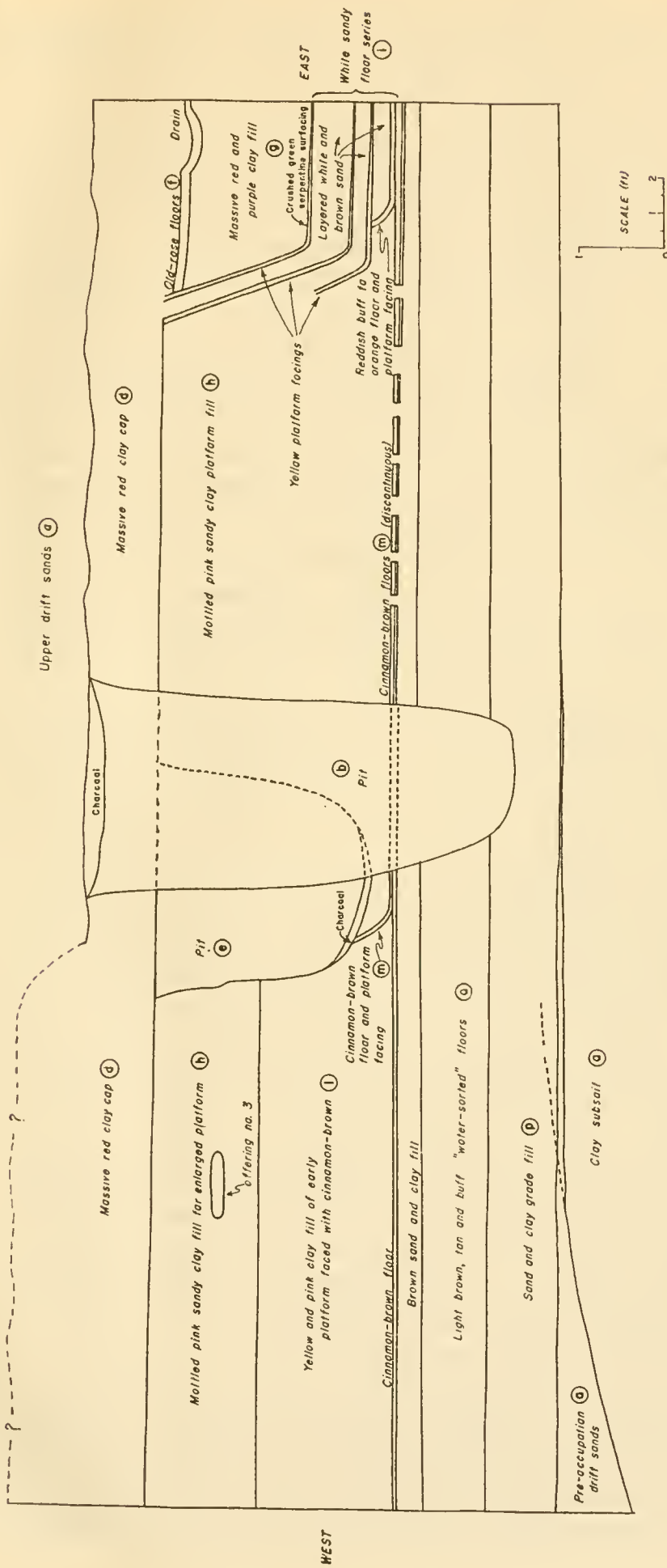


FIGURE 7.—Profile of east end of South-central Platform from centerline to 40 feet east.

thought-out plan of procedure and a sound body of engineering principles possessed by the builders of the site. The sand was removed for a distance of about 100 feet east of the centerline, at which point it was about 20 inches thick. Against the low face of this sand was laid a block of heavy red clay mixed with white clay loading (q). We assume that this clay buttress ran along the whole length of the eastern side of the Court, and perhaps around the other three sides, but we did not check this point. This clay block measured 12 feet wide, 20 inches thick at the eastern edge, and 17 inches thick at the west edge. The surface was smooth and the corners well shaped and squared. Obviously, considerable care was taken to lay down this clay construction. Within the Court area and between the centerline and the west face of the construction of massive clay (q) just described was a fill of brownish sand and clay (p), whose top surface came up to the level of the clay block (q) to the east. The surface of this fill sloped to the west (i. e., inclined toward the centerline), and it is suggested that the purpose of this slope was to form a grade for drainage of surface water which was carried from the high eastern edge of the Court toward the centerline where it was then channeled off in some sort of drain to the south where the surface drift sands could absorb it. On top of layers (p) and (q) lay a series of stratified light brown, tan, and buff sandy floors (o) which we have termed "water-sorted." In thickness these run from 4 or 5 inches at the east edge of the Court to 9 inches or so at the west near the centerline. This layer also has a marked surface slope to the west. We believe that these floors mark a series of early sandy clay surfacing layers of the Court which were subjected to sheet washing of rainwater flowing over the graded Court surface. Such washing tends to separate the fine clays from the coarser sand, and to deposit these two into an upper thin fine clay band and a lower coarse sand band. The eastern limit of layer (o) thins out rapidly as it continues over the clay block (q), and reaches a terminus where it butts up against the toe of a low north-south running embankment of massive red clay (n), triangular in cross section, about 10 inches high and 18 inches wide. This ridge of heavy clay appears to be the original low border of the Court area. It may have been originally larger, though there is no evidence of its having been so. The fact that the brown water-sorted floors come up to its toe indicates pretty definitely that it is preserved in its original form and dimensions.

In the area extending east of the centerline (except where cut out by later alterations) for about 50 feet there were two cinnamon-colored sand floors (m) which lay on top of the water-sorted brown sandy floors (o). Each of these is about one-half inch thick, the lower one running uninterruptedly to the east wall of the 1943 centerline trench

and the upper one lying directly on the first, but at about 26 feet east of the centerline rising sharply to form the facing of an elevated platform. The elevation of this platform could not be determined since later disturbance had cut off the facing and upper surfacing. The fill of this structure was a yellow and pink clay (l) now 20 inches thick; it may be safely assumed that the original elevation was higher since no top surfacing layer was apparent. The east-west dimension (width) of this platform may be estimated at about 52 feet as judged from the fact that to the east of the centerline, which may be assumed to be the midpoint of the platform, it extended 26 feet. At this point we have the east half of the Court surrounded by the low red clay ridge (n) and surfaced with brown sandy clay floors (o) subject to erosion by rainwater flowing down a gentle slope to the west at about 1 inch fall per 10 feet. We assume the west half of the Court to have been similarly constituted except for the drainage slope which there would incline east toward the centerline. The area just east of the centerline was occupied by the low platform faced (and probably surfaced) with a cinnamon sandy clay (m) about a half-inch thick which extended on as a court floor surface east of the toe of the platform for at least 25 feet. Here it could not be traced further, either because it had been removed deliberately or had been eroded away, or perhaps was never present, and from here eastward for 51 feet to the inner edge of the low red clay embankment (n) we noted at this level only the brown water-sorted sandy floors (o).

The next major construction effort was carried out on the border of the Court in the form of the laying of a high and thick wall of large, unfired red and yellow adobe bricks (k) set in a red clay mortar. This brickwork appears to have been continuous on the east and west sides of the Court, but to terminate shortly after turning each of the four corners (cf. LV, p. 60, description of Feature A-1-i in this paper). The top of this wall has obviously eroded and been reduced in height, and now has an elevation of 2 to 3 feet. At the base, where it lies on the brown water-sorted floors (o) the wall is 15 feet wide. The individual adobes, while they vary in their several dimensions, average 10 to 14 inches long, 8 to 10 inches wide, and $2\frac{1}{2}$ to $3\frac{1}{2}$ inches thick. The inner face of the wall has been cut away by a later trench (c), so that its original appearance and angle of inclination is unknown. The adobes lie in horizontal courses separated by $\frac{3}{4}$ to 1 inch of mortar except for the outer half of the wall where they are inclined down so that the outer edge of the wall is sloping and butts directly up against the red clay ridge (n) which served as the border of the Court in its early phase of use and construction. It may safely be assumed that the inner face of the adobe wall was

vertical or steeply sloped, that its top was flat or gently rounded, and that its outer facing surface was inclined at a low angle. At the toe of the brickwork wall's inner face was set a row of end-to-end dressed basalt blocks (j) resting on their edges. These are like others found as parts of structures in the Court (e. g., Features A-1-i, A-1-e) and average 19 inches long, 9 inches wide, and 4½ inches thick. Against the inner facing surface of these basalt blocks were what we called the "white sandy floor series" (i). Here at the eastern limit of the floor of the Court where they came up to the basalt footing blocks of the wall the sandy floors series total about 4 inches thick. To the west they ran for 48 feet to the eastern toe of the enlarged platform which was 46 feet east of the centerline. The (i) floor series was 8 inches in total thickness at its western end, and thus the general profile is that of a thin wedge with the taper running east toward the wall outlining the Court. The east dipping grade was reduced, though still maintained for drainage.

The initial element of the white sandy floor series (i) is a thin reddish-buff to orange-colored sandy clay floor about one-quarter of an inch thick lying on top of the cinnamon-brown floor (m). The occurrence of this buff-to-orange floor is limited; its western limit is 47 feet east of the centerline, and it is traceable from this point eastward for only 5 or 6 feet where it becomes indistinct. Like the upper cinnamon-brown floor (m) this floor seems to have served as a colored facing for a low steep-sided platform with the floor area immediately adjacent to the structure also bearing the same surfacing. The only evidence of the elevated platform so faced now visible is the remnant of the steep sloping toe of the structure—later alterations and additions to this platform (see fig. 7) have removed all but this limited evidence of this, the first of four separate stages of the building and alteration of the platform. The earlier platform whose eastern edge lay 26 feet east of the centerline was at this time incorporated into the enlarged platform by dumping on top of it and filling in to the east (and presumably to the west on the other side of the centerline) a mottled pink sandy clay fill (h). On the top of the early platform this fill layer (h) is 17 inches thick, and to the east on top of the cinnamon-brown floor (m) it is 37 inches thick. The platform was, therefore, at least 37 inches high. Offering No. 3 appears to have been deposited at the time the (h) layer was being laid down.

The platform which was formed by enlarging the earlier (l) and (m) components by adding the (h) and (i) fill and surfacing was subsequently rebuilt 3 more times. The second alteration entailed the surfacing of the flat Court area with a white sandy clay layer from 2 to 3 inches thick and refacing the platform with successive thin coats (totaling about one-quarter inch thick) of bright yellow

fine clay (pl. 3). The third and fourth alterations were similar to the second, each consisting of white sandy clay Court resurfacings which were laid down at the same time the exterior painting of the platform was renewed. The surface of the uppermost and latest of the white sandy floors is covered with a definite thin layer from $\frac{1}{8}$ to $\frac{1}{16}$ inch thick of finely crushed green serpentine. This green surfacing layer was probably derived as a by-product of the shaping and finishing of the serpentine blocks which form the jaguar mask in Features A-1-d and A-1-e, the massive "pavement" offerings in the Court (Features A-1-h and A-2-d), and the rows of serpentine blocks which occurred at different places in the Court area in association with various structures. The La Venta site builders, always on the lookout for bright-colored materials for floors and structure surfacings, probably saved and used the stone workers' pecking and polishing waste, and it is logical to assume that this use came at about the same time, or shortly after, a period of considerable activity in dressing serpentine blocks.

The next event in the history of the Court was the dumping in of a thick layer of massive red, purple and pink clay (g). This fill layer, apparently intended to raise the general elevation of the Court area, was overall about 15 inches thick. Where this (g) fill came up against the platform it covered, and thus protected, the yellow facing. On top of the (g) fill rests the "old-rose floor series" (f). These represent a stabilized surface for a reasonably long period of time as indicated by the large number of colored elements in the series. Just west of the platform the old-rose floors (so named because of their main color element) are 4 inches thick, and the following sequence of colored floors is evidenced here reading from bottom to top: orange, rose, tan, white, tan, orange, rose, tan. Elsewhere along the exposed wall of the trench the series is similar, though individual components may be locally thicker or thinner, or even absent, as though they were differentially eroded. We assume that a new flooring layer was applied when the existing one began to wear away from water erosion or use, and this assumption adequately explains why there are discrepancies between one spot and the other on the Court surface.

The old-rose floors (f) which now surfaced the Court must have posed a new hydraulics problem to the site builders. Precisely what the problem was we cannot tell, but the manner in which the floors were laid and their slopes, together with shallow open gutters, provides the evidence for the existence and solution of the drainage problem. At about the midpoint between the platform to the west and the adobe wall enclosing the Court on the east, there occurs a north-south running crown or drainage ridge which had the effect of draining surface waters either to the east or west where they were

collected either in the east drain which ran along the inside of the adobe Court wall or in the west drain which ran in a north-south direction about 4 feet west of the edge of the platform. This last drain was 24 inches wide and 2 inches deep and contained clean coarse sand which had settled in it. The further course and exit from the Court of these drains is unknown—we did not follow them out because of shortage of time, and can only presume that they debouched through the south wall of the Court to empty on the surface drift sands.

In the west the old-rose floors (f) run up against the steep front of the platform. It is clear that the top of the platform must have projected above the old-rose floors, but the height at which its surface originally stood is unknown, for the reason that the subsequent (and final) alteration of the Court's surface involved the shearing off of the top of the platform. Referring to figure 7, the line marking layers (d) and (h) represent the planed off top of the (h) layer, but this cutting was apparently done at the end of the old-rose floor (f) period in preparation for laying down the massive red clay cap (d). In figure 9, component (e) is the old-rose floors corresponding to (f) in figure 7. The (e) rose floors are associated with the gray sand (d) and light red clay (c) layers. Further east (cf. fig. 7) the platform elevation which one would expect to find correlated with the old-rose floors (f) is entirely lacking. It would appear, therefore, that the preparation for the laying down of the (d) red clay layer involved the removal of the platform elevation associated with the (f) floors.

The exact size of the platform composed of the (d) red clay could not be determined because while using the bulldozer to remove the 1942 and 1943 backdirt piles we inadvertently cut off the upper part of the red clay elevation. We indicate what we believe to be its approximate extent in figure 7.

After the old-rose floors had been laid and used, and probably just before the next major building was started, a large pit (e) was dug into the (h) fill of the platform and down to just above the level of the cinnamon-brown floor (m). The west edge of the pit cut off the front facing (m) of the early low platform. Diameter of this pit cannot be determined because a later pit (b) has cut away its eastern half. In the bottom of the (e) pit is a $\frac{3}{4}$ -inch thick layer of charcoal. Such pits containing charcoal were found in other platforms (Features A-1-f, A-1-g) in the Court area, and the best explanation we can suggest as to their function is that they are sites of burnt offerings of perishable materials. Although it is not certain, we believe the (e) pit to be contemporaneous with the (f) floors and its red and yellow clay fill to represent the type of material removed just

before the (d) layer was laid down. The great Ceremonial Court, by this time (when the old-rose floors (f) had been laid down) was no longer an amphitheaterlike area which it had been earlier at the time the adobe wall (k) was first thrown up and the Court interior was surfaced with the white floor series (i). The successive modifications of the South-Central Platform (A-1-c), the addition of the (g) clay fill and the old-rose floor series (f) had brought the surface level of the Court nearly to the height of the top of the adobe wall (k), so that in effect what might be considered an "acropolis" or broad, flat, elevated platform had been produced (fig. 6). Whether this aim was envisaged by the original planners of the Ceremonial Court we cannot say, but the probabilities are that this increase in elevation of the Court's surface was not planned for as an eventual goal. Our reason for so believing is this: the adobe wall formed in effect a screen about 4 feet high behind which the sacred rituals and activities took place. If the original plan had been to gradually raise the Court level, the enclosing wall would probably have been originally made rather higher in order to maintain the element of privacy. What actually occurred next in the Court was the importation and setting of the great basalt columns to form a palisaded enclosure, and there are no indications that such a palisade was originally planned for. In other words, the palisade itself or something of the sort to produce the effect of an enclosed sanctuary was suggested by the open and exposed Court surface which had gradually become elevated in the course of time. An alternative to outlining the Court with stone columns would have been to build up the adobe brick wall. This alternative was not chosen, perhaps for the reason that the custom of using such bricks had by this time gone out of vogue.

When the time came for the next major building program in the Court, a layer of at least 12 inches thick of massive red clay (d) was deposited over the entire surface of the Court including all of the component features of sub-units A-1 and A-2. This (d) layer runs pretty consistently about 1 foot in thickness, but varies in places a few inches and shows evidence of having lain exposed and subject to erosion. We may suppose that it was originally finished or topped off with colored floors, but of these no trace was discovered. From this it is clear that the abandonment of the site occurred at the time when the (d) red clay component was exposed on the surface. Gradually the upper drift sand began to accumulate, and continued to deposit slowly to the present day.

The (d) red clay capping of the Ceremonial Court was contemporaneous with the time of the importation and setting up of the large numbers of basalt columns to form the palisaded border of the Court, the tomb (Feature A-2-a), and the rectangular enclosure on top of

the Southeast Platform (Feature A-1-d) and Southwest Platform (A-1-e). A narrow and fairly deep trench (c) was dug to receive the columns (fig. 6). At the point where our excavations cut through the east wall of the Court, this trench was about 40 inches wide and 33 inches deep. The trench had cut off the west face of the brick wall removing all evidence of the juncture of the various layers of the Court fill with the inner face of the wall. The (c) trench was dug to the level of the base of the adobe wall, and the row of basalt facing blocks (j), long since buried over by later fillings, was rediscovered, exposed in the bottom of the trench, and left in place. We assume that the trench to receive the columns was dug around the entire perimeter of the Court, and that this trench was only partly filled with stone columns as detailed earlier in this discussion. In the particular section of the Court wall under discussion here (i. e., the southern half of the east border of the Court) there is no evidence that stone columns were ever set in the trench. It is possible that the engineers who planned and executed this terminal renovation of the Court ran out of stone columns and used logs as surrogates for columns. The column trench is now filled with red clay (d), but no indication of former wooden columns could be detected, and indeed, we would scarcely expect any evidence to remain, for as the (hypothetical) wooden columns rotted out, the red clay packing would wash and settle in the cavity and thus eliminate evidence of their earlier existence.

Exposed in our trench wall was a round pit (b) 5 feet in diameter and 60 inches deep which had been dug from the surface of the (d) massive red clay fill layer (fig. 7). This pit penetrated down into the original (p) fill layer of the Court, and intersected the eastern half of the earlier (e) pit just to the west. The (b) pit contained no material offerings, and its top held a 4-inch thick layer of clean wood charcoal which may have been connected with some sort of offering ritual. The top of this charcoal was exposed on the surface, and is therefore the latest event evidenced in the entire profile of our trench excavation.

Above the (d) red clay layer was the surface mantle of gray drift sand (a) which averaged in the Court area 4 feet in thickness. This sand deposit marks the period elapsed since abandonment of the site by the Olmec builders. In the opinion of several geologists of Petroleos Mexicanos who visited the site during the 1955 excavations, this sand is derived from the coast of the Gulf of Mexico some 12 miles to the north by wind action. This upper sand exhibits no lensing, layering, or internal stratification. In some areas of Complex A, notably just south of the edge of Feature A-1-e (Southwest Platform) some minor pottery offerings were buried in the upper drift

sand. These offerings indicate the presence of people on La Venta island, but it is clear that these were not the Olmec builders of the site. The post-Olmec period at La Venta is discussed elsewhere in this report.

CHRONOLGY

Referring back to the sequential account of the history of the layers and structures exposed in the bulldozed trench, we may now factor out the several phases or periods represented by this series (cf. fig. 8).

Phase I construction began with the removal of the (a) drift sand overlying the clay subsoil for the purpose of preparing the Ceremonial Court for construction. No doubt the motivation for this was to secure a level foundation for the Court. After the loose surface sand was cleared off the massive clay block (q) was laid down, the sandy clay fill (p) was brought in and dumped over the Court to fill the extensive area enclosed by the (q) clay foundation. The (p) layer was laid with a grade to enable surface water to run off toward the centerline where, it may be assumed, a ditch or drain carried the waters off and dumped them on the sandy surface south of the Court. With this much preliminary work accomplished, the Court was then outlined with the low red clay embankment (n). The effect of this embankment was to enclose the Court and make it a finite entity. At this point the light-brown, tan and buff "water-sorted" floors were laid down, all with a grade of about 6 inches in 60 feet. There are a number of these floors, each representing a layer an inch or so thick, which were applied to the Court. They could not be counted, but the fact that they are present in some numbers indicates a fairly long period (presumably several years) when the Court remained at this stage of construction. The cinnamon-brown floors (m), and the earliest platform fill (l) also belong to Phase I. At this point the southern part of the Court was a flat-surfaced area relieved only by the low platform mound.

Phase II here begins with the erection of the adobe brickwork wall (k) surrounding the Court. This wall incorporated the older Court border feature, the low red clay embankment (n). The inner edge of the wall was marked by the single row of basalt facing blocks (j), against which there abutted the white sandy floor series (i) which ran across the Court to the point where they came up against the South-Central Platform (Feature A-1-c) which at this time was enlarged both horizontally and vertically by adding the (h) fill and offering No. 3. The platform was resurfaced three more times during the white sandy floor period. The latest floor surface of the (i) series bears a thin layer of crushed green serpentine.

Phase III marks the deposition of the massive red, purple, and pink clay fill (g) in such a manner as to rearrange the internal Court

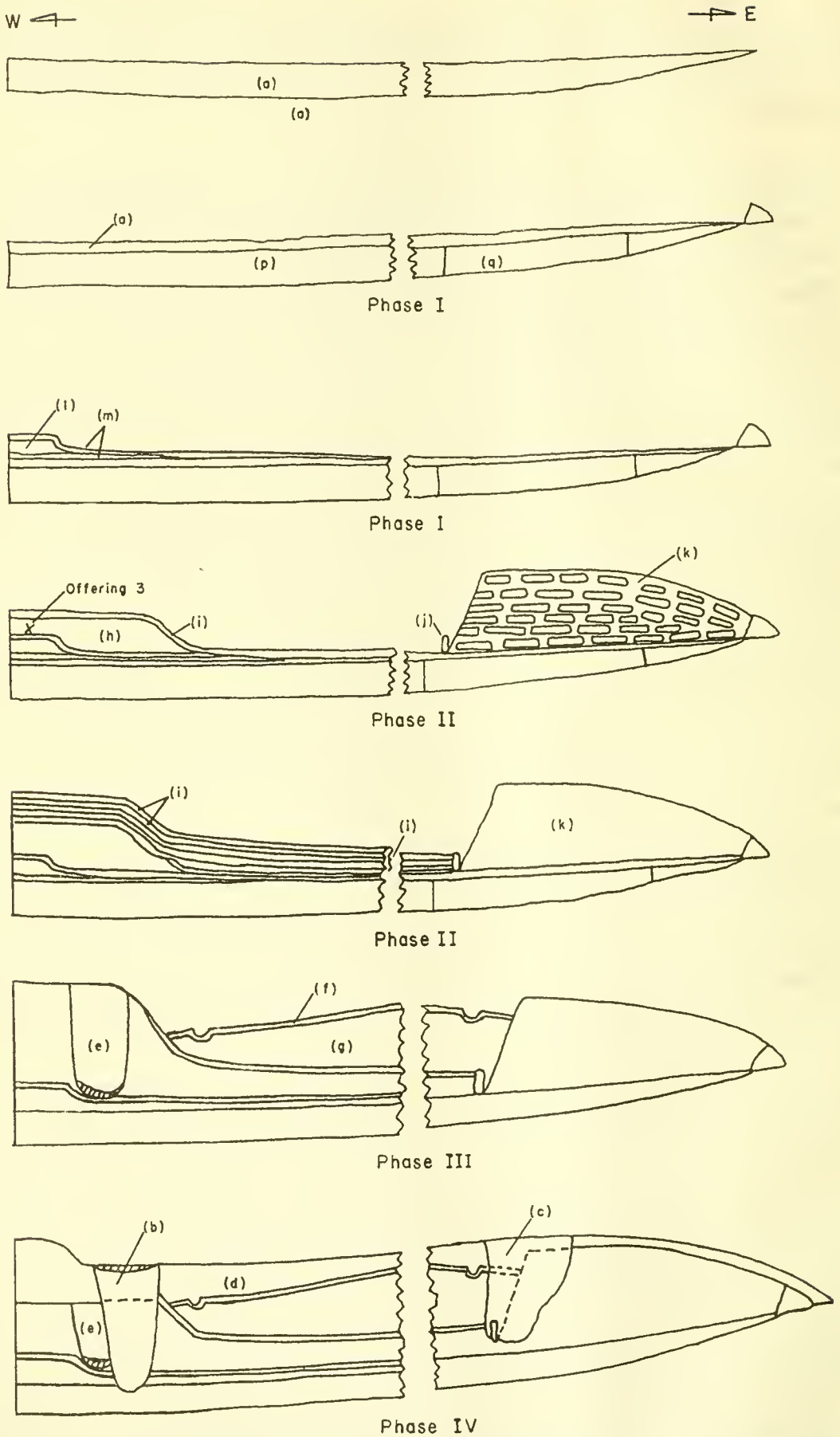


FIGURE 8.—Diagrammatic sketch showing sequence of construction layers in south half of east part of Ceremonial Court. (For identification of lettered components, see p. 17. Not to scale.)

drainage so that the old-rose floor series (f) which cap the (g) fill in the east half of the Court drain either to the west toward the South-Central Platform or east toward the wall. A pit (e) into the top of the Phase II platform and with its bottom covered with charcoal therefore probably marks some sort of ritual offering activity in Phase III times. The top of the Phase III platform, which was apparently made of red and yellow clay as judged from the (e) pit fill, was entirely removed during the next phase.

Phase IV building involved the lowering of the elevation of the platform—i. e., removal of the entire Phase III platform heaving and the upper part of the Phase II platform mass, the deposition of the massive red clay capping (d) which covered the entire Court, the excavation of the narrow trench to receive the basalt columns (c) which were imported and placed in Complex A at this time, and the digging of a second pit (b) through the (d) deposit into the platform. The Phase IV South-Central Platform probably was about 1 to 2 feet high and rectangular, measuring approximately 35 feet north-south and 52 feet east-west.

At this point the site is abandoned and the upper drift sands (a) begin to accumulate, a process which presumably has continued to the present time.

In final summary we may relate the various stratigraphic and construction elements listed above as to their phase as follows:

Phase IV.....	(b)-(d)
Phase III.....	(e)-(g)
Phase II.....	(h)-(k)
Phase I.....	(l)-(q)

NORTH-SOUTH CENTERLINE TRENCH THROUGH COMPLEX A

As part of the 1955 excavation program, we reopened and deepened part of Wedel's main trench which ran along the centerline from the tomb atop the north mound (Feature A-2) south to the north face of the Pyramid (Complex C). We concentrated our efforts on the area between the north edge of the South-Central Platform (Feature A-1-c) and the tomb. Length of our trench was 169 feet; its width varied in accordance with the depth to which local sections were dug and the need to batter the walls to prevent cave-ins.

We have drawn up the profile of the north-south trench through the Court area, including in it data recovered by Drucker in 1942 and Wedel in 1943. This profile, therefore, includes all of the available information on structural layering of deposits and location of offerings recovered by the several expeditions in the centerline trench north of Mound A-3.

The profile, it should be noted, is drawn with a differential vertical and horizontal scale which has the effect of exaggerating the vertical

dimension. Further, the profile was so long that it has been cut into three sections for the sake of convenience in printing and reference by the reader. These are treated separately in the following pages and are referred to as the southern section (fig. 9), central section (fig. 10), and northern section (fig. 12).

We are unable to correlate to our complete satisfaction the layers recorded by us and shown in figure 7 with those noted by Wedel (LV, fig. 15) from whom we have taken the north-south profile of the South-Central Platform as shown in our figure 9. The broad phase correlation we feel is fairly sound, but the detailed duplication of earth layers and floors is more difficult to pin down.

SOUTHERN SECTION

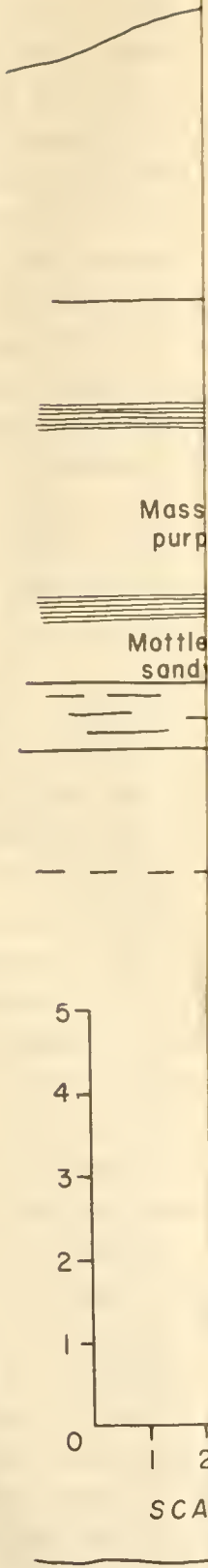
(Fig. 9)

The 1942 and 1943 excavations by Drucker and Wedel had pretty much removed the center of a stepped or terraced clay structure which Drucker (LV, pp. 28-30) refers to as an "entryway to the ceremonial enclosure" or "stile" and Wedel (LV, pp. 39-44, 77, fig. 15) more correctly speaks of as a "platform." The east-west limits of this construction were not examined by either Drucker or Wedel. The 1955 excavations cut into the eastern half of this structure (fig. 7), which can now be identified as a multistage platform similar in form to, but slightly larger in size than the Northeast and Northwest Platforms (Features A-1-f, A-1-g). We have termed this South-Central Platform Feature A-1-c. Just to the south lay the broad "forecourt" consisting of a flat-surfaced area lying between the elevated Southwest and Southeast Platforms (Features A-1-d, A-1-e).

We assign the following letter designations to the layers and constituents of the southern section of the profile:

- (a) Natural soil deposits :
 - Surface drift sands
 - Preconstruction drift sands
 - Clay subsoil
- (b) Massive red clay cap
- (c) Light-red clay platform surfacing
- (d) Gray sand fill
- (e) Old-rose floor series
- (f) Fill over six-layer pavementlike offering (Feature A-1-h)
- (g) Red and purple clay fill south of platform
- (h) Mixed sand and clay fills against platform front on north and south
- (i) Cut for pit to contain pavementlike offering (Feature A-1-h)
- (j) Burned layer on top of platform
- (k) Later white floor series
- (l) Yellow clayey sand platform fill
- (m) Earlier white floor series
- (n) Bedded sandy floors ; some burned

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Mass
purp

Mottle
sand

5
4
3
2
1
0
1 2
SCA

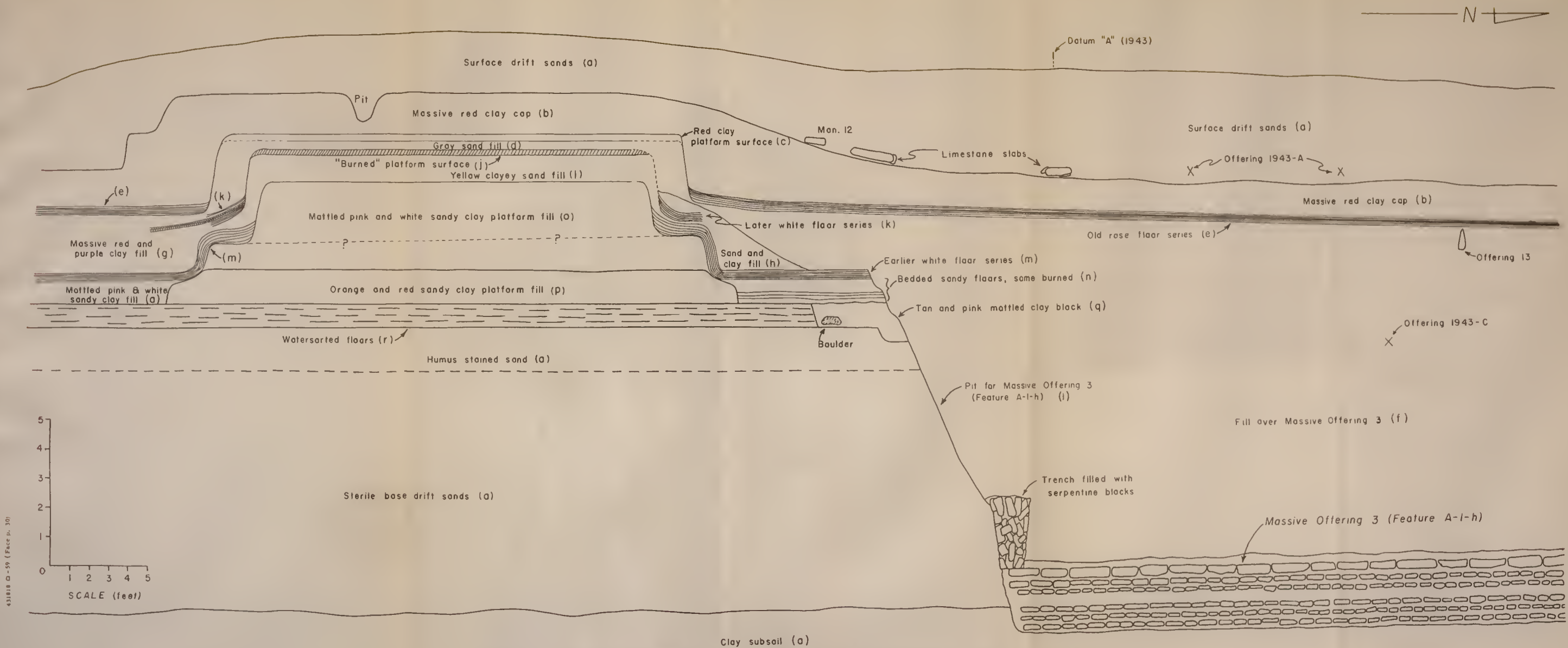


FIGURE 9.—North-south profile along centerline of Complex A which includes South-central Platform (Feature A-1-c) and south half of Feature A-1-h (Massive Offering No. 3). (For description of layers and components designated by letter, see pp. 30-31.)

- (o) Mottled pink and white sandy clay platform fill
- (p) Orange and red sandy clay platform fill
- (q) Tan and pink mottled clay block
- (r) Brown sandy water-sorted floors

Construction here begins with the laying down of the brown sandy "water-sorted" floors (r) (LV, figs. 11, 15, Wedel's varicolored sands; Drucker's level A, lower part) directly upon the natural preoccupation drift sands (LV, figs. 11, 15), which here appear to have not been much disturbed since the original humus-stained upper level is still present. Charcoal in the upper few inches may represent evidence of the clearing and burning of the area just before construction began. If comparison of the east-west profile of the bulldozed trench (fig. 7) and that of the southern end of the north-south trench (fig. 9) is made, it appears that the surface of the clay subsoil dips down to the west very abruptly somewhere between the centerline and 20 to 25 feet to the east. The (r) floors which mark the original surfacing of the Court interior were then cut through on the centerline and a heavy tan and pink clay (q) filled in the excavation. The eastern and western limits of this clay are unknown, and toward the north its continuation has been terminated by the great cut (i) into which Feature A-1-h was laid. It further appears that this clay feature (q) may have originally stood somewhat higher, and that the bedded sandy floors (n), some of which are burned, were deposited on the basal remnant of the (q) construction *after* its upper surface had been removed to the level of the upper surface of the earlier (r) floors. Provided these suppositions are correct, and notwithstanding the fact that we know nothing about the original lateral and vertical dimensions of the (q) component, we propose that the (q) block is the remnant of a simple clay construction, either a simple platform or the pediment upon which a monument was placed. Embedded in the (q) clay we found three stones which may be part of a larger feature which extends into the side walls, or a remnant of some earlier construction, or incidental material included in the clay fill, though this last seems unlikely since similar inclusions were lacking elsewhere in the site. The stones are shown in pl. 4, left *a*, and consist of (1) a light gray basaltic boulder measuring 7 inches long, 11 inches wide and 6 inches thick; (2) a dressed serpentine slab ("paving block") measuring 17 inches long, 11 inches wide, and 2¾ inches thick; and (3) an unworked subspherical basaltic boulder, apparently waterworn or stream-smoothed, 11 inches in diameter. Under the first stone was found a small sherd of Fine Paste Buff-Orange pottery. These three stones may have been in some manner associated with the possible Phase I Massive Offering to the north (see p. 46). It may be noted that these two small basalt boulders are the earliest evidence of basalt at the La Venta site (except the monuments of this

material which we are unable to assign as to phase). Under the center of the Northeast Platform (fig. 16, component (s)) and under the north edge of the Northwest Platform (fig. 20, component (p)) we noted similar clay remnants, although these three features are not all of equal age. The (p) component in the Northwest Platform appears to be the earliest of the three; the (s) component in the Northeast Platform is difficult to date and is either older than or contemporaneous with the (q) component in the South-Central Platform. What appears significant in these three clay features, of course, is their placement in the immediate vicinity of the loci of the three major platforms constructed later within the Court.

Directly upon the (r) floors was dumped the orange, reddish, and white sandy clay (p) layer which was the hearting of the first stage of the South-Central Platform. This is the upper part of Drucker's level A (LV, fig. 11) and the lower part of Wedel's mottled clay (LV, fig. 15). The facing of this low platform to which Wedel gives a minimum height of 12 inches (fig. 9, top of (p) layer) was the second cinnamon-colored layer noted by us in the bulldozed trench (component (m) in fig. 7) and which appears as "A" in Wedel's profile of this structure (LV, fig. 11).

North of the platform at this stage of construction a series of bedded sandy floors (n), some of them burned or baked, were deposited on top of the (r) floors and extended up to the front of the platform. These do not occur elsewhere, and presumably continued on into the Court area to the north, but their extension is impossible to determine since the cut (i) to contain Feature A-1-h removed their northern limits.

The platform is now increased in height about 3 feet by a heavy fill of mottled pink and white sandy clay (o) to form a stepped platform. On the south edge a fill of the same mottled pink and white sandy clay was deposited over the (r) floors to raise the level of the area surrounding the platform. Then the white sandy floors (m) which covered the Court area were run up the terraced face of the platform but not over its top surface. These floors we have called the earlier white sandy floors to distinguish them from similar ones deposited here a short time later. The platform was next increased in height about 14 inches with the addition of a layer of yellow clayey sand (l), capped with a burned layer (j) and faced with additional white sandy floors (k) called here the later white floor series. We may interpret the stratigraphy of the South-Central Platform to read that the buried offering (Feature A-1-h) dates from after the deposition of the (m) and (k) floors. After the digging of the pit (i), the offering (Feature A-1-h) is deposited and the (f) fill for the pit is loaded in and the work temporarily termi-

nated, as evidenced in figure 10, before the filling is completed. The (g) fill of red and purple clay south of the platform is apparently contemporaneous with the (f) fill, although at this point the stratigraphy which is taken from Wedel (LV, fig. 15) is far from clear. At this point the later white sandy floors (k) are deposited in the area around the heightened South-Central Platform. Then when the pit filling is resumed, the later white sandy floors are cut off and the (h) mixed sandy clay "buttress" laid up against the north slope² of the South-Central Platform, and the (f) fill over the offering completed to level the Court area. The platform is again resurfaced, this time with a thin gray sand layer (d) and capped with a light red clay (c). The old-rose floors (e) are now begun and provide a stabilized Court surface for some time, being renewed as they faded or were worn away (pl. 4, b). The final event is the deposition over the entire platform of the massive red clay cap (b) whose surfacing remains unknown since this layer was exposed and subjected to erosion after the abandonment of the site.

The pit, filled with upper drift sands, dug into the surface of the (b) layer on top of the platform is similar to others found in and alongside both the Northwest and Northeast Platforms. It is possible that these may be exploratory tests dug by would-be looters following the abandonment of the site. The fact that quantities of jade were still buried in the abandoned site must have been known, and after the site was no longer under the protection and care of its guardians robbers might well have tried their luck in the platform tops. Indeed, one wonders if the locations of the latest offerings may not have been marked and thus easily found—we must recognize the possibility that some of the (hypothetical) offerings contained in the (b) layer throughout the site were removed by looters following abandonment of the site. There is, of course, the alternative possibility that the priests themselves who were the caretakers of the site³ removed the latest offerings from the platforms, but such removals (cf. the discussion of Offering No. 4) were not consistent with the earlier attitude toward such offerings.

² If there was evidence of such a "buttress" on the south side of the platform covering the (k) and (m) white floor series this reconstruction would be more defensible.

³ We have assumed that the La Venta site was under the continual care of a body of caretakers whom we believe to have been members of the priesthood. The repeated resurfacings of Court floors and platform faces argue for a permanent corps of residents responsible for the upkeep of the center. The major rebuilding programs undoubtedly involved great numbers of laborers to carry clays and sands and dig pits, and these were periods of extraordinary activity. But each of the successive surfacings of the white sandy floor series, or of the old-rose floor series, involved the efforts of a number of persons as will be readily apparent if we compute the cubic mass of a particular color of clay or clayey sand flooring one-half inch thick distributed over the surface area of the Court. We have made such a computation, which, though admittedly approximate, amounts to 885 cubic feet.

Lying on the red clay cap (b) were found in 1943, along the centerline just north of the South-Central Platform, a series of offerings (1943-A), limestone slabs, and Monument No. 12. The location of these finds, as well as can be determined from Wedel's account, is shown in figure 9. All of these finds date either from the latest occupation phase of the site, or from the postoccupation period when the drift sand was accumulating.

In summary the construction phase sequence may be outlined as follows:

- Phase IV . . . (b)
- Phase III . . . (c)-(i)
- Phase II . . . (j)-(o)
- Phase I . . . (p)-(r)

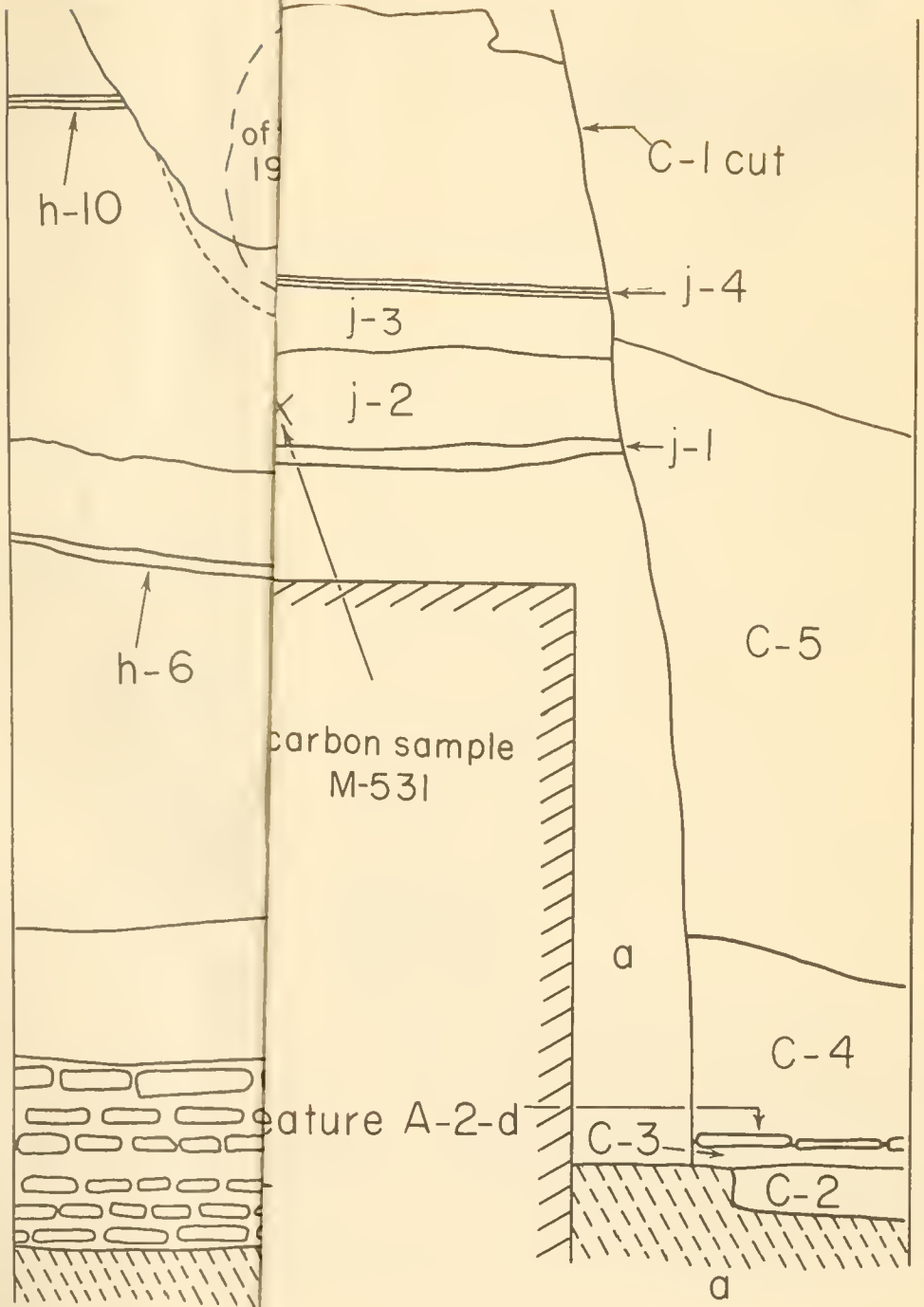
CENTRAL SECTION

(Fig. 10)

This portion of the profile of the north-south trench along the centerline of the Ceremonial Court (sub-unit A-1 of Complex A) includes the stratigraphy revealed in the northern half of the pit in which Feature A-1-h lay, and the southern half of the mound (A-2) lying just north of the Court along the centerline. The A-2 mound profile is incomplete, a large section of its center having been removed anciently by the deep cut for Feature A-2-d, and some of the older construction features and layers at its southern edge were largely removed by the deep cut for the Feature A-1-h offering. We are left, therefore, with only a portion of the southern half or one-third of the A-2 mound constructions in the space between the two massive offerings (Feature A-2-d and A-1-h). It may be said, however, that some of the earliest constructions in the site were situated here, that particular attention was given throughout the entire span of time the site was in use to the A-2 mound, and that through most of its history it was a prominent surface feature consisting of a terraced platform mound, probably square or rectangular in outline. Unfortunately since the position of its center cannot now be determined, a reconstruction of its probable original dimensions can only be estimated (fig. 11).

Figure 10 is the trench profile extending from about the center of the pit containing the Feature A-1-h offering in the south to the southern limits of the Feature A-2-d offering pit in the north. The field profile is somewhat more detailed than figure 10; the simplification process consisted of the elimination of minor and local loading layers and the like without sacrifice to essential completeness of the stratigraphic record.

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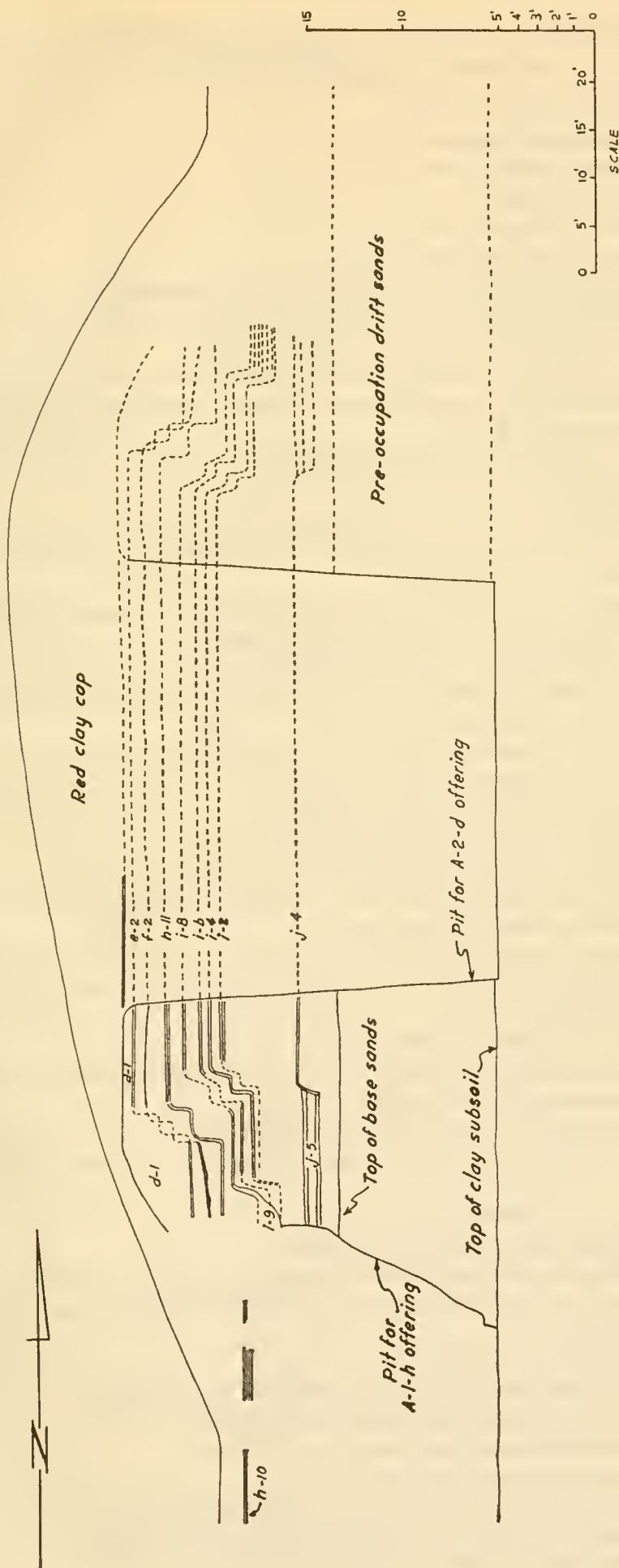


FIGURE 11.—Reconstruction of Mound A-2 showing position of cut for Massive Offering No. 2 (Feature A-2-d).

With reference to figure 10 the various layers and components exhibited in the profile are designated as follows:

- (a) Natural soil formations:
 - Upper drift sands
 - Preoccupation drift sands
 - Clay subsoil
- (b-1) Red clay capping level
- (b-2) Trench filled with (b) red clay
- (b-3) Pit filled with sandy yellow clay and Monument 13
- (b-4) Pit filled with yellow-brown sandy clay and containing Offering 1943-B
- (c-1) Cut line for pit containing Feature A-2-d
- (c-2) Blood red clayey sand underlying layer C-3 and Feature A-2-d
- (c-3) Thin wedge of reddish-brown clayey sand under northern half of Feature A-2-d
- (c-4) Fill of dense olive and yellowish-brown clays lying over Feature A-2-d
- (c-5) Brown sandy fill in C-1 pit lying above C-4 fill
- (c-6) Yellowish-brown sandy clays with loading lenses of heavy clays and sands
- (d-1) Pinkish-tan sandy clay fill containing a fragment of white sand floor with thin purple surfacing layers
- (d-2) Gray-tan sandy clay layer marking contact of (b-1) and (c-6) layers
- (e-1) Fill of reddish-yellow sandy clay with some charcoal and black sherds
- (e-2) Thin gray sandy floors
- (f-1) Fill of yellowish clay with red and white clay inclusions
- (f-2) Burned red sandy clay floor on top of (f-1) layer
- (g-1) Upper series of 7 colored sand floors
- (g-2) Lower series of 6 colored sand floors
- (h-1) Cut for pit containing Feature A-1-h offering
- (h-2) Heavy red and yellow clay retaining wall against preconstruction sands exposed in pit wall
- (h-3) Intrusive trench into (h-2) clay bank containing serpentine slabs
- (h-4) Heavy sandy clay fill banked up against (h-2) and over north edge of Feature A-1-h
- (h-5) Gray and brown sand fill of (h-1) pit
- (h-6) Thin banded clean sand and fine clay layers marking deposition in depression of unfilled pit
- (h-7) Ginger-colored clayey sand over (h-6) layers
- (h-8) Fill of yellow and brown sandy clays over (i-8) floors and (h-7) pit fill
- (h-9) Pit containing Offering No. 1
- (h-10) Old-rose floor series in Court area
- (h-11) Light-tan surfacing layers capping (h-8) platform fill in mound A-2
- (h-12) Pit containing Offering No. 2 intrusive through some of the (h-10) floors
- (h-13) Yellow-red sandy clay
- (i-1) Fill of white and red sandy clays under (i-2) floors
- (i-2) Thin purple-wash floors of platform mound A-2
- (i-3) Fill of yellow sandy clay above (i-2) floors
- (i-4) Purple floors lying on (i-3) fill
- (i-5) Fill of olive-brown sandy clay lying on (i-3) floors
- (i-6) Purple floors lying on (i-5) fill
- (i-7) Reddish-yellow sandy clay fill lying on (i-6) floors

- (i-8) Purple floors lying on (i-7) fill
- (i-9) Varicolored sandy clay floors
- (j-1) Tan sandy clay layer with charcoal
- (j-2) Thin-layered salmon-colored sands containing charcoal
- (j-3) Mottled white sandy clay platform fill containing fragments of red-white banded and tan-white banded flooring fragments and charcoal
- (j-4) Brownish-gray thin flooring bands on (j-3) fill
- (j-5) Sandy layers (peach, white, yellow) fill laid against painted front of (j-4) platform floors

The sequence of the development of the A-2 platform mound may now be set forth, reference to layers and components of the profile in figure 10 being to the list which appears immediately above.

Lying upon the naturally deposited preoccupation sands (a) is a thin layer of tan sandy clay containing charcoal (j-1) which appears to be the first artificially laid stratum under the A-2 mound. On top of this is a layer of uneven thickness (j-2) consisting of a number of thin, horizontally bedded salmon-colored sands containing charcoal fragments, a sample ⁴ of which was collected for radiocarbon dating. The fill layer of mottled white sandy clay (j-3) which formed the hearting of the earliest platform in the A-2 mound contains not only charcoal,⁵ but also fragments of flooring levels about the size and thickness of a man's palm which had been dug up and mixed in as part of the fill. Some of these flooring fragments show red-white layerings and others are tan-white bands. They must have come from some earlier structure or structures surfaced with colored floors, but where these earlier structures were is quite unknown. As will be pointed out, in the Phase I fill under the Northwest Platform (Feature A-1-g; see fig. 21) were found flooring fragments which, although of different colors from these in the early A-2 mound layers, must date from approximately the same time.⁶ It is therefore quite certain that somewhere in the immediate vicinity there were clay structures (platforms?) which had been in use for some time, as indicated by the several colored layers comprising the floor fragments, and which were destroyed when the big construction project involved in the building of Complex A was begun. We believe that the remnants of early clay structures can also be seen (p) in figure 20 (Northwest Platform), (s) in figure 16 (Northeast Platform), and (q) in figure 9 (South-Central Platform). Whether the flooring fragments in the fill underlying the A-2 platform mound and the Northwest Platform are floors or platform facings cannot, of course, be decided, but in terms of later La Venta construction these fragments look like floors which were laid down to cover a flat area. We are therefore

⁴ No. M-531.

⁵ No. M-532 for radiocarbon dating.

⁶ Compare M-534 from Northwest Platform with age of $2,670 \pm 300$ years with M-532 from A-2 mound with age of $2,650 \pm 300$ years.

led to believe that pre-Phase I clay structures surrounded by colored sandy floors existed either within what was later to become the Ceremonial Court enclosure, or in the general vicinity of the La Venta site proper, and that when the Ceremonial Court was made these earlier structures were destroyed by digging them up and using them as parts of the early fill-leveling layers. The fragmentary clay construction (element (p) in fig. 20) may be evidence of a pre-Phase I in situ platform.

The (j-3) fill is capped with a series of thin brownish-gray flooring bands (j-4) which cover both the flat upper surface and vertical front of the platform. The northern limits of this low platform have been removed by the (c-1) cut for the A-2-d massive offering, and it cannot be determined whether it stepped up or not, though the likelihood is that it did in view of later constructions in this area (cf. i-4).

After this platform was used for a time, fill layers of peach, white, and yellow sandy material (j-5) were dumped in the area south of the platform front. None of these layers appears to be a laid flooring level, and they may simply indicate abandonment of the platform and preparatory filling for later construction in this area.

The next event was the deposition of a thick layer of fill (i-1) of fairly compact white sandy clay with loads of pinkish-red clay, gray sandy clay, and some charcoal. How the charcoal pieces became mixed in otherwise clean fill we cannot say, but it is possible that the (i-1) fill is the hearting of some earlier structure judged from its mixed nature and consistency. On top of this (i-1) fill were laid a large series of very thin bright purple floors (i-2). In aggregate these amounted to about 3 inches in thickness, and numbered at least 100 separate colored layers. The purple layers are very thin, and were probably painted on with a brush; a thin colored clay paste was used. This series of floors has been cut off at each end and its extent cannot be determined. The uppermost (i-1) fill consisting principally of reddish sandy clay probably extended originally farther south, and if so, the (i-2) floors also originally continued south for some distance. The disturbance in this whole section by repeated constructions is very great, and hinders exact reconstruction of structure forms.

To avoid unnecessary repetition, it may be indicated here that components (i-3) to (i-8) form a succession of fill and flooring layers of the same platform whose dimensions are unknown, but whose south face was stepped with low terraces. The (i-9) component consists of a series of colored sandy layers which are believed to be the remnants of an "apron" extending to the south of the platform mound. From top to bottom this series of sandy colored "floors" is: mixed purple and brown; tan; orange yellow; yellow; purple and white; tan; yellow. As shown below, the (i-9) sandy floorings are equivalent in time

to the white sandy floor series found through the Court enclosure.

The next major event was the excavation of the great pit (h-1) which was to receive the six-layer pavementlike massive offering No. 3 (Feature A-1-h). This cut effectively obliterated all evidence of construction features which may have been present in the area just south of the A-2 platform mound where the Court floor and A-2 mound joined. The excavation for the A-1-h pit began at the level marked by the south end of the (i-8) flooring layer and is therefore equivalent to the end of the white sandy floor period in the Court (cf. fig. 17).

After the pit was fully excavated, and before the offering was deposited, a thick sloping retaining wall of heavy red and yellow clay (h-2) was laid up against the base sands. The probable purpose of this buttress was to prevent the sand from slumping—a distinct possibility due to the overburden of construction layers comprising the southern margin of the A-2 platform mound. We found no evidence of a similar retaining wall of clay on the east, west, and south slopes of the same cut, probably for the reason that the overburden was not so heavy and the danger of settling was not presumed to be serious. After the Feature A-1-h offering was deposited the thin cap of clay mortar in which the blocks were embedded was carried up against the (h-2) retaining wall. Then, about 2 feet of (h-5) gray and brown sandy fill was dumped in over the offering, and at this point a trench about 3 feet wide and 2½ feet deep was dug down around the *entire* perimeter of the offering. This trench (h-3) cut into the face of the (h-2) clay buttress on the north, and through the (h-5) shallow fill on the east, west, and south borders of the partly filled offering pit. The trench was then filled with finished serpentine blocks. Some of the blocks are broken or show minor imperfections, but most of them are in perfect condition, so they cannot be classed as rejects. They are variable as to size, and are probably from some earlier offering or construction. Average dimensions are 7 inches long by 4 inches wide. It is likely, though we have no evidence to support the proposition, that an earlier pavement (perhaps a jaguar mask like that in the Southeast and Southwest Platforms, or the one found by Wedel and Stirling (LV, pp. 74-75, fig. 24) just south of Mound A-3 along the centerline) was situated in the area of the pit dug for Feature A-1-h, and that it was torn out, the blocks were saved, and were then reburied in the trench square dug down over the edge of Feature A-1-h. Since there are more blocks in the trench fill than would be needed for a mosaic mask of the general size of the ones noted in Features A-1-d and A-1-e, the blocks are more probably the remains of a large flat paving like Feature A-1-h or A-2-d. Whatever the exact explanation, the

strong probability that the trench-fill blocks are re-used suggests that they were salvaged from an earlier feature, and the likelihood is that this feature originally lay in the area occupied by the A-1-h offering.

Now that the A-1-h offering was safely in place, further filling of the huge pit proceeded. First a sloping bank of heavy sandy clay fill (h-4) was banked up over the north face of the cut, followed by the (h-5) gray and brown sand fill in the main depression. On the north the (h-5) pit fill will be seen to be higher than in the central area of the pit, and in this way an inner depression was left. At the point where 4 feet of (h-5) fill had been laid in over the offering, work stopped for a time and was later resumed. How long this interval was, between the end of the (h-5) filling and its resumption marked by the (h-7) and (h-8) layers, cannot be said. The interval is marked by the (h-6) stratum consisting of clean washed sands and bedded layers of fine clays which were deposited by surface waters collecting in the depression formed by the partly filled offering pit. Thus, the partly filled pit stood open for at least one rainy season, during which surface waters collected in the central low spot and deposited the 3- to 6-inch layer of stratified waterwashed sands and clay colloids. At this time, and apparently before the rains started, Offering No. 10, a cruciform celt cache, was placed in the pit.

The resumption of filling, which we assume occurred as soon as dry weather returned, was marked by a second offering (No. 12) over which was laid a layer of ginger-colored clayey sand (h-7). This (h-7) layer leveled off the central sump even with the higher (h-5) layer to the north. Filling continued in the form of the (h-8) yellow and brown sandy clays and proceeded until a surface was reached upon which the old-rose floor series (h-10) were laid. Offering 1943-D and Offering No. 8 were deposited during the laying down of the (h-8) fill. The (h-8) fill was continued to the north to cover the older (i-8) purple floors. But before the (h-10) floors were begun, and after the (h-8) fill was completed, a pit (h-9) was dug and Offering No. 1 was deposited. We had assumed, upon removing Monument 13 ("The Ambassador") from the centerline in order to carry on the trench in the levels beneath it, that Offering No. 1 was deposited at the same time as Monument 13 was set in place, since the offering was situated directly beneath the monument. The profile shows clearly, however, that Offering No. 1 must be rather older than the point in time when Monument 13 was placed in its present position, since the pit (h-9) in which the offering lay extended north *under* the old-rose floors (h-10). The (b-3) pit is later than the (h-9) pit in which Offering No. 1 lies, as indicated by the intrusion of (b-3) into (h-9). It seems very probable that an east-west row of posts, or perhaps slab monuments, earlier stood immediately above Offering No. 1 during the

period when the Court was surfaced with the old-rose floors (h-10), and that when the (b-1) fill was laid down the line of slabs or posts was elevated to prevent its being buried. A further inference flows from this reconstruction of events, and that is the critical position marked by the locus of Offering No. 1 and Monument 13. This geographical point apparently marked the juncture of the southern toe of the A-2 platform mound and northern limit of the Court floor. In this light we can explain with some rationality why Monument 13 stands here, a point apparently recognized earlier by Wedel (LV, p. 63). The old-rose floors (h-10) which stretch out to the south over the Court floor from the point marked by Monument 13 form a variable layer ranging from 1 to 5 inches thick of successive colored sandy floors (tan, white, rose) of which rose is the most prominent. To the north of the point marked by Monument 13 for a distance of just over 5 feet is the same series of floors, but there are more of them and the layer is noticeably thicker. At the northern end they incline upward, and terminate against a block of yellow-red sandy clay (h-13), beyond which gap they resume again for about 30 inches. The interruption and upward tilt of the (h-10) floors here seems to indicate the former presence of some material object, perhaps a post or monument, which has since been removed. It is quite apparent that the area along the southern margin of the A-2 platform mound and the northern limit of the Court floor was the scene of considerable activity, and that certain features, presumed to be carved monuments or posts, once stood here as though to mark off the northern limit of the Court enclosure from the rising terraces of the platform mound to the north. The platform mound to the north was surfaced with the (h-11) light tan colored capping layers in a series of at least three terraces, but what lay beyond in the area later cut out by the deep (c-1) pit cannot now be determined.

One final event which occurred during this phase must be noted. Offering No. 2 lay in a pit (h-12) which had been dug from a higher level. This was made clear by the observation that it was intrusive through the lowermost (h-10) floors. The 1943 digging at this point had cut away most of the (h-10) floors, and it was not possible for us to determine in 1955 whether the offering was intruded through the entire (h-10) floor series or only part of them. The problem is a minor one, however, since we can be certain that Offering 2 dates from the period of the old-rose floors. The remnant of an originally larger offering called by us Offering No. 2A consisted of five polished celts. It precedes in time Offering No. 2, and was disturbed and partly removed by the Offering No. 2 pit (h-12). Offering No. 2A probably dates from the end of the period marked by the (h-8) fill just before the (h-10) floors were laid down. It is possible that the celts removed

from Offering 2A by the excavation for the Offering 2 pit were re-deposited with Offering 2.

The series of 13 colored sandy clay floors (g-1, g-2) which total 30 inches in thickness appear to mark a front platform or "apron" similar to the earlier one called here (i-9). The colors of the (g) floors from top to bottom are: reddish-brown, white, reddish-brown, reddish-yellow, reddish-brown, yellow, white, yellow-brown, white, red-orange, yellow-brown, white, yellow-rose, and red-brown. We distinguish the upper 7 floors as (g-1) and the lower 6 as (g-2) because of the disconformity indicated by the (h-13) component. If these floors were a separate terrace level standing between the A-2 mound and the Court floor, the (g-1 and g-2) floors would equate with the (e-1) and (e-2) fill and floors. We admit the stratigraphy is unclear, but what does seem indicated by the (i-9), (g-1), and (g-2) sandy floors is the existence of prepared level areas in the junction area of the Court and A-2 platform mound. There is no evidence for such an apron correlated with the (h-11) floorings of the platform mound, but since these would have been in the area cut out by the later (b-2) pit we can only propose that they may once have been present here.

The (f-1) layer of fill of mixed red and white clay was deposited in order to resurface the platform mound with the (f-2) floor which is a departure from the earlier (i-2, i-4, i-6, i-8) purple and (h-11) tan painted or wash floors in that it is a burned red sandy clay surfacing. The clay is baked hard, though no charcoal occurs on it, and the presumption is that the baking was deliberate.

The (d-1) fill was deposited after a partial digging away of the existing platform mound structure (e-1, e-2, f-1, f-2). This fill is a pinkish-tan sandy clay which contained a fragment of white sand floor with thin purple surfacing coats. This flooring fragment might have come from the (i-8, i-6, i-4, or i-2) floors. It is therefore indicated that the (c-1) cut for Feature A-2-d (Massive Offering No. 2) was made at the end of the (e-2) floor period, and the (d-1) fill is some of the backdirt dug from the (c-1) pit; if so, this would satisfactorily explain how the purple-coated flooring fragment got incorporated in the (d-1) fill.

The (c-1) cut is a very deep, near-vertical wall which sliced down through all earlier constructions and the underlying base sands to reach the clay subsoil. We believe that the entire operation of the excavation of the (c-1) pit, placing of the offering (Feature A-2-d) and filling of the pit was a single season operation for the reason that the exposed sand stratum between (j-1) and the subsoil shows no sign of washing or erosion, which it should exhibit had it stood exposed to the seasonal rains. The heavy overburden of structural remains above the contact of (j-1) and the lower sands must have made such a steep-

walled excavation hazardous at best in the dry season, but the increased weight of water absorbed by the clay constructions on top and the loosening or washing of the lower exposed sands would certainly have led to a caving of the formidable exposure had it been left exposed to the rains. Once the pit was dug a blood-red clayey sand (c-2) was laid down, and upon it a thin wedge, which tapered off to the north, of reddish-brown clayey sand (c-3) was put down, and upon this the serpentine block pavement or mosaic was placed. Over the slabs was thrown a thick blanket of dense olive and yellowish-brown clays (c-4), and above this a "cheap" fill of brown sandy material (c-5) which was followed by a yellowish-brown sandy clay with loading lenses of heavy colored clays and clean sand (c-6). The uppermost level of the (c-6) fill is a heavy red and yellow clay which merges imperceptibly into the overlying (b-1) red clay. That the (c-6) and (b-1) layers are distinguishable is shown by the thin (d-2) layer of grayish-tan sandy clay which marks the top of the (c-6) fill covering Feature A-2-d.

The final major alteration of the site now begins with the deposition of the massive red clay cap (b-1) and after this was in place a deep east-west trench (b-2) was dug. This trench contained nothing, at least in the centerline trench, and we did not follow it out laterally. Whether it was intended to hold columns or posts we could not determine. The projected line of the short east-west rows of stone columns running west from the northeast corner of the enclosing Court wall and east from the northwest corner does not correspond to this trench. We cannot suggest the reason or purpose for this trench.

At the point now marking the juncture of the Court floor and toe of the A-2 platform mound stands Monument 13. The placing of Monument 13 here clearly occurred after the (b-1) red clay was deposited. An earlier trench occupying the position of the (b-3) pit may have been dug out, the row of posts or slab monuments removed, the trench refilled with yellow sandy clay, and Monument 13 set in the yellow sandy fill. Monument 13, therefore, in its present position dates from the very end period of the La Venta site. The monument itself may be an earlier piece.

Still further south a pit filled with red clay (b-4) contained Offering 1943-B. This pit clearly dates from the (b-1) period since it is intrusive through the (b-1) clay, the (h-10) floors, and penetrated the upper (h-8) fill of the (h-1) pit.

Now occurred abandonment of the site. There is no evidence in the trench area covered by figure 10 of pit-digging (for looting?) noted in the South-Central and Southwest, Northeast and Northwest Platforms. Erosion of the (b-1) red clay set in, and the (a) upper drift sands gradually accumulated to protect the clay constructions underneath.

CHRONOLOGY

We may summarize the sequence of building activities in the A-2 platform mound, as illustrated in figure 10, as follows:

Phase I begins with the deposition of the (j-1) layer, followed by the (j-2) fill, continues with the (j-3) hearting of the earliest platform, which is capped with (j-4) floors. The (j-5) fill layers deposited against the low front of the platform are considered here as part of Phase I construction, although they may possibly be the initial activity of the Phase II period. Our reason for assigning (j-5) to Phase I is that they appear to be, insofar as level is concerned, either a part of, or a local equivalent to, the "watersorted floors" found elsewhere in the A-1 complex. It is important to note that the (j-3) layer contains colored flooring fragments derived from some earlier structure, and that it is practically certain that during the earliest construction of the Ceremonial Court (A-1) and the A-2 platform mound there were existing structures somewhere in the vicinity. These earlier structures would, therefore, be pre-Phase I or contemporaneous with Phase I activities at the main La Venta site. They are more likely, on logical grounds, to be pre-Phase I, since it would be improbable that during the period of initial construction in the A-1, A-2 complexes of the main site, other structures were being built, maintained, and destroyed at the same time. The suspicion is very strong, therefore, that the island of La Venta, and somewhere in the near vicinity of the La Venta site area itself, there was already established some sort of ceremonial site which was superseded by the main La Venta site and that this process involved the destruction, in whole or part, of the earlier site. Since La Venta is remote from areas of intensive habitation, a fairly long period of time may have been spent in the locality by the engineers and priests planning and laying out the construction project. If several years of planning and preliminary work went into the project, and this seems not unlikely, some sort of shrine or temple was probably built to serve interim requirements of ceremony and ritual. That these constructions may have been fairly considerable ones is indicated by the fact that two types of floorings (banded red-white and tan-white) are represented in the (j-3) fill. Altogether on the basis of such speculation, we propose that the flooring chunks in layer (j-3) derive from an earlier ceremonial site in the neighborhood—the tenuous link between this hypothetical pre-La Venta site and the main (and later) La Venta site proper is pure speculation.

Phase II begins when the A-2 platform mound was enlarged with the (i-1) fill and (i-2) purple surfacing. The (i-2) purple floors are very thin, numbering as many as 20 per inch, and it may be assumed that the platform mound remained in this form for a fairly long period of time. If the colored washes, consisting of very fine clays,

were renewed once a year, the (i-2) surface may have endured for 50 years or so. The platform mound is then rebuilt and resurfaced three more times (i-3 to i-8 fills and surfacings) following the contour of the underlying (i-4) surface. The (i-9) apron on the southern front of the A-2 mound was deposited during this phase. The (i-8) platform mound surfacing is contemporaneous with the end of the sandy white floor series found over the Court area. The lack of Phases I and II jade offerings can possibly be accounted for by assuming their removal in Phases III and IV by the excavation of the (c-1) and (h-1) pits. Some of the numerous Phases III and IV offerings may be redeposited Phase I or II offerings which were necessary to remove.

Phase III is a period of major construction, and is brought to an end with the surfacing of the Ceremonial Court with the old-rose (h-10) floors. Phase III begins with the (h-1) cut (at the level of the older (i-8) platform mound surfacing) for the Feature A-1-h offering, and includes the retaining wall (h-2), block-filled trench (h-3), fills (h-4, h-5, h-6, h-7), all elements of the offering pit—the (h-8) platform fill and (h-11) surfacing, and special components such as Offering No. 1943-D, Offering No. 1 (h-9), Offering No. 2 (h-12), Offering No. 2A, and the (h-13) deposit. The (h-10) old-rose floors bring the phase to a close. Also part of Phase III are the (f-1) fill and (f-2) surfacing, the (e-1) fill and (e-2) surfacings.

The (g-2) floors, comprising the fronting "apron" of the A-2 platform mound are equated with the (e-1) and (e-2) layers of the A-2 mound itself. The (h-13) element is considered to be a filled pit (or trench?) which contained a post or monument, and which, when removed, permitted the deposition of the (g-1) "apron" floors. The (g-1) layers are also equated with the (e-1) and (e-2) fill and surfacings of the platform mound. These equations of layers, identification of the (g-1) and (g-2) sandy floorings as an "apron," and the (h-13) component as a pit or trench which held, during the (g-2) floor period, a post or row of upright features forming a barrier between the Court floor and the A-2 platform mound are all rather hypothetical. But the special features such as pits and trenches (b-3, h-13, b-2) and isolated sandy floorings (g-1 and g-2) in the area marking the junction of the Court floor and the platform mound and abundance of ritual offerings, definitely indicate the area as one selected for special attention. Unfortunately we are unable to be very precise about the way in which this area was treated by the La Venta site builders.

Phase IV is instituted at the end of the (e-1)-(e-2) fill and floor sequence with excavation of the great (c-1) cut into which the Feature A-2-d offering was laid. The (d-1) fill is considered to be dump material dug out of the (c-1) cut. Integral elements of the (c-1) pit

and its fill are the serpentine blocks comprising the offering, and the (c-2), (c-3), (c-4), (c-5), and (c-6) components which are capped with the thin (d-2) gray clay layer.

Phase IV here, as elsewhere in Complex A, is marked by the complete smothering of all earlier construction by a layer of massive red clay (b-1). Monument 13 stands in a pit (b-3) dug from the (b-1) surface, and there is an unexplained trench (b-2) dating from the (b-1) layer, as well as the (b-4) pit containing Offering No. 1943-B.

One conclusion of considerable significance may now be drawn. This observation has to do with the dating of the A-1-h and A-2-d serpentine block paving offerings. A-1-h (the six-layer block offering) dates from the very beginning of Phase III, and A-2-d dates from the very beginning of Phase IV. The equivalent Phase II offering is the Southwest and Southeast Platform substructures. This suggests that each major rebuilding phase at La Venta was begun with a massive serpentine block pavement offering. If this is so, one wonders where the Phase I serpentine block offering is, and we suggest that it is now to be seen in the (h-3) serpentine block-filled trench dug down around the edge of the A-1-h offering, the blocks being those which were removed by the deep excavation (h-1 in fig. 10) which dates from Phase III. Since no stratigraphic evidence of a pit which may have once contained this hypothetical Phase I offering was noted by us, we assume that it lay along the centerline within the area occupied by the later (h-1) pit. It would thus have been somewhat smaller in surface area than the A-1-h offering. Being forced to rip out an earlier dedicatory offering, the Phase III renovators were presumably impelled to redeposit the Phase I massive offering blocks in a ritual manner in its original locus.

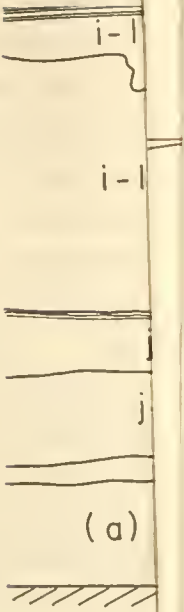
In summary, the correlation of layers and components shown in figure 10 with phases are :

Phase IV-----	(b-1)-(b-4)
	(c-1)-(c-6)
	(d-1)-(d-2)
Phase III-----	(e-1)-(e-2)
	(f-1)-(f-2)
	(g-1)-(g-2)
	(h-1)-(h-13)
Phase II-----	(i-1)-(i-9)
Phase I-----	(j-1)-(j-5)

NORTHERN SECTION

(Fig. 12)

Figure 12 details the stratigraphy of the northern end of the north-south trench and covers the area along the centerline occupied by the deeply buried A-2-d serpentine block offering, the crest of



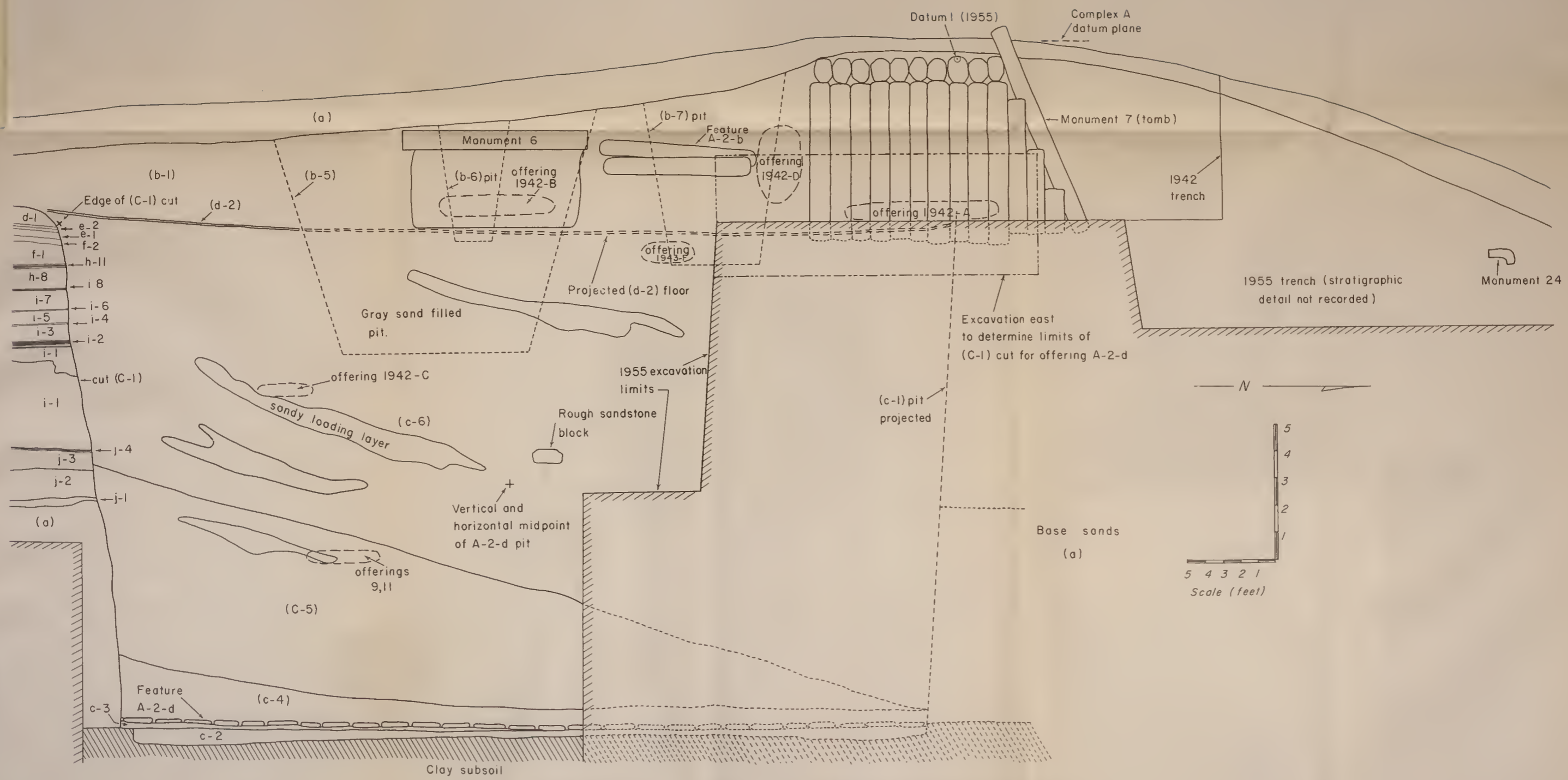


FIGURE 12.—North-south profile of Feature A-2-d (Massive Offering No. 2) and north part of Mound A 2.

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the A-2 platform mound in whose uppermost levels were recovered, in 1942 and 1943, the elaborately decorated sandstone coffer with lid (Monument 6) and the basalt column tomb (Monument 7) and the north slope of the A-2 platform mound in which was found Monument 24.

At the outset of this discussion it should be noted that the bulldozing of the airstrip just north of Complex A had not only completely removed the northern toe of the A-2 mound but also disturbed the upper levels of the A-2 mound between the airstrip and the tomb (Monument 7). Our excavation here, which consisted of a shallow trench along the centerline north of the tomb structure, was hampered by standing water from February and March rains, and was difficult to interpret because of the disturbed stratigraphy. Lack of time, and pursuit of stratigraphic data in the main trench south of the tomb did not allow us to return to our earlier trench excavation north of the tomb, the result being that the precise stratigraphic record of the A-2 mound layers immediately north of the tomb was not recovered. At no place in this trench did we reach the preoccupation base sands. As may perhaps be admitted by the reader of this report, the stratigraphy of the Complex A-1 at La Venta was complicated, and much of our energy was devoted to an attempt to correlate levels in the several areas of the main Court where we were digging continuously with sections of the labor force. Not all significant data were recorded, and we did not clearly see at the time the excavations were being conducted, that certain areas should have been studied and recorded in detail—the trench north of the tomb in Mound A-2 is one of these neglected areas of importance, as is the strip running east and west of the point marking the juncture of the A-2 platform mound and the Ceremonial Court. For these lacunae in the information we admit responsibility, and say only that we did the best that we could at the time.

The various layers, and components of the northern end of the centerline trench as shown in figure 12 are designated by letter and number in the list below. Designations of layers and components occurring in figure 12 which have been previously listed and which also occur in figure 10 retain here those designations.

(a) Natural soil formations :

Surface drift sands

Preoccupation gray drift sands

Clay subsoil

(b-1) Red clay

(b-5) Gray sandy clay-filled pit dug through (b-1) layer

(b-6) Gray sandy clay-filled pit dug into (b-5) pit fill

(b-7) Like b-5

(c-1) Cut line for pit containing Feature A-2-d (Massive Offering No. 2)

- (c-2) Blood-red clayey sand underlying layer (c-3) and Feature A-2-d
 (c-3) Thin wedge of reddish-brown clayey sand under southern half of Feature A-2-d
 (c-4) Fill of dense olive and yellowish-brown clays lying over Feature A-2-d
 (c-5) Brown sandy fill in (c-1) pit lying above (c-4) fill
 (c-6) Yellowish-brown sandy clays with loading lenses of heavy clays and sands. Uppermost parts are massive sandy red-yellow clay.
- | | |
|---------------|--|
| (d-1)—(d-2) | } See preceding text section and fig. 10 for details |
| (e-1)—(e-2) | |
| (f-1)—(f-2) | |
| (h-8), (h-11) | |
| (i-1)—(i-8) | |
| (j-1)—(j-4) | |

The A-2-d feature has been treated earlier as to its relative time of deposition. It will be recalled that this massive offering marked the initiation of Phase IV construction, and that it represents a continuation of similar practices known for Phases II and III and probably for Phase I. We were unable, on account of the tomb (Monument 7) standing on top of the A-2 platform mound on the centerline, to carry our north-south trench beyond the point indicated in figure 12 for fear of undermining the massive and weighty construction. In order to find the east-west and north limits of the (c-1) cut we widened the trench at the level of the (i-8) purple surfacings in order to track the upper edge of the cut line. This we did successfully, and determined the exact dimensions of the edge of the (c-1) cut. Assuming the inclination of the east, west, and north sides of the cut conform to that of the south wall, the dimensions of the bottom of the cut and of the offering were calculated and are shown on figure 12.

In the lateral extensions of the main trench at the level of the (i-8) surfacings, we encountered several large, round steep-walled and flat-bottomed pits which had been dug through the (b-1) red clay capping layer. These pits were filled with a gray sandy clay, and partial excavation of the (b-5) and (b-6) pits yielded no material items. So far as present evidence goes they do not seem to have been offering pits. The three pits noted west of the centerline (b-5, b-6, b-7) were matched by similar ones on the east of the centerline. In the small remnants of A-2 mound mass left undisturbed and lying between the (c-1) cut and the (b-5) and (b-7) pits (and their opposite numbers lying just east of the (c-1) cut edge), we noted that the purple surfacings, presumably extensions of the (i-4), (i-6), and (i-8) purple layers, were present. Beyond the midpoint of the tomb no exact record of stratigraphy was made, and we know only that purple surfacing layers for platform tops occurred as far as 30 feet north of the tomb. Vague though these data

be, they seem to indicate that the purple-surfaced platform mound was an extensive one. Our reconstruction of its probable size and contours is shown in figure 11.

It has been shown earlier that the (c-1) cut, the offering (Feature A-2-d) contained in it, and its several fill layers (c-4, c-5, c-6) precede the laying down of the (b-1) massive red clay cap which elsewhere in Complex A-1 (Ceremonial Court) is the main stratigraphic component of the last building period (Phase IV).

Monument 6, the stone coffer, was found by Drucker and Stirling in 1942, and Wedel notes (LV, p. 62) that this stone object was placed "in or on a more or less structureless fill, and then covered with red-orange clay." The fill referred to by Wedel is identifiable as our (c-6) component, and his red-orange clay is undoubtedly our (b-1) clay layer. The dividing line between these is marked by the thin (d-2) layer which was not noted by us as covering the entire surface of the (c-6) fill layer. Disturbance of a formerly continuous (d-2) layer could have been caused at the time Monument 6 (the stone coffer) and Monument 7 (the tomb) were placed, or (d-2) could be an incidental byproduct of the deposition of Monument 6. Layer (d-2) is of chief significance in marking the unconformity between the (c-6) and (b-1) layers which, by the time we excavated in 1955, were somewhat disturbed by the earlier digging in 1943.

In the fill of the pit containing the A-2-d offering were recovered Offering 9 and, directly opposite it, Offering 11 (in the c-5 layer), Offerings 1942-C and 1943-F (in the c-6 layer), and a rough unworked sandstone chunk measuring 21 by 14 by 6 inches lying in the (c-6) layer. This sandstone block had no apparent relation to anything above or below it, but deserves mention because it is a deliberate inclusion in the fill. The sandstone is similar in color, hardness and texture to the material from which Monument 6 is made. It occupies the nearly exact position of the midpoint, vertically and horizontally, of the (c-1) pit, though the exact spot (indicated by the + in fig. 12) is slightly lower and just to the south of the rough sandstone piece.

The stone coffer (or coffin?) denoted as Monument 6 rests on the centerline precisely over the midpoint of the A-2-d pit—a clear indication of relationship between Monument 6 and the A-2-d offering itself. The south half of the tomb (Monument 7) rests on the uppermost (c-6) fill layers, and the north half sits on the older and undisturbed stratigraphic layers comprising the (j-1) to (e-2) series shown to the south of the (c-1) cut line.

To the north of the tomb in our abortive trench was recovered Monument 24 which lay at the same stratigraphic level as (f-1), though whether in actual fact the (f-1) layer ran this far north as a

continuous stratum we are unable to state. It does, at any rate, belong to the pre-(b-1) red clay period.

After the stone coffer (Monument 6), the stone column tomb (Monument 7), and Offering 1942-A inside the tomb were put in position, the red clay capping layer (b-1) was laid on, and in the process the 1942-D offering and stack of stone columns (Feature A-2-b) were deposited just south of the tomb.

CHRONOLOGY

The older deposits, presumably correlated with the stratigraphic series extending between (j-1) and (e-2) are not specifically recorded in the area north of the intrusive (c-1) cut for the A-2-d offering, though, as mentioned earlier, the uppermost purple surfacings which are probably the (h-11, i-8, and i-6) elements are known to be present alongside the (c-1) cut and the tomb, and in the area north of the tomb. These structural-stratigraphic components would comprise Phases I-III.

The (c-1) pit with its offering and fill layers (c-2 to c-6) are all classifiable, as detailed in the preceding section where the central section of the north-south centerline trench (fig. 10) is discussed, as marking the first activity in the A-2 platform mound of Phase IV. Phase IV also encompasses the deposition of the two major monuments (Nos. 6, 7) and their enclosed offerings, the pile of stone columns between the tomb and the stone coffer (Feature A-2-b), the 1942-D offering, and the enclosing and covering (b-1) red clay cap, as well as the latest activity evidenced in this area in the form of the large steep-sided circular pits (b-5, b-6, b-7) which were dug through the (b-1) layer and filled with a gray sandy clay.

It occurs to us now that there may be a series of offerings in the presumably undisturbed levels in the area north of the north half of the tomb. Pre-Phase IV dedicatory caches would have been removed by the deep centerline pit in which Feature A-2-d lay.

In summary we have:

Phase IV	-----	(c-1) - (b-7)
Phase III	} Presumed to occur in same order as outlined in preceding section of this report.	
Phase II		
Phase I		

NORTHEAST PLATFORM (FEATURE A-1-f) AND COURT FLOOR WEST TO CENTERLINE

Not long after the excavations were begun at La Venta in 1955 we added to the labor force, appointed an additional straw boss,⁷

⁷ A comment here may be worth while. The basis for raising one of the regular work crew to the status of straw boss was his ability to work steadily, his agreeable nature, and our guess as to how he would exercise his authority to keep the work moving. Almost without exception these men who were popular individuals and hard workers, when picked

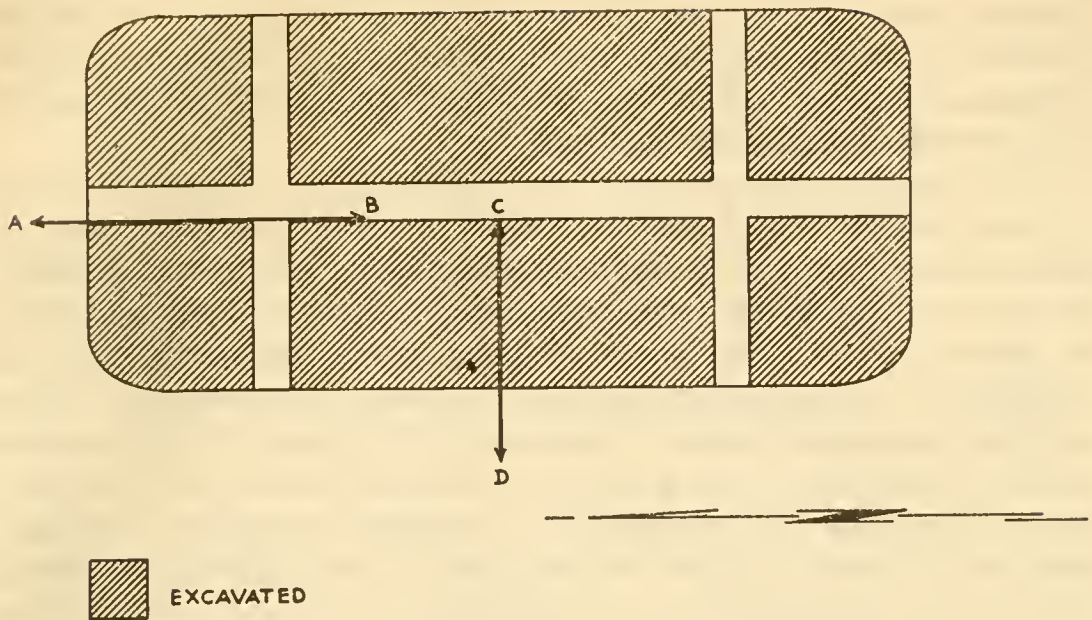


FIGURE 13.—Plan of Northeast Platform (Feature A-1-f) showing location of profiles. A-B, Shown in figure 15; C-D, shown in figure 16. (Not to scale.)

bought a dozen more wheelbarrows and shovels, and began to clear off the 4 feet of surface drift sand which covered the north portion of the eastern half of the Ceremonial Court. The upper sands were loose and easy to shovel and wheelbarrow away, and before long we had reached the top of the red clay cap which was now known to us as the last exposed surface marking the abandonment of the building program and utilization of the site.

We were careful to leave exposed the somewhat irregular surface of the red clay which gave every appearance of having been subjected to erosion before the protective mantle of drift sand began to accumulate in quantity. As the sand removal progressed the workmen encountered a low clay-covered ridge with a major north-south axis lying just inside the east wall of the Court. The sand overburden covering the north slope of this flat-topped ridge was not removed, but by projecting the visible angle of slope we derived the figure of the structure's length as 54 feet and its width as 22 feet (fig. 13). The line of the south slope where it merges with the Court surface is just south of the point where the southernmost stone column on the east wall of the Court stands. The sides of the structure rose

as straw bosses suddenly became afflicted with extreme lassitude and were reluctant to volunteer any reprimand to their erstwhile equals for goldbricking. Among other reasons for the display of such attitudes was the simple one of self-preservation. A reprimand by the straw boss can easily lead to resentment, and ultimately to a grudge, with the result that the straw boss some dark night might be bushwhacked with a Collins machete by the aggrieved worker. The end result was that so long as Drucker or Helzer was present and relayed directions through the straw boss all went well, but when neither of us was present the work was likely to lag measurably. No doubt all Mesoamerican excavators have similar or special observations to make on this point, but the matter of running a large crew with efficiency is one which requires particular accommodation to the local culture pattern, and can be learned only by first-hand experience.

at a steep angle (45°) to the flattened top, thus producing what might be called a linear truncated pyramid, though more accurately described as a flat-topped platform with sloping sides rising 3 feet above the surrounding surface of the Court.

Visible in the top surface of this platform were three pits, two of these (indicated as A and B in fig. 14) being about 30 inches in diameter at the top, 24 inches deep, and filled with gray drift sand. The center of pit B lay 18 feet from the south end of the platform, the other pit (A) the same distance from the north edge of the platform. The slightly larger pit located at the north end of the platform is discussed below in connection with figure 15. The mathematical placement of pits A and B encourages the opinion that they were dug in these precise spots for a particular purpose. It is possible that a wooden column or post stood in each, though we found no evidence to support this idea. Both the eastern and western edges of the platform had been disturbed by dug pits (fig. 14), there being three on each side which cut back into the sloping sides of the platform. These pits are 3 to 4 feet or more in diameter at the top, but reduce in size at their bottom which is about 24 inches below the Court surface. These pits, like the two in the upper surface of the platform, were filled with loose drift sand. It is possible that these pits once contained some perishable material, possibly wooden posts, which in the course of time after abandonment of the site gradually rotted out and were filled with the upper drift sand. A second possible reason for the pits is that at these points ritual offerings (of jade?) were originally placed, and at the time the site was abandoned the priests dug these up and carried them away. If this were the case, it would involve the further assumption that only the more recent ritual offerings were thus removed, since our excavation of the platform revealed a number of valuable offerings which had not been disturbed. The possibility that these several pits are assignable to the time of the abandonment of the site, or shortly after, is enhanced by evidence of postabandonment activity in the form of several piles of well-finished rectangular serpentine blocks found lying in the lower levels of the upper drift sand in the Court area just inside the east wall (pl. 5). One such pile containing about 150 blocks (random sampling gave average dimensions of 4 by 9 inches) lay embedded in drift sand 6 to 12 inches above the red clay surface of the Court floor in the bulldozed trench 6 feet west of the brickwork wall. Further north, at 5 feet south and 11 feet west of the northeast corner column of the Court wall and lying in the gray upper sand at a depth of 40 inches, was a neatly stacked pile of serpentine blocks varying in size from 6 to 12 inches wide, 11 to 14 inches long, and 2 to $3\frac{1}{2}$ inches thick (pl. 5, *a*). This piling obviously was deliberate, and took place

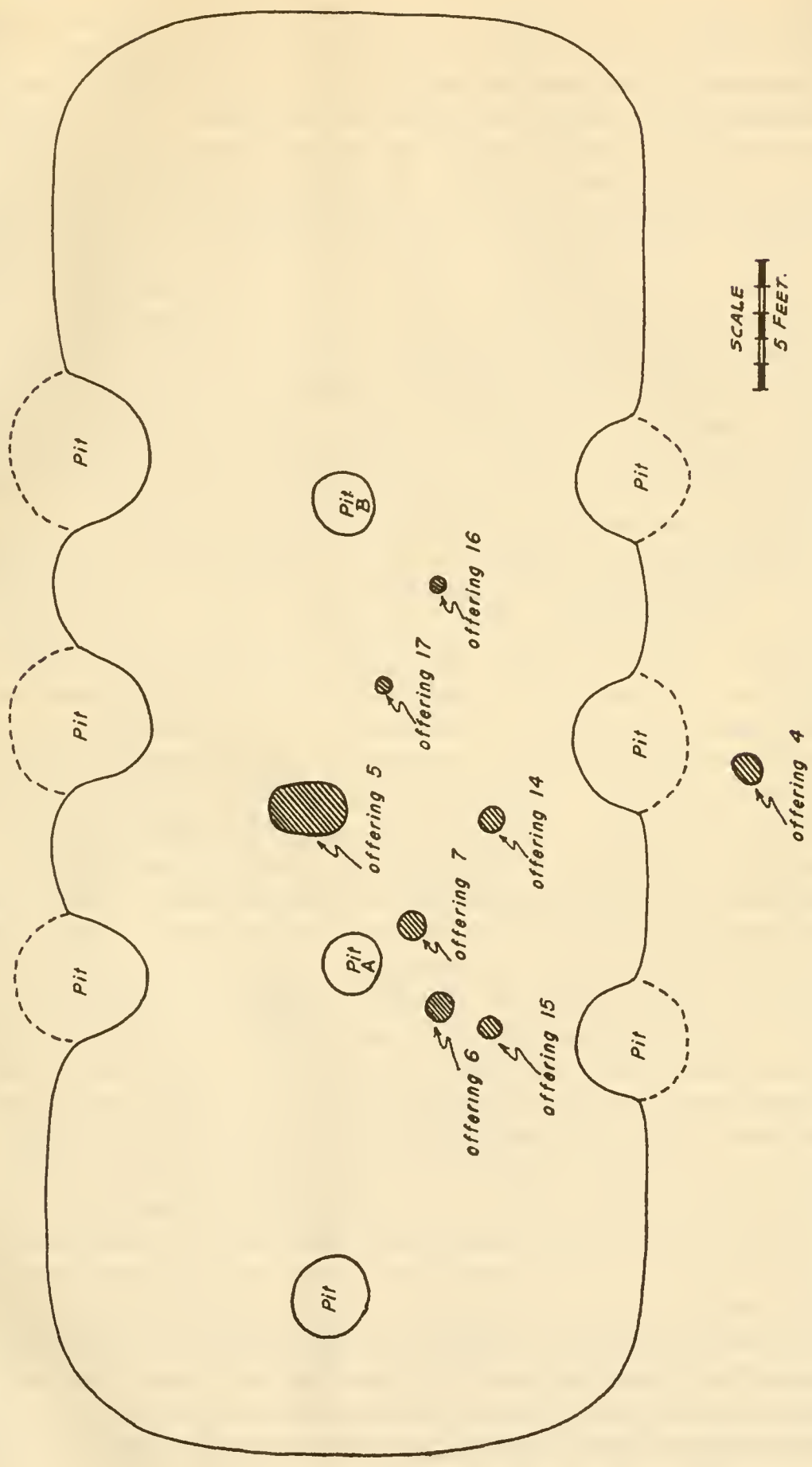


FIGURE 14.—Plan of Northeast Platform (Feature A-1-f), Phase IV. (Note position of offerings within platform structure.)

after a foot or so of drift sand had accumulated on the Court surface. About 20 feet south of the pile just described was a third accumulation of serpentine blocks (pl. 5, *b, c*), but different from both lots described above in that these were all broken. They appear to represent a pile of discarded and useless fragments, the leftovers of a salvage project involving the prying out of some quantity of serpentine blocks from their original position and the sorting of these blocks into piles according to size and completeness (i. e., reusability), at a time not long after the abandonment of the site by the latest users. But a fairly long time lapse between the abandonment date and the serpentine block removal project is indicated, because the surfacing of the uppermost red clay fill had eroded, and a foot of drift sand had accumulated in the Court interior. We doubt that this rifling of the serpentine blocks was contemporaneous with the several pits in the top and edges of the A-1-f platform—the latter seem older, though we cannot produce evidence for this impression.

Although this discussion of possible explanations for the dug pits associated with the platform is largely speculation, we should mention three more hypotheses. All are possible; none seems probable to us. The pits could be vestiges of original open pits for the receipt of offerings. We feel this improbable, because such pits could act as sumps and for much of the year contain water. Second, the pits could be holes originally holding wooden columns, across which beams were laid and rafters set to form a gabled roof arcade covering the central part of the platform. Since there is no other evidence in the entire La Venta archeology which might be interpreted as indicating the presence of wooden structures, we are understandably hesitant in suggesting that this possible interpretation be considered very seriously. A final theory to account for the 6 pits along the eastern and western margins of the Northeast Platform involves the suggestion that stone columns of the type which border the Court were set up here originally and later removed. Wedel in 1943 (LV, p. 60) noted an isolated north-south row of 6 upright basalt columns lying between the east edge of the Southeast Platform (A-1-d) and the enclosing wall of the Court which here (LV, fig. 14) lacked columns. We cite Wedel's observations (LV, p. 61) to show that isolated rows of stone columns did occur in the Court area, but we know nothing about this particular row as to its association with any now buried structure. We consider the possibility that basalt columns once sat in these sockets alongside the platform as unlikely, but again this is impressionistic and the matter cannot be settled with any evidence at hand. Or, we must admit, several possible combinations of circumstances might apply here, such as salvage digging (top pits) and posts (side pits). The problem of decision rests, we might add, not so much on our technique

of excavation as upon the eroded top red clay level which effectively obscured details of terminal surface structures and features. Taken all in all, we believe that either isolated wooden posts (presumably carved and/or painted) sat in these pits on top of or alongside the Northeast Platform or they represent the evidence of rifling of late period offerings (presumably jade) carried out when the site was abandoned and its caretakers either voluntarily moved on to establish another ceremonial center or were forcibly evicted by some unknown group of successors.

Our method of excavation of the A-1-f platform was to stake out the elevation and dig vertically, leaving one central north-south wall for profile control and two east-west walls (fig. 13). After the main areas were dug, the center run of the north-south wall was excavated to remove several offerings lying near its base. The various layers and components of the Northeast Platform (Feature A-1-f) are given letter designations in the following list, and in the discussion which follows, these letters will be used for reference. A final section will discuss the relationships of the various layers and components.

(a) Natural soil formations :

Surface deposit of gray drift sand

Preconstruction gray drift sand

Clay subsoil

(b) Pits dug from (c) surface in platform

(c) Red clay fill over Court area

(d) Old-rose floor series

(e) Heavy red and yellow clay fill in open pit

(f) Waterlaid sand lenses in bottom of open pit

(g) Open pit left in upper part of (h) and (k) fill of (l) pit

(h) Brown sand with high clay content fill

(i) Yellow clay platform fill

(j) Clean white sand lenses in (k) fill

(k) Brown sandy fill in (l) pit

(l) Cut in which pavementlike offering (Feature A-1-h) lay

(m) White sandy floor series

(n) Colored plaster facings of second stage of platform

(o) Yellow and red clay platform fill

(p) Colored plaster facings of first stage of platform

(q) Pink mottled clay fill for platform

(r) Brown water-sorted sandy floors

(s) Massive red, yellow clay fill of pit under platform

(t) Pink sand "floor" in (b) fill

(u) Brown sandy fill

The description which follows is based upon observations made during excavation of the Northeast Platform (figs. 15, 16) and an east-west hand-dug trench running from the centerline of the site eastward to the A-1-f (Northeast) platform (fig. 17). Since the sequence of events, as disclosed in the stratigraphy, involves both the floor of the

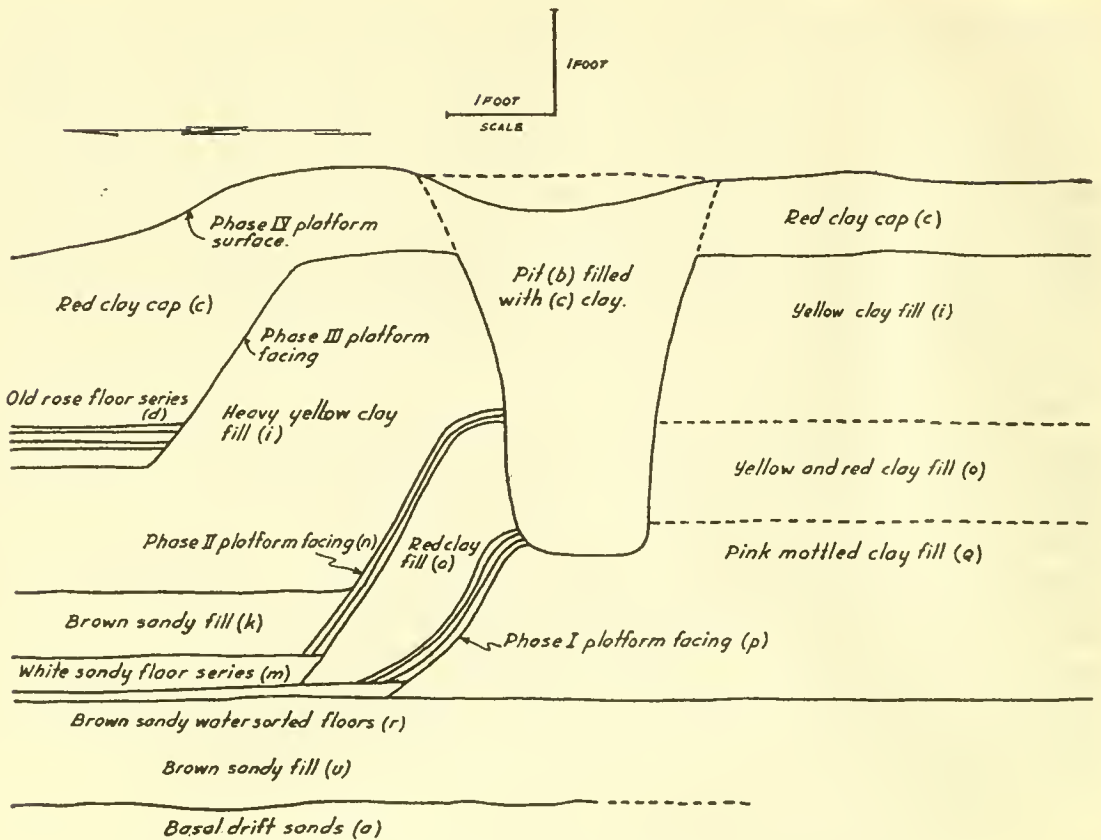


FIGURE 15.—Profile of north face of Northeast Platform (Feature A-1-f).

Court through which the trench passed and the platform, they are conveniently discussed together.

The earliest deposits were laid directly upon the drift sand (a) which lies upon the clay subsoil (a). This fill (u) consists of a brown sandy laminated deposit which gives some evidence of water sorting. The (u) layer has been partly cut out by the great pit (l) dug later for Massive Offering No. 3 (Feature A-1-h) as shown in figure 17. Between the intrusive pit for the A-1-h offering and the edge of the A-1-f (Northeast) platform is a layer not found elsewhere in the site which consists of an irregular thin stratum of pink sand (t) varying from 1 to 2 inches thick and lying directly upon the (u) component. This may have been either a localized floor, or simply a different element of the (u) brown sandy clay fill. We are inclined, in view of its uniqueness, to class it as part of the (u) layer since it is also covered with the (u) layer. The (u) fill deposit is apparently the base layer upon which the Court floor and structures were built, and may thus be termed the foundation level. General thickness of the (u) fill varied from 12 to 18 inches. The surface was fairly even, but we did not determine by instrument whether this surface had a drainage slope.

The next construction evidenced is a small rectangular pit $2\frac{1}{2}$ feet square and 9 inches deep with sloping sides filled with heavy red and

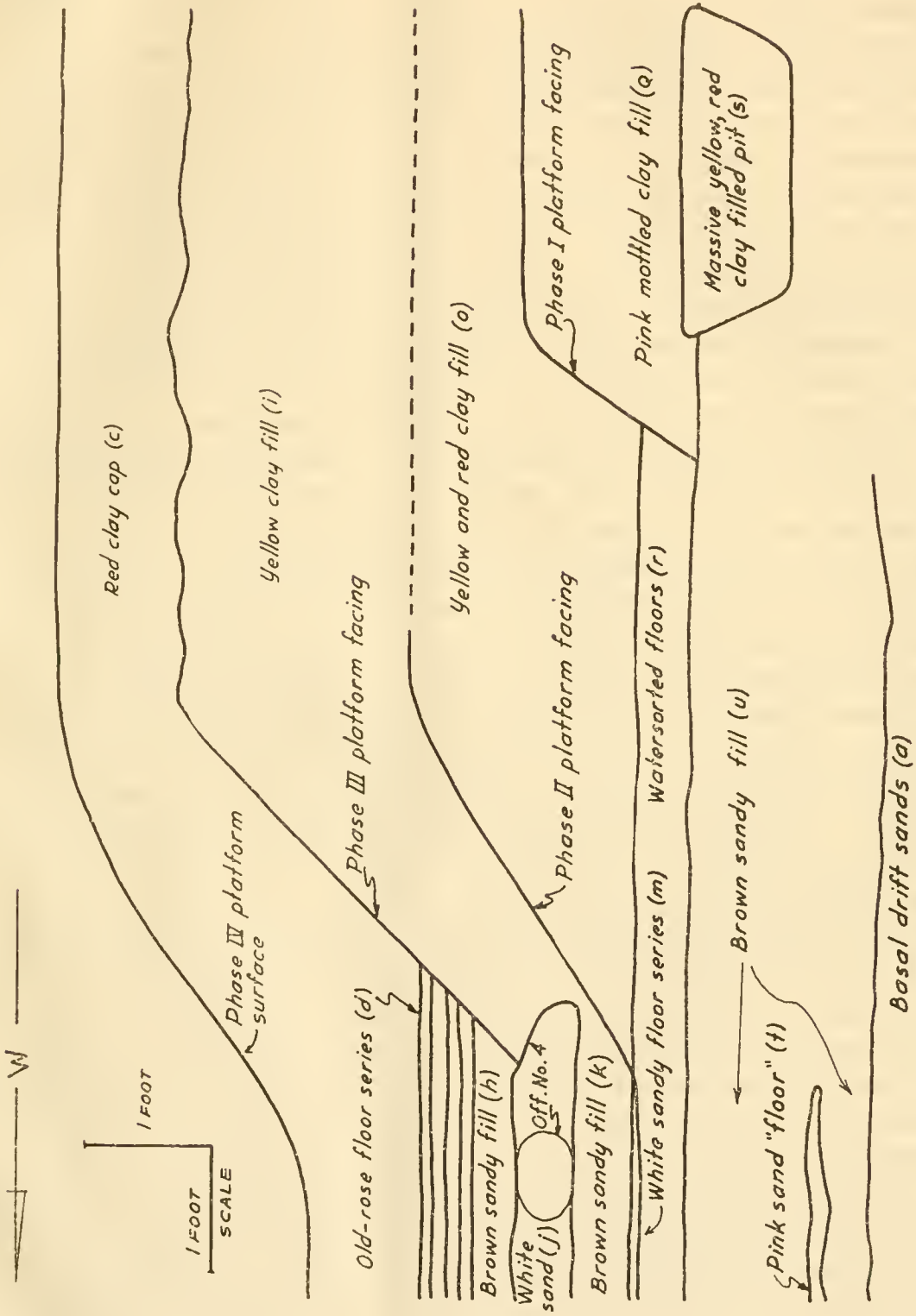
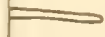


FIGURE 16.—Cross section of west face of Northeast Platform (Feature A-1-f).

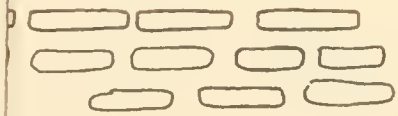
yellow clay (s) as shown in figure 16. Nothing was found in this pit, and its purpose is unknown. The top of the clay pit fill is slightly higher than the upper surface of the (u) layer. This block of clay may have been a "grade level" block similar to the (q) component beneath the Court wall (discussed elsewhere, cf. fig. 6). Or, this clay block may have served as a base or pedestal for a monument, since removed. Directly upon the (u) fill deposit was laid the brown water-sorted sandy floors (r) which are identical to those described earlier (e. g., layer (o) in fig. 6). A surface slope, presumably to provide means for drainage of rainwater is evidenced in the (r) floors. Under the platform (Feature A-1-f) the (r) layer is from 4 to 6 inches thick except at the northern end of the platform where this layer thins out to about one-half inch in thickness as shown in figure 15. There is thus here a double slope. From a (projected) crown under the north central part of the platform the (r) floors slope north toward the inner edge of the north wall of the Court and west toward the centerline, at which points the water was presumably carried out of the Court interior through some system of drains. The first of the succession of stages of building of the Northeast Platform was carried out before the (r) floors were laid down. This earliest platform was formed by dumping in a fill or hearting of heavy pink mottled clay (q) and then plastering this fill with thin colored surfacing layers (p). On the north face of the platform in its first stage four distinct surfacings were noted; these ran (earliest to latest), white, red, yellow, yellow. The colored surfacings on the west side of the platform are eroded, and only a thin yellow layer remains to indicate this face. The platform was next enlarged by dumping over and around it a layer of yellow and red clay (o) which increased the overall length and width of the platform by about 2 feet and raised its elevation about 1 foot. The top surfacing (p) of the first platform was scraped off before the (o) fill was laid down. As part of the Court refurbishing program, the resurfacing of the Court floor with the white sandy floors (m) was carried out. These floors overlap the toe of the second stage of the platform which was painted or plastered at least 3 times with bright yellow clay (n), each of these plastering layers being about one-fourth of an inch thick. These three surfacings, like the four of the primary platform, indicate a period of stability when nothing much but resurfacing of existing structures and floors was carried out.

A period of large-scale activity follows this interval of quiescence, and is marked by a sequence of events. First, apparently, was the excavation of the tremendous pit (l) into which was laid Feature A-1-h (the six pavementlike levels of dressed green serpentine blocks). This cut was started from the level of the (m) white sandy floors and meas-

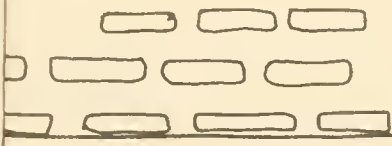
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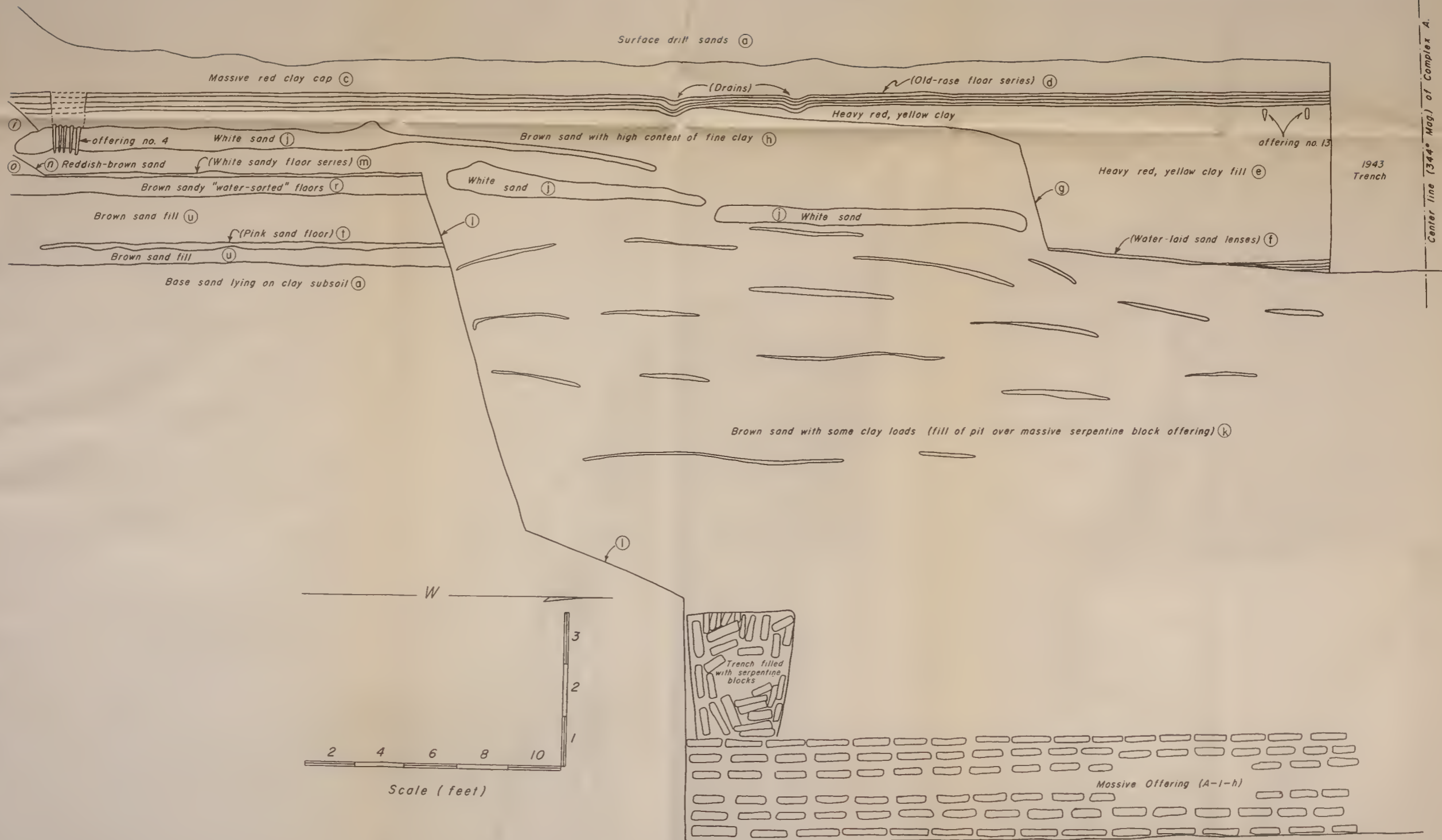


FIGURE 17.—Profile of south wall of east-west trench across east half of Ceremonial Court.

ures 77 feet on a side. Surface area of the edge of the pit is 5,929 square feet. The position of this excavation or cut is shown on figure 4. The cut and its offering (A-1-h) were obviously planned to fall in the northern half of the Ceremonial Court. The east line of the cut at its level of origin which is the surface of the white sandy floors (m) falls on a line 38 feet 6 inches east of the centerline, and the west line of the cut lies 38 feet 6 inches west of the site centerline. The six superimposed pavementlike levels (Feature A-1-h) which measure 63 by 66 feet, and the serpentine slab-filled trench lying around the perimeter of the offering have been described elsewhere (pp. 39-40). After the offering had been placed in the pit the hole was filled by dumping in brown sand with some clay loads (k) until about 2½ feet of fill was deposited. At this point a trench was dug down to the surface of the offering and the trench was filled with serpentine blocks. These blocks were not systematically laid, but were simply dumped in, and one might speculate at length as to the reason for this block-filled trench as well as the source of the blocks themselves. It is possible that an offering pavement of serpentine blocks had earlier been placed in the area, was removed by the cut for the A-1-h offering, and was replaced in the same general area as fill for the trench over the edge of the later offering.

One element of the (k) brown sandy fill is seen in the flat-lying lenses of clean white sand (j). In figure 17 three of these (j) lenses are shown, and it is obvious that they are an integral element of the A-1-h offering pit fill. The largest of these lenses was exposed in the trench running west of the Northeast Platform (Feature A-1-f), and is of particular note for two reasons. First, Offering No. 4 was embedded in this clean white sand (figs. 16, 17), and must have been placed there at the time the sand lens was being laid down. Second, the western toe of the third stage of building of the Northeast Platform was built on the top of this particular sand layer (j). Thus we have up to this point the following sequence of events: a period of stability when the Court floor was covered with white sandy surfacings (m) and the second stage of the Northeast Platform (Feature A-1-f) was covered with yellow surfacings (n). This period was terminated by the digging of the great pit (l) into which the massive six level pavementlike offering (Feature A-1-h) was deposited. The pit was then filled with brown sand (k) mixed with some heavy clay loads to give it stability. At about the top of the pit the Olmec engineers laid in some sizable lenses of clean white sand (j) 6 inches or so thick and 10 to nearly 30 feet long (width of these lenses was not ascertained). Toward the eastern limit of one of these lenses there was deposited, presumably as a ritual offering connected with the construction work going on, Offering No. 4, and upon the white sand lens (j) was built

the western edge of the third enlargement of the Northeast Platform. This enlargement added but little, perhaps 2 to 3 feet, in the north-south and even less in the east-west surface area dimensions of the platform, whereas the enlargement added nearly 2 feet to its height. This enlargement (see figs. 15, 16), was accomplished by depositing a heavy yellow clay (i) with the effect of encapsulating the earlier (second stage) of the platform. Once the third stage of building of the platform was accomplished, more fill consisting of a brown sand with a high content of fine clay (h) was deposited over the Court area in order to form a level surface upon which the old-rose floors (d) were then laid. Both the (h) and (d) layers overlap the toe of the third-stage platform structure as shown in figure 16. The north face of the platform does not show either the (j) or (h) layers—their place is here occupied by (i) clay fill. To the west in the east-west trench (fig. 17) crossing the Ceremonial Court the (k) and (h) fills were so laid down as to leave a sizable pit (g) which must have remained open to the weather for one or more rainy seasons as judged by the thin waterlaid sand lenses (f) in its bottom. Why this inner pit (g) measuring 32 feet east-west and 3 feet deep was left open we cannot tell. It may be that some original plan to use this pit had to be postponed for a time, and the plan was abandoned in the interval. At any rate, after the pit had stood open to receive surface drainage waters for a season or so it was then filled with a compact red and yellow clay (e) whose surface was leveled off to conform with the top of the (h) layer and upon which were laid, in the course of time, the succession of pink, rose, white and tan colored floors which we have termed the "old-rose floor series" (d). Offering No. 13 consisting of 2 serpentine pseudocelts was deposited in the upper part of the (e) clay fill. Although we did not run a sufficient number of precise instrument levels on the elevation of the old-rose floors where they were exposed in the trench between the Northeast Platform and the centerline, they appeared to slope westward from the platform and eastward from the centerline in this portion of the Court, and this impression is supported by the two shallow drains lying 25 and 30 feet east of the centerline.

The last major building program involved here, as over the entire area of Complex A, was the dumping of the heavy red clay fill (c) whose eroded surface resulted after the abandonment of the site by its builders. In the north end of the Northeast Platform is a deep circular pit (b) 2½ feet in diameter and 3½ feet deep dug from the (c) surface and filled with red clay (c). The pit contained nothing, and we are unable to determine or suggest its purpose.

After abandonment of the site the severe erosion of the exposed red clay (c) surface began, and we assume that there were thus re-

moved whatever colored surfacing layers may have once been present. In the further course of time the gradual accumulation of aeolian drift sands became thick enough to cover the clay structures and thus preserve them.

A number of jade and pottery offerings (Nos. 5-7, 14-17) found in the Northeast Platform are discussed below in the section on Offerings. The location of each offering is shown in figures 14 and 18.

CHRONOLOGY

There remains now the need to discuss the relationships of the various layers and structural components listed above on page 55.

Phase I at La Venta in the Northeast Platform and the Court area lying to the west as far as the centerline comprises the brown sandy fill (u) which was laid on the preconstruction drift sands, the (t) pink sand "floor" (which has been considered a part of the (u) fill), and the brown sandy watersorted floors (r) which mark the first flooring of the Court. The clay-filled pit (s) may predate the (r) floors, though this point is difficult to decide since disturbance of normal layering has occurred here (fig. 16). Before the (r) floors were laid the earliest Northeast Platform was built with a hearting of (q) clay and facings of fine colored clay "plaster" (p). This early low platform stood for some time and marks a period of stability. Offerings 7, 15, 16, and 17 are doubtfully attributed to Phase I.

Phase II begins with the enlargement of the early platform by covering it with the yellow and red clay fill (o). Then the first of the white sandy floor series (m) were laid down, and as they were added the platform was resurfaced with the (n) yellow colored clay plaster coats. No offerings certainly attributable to Phase II are noted in the Northeast Platform.

Phase III is marked by very extensive work in this central section of the Court. This activity begins with the excavation of the great pit (l) into which was put the massive pavementlike offering (Feature A-1-h). After a few feet of brown sand fill (k) were thrown in on top of the offering the trench around the perimeter of the offering was dug and filled with serpentine blocks (see fig. 17). Filling of the pit with (k) materials continued, and on the east this fill extended out over the white sandy floors (k) to come up against the face of the Northeast Platform (figs. 15, 16). To the west an open pit (g) was left in the (k) fill and this stood open to receive surface water for a short time, perhaps a year or so as judged from the thin waterlaid sandy layers (f) in its bottom. Toward the top of the (k) fill, layers of clean white sand (j) were laid in, and the third stage of the Northeast Platform was formed by covering the earlier platform with yellow clay (i). Offering No. 4 in the (j) layer can be dated as Phase III. The (k)

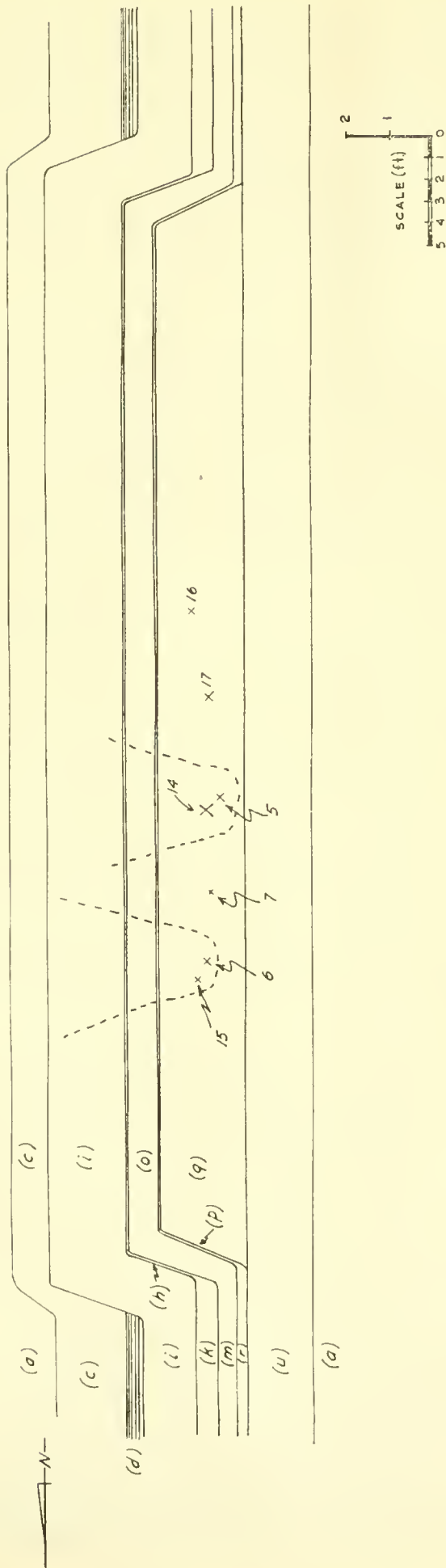


FIGURE 18.—Northeast Platform. North-south profile through center showing relationship of Offerings to structures. (For identification of lettered layers, see p. 55.)

fill of the (l) pit is now continued with a somewhat more clayey material (h), the open pit (g) astraddle the centerline is filled with a heavy red and yellow clay (e), and the old-rose floor series (d) are laid down over the Court floor. Five offerings (Nos. 4, 5, 6, 13 and 14 (?)) are assigned to Phase III.

Phase IV, marking the last building activity in the Court, is evidenced by the covering over the entire area with a layer of heavy red clay (c). Whatever surfacing this may have once had has been eroded by wind and rain following exposure after the abandonment of the site. Toward the north end of the Northeast Platform is a deep pit (b) dug from the surface of the (c) layer and filled with (c) clay. It contained no offerings or charcoal, and its function is unknown. Elsewhere in the top of the platform, and on the east and west edges of the platform are other pits whose purpose is equally unknown. These pits, 8 in number, have been treated at length earlier in the discussion.

In summary, the relationship of the several layers and construction components in the Northeast Platform (Feature A-1-f) and the Court area to the west are as follows:

Phase IV-----	(b)-(c)
Phase III-----	(d)-(l)
Phase II-----	(m)-(o)
Phase I-----	(p)-(u)

NORTHWEST PLATFORM (FEATURE A-1-g)

After the Northeast Platform (Feature A-1-f) was uncovered in the east half of the Ceremonial Court and proved to contain jade and pottery offerings, we measured off the probable position of a similar platform in the western half of the Court, and cleared off the sand overburden. Our forecast on the size and placement of a western platform proved to be precisely correct, but intensive excavation failed to produce material offerings in any quantity. As shown in figure 19, the platform was dug by us in such a way as to recover profiles. The southern third of the platform was not excavated.

Although the two platforms are similarly situated and of the same dimensions, the building stages of the Northwest Platform were more difficult to reconstruct owing primarily to extensive disturbance by ancient pits dug into its mass.

Toward the western limit of the Court the original sand surface dipped sharply to the west, and this necessitated the deposition of a thick layer of fill in order to bring the surface level up to that of the remainder of the Court.

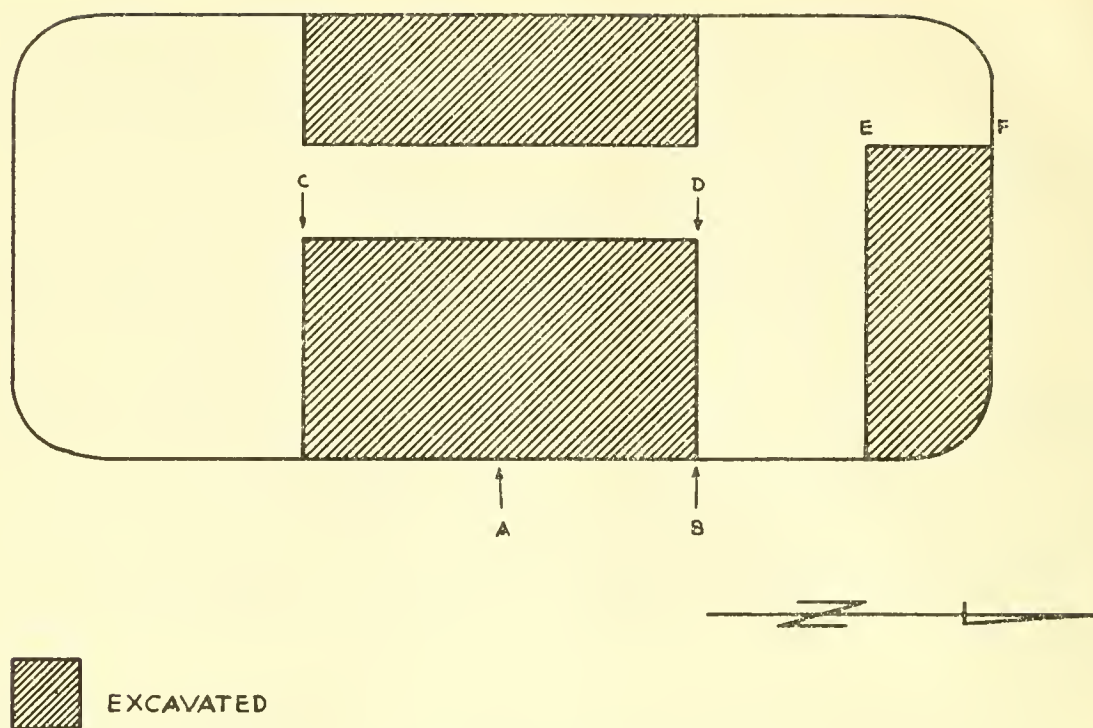


FIGURE 19.—Plan of Northwest Platform (Feature A-1-g) showing location of profiles. A-B, Shown in figure 22; C-D, shown in figure 21; E-F, shown in figure 20. (Not to scale.)

Layers and components which go to make up the Northwest Platform profile (figs. 20, 21) are designated here by letters to facilitate reference in the description which follows:

- (a) Natural soil formations :
 - Surface drift sand
 - Preconstruction drift sands
 - Clay subsoil
- (b) Massive red clay fill
- (c) Olive clay fill laid against face of (d)-(e) structure
- (d) Yellow and brown painted platform facings
- (e) Light-brown clay platform fill
- (f) Old-rose floor series
- (g) Heavy mottled red and yellow clay fill
- (h) Crushed green serpentine floor
- (i) Fine banded white, purple and brown floors
- (j) Yellow painted platform facings
- (k) Brown clay platform fill
- (l) Yellow sandy clay platform fill
- (m) Water-sorted brown sandy floors
- (n) Soft brown sand fill containing charcoal
- (o) Red and purple painted facings of (p)
- (p) Massive pink and white clay block or "platform"
- (q) Brown sandy fill

NORTHERN END OF PLATFORM

The most complete profile from which the history of the Northwest Platform may be reconstructed is shown in figure 20. Originally the

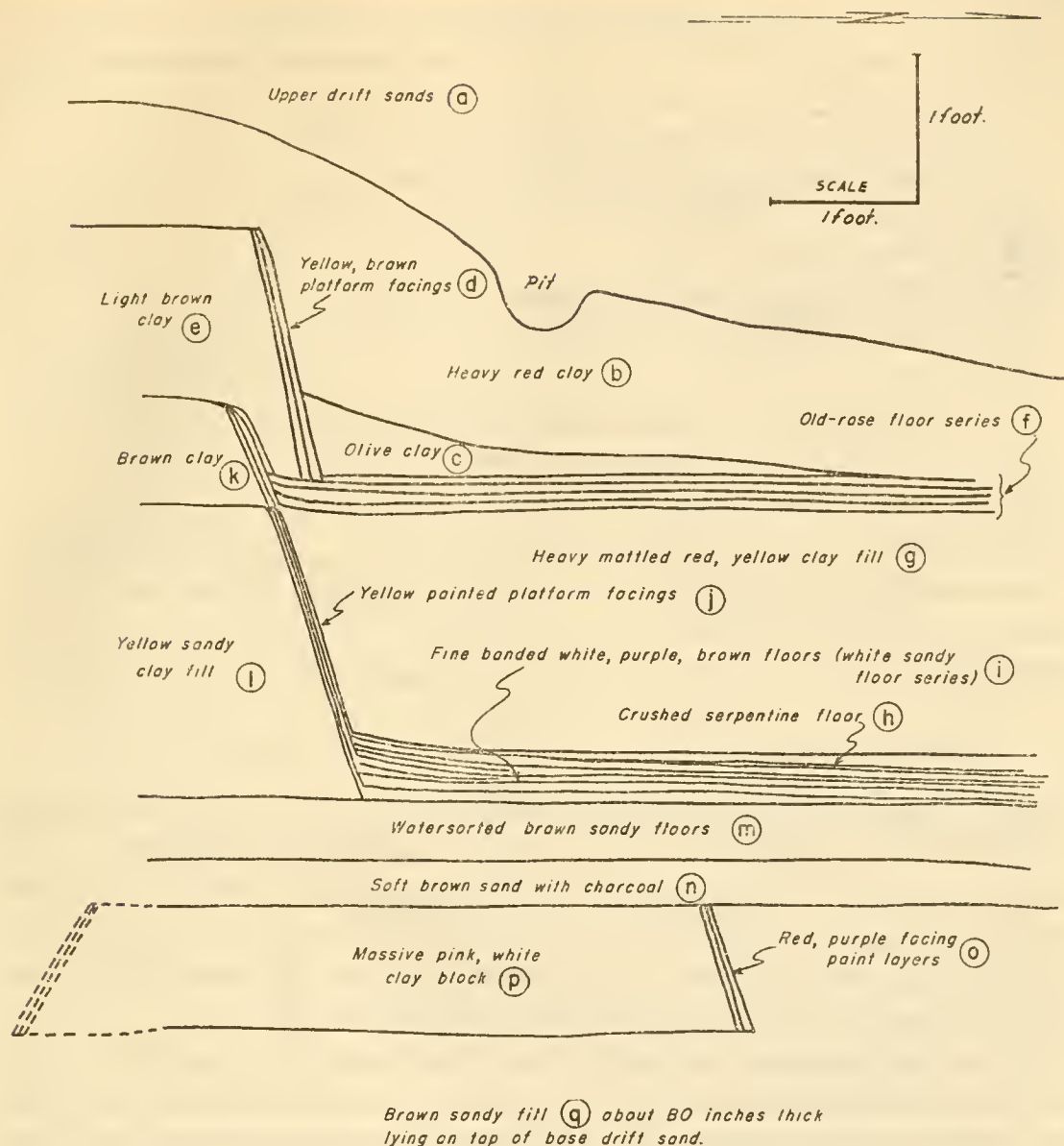


FIGURE 20.—Northwest Platform. North-south profile of platform edge at north end.

surface of the sand was much lower here than in the eastern edge of the Court, and in order to bring up the level of the surface a brown sandy clay fill (q) was laid down. Apparently embedded in this is a massive pink and white clay block (p) with sloping sides which bear a few thin red and purple painted facing layers (o). Before this (q) fill was completed this clay block or platform was fashioned and was exposed for some time as indicated by the several painted surfacings. The top of the clay block or platform has been sheared off, and on top of it was deposited another fill layer of soft brown sand containing much charcoal (n). The (p) clay structure may have been a pedestal for a monument long since removed. This is one of the bits of evidence we have of construction prior to the deposition of the water-sorted brown sandy floors (m) which are found throughout the Court area. The (m) sandy floors lie on the (n) fill and are succeeded by the fine

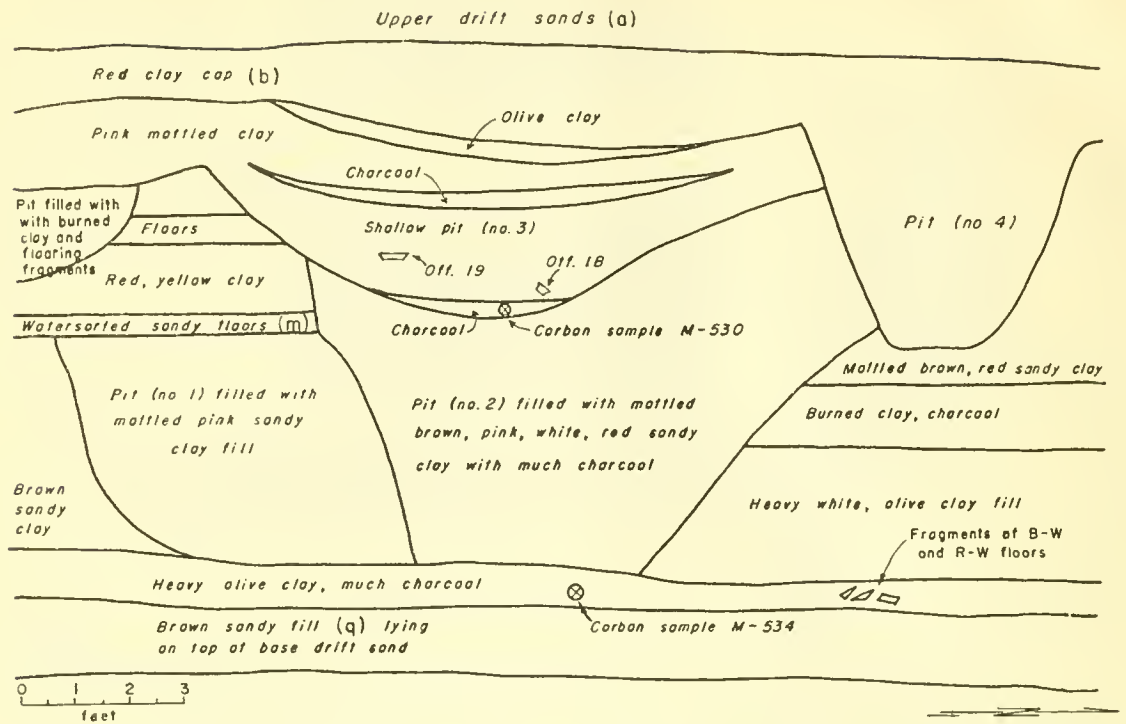


FIGURE 21.—Northwest Platform. North-south profile at center of structure.

banded purple, white and brown floors (i) which are the equivalent to the "white sandy floor series" noted elsewhere in Complex A. Directly upon the (m) floors was built the first stage of the Northwest Platform consisting of a fill or hearting of yellow sandy clay (l) with the sloping sides painted, as in the case of the Northeast Platform, with a series of very thin yellow clay washes (j).

After the platform was built the white sandy floor series (i) were laid down over the Court area, and here, as elsewhere, run up to the toe of the various structures. As these floors were renewed from time to time, sometimes by changing the colors (white, purple and brown are represented here), the platform facings (j) were also renewed. The final stage of the (i) floors is marked by a thin, though definite, layer of crushed green serpentine. This serpentine layer was noted elsewhere (surfacing of layer (i) in figure 20).

A major alteration of the area was now undertaken with the deposition of a thick layer of heavy mottled red and yellow clay fill (g) which came up to the surface of the platform formed by the (l) fill. The platform was now increased in height about 8 inches by adding a layer of brown clay (k), and running up against the face of this clay fill which was painted with a yellow wash are the old-rose floor series (f). The (f) floors, which are 3 to 4 inches thick, show the following sequence of layers: white (earliest), tan, pink or rose, white (latest). This second stage platform consisted, as may be seen in figure 20, of a very low elevation, much lower in fact than the equivalent platform stage in the east half of the Court.

The next rebuilding involved the laying down of a light brown clay platform fill (e) enveloping the earlier platform. The sides of this platform were faced with yellow and brown clay washes (d).

The final alteration comprised the laying up of a dense olive clay "buttress" (c) against the toe of the (d)-(e) platform and the covering of the whole with the massive red clay cap (b). The term "buttress" is not technically correct, and as used in this connection refers to a layer of heavy clay laid up against the sloping front of platforms before the common fill was brought in and deposited over the surrounding area. The purpose of the buttresses here, as well as in the South-Central and Northeast Platforms, seems to have been to cover and protect the platform fronts, though why such conservation measures, if that is what the intent was, were necessary or desirable is impossible to say. An alternative possibility is that the olive clay (c) layer was deposited over a perishable offering just before the massive red clay cap (b) was laid down. We frequently found masses of dense olive clay associated with offerings elsewhere in the Court, as in the case of Offerings 9 and 11. If such was the case in this instance, no traces of the offering remained when the platform was excavated. The shallow, unfilled pit in the surface of the (b) red clay cap may be a looter's pit such as found in the other platforms.

CENTRAL PART OF PLATFORM

Figure 21 shows the north-south profile of the interior of Feature A-1-g. It is difficult to match the layers exposed here with those shown in figure 20. The fill or hearting layers ((e), (k), (l) in fig. 20) do not appear in the center section, perhaps either because of considerable disturbance or because the fill materials themselves were variable.

On the base sand is a brown sandy fill equivalent to the (q) layer in figure 20, and above this a massive olive clay fill with considerable charcoal, some of which was collected for radiocarbon dating.⁸ In this layer were fragments of black and white and red and white floors which must have been secured from some structure existing locally. These broken floor sections indicate pre-Complex A constructions in the vicinity, but where these lay is unknown. The several succeeding layers of heavy white and olive clay, burned clay with charcoal, mottled brown red sandy clay, and brown sandy clay cannot satisfactorily be matched with the profile in figure 20, though they appear to be fill layers underlying the water-sorted brown sandy floors ((m) in figure 21). Presumably the water-sorted floors ran continuously, but have been partly cut out by later digging and filling.

⁸ No. M-534.

Above the water-sorted brown sandy floors is a layer of red and yellow clay fill on top of which lie an 11-inch thick series of thin floors whose order and thickness (top to bottom) are as follows:

Light tan sandy clay, 1½ inches thick

Medium brown sandy clay, ½ inch thick

Olive sandy clay, 1½ inches thick

Olive sandy clay, 1½ inches thick

Yellow sandy clay, 1 inch thick

Thin banded light yellow and medium brown layers—6 floors total ½ inch thick

Thin banded floors in following sequence (top to bottom)—white, brown, white, brown; total thickness ¼ inch

Brownish red sandy clay, 4 inches thick

Fire-baked clay surface, ½ inch thick

Pink sandy clay shot with bright yellow sandy clay pellets, 1 inch thick

Above the floors which seem to have been surfacings of the top of the platform is a pink mottled clay fill much like that which lay above the jaguar mask pavement in the Southwest Platform, and above this the massive red clay cap.

As may be seen in figure 21 four large pits have been dug into the platform. These cover a long range of the time represented by the platform, and they are numbered 1-4. In the bottom of pit No. 3 was a lens of charcoal, a sample of which⁹ was collected for radio-carbon dating. This charcoal may represent evidence of burned offerings (such as copal, feathers, or the like) in the bottom of the pit. No carved stone offerings like those found in the Northeast Platform were found here, but in pit No. 3 were found two pottery vessels (Offerings 18, 19).

EAST EDGE OF PLATFORM

A north-south exposure running along the east edge of the Northwest Platform is shown in figure 22.

The stratification is reasonably conformable to that shown in figure 20, but differs in that there is evidence of two large and deep dug pits which interrupt the strata they penetrate. The lower brown sandy fill (q) lies on base sand as it does immediately to the west, but is here less thick indicating that the preconstruction drift sand sloped down toward the west very abruptly between this point and the center of the platform about 15 feet to the west. The upper layer of clean white sand may be identifiable as the same material indicated as (j) in figure 17 which was, it will be recalled, part of the great Court-filling project which followed the deposition of Feature A-1-h (the six pavementlike layers). The brown sandy clay layer, likewise, is probably the same component as (e) in figure 17 since it underlies

⁹ No. M-530.

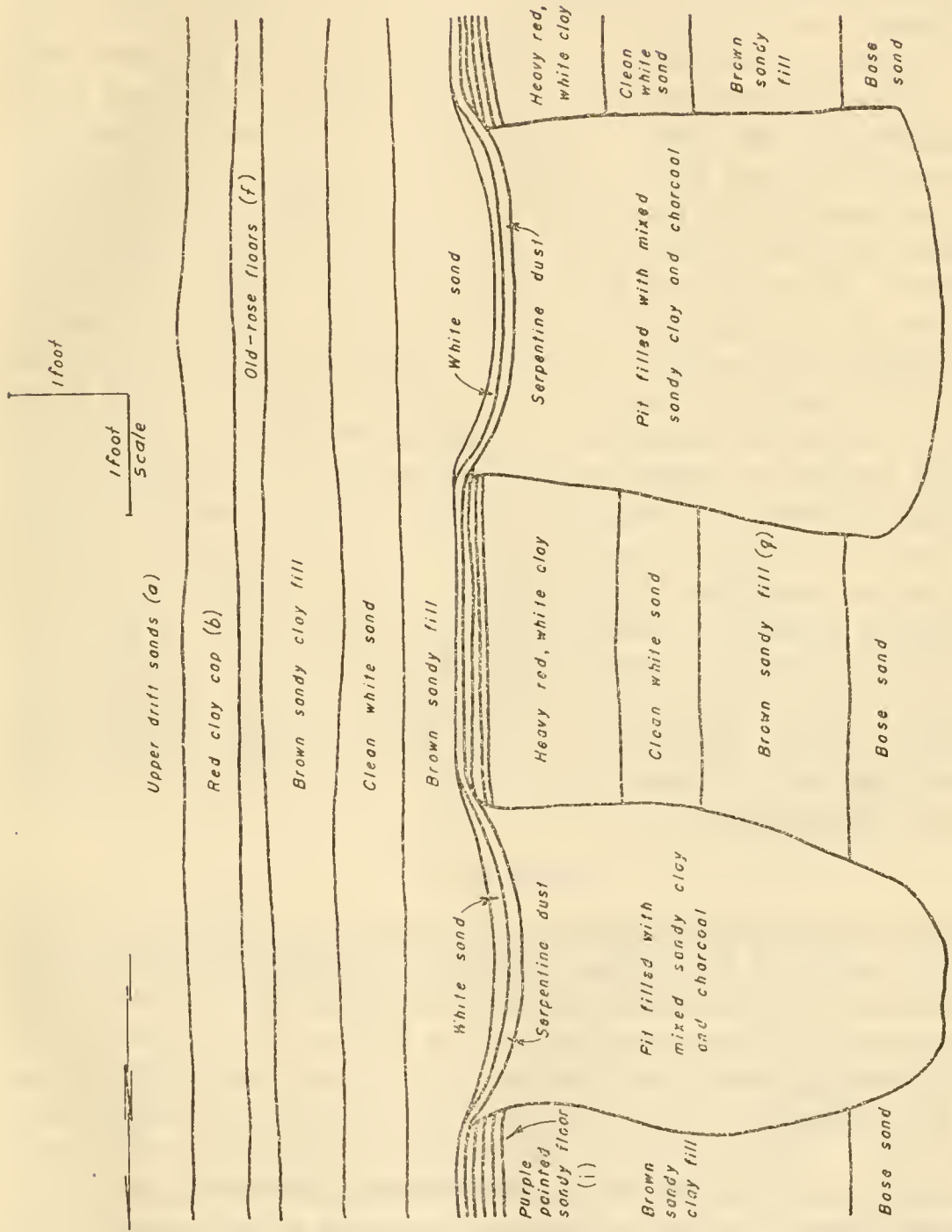


FIGURE 22.—Northwest Platform. North-south profile through two pits along east edge of platform.

the old-rose floor series. The old-rose floors (f) are identifiable as the Court surface which preceded the deposition of the massive red clay cap.

The two pits in figure 22 are between 2 and 3 feet in diameter at the throat and nearly 4 feet deep. The purple painted sandy floors (i) which are equivalent to the white sandy floor series in other parts of Complex A were laid down at this point while the pits were present. The pits were dug from the surface of the heavy red and white clay layer and were used while the purple painted sandy floors were accumulating, then filled with mixed brown sandy clay containing charcoal and the pit depression (owing to settling of the fill) was covered with the final element of the purple painted floors which consisted of the layer of green serpentine dust. The pits contained no trace of offerings, burning, or any evidence which would lead to an identification of their function. That they remained open for the fairly considerable span of time during which the purple floors were accumulating is doubtful—no settling layers of silt or sand which would result from surface water accumulation were apparent in the bottom of either. Our supposition is that these pits were the sockets for large wooden posts or columns, probably carved or painted, which flanked the inner edge of the platform. Whether these were posts to support a structure is doubtful since they are so large in diameter. We did not check the western edge of the Northwest Platform for similar pits, nor did we find evidence of additional pits farther south in line with the two noted. If two massive wooden columns did stand here, as we suppose, they were not exactly centered along the edge of the platform.

CHRONOLOGY

Phase I in the Northwest Platform (see fig. 20) comprises the thick brown sandy fill (q) resting upon the preconstruction drift sand, the massive clay block with painted outsloping sides (p) whose top appears to have been truncated in order for the (n) soft brown sand with charcoal layer to be deposited. This phase is brought to a close by the surfacing of the Court with the water-sorted brown sandy floors (m). The possibility that the construction elements (earth layers, pits, and clay block (p)) beneath the water-sorted floors (m) are pre-Phase I in time is discussed elsewhere in this report.

Phase II begins with the building of the first stage of the Northwest Platform marked by the yellow sandy clay fill or hearting (l), and the succession of fine banded white, purple and brown floors (i) which are identifiable as the "white sandy floor series" found widely in the Complex A area. As the (i) floors were refurbished from time to time, the yellow painted platform sides were repainted with a clay wash or

plaster (j). The phase is brought to an end with the final surfacing of the (i) floors with a thin layer of crushed green serpentine (h). At this particular point in time the platform was bright yellow and the Court floor a soft green color.

Phase III begins in the Northwest Platform area with the deposition of about 20 inches of heavy mottled red and yellow clay (g) around and against the platform, the addition of a 10-inch brown clay (k) cap to the earlier platform (with (l) hearth) whose top was now level with the surface of the (g) fill, and the laying down of the old-rose floor series (f). Instrument leveling shows the surface of the old-rose floors here to be at the same general elevation as those elsewhere in the Court interior. The sides of the second stage platform (with (k) hearth) continued to be surfaced with yellow clay washes. Toward the end of the period during which the (f) floors were in use and being refinished as they eroded or dulled, the height of platform was increased by dumping on a 14-inch cap of light brown clay (e) whose inclined sides show two colored surfacings (d), one brown and the other yellow. It appears that the reason for this late modification of the platform was to correct the elevation of the structure whose first top surface (k) was lower than that of its opposite number in the eastern half of the Court (cf. (i) in fig. 15).

Phase IV is the last major modification of Complex A, and here comprises the wedge-shaped platform front "buttress" of olive clay (c) and the thick layer of massive red clay (b) over the platform and Court surface. It cannot now be determined, because of heavy erosion of the surface following abandonment of the site by its builders, whether the platform front was flat surfaced as in the case of the earlier stages; but since the elevation of the platform was preserved (pl. 6), it seems probable that its appearance was much like that in the earlier stages.

To summarize, the relationship of the various layers and components in the Northwest Platform (Feature A-1-g) is:

Phase IV	-----	(b)-(c)
Phase III	-----	(d)-(g), (k)
Phase II	-----	(h)-(j), (l)
Phase I	-----	(m)-(q)

NORTHEAST ENTRYWAY (FEATURE A-1-i)

In the northeastern corner of the Ceremonial Court some clearing of the drift sand overburden was done, and the enclosing wall of the Court was exposed. The corner column was standing, and a row of 11 upright columns running for 20 feet west of the corner column was found. Further exploration to the west of the last column did not yield other columns, and the embankment in which the columns stood

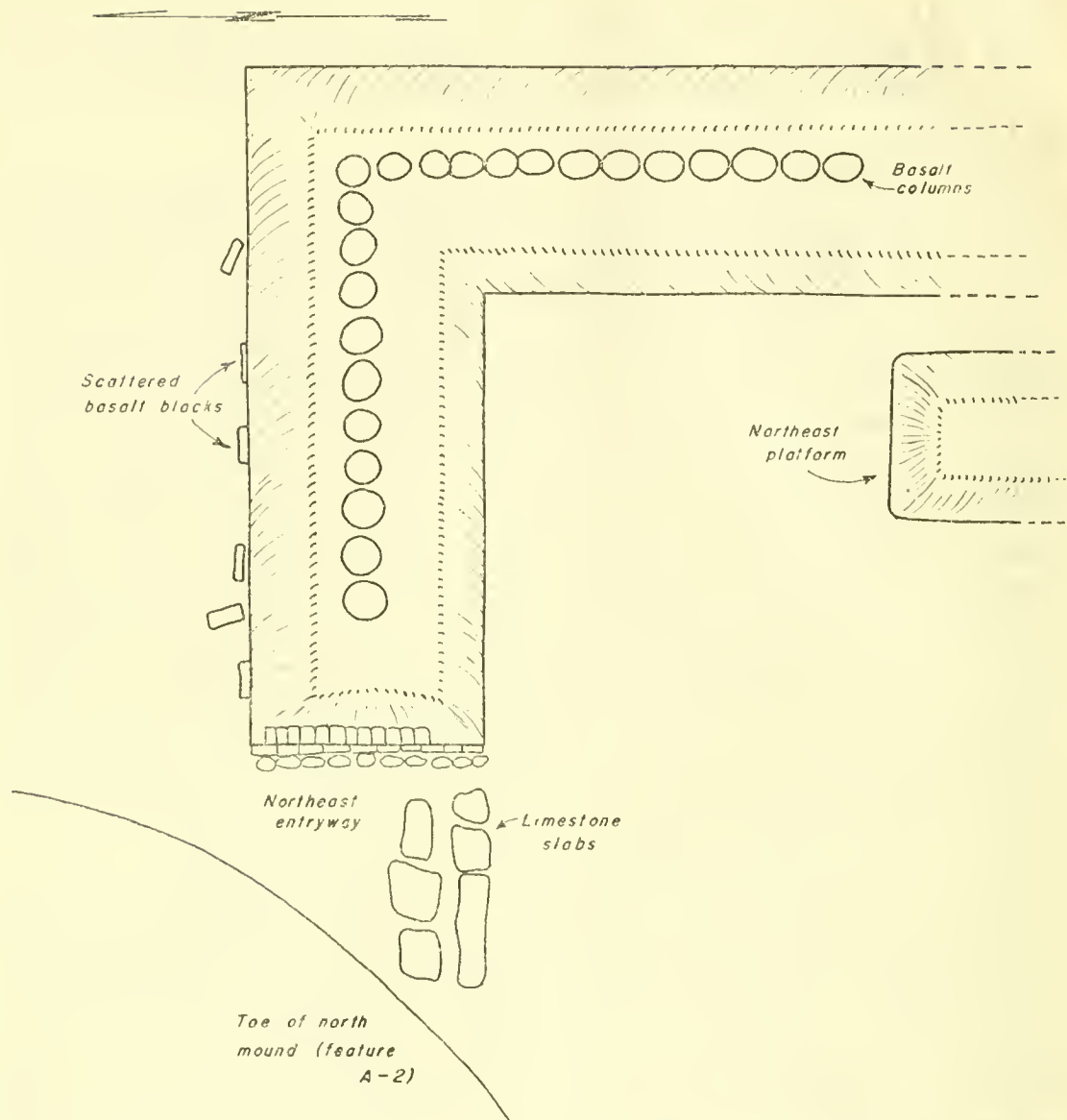


FIGURE 23.—Northeast Entryway. Diagrammatic plan of northeastern corner of Ceremonial Court (not to scale).

sloped down into a depression about 8 feet wide. The outside face of the short section of the embankment between this dip and the northeastern corner was cleared, and here were found about 4 feet below the surface of the embankment several large rectangular dressed basalt blocks which appeared to be the remnant of an earlier continuous row of footing blocks set up against the wall slope (fig. 23). Wedel in 1943 (LV, pp. 48, 77) also noted basalt facing blocks outside the embankment on the western side of the Court. The termination of the embankment and columns indicates that some sort of entryway was situated here.

In the following list small-letter designations refer to layers or structural components of the Northeast Entryway (Feature A-1-i), and in the discussion these various layers and structural features will

be referred to by their letter designation. A final section will discuss the relationships of the various layers and components.

- (a) Natural soil formations :
 - Surface deposit of drift sand
 - Preconstruction drift sand
 - Clay subsoil
- (b) Charcoal layer lying west of (c)
- (c) Flat limestone blocks lying in upper (d) layer
- (d) Massive red clay cap
- (e) Stone facing blocks lying in (f)
- (f) Red clay fill in (g) cut
- (g) Cut through layers (h) to (m)
- (h) White sandy clay floor
- (i) Brown sandy fill on top of (j)
- (j) Old-rose floors
- (k) Yellow and brown sand fill
- (l) Yellow and red floor layers
- (m) Light-brown sand and clay fill
- (n) Purple-brown surfacing on top of (o)
- (o) Adobe brick Court embankment or wall
- (p) Brown sandy water-sorted floors
- (q) Mottled red, brown sandy clay fill

In this area the original surface contour must have been very low as indicated by a series of auger holes which were put down from the bottom of our excavation (which penetrated about 2 feet into the sandy clay fill (q)). Above the clay subsoil lay 36 inches of preconstruction drift sand, and on top of this 9 feet 6 inches of mottled red and brown sandy clay fill (q) which was laid in to bring the level of the Court foundation up to the point where the first floors could be laid down. These earliest floors here consist of brown sandy water-sorted layers (p) about 6 inches thick which occur elsewhere within the Ceremonial Court. Upon the (p) layer was built the adobe brick work wall (o) which here was roughly measured as being 11 to 12 feet wide and standing 3 feet 6 inches high. Since this is the second of two cuts made by us through the wall it may be worthwhile to compare this A-1-i section with that exposed in the east end of the bulldozed trench further south (fig. 6). The differences between the two are these: no evidence of the early red clay embankment ((n) in fig. 6) was seen in the northeastern corner of the Court; the width of the wall was similar in both sections, but the height is greater in the northeastern corner. In the latter area we are apparently dealing with the original height of the wall since it does not here show erosion or deliberate removal of the upper surface but bears a thin colored plaster surfacing (n). It appears that in both sections the inner facing wall was fairly steep and the outer facing slope was longer and more gradual. In both areas the wall was built upon the brown water-sorted sandy floors ((o) in fig. 6, and (p) in fig. 24).

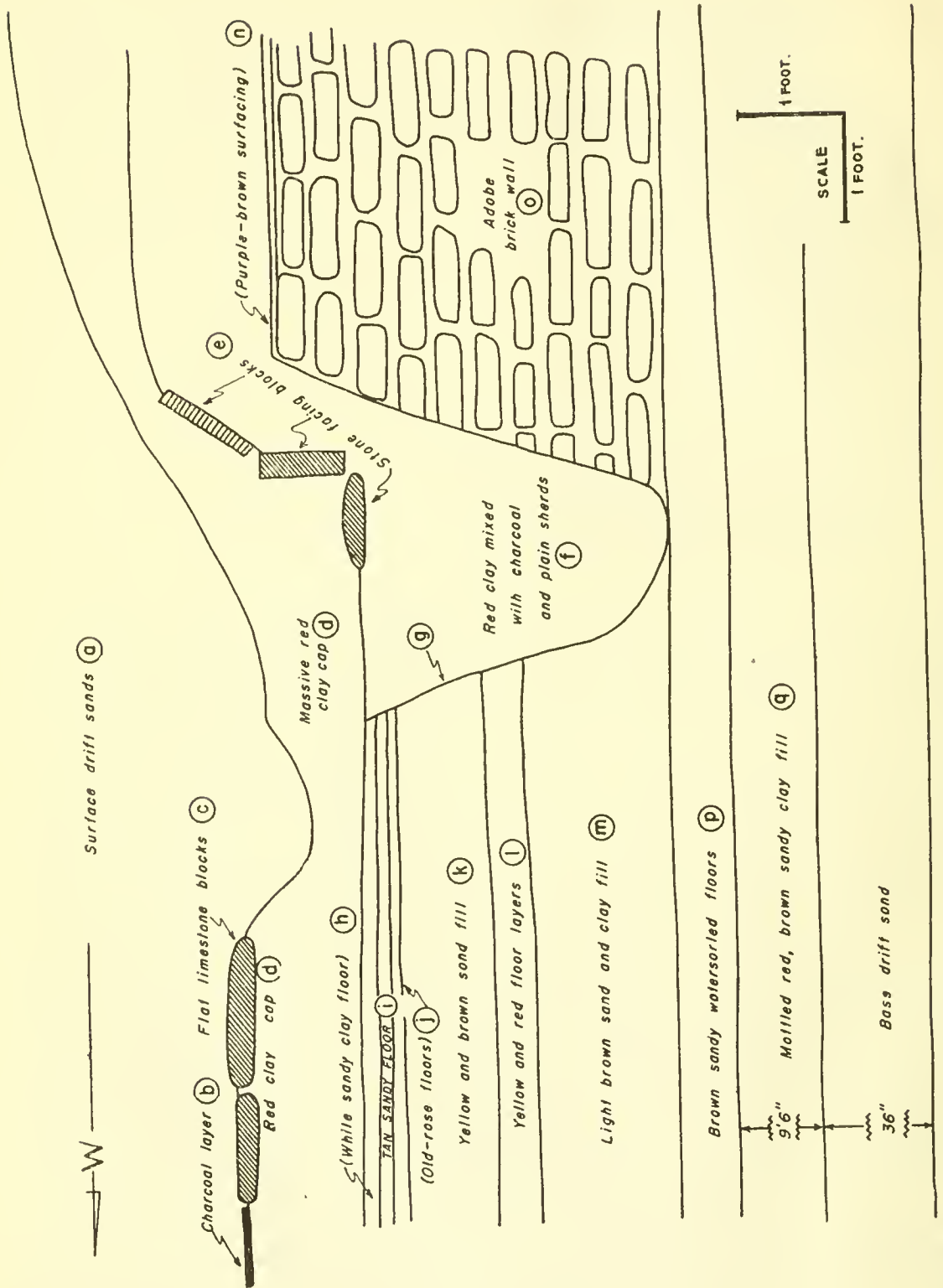


FIGURE 24.—East-west profile through Northeast Entryway (Feature A-1-i).

After the brickwork wall (o) was built the Court level was raised by depositing 12 to 14 inches of light-brown sandy material charged with clay loads (m), and on top of this level the builders lay down a series of bright red and yellow clay floors (l). These floors were not counted, but their number runs to a half dozen or so, and in aggregate they are about 4 inches thick. There is no equivalent series of colored floors farther south in the east half of the Court, so we assume that these floors are connected with some special surface treatment restricted to the north edge of the Court interior. Here we may note another divergence from the usual pattern in the vicinity of the Northeast Entryway which is the absence of the white sandy floor series which elsewhere in the Court lie directly upon the (p) layer. They may at one time have been present and were later removed or eroded away, though this seems unlikely—it is more probable that they were not laid down in this particular area and that their place was taken by the (l) red and yellow floors at a higher elevation. With reference to our datum level the top of the (p) layer in figure 24 is at the same elevation as the top of the (o) level in the bulldozed trench to the south (fig. 6)—this is taken as indicating a fairly uniform surface (with a slight drainage slope to the west) over the whole of the Court area.

On top of the (l) red and yellow floors is a 12-inch-thick yellow and brown sand fill (k) which is capped by a 1-inch thickness of several successive old-rose floors (j), a tan sandy floor (i), and a white sandy clay floor (h). These three flooring zones, (j)–(h), are probably all to be considered as a unit which appears elsewhere throughout the Court (cf. figs. 6, 7, 17) as a single series. In detail the sequence of colors, the thickness of individual floors and total thickness of the series, and so on, varies from place to place, and these variations are attributed by us to differential weathering (while exposed) as well as to possible different color combinations in different areas of the Court. Given more time we could have worked out these chromatic differences, but Squier was primarily occupied with instrument mapping, and Drucker and Heizer had to supervise the crew which might be scattered out over the site in a half-dozen gangs, and at the same time make notes and draw profiles. Under the circumstances we feel that we were fairly successful in securing the main sequential history of Complex A, and admit and excuse our inability to answer particular questions such as the one concerning the precise, areal-stratigraphic distinctions in the old-rose floor series.

We assume that the (h) floor originally ran up to the brickwork wall (o), and that the intrusive trench (g) which was dug from the (h) surface removed the floors against the wall, together with the underlying (i)–(m) layers encountered in the pit. There is no apparent reason for the (g) cut, and it may be suggested that this

narrow trench which ran across the west face of the wall was dug in order to salvage a row of dressed rectangular basalt blocks which may have originally run north-south at the base of the brickwork wall and rested on the top of the (p) layer. Although there is no evidence of the former presence of such stones, they did occur in this relative position at the base of the inner slope of the wall where we sectioned it in the bulldozed trench (cf. fig. 6). It is possible that the (g) pit cut away the original west-facing terminus of the brickwork wall, the only evidence for this suggestion being the absence on this face of the purple-brown surfacing (n) which does occur on the top surface of the wall. The (g) pit was filled and the top and sides of the brick wall covered with a tight red clay mixed with considerable charcoal and plain sherds (f), suggesting a source from some habitation dump area. In the surface of this (f) pitfill and against the slope of the west face of the truncated wall were set three rows of carefully dressed basalt and serpentine blocks (e) which give the general effect of dressing up the terminus of the wall (pl. 7; fig. 23). We are guessing that a ground-level entrance to the Court from the north could have been situated here, although there is no direct evidence at hand to warrant the precise use of the term "entryway." The general surface of the Court lay at the elevation of the surface of the (h) level. The upper row of 11 blocks may originally have extended farther to the north and south (pl. 7). Below these lay 11 of the common dressed rectangular basalt blocks laid end-to-end on edge like those found as footing blocks against the base of the brick wall in the bulldozed trench (fig. 6), in the Southwest Platform (Feature A-1-e) and elsewhere in the Court area (LV, figs. 13, 16, p. 47). The third row lay flat, and consisted of 16 chipped basalt blocks of a type which occurred at various places in the Southwest Platform (Feature A-1-e). At about the center of this lowermost row one block was lifted about 8 inches above the rest, as may be seen in plate 7. The upper row of serpentine blocks vary from $9\frac{1}{2}$ to 14 inches long, $6\frac{1}{2}$ to $12\frac{1}{4}$ inches wide, and $1\frac{3}{4}$ to $3\frac{1}{2}$ inches thick. The middle row of finished basalt blocks are more uniform in size, and run from $19\frac{3}{8}$ to $21\frac{3}{4}$ inches long, $7\frac{1}{4}$ to $9\frac{1}{8}$ inches wide, and $3\frac{5}{8}$ to $5\frac{1}{2}$ inches thick. The bottom row of chipped basalt blocks average $12\frac{1}{8}$ inches long, $8\frac{1}{2}$ inches wide, and 3 inches thick.

The terminal building stage is marked here, as elsewhere through Complex A, by the addition of the massive red clay (d) which covered over the three rows of stone blocks (e). Beginning a few feet west of the middle row of blocks (e) and extending to a point 11 feet west is a double row of six large stone slabs (c), five of them white limestone (pl. 7). The row is 4 feet wide and 9 feet long, lying on the (d) red clay. The northwesternmost stone is of gneiss or green schist measur-

ing 22 by 14 by 5 inches, and may be part of Monument No. 22, judging from the identity of material and the remnants of carving on one surface. Immediately west of the double row of flat slabs is a heavy bed of charcoal (b)¹⁰ of undetermined extent resting on the (d) red clay which is here burned to a brick orange from the action of the open fire. The row of slabs (c) sit on the edge of what may be called a parapet, for just to the south the surface of the red clay (d) drops about 1 foot. The (d) fill, therefore, was thicker at this point in the line of the embankment in order to preserve the outline of the inner Court rectangle. Just to the west of the (c) slabs the edge of the north mound (Feature A-2) is encountered.

CHRONOLOGY

The following sequence of phases or periods of construction activity for Feature A-1-i may be suggested.

Phase I construction began with the filling of the low area on top of the preconstruction drift sand (a) with the deposition of the mottled red and brown sandy clay fill (q). On this surface was then laid down the brown sandy floors (p) with a slight grade to the west in order to provide drainage of the interior of the Court. The presumption is that both halves of the Court drained toward the centerline and the waters were there collected and carried out of the Court interior—this is pure hypothesis since we did not note any central conduits. Whether the low red clay embankment found in the wall section at the east end of the bulldozed trench is present here we did not determine. We believe that it is present, and, if so, it would belong to this phase.

Phase II begins with the erection of the adobe brick wall (o) which was topped with a thin purple-brown clay plaster (n), continues with the deposition of the sand and clay (m) fill and is concluded with the laying of the yellow and red floors (l). This exact series of layers is not duplicated elsewhere in the Court for reasons which we do not understand.

Phase III begins after the period of stability marked by the (l) floors with the laying down of the (k) fill which is capped with the (j), (i) and (h) old-rose floor series. These floors were then chopped out by a trench (g) dug just west of the end of the (o) wall; a fill of red clay (f) was thrown in the pit, leveled to the west with the surface of the (h) floor, carried up over the top of the (o) brickwork wall, and in the surface of the (f) fill were set the three rows of stone blocks (e). How long this arrangement endured cannot be told, though apparently not for very long since the old-rose floor series was never resurfaced.

¹⁰ Sample (No. M-533) collected for radiocarbon dating.

Phase IV is marked by the overall coverage of the Court with a tough red clay layer (d) whose supposedly finished surface has eroded away without any trace. The double row of large flat stone slabs (c), five of white limestone and one a section of gneiss or schist broken off a larger finished monument (No. 22?), was set on the surface of the (d) clay. The site was then abandoned and left to the forces of erosion which caused considerable weathering of the surface until the upper drift sands (a), here about 48 inches thick, became deep enough to protect the clay surface from direct exposure to the elements. Large open fires which left a bed of charcoal (b) appear to have been built just to the west of the row of limestone slabs shortly after the abandonment of the site by the Phase IV builders.

In summary, we may relate the various layers and structural components in this section of the site as follows:

Post-phase IV	-----	(b)-(a)
Phase IV	-----	(c)-(d)
Phase III	-----	(e)-(k)
Phase II	-----	(l)-(o)
Phase I	-----	(p)-(q)

SOUTHWEST PLATFORM (FEATURE A-1-e)

The feature was situated in the southwestern portion of Complex A-1. It intersected the southern edge of the Complex between the center and southwestern corner. Prior to excavation it was marked by what appeared as a rectangle of basalt columns, some of which had obviously slumped out of their original positions (pl. 8). These columns protruded above the modern ground surface from 1 foot to 3 feet. There was a total of 34 columns in more or less vertical position; 13 along the north edge of the feature; 8 along the east side; and 7 along the west side. In the approximate center of the south side of the feature there were 6 columns standing. The remainder of the south side lacked standing columns owing to ancient removal or erosion. These columns marked off a rectangular area approximately 19 feet north-south by 23 feet east-west (fig. 25). If our measurements were correct, that is, if the columns we believed to mark the ends of the row on the north side had not been moved from their original position, the structure was slightly smaller than the companion feature A-1-d, whose interior measurements Wedel (LV, p. 50) gives as 20 feet 8 inches (6.3 m.) by 25 feet 7 inches (7.8 m.). It was difficult to determine the exact dimensions because of slippage along the southern ends of the east and west sides and along most of the south side. There was a definite slope of the surface of the uppermost clay layer. It is probable that this slope, which amounted to approximately 1 foot in the 19 feet of surface within the enclosure,

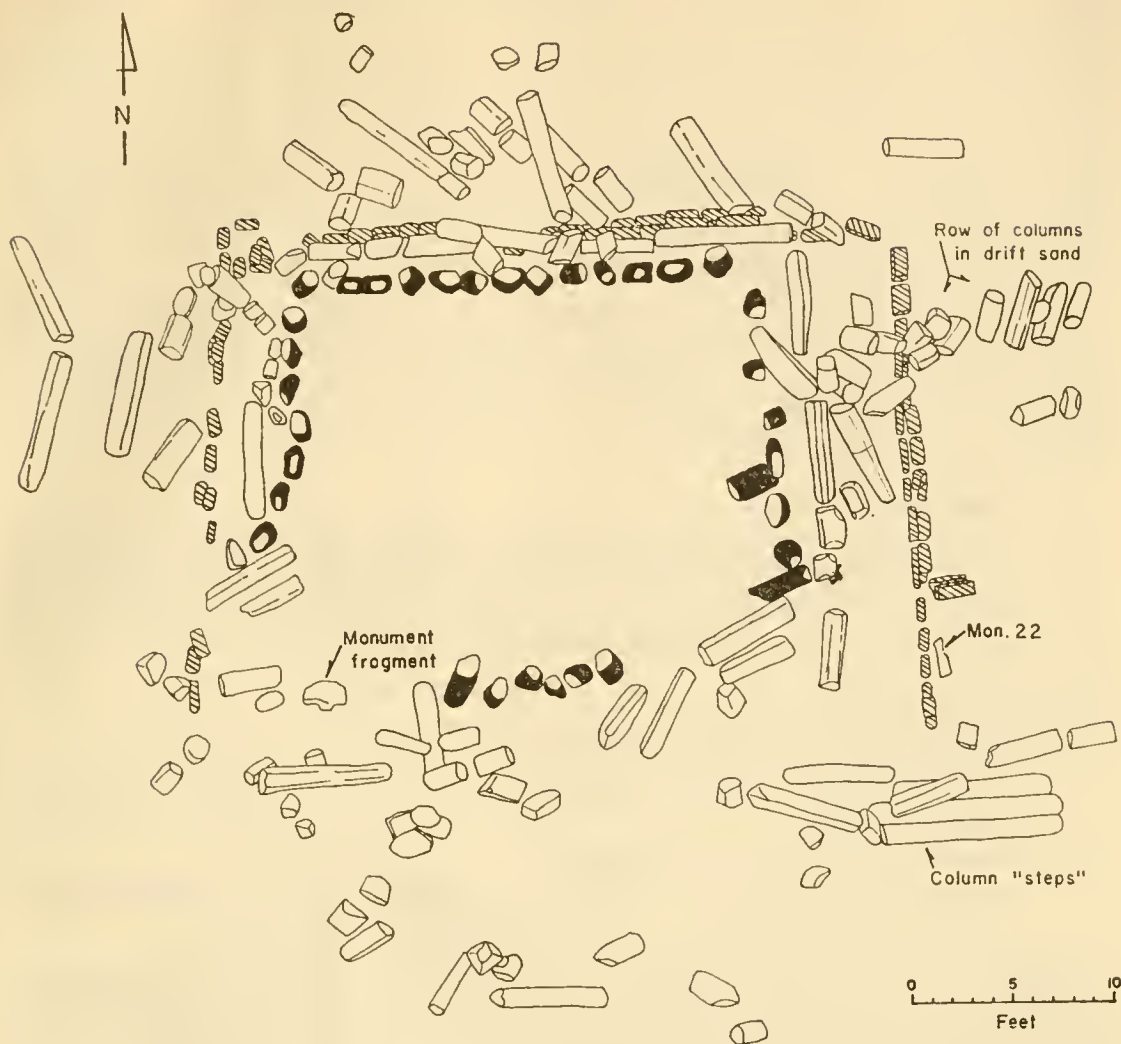


FIGURE 25.—Southwest Platform. Plan view showing standing basalt columns in approximate original position (solid black) and facing blocks (hachured) of Phase IV.

was mostly the result of erosion after abandonment of the site. Subsequently in the course of our excavations many pieces of columns were found in positions along the south side and in the southeastern and southwestern corners which might indicate that some of the stones had eroded out of their original places and rolled part way down the slope.

At the time of the clearing, and prior to our excavations, the feature was covered with grayish sandy topsoil to approximately the same level as in the other parts of Complex A.

One of the first problems which we attempted to solve was whether the rectangular columns had been set up to face outward or inward. Any evidence pertaining to this question not only would be of interest in our final interpretations but naturally would have a certain effect on our attack on the feature. The basalt columns used in the structures at La Venta tend to have one side naturally wider and flatter than the rest, although always somewhat irregular. These wide flat faces were in many cases made more regular by grinding.

The columns which had retained their original vertical positions in all cases had these improved flat faces turned outward. Corner columns on the southeast, northeast, and northwest corners showed two ground-down faces on adjoining sides of the columns, which were faced outward. This evidence, combined with that of the facing blocks on the outside of Feature A-1-d (LV, p. 50) indicated clearly that the structures were built to be viewed from without.

Our method of excavation of Feature A-1-e was determined in part by our knowledge of the structure (based on LV, pp. 31, 49-59), and in part on the problems which we wished to resolve. We knew the following about the feature:

- A. It faced outward
- B. It consisted of several layers, at least, which from top downward were: a cap of massive red clay, a layer of adobe brick, and massive clay fill
- C. These layers probably overlay a mosaic of serpentine blocks on a prepared foundation like that found in A-1-d in 1943

We did not know:

- A. The external form of the structure
- B. If the anticipated mosaic would be similar to, or different from, that found in 1943
- C. The size and form of the foundation
- D. The structural and chronological relationships of A-1-e with other features of the Complex

With the aim of excavating in such a way as to be able to determine the foregoing points, we laid out a set of wide trenches entirely around the perimeter formed by the basalt columns, with the general plan of driving in against the structure in arbitrary levels, determined principally by convenience in handling the large quantities of earth to be moved, then excavating the feature itself to the depth of the exterior trench, and repeating this process until we got to the bottom. We were of the opinion that this attack on the structure would give us the information we wished about its form, its contents, and its relationship to other parts of Complex A. This approach meant of course that we would have to remove the stone columns, but we were prepared to accomplish this.

As the excavation progressed downward the need for runways, ramps, and shoveling platforms forced us to reduce the size of the trench around the feature. From an early stage in the excavations we left a stratigraphic control wall (pl. 12) running from north to south a little more than halfway along the east-west line of our excavation. The north wall of our excavation was kept inside the northern edge of the structure so that it too would give us a stratigraphic section across the feature in the east-west direction.

In most general terms, our work indicated that when completed and in its final stage the feature was a small rectangular platform, sur-

mounted by a rectangle of basalt columns, rising a few feet above the finally prepared surfaces of the general interior of the Court just to the north, and overlooking a long narrow depression to the south, which is now filled with drift sand to very nearly the same level as the top of the feature. The feature consisted of a series of artificially constructed layers, which are distinguished from one another by substance, color, and form of material of which they are composed. Each layer is considered to have been a structural entity. There were other structural entities as well, including the pit dug to contain the base of the feature, walls, and components consisting of special types of fill. Each of these components will be listed briefly, and then described in some detail. Only after this has been done will their structural and other relationships be discussed. We believe that certain individual layers represent construction phases laid down at times when the entire feature was refurbished and enlarged. Certain other layers represent surfacing materials chosen to produce some desired visual effect; several such layers were sometimes laid down in a single construction phase. In the following list, small-letter designations are given the layers and components (figs. 26, 27) for convenience of reference.

(a) Natural soil formations:

- Surface layer of gray drift sand
- Preconstruction gray sand
- Clay subsoil

(b) Massive red clay cap (this and all the following components are artificial)

- (c) Old-rose colored floor series
- (d) Reddish-yellow sandy clays with small white clay particles
- (e) Brown, yellow, and orange floor series
- (f) Yellowish-red clay fill
- (g) White sandy floor series
- (h) Adobe bricks in clay mortar
- (i) Mottled pink clay fill
- (j) Olive-colored clay layer and serpentine block mosaic
- (k) Olive and blue clays with rough stone blocks
- (l) Miscellaneous fill between clay-and-stone base and subsoil
- (m) Wall-like fill of specially colored clays
- (n) Pit into natural soil formation, and retaining wall against sand overburden
- (o) Buff and brown sandy floor series with suggestion of water-sorting
- (p) White, brown, and red-brown clayey sand fill

(a) *Surface layer of gray drift sand.*—This is a layer of soil that blankets the entire Complex, filling depressions and masking low elevations. It consists of grayish sand which at the surface is slightly darker, apparently being humus stained. It is fairly fine, light, and noncohesive. In the course of our excavations we found at various points fragments of basalt columns, and other stones used in the struc-

tures, which had eroded out of their original positions and slid or rolled down onto the sand. Frequently, several adjacent pieces could be observed to be lying at different levels, suggesting that the sand deposit was building up gradually ever since the abandonment of the site. We believe this sand to have been brought by wind since we cannot account for it in any other way. We also found this sand to contain artifacts and other evidences of human activity referable to a "post-Olmec" occupation. This layer of draft sand varied in depth from a few inches to approximately a foot over the uppermost structural layer of Feature A-1-e.

(a) *Preconstruction gray sand*.—In various parts of the Complex a grayish sand of fine texture was found to underlie the structures. This same situation occurred around the margins of Feature A-1-e. Immediately under artificial man-made deposits the sand tended to be dark as though it retained a certain amount of humus material. Below the apparently humus-stained zone it graded rapidly to a gray color. This sand could not be distinguished in color, or any other respect, from the gray drift sand that covers the present surface of the entire site. As a matter of fact, to the south of the feature where it seemed reasonable to assume that the postoccupation drift sand might be directly superimposed on the earlier preconstruction sand, we were able only with great difficulty to distinguish between the two levels, and to define a contact zone. Our assumption, therefore, is that both sand deposits actually represent parts of the same natural process of soil deposition accidentally interrupted in places by the constructions of the site builders. In other words, the sand deposition probably continued throughout the occupation of the site and after it.

(a) *Clay subsoil(s)*.—At the lower margin of the gray sand was found clay subsoil. There was in places a relatively thin layer of compact sandy clay, brown with a faint purplish tinge in color. We are not certain whether this represents a remnant of an old soil formation, or whether it is a zone developed in place from the more extensive clay formation which underlies it. This latter clay which we encountered at various points in the course of our excavation is a massive compact yellow clay, which appears to contain a small amount of sand which has grayish and rust-colored streaks throughout. The pit dug for the construction of the foundations of Feature A-1-e cut through a thin layer of the purplish-brown clay, and in the yellow clay were gray- and rust-colored streaks.

(b) *Massive red clay cap*.—This was a clay layer, apparently deliberately chosen for its color since it was quite uniform in this respect, which was from 10 to 20 inches thick over the top of the feature. It was quite obviously applied not only to renovate but to enlarge the



Clay subsoil
(a)



Scale (feet)

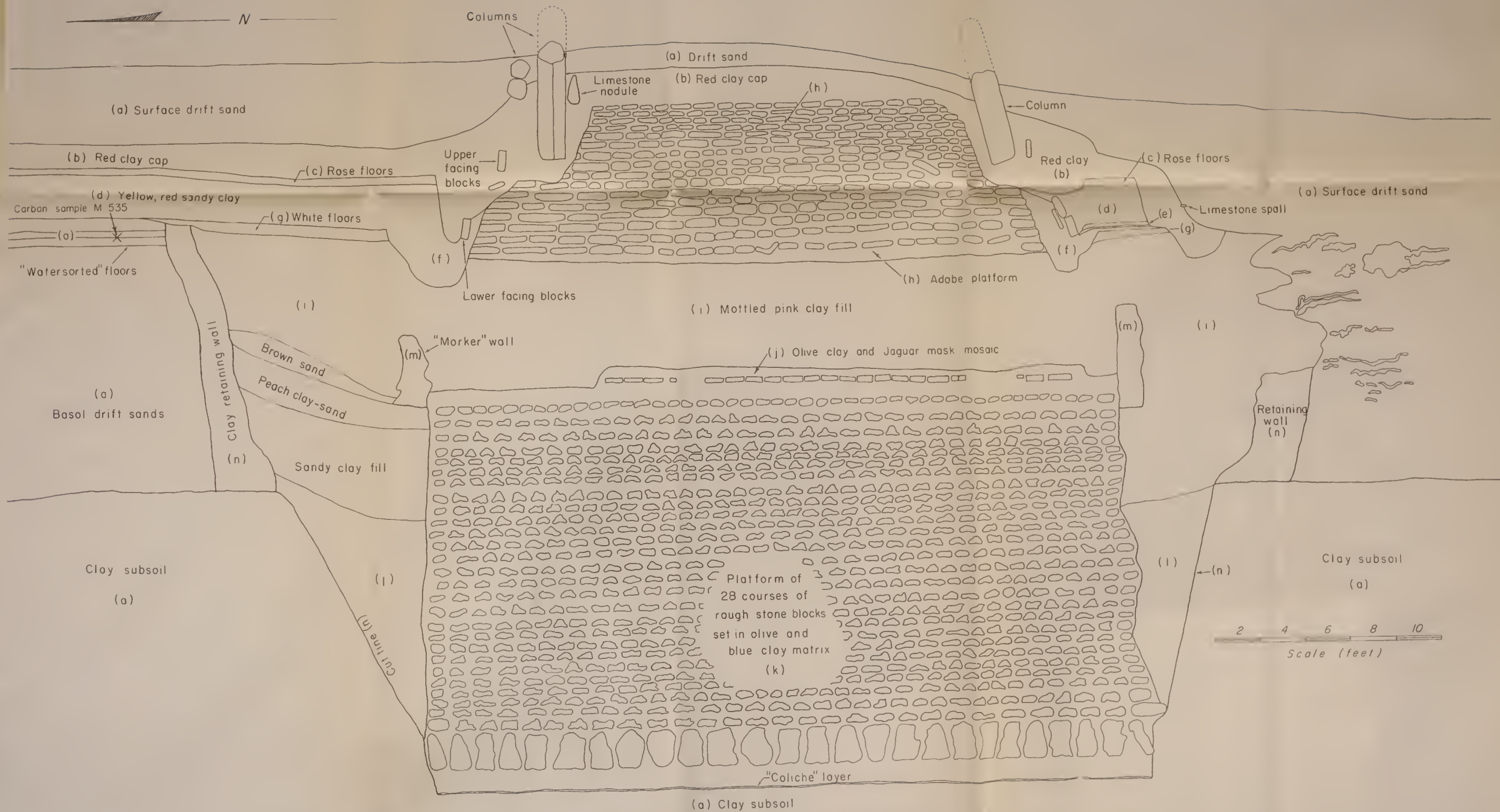


FIGURE 26.— Southwest platform. North-south profile through center showing structural features.

structure. This was indicated by the fact that its horizontal dimensions were larger than those of the layer immediately beneath it. Its north-south dimensions were approximately 34 feet—that is to say, it extended 8 or 10 feet to the southward of the south row of columns. It seems highly probable that this area to the south of the columns originally consisted of a series of descending wide steps. Since this structural layer formed the last surface which was exposed to erosion from the time of abandonment of the site until it was finally buried by the gray drift sand, it was severely damaged so that its original form was impossible to ascertain. The east-west dimension of this layer was probably about the same as the north-south one. As remarked previously, the surface within the enclosed rectangular columns dipped markedly to the south. It seems probable, however, that its original surface was level, or very nearly so. We have made use of the highest elevation of this clay layer as a reference point in describing depths of other components of the structure. We do this being aware that the original height of the clay layer may have been greater, but it certainly could not have been less.

This clay layer was specifically associated with the basalt columns. These columns are naturally formed and of various lengths. They have been considerably broken, sheared off by cleavages at approximately right angles to the long axis. We are of the opinion that most of this breakage may have been caused by fires when the site was used for milpas after abandonment by the builders. The longest column in the feature was 7 feet 10 inches in length. In cross section the columns are irregular pentagons. Their maximum diameters range from 12 to 20 inches. We counted 153 pieces, large and small, in and around Feature A-1-e (including several large columns near the southeast corner which were arranged like steps, to be mentioned later, and a row of column fragments which extended to the east from the northeast corner of the feature and which rested entirely in the upper layer of drift sands (see fig. 25, pl. 9, *b*) and therefore represent a post-Complex A activity). By a very rough compilation the total length of the columns and fragments comes to about 400 linear feet. If we use 1 square foot as a working average for cross sections of the columns, and we believe this to be conservative, at an approximate weight of 180 pounds per cubic foot of basalt, we get a total of 72,000 pounds, or 36 tons of basalt, used in this one small feature of Complex A.

The vertical columns were set up in pits dug into and, in most cases, through the bright red clay cap. In clearing the columns for removal (pl. 9, *a*) we were able to observe that the bases had been set at different levels, which implies that an attempt was made to level off the original tops of the stones. The vertical columns were set fairly close

together in rows, but not making contact along their edges. Spaces a few inches wide could be observed even between columns which apparently had not been moved from their original situations. Outside the rows of columns and against their bases, horizontal columns were placed two high (pl. 10). These stones were probably for decorative purposes. The vertical columns were set too deep (the maximum depth noted was about 4 feet) in the compact clays for them to need support. Most of the columns, particularly on the north and east sides of the feature, penetrated into the layer of adobe brickwork under the red clay.

Along the outside of the feature, about 7 feet to the south of the southern edge of the row of columns, at a depth of $6\frac{1}{2}$ feet below the reference point at the top of the present red clay surface were three lots of small waterworn nodules of compact white limestone. These ranged in length from 6 to 8 inches; in width $2\frac{1}{2}$ to 4 inches; in thickness three-fourths to 1 inch. They were laid flat with their long axes in an east-west direction, the outer edges forming a fairly straight horizontal line. There were three or four of these nodules at approximately the center of the structure (these were dug out by curious visitors to the site after working hours before they could be measured in). There were 10 more in the southeastern corner, and 5 not nearly so regularly placed in the heavily eroded southwestern corner. All these lots lined up to form a fairly straight east-west line on a horizontal level. It seems probable that the edges were originally exposed to view, perhaps at an angle of steps descending the south side of the platform.

There was a very definite association of this same type of dense white limestone with the red clay cap in another part of the feature, and also in other areas of the Complex. Within the red clay cap, just inside the north row of columns, there were a number of large waterworn pieces of limestone just below the surface and close to or touching the columns. In one case a piece of limestone lay directly under the base of a column. The largest of these pieces was 19 inches long by 12 inches wide by 6 inches thick. Four others were approximately a foot long, and the smallest was 6 or 7 inches in its maximum dimension.

On the basis of our information about this final level we can make some assumptions as to the appearance of the Feature A-1-e at this time. It must have been a small rectangular platform at least 3 feet higher than the surface of the court just to the north. A neat rectangle consisting of vertical columns surrounded by a double row of horizontal ones covered most of the platform surface. On the south side it descended either in a slope or, what seems more likely, in a series of steps for somewhere between 6 and 8 feet to the sandy area in front of the structure. Perhaps associated with such a series of steps were

three basalt columns resting on the red clay surface at the southeast corner of the structure (pl. 9, *b*). These were arranged like steps, with the lowest member to the south like those found by Wedel (LV, p. 60) along the centerline at the south edge of the Ceremonial Court (fig. 4). We may presume that a similar series of basalt column steps was placed at the corner of the Southeast Platform (Feature A-1-d); the 1943 excavations of that structure did not extend far enough to the south to expose them if they are there.

Another type of material associated with this last phase of structure under consideration were blocks of stone which for want of a better name we designated "facing blocks." There were three types of such blocks used at various times during the occupation of the site. Two of these types were used in this red clay cap period, and since they are both in all respects identical to two of the earliest used types, it seems highly probable that they were dug up and reused. One of these types consisted of long, narrow, well-shaped rectangles of basalt with all sides carefully squared and ground smooth. A typical block of this kind, on the basis of measurement of a small series, measured 19 inches by $9\frac{1}{2}$ inches by $4\frac{3}{4}$ inches. In the series measured the largest block was $21\frac{3}{8}$ by 10 by $4\frac{1}{2}$ inches; the smallest was $17\frac{5}{8}$ by $8\frac{3}{4}$ by $5\frac{1}{8}$ inches. The other type of blocks consisted of pieces of basalt which give the impression of being very roughly shaped. Examination made clear that they were actually worked into their final form by means of a sort of massive chipping process. They were not blocks of the previously described type in an unfinished state because they were consistently proportionately much wider, shorter, and thinner than the well squared stones. A typical block of this chipped variety was 14 by 10 by $3\frac{1}{2}$ inches.

These blocks were used in several different ways. On the north side of the structure, that is to say on the face toward the Court, two rows of facing blocks were set above a fill of clay in a wide deep trench. Plate 10 shows how this trench cut through previous floors and layers at the edge of the Court. A peculiar thing about these two layers of facing blocks was that we were unable to find any indication of a surface line associated with them, so that apparently these stones were embedded in the fill and covered up almost immediately.

On the east side of the feature facing blocks were set in a more complex arrangement. There were two rows of the chipped blocks laid horizontally, one on top of the other, on their sides, not on their edges. Squared blocks in a single row were set on their edges along the inner margins of the flat blocks. As may be seen in plate 11, *a*, the stones were placed very carefully to form neat level rows. They were apparently intended to be seen because they protruded from the surface of the red clay.

On the south side, a few blocks of a carefully squared type were found stood on edge, apparently forming a single row about a foot from the outer side of the row of columns and buried about 1 foot below the surface of the red clay. There did not appear to be enough of these blocks of stones either in place or eroded out in the sand to account for a complex arrangement like that on the east side.

On the west side, because of damage from erosion, it was not clear just how the facing blocks were placed originally. From the number of blocks found, some in place, some lying in the sand below their original level, it seems probable that there was a single row just as there was across the south face of the structure. This single row, however, appears to have been made up from both the squared and crudely chipped types of blocks since both types were found in apparently undisturbed positions in the row. The facing arrangement on the west side of the feature, like that on the east side, must have stood exposed to view above the surface of the red clay cap. Why the facings on the east and west sides should have been left uncovered by the clay, while those on the north and south sides were originally deeply buried, is not now clear. It is possible, of course, that two periods of deposition of the red clay cap are involved here, the latter of which involved extension of the clay cap out over the facings on the north and south sides of the feature; but no evidence of two such periods was anywhere observed and we can only admit that we have no answer to the problem.

Our excavations disclosed that a U-shaped trench averaging a little over 2 feet in width and the same in depth, and filled with the same clays as were used for the red clay cap (b), had been dug around the east, north and west sides of A-1-e. On the south side this trench was much less clearly marked and was in fact only a wide, shallow depression. The trench is shown in the profile drawings (figs. 26, 27) and its edge on the north side of the feature may be seen in plate 10, *a*. We at first regarded the trench as directly connected with the laying down of the stone facing block arrangements, i. e., that the trench was dug and filled with the moist and plastic red clay in which the blocks could be anchored firmly, in a fashion impossible in the preexisting sun-baked clay of the structure. As we dug farther, however, it became clear that the facing stones were placed too far above the trench for them to rest in the trench fill. But further digging did disclose another lower facing stone arrangement, to be described presently. And it may have been in connection with this lower row of facing stones that the upper trench was dug. It seems quite possible that the intent may have been to line up the upper facing stone arrangement with the lower, which had been covered over. This presumes, of course, that some memory of the earlier arrangement had been retained. As is shown in the

profile drawings, the upper level of facings is laid almost directly above the lower, giving some strength to our idea. It is possible that some borrowing of facing stones from the lower level for use in the upper now occurred as well. We noted a number of instances where the lower facing stone arrangement had been disturbed.

(c) *Old-rose colored floor series; and (d) reddish-yellow sandy clays with small white clay particles.*—The old-rose colored floor series in A-1-e consists of a layer of the peculiarly colored sandy clay for which we named the stratum, from $\frac{5}{8}$ to $1\frac{1}{2}$ inches thick, overlying a yellow sandy clay of about the same thickness with another old-rose colored layer beneath that. As elsewhere expressed, the fundamental assumption in all our interpretations of structural stratigraphy at La Venta is that a layer, or series of layers, of this sort represents the surfacing of a mass of structural fill, such as (d) the reddish-yellow sandy clays with small white clay particles. Therefore, these two layers will be dealt with here simultaneously.

This floor series and its fill entirely surrounded the structure, forming part of a continuous level extending over the entire Court surface. There was a strip of these floors overlying a small quantity of the associated fill on the south side of the feature, extending a short distance to the southward from a point approximately 3 feet south of the line of columns. It apparently represents a fragment of a former small terrace to the south of the main mass of the structure. The extent of this terrace cannot be determined since its outer end was cut away in connection with the deposition of the massive red clay cap, and the inner (north) end was also cut away by later disturbances.

The old-rose floor series to the east approached Feature A-1-e on a slightly higher level (approximately 7 inches) than did the same floor series on the west. The remnant of terrace to the south is on about the same level as the adjacent edge of the old-rose colored floor series on the east side.

(e) *Brown, yellow, and orange floor series; and (f) yellowish-red clay fill.*—This floor series (e) consisted of layers ranging from one-fourth to three-fourths of an inch in thickness in which the light-orange colored sandy clay levels predominated. The series was actually a double one in that it showed some slight change after a certain number of levels had been added. This will be described later. The double floor series partially overlay a yellowish-red clay fill (f) which also contained some fragments of clays of inferior layers in which it had been intruded.

The fill just described was contained in a U-shaped trench which penetrated lower levels of the structure on all sides. On the southern terrace the pit, or trench, measured at its highest point, was 1 foot 8 inches deep and 2 feet 6 inches wide. This trench was loaded with

fill of the type just described. The lower part of the fill was distinguished by content of fragments of pinkish-white clay that had been removed in cutting the bottom part of the trench. The fill was backed up against the exposed faces of the adobe brickwork to an indeterminate height; because of later disturbances its top could not be defined. At a point 1 foot 6 inches above the base of the trench a very elaborate set of facing blocks were placed.

The essential element of this architectural ornament was a long row of very carefully squared basalt blocks, which completely surrounded the structure (pl. 12). These were stones of the same type as those previously described as having been reused in connection with the building of the red clay cap. The blocks were placed on their long edges, end to end, their lateral axes in a vertical position. They were lined up and leveled most carefully so that the row is quite straight and level. On the south side of the structure this row is 35 feet 8½ inches long and that on the west side 26 feet 6 inches in length. These two segments of the ornament which we exposed completely vary only 2⅓ inches in elevation in the 60 plus feet of their combined length. Of course one factor which contributes to the neatness of this arrangement at present is the fact that these facing blocks were below the level of major erosion damage to the structure. As a matter of fact, along the western side of the feature a considerable quantity of fragments of stone columns and facing blocks from upper levels lay in the sand just outside and above this row of blocks, having eroded out, slid, or tumbled down the side of the building. The row of blocks extended continuously around the north and east sides.

On the north, east, and west sides this row of blocks constituted the whole ornament. On the south side, however, there were two other sets of blocks, in addition to the neatly squared ones of basalt (pls. 12, 13). Behind the basalt blocks, a row of polished serpentine blocks had been placed. These serpentine blocks averaged about 9 by 13 by 3 inches in size. They were set with their long dimension upright, tilted back at a slight angle. All had one flat polished face and squared edges, and were so cut that they fitted together edge to edge quite closely. At the eastern end of the row there were two specially cut narrow blocks about 5 inches in breadth, which obviously had been made to fill out the length of the row as determined by the length of the basalt blocks. The backs of the serpentine blocks varied considerably, some were flat, some bulged somewhat in the middle, and some were quite convex, edge to edge. The backs were smooth, but not polished. The thickness of the blocks varied from 2 to 4 inches, the average being just under 3 inches.

On top of the rectangular basalt blocks was a row of the chipped basalt blocks (just like those described in connection with the red

clay cap) set with their long dimension upright, and tilted back at a slightly greater angle than were the serpentine blocks, so that they completely covered the latter. The whole arrangement was quite neatly set up; originally it must have been even neater than our photographs show because of the fact that the chipped blocks particularly tended to settle and slump out of place with the passage of time. It is rather difficult to see why the serpentine blocks, which probably had a very pleasing appearance with the original polish of their faces, should have been so carefully placed and then covered up. We searched for any indication of time difference in the deposition of the three layers, but could find none. The fact that the end blocks of the serpentine row were especially cut down to fit the length of the squared basalt blocks indicates pretty certainly that basalt blocks were a primary part of the architectural ornament, and that the whole thing probably represented a structural unit.

That the floor series (e) described above is associated with these facing blocks can easily be demonstrated by a study of the profile (fig. 26). It was mentioned that the floor series is a double one. The lower component partially overlies at its inner (northern) end a set of white sandy floors (g), which had been cut away in the course of making the trench containing the fill and facing blocks. The inner end of the brown-, yellow-, and orange-colored floor series continued on at the same level to overlie the fill in the trench and extended just to the base of the outer edge of the rectangular facing blocks. As this part of the floor series was repaired and restored, and thus increased in height, the inner few inches were tapered off so that the lower portion of the facing blocks was not covered. Whether eventually the shallow gutter thus formed along the base of the blocks began to cause danger from erosion, or whether in the course of time a certain amount of slope wash was allowed to accumulate there, we were unable to determine. However, there is a small zone of clay triangular in section which filled the gutter to a depth of about 2 inches. Succeeding layers of floor from this series ran out over this small quantity of fill to the edge of the facing blocks. However, from this point on, until the cessation of use of this series of floors, succeeding layers were once more tapered off downward so that they left most of the squared facing blocks exposed to view.

This floor series would appear to represent a special feature constructed in connection with the laying of the facing blocks. There are no similar floor series in any other part of the Complex excavated by us. One may, of course, assume that in all likelihood a similar set of floors could be found in front of Feature A-1-d, the corresponding structure in the southeast corner of the Court area.

(g) *White sandy floor series.*—This floor series consists of a number of thin layers of white sandy material separated by tan and buff sandy layers. The floor series surrounded the entire A-1-e structure and presumably at one time had been in direct contact with the main body of the structure but was cut off by the trench containing the facing blocks just described. South of the feature the white floor series is represented by only a narrow remnant of what must have once been a small terrace or walkway overlooking the sandy area to the south.

This white floor series is extremely important in the interpretation of the history of the site. It recurs in various parts of the Complex and because of similarities in color, material, and in stratigraphic position is considered to be a unit. As will be described in more detail below, the foundations of Feature A-1-e were laid in a prepared pit. Space between the foundations and the edge of this pit was filled with clays, and these white sandy floors extended outward from the general Court area and overlay this fill and other primary elements of the structure.

(h) *Adobe bricks in clay mortar.*—The adobe bricks, unfired and sun-dried, were made out of a variety of clays of yellowish colors. They were not all alike; some being light and some dark yellow, others tending to yellowish brown, and a few having a yellowish-orange tone. They were laid up in heavy masses of red clay mortar. It was possible to remove entire adobes, or large pieces of them, to see what their original form had been. They were quite obviously hand-molded, approximately rectangular with rounded corners, although some were almost elliptical in plan view. The edges were not squared, but rather convex. The size varied a good deal, although the average was somewhere between 10 and 14 inches long, 8 to 10 inches wide, and $2\frac{1}{2}$ to $3\frac{1}{2}$ inches thick. These bricks were laid in well-defined courses (pl. 11, b), separated by layers of mortar from 1 to 3 inches thick. The same red clay mortar filled the spaces between the blocks of each course. Some of the courses were arranged in organized patterns. One that was observed consisted of blocks of adobes 4 wide by 3 long, that is, 12 adobes to a block. Each of these blocks of 12 adobes was placed with the long axes of the adobes in the same direction and at right angles to those of adobes in adjacent blocks. This pattern was varied only on the northwest edge of the course where a mass, 12 adobes long by 7 wide, was laid with the long axes east-west. Along the west edge of this level there was a border row of adobes laid end to end with the long axes north-south, that is, parallel to the edge of the course. Along the north edge of this same level the adobes were laid in a single row, side to side, again with long axes north-south. Time did not permit our clearing each of the courses of adobes to determine patterns used in them. It seems likely, and our field observations suggest, that



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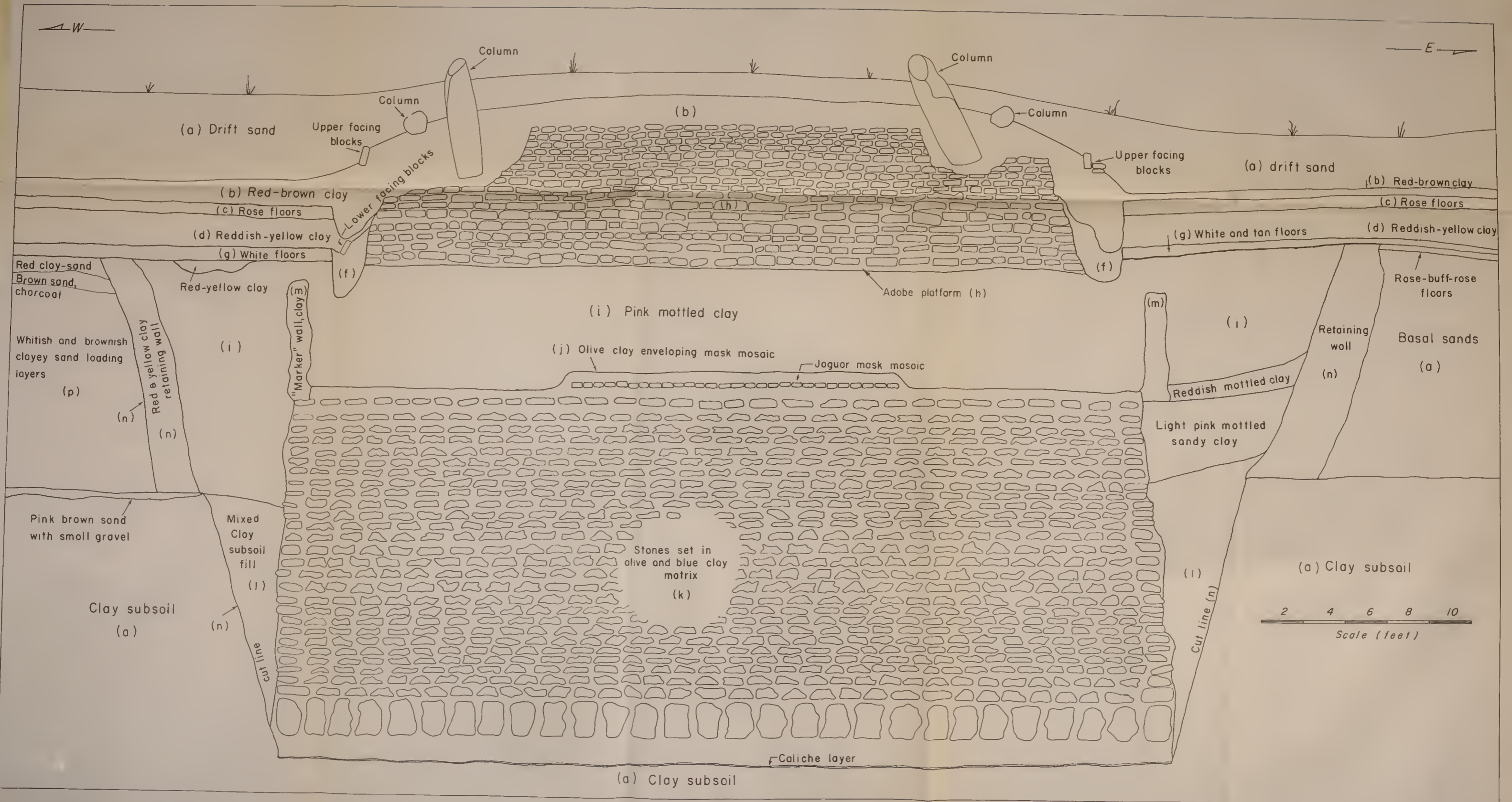


FIGURE 27. Southwest platform. East-west profile through center showing structural elements.

all or nearly all of the courses were laid in patterns of this same general type. The use of blocks of adobes would have provided a way of accommodating the adobes of various sizes in manageable units, and would also give a certain effect of breaking joints.

The number of courses of adobes was, strangely enough, difficult to determine. The uppermost, directly underlying the massive red clay cap, were very faintly outlined and difficult to see. It seems probable that the leaching action of soil water and, prior to the deposition of the drift sand over the top of the feature, the dry season soil cracking with its resultant mechanical mixing of soils, had largely destroyed the upper layers. The greatest number of courses that we could count was 16. In the small test pit dug in the feature in 1942, a picture was taken (LV, pl. 3) in which the light chanced to be just right to bring out color differences in the clay. In this photograph 15 courses of adobes are easily visible, and in addition one more may be seen, although with difficulty. It is also true that the 1942 test was quite close to the center of the structure, and may have cut through the highest point of the brickwork. Thus our figure of 16 courses counted in 1955 may be close to the number originally laid down.

The adobes lie directly under the red clay cap (b) which, as has been stated, covered the top of the structure. They lie directly on (i) the mottled pink clay fill. It is not known if the adobe brickwork constituted only the core of the structure at a certain period, or if it also formed the exposed top and sides. We are inclined to believe that the adobes were exposed on the sides of the feature, and possibly on the top as well, because of the appearance of the ends of the adobes on the south side where they are covered by the fill associated with the lower rows of facing blocks. There, in profile, they appear to extend out slightly over the edges of the layers of mortar between them, and the red clay mortar appears to have a concave vertical profile on each level, as though slightly washed out as a result of exposure to the weather. The combination of colors, the yellowish bricks which contrast strongly with the red clay of the mortar, would seem to be quite striking and decorative, perhaps too much so to have been covered up. We must caution, however, that this latter line of evidence is not to be relied upon too heavily at the site of La Venta.

On the northern, eastern, and western sides the outer ends of the adobes were cut away by the trench dug for the installation of the lower alinement of facing blocks. As we have indicated above, we believe that the lower few courses along the south side of the structure had been left relatively undisturbed. It appears that here the trench for the lower facing stones cut through the white floor series (g) but did not penetrate into the adobes, whereas on the other three sides the trench cut off a small amount of the adobe platform. The outer

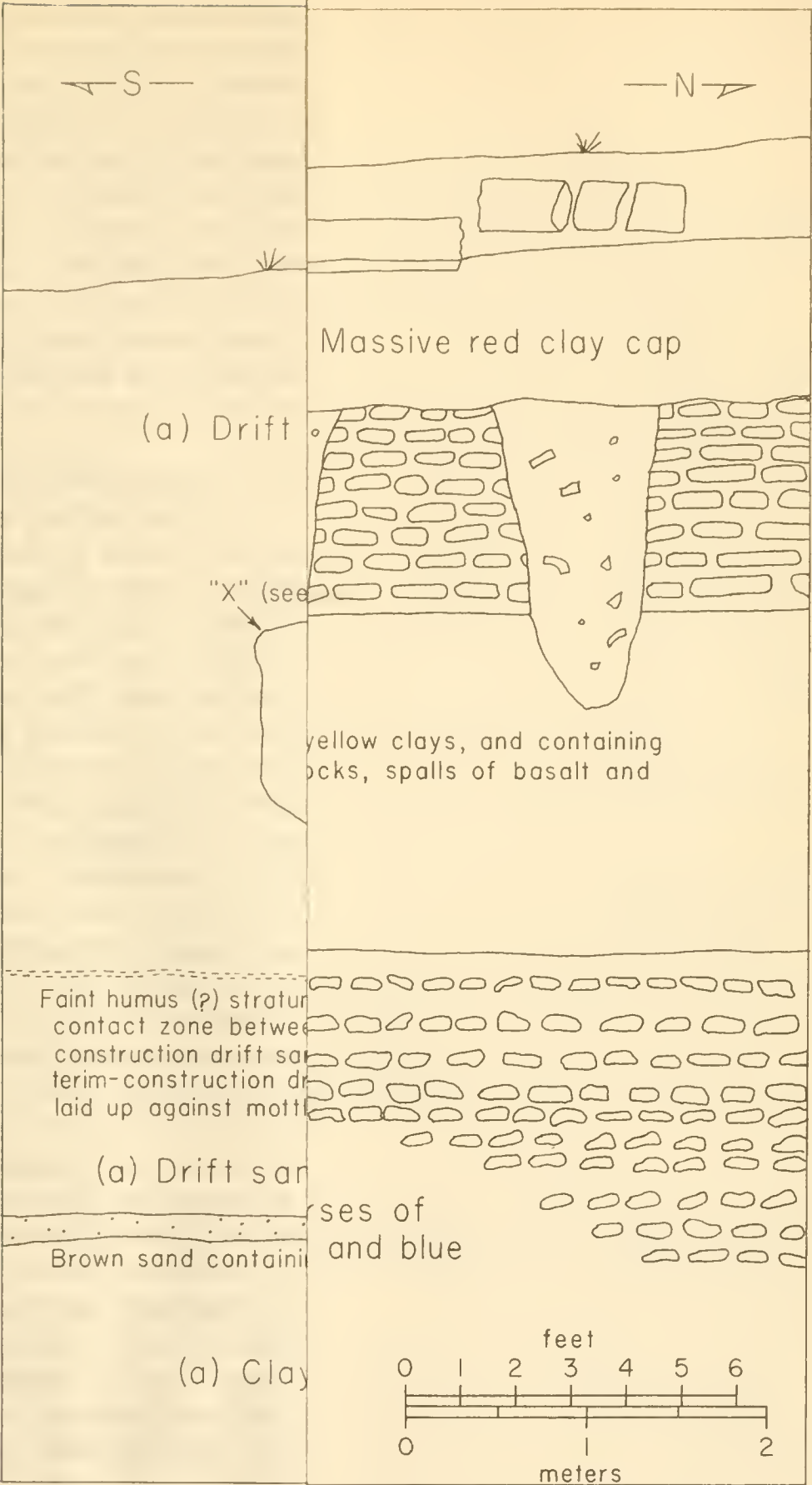
courses of adobes along the south side are stepped back successively, indicating that the structure had sloping sides.

We may estimate the amount cut off on the north side by assuming that the cut through the white floor series (g) was made the same distance out from the adobes here as it was on the south side. This gives us an estimate of 26 feet 4 inches for the original north-south dimension of the adobe structure. The east-west dimension must be very close to the original length because of the narrowness of the trench along these sides; we estimate that the original east-west dimension was approximately 34 feet 6 inches.

The adobe structure thus appears to have been a small rectangular platform of truncated pyramidal shape, measuring approximately 26 by 34½ feet at the base and standing approximately 6 feet above the level of the surrounding white Court floors.

(i) *Mottled pink clay fill*.—This was a layer of massive clay which supported, at its center, the mass of adobe brickwork, and to the south supported the terraces. It was capped by the white floor series (g) around the sides of the feature outside of the horizontal limits of the adobes. This fill consisted of a peculiar mixture of light reddish clays with pellets and streaks of white and yellow clays that combined to give a sort of pinkish effect. The clays also contained a fair quantity of sand, enough so that the material does not crack when sun-dried. We are unable, of course, to say whether this sand was added intentionally, or whether the clay was chosen because it naturally contained this useful material. This fill was quite compact and hard when moist, and very hard when dried. It was not entirely homogeneous. At the middle of its southern edge there was an area of similar texture, but of a slightly darker color. The northern half of the fill, the part sectioned by the north wall of our cut, showed several piles, or small mounds of material which was predominantly sandy and poorly consolidated. In the southeastern corner of the structure the clay was essentially the same in texture and consistency as the main mass, but with a variety of minor color differences so that loading lines rising to the south as the fill was built up against the wall were very easy to observe. It may be mentioned that similar fill was encountered in other features of the Complex.

The western wall of our excavation intersected three pits in a north-south row, whose centers were approximately 2½ feet east of the western row of lower facing blocks; at 9, 15, and 22 feet, respectively, south of the north row of facing blocks (fig. 28). The bottoms of the pits were approximately 3 feet below the level of the small blocks. We failed to note points of origin of these pits, but the content of the pitfall, variety of clays, broken adobes, fragments of serpentine, and spalls of columnar basalt, as well as the location of the pits, lead us to



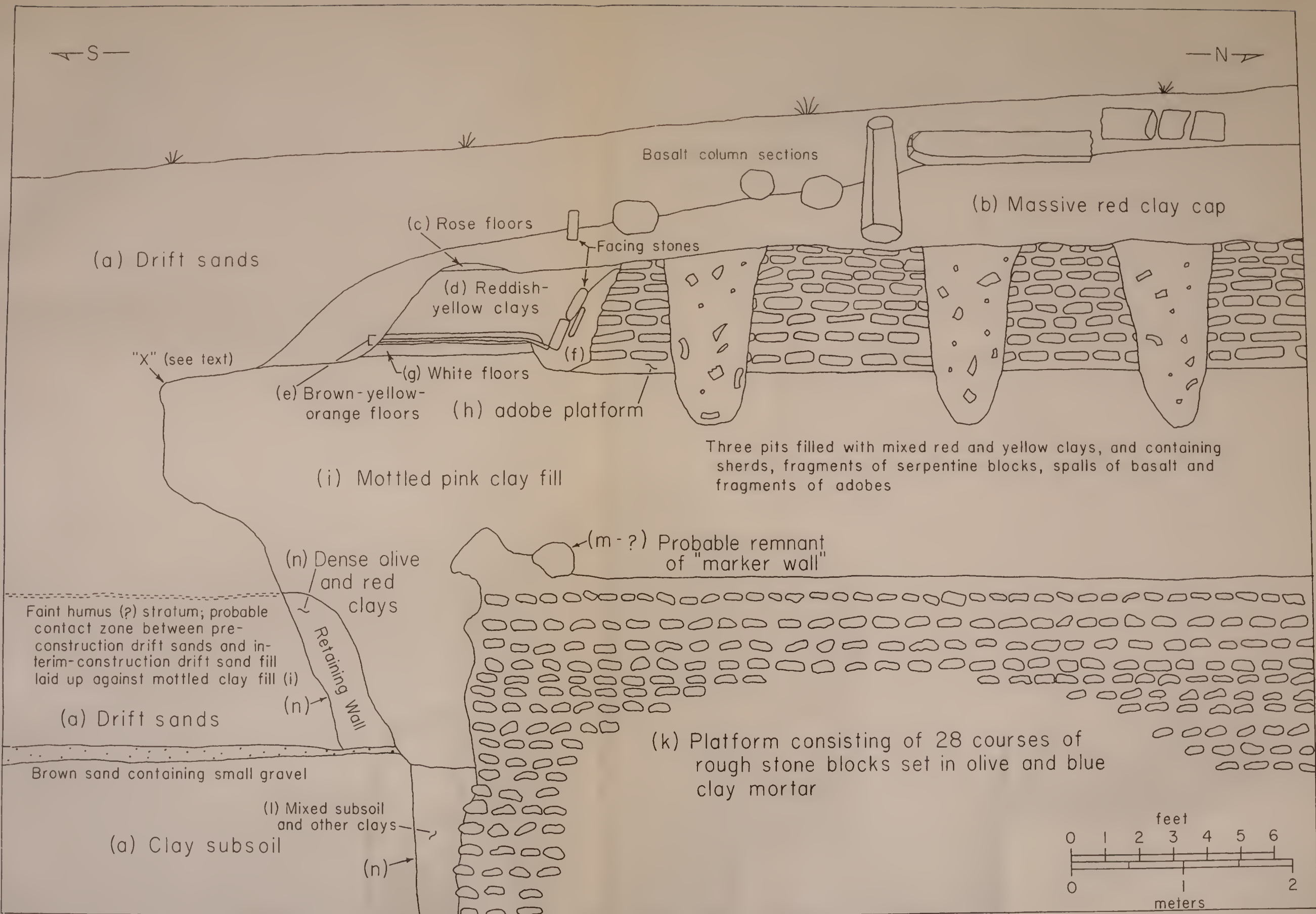


FIGURE 28.—Profile of southwest corner of Southwest Platform.

believe that they were to be associated with the red clay cap, or perhaps even postdated its construction. It is just possible that they may have been tests made in ancient times to examine the lower structures, or to search for a reference point. As will be brought out in another section, we found other evidence of checks of this sort.

(j) *Olive-colored clay layer and serpentine block mosaic.*—This was a layer of tough yellowish-olive clay about a foot thick, which formed a sort of envelope about a mosaic of serpentine blocks (pl. 14). That is to say, it formed the bedding material in which the blocks of mosaic were set, and also covered the mosaic. No observable distinction between the clay under and that over the mosaic could be found; therefore, we consider the clay envelope and the mosaic to form a single unit.

The mosaic (fig. 29) was almost the exact counterpart of that found in the similar feature (A-1-d) in the southeastern corner of the Complex in 1943. This present one consisted of 485 carefully cut and squared blocks of serpentine.¹¹ All these blocks had one flat surface, or face, so that they could be laid to form an even plane. The backs of some of the blocks were flat, those of others were round. A few well-preserved areas on some blocks (probably denser and harder portions of the stone, since serpentine varies greatly in hardness) retained enough polish to indicate in all probability that all the blocks were worked to have smooth shiny surfaces when laid in place. When uncovered by us, most of the blocks showed a greater or lesser amount of accretion. This was definitely not asphalt although described as such in 1943 (LV, pp. 56, 59), but was a manganese product, the residue of oxidation resulting from effect of soil water on the serpentine. The mosaic covered an area 15 feet 5 inches east-west by 20 feet 7½ inches north-south.¹² It was laid almost, but not quite, level. The main portion, that comprising the nearly square area forming the main part of the mask, dipped to the south 3½ inches on its eastern edge and 2⅓ inches on its western edge. The outlying diamond-shaped appendages on the south side sloped to the northward 2¾ inches.

The mosaic represented a very highly conventionalized mask of the jaguar, and incorporated most of the distinctive features repeated in other Olmec representatives of this deity (pls. 15, 16). The mask of course was intended to be viewed from the north. The south edge was the top. The four diamond-shaped appendages on the south side represented either a headdress or plumes. Within the main square area of the mask the four small open spaces with castellated upper edges represented four eyes, with the plumed eyebrows of the typical

¹¹ Wedel (LV, pp. 56-59) notes 497 stone elements in the mask in the Southeast Platform.

¹² The mask in the Southeast Platform (LV, pp. 56, 59) measured exactly the same east-west, but was 2 inches longer in overall (north-south) length.

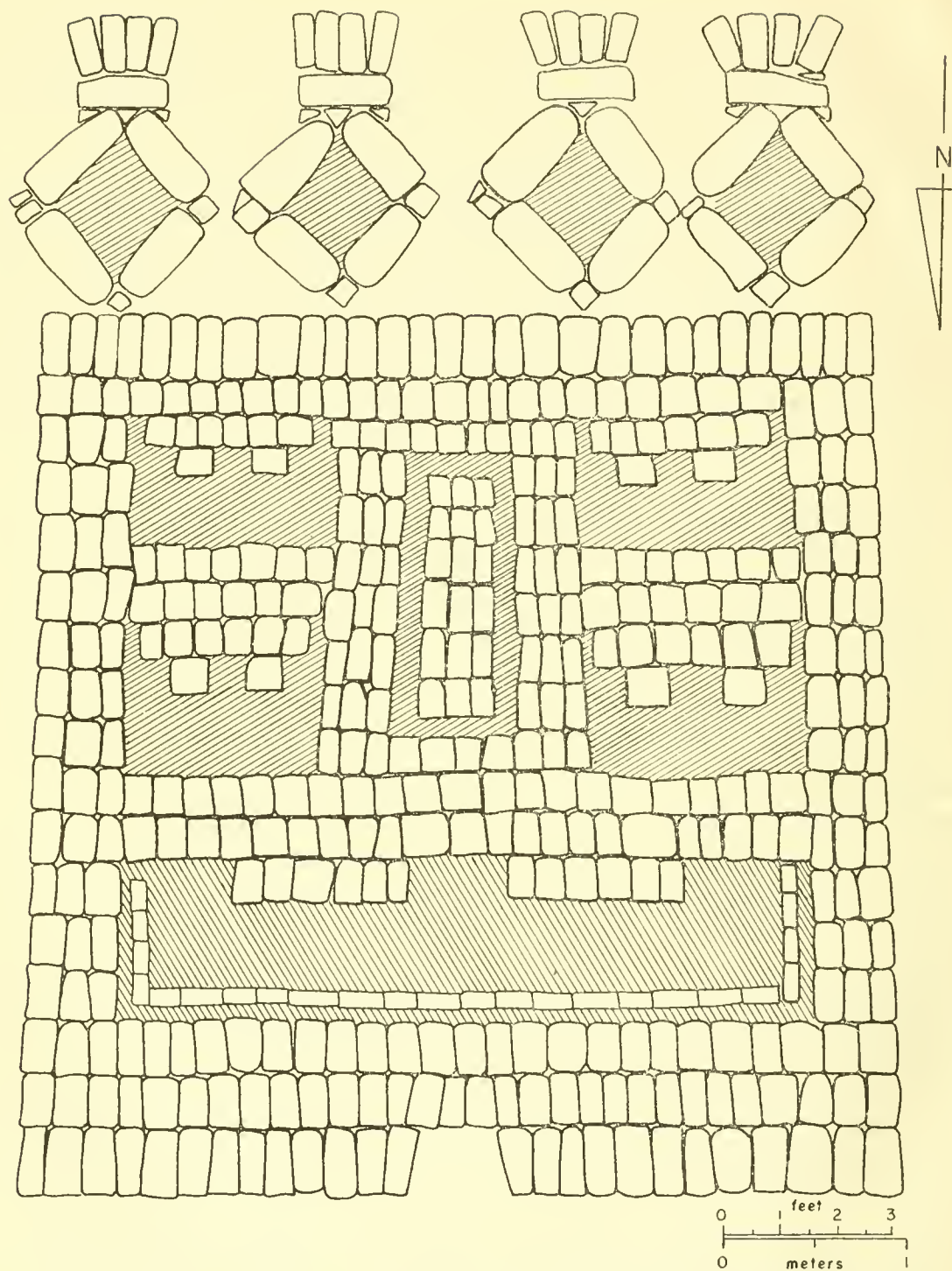


FIGURE 29.—Jaguar mask mosaic in Southwest Platform. Hachured areas indicate colored sands.

Olmec Jaguar representation. The long narrow panel in the center of the mask represented the nose, and the wide area across the lower portion, the mouth with lip and fangs. The small trapezoidal notch on the lower margin was the curve of the lower jaw of the beast. The open area of the mouth was filled with approximately an inch of cinnamon-colored sand. No other part (eyes, nose, chin cleft) was so treated, strangely enough, although the centers of the diamond-shaped appendages at the top were filled with clay, slightly more yellowish

in color than that of the matrix in which the mosaic was set. This yellowish clay may have made even more contrast when first deposited, and subsequently may have been tinged by the olive-colored clay above and below.

At the southwest corner of the mask mosaic, entirely encased in the olive clay matrix, was found a small kneeling human figure of fine-grained basalt (fig. 63). This figure will be described later in this report.

(k) *Olive and blue clays with rough stone blocks.*—Underlying the clay base of the mosaic was a slightly darker colored olive clay which formed one of the two major components of the base of the feature. This clay was quite dense and compact. It was not altogether uniform in color. As indicated, certain portions contained, instead of olive-colored clay, a clay of a gun-metal blue color containing bits of vegetable material, which looked like subsoil from a swamp area.

The other constituent of the bottom of the structure consisted of chunks of stone, principally serpentine, although a few pieces of other kinds of metamorphic materials such as gneiss and schist were observed. By far the greater proportion of these pieces of stone were rough, irregular chunks in form. A few showed roughly chipped and uneven edges as though they had been partly prepared for working into blocks, and a smaller number were partly shaped and worked blocks that had apparently broken during the process of manufacture. In brief, the stone materials embedded into clay had the general appearance of quarry refuse. There were a very few blocks of serpentine which had been worked into square, flat plaques and which were unbroken. These stones were laid in 28 well-arranged levels in the clay.

This foundation of clay and rough stones was subterranean, that is to say, it was built in a large pit especially dug to contain it. The top layer of stones (pl. 17) occurred at an average depth of about 1 foot below the base of the mosaic just described, and 14 feet 7 inches below the highest preserved point of the red clay cap. This layer of stones had an extent of 29 feet 4 inches north-south by 40 feet 1 inch east-west. The southern edge of the layer was composed of pieces selected because they had one comparatively straight end. These stones were laid with their long axis north-south, and the straight ends were evened to produce a neat line along the southern edge of the layer. The same arrangement was followed in all the other layers, except the bottom one. Other edges, that is those on the east, north, and west, were not treated in the same fashion, but were rough and uneven, indicating that construction of each layer began with the southern edge. To return to the top layer, all other stones were laid with their long axis east and west. On being cleared they gave the impression of being laid in rows. Careful inspection, however, made

clear that this was not so. The stones were not only of various widths, but of various shapes, and were laid 4 to 5 inches apart; consequently rows were formed by a few stones, pinched out, and new ones were started. In the entire surface of the layer there is not a single row that runs all the way across. Some degree of skill and craftsmanship, and planning as well, was involved in making such a regular appearing layer out of irregular chunks of stone. This same general system was followed in all the layers which we cleared.

The stones of the top layer ranged from 10 to 15 inches in length, 5 to 10 inches in width, and 2 to 5 inches in thickness. There were no very large, nor very small pieces in the layer; an "average" appearing stone was 12 by 7 by 2 inches in size. Counts made of two randomly selected 10 foot by 10 foot squares, gave an average of 141 stones per hundred square feet of area.

The second layer of rough stones, which occurred at a depth of 10 inches below the top of the first layer, was like the top one in the arrangement of the stones. The southern edge was evened off with the stones laid in a north-south direction and the rest of the stones were laid east and west in what looked like regular rows, but which actually were not. The stones of this layer were slightly larger, so that the count of two squares, 10 feet by 10 feet in area, gave an average of 114 stones per hundred square feet.

The size of the stones increased and the stones were set closer together as we went downward through the layers; also the layers were closer set with less and less clay between them.

In order to expose the jaguar mask mosaic, we removed the stratigraphic control wall after recording the sections exposed in it. When we began to remove the layers of stone we once more began to leave a stratigraphic wall in the middle of our cut. The first four layers of stone were partly removed, one at a time, from the west side of our excavation. Those in the eastern half were stepped down so that at one stage we had remnants of all four of them in their original vertical relationship (pl. 18, *a*). Since the layers of stone proved to continue downward, we removed the remnants we had left in the east side of the cut and stripped off both sides down to and including the eighth layer. From the eighth layer on only the western side of our excavation was actually worked. Beginning with the 18th layer (pl. 18, *b*) averaging 9 feet below the first layer of stone, we reduced our excavation to an 8-foot by 4-foot cut in order to reach the bottom of the structure during the 1955 season.

The chief points of difference in the layers that we were able to note were the following: In the eighth layer, in the northwest corner, there was a small area in which, instead of the usual rough or partly worked chunks of stone, completely squared blocks of serpentine had

been placed. These blocks varied somewhat in size and were laid edge to edge to form a small level area without, however, actually being laid in rows. This part of the layer that we exposed was approximately 6½ by 7 feet in extent in the very corner of our cut. The shaped stones continued on for unknown distances into the north and west walls of our excavation. In the 15th and 16th layers, in the northern 4 feet exposed in our excavation, the stones were embedded in the blue clay previously described that replaced the olive-colored clay. The area of this blue clay increased rapidly in successive layers below. We encountered it in the bottom of our cut at the south edge of the base. The 28th layer of stones, the lowermost, were stood on their edges, not laid flat (figs. 26, 27). It and the 27th layer, immediately above, consisted of the largest stones of all, at least in these small sections we sampled. Many of the pieces from these two layers weighed from 70 to 100 pounds.

Beneath the 28th layer of stones there was a 13-inch layer of compact blue clay which lay over the base of the pit. The contact of this blue clay layer with the basal subsoil clays was marked by a layer approximately one-fourth of an inch thick of a hard, dark-gray calichelike material. This marked the bottom of the clay and stone mass, at a depth of 17 feet 5 inches below the top of the dark olive clay and 31 feet 5 inches below the top of the red clay cap.

The total mass of this stone and clay base of Feature A-1-e is of a good deal of interest. If, for rough and ready computation, we assume that the outer faces of the clay-and-stone mass were vertical and regular, although we know that they were actually not, the total volume equals 20,500 cubic feet.¹³ If we assume further that two-thirds of the mass consisted of stone, which would appear to be a fairly conservative guess, we get a figure in the neighborhood of 13,650 cubic feet of stone; at 150 pounds per cubic foot (a figure based on the average specific gravity of serpentine) the quantity of stone comes to just over 1,000 tons. This figure is of course a very rough estimate which may be off 100 or even 200 tons either way. Even at that, it is clear that there was a very large quantity of stone used, especially when it is remembered that it all had to be brought in over long distances to this site in the stoneless coastal plain.

(1) *Miscellaneous fill between clay-and-stone base and subsoil.*—As the profiles (figs. 26, 27) show, the sides of the clay-and-stone mass were not quite vertical since some courses extended out farther than others. However, it seems probable that they were intended to be approximately vertical. The walls of the pit dug to contain the base were, as will be brought out, not vertical but steeply sloped. The

¹³ Where exposed by us, there were bulges past the edge of the top layer that would increase the total volume.

space left between base and subsoil, which narrowed from top to bottom, was filled with varieties of clays. In some places it was fairly clear that quantities of the material were dug from the pit itself, that is to say, the subsoil mixed with other clays was thrown back in. The fill, because of the variety of materials of which it was composed, obviously differed from other built-up clay layers, most of which were very clearly of clay selected for their color, or combination of colors. This fill was a heterogeneous mass. A most significant point regarding it was that loading lines were clearly visible in all sections made through it. The varieties of clays used made these very clear. These loading lines uniformly sloped upward from the clay-and-stone base to the edge of the pit. This suggests that as the base was built up, the space between it and the edge of the pit was filled, level by level, from the base itself.

(*m*) *Wall-like fill of specially colored clays.*—Associated with the layer of olive clay and rough stones was a structural component which appeared in cross section as a very conspicuous low, more or less vertical, wall of brightly colored clays (pl. 19). We applied the term “marker wall” to distinguish this “wall” from the retaining wall (*n*) to be described below.

This component was actually surrounded by the mottled pink clay fill, and in a sense formed a structural link between this latter type of fill and the base. We first observed it in the southeastern area of our excavation where it was noted to extend in an east-west direction from the stratigraphic control wall to the eastern wall of our trench. It appeared as a quantity of bright red clay containing chunks of dark green clays, and inclusions from 1 to 3 inches in diameter of white and yellowish sandy material. It was most conspicuous in contrast to the mottled pink fill which surrounded it. When completely sectioned, it was observed to be 5 feet 2 inches high, with an average width of 11 inches. In the east wall of our excavation its base was situated 5 inches south (outside) of the southern edge of the clay-and-stone mass, and about the same distance below the level of the top of this mass. The top 2 feet, instead of being vertical, was inclined to the south at an angle of about 45°. Where cross-sectioned by the stratigraphic control wall (fig. 26) it was noted that this component was closer to the top of the base. In other words, it was not quite parallel to the edge of the base although it probably was intended to be. To the west of the stratigraphic control wall this component seemed to dwindle away. In the southwestern corner of our excavation (fig. 28) all that remained of it was an irregular mass of red clay with green and white inclusions which lay atop the clay and stone mass about 15 inches north of its southern edge. In the 18 feet from the stratigraphic control wall in the center of our excavation to the southwestern corner of this

excavation, the red clay wall had bent $1\frac{1}{2}$ feet to the north and diminished 30 inches in height. The reason for this change is not clear, but it probably was connected with a number of other differences which set off the southwestern corner from the rest of the structure, to be discussed below with relation to the pink mottled clay layer (i) and clay retaining wall (n).

When cutting extensions from our main excavation to locate the edges of the clay-and-stone mass, we found that the wall-like component in the southeastern corner of our cut continued eastward to the corner of the clay-and-stone layer, at which point it joined a similar structural element which ran northward just outside of, and following, the edge of the base. The principal difference between this eastern component and the first one we noted was that the former consisted of green clay with only a few bits of red clay. Where sectioned in our trench, this green component resembled a vertical well-made wall 1 foot 6 inches through at the base, tapering to 1 foot at the top. It was 5 feet 2 inches high. The flat base was just outside the clay-and-stone mass, with its inner edge touching the olive clay. Subsequently, our other extensions from the main excavation cross-sectioned similar components on the north and on the west sides, which like the one just described ran along the edge of the base and just outside of it. Both northern and western segments consisted of mixtures of clay in which red predominated, as was the case with the southern segment. In brief, the entire base was surrounded by a strikingly colored wall-like element, which was carried upward into the mottled clay fill.

(n) *Pit into natural soil formation, and retaining wall against sand overburden.*—The pit which was dug for the base of Feature A-1-e was noteworthy, not only for its size and depth, but also for the steep slope of its walls. The dimensions of its original margin are difficult to measure accurately for two reasons. First, the original sand surface of the site sloped in this particular locality in two directions, from east to west and from north to south. To the west it sloped quite steeply, so that the extension of our trench in the northwest corner, which was not dug completely to the bottom, did not encounter the original old sand surface. Instead, we found, lying outside of the components of the feature, a mass of older artificial fill which had been cut through (fig. 27). We estimated the upper dimensions of the pit as 50 feet 4 inches north-south by 61 feet 3 inches east-west. In this locality, the upper edge of the clay subsoil runs in a nearly horizontal plane in all directions. At the level of the clay subsoil the dimensions of the pit were 41 feet north-south by 49 feet 5 inches east-west. The bottom of the pit, if we assume that our cross sections in our reduced excavation in the southwestern corner are representa-

tive, was approximately of the same dimensions as the top of the clay-and-stone base (k). As to the depths: in the northeast corner, the pit cut through 10 feet 10 inches of sand; in the southeast corner 8 feet 1 inch; and in the southwest corner approximately 4 feet 4 inches. The depth of the pit into the clay subsoil was 13 feet, if we assume the bottom of the pit was level.

The pit was dug through the sand, leaving walls with slopes ranging from 70° to 80° . On reaching the top of the clay subsoil the horizontal dimensions of the pit were reduced between 2 and 4 feet north-south and about the same amount east-west. This left a shelf between 2 and 3 feet wide all around the inside of the pit. Masses of heavy clay, primarily red clay with large inclusions of white sandy clays (pl. 19), were built upward on this shelf on all four sides of the pit. They were not built vertically, but sloped, following the contour of the sand surface against which they were laid. In thickness, these components varied somewhat. The east wall, where sectioned, averaged about 2 feet 6 inches through. The one across the north side, which, where sectioned by our trench, was the tallest and also the narrowest, tapering rapidly from its 2 feet 8 inch width at the base to an average of 1 foot 6 inches. The height of these structural components varied according to the height of the sand bank against which they were built. The lowest observed by us was the southwestern portion of the south wall, which narrowed and dipped to the west until the southwestern corner of our trench cross-sectioned a wall 4 feet 5 inches high and 1 foot 6 inches in maximum width. Everywhere around the cut, except in the southwest corner, the mottled pink fill layer (i) extended out over the edges of the base to make contact with this sloping formation of clay. In the southwest corner part of the mottled pink fill extended over the clay wall and made contact directly with the surrounding gray sand. This situation presents a special problem, which will be discussed later on.

Below the edge of the clay subsoil the slope of the pit followed approximately the same angle as was used through the drift sands. Where we exposed it, it was observed to range from 70° to 80° . Near the bottom of our reduced trench it became almost vertical, being measured at 89° .

(o) *Buff and brown sandy floor series with suggestion of water sorting.*—Layers of material of this type, similar in color, texture, as well as the water-sorted appearance, were noted at a number of other points in Complex A. We believe that they represent an early structural phase of the site for reasons which will be described elsewhere. At the feature presently being discussed, no such layers were found in the structure itself. However, in the extension of our trench in the northeastern corner, layers of this type were exposed. Here the ancient

excavation of the pit for the base cut through 1 foot 2½ inches of layers of this type (fig. 26). There appeared to be three levels of these materials, each consisting of a considerable number of thin strata, ranging from one-fourth to three-fourths of an inch thick each. It was also noted that this series of levels contained considerable amounts of charcoal at the point where they were cut by the old pit. The white floor series lay directly over these levels as elsewhere in the Complex. At the southeastern corner of our excavation (see fig. 27) another possible occurrence of the "water-sorted" floor series was noted. This was a level averaging 3 inches thick made up of three thin strata of colored clayey sands. This level had been cut by the excavation of the pit for the A-1-e stone and clay platform and later had been covered by the white floor series (g). The level consisted of two layers of pinkish clayey sand, each about an inch thick, between which lay a 1-inch thick layer of buff clayey sand. The differences between this floor series and the "water-sorted" floor series as encountered elsewhere in the Court are worthy of note. The position of this rose-buff-rose series, however, above the humus-stained drift sands and below the white floor series, suggests that it may simply be a variant of the "water-sorted" floor series not observed elsewhere by us.

(p) *White, brown and red-brown clayey sand fill.*—Artificial fill layers of clayey sand in obviously loaded layers which varied somewhat in color, being white or near white, brown and red brown, and in which the sand content predominated, were found immediately to the west of Feature A-1-e. These levels were outside of all components of the structure itself and appeared to have been cut through by the pit for the foundation (see fig. 27). They underlaid the white floor series; that is to say that these layers were found in a stratigraphic position in which the buff and brown sandy floor series normally occurred. The chronological situation is not clear. This fill may have been associated with the white floor series, but it is our feeling that the artificial fill was laid down during the initial Court leveling period to bring the surface in this area up to the level obtained elsewhere in the Court and that it later was cut through by the pit for the A-1-e foundation.

INTERPRETATIONS OF FEATURE A-1-E

FUNCTIONS

It is quite certain that the part of the structure that we have referred to as the "clay-and-stone base" (k) was not a foundation in the ordinary sense. It was entirely nonfunctional. In the first place, such laborious construction was not necessary for stability. On this same site in La Venta, in fact in certain parts of the same complex, fairly substantial structures of clay were built directly on the original surface. Obviously the builders knew that this surface was stable enough

to support such features. At the most, if stability were a point regarded as important, they would have had to dig down only to the surface of clay subsoil and not 13 feet below it. Second, the inclusion of the very large quantity of rock placed in layers of the "foundation" was actually not necessary either. That it was not, was obviously known to the builders who constructed other and larger mounds of sand and clay, structures which lasted throughout their times and are still substantial mounds at the present day. An additional fact regarding this part of the structure is that our evidence indicates quite clearly that neither the stones of the base nor those of the more painstakingly prepared mosaic (j) can be considered ornamental since they were not left exposed to view, but immediately upon being deposited were covered with layers of clay. Therefore, we are forced to conclude that the rough stone layers, and the mosaic as well, formed an offering and were of a religious rather than functional or ornamental significance. We know that in much later times jade was valued most highly by the inhabitants of the area. The fact that objects of jade were used as offerings by the Olmec indicates that they, too, prized this substance. We might suggest, therefore, that the green serpentine may have represented jade in a certain symbolic sense. In addition, the cost of the serpentine in terms of human labor required to transport it the long distance from the source made it valuable and worthy to be used as an offering material. The number of rough stone layers, 28 in all, may have been significant also, perhaps referring to a lunar month. The rough stone layers and the clays in which they were placed, and the mosaic mask, will be referred to as "Massive Offering No. 1."

If we may use the hypothesis that this huge subterranean mass was not a structure in the ordinary sense, but simply an offering, and that the structure, architecturally speaking, was the small platform mound on top, we have something which comes closer to falling within the normal areal pattern and, as will be brought out below, gives us a logical base for interpretations of structural sequences.

The next two points to be considered refer to our interpretations of certain minor aspects noted in the course of the excavations. For example, the sloping clay walls of red clays with white inclusions (n) which were laid up against the sand at the edges of the original pit were simply retaining walls, we believe, laid up to prevent cave-ins while the deeper portion of the pit was being dug and the offering was being placed in it. We have another example of such an engineering device from another part of Complex A-1 (cf. fig. 10). This matter became quite clear to us, since we ourselves were quite conscious of the problem imposed by working below steep faces of the loose light sand. We found it necessary to slope the upper walls of our trenches which cut through the drift sand to about 60°.

Another minor component worth special comment is the wall-like fill of specially colored clays (m). Our first impression of this element was that it was a wall to support the fill during construction. However, a little thought made it obvious that the component was too thin and too nearly vertical to ever have stood alone or to have given much support to a face. The components just described which were interpreted as real retaining walls (n) were invariably laid up on slopes. The thin vertical walls (m) could not have functioned in this fashion. In addition, there was the peculiar angle of the upper portion of the material noted in the southeastern wall of our cut. Finally, there was the fact that in several exposures the component was completely surrounded by mottled pink fill, not only on both sides but above and below as well. Next, we tried to see the component as a ditch dug and refilled with special material. Its irregular outline, however, as exposed in our northern trench and in the southeastern corner of the feature, and its narrowness and relatively great depth—which would pose a problem to manual methods of ditch digging even today—combined to render this interpretation incredible. It became apparent that the only way in which the “wall” could reasonably have been constructed was that it must have been built up simultaneously with the deposition of the mottled pink fill in which it was placed. There are at least two possible interpretations of its function. One of these is that it may have been intended as a permanent marker, defining the outer perimeter of the layers of clay and rough stone. That is to say if the builders had intended to make it possible for their successors, in some renovation of the feature, to determine exactly what the dimensions of the original structure had been, they could have done so by this method. The fact that the south segment of the component did not run quite true might be attributed to bad workmanship or accident in the course of the construction. There is also the possibility that the component had some ritual significance which must remain unknown to us. The fact that its eastern segment was predominantly of green color hints at such an interpretation. We shall point out another possible association of green with an easterly direction in another part of our excavations. Another instance of surrounding a buried stone structure with a wall-like element, the significance of which may be different from that of the present instance, is to be found in Massive Offering No. 3, Feature A-1-h, where a “wall” formed of dressed serpentine blocks surrounds the offering.

The situation noted in the southwestern quarter of Feature A-1-e is of immediate significance to the chronological interpretation. As was noted above, the sloping mass of clay (n) laid up against the sand wall around the pit is believed to have been a retaining wall. Its purpose was apparently to keep sand from falling into the pit while

work was going on. In other parts of the structure that were sectioned by our trenches, the mottled pink fill was carried out against the retaining wall. Only in this southwestern quarter of the feature did we find this type of fill extending out over a low retaining wall to make direct contact with the sand. One possible explanation of this situation is that there was a time difference between two steps in the construction of the feature. That is, if the original retaining wall actually was built against a sand bank which sloped sharply to the west and the offering was put in place within the pit, but left uncovered, this situation would be accounted for. It would mean that prior to the deposition of the mottled pink clay (i), sand accumulated in front of the southwest corner of the feature so that eventually, when the fill was deposited, it was simply carried out to the edge of the sand. This does not appear to be a likely possibility when the manner in which the mottled pink clay and drift sands come in contact is studied in the profile drawings, figures 26 and 27. Furthermore, all the evidence points to the immediate covering of the stone and clay structure (k) and mosaic (j) by the mottled pink fill, *not* to a period during which the mosaic was left exposed and during which drift sands were building up south of the structure. We can be practically certain that had the pit remained open for any length of time in this region of torrential tropical rains, clear evidence of this would be present in the form of eroded surfaces and deposits of water-laid clays and sands. Instead of this we found all surfaces in excellent shape, and there is no doubt in our minds that the mottled pink clay (i) was laid down immediately after the stone and clay platform and the mosaic were constructed. This of course does not rule out the possibility that the mosaic mask may have laid exposed to view for a short time during which ceremonial activities may have been conducted. The small basalt human figure (fig. 63) which was found at the southwestern corner of the mosaic may have figured in just this kind of activity.

We believe that the reason for the difference in construction methods employed in the southwestern quarter of the feature is to be found in the original slope of the drift sands in this area of the site. We have noted in our discussion of the Northwest Platform, Feature A-1-g, that the sand ridge on which Complex A is built drops off rather sharply along its western side. This made necessary the addition of fill materials along the western side to bring the level up to the general Court level. Such fill was encountered by Wedel (LV, pp. 46-49) beneath the west Court wall and by us below the Northwest Platform, and we have described above a similar fill (fig. 27) found outside of the clay retaining wall (n) at the northwest corner of the present feature, A-1-e. We assume that this fill extended for some

distance west of the Court wall to give the required foundation for the wall. We do not know how far south it extended; probably it continued only a short distance south of the corner of the Court wall and our trench at the northwest corner of Feature A-1-e. South of the area which was raised in level by the (p) fill, the original drift sand surface probably remained relatively undisturbed.

When the pit for the stone and clay platform (k) was dug, its northern section cut through the prepared Court floor, including the "water-sorted" floors (o) in the northeastern quarter and the artificial fill (p) in the northwestern quarter. The southern margin of the pit, however, cut through only the original drift sands. When the clay subsoil (a) was reached, the clay retaining wall (n) was plastered up against the cut bank to the surface level and digging of the pit was resumed through the subsoil clays. Thus we believe that the top of the clay retaining wall (n) shows fairly accurately the surface level existing at the time the pit was dug. If we are correct in this reconstruction, the slope of the original preconstruction drift sands should be apparent from a comparison of the height of the retaining wall at different points around the feature, except in the area in the northwest part of the feature which was raised by the addition of the artificial fill (p). The east-west slope across the south side of the feature, calculated by this method, was 7 feet 10 inches in 35 feet, i. e., the original surface of the drift sand was 7 feet 10 inches lower at the southwest corner of our excavation than at the southeast corner, 35 feet to the east. A slight slope of approximately 6 inches from north to south in the vicinity of Feature A-1-e appears from a comparison of the height of the retaining wall at the northeast and southeast corners of our excavation.

If the top of the retaining wall along the southern edge of A-1-e marks the approximate surface level of the preconstruction drift sands, we might expect to find evidence in the drift sand itself to indicate the former surface. We searched carefully for such a surface line along the southern edge of our excavation but except at the southwest corner were unsuccessful. At the southwest corner (fig. 28) a faint zone of what appeared to be humus with scattered minute fragments of charcoal was visible in the drift sands at the level of the clay retaining wall. This darkened stratum averaged approximately 4 inches thick along the several feet exposed by us. It is possible that this stratum was originally somewhat thicker but had been scraped off in the preconstruction preparations in this area of the site. This might account for its absence along the remainder of the south side but we have no evidence on which to base a positive statement one way or the other. We can only note that elsewhere in Complex A the upper levels of the preconstruction drift sands are

clearly evident by their "humus-stained" appearance and are usually more than a foot in thickness.

Above the darkened stratum just described, extending up to the present surface level, we found only gray drift sand with no indications of time differences in its deposition. We believe, however, that this upper drift sand was deposited in this location partly by human and partly by natural means. During the laying down of the mottled pink clay fill (i) drift sand removed from some nearby location was being filled in along the south side of the feature to compensate for the slope of the original sand ridge. As the mottled pink clay rose in height, so did the sand fill being banked against it. This continued to the top of the mottled clay fill. At this point the surface of the drift sand fill was approximately at point X in figure 28. The adobe platform (h) and white floors (g) were then built over the mottled pink clay (i). The white floors may originally have extended a few feet farther south of the adobe platform than shown in figure 26, but have been cut off by subsequent constructions. The drift sand level marked by point X (fig. 28), or perhaps slightly above this, was the surface during the subsequent Olmec use of the site. Following abandonment of the site the drift sands accumulated to the present surface level. No evidence of the Olmec occupation surface at or near the level of point X could be detected. This was the situation noted generally around structures which were surrounded by drift sands, as in the case of Mounds A-3 and A-5, and may indicate that the Olmec kept the sand surface clear of plant growth and debris. Thus the lack of a stratigraphic break between early and recent drift sands may not be significant.

ENGINEERING

Certain information which we were able to derive relating to construction technique used in building Feature A-1-e places an interesting light on the engineering capabilities of the ancient Olmec. For example, the way in which the pit to contain the offering under the platform was dug indicates quite clearly that the builders understood quite well just what they could and could not do with the soils and materials at their disposal. The retaining wall (n) built to keep sand from caving into the pit as they dug it was clearly a most ingenious and effective device. Heavy compact clays laid up along the slope were quite adequate to prevent the sand from shifting down into the pit.

Another point which is worth considering concerns the handling of the basalt columns set up around the top of the structure. Many of these were set in individual holes, differing in this regard from those set up in the wall A-1-a enclosing the Court, which were set up in a trench. If, as we believe, the columns were set so that their tops

were leveled, very careful measurements must have been involved in digging the pits to the right depth. Once set into its hole, a basalt column would have been most difficult to remove had the hole been too shallow. It certainly could not have been lifted out like a fence post, but would have had to be dug out. We found no indications of extensive digging around any of the columns that might indicate that they had been removed and then replaced.

If the wall-like fill of differently colored clays (m) actually was, as suggested, a sort of marker to define the limits of the underlying offering, it was a most ingenious sort of benchmark. We have of course no way of determining whether this was the real purpose of the "marker wall." We saw nothing which would indicate positively that use was made of it in later construction epochs. Once the adobe platform (h) was in place it would serve as the feature around which later alterations and additions were planned. Even the alinement of the adobe platform itself does not appear to have depended upon the "marker wall" since the one is not centered exactly over the other. We are inclined to regard this feature as a "marker wall" more in the symbolic than in the practical sense.

CHRONOLOGY

If, on the basis of our interpretations concerning the function of Feature A-1-e, we turn to a determination of the chronological sequence and relationships of the several layers of the structure, we come to the following conclusions.

Phase I is represented here, as elsewhere in Complex A, by the buff and brown "water-sorted" floor series (o), which was observed only in the northeastern quarter of A-1-e. We have mentioned above another possible occurrence of the "water-sorted" series in the form of the rose-buff-rose floor level which was exposed in the southeast corner of the feature. The white, brown, and red-brown clayey sand fill (p) against which the clay retaining wall (n) was laid along the western side of the feature may represent a Phase I component or it may be contemporaneous with the clay wall (n) and the white floor series (g). This fill material has been cut through by the pit for the stone and clay platform (k), and it is our opinion, as has been detailed above, that it was laid down during the Phase I leveling of the Ceremonial Court.

Phase II, the initial construction phase of the Southwest Platform itself, is divisible into two subphases. Phase II-a consisted of the digging of the pit (n) and laying up of its clay retaining wall (n), the placing of the massive offering, including both the 28 rough stone layers embedded in clay (k) and the mosaic mask (j), the deposition

of the mottled pink fill (i) and "marker wall" (m), and the construction of the adobe brickwork platform (h). At this time the adobe platform was the only part of the structure which was visible above the ground level. The structure was surrounded by and contemporaneous with the whole floor series (g) in the general Court area. We do not know whether the adobe structure was surfaced or painted in any way. It is possible that the color of the adobes themselves was sufficient ornamentation, but we should note that in other parts of Complex A, as in Mounds A-2 and A-3, structures were given surface coatings in Phase II times.

Phase II-b is represented in our analysis principally by the U-shaped trench dug around the perimeter of the adobe platform in which a special fill (f) was put to support the lower set of facing stones. It is possible that the adobe brickwork was entirely covered with a layer of the fill in which the facing blocks were set, but this is not certain. We do know that there was a special set of floors (e) laid on a narrow terrace south of the main platform as a part of this subphase.

Phase III probably involved some enlargement of the adobe platform in the course of which its outer walls were covered with clay fill (d) and the perimeter was surfaced with the old-rose floor series (c). We do not know whether or not the fill was added to the top of the platform at this time. If it was, it was scraped off in connection with the rebuilding during the succeeding construction phase. The principal Phase III effect in this part of the site appears to have been to raise the Court level surrounding the A-1-e platform, thus reducing its height.

Phase IV was represented by the deposition of the massive red clay cap (b) built on top of the platform and around the sides of it, and as has been brought out, over the rest of the Complex as well. With this layer are associated the basalt columns and upper facing stones, and the use of the waterworn nodules of limestone. This phase involved a very extensive modification and enlargement of the feature as well as introducing new elements in the pattern: the basalt columns and the slabs of limestone. Subsequent to Phase IV came abandonment of the site, heavy erosion which damaged the south side of the feature and most particularly the southwest corner, and finally the continued gradual deposition of the drift sand (a) which built up to form the modern surface.

The several building stages may be summarized as follows:

Phase IV	-----	(b)
Phase III	-----	(c)-(d)
Phase II-b	-----	(e)-(f)
Phase II-a	-----	(g)-(n)
Phase I	-----	(o)-(p)

EXCAVATIONS IN MOUND A-5

Mound A-5 is the feature which was designated "Earth Embankment A-5" in the 1952 report (LV, fig. 14). The mound appeared as a long low ridge, running parallel to the central axis of the site. Because of the quantity of the drift sand which had filled in around it, the mound was rather inconspicuous. Probing along its crest revealed pieces of stone spaced a few feet apart for some distance along the top. When the drift sand was cleared off and these stones were exposed, they were found to be waterworn pieces of white limestone lying on the surface of the structure. At what appeared to be the highest point of the feature, an excavation was laid off 38 feet in a north-south direction by 30 feet east-west. This cut straddled the crest of the mound and the eastern slope toward Mound A-3. An extension, approximately 30 feet in length, was dug from the northeast corner of the excavation across the slight depression toward Mound A-3.

When the drift sand had been cleared from the top of the feature and its side within the limits of the excavation, it was found that there was a layer of drift sand which at its shallowest on the highest part of the mound measured 1 foot 4 inches deep and which increased in depth to the eastward to some 17 feet 6 inches between structures A-5 and A-3. The east slope of A-5 proved to be not a simple slope, but one which apparently originally descended in two terraces forming three steps between the crest and the base (fig. 30). After abandonment of the site these terraces apparently drained toward the south and were eroded along their inner sides so that on excavation they appeared troughlike rather than level.

The sterile clay base underlying the eastern side of Mound A-5 was nearly level. Resting on this clay base was an irregular layer of brown sand, averaging 10 feet in thickness, similar to that found beneath other structures in Complex A. Mound A-5 lay on this sand layer. We should note here that along the western side of the Ceremonial Court, just to the north of Mound A-5, the sand dropped off sharply, necessitating the use of artificial fill to maintain the Court level. A similar situation may prevail beneath the western side of Mound A-5. The clay mound rose to a total height of 7 feet 11 inches above the sand layer. The mound stepped down a distance of 1 foot 3 inches from its crest to the second (higher) terrace mentioned above and from this a distance of 1 foot 4 inches to the lower terrace. The east edge of the mound dropped off steeply to the mound base. The excavations thus revealed that Mound A-5 (and by inference Mound A-4 as well) is a long, low platform mound, approximately 285 feet in length by 53 feet in width across the top. We did not find time to determine whether the ends of the mound are squared or rounded; the surface contours indicated rounded ends.

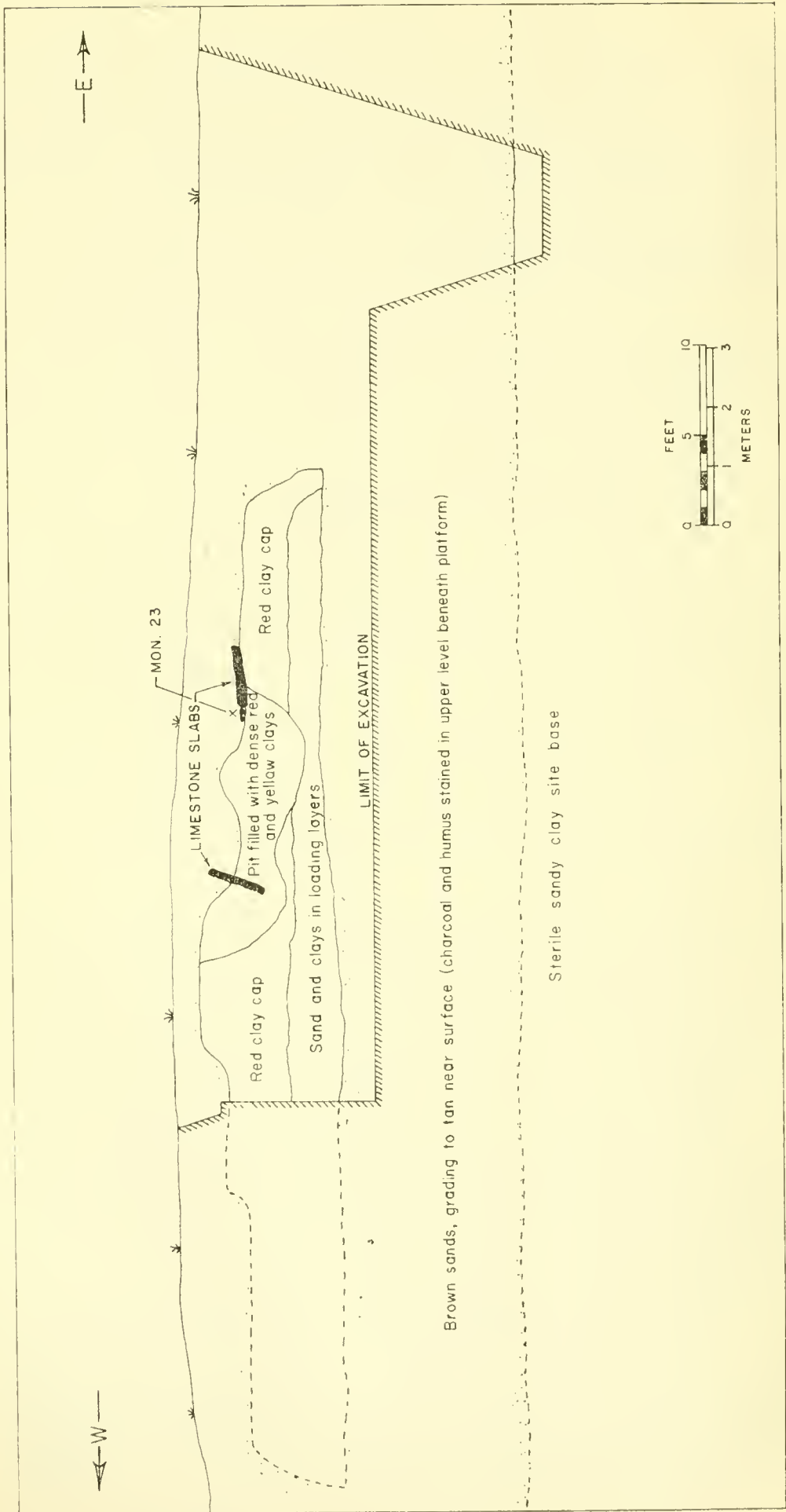


FIGURE 30.—Mound A-5. Profile of east-west trench.

The lower terrace of the mound had been paved with large water-worn slabs of limestone, unshaped by human agency. Six large slabs (pl. 20, *a*) supplemented by smaller pieces, forming a rough paving, were visible in the area excavated by us. The large pieces were 3 or more feet across and as much as 8 to 10 inches thick, and must have weighed between 300 and 400 pounds each. On the inner (western) edge of this terrace, Monument 23 had been placed. This monument, which is described in detail elsewhere in this report, is a slightly more than life-size statue representing a seated human figure. The head and arms had been broken off in ancient times. Although we searched for the missing pieces we were unable to find them, and it seems quite clear that they were not in the immediate vicinity.

On the inner side of the second terrace there was another series of large limestone slabs. These, however, had been set vertically, forming a row roughly parallel to the long axis of the mound. The profile along the north edge of our excavation showed very plainly that there had been a large pit dug in ancient times, which extended from the outer (western) side of the vertical slabs eastward to the horizontal slabs that paved the lower terrace, and in depth extended nearly to the base of the mound. The pit was filled with heavy clay soil into which the limestone slabs had been set. Excavation of this pit, however, yielded nothing in the way of information or artifacts. We found no indication of the purpose of the large vertical slabs and are left with the supposition that they were intended as an ornamental feature along the back of the second terrace.

The east-west profile trench through Mound A-5 gave us no conclusive evidence as to the period of construction of the mound. Outside of the area of the refilled pit the trench showed various levels distinguished by soils of different types or colors, but these seemed to represent merely differential loading. No layers of chronological significance, as in the "floor" levels found elsewhere in Complex A, were recognizable here. Apparently the mound had been built during a single construction period. The uppermost layer was formed of massive red and yellow clays, very similar to the clays capping all other structures in Complex A which are of the final construction period, Phase IV. The use of limestone slabs is also a Phase IV trait elsewhere in Complex A. Therefore it is possible, perhaps even probable, that Mound A-5 and its twin on the eastern side of the complex, Mound A-4, date entirely from the Phase IV construction. Lacking any stratigraphic means of verifying this, we shall simply admit that we do not know. No artifacts aside from Monument 23 were recovered from this excavation.

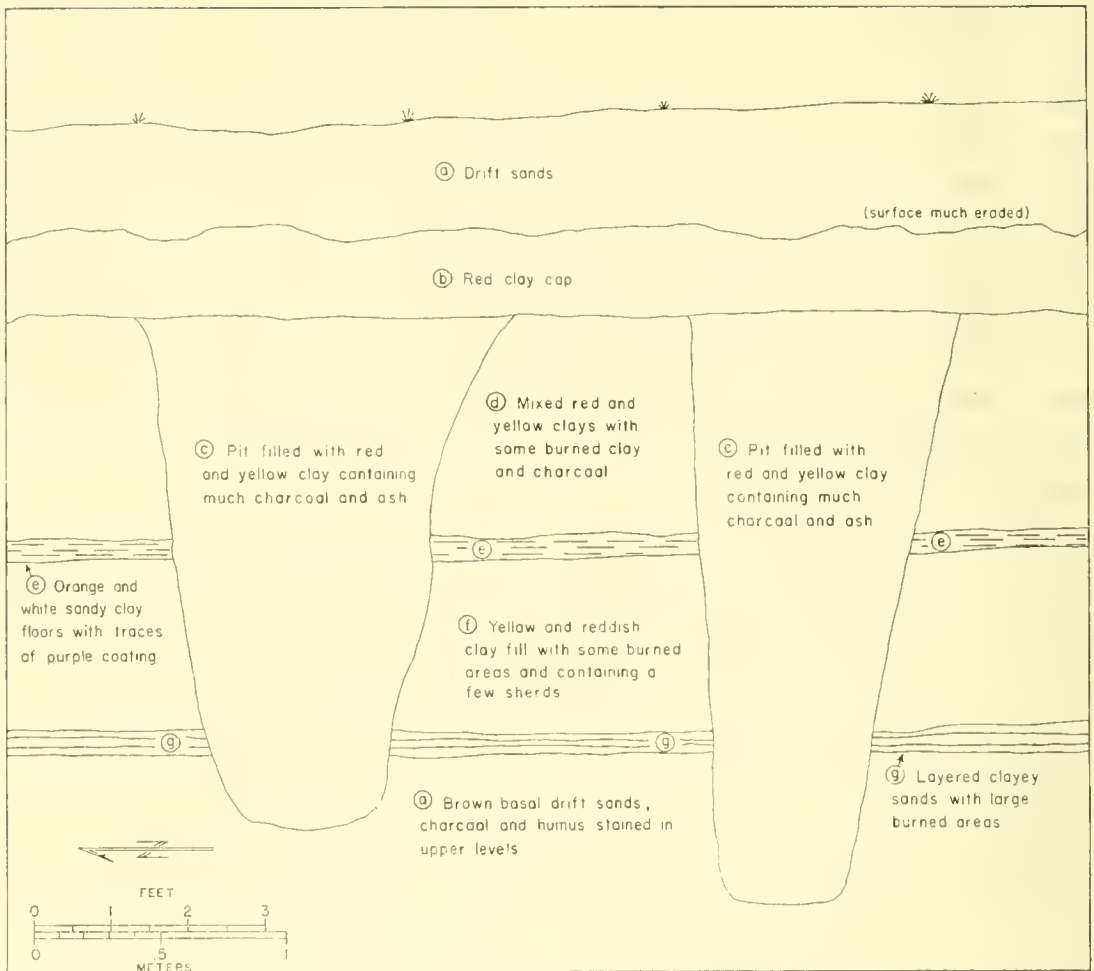


FIGURE 31.—Profile of Mound A-3. Section of east wall of 1955 north-south trench.

EXCAVATIONS IN MOUND A-3

Mound A-3 was the small feature south of the Ceremonial Court in which the sandstone cist (Feature A-3-a) was discovered in 1943. We carried out some minor tests here with two purposes in mind. The first was to attempt to coordinate our terminology with that of Wedel, who has given a detailed description (LV, 65-67) of his cross section of this feature. Our second aim was to cut a short trench westward toward Mound A-5 to add, if possible, to the limited information we had gathered in our investigations in the latter feature. The check of the stratigraphy in general corroborated Wedel's information, although we did make some adjustments of terminology to make his and ours conform. In addition, on the basis of our work in the other features of Complex A, we were able to make some elaborations of his distinctions of layers. We will describe first the results of our excavations in our north-south trench, which paralleled Wedel's trench through the mound for a distance of 30 feet but extended 3 feet

farther to the east. A profile of part of this trench is shown in figure 31; the entire mound is seen in plain view in figure 4.

The original ground surface on which the feature was built was, just as stated by Wedel, the humus-stained sand layer (a), the uppermost portion of which contained considerable charcoal. Assuming that the top of the sterile clay subsoil underlying the sand layer was at the same level as noted a short distance to the west near Mound A-5, the depth of the sand layer beneath Mound A-3 would be approximately 12 feet. This appears to be the same layer encountered by us elsewhere in Complex A at the original preconstruction surface. Overlying this base was a thin stratum, 3 to 5 inches thick, of layered clayey sands (g) with some areas that appeared to be burned. It is possible that these represent original leveling layers, corresponding to the "buff and brown sandy floors, apparently partly water-sorted" in the general Court area. We noted that the (g) layer contained a higher proportion of clay and was generally more pinkish in color than is usual for the "water-sorted floors" in the Court proper. The next stratum consisted of a mixed yellow and reddish clay fill (f), 2 feet 2 inches thick, with a few sherds and some areas showing burning. This was capped by a series of orange and white sandy clay floor layers (e) approximately 4 inches thick. Traces of purple coating were discernible at intervals along this floor level. Over these floors was a layer, 2 feet 10 inches thick, of dense red and yellow clays (d) with considerable quantities of charcoal, which in turn was covered by a 13-inch thick capping (b) that appeared to be the same as the massive red clay cap noted as the final construction layer throughout Complex A. Resting on this clay cap was a 15- to 20-inch layer of postoccupation drift sands (a). The surface of the red clay cap (b) was very irregular, suggesting extensive erosion before the protective mantle of drift sands had accumulated.

We pause here to take note of a point of difference between our findings and those of Wedel. Within the Ceremonial Court Wedel used the term "tierra bonita" to refer to the floor series that we have designated in the present report as the "old rose" floor series. This series of sandy floor layers was not encountered by us in Mound A-3. The "tierra bonita" level described by Wedel (LV, pp. 65-67) matches well in general description, stratigraphic position, and absolute elevation with the series of layered sands (g) which we found to cap the base sands and which we have suggested above may be the "water-sorted floors" found in the Court. We determined the elevation of the top of Feature A-3-a ("Tomb C") during the 1955 excavations. Knowing this elevation we can calculate the approximate elevation of the "tierra bonita" level described by Wedel. The figure thus

derived falls within 4 inches of the elevation of our layered sand level (g) and there is therefore little doubt that the two floor series, though differently termed, are in fact the same. It will be recalled that above this layered sand series Wedel found only a massive reddish clay dome. Our 1955 excavations, which paralleled Wedel's trench through Mound A-3 but exposed the area 3 feet farther to the east, revealed a more complicated stratigraphy than that found by Wedel. This has been briefly described above. A most important component observed by us but not by Wedel is the orange and white sandy clay floor series (e). Wedel notes (LV, p. 67) that the reddish clay dome of Mound A-3, as exposed in his trench along the major axis of the mound, consisted for the most part of a ". . . chaotic mass of burnt clay, fire-blackened earth, stones, and an occasional tiny sherd." We noted several intrusive pits in our trench just to the east of Wedel's excavation which were filled with the same kind of clay rubble (fig. 31). It appears that the entire central part of Mound A-3 was extensively disturbed in ancient times, leaving only occasional areas of undisturbed stratigraphy one of which we were fortunate enough to encounter. This disturbance apparently prevented Wedel from detecting the orange and white floor series (e) in the walls of the trench excavated by him.

Our east-west trench, begun near the western edge of the 1943 excavation and extending toward Mound A-5 for a distance of 20 feet, revealed the western edge of what appeared to be a flat-topped structure which was capped with the orange and white sandy clay floor layers with traces of purple coating as described above in our north-south trench in this mound. This structure was covered with the massive red clay cap as in the central part of the mound. Extensive disturbance of the structure had occurred in the area exposed in the eastern part of our trench.

The 1955 excavations in Mound A-3 showed that this mound, instead of being simply a structureless clay dome resting upon a prepared level, was at one time a platform mound with a decorated surface. The east-west dimension of this platform was approximately 40 feet, as determined by the distance of its western side from the site centerline. The north-south dimension can only be estimated at this time; from the length and configuration of the overlying red clay cap we estimate that the major axis of the platform was between 60 and 75 feet in length. The top of the platform rose 2 feet 6 inches above the layered sandy clay base.

The sequence of construction activities in Mound A-3 may be summarized as follows. The initial step was the leveling of the original sand surface. Wedel has described (LV, p. 67) what may

have been the method used by the builders to achieve a level surface here, by the use of sun-dried adobe brick "grade stakes." Upon this surface was laid a series of layers (g) of clayey sands. These sands show evidence of burning, perhaps as the result of ceremonial activities in connection with the construction. Upon this prepared surface was deposited a hearting of dense yellow and reddish clay (f) and this was surfaced by repeated applications of thin layers of orange and white sandy clays (e), forming a flat-topped platform mound. The surface of this platform was painted an indeterminate number of times with a sandy purple wash.

CHRONOLOGY

We must now face the problem of relating the platform and its prepared base to the sequence of building phases throughout Complex A. We have suggested above that the layered clayey sands (g) may correspond to the "water-sorted" floor level found elsewhere in the site. This has been a Phase I component wherever found. Two factors may weigh against the attribution of the (g) layer to the Phase I "water-sorted" floor constructions, neither of which may be overly significant in our attempt to date this component. The first of these relates to the absolute elevation of the (g) layer, which is just over 1 foot above the average elevation of the "water-sorted" series in the Court at large. This need not weigh too heavily since Mound A-3 stands some distance from the southern margin of the Court proper and it may not have been considered necessary by the site builders to construct the (g) level here at exactly the same level as elsewhere. Secondly, there is the fact that the (g) series in Mound A-3 contained somewhat more clay and was generally more pink in color than was the case in the "water-sorted" floors wherever observed by us in the Ceremonial Court. Much of the pink color appeared to us to have resulted from the burning which took place on the (g) level prior to the construction of the platform (e-f). As for the greater proportion of clay in the (g) level, this may be of small importance by itself since we actually observed only a small fraction of the total expanse of this level either in the Ceremonial Court or in Mound A-3 and therefore know very little about its range of variation. We are inclined to regard the (g) level as a Phase I component because of its color, its relative elevation, and its stratigraphic position with respect to the underlying sands (a); all of which accord better with the "water-sorted" floors than with any other construction element in the Ceremonial Court.

We believe that the platform consisting of the yellow and reddish clay fill (f) and orange and white sandy clay surface (e) also dates

from the Phase I constructions. Our problem here is to differentiate the (e) surface layer from the Phase II white floor series found throughout the Court. It should be noted that nowhere in the Court have we observed the white floor level to run over the top of any platform structure. In every case the white floors are court floors only, running up to the sloping faces of the platforms but never continuing over the top. However, in the remnant of the Phase I platform in Mound A-2 (see j-4 in fig. 10) a layer remarkably similar in composition and color to the (e) layer in Mound A-3 is used to surface the platform. This similarity to the stratigraphically clear Phase I platform surfacing technique in Mound A-2, together with the obviously early context of the (f) platform fill—resting as it does on the initial prepared surface layer (g)—leads us, regardless of the distance separating Mounds A-2 and A-3, to suggest a Phase I date for the (e-f) platform.

We found no evidence in Mound A-3 of repeated platform enlargement such as was common in the structures in the Ceremonial Court. The original platform apparently stood exposed, except for resurfacings, until covered by the (d) and (b) clay cap. We have mentioned above that traces of purple coating were visible intermittently along the top of the platform surface layer (e). It is possible that these represent the only evidence of Phase II activity in Mound A-3. Purple coloring was observed in several places in the Court as a component of the Phase II white floor series and in Mound A-2 was the only color used to surface the Phase II platform throughout its complicated series of rebuilding and resurfacing (i-2 to i-8 in fig. 10) stages. None of this, of course, clinches the case for the purple surfacing of Mound A-3 as a Phase II feature; it seems clear, however, that if Phase II is represented in this mound it is limited to the purple surfacing.

Subsequent stages of construction of the mound appear to be associated with the building of the stone slab cist (Feature A-3-a) which was found in 1943. Apparently a shallow trench was cut through the middle of the platform along its north-south centerline, which was also the centerline of Complex A. Into this trench was thrown a foot or so of red and yellow clays containing some burned clays and much charcoal. The uprights and floor slabs of Feature A-3-a were set in this clay rubble and the offering of jade objects, Offering 1943-G, was placed in the cist. The trench through the platform then seems to have been filled with more of the same clay rubble, filling in around the stone cist and building up a layer about 3 feet thick (d) over the top of the platform. Nearly 2 feet of the upper part of the cist protruded above this (d) layer. Following the deposition of the (d) layer a number of pits (c) were dug into it, some of these extending in depth well into the preconstruction drift sand layer beneath the

mound. Those which we saw in our north-south trench through the mound were filled with the same clay rubble as made up the (d) layer itself, but with the addition of much charcoal and ash. We found nothing in these pits to indicate their purpose. They may contain the burned remains of offerings made to commemorate some event with which the alteration of the mound and building of the stone cist were also associated. At any rate, after the filling in of the (c) pits the layer of massive red clays (b) was put down over the entire mound to a depth sufficient to cover the top of the cist with at least several inches of clay. Several offerings of jade and other materials (Offerings 1943-H through 1943-M) were deposited in the upper levels of the red clay cap (b), probably also commemorating whatever event was honored by the construction of the cist and addition of the cap over the mound. After the deposition of the red clay cap the mound stood exposed to the elements for some time. This is indicated by the erosion which has badly scarred the surface of the mound and run down its sides sufficiently to obscure whatever form the mound might have had in its final phase. The erosion was largely brought to an end by the accumulation of the mantle of drift sands (a) which formed the modern surface.

The final alterations of Mound A-3, which include the deposition of the red and yellow clay layer (d), the stone cist, charcoal and ash-filled pits (c), and massive red clay cap (b), were almost certainly made during a single construction phase. This phase must have been the one which we have designated Phase IV throughout Complex A. The construction of the stone cist in a structureless fill (d) and covering with the red clay cap (b) accords very well with the final phase constructions in Mound A-2, where the basalt column tomb (Monument 7), pile of basalt columns (Feature A-2-b), and sandstone coffer (Monument 6) were placed in an identical context. We recognize that Phase III, which in the Ceremonial Court is marked by the "old rose" floor series, is missing in this interpretation. No evidence was found, however, either during the 1943 excavations or by us in 1955 which would indicate that Phase III had ever been represented in Mound A-3. It is of course possible that enlargements to the Phase I platform made during both Phases II and III were removed during the Phase IV alterations, but we found nothing that would substantiate this.

Another feature which may be associated with the final construction stage in Mound A-3 is the jaguar mask mosaic which Wedel (LV, pp. 74-75) designated as "Pavement No. 2." This mask mosaic was located on the Complex A centerline with about 1 meter separating its northern edge from the south edge of Mound A-3. It apparently rested on a prepared clay base and was covered only by the upper drift sands. We found no evidence, nor did Wedel in 1943, of a massive offering in Mound A-3 such as was laid down in Mound A-2 (Feature

A-2-d) at the beginning of the Phase IV constructions. It is barely possible that the jaguar mask mosaic was intended as a functional equivalent of the massive offering in Mound A-2. Certainly the fact that it was covered only by drift sands argues for its lateness in the Complex A phase sequence since the universally demonstrated tendency of the Phase IV site builders was to completely cover all exposed features from previous phases. An additional, but somewhat speculative, argument for the lateness of the mask mosaic might be made on the basis of the differences between this mosaic and the two which date from Phase II times found in the Southeast and Southwest platforms. A comparison of the three mosaics (LV, figs. 20, 24; this report, fig. 29) shows a number of rather striking differences between the mosaic found just south of Mound A-3 and the two Phase II mosaics. It might be argued that these differences came about as the concept of the conventionalized jaguar face changed with time. We wish merely to suggest such an argument, not to pursue it here. Our best evidence for a Phase IV date for the mask mosaic is provided by the absence of a clay cap over its surface, as we have stated above.

To briefly summarize our interpretation of the history of Mound A-3, this structure appears to have resulted from essentially two stages of construction. During the Phase I activity, the basal drift sands were leveled and a layer of clayey sands (g) was laid down. Upon this a platform consisting of the yellow and reddish clay hearting (f) and orange and white sandy clay surface layer (e) was built. During Phase II of Complex A history, activity appears to have been limited to the addition of a number of washes of a sandy purple coating over the top of the platform. Phase III seems to be totally unrepresented in this structure. The final stage of activity, Phase IV, saw the construction of the stone cist (Feature A-3-a), addition of the red and yellow clay rubble (d) and the massive red clay cap (b) with its offerings of jade and other materials, and probably the construction of the jaguar mask mosaic just south of the mound. Following a period of heavy erosion a layer of drift sands (a) slowly accumulated over the surface of the mound.

In simplest terms, then, we can summarize the history of the mound as follows:

- Phase IV__ (b)—(d)
- Phase III__Not represented
- Phase II___Purple coating on (e)?
- Phase I____ (e)—(g)

EXCAVATIONS IN COMPLEX C

As noted elsewhere the Pyramid, designated "Complex C," had around its base a number of platformlike appendages. Clearing of

Complex A and the lower northern slope of the Pyramid brought into prominence a long narrow platform that projected northward from the face of the Pyramid. This feature designated as "C-2" (see fig. 5) was approximately 60 feet long and 30 feet wide. It rose quite steeply from the low-lying ground to a height of about 10 feet at its outer tip. From this point it sloped gradually to a point at which it joined the mound mass. The western side of the platform from the point of juncture with the main Pyramid outward had been considerably damaged by erosion. We laid out two squares to the east of the platform, leaving a stratigraphic wall section between them. Just east of the centerline we laid out an 18-by-40 foot cut parallel to the north-south axis of the platform. The two eastern squares were excavated to a depth of 6 feet below the surface and then abandoned, and efforts were then concentrated in the western cut. The narrow trench extending to the north was approximately 40 feet in length. At a depth of 10 feet it was reduced in width to leave a 3-foot shelf as a runway for dirt removal. At 11 feet 6 inches the cut was further reduced to a narrow trench 2 feet wide in the center of the main trench, which was carried down 3 feet, and then work in this feature was stopped.

This test was made in the hope of collecting some information on structural sequences within the platform and the Pyramid itself. The head of our deep trench, of course, intersected the toe, at least, of the Pyramid proper. However, we found no indications of structural sequences of the type we had hoped for. The platform was a one-phase construction, which cast no light on the construction of the Pyramid, unless it might be to hint that the Pyramid and platform were part of the same single phase project. There was no visible structural separation between the Pyramid mass and the platform. The platform and the edge of the main mass of the Pyramid consisted of a tough yellowish buff clay on the surface, and at a depth of 9 feet 10 inches (measured from the highest point at the head of our trench) we encountered a fill, or hearting, of clean very light-gray sand. This sand continued into the Pyramid. It extended to the point under the junction of the platform and Pyramid. This sand was unusual in that it appeared to be quite clean, like beach sand. Where first encountered it contained a considerable quantity of fragments of broken pottery and wood charcoal.¹⁴ These sherds must have been thrown into it deliberately, perhaps as binder, for the sand itself was far too clean to have come from an occupation or refuse zone. We noted several points both in the overlying clay and in the sand core at which some differential loading occurred, but there

¹⁴ Carbon sample (No. M-536) collected here for radiocarbon dating.

was no indication whatsoever that these pointed to any structural chronological significance.

On the south foot of the Pyramid there are two platforms, one of which runs east-west along the entire south face and is designated by us as C-4. The other, C-5, is a long narrow structure extending out in a north-south direction from its point of juncture with C-4. Almost exactly at the base of the slope of the main Pyramid mass and the point where it joins C-4, three new monuments, Nos. 25, 26, and 27 (pls. 53, 54) were found. Monument 25 was situated very nearly on our reconstructed centerline of the site. Monument 26 was set just to the eastward with about 3 feet separating the edges of the two stones. Monument 27 was set 75 feet to the eastward of Monument 25. All three stones, although at present they have slumped somewhat, appear to have been set originally in a line which was approximately perpendicular to the centerline of the site. All were wide, flat, stela-like slabs of stone and were set with their carved faces to the south. Clearing them indicated that they had been set up in shallow holes with backs braced against a shelflike bank cut into the main Pyramid mass. That they were entirely buried was due to the fact that slope-wash from the main Pyramid had covered them in the course of the years. The base of Monument 25 was at a point 7 feet 11 inches below the present surface. Its pointed, broken base was wedged up with a variety of small stones, including 2 pieces of limestone, one of basalt, and a small chunk of schist. Monument 26, which is 1 foot 2 inches shorter than Monument 25, had been set in a shallower pit so that when it was straightened up the top must have been very nearly even with that of the stone next to it. The hole in which Monument 27 had been set was very easily seen. It was a pit which penetrated 2 feet 7 inches into the surface red clay layer. The monuments themselves will be described in detail in a separate section, but it may be mentioned here that the carvings on all three represent jaguar masks in low relief. Two of the three (Monuments 26 and 27) were placed upside down.

In addition to clearing these three monuments, three test pits were dug to search for more in the same area. Since Monuments 25-27 had been found on what had been intended as the last day of excavation, the work that could be done was quite limited. On the assumption that the monuments might be part of a symmetrical arrangement, test pit "A", 5 feet by 10 feet, was dug immediately west of Monument 25 to search for a companion stone to Monument 26. Test pit "B", of the same dimensions, was dug 75 feet west of Monument 25 to search for a companion to Monument 27. Test pit "C" was dug more or less at random, 15 feet east of Monument 26, along the line of the stones. All these pits were dug to a depth of 8 or 9 feet and tested several feet deeper with a soil auger.

On the outer end of C-5, south of the two altars (Altars 2 and 3), a 5-foot by 20-foot pit was dug in a small mound at the tip of the platform. This feature was small, rising to a height of about 4 feet above the level of the outer end of the platform, which was estimated as 11 feet above the present general surface south of the Pyramid and its platforms. This test was dug to a maximum depth of 36 inches from the highest point. There was a very thin layer of drift sand which graded rapidly into brown sandy clay under which a bright orange-red clay was found.

This set of platforms appears to be a fruitful place for further investigation. One obvious problem is that of determining the relationships between Monument 1 (a colossal head) and the three new monuments. The conditions of these latter and the facts that two show considerable evidence of ancient damage, and that two of them are placed with the design upside down, hint very strongly at post-Olmec reuse. We are of the opinion that they were placed in their present situation by people, who though awed by the mysterious carvings, did not actually understand the designs. It seems possible, although it probably could never be proved, that these three stones might originally have been placed around the foot of the platform (C-5) forming a symmetrical arrangement by completing, or balancing Monument 1 and Stela 2. The general indications from our few tests in this locality were that extensive excavations might be required to yield any results, or at any rate excavations larger than we were prepared to undertake at the very end of the season. Rather than biting off more than we could chew, we refilled the tests and reburied the monuments and left them there. A further possibility for future work is in determining whether or not there lie buried on the east side of the centerline, monuments whose positions match those of Monument 1 and Stela 2.

CORRELATION OF COMPLEX A CONSTRUCTIONS

The correlation chart (see table 1) summarizes the construction history of the several structures in Complex A at La Venta. It will serve as a useful guide to the reader who may have become lost in the welter of detail concerning the history of the individual structures. Added to the chart is the phase designation of the numerous offerings recovered since the beginning of excavation in 1942.

As has already been pointed out, the site was laid out on a natural ridge which runs approximately north and south. In the Ceremonial Court area this ridge was leveled off where it was too high in the east half, and filled in the low western half. It is possible that the remnant of a pre-Phase I structure is to be seen in the (p) clay block (fig. 20)

TABLE 1.—Correlation of La Venta construction elements and offerings by phase

La Venta construction phase	East Court wall and floor west to centerline (A-1-a, A-1-b, A-1-c; figs. 6-8)		South Central Platform and Court area adjoining (A-1-c; figs. 7-9)		Southwest Platform (A-1-e; figs. 26-28)		Northeast Platform and Court floor to centerline (A-1-f; figs. 15-18)	
	Construction elements	Offering Nos.	Construction elements	Offering Nos.	Construction elements	Offering Nos.	Construction elements	Offering Nos.
IV	b-d Basalt columns Red clay cap		b Red clay cap		b Basalt columns Upper basalt facing blocks Limestone slabs Red clay cap		b-c Red clay cap	
III	e-g Rose floors		c-i Rose floors	1943-C Massive Offering No. 3	c-d Rose floors		d-l Rose floors	4, 5, 6, 13, 14(?)
II	h-k Basalt facing blocks Adobe brickwork White floors		l-o White floors	3	e-n Lower basalt and serpentine facing blocks Adobe brickwork White floors	1942-E Massive Offering No. 1	m-o White floors	
I	l-q Water-sorted floors		p-r Water-sorted floors	(Massive Offering ?)	o-p Water-sorted floors		p-u Water-sorted floors	7(?), 15(?), 16(?), 17(?)

La Venta construction phase	Northwest Platform (A-1-g; figs. 20-21)		Northeast Entryway (A-1-i; fig. 24)		Mound A-2 and area to south (figs. 10-12)		Mound A-3 (fig. 31)		Mound A-5 (fig. 30)	
	Construction elements	Offering Nos.	Construction elements	Offering Nos.	Construction elements	Offering Nos.	Construction elements	Offering Nos.	Construction elements	Offering Nos.
IV	b-c Red clay cap		c-d Limestone slabs Red clay cap		b 1-b 7 Basalt column tomb Sandstone coffer Limestone slabs Red clay cap	Massive Offering No. 2 1942-A, 1942-B, 1942-C, 1942-D, 1943-B, 1943-F, 9, 11	b-d Sandstone cist Red clay cap	1943-G through 1943-M Pavement No. 2 (1943)?	Entire structure Limestone slab pavement and mound facing Red clay cap	
III	d-g, k Rose floors		e-k Basalt and serpentine facing blocks Rose floors		e 1-h 15 Rose floors	1943-D 1, 2, 8, 10, 12	None		None	
II	h-j, l White floors	18(?) 19(?)	l-o Adobe bricks		i 1-i 9 [White floors]		None certain		None	
I	m-q Precomplex A evidences Water-sorted floors		p-q Water-sorted floors		j 1-j 5 Precomplex A evidences Water-sorted floors		e-g		None	

underneath the Northwest Platform. If so, this would indicate a pre-La Venta complex on the same site. If there were earlier structures on the spot now occupied by Complex A, these must have been alined differently from the later structures in this area. The fragments of colored flooring layers in the lower fill layers in the Northwest Platform and Mound A-2 certainly indicate that clay structures with painted surfaces were being destroyed during the building of the Phase I structures. Where these earlier structures were must be left for future investigators to determine.

As is clearly shown by table 1, we may speak of Phase I as the water-sorted floors period, of Phase II as the white floor period, of Phase III as the rose floor period, and Phase IV as the red clay cap period. In nearly every structure, these particular diagnostic features occur at the same elevation, and it is not to be doubted that they are indicative of the same activity carried out throughout the Court area during its several successive rebuilding phases.

PHASE I

The laying out of the La Venta site, by which we mean the determination of the central alinement and plotting of the boundaries of the Ceremonial Court and positions of the enclosed platforms and the north platform mound (Mound A-2) and, in all probability the initial stage of the Pyramid, must necessarily have preceded the earliest construction work.¹⁵ When the leveling and filling of the area to be occupied by the Ceremonial Court was concluded and the small red clay ridge surrounding the Court (upon which was later superimposed the brickwork wall) was thrown up, the water-sorted floors were deposited. At this time the first low platform mounds (Northeast, Northwest, and South-Central) were erected, and the earliest stage of the platform mound (A-2) north of the Court was built. A low clay platform capped with orange and white sandy clay surfacing layers was constructed just to the south of the Ceremonial Court on the centerline (Mound A-3). Four dedicatory caches or offerings (Nos. 7, 15-17) in the Northeast Platform are doubtfully attributed to Phase I. In the discussion of Feature A-1-h we have given our reasons for believing that the serpentine block-filled trench surrounding the perimeter of the offering held the redeposited blocks derived from a Phase I massive offering which originally occupied part of the area in which Feature A-1-h was laid. Although there is no proof that these blocks are derived from such a Phase I offering, this inter-

¹⁵ It will be apparent to the reader who carefully studies the plan view of Complex A (fig. 4) that a long list of allnements of the varlous platforms, buried pavementlike offerings, and dedicatory offerings with one another could be made up. This certainly must indicate that the Olmec were deeply concerned with maintaining an orderly arrangement of features within the complex. It probably also indicates that there were functional relationships between the structures, offerings, and monuments.

pretation is strongly suggested by the fact that at the beginning of Phases II, III, and IV a massive offering (Nos. 1, 2, and 3) was deposited.

PHASE II

The beginning of Phase II was marked by the excavation of the great pits, the deposition of the 28 layers of rough serpentine blocks, the jaguar mosaic masks, the fill layers and erection of the adobe brickwork platforms, and the laying of the facing blocks around the footing of the platforms in the Southeast and Southwest Platforms. Following the deposition of the mosaic masks in these structures, Offerings 1942-E and 1943-E were placed. Next came the building of the brickwork wall or embankment which surrounded the Court, the inner (and outer ?) toe of this wall being marked by continuous rows of dressed rectangular basalt facing blocks. In the Northwest Platform, offerings of pottery vessels (Offerings 18 and 19) were probably deposited in this period. The three platforms inside the Court area were increased in height and area and additional platforms were built on Mound A-2. Offering No. 3 was deposited at this time in the South-Central Platform. The level of the flat interior of the Court was raised by the addition of dense clay fill and this was capped by the white sandy floor series.

PHASE III

Phase III was initiated by the deposition of Massive Offering No. 3 (Feature A-1-h) astride the centerline between Mound A-2 and the South-Central Platform. The three platforms inside the Court were all enlarged and in the Northeast Platform were deposited Offerings 5, 6, 13, and probably 14. Offering No. 4 was placed just west of this platform in the fill layers which form part of the addition to raise the level of the Court floor. A number of offerings (1943-C, 1943-D, 1, 2, 8, 10, and 12) were placed in the Phase III fill layers just south of Mound A-2 along the centerline. Mound A-2 was added to repeatedly. Within the Ceremonial Court the Phase III surface consists of the old-rose floor series. These, like the sandy white floor series of Phase II, mark a period of unknown but fairly considerable duration as judged by the number and thickness of successive floorings. At this time the terminus (at the Northeast Entryway), and possibly the outside toe, of the brickwork embankment or wall surrounding the Court was faced with dressed basalt and serpentine blocks.

PHASE IV

Phase IV began with the placing of Massive Offering No. 2 (Feature A-2-d) at a point estimated as the center of Mound A-2. In the fill over this offering were deposited Offerings 1942-C, 9 and 11. The

deposition of the red clay cap over the floor and structures of the Ceremonial Court, as well as over Mounds A-2 and A-3, is the most distinctive stratigraphic element of this period. The use of sandstone, of which the Mound A-3 cist and the Monument 6 coffer are made, as well as limestone slabs (found in Mound A-5, the Northeast Entryway, along the site centerline, in the Southwest Platform, the flooring of the Monument 7 stone tomb and the limestone wedges or shims beneath Monument 25 and Stela 5) is entirely limited to Phase IV at La Venta. Another Phase IV material is greenschist of which Monuments 22, 24, and Stela 5 were made. Monuments 16, 17 and 18, at the south end of the island, may because of the material of which they are made belong to Phase IV as well. Mounds A-4 and A-5 were apparently constructed during Phase IV. At this time the basalt columns (the total number of which is not known but exceeds 200) were imported from a source as yet not determined. Some of these were used in the stone tomb ("Tomb A" or Monument 7), others were laid in small stacks (for example, just south of the stone tomb and in the space between the Southwest and Southeast Platforms), and numbers were set upright in the top of the Phase II brickwork platforms of the Southwest and Southeast Platforms and in the crown of the brickwork embankment surrounding the Court. It is our opinion, contrary to that of Wedel (LV, p. 65), that the enclosure of the Court with the basalt columns was never concluded. This is not to deny the possibility that some columns were removed from the surrounding wall, but our meager evidence indicates that there were sections of the wall in which columns never stood. It is not beyond the bounds of possibility that the tremendous labor involved in transporting the columns to La Venta might have been more than the Phase IV inhabitants could handle and the job was never completed.¹⁶ We have at various times during the writing of this report speculated on the possible reasons for this failure to complete the column-importing project and have discussed among ourselves such possibilities as social revolt, cutting off of the distant source of supply, or unanticipated

¹⁶ The source area of the basalt columns remains, in 1957, unknown. It is definitely *not* La Union volcano on the Sayula River. The best guess is that the Tuxtla mountains about 50 airline miles northwest (cf. fig. 1) was the source. Stirling's hypothesis (1943 b, p. 50) that the columns were rafted from here down the coast and up the Tonala River to La Venta seems the best to account for the basalt at the site. Our own workmen found it simpler to carry the columns by means of rope slings and freshly cut poles (pl. 9, a) rather than drag them with a four-sheave rope block. The practicable limit seemed to be about 35 men carrying a 2-ton column, with each man's share about 110 pounds. The greatest stela on the site (Stela 3) weighs about 50 tons (Stirling, 1943 b, p. 52) and is 14 feet high, 6 feet 8 inches wide, and 3 feet thick. With a total weight of 100,000 pounds, and a load limit of 100 pounds per man it would have taken 1,000 men to carry this stone. Cross-country carrying of such a block through jungle and across rivers might be done, though it seems improbable. We conclude that rafting to the island and dragging the final distance on skids or rollers on land is the only acceptable answer as to how Stela 3 came to La Venta. Similarly, the basalt columns were probably rafted, though with considerable effort they could have been carried individually.

cessation of the occupation of the site due to conquest. Since we are unable to produce anything concrete in support of these or other alternatives, we leave this, like other problems, to future investigators. It would seem logical that the effort involved in bringing in the stone columns and placing them in the Ceremonial Court area, the building of Mounds A-4 and A-5, the placing of the numerous offerings of this phase, and the construction and burial under the red clay cap of the stone tomb (Monument 7) and sandstone coffer (Monument 6) in Mound A-2 and the sandstone cist (Feature A-3-a) in Mound A-3 indicate no intention of a sudden abandonment of the ceremonial center.

The four construction phases at the site of La Venta which we have discussed in this report may, as we have indicated earlier, represent activities which occurred at the beginning or termination of a calendrical and/or religious cycle (cf. Tozzer, 1941, p. 151). Distinctive to Phase IV at La Venta are the great tombs represented by Monuments 6, 7, and Feature A-3-a. There is no evidence of tombs in Phases I to III. (We remind the reader of the interpretation proposed elsewhere in the present report that offerings such as 1943-L, and Offerings 5-7 from the 1955 excavations, may symbolize, but do not represent, actual burials.) The elaborate burial of high priests or rulers in Phase IV may indicate the development of a highly differentiated class-structured society which became so top heavy that it broke down because of the inability or unwillingness of the general population to support it. There were very likely burials of such personages in earlier times, but they apparently were interred elsewhere than at La Venta. The organization of society necessary to accomplish in Phase IV the importation of the huge quantities of stone columns, taken together with the tomb burials at La Venta, do at any rate imply a much more rigorous and autocratic control of the general population than during Phases I to III.

OFFERINGS

In the 1955 excavations a total of 30 dedicatory offerings or caches was recovered within Complex A. Of these, 3 are of the "massive offering" class in the form of solid pavements of dressed serpentine blocks or mosaic zoomorphic masks. The remainder are dedicatory offerings of one or more small objects such as celts, figurines, pottery, ornaments, and the like.

In Appendix 1 the dedicatory offerings of small objects recovered in the La Venta excavations of 1940-43 are listed for the purpose of record. The offering numbers given in this list are those assigned by us. We have attempted (table 1), in addition, to show the location and assign each of these offerings to one of the construction phases as determined in 1955 and detailed in this report.

MASSIVE OFFERINGS

In the course of the 1955 season we recovered data on three features of very unusual type, which we interpret as offerings. These offerings are quite different from the ordinary lots of small objects of pottery, jade, or other minerals which are commonly found in Mesoamerican sites. It would be well to point out that two additional features of this type were found in 1943, making a total of 5. The characteristics of these massive offerings, on the basis of our limited sampling, seemed to be that large deep pits were dug to receive them, and the offerings themselves consist of a very great quantity of stone. One such offering has already been described briefly in discussing the excavation of Feature A-1-e and its structural sequences. There, it was pointed out that the entire lower part of the structure, that is, the layers of rough stone embedded in the olive-green and blue clays, and the mosaic mask as well, were considered to be an offering. Although in 1943 Stirling and Wedel did not have time to determine the size and depth of the "rubble" underlying the serpentine mosaic which they found in Feature A-1-d, it is most probable that it was similar to or identical with that which we excavated in 1955. The feature which Wedel refers to as "Pavement No. 2,"¹⁷ a less carefully laid-out mosaic of serpentine blocks, would be another offering of this type although a deep pit was not made for its placement. This had been disturbed in ancient times.

MASSIVE OFFERING NO. 1

(*Construction Phase II*)

This consisted of the jaguar mosaic and the 28 rough stone layers in Feature A-1-e, and has been described in connection with that structure.

MASSIVE OFFERING NO. 2

(*Feature A-2-d; construction Phase IV*)

At the north end of our main north-south trench we were able to trace the outlines of a long, narrow pit. Its border was 49½ feet long north-south and almost exactly 20 feet wide east-west. This pit was dug to a depth of 16 feet 3 inches below its point of origin (fig. 12). This ancient excavation was dug with extremely steep walls, which cut through earlier construction levels and penetrated deeply into the gray drift sand underlying the original structures. The slope of the walls where we were able to measure them at the southern end of this

¹⁷ On the site map (LV, p. 35) the pavement in the East (i. e. Southeast) Platform is erroneously labeled Pavement No. 2. This is actually Wedel's Pavement No. 1 (cf. LV, pp. 56-59).

cut averaged 74 degrees from the horizontal. A short exposure of the edge of the cut at its eastern side along the side of the tomb had a slope of 80 degrees. The pit penetrated only a short distance into the clay subsoil underlying the sand. In the bottom of this pit a 6-inch layer of bright red sandy clay was placed. On this prepared bed was placed a layer of serpentine blocks (pl. 20, *b*). These blocks were very carefully prepared, having been cut to rectangular forms with rounded corners, and their upper surfaces smoothed, probably originally polished to a high gloss. The blocks were laid with their long axes in a north-south direction. They were placed in rows which ran east-west. That is to say, in each row the blocks were carefully selected for length. The lengths of the different rows differed a good deal because the blocks ranged in length from 16 to 25 inches. In each row the blocks were of various widths, and consequently did not form north-south rows. The blocks in each row were placed fairly close together and the rows themselves were quite close. The southernmost row of blocks, that is at the southern edge of the offering, extended a few inches out past the edge of the red clay bed and to accommodate them the face of the pit had been shaved down to an almost vertical slope. It seems probable that the blocks were laid from north to south and the total length of the offering was just slightly greater than had been intended, perhaps because of spacing between rows of blocks, so that the excavation had to be extended slightly at the last moment to accommodate the final row. A striking fact about this feature is that the very steep exposures of sandy soil underlying the lowest platform levels show no signs of having been faced, or shored up, in any way. This can only mean that the entire job—the digging of the pit, the placing of the red clay bed and the layer of blocks, and the filling of the pit—must have been accomplished in one single operation, in fact during one single dry season. Otherwise it is inconceivable that the steep faces of sand with the heavy overburden of clay would not have been washed out and caved in during the torrential seasonal rains of this area. The cruciform cache of celts found in 1942 (Offering 1942-C) had been placed in the fill over this offering, as had Offerings 9 and 11 found in 1955. As will be noted there is a frequent association of offerings of celts, especially in cruciform layouts, with massive offerings of this type. Cruciform celt offering No. 1942-C lay over Massive Offering 2 (LV, 27); cruciform celt offering 1943-E lay over the mosaic mask in the Southeast Platform (Feature A-1-d) (LV, pp. 55-56), and cruciform celt offering No. 10 lay over Massive Offering 3. It is not known whether the celt offering (No. 1942-E) found by Drucker in 1942 in the Southwest Platform was arranged in a cruciform layout.

MASSIVE OFFERING NO. 3

(Feature A-1-h; construction Phase III)

At a point 72½ feet south of datum 1, and directly across the center-line, we found the edges of another pit which proved to measure at the top 77 feet north-south by 77 feet east-west. This pit had been dug down to the clay subsoil 12 feet 11 inches below its point of origin (figs. 10, 17). The upper margins of the pit were dug with only a moderate slope to a depth of 4 or 5 feet. From that point on the slope was abruptly increased to between 65 and 75 degrees from the horizontal. On the north side of the pit where the sandy subsoil occurred at somewhat higher level, the pit had a somewhat gentler slope of approximately 50 degrees toward its bottom. Unlike the pit for Massive Offering No. 2, when this one was dug a retaining wall of heavy clay was built up against the exposed face of the gray drift sand on the north side. This retaining wall was quite similar to those associated with construction of the massive offering in Feature A-1-e. It consisted of heavily loaded masses of compact clay piled up against the slope of the sand. In the bottom of the pit, layers of serpentine blocks were placed (pl. 21). There were six of these layers separated from each other by thin layers of tough green clay fill (pl. 22). These blocks of serpentine, like the ones in the pit to the north, had been carefully shaped. They were all cut to rectangular form and well smoothed. Those of each layer varied somewhat in size, both in length and width, but had been carefully selected so that in each east-west row all of the blocks were of the same length so that the rows would be quite regular. The layers gave the impression of pavements, although there is no indication whatsoever that they actually were intended to serve as surfacing. In fact the contrary is true. We believe that they were covered up rapidly soon after their deposition. The lowermost layer was quite level and regular. The surfaces of those laying above it were more uneven. This may have been the effect of the settling of the clay fill between the layers, due to the heavy weight of the overburden. The two outer layers, that is to say, levels 1 and 6, counting from the top down, were made of quite large blocks. The layers between them were of small blocks. There was also a thicker layer of fill between layers 3 and 4 than between any others, which separated the levels into two sets of three layers each. In all but one layer (the fifth) the longest blocks of all formed a sort of a border along the north edge.

The entire area occupied by this offering measured 63 feet north-south by 66 feet east-west. We did not expose it all. Our main north-south trench uncovered a section 26 feet long, from the northern edge of the stone layers, by about 5 feet wide. We then cut a 9 foot

by 3 foot section through the layers down to the subsoil. We also exposed the southern edge of the stone layers. East and west dimensions, however, were determined by exposing the upper 4 or 5 feet of the pit in extensions of our main trench and then testing with a soil auger to determine the limits of the stone. We believe that we were able to determine the dimensions with reasonable accuracy, and we also assume that the layers over the entire area of the offering were of the same character as those that were exposed by us. Some measurements of individual blocks follow:

Layer 1: Range 26 inches \times 11½ inches to 13 inches \times 7 inches

Layer 2: (Average length 7½ inches)

Layer 3: (Average length 7 inches)

Layer 4: Range 12 inches \times 8 inches to 5 inches \times 4½ inches

Layer 5: Range 8¾ inches \times 5¾ inches to 5½ inches \times 5 inches

Layer 6: Range 14½ inches \times 10 inches to 11 inches \times 7½ inches

(Thicknesses of blocks in all layers 2 inches to 4 inches)

The laying of the layers of the serpentine blocks did not complete this feature. The top layer was covered with a cap of heavy clays, which was backed up around the edges against the retaining walls, and subsequently a trench was dug into this clay fill down to the level of the top layer of serpentine blocks (fig. 10). This trench had, in the sections exposed by us, a width of 3 feet 5 inches at the top and tapered to approximately 2½ feet in width at the bottom. Its depth varied from 2 feet to 2 feet 4 inches. It was dug around the entire perimeter of the horizontal stone layers. On completion it was filled with small dressed serpentine blocks (pl. 23, *a*). These blocks were similar in size, shape, and finish to those of the inner layers of the main offering. They were not placed carefully, however, but appear to have been dumped into the trench. Those within the trench are lying at various angles although many of them were observed to be more or less on end, or edgewise. On top of the pile they were tossed in flat. This feature of stone blocks forms a sort of "wall" around the edge of the carefully laid blocks. It was in turn covered with fill and the entire pit was filled with sandy clays, and toward the top with heavy clays. It was noted that in this fill sandy materials predominated toward the bottom. Apparently the material used did not matter except in the uppermost portion of the fill where clay was used to provide a good solid surface. The entire pit appears not to have been filled in a single operation, but presumably over a period of one or more rainy seasons. There are indications of slumping of retaining walls, and occasional horizontal streaks of what appear to be water-sorted materials. This fill was finally sealed off by the laying of the old-rose colored floor series. At the center of the northern edge of this offering, that is to say on the centerline of the site, a whole series of small offerings were deposited as the fill

accumulated. It is worth commenting that six offerings of small objects were placed here within an area of approximately 20 feet from the north edge of the layers of serpentine blocks. In addition, Monument 13 had been set in the same immediate area during the final phase of the utilization of the site. It would appear that this particular location was regarded as an especially propitious place for offerings and that some markers were placed, or some record was kept of the location of the deeply buried layers of serpentine long after they had been covered up. It is also worth noting, incidentally, that one of the offerings associated with this particular area was a cruciform layout of celts (Offering No. 10).

As has been stated, we interpret these large stone features as offerings, which were covered shortly after they were laid in place. There is no indication at all that they served any practical purpose, such as pavements on which people walked, or on which rituals were performed. The larger offering, that of the six levels of stone layers, may have required a fairly long time to complete. However, there is no indication that any of the layers of stone were exposed for a long period. Similarly we were unable to find any evidences at all that Massive Offering No. 1, under Feature A-1-e, was left uncovered for any considerable length of time. Another point which suggests that the fill over these features was deposited fairly continuously, and rapidly, is the fact that in several instances the subsidiary offerings of celts and other objects were not placed in pits dug into the fill, but were apparently deposited at a certain stage of loading in the clay and sand, and then covered up by continued filling.

Mention has been made of the association of cruciform offerings of celts as subsidiary offerings to these buried masses of stones. Such offerings were found in the fill over Massive Offering 2 (Offering 1942-C) and Massive Offering 3 (Offering 10), and an elaborate layout of cruciform celts (Offering 1943-E) was found in 1943 in the fill over the mosaic mask of the Feature A-1-d. In 1942 Drucker's small test pit in Feature A-1-e encountered a total of 6 roughly made serpentine celts. He was not able to determine whether they had been laid in any definite arrangement.

These massive offerings indicate some rather unusual patterns in Olmec culture. We know of nothing quite comparable to them in the rest of Mesoamerica. The emphasis on deeply buried treasures suggests somewhat different attitudes from those involved in and motivating the erection of stelae, the building of great mounds with temples on top, and so on. Of course these latter customs also were practiced at La Venta. The use of serpentine blocks in the massive offerings may have symbolized to the Olmec offerings of jade. It is clear that jade was highly prized and regarded as a preferred mate-

rial for use in offerings. The dressed and polished green serpentine blocks used in the massive offerings may have been intended to simulate huge offerings of jade. Then there is the sheer magnitude of these offerings. Their size alone must have made them noteworthy and valuable in terms of the human effort involved in transporting such large quantities of stone over great distances, not to mention the labor expended in preparing the stone for use. Other suggestions as to the significance of the massive offerings undoubtedly could be made, but those given above seem to us to be the most obvious, and perhaps the most likely.

SMALL DEDICATORY OFFERINGS

There is a group of small offerings recovered from within the Ceremonial Court, which may be treated separately since they form a natural and distinct unit from other offering materials removed in the 1955 season. In the first place they are obviously of a different order from the layers of large pieces of stone which we interpret as offerings. Second, stylistically and chronologically, they are quite distinct from the lots of offerings which were found outside of the Ceremonial Court. The objects considered here consist of a number of comparatively small objects of jade, serpentine, and other minerals, and a number of ceramic specimens. No pottery figurines were found with dedicatory offerings in Complex A. This may suggest that pottery figurines had a purely secular function at La Venta. It is worth pointing out as part of this introduction, that the offerings were not deposited at random within the Ceremonial Court. All the materials in this series were either located very obviously with reference to the centerline of the site, or they were associated with certain structures, like A-1-f, A-1-g, etc. These materials will be described in the following paragraphs. For descriptive purposes, each lot of offerings will be treated separately. However, initial descriptions of each class of artifact will give a very brief summary of the typology of that particular class. These typological discussions are intended to cover all the materials found in the course of our season's work.

OFFERING NO. 1

Location.—On centerline of the site directly beneath Monument 13.

Construction Phase.—Phase III.

Description.—This offering consists of 20 large roughly made pseudocelts of serpentine, laid with their axes north-south in three rows of six each, with two specimens at the southern end of the layout placed so as to stand upright (fig. 32). This offering was placed in a pit beneath Monument 13. The point of origin of this pit appeared to be prior to the laying of the orange and old-rose floors. The three

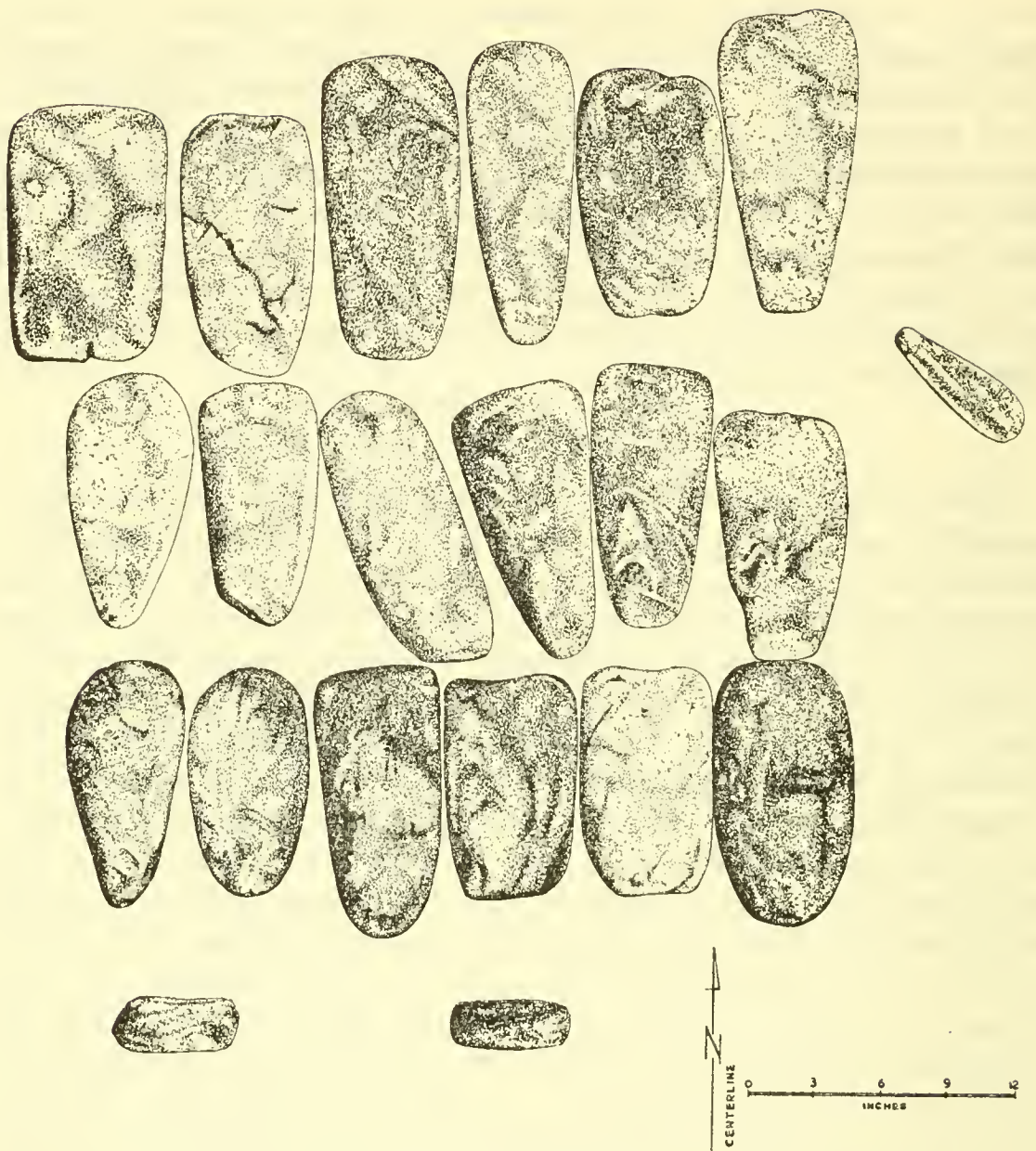


FIGURE 32.—Offering No. 1.

rows in which the specimens were placed form a figure approaching a rectangle, 3 feet 2 inches across the north side, 3 feet across the south side, 3 feet 1 inch along its western edge, and 3 feet 5 inches on its eastern side (pl. 23, *b*, *c*). The two vertically placed pieces stood 4 inches south of the southern row of pseudocelts. The pit in which this offering was placed had a narrow extension to the north which contained nothing but ordinary pitfall. The association with Monument 13 we consider to have been accidental, not purposeful. The computed center point of this offering lay almost directly beneath the center point of the monument and it is possible that the monument was placed with reference to the location of Offering 1. It is more likely, however, that both were located with reference to the centerline and to features connected with the south edge of Mound A-2, the offering in Phase III, and the monument in Phase IV.

Within the pit of the offering, but off to one side and placed apparently without any relation to the main offering, was found a small serpentine celt which possibly had accidentally been dropped in the position in which found.

The objects which we have referred to as "pseudocelts" are large, elongated, probably waterworn pieces of serpentine, which had shapes approximating those of finished celts. Some showed traces of slight amounts of workmanship, apparently to remove major irregularities. They were approximately elliptical in cross section, having one thick rounded end which apparently represented the poll of the celt, and at the other end the two wide sides taper into a blunt edge. The similarity to real celts is actually not very close. Had we not found so many other offerings of celts in this, as well as in previous seasons' work at La Venta, it is quite possible that we would not have recognized these pieces as imitations of the genuine well-made celts. The specimens vary from 9 to 14 inches in length, 5 to 7 inches in width, and 2½ to 4 inches thick. A number of the individual pieces weigh between 10 and 15 pounds.

OFFERING NO. 2

Location.—Centerline of the site.

Construction Phase.—Phase III.

Description.—This offering consisted of two layers of celts of jade, serpentine, and other materials. There were 31 pieces in the upper layer and 20 in the lower one. These were contained in an elliptical pit 3 feet 6 inches long by 2 feet 5 inches wide. The base of this pit was 1 foot 6 inches above the bottom of the pit in which Offering No. 1 was placed (pl. 23, *b-d*). The upper layer of celts was placed in what appears at first as an irregular arrangement (fig. 33, pl. 24). Casual inspection suggests deposition in three incomplete north-south rows in which the specimens were laid with their longitudinal axes east and west. Closer inspection and comparison with the lower layer, however, indicates that the celts were laid in two groups, each consisting of two lots of 5 specimens each, which were laid poll to poll with the bits outward. The space between the two groups of 10 celts was filled by a triangular arrangement of 10 laid in four rows of 4, 3, 2 and 1, with the single specimen of the uppermost row out of place. A fragment of a celt occurred near the row of two celts. It seems highly probable that the upper group of specimens may have been laid in the pit at a slightly higher level, perhaps having been placed on a mat or some other perishable material, and in time sunk down to the same level as the layer below.

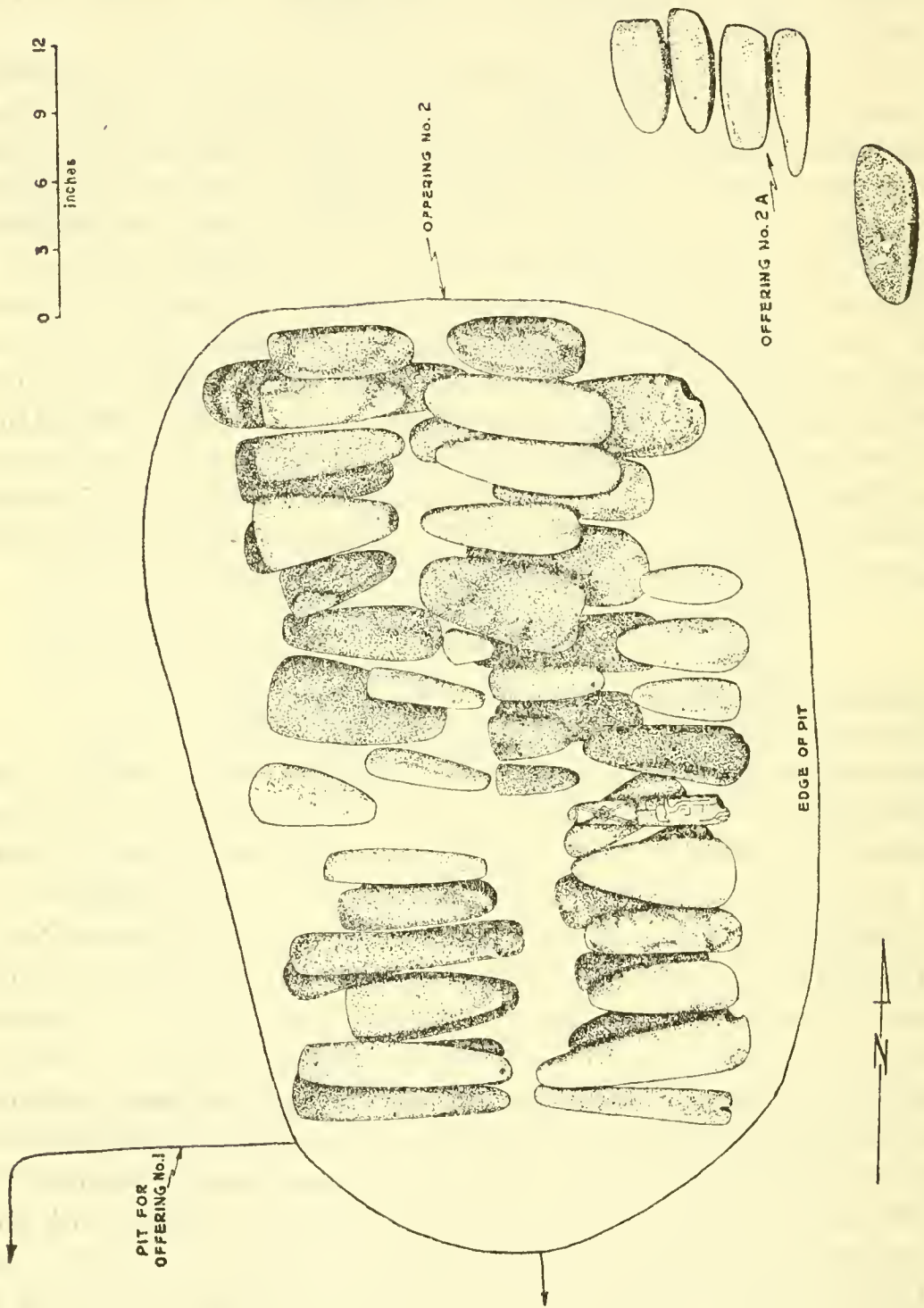


FIGURE 33.—Offerings Nos. 2 and 2A.

The lowermost layer, that of 20 celts (fig. 34, pl. 25), is quite obviously arranged in four groups of five celts each, laid out in two north-south rows.

Celts of stone are one of the most abundant types of artifacts at La Venta. In the course of the 1943 and 1955 field seasons, several hundred have been found. It will be recalled that Wedel and Stirling (LV, pp. 75-76) found one offering containing 253 of these objects. A survey of the literature does not show any comparable frequency of celts from any other Mesoamerican site. The La Venta specimens vary a good deal in form. One type which may readily be distinguished is that which we have already referred to in discussing Offering No. 1, the pseudocelts. For present purposes at least, we may consider these as a single group. It is just possible, however, that there are actually two categories under this type which we are unable to separate at present. That is to say some of the objects, so classified by us, may actually be blanks, which were imported for completion, but which instead were placed in the offerings. Others, like the stones deposited in Offering No. 1, may never have been intended as materials for making finished celts, but may have been merely symbols to be used as offerings. The second type would include all the completed, or nearly completed, true celts from the site. Although, as has been stated, there is a fair amount of variation in the details of form, most of these objects have certain similarities. They range greatly in size, but some of their proportions are fairly constant. The length is ordinarily between 2 and 3 times the width, and the width is ordinarily between 2 and 3 times the thickness of the specimen. In other words La Venta celts tend to be moderately long and rather flat. The maximum width usually occurs at, or just above, the bit so that the piece tapers gradually to the poll. The typical bit is ordinarily strongly curved from side to side and symmetrical. A few specimens have bits which are concave-convex in cross section, a form which would appear to be more suitable for use as an adz than as an ax or chisel. Within this generalized pattern there appears to be two major subclasses which may have depended upon the technique of the manufacturer of the individual specimen. In one of these the cross section is rectangular, or approximately so. It would appear that celts of this type for the most part were made by sawing out a blank of the material from a larger piece of stone. Remnants of shallow saw grooves can be seen on a number of these pieces. Among these celts which are rectangular in cross section there is a small subgroup of comparatively short, thick celts which are square or nearly so, in cross section, their sides tapering rapidly toward the bit and tapering also toward the poll. These are invariably very sturdy-looking tools. They are customarily made of tough igneous rock, not jade, and are smooth all



FIGURE 34.—Celts in lower layer of Offering No. 2.
Compare with figure 33.

over but not polished. We do not know whether these are pieces which have been imported from some non-Olmec region, or whether they represent some special sort of tool whose shape was determined on the basis of functional need. The other principal category of celts includes those which are elliptical to asymmetrical in cross section. In this category we have a wide range of cross-section shapes, ranging from very regularly formed ellipses through specimens which show only slight asymmetry to the extremes in the other direction which are quite asymmetric. It is impossible to tell how the very precisely symmetrical specimens were made. The blanks from which they were made might perhaps have been sawed out, but if so the work was carried on until no traces of the original cut marks remained. On the other hand they may have been irregularly shaped pieces which had been very carefully ground down. Asymmetric specimens, however, are in many cases quite obviously celts which were made from small elongated probably waterworn stones whose natural shape was such that only a relatively small amount of work was needed to transform them into usable tools. Whether the very symmetrically made specimens were also derived from such stones we cannot determine. A considerable number of the jade and serpentine celts, particularly, appear to have been derived from worn river cobbles.

A point of particular interest in connection with the function of these objects was the fact that the examination indicated that a considerable percentage of them had actually been used for cutting purposes. Previously it had been thought that at least the jade specimens might have been made for ceremonial purposes only. Of course there is always the supplementary possibility that celts of jade, or even of other materials, might have been intended for ceremonial use, but that such use might have included, for example, cutting wood for ceremonial fires, or something of the sort. At any rate many of the celts showed nicks along the bits, which very strongly suggest use, and in addition showed signs of what appeared to be battering on the polls. Only a few which had nicks along the cutting edges were without battering on the other end. This suggests use of these implements as chisels or wedges which were pounded, rather than as axes or adzes.

Of the 51 specimens in Offering No. 2 (including the one fragmentary celt), the following facts were noted:

- 14 specimens were of jade
- 20 specimens were of serpentine
- 17 specimens were of other materials
- 11 specimens were rectangular in cross section
- 26 specimens were elliptical in cross section
- 14 specimens were asymmetric in cross section
- 20 specimens showed signs of apparent hard usage
- 5 specimens were decorated

The 5 decorated celts in Offering No. 2 merit brief detailed descriptions. In the uppermost layer was a celt of serpentine, $6\frac{1}{16}$ inches long, $1\frac{1}{16}$ inches wide, and $\frac{7}{8}$ of an inch thick with asymmetric cross section, and with the remnant of a lightly incised design on one face. The fact that one end of the design is missing indicates that either the celt was cut down from a larger one, or that it was resharpened so much that part of the design was ground away. The design itself consists of two parts, which appear to differ stylistically. (See fig. 35, *d*.) The lower design is of a somewhat crudely drawn rectangle with crossed diagonal lines through it. It also has curved lines which cut off the insides of the corners and has a circular element within a lozenge in its center. Immediately above this is the remnant of a much more skillfully engraved design which stylistically conforms to the usual standards of Olmec art and contains at least one very distinctive element of this art style. This element is the split, strongly curved, fang which may be seen in the left-central portion of the design. On the lower right-hand side is an element which almost certainly is intended to represent the lower mandible of a skull which has mutilated teeth. In all probability, when complete, this part of the design represented either a being, characteristically shown as a death head, or else one distinguished by a bony lower mandible, as were certain Mayan deities.

From the lower level of celts of this offering came four decorated pieces. One of these was a large, wide, celt of mottled-gray jade (fig. 35, *a*). This piece was $7\frac{5}{8}$ inches by $3\frac{15}{16}$ inches by $1\frac{1}{4}$ inches in dimensions. In one face a concavity in the form of a rectangle with rounded corners, $4\frac{1}{2}$ inches by $2\frac{3}{8}$ inches by $\frac{9}{16}$ inches deep, had been ground. There is no indication of work marks, or wear, that would suggest that this cavity had been used for grinding paint or some similar purpose. Actually, the piece looked so much like the sort of thing one might find modified into an ash tray to be sold to the tourist trade that had we not found it ourselves, we might very likely have doubted its authenticity. Subsequent to the grinding out and polishing of the concavity, four rather crudely and roughly incised design elements were scratched in the poll end of the face, and a small crude human figure was drawn on the bit end, with its legs and feet extending down into the concavity. This little figure is quite crudely done, but the treatment of the mouth very plainly shows that whatever the artistic ability of the person who scratched it on this celt, he was quite familiar with the standard conventionalizations of Olmec art.

Rather crude incising, somewhat comparable to the designs just described, was put on a medium-sized serpentine celt in the same layer. This design consists of a series of elements, which include four irregu-

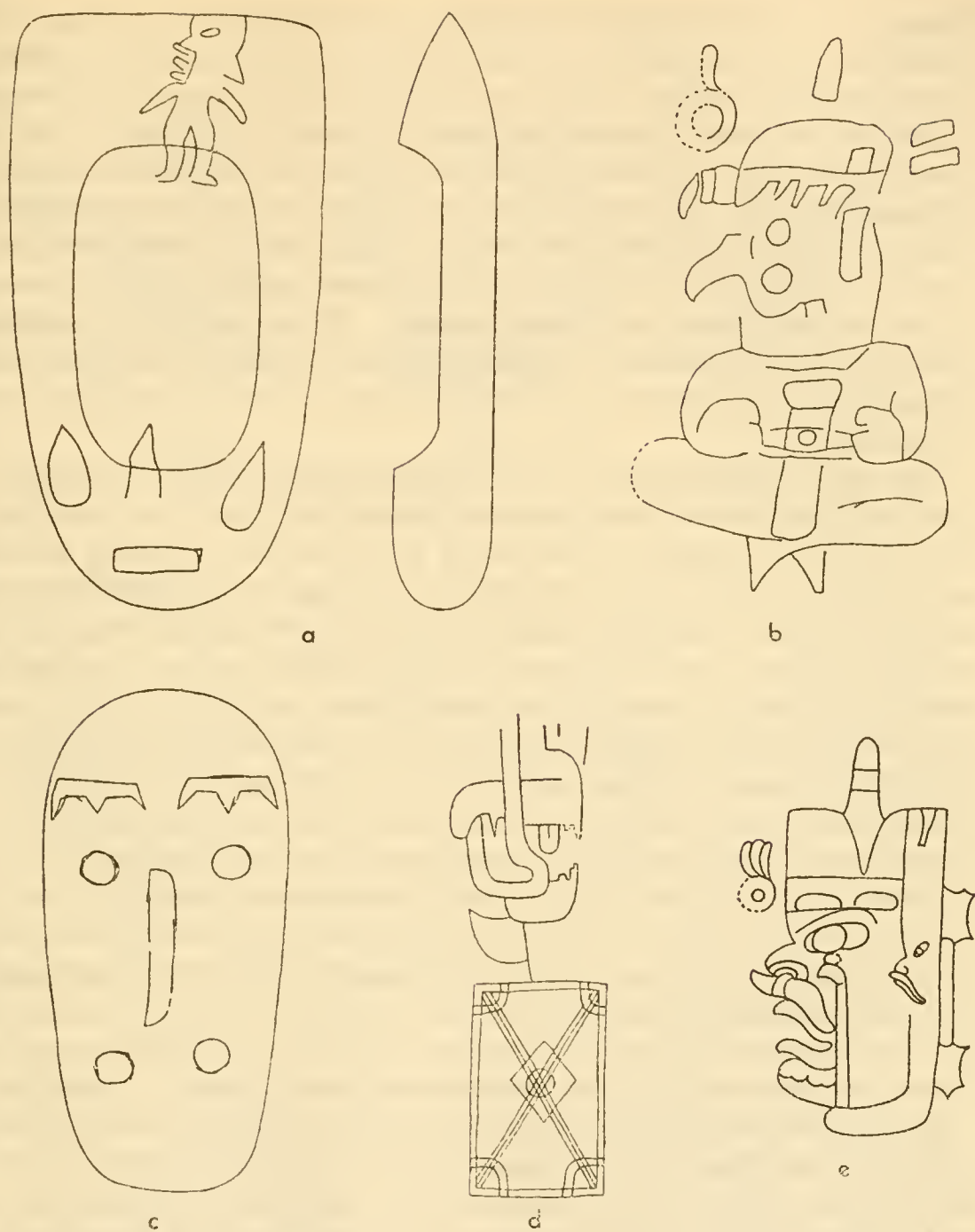


FIGURE 35.—Engraved designs on celts from Offering No. 2;
a shows upper decorated surface and cross section.

larly drawn circles around an elongated and vertically placed element, the uppermost circles being surmounted by two horizontal bars which have three points, each pointing downward (fig. 35, *c*). The pattern is somewhat reminiscent of the better carved ones from the decorated jade celts found in 1942 (Offering 1942-C, LV, p. 165). The specimen measures $5\frac{13}{16}$ by $2\frac{1}{2}$ by $1\frac{5}{8}$ inches.

A much more elaborate design occurs on a celt made of what appears to be a fairly compact brownish tuff. The stone from which the specimen was made appears to be waterworn to very nearly its present

shape. It was probably only slightly modified before the design was placed on it. Dimensions of the specimen are $7\frac{7}{8}$ inches by $3\frac{13}{16}$ inches by $1\frac{1}{16}$ inches. The figure incised on one face of this stone appears to represent a personage wearing a mask in the form of a bird's head (fig. 35, *b*). However, if the projections toward the left actually represent the open beak of a bird, then what we have interpreted as the eye with a tufted eyebrow over it would seem to have been misplaced. The body of this personage is represented in what would seem to be a seated posture with legs crossed. He appears to be holding some object in his hands. Above the figure, toward the bit, are four miscellaneous elements which do not appear to be connected to the figure itself.

The final decorated celt is a very symmetrically shaped large specimen, which appears to be of material similar to the one just described, but considerably harder. The bit of this specimen is heavily nicked and broken, and the poll is battered as though it had received very rough treatment. Measurements of the piece are $13\frac{7}{16}$ by $4\frac{1}{16}$ by $1\frac{1}{8}$ inches. On one face of the celt a head, in profile, has been incised in what is absolutely classic conventional Olmec style (fig. 35, *e*). Not only are the details of the representation of the head in conformity to the stylistic standards, but the engraving itself also very clearly conforms, being done with neat, clean lines, sweeping even curves like the apparent death head of the design on the first celt described. This workmanship manifestly differs from the scratched, irregular lines of the other engravings. In fact the comparison is so striking that one suspects that not only was some exceptionally sharp cutting tool used but that some special techniques were involved. Whether some sort of stencil might not have been used to lay off a pattern may never be known, but the regularity in this engraving hints at such a possibility.

In figure 36 are shown a number of heads represented either by flat incising or modeling in hard stone, usually jade, which are all obviously in the Olmec style. The decorated celts from Offering No. 2 at La Venta (fig. 35) add importantly to the corpus of indisputable specimens of Olmec incised art. Figure 35, *b* and *e*, although different in excellence of execution, are nevertheless stylistically similar in sharing the small detached figure just beside the forehead and the central projection arising from the top of the head. Notwithstanding the apparent crudity of the engraving shown in figure 35, *b*, the representation is nevertheless done with considerable skill, and obviously represents a bird-headed deity seated tailor-fashion with the lower arms and hands resting on the thighs, a posture which is duplicated in Monument 23 and elsewhere in the La Venta materials. Certain features of the two engraved celts just mentioned may be compared to the series of pieces shown in figure 36. The detached element

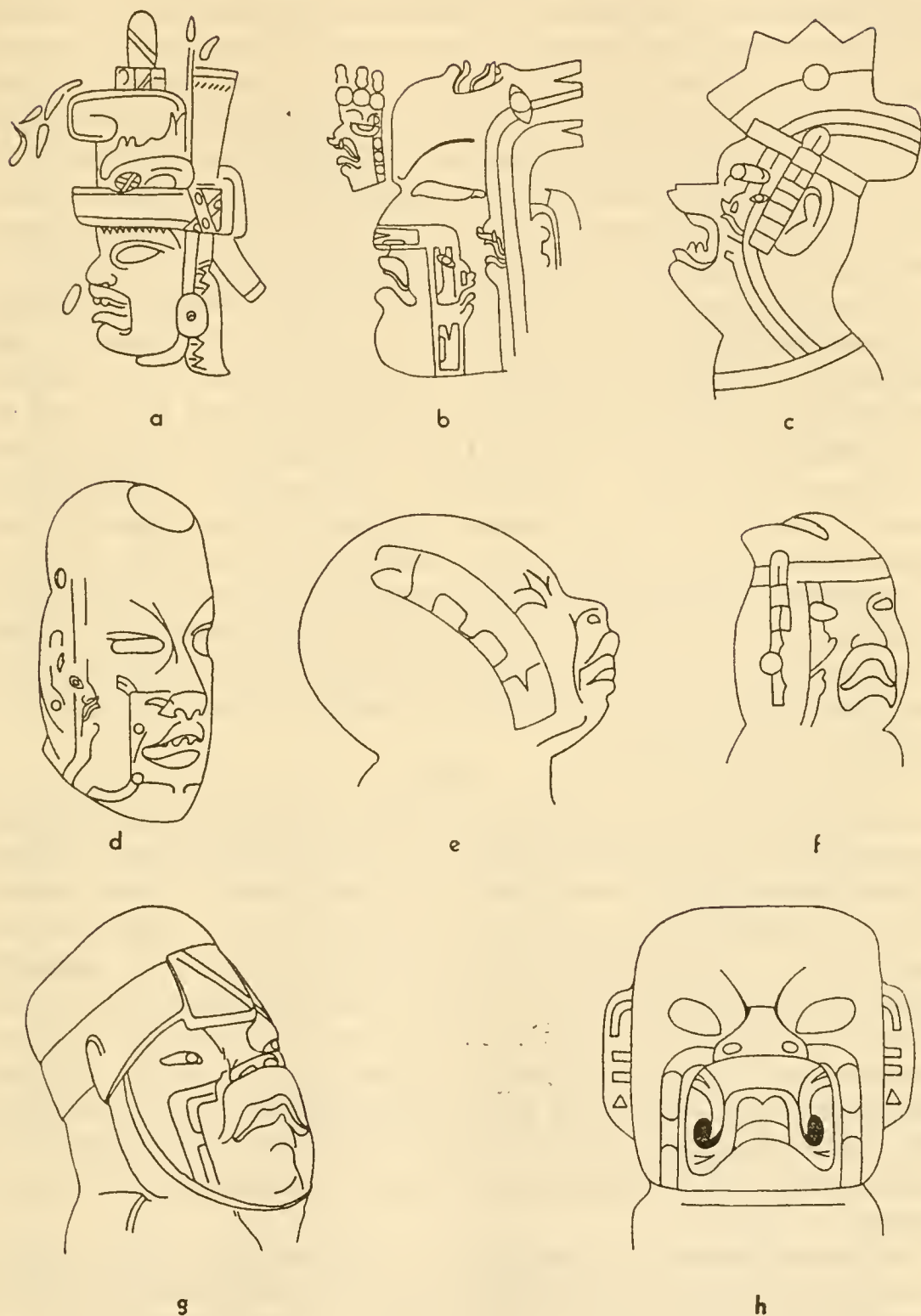


FIGURE 36.—Olmec art. Not from La Venta site. *a*, From engraved celt, Simojovel, Tabasco. *b*, Provenience unknown. *c*, Necaxa, Puebla. *d*, Chiapas. *e*, Guerrero. *f*, Mixteca. *g*, Guatemala. *h*, Veracruz or Oaxaca.

beside the forehead is possibly represented on the engraved Simojovel ax (fig. 36, *a*), and by the small profile on the jade plaque (fig. 36, *b*). This element may represent a carved miniature plumed head attached to a hat or headdress as judged from such a piece clearly shown on Altar 5 at La Venta (LV, fig. 52, top). The notch in the top of the head in figure 35, *e*, is apparently also present in the engraved plaque, figure 36, *b*, but in this instance as a secondary element, that is, a decorative element which is not an integral unit of the main profile. The mouth of the figure in figure 35, *e*, is identical to that on upper left and lower right faces in figure 36, *b*. The element consisting of two vertical lines running down the back of the head and bending forward under the chin as far as a point below the corner of the mouth may represent the lower jaw of the La Venta type mask in Monument 19, although this may possibly be related to a cinch or chin strap such as shown at La Venta in Altar 5 (LV, fig. 57) and in figures 36, *c* and *g*. The profile which omits or minimizes the lower lip and chin in this element (figure 35, *e*) also occurs in the pieces shown in figure 36, *c* and *d*, and possibly below the right eye in figure 36, *f*. The cheek ornament consisting of a double line usually running from the root of the nose laterally to the cheekbone and from there vertically to the chin occurs in simple form at La Venta on the engraved celt (fig. 35, *e*) and more elaborately in the pieces shown in figure 36, *b*, *d*, *e*, *g*, and *h*.

It is not possible to draw much meaning from this sort of comparison since the items we are matching with the La Venta pieces are lacking in provenience or archeological context. The nonproductiveness of such attempts emphasizes the requirement for additional controlled archeological excavations to secure reliable study materials. The increasing production of archeological fakes imposes even stricter demands upon the archeologist to make certain that he is dealing with genuine specimens (cf. Petersen, 1953). The new materials from the La Venta excavations of 1955 do, however, add to our knowledge of Olmec decorative motifs and tend to show that, when sufficient materials of undoubted provenience are on hand, significant conclusions can be drawn about the development of Olmec art and its diffusion to other areas.

It is worth noting that the La Venta site has not produced a single example of the large, elaborately sculptured "votive axes" which are obviously of Olmec origin (Saville, 1929 a, 1929 b; Judd, 1951), and there may be some reason, therefore, for suggesting that such axes date from a later stage of Olmec culture than is represented at La Venta.

Table 2 gives data on celts from the upper and lower layers of Offering No. 2.

TABLE 2.—Offering No. 2

UPPER LAYER

Length	Width	Thick- ness	Cross section	Material	Remarks
<i>Inches</i>	<i>Inches</i>	<i>Inches</i>			
6 $\frac{1}{16}$	2 $\frac{3}{16}$	1 $\frac{5}{16}$	Elliptical.....	Schist.....	
5 $\frac{1}{16}$	3 $\frac{1}{16}$	1 $\frac{5}{16}$	Rectangular.....	Basalt.....	Bit nicked, poll battered.
7 $\frac{3}{16}$	2 $\frac{7}{16}$	1 $\frac{3}{16}$	Elliptical.....	Diorite.....	Bit nicked.
5 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{5}{16}$	Rectangular.....	Serpentine.....	Do.
7 $\frac{1}{16}$	2 $\frac{3}{16}$	1	Elliptical.....	Jade.....	Do.
7 $\frac{3}{8}$	2 $\frac{7}{8}$	1 $\frac{1}{4}$	do.....	do.....	Asymmetrical bit.
4 $\frac{1}{16}$	1 $\frac{7}{8}$	1 $\frac{7}{8}$	do.....	do.....	Asymmetrical bit nicked.
6 $\frac{3}{8}$	1 $\frac{3}{8}$	$\frac{3}{4}$	Asymmetrical.....	Serpentine.....	
6 $\frac{3}{8}$	1 $\frac{3}{16}$	1 $\frac{3}{16}$	Elliptical.....	Jade.....	Do.
Fragment			Asymmetrical.....	Serpentine.....	
7 $\frac{3}{16}$	2 $\frac{3}{16}$	1 $\frac{1}{16}$	Rectangular.....	do.....	Bit broken off; biconical perforations at poll. String-sawed notch along axis at bit.
8 $\frac{1}{8}$	2	$\frac{7}{8}$	Elliptical.....	Jade.....	
5 $\frac{7}{8}$	2 $\frac{3}{8}$	1 $\frac{3}{8}$	Asymmetrical.....	Diorite.....	Bit nicked; poll battered.
5 $\frac{3}{4}$	2	1 $\frac{5}{16}$	Elliptical.....	Serpentine.....	Do.
5 $\frac{3}{16}$	2 $\frac{1}{16}$	1 $\frac{5}{16}$	Rectangular.....	Jade.....	Bit resharpened.
7 $\frac{1}{8}$	3 $\frac{1}{16}$	1 $\frac{3}{8}$	Elliptical.....	Serpentine.....	Bit nicked, poll battered.
6 $\frac{1}{16}$	2 $\frac{1}{4}$	1 $\frac{1}{2}$	Rectangular.....	do.....	
5 $\frac{1}{16}$	2 $\frac{3}{16}$	1	do.....	Diorite.....	Straight bit.
6 $\frac{7}{8}$	2 $\frac{3}{8}$	2 $\frac{1}{16}$	Elliptical.....	do.....	
5 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	do.....	Serpentine.....	
8 $\frac{3}{4}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	Asymmetrical.....	do.....	
5 $\frac{1}{2}$	1 $\frac{5}{8}$	$\frac{7}{8}$	Elliptical.....	do.....	
3 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	Rectangular.....	(?).....	Bit broken off, poll battered.
6 $\frac{1}{16}$	1 $\frac{9}{16}$	$\frac{7}{8}$	Asymmetrical.....	Serpentine.....	One face decorated.
5 $\frac{1}{16}$	1 $\frac{5}{16}$	1 $\frac{3}{16}$	Elliptical.....	do.....	Bit nicked.
5 $\frac{1}{8}$	2 $\frac{3}{4}$	1 $\frac{1}{8}$	do.....	Jade.....	
3 $\frac{1}{16}$	1 $\frac{5}{8}$	1 $\frac{3}{16}$	do.....	do.....	Elliptical form in plan view.
6 $\frac{3}{8}$	1 $\frac{7}{8}$	1 $\frac{1}{16}$	Asymmetrical.....	Serpentine.....	
8 $\frac{1}{2}$	2 $\frac{3}{8}$	1 $\frac{3}{16}$	Rectangular.....	Diorite.....	Curved longitudinally.
3 $\frac{7}{8}$	1 $\frac{3}{16}$	1 $\frac{3}{16}$	do.....	Conglomerate.....	Bit nicked; poll battered.
5 $\frac{1}{16}$	2 $\frac{7}{16}$	1 $\frac{3}{8}$	Elliptical.....	do.....	Bit nicked, no polish.

LOWER LAYER

<i>Inches</i>	<i>Inches</i>	<i>Inches</i>			
7 $\frac{1}{16}$	3	1 $\frac{7}{16}$	Asymmetrical.....	Serpentine (?).....	Pseudocelt (or blank?).
6 $\frac{1}{16}$	4 $\frac{1}{16}$	2	do.....	Jade.....	
4 $\frac{1}{16}$	3	$\frac{7}{8}$	Rectangular.....	Serpentine.....	Bit nicked, poll battered. Biconical perforation.
5 $\frac{5}{8}$	2 $\frac{1}{16}$	1 $\frac{7}{16}$	Asymmetrical.....	Jade.....	
5 $\frac{7}{8}$	2 $\frac{1}{16}$	1 $\frac{1}{4}$	do.....	Serpentine.....	Bit flat, unsharpened (unfinished?).
13 $\frac{1}{16}$	3 $\frac{1}{16}$	2	Elliptical.....	do.....	Do.
6 $\frac{3}{8}$	2 $\frac{1}{16}$	1 $\frac{1}{8}$	do.....	Jade.....	
7 $\frac{3}{8}$	3 $\frac{1}{16}$	1 $\frac{1}{4}$	do.....	do.....	Concavity 4 $\frac{1}{2}$ × 2 $\frac{3}{8}$ × $\frac{9}{16}$ inches in one face; crude incised decoration.
6 $\frac{5}{16}$	2 $\frac{1}{4}$	1 $\frac{1}{4}$	do.....	Serpentine.....	
8 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{3}{16}$	Asymmetrical.....	Diorite.....	Bit nicked.
7 $\frac{3}{16}$	3	1 $\frac{3}{16}$	Elliptical.....	Jade.....	Bit nicked, poll battered.
7 $\frac{1}{8}$	1 $\frac{3}{8}$	1 $\frac{1}{16}$	Rectangular.....	(?).....	Bit straight; thong-cut notch.
5 $\frac{1}{16}$	2 $\frac{1}{2}$	1 $\frac{3}{8}$	Elliptical.....	Serpentine.....	Crude incised design; shape mostly natural, slightly modified.
7 $\frac{7}{8}$	3 $\frac{1}{16}$	1 $\frac{1}{16}$	Asymmetrical.....	Tuff.....	Elaborate design; bit chipped; poll battered.
13 $\frac{1}{16}$	4 $\frac{1}{16}$	1 $\frac{1}{8}$	Elliptical.....	(?).....	Elaborate incised design.
7 $\frac{1}{16}$	3 $\frac{1}{16}$	1 $\frac{7}{16}$	do.....	Diorite.....	
5 $\frac{1}{16}$	2 $\frac{1}{16}$	1	do.....	Serpentine.....	Bit nicked; poll battered.
8 $\frac{1}{16}$	2 $\frac{5}{16}$	1 $\frac{9}{16}$	do.....	Basalt.....	Do.
6 $\frac{3}{16}$	3 $\frac{1}{2}$	1 $\frac{9}{16}$	Asymmetrical.....	Serpentine.....	Unfinished(?).
8	3 $\frac{1}{4}$	1 $\frac{3}{8}$	do.....	Jade.....	Bit nicked; poll battered.

OFFERING NO. 2-A

Location.—On the centerline of site, just to the northeast of, and outside of pit of Offering No. 2.

Construction Phase.—Phase III.

Description.—This offering of five celts as found by us appeared to be the remnant of a lot of materials deposited prior to the placing of Offering No. 2, and possibly prior to the placing of Offering No. 1. The pit of Offering No. 2 very obviously cut through the Offering 2-A arrangement (pl. 23, *d*; fig. 33). As found by us, there was a row of four celts which had been laid with the bits to the north. Immediately to the south of this row lay one other celt in a similar position. The corner of the pit of Offering No. 2 was so located that it could have removed companion pieces from Offering 2-A. It will be recalled that an extra celt was noted in the pitfall of Offering No. 1. It may be, therefore, that Offering No. 1 intersected the one under present discussion, and that subsequently Offering No. 2 cut into and removed another portion of it.

Table 3 gives data on celts from Offering 2-A.

TABLE 3.—Offering No. 2-A

Length	Width	Thick-ness	Cross section	Material	Remarks
<i>Inches</i> 6 $\frac{3}{8}$	<i>Inches</i> 2 $\frac{3}{4}$	<i>Inches</i> 1 $\frac{7}{16}$	Asymmetrical...	Jade.....	Appears to be blank, with thick rounded, blunt straight bit; well polished except for few depressions. Appears to be slightly modified water-worn nodule.
6 $\frac{3}{4}$	2 $\frac{1}{8}$	$\frac{3}{8}$do.....do.....	
4 $\frac{5}{8}$	2 $\frac{5}{8}$	1 $\frac{5}{8}$	Rectangular?...	Sandstone?...	One face and edges regular, smoothed, slight polish; other face roughly chipped out.
5 $\frac{1}{4}$	2	$\frac{3}{16}$	Elliptical.....	Schist?.....	} These two specimens made of unusual material; unless it has deteriorated considerably since deposition, the pieces could never have served for tools.
5 $\frac{7}{16}$	2 $\frac{7}{16}$	1 $\frac{3}{16}$	Rectangular....	Schist?.....	

OFFERING NO. 3

Location.—In east half of South-central Platform.

Construction Phase.—Phase II.

Description.—Offering No. 3 consisted of a very large number of small, and in many ways exceptional, jade objects and a few pieces of other materials. The precise layout of this offering was not observed because it was disturbed by a bulldozer in the course of cutting a sectional trench in the southeastern quadrant of the Court. The location, however, could be determined with some precision because of the fact that the offering had been covered over with a sort of cap of yellow clay. The northern part of this clay envelope remained in situ in the trench wall. There were at least two aspects of this offering which characterize certain specialized patterns of La Venta offerings. In the first place the specimens were placed in a bed of cinnabar. Secondly, the offering and its cinnabar base were covered with a layer between 1 $\frac{1}{2}$ to 2 inches thick of specially selected bright yellow clay.

Description of specimens.—As previously stated, this offering contained a considerable number of pieces. There had been three figurines, a pendant in the form of a water bird; four small concave rectangular objects; five spangles, five ornaments of rock crystals, and a large number of beads of various types.

The first of the figurines (pl. 26, *d-f*) is made of very light gray jade with a faint bluish tinge, and quite opaque. The specimen is $2\frac{5}{32}$ inches long and has a maximum breadth of $1\frac{7}{32}$ inches. The carving represents a human being and stylistically conforms to the general pattern of Olmec figurines. Among the several points of difference which set this specimen off stylistically from the most typical of these carvings, perhaps the most obvious is that of its proportions. The body is much shorter and more heavy set than the usual representation, and the head and face are also shorter and wider than normal. Various features are indicated by shallow rounded grooves which outline them. There are grooves to indicate the hair line, the hairdress itself, and the lower lip, and in addition there are grooves around the eyes. Similar grooves also indicate a breechclout. Arms are separated from the body by a technique which was probably utilized in making other figurines, but which here is more easily determined: holes were drilled from front to back between body and arms and the completed cuts were made by string sawing, begun at the drill holes. Note that the hands are joined to the body and also that the direction of the cut curves from back to front (indicating use of a very flexible tool). The legs were separated (feet are joined together) in the same way. The figurine presents the usual Olmec characteristics of having a series of intersecting biconical perforations at various points such as nasal septum, the ear lobes, and in addition at the back of the neck, to provide a point of suspension. The eyes were formed by double drilled pits and there are typical drilled pits also at the corners of the mouth. The polish of the specimen is quite high except for a few small areas on the back, which appear to have been eroded, or to have suffered damage due to chemical action of the soil.

The second figurine (pl. 26, *a-c*), $2\frac{9}{16}$ inches long, is in many respects closer to the standard Olmec figurine than the one just described. The principal point of difference is in its very small size. It is made of very light gray jade, opaque, and mottled with streaks which are of medium gray color. The head shows the exaggerated elongation, suggesting the deformation so commonly seen in Olmec figurines. There are the usual biconical perforations in the nose and ears, and through the back of the neck for suspension. The corners of the mouth are marked by drill pits. One minor variation is to be found in the fact that the eyes were not drilled but were indicated by saw

cuts. A breechclout is indicated front and back by light incised lines. Part of one arm was broken off prior to placing it in the offering, as indicated by the worn appearance of the break. Polish of the specimen was medium.

The third figurine was represented by a small arm fragment only. This bit looked at first as though it might be the missing piece of the arm of the figurine just described. However, it did not fit at the break and it differed enough in cross section and in color to indicate that it very clearly came from a different specimen. The fragment is of a grayish opaque jade slightly darker than that of the piece just described. The two figurines must have been very nearly the same size.

An outstanding art object uncovered in the course of the season is a small pendant in the form of a long-beaked water bird (pl. 27, *a*). This specimen was made of a piece of light greenish-gray opaque jade which was mottled with light gray streaks. The carving represents, in simple, stylized fashion, a crested cranelike bird with trailing wings. The front of the object is convex laterally; the back is concave. There are 5 perforations along its edges, which presumably were intended either for suspension, perhaps in a necklace consisting of several strands of beads, or to enable sewing the piece on some article of clothing. All the perforations are biconical except a sixth one, at the very center of the piece, which is drilled through from the back only.

Four small objects of jade, rectangular in outline with concave depressions at their centers (pl. 27, *b-e*), suggesting in their form flat-ended dugout canoes, are similar to the much larger specimen of Olmec workmanship found at the site of Cerro de las Mesas in 1941 (Drucker, 1955, pl. 38, *b*). Two of the pieces are of opaque, very light gray jade. One is a bright medium green opaque jade, and the fourth is a dark grayish jade, which when held against the light appears to be a translucent blue gray with a few streaks of bright green color. As stated, all are generally similar in form, being rectangular in plan with concavities at the center of one side. At what appears to be the bottom side, all are slightly convex. They range in length from $1\frac{3}{64}$ to $1\frac{1}{4}$ inches, in width from $\frac{1}{2}$ to $\frac{9}{16}$ of an inch, in thickness from $\frac{3}{16}$ to $\frac{1}{4}$ of an inch. While generally similar in form, the concave area in each differs slightly from that of the rest. One piece has a concavity that extends its entire length with edges slightly raised above the level of the end platforms. Another has a rectangular cavity in the middle with sides and ends on the same level. The third has a roughly rectangular cavity in the middle, and the fourth has a shallow channel its entire length with an elliptical depression at the center. Each piece has two biconical perforations at each end. These suggest that the specimens were intended to be attached to some garment. Other biconical perforations are drilled through the central part of each piece.

Another set of objects also appears to have been intended for attachment on some article of clothing because of numerous small holes which they contain. This lot consists of five pieces, which are all variants of the same basic shape: small slightly convex pieces of jade with one straight and one curved edge and elongated ends (pl. 28, *top row*). Three of the pieces are of opaque, light to medium green jade. One is a grayish-green jade and the fifth is translucent medium green jade. All have unilaterally drilled perforations at the center and a perforation at each end. Three have intersecting biconical perforations along the straight edge, and one, the smallest, has two small grooves apparently in lieu of perforations. Perforations drilled through these pieces are mostly quite small. One which was measured was just under one-sixteenth of an inch at its point of origin, and less than one thirty-second of an inch at its point of exit. Two of the specimens were highly polished and the other three had a medium polish.

This offering also included five small objects of rock crystal (pl. 28). All of these were variants of one basic shape, and like the specimens in the preceding paragraph, would appear to have been designed for attachment to some article of clothing, since they were perforated in such a way that it would be quite easy to sew them on. They ranged from $\frac{15}{32}$ of an inch to $\frac{9}{16}$ of an inch in length, from $\frac{11}{32}$ to $\frac{3}{8}$ of an inch in width, and from $\frac{1}{4}$ to $\frac{5}{16}$ of an inch in thickness. All were made so that they had one surface which was convex both longitudinally and laterally, and bases which were cut into three flat planes. Intersecting biconical perforations were drilled through each end and one side, so that each object has three points of attachment. Three pieces have tiny, finely incised designs on the flat end surfaces. The other two are plain. When placed with the central flat side down, the angles of the other two flat surfaces transmit the color of the background in such a way as to create a multicolored effect on the convex surface. Figure 37 illustrates two of the decorated pieces and shows the way in which they are perforated.

There were a number of tubular objects of jade (pl. 28) also contained in the offering. These are pieces which are often referred to in literature as "large tubular beads." These, however, because of their size, and also because of the fact that several of them have been found associated with earspools suggest that they may not have been used as beads in the usual sense, but had some special purpose, and very likely formed parts of the earspool assemblies. This seems especially likely when they occur in what are obviously matched pairs. One such pair consisted of two pieces, both just under $1\frac{1}{2}$ inches long, and just under $\frac{1}{4}$ of an inch in maximum diameter. In addition to the longitudinal perforations each had a row of five

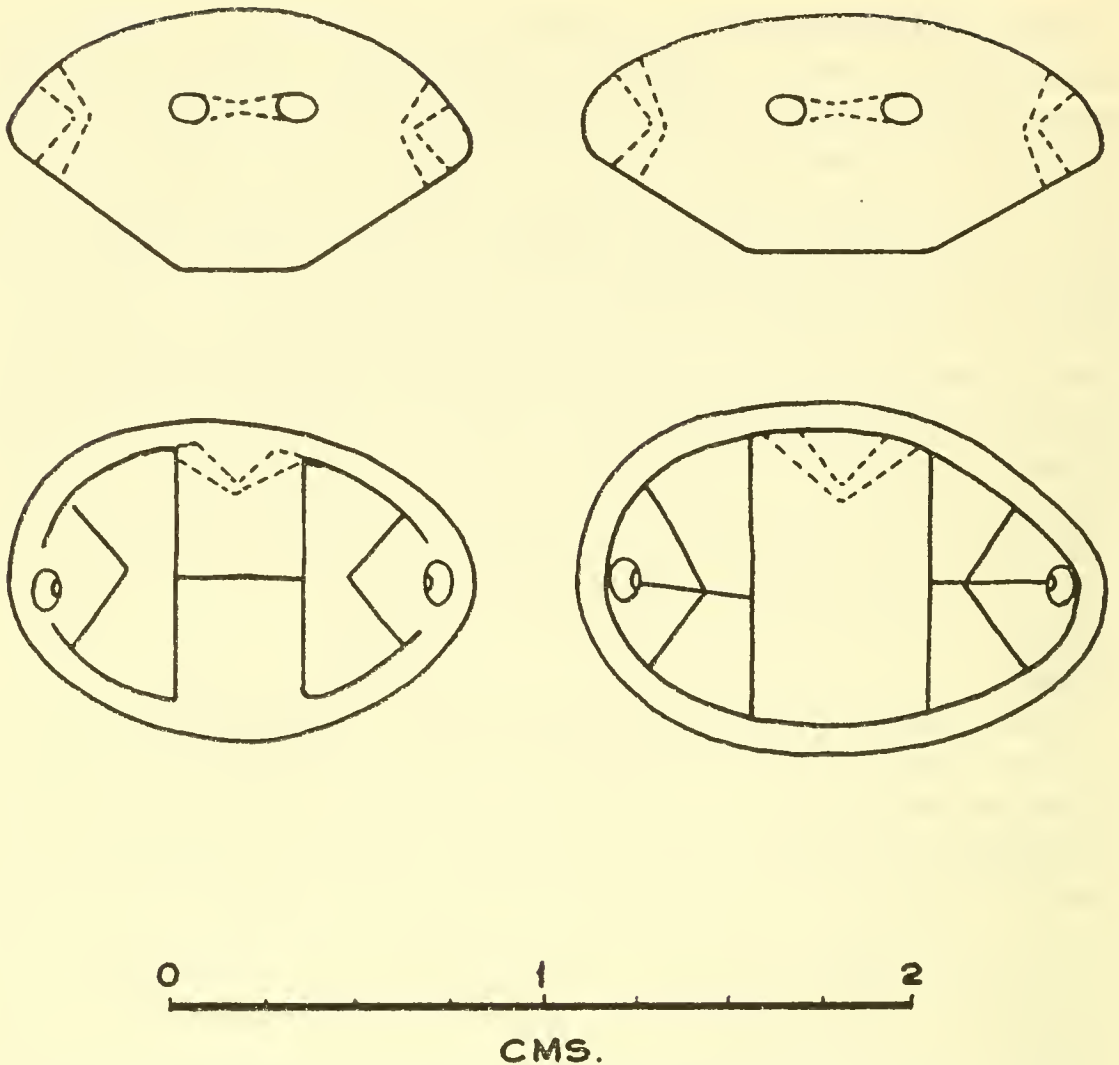


FIGURE 37.—Rock crystal ornaments from Offering No. 3 showing drilled holes and engraved designs.

small holes drilled down one side. They suggest in form simple flutes. Both pieces are of jade although apparently made of different pieces of stone since the color differs, one being of medium gray jade mottled with light gray and greenish streaks, and the other of light gray jade streaked with bluish green. One has both ends cut off quite squarely and has its maximum diameter at the center with a very slight tapering toward the ends. The longitudinal perforation of this piece is biconical. The companion piece has no taper. It has one nearly square end and the other one slightly irregular. There is a little incised circumferential groove near either end. The cross section of this specimen is not quite round. It was apparently made from a piece of jade which was sawed out of a larger piece so as to have a rectangular cross section, and then the corners were rounded off after a fashion. Unlike its companion piece, this specimen has a single longitudinal perforation drilled all the way through from one end. The tapering drill hole, at its point of exit, came out slightly off center.

Another pair of cylindrical objects have circumferential grooves which mark them off in a series of small round nodelike sections (pl. 28). Each piece has eight of these circumferential grooves. The segments thus formed are not of the same size in either piece. As in the preceding case, one of these pieces has a biconical, longitudinal perforation, and the other is drilled from one end only. Both are of opaque jade, one of light-green color, and the other of a more grayish tone.

In addition to the foregoing specimen, there were a large number of pieces which by their form, size, and the numbers in which they occurred probably actually were beads. The beads at La Venta include a variety of types. The most abundant form was the subspherical type, which grades imperceptibly into specimens that appear to be nothing but rounded pebbles, perforated for suspension (pl. 29). Both in the offering presently being discussed and in others as well, we made a considerable effort to distinguish consistently between the subspherical and the pebble beads, but were unable to do so. Extreme forms at either end of the range are quite distinctive. However, at the point at which the two forms merge, transition is so gradual that distinction between them cannot be made consistently. In Offering No. 3 there were 54 small beads of this type (pl. 28), as well as 13 fragments which also appeared to come from specimens of this form. All of these apparently were jade. They ranged in size from a length (length of beads here refers to the dimension along the axis of the perforation) ranging from $\frac{1}{16}$ to $\frac{1}{4}$ of an inch, with maximum diameter $\frac{1}{8}$ to $\frac{1}{4}$ of an inch. In addition there were 27 small subspherical beads, all of which were more regular in form, and much better rounded than the preceding, which were not of jade but of some fairly hard, dark purplish-brown material. These, like the other subspherical beads, were almost all biconically drilled. This was quite characteristic of materials at this site.

Another bead type consisted of 26 flat disk-shaped specimens (pl. 28). These are all small and mostly of translucent green or blue jade. They range in length from $\frac{1}{16}$ to $\frac{1}{8}$ of an inch and in diameter from $\frac{1}{8}$ to $\frac{3}{16}$ of an inch. Most of these are unilaterally drilled, only the 7 largest of this group are bilaterally perforated.

Cylindrical (or tubular) beads are represented by 58 specimens from this offering (pl. 28). As in the case of the subspherical beads, cylindrical beads from the La Venta site ranged through an unbroken series of specimens which are quite regularly cylindrical in form, to merge with another form approaching that usually referred to as "barrel-shaped." We found it impossible to find a clean-cut line of demarcation between these two types.

In addition to the foregoing there were a number of beads of somewhat special shapes. There are 9 lobed or "gadroned" pieces (pl. 29), all of which were a variation on the beads of subspherical form. Beads in this group vary somewhat in that 6 of them have rather shallow grooves, and in the other 3 enough material had been cut away to leave very pronounced lobes. Three specimens have three segments, or lobes, marked off. Six of them have four such segments. One of the latter is very nearly a cube with rounded corners. A tenth specimen of irregular subspherical form has two grooves and two side perforations approximately 120 degrees apart.

Of especial interest was a lot of 9 small beads, which in their form suggest copies of pottery vessels (pl. 28). Six look like globular, short-necked pots. Three others, each of which differed slightly in form from the rest, are strongly reminiscent of tall, long-necked jars. All these specimens are perforated along their longer dimension, that is, from base to mouth of the vessel.

OFFERING NO. 4

Location.—Immediately west of center of Northeast Platform under Court floor.

Construction Phase.—Phase III.

Description.—This offering came to light in the late afternoon just before the regular shift ended. It was necessary to expose, record, photograph, and remove the find in the few hours of remaining daylight. It proved impractical to leave any small finds in situ overnight, even with a guard, and because of the ever-present threat of looting we had no recourse but to do the best we could in the time available. Offering No. 4 is of particular interest because it was unique in a variety of ways. It consisted of a group of 16 figurines and 6 celts, which had been arranged in such a way that they represented a scene (pl. 30, fig. 38). The long slender celts, all of jade, were stood upright edge to edge along the east and southeast edge of an ellipse 20 inches along its north-south diameter, and 14 inches east-west. The figurines were also standing upright. One of them, typically Olmec stylistically, but of very unusual material, was placed so that it stood with its back against the row of celts. The other 15 figurines, two of which were jade and the rest of serpentine, were placed in front of this figure. A file of four was set up as though passing in review from north to south. The 11 other figurines are arranged in a semicircle along the western side of the ellipse, watching.

The feet of the figurine and polls of the celts were embedded in a small, slightly mounded hump of reddish-brown sand which, as an extensive layer, constituted part of the fill underlying the rose-colored

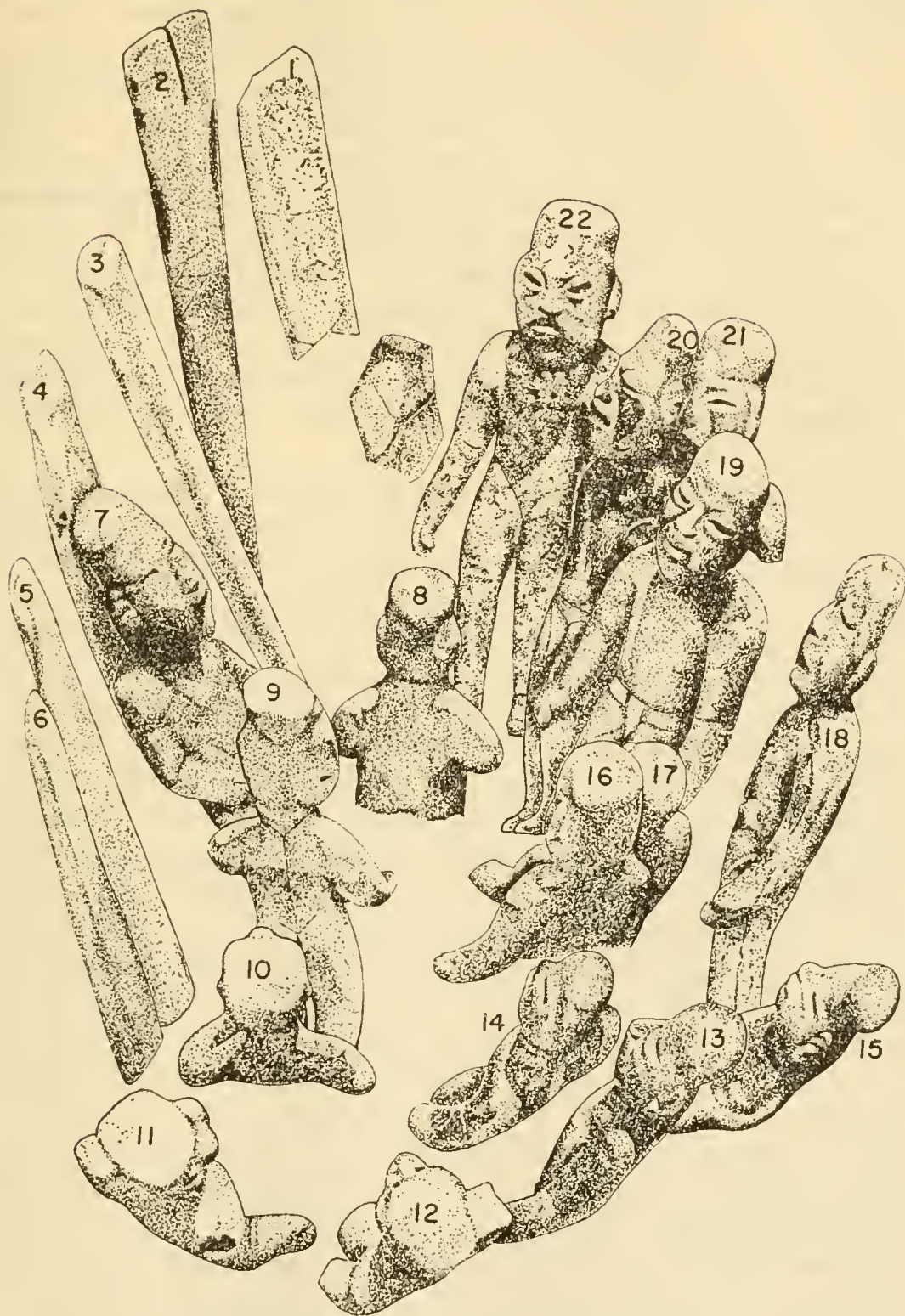


FIGURE 38.—Offering No. 4, looking south.

floors. It should be noted that in this general area, this particular fill was not entirely of clay, but contained some extensive layers of sand (fig. 17). After the celts and figurines had been placed in position the feet and lower legs of the figures and the polls of the celts were buried about 1½ inches in the reddish-brown sand to hold them upright. The whole offering was covered with white sand. At this point the white sand was mounded up so that it covered the figurines and extended outward, in the form of an elliptical lens, some distance north and south. A thin brown sand layer was then used to fill out the surrounding area level with the top of the white sand mound in which the figurines were buried. The area was then leveled off and covered over with the old-rose floor series. We assume, of course, that it was first covered with the lowermost layer of this floor series, which after a time was repaired and renewed by covering it over with another colored layer, and so on.

The story of this layout does not end at this point. At a later date, that is to say after the final member of the old-rose floor series (which here comprised four colored layers) had been placed over the offering and over the rest of the Court, a hole was cut through the floors in the form of an ellipse, which was almost exactly the same size as that of the figurine layout, and was centered very accurately directly above it (pl. 31). This hole was dug down to the level of the heads of the figurines and the tips of the celts and then refilled. The cut through the floors was most obvious when we cleared off the level, because the material with which the hole was filled was lighter in color and contrasted strikingly with the white and old-rose colors of the uppermost floors (fig. 39). Our first thought was, of course, that the hole had been dug in order to place the figurines and celts but the reddish-brown sand in which the lower legs of the figurines were set was undisturbed and extended continuously outward in all directions—in other words, extended out a greater distance than the margins of the hole cut through the floors. The same was true of the white sand with which the figurines were covered. The pitfall, however, from the point of origin from the pit down to the heads of the figurines was obviously mixed, containing fragments of the old-rose, white, yellow and orange colored floors through which the hole had been cut. Therefore, it was quite clear that the figurines and celts had been placed prior to the laying of the floors and the hole was cut through subsequently (probably at the very end of Phase III) to inspect them. The point of especial interest in this connection is the very accurate manner in which this inspection hole was located directly over the elliptical area occupied by the offering. We are of the opinion that this indicates that some sort of accurate records were made, or possibly some sort of

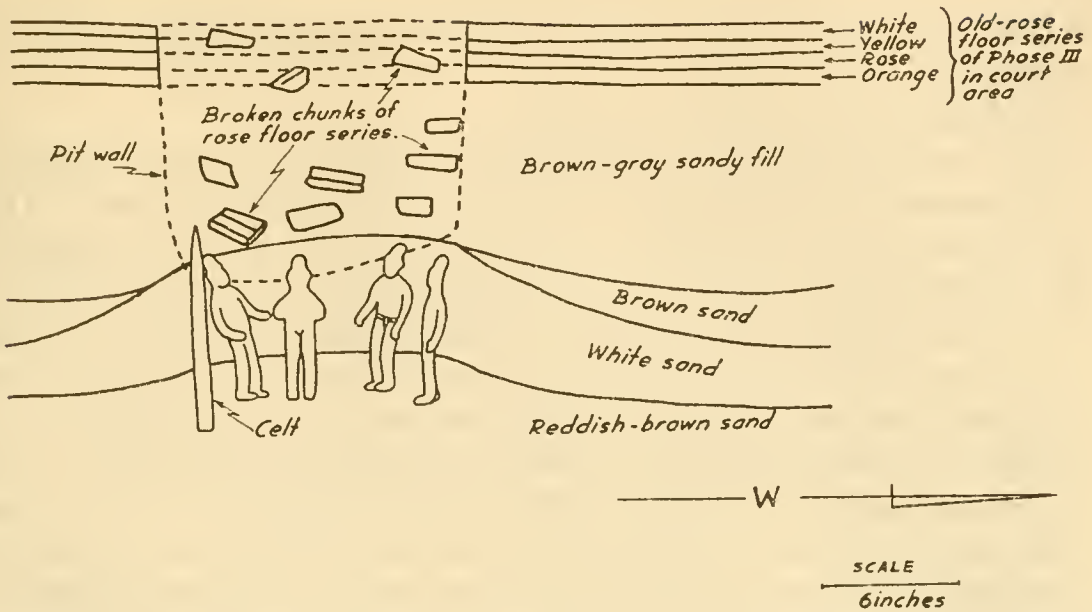


FIGURE 39.—Section through Offering No. 4. Left to right in offering: celt 4, figurines 7, 8, 19, 18. Note pit cut from white sand floor (latest of Phase III old-rose floor series) to inspect figurines that were originally deposited at time Phase III fills (reddish-brown sand, white sand, brown sand) were laid down. Compare with plate 31.

plan, so that a considerable time after the burial of the offering it could be found again.

It is necessary here to add some qualifications to a prior popular description of this figure layout. In that account (Drucker and Heizer, 1956, p. 367) we described the scene stating that all the figures of serpentine and jade were arranged to face the figurine made of granite which stood against the wall-like row of celts. More leisurely and careful study of the photographs and field notes, however, suggest that this unusual figurine, while it obviously represented an important personage in the scene, was not necessarily the primary center of interest. Two alternative explanations of the layout occur to us. Referring to figure 38 and plates 30 and 32, it could be claimed that the scene depicted by the figurines centers about five principal characters. These are the four figurines (fig. 38, Nos. 8–11) which appear to be alined in a file facing south, and the single figurine (No. 22) which stands directly in their line of march. The remaining figurines are arranged in a semicircle watching this scene. The figurine of granite (No. 7) may represent a captive or another important personage. The most important figure, by this interpretation, would be the one (No. 22) facing the oncoming file. It is worth noting that this figurine was the most spectacular in appearance of all this group, being made of bright green jade with numerous black inclusions which gives a very striking appearance. The features of this figurine were also most haughty and commanding. The file of four figurines (Nos. 8–11) is in no way set apart from the others by special characteristics. There

is nothing about them to indicate whether they are priests who are performing some ritual, or whether they are dancers, or perhaps candidates for some sacrificial rites.

Our second alternative interpretation has to do with the apparent arrangement of the majority of the figurines in groups of two. This shows most clearly in plate 30. The figurine pairs (with reference to the numbers shown in fig. 38) would be 8-9, 10-11, 12-14, 13-15, 16-17, 18-19, and 20-21. Nos. 7 and 22 stand by themselves. What was taken above as a file of four figures (Nos. 8-11) would by this interpretation be included as simply two more pairs of figures in the group which is observing some ritual in which the figurines Nos. 7 and 22 are the central personages. No. 22 again appears to be the real center of the action. It is possible that another figurine originally stood beside the one numbered 7 in the drawing, perhaps backed up against celt No. 3. From this location we recovered two fragments of very badly decomposed schistose (?) material which on being cleaned appeared to be fragments of the arms of a figurine. It may be that a figurine of this rather soft laminated stone was placed in this space and, after having been buried for some time, disintegrated very badly. It is quite possible that it was removed at the time the inspection hole was cut through the overlying floors.

Whatever the real explanation of the scene depicted by the group of figurines and jade celts may be, it apparently represents some important ritual. The arrangement is unique. We suggest that it offers some very interesting clues as to the way in which at least some of the Mesoamerican figurines actually may have been used. The only comparable figurine arrangements with which we are familiar—and the similarities are not very close—are the well-known Tarascan ceramic arrangements of figurines (cf. Spinden, 1957, pl. 48) and the scene portrayed by the group of clay figurines in front of tomb 103a at Monte Alban. The date of this find is post-Monte Alban III (Caso, 1947 b, figs. 18-19, p. 183).

The six celts of the offering (pl. 32) differ from the usual objects of this type found at this site. They are much longer and much more slender than other celts from La Venta that we have seen. The lengths vary from $9\frac{5}{16}$ to $10\frac{3}{4}$ inches, the widths from $1\frac{3}{16}$ to $1\frac{9}{16}$ inches, and in thickness they range from $\frac{3}{8}$ of an inch to $1\frac{3}{16}$ of an inch. All six are, as may be seen, nearly of the same size and of the same general form. All have slightly rounded polls, curved symmetrical bits, and in cross section have the form of somewhat flattened ellipses. Nos. 1 to 4 (fig. 40) are all of an opaque, light-gray jade, with here and there small areas of buff tones, and also small streaks of a bluish cast. In point of fact it is highly probable that all four of these celts were actually cut from the same piece of stone. Not only are they similar

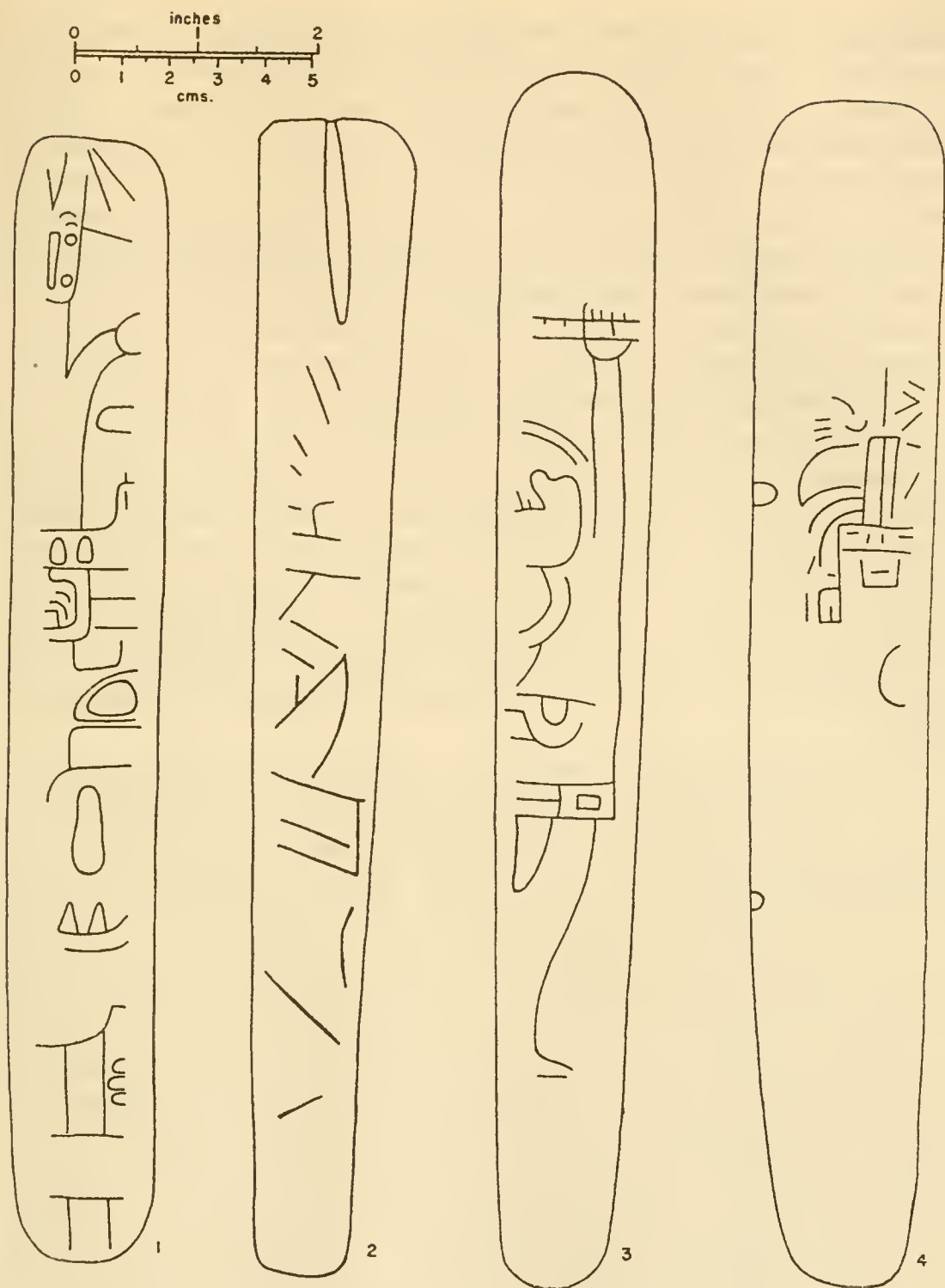


FIGURE 40.—Decorated jade celts from Offering No. 4.

in color and texture, but all four of the remnants have a design incised upon them prior to the grinding away of their present edges (fig. 40). In addition celt No. 4 has portions of two deep drill pits on one edge which were cut partly away when this stone was cut to its present size. It has proved impossible for us to reconstruct the original design, since so much of it has been ground away in rounding off the edges of the celts. It seems probable, however, that the original object was a large flat plaque. The remnants of the design appear to

include a few parts of common Olmec design elements. Celt No. 1 shows some parts of design, which might have formed part of a column of glyphs. Celt No. 2, although its design remnants suggest a rather rigid geometric motif, may have contained some sort of an ornamental border along one edge of the original plaque. Celt No. 3 appears to contain part of a human figure, and No. 4, which almost certainly joined No. 3, seems to contain the remnant of a design indicating an elaborate headdress. The other two celts are of different jade, No. 5 being of a light-gray jade of a faint greenish cast, and No. 6 of a light grayish-blue jade. Neither of these has traces of decoration. They are similar to the preceding in general form, except that both have a slight longitudinal curve. Celt No. 5 has certain signs suggesting that it may have actually served as a working tool. The edge of the bit was ground off blunt before it was placed in the offering. It seems possible that this may have been done because the cutting edge was badly nicked. There are a couple of slanting cracks near the bit which might have been produced in the course of work, and there is an old transverse break about $1\frac{1}{2}$ inches from the poll. The poll itself shows some suggestion of having been battered and pounded upon.

The 16 figurines in the offering are in many respects very similar, and are stylistically quite typical Olmec figurines (pls. 33-36). Inspection of them indicates, however, that there are minor points of difference between them. Some of this difference may be defined as more or less emphasis on the usual conventionalization of these specimens. Another variety of difference appears to represent better, or poorer, craftsmanship on the part of the makers of the pieces. All 16 of the pieces are very near to being the same size. However, as will be brought out, they appear to have been selected so that they formed a well-matched group, but probably were not manufactured especially for this particular offering. In overall height they range from $6\frac{5}{16}$ inches to $7\frac{15}{16}$ inches, most of them being just a little over 7 inches in maximum length. Many of them had traces of bright red cinnabar paint with which they had been decorated. As will be noted, some had this paint on the feet and legs, others on the faces, and only a very few may have been painted all over. Other points of difference among them included whether or not they were shown as wearing breechclouts, whether or not they appeared to have dental mutilations, and so on. A list of these minor differences will be presented below in table 4. It seems worthwhile, however, to give somewhat more detailed descriptions of a few of the unusual or outstanding specimens in the group.

The first figurine to be described, piece No. 7 in figure 38, is the specimen which was made of a conglomerate, consisting chiefly of

granitic sand. This specimen has at present a very peculiar gritty appearance. This, however, appears to be due to the fact that the original surface has deteriorated, presumably because of chemical action of the soil. At any rate there are a few small areas, particularly on the back of the specimen, and in such partially sheltered spots as the undersides of the arms, sides, and legs, in which there are vestiges of a smooth polished surface, dark buff in color. It seems most likely, therefore, that this specimen was originally given a finish comparable to those of other more usual Olmec figurines. Nevertheless it would have been quite conspicuous in any series of figurines because of the very distinctive color, which contrasted strongly with the greens, grays, etc., of the serpentine and jade pieces. Details of workmanship of the head and face, the use of drilled pits at various points, and the posture are all features which are treated in typical Olmec style in this piece. If any of the specimens in this group was specially made for use in this particular scene, it was likely to have been the one under present consideration.

Another outstanding figurine is the piece which was assigned No. 9. This specimen is made of a very light grayish jade with a faint bluish tinge, and the material is quite hard and was given a very high polish. While this specimen is typical in many respects and conforms to the general stylistic pattern, it is one of the most highly conventionalized from the site, comparable in that respect to the two standing figurines of blue jade found in 1942. The face is proportionately larger and longer than average, and its head is extremely elongated. Fingers and toes were not indicated even in the usual sketchy fashion. The form and musculature of the back, which is often very skillfully molded in Olmec figurines, is in the case of this specimen reduced to a very simplified set of flattened planes and incising which continues up the back of the head. The slightly bent knee or slouching stance, which is characteristic of all La Venta stone figurines, is greatly exaggerated in this specimen. It may be noted that the figurine lacks the lower part of one arm. This break occurred before it was placed in the offering, since the arm fragment was not in the pit.

Specimen No. 17 in this offering is of interest because of the skillful and highly realistic treatment, particularly of the musculature of the body. Unfortunately, the black inclusions and the spots of brownish color on the light gray serpentine of which this piece is made, make this modeling difficult to see, particularly in photographs. However, the musculature of the torso at front and back is carved in a very skillful and subtle way in low relief, and is quite realistic. The contrast between the workmanship of this piece and that of No. 18, which is one of the more poorly made ones, is notable.

Piece No. 18, while in a general way conforming to the stylistic pattern, differs in a number of respects. The form of the face and head are not quite normal. There are no brow ridges indicated on the forehead, and the forehead bulges instead of sloping. The eyes are made in a sort of semilunar form. The jaws are narrower and more tapered than is usual. The arms and head are proportionately large and bulky, and their form is crudely represented. The body is flat and unmolded, both front and back. There is a layer of material left under each foot, which somehow suggests that the manufacturer did not quite understand how to represent feet in the conventional manner. There are also a number of drilled pits not ground away under the arms, and between the fingers and some of the toes.

Another somewhat unusual specimen is No. 21. This piece was made of serpentine, containing black inclusions. It is at present a light greenish-gray color. The molding of the head and face of this piece is quite different from the usual standards. A few shallow horizontal channels were used instead of the usual modeling of the area around the eyes. The alae of the nose were completely omitted. The mouth differs from the usual typical Olmec representation of this feature in that the upper lip is flat, the mouth itself is a thin slit with tiny drill pits at the corner, and the lower lip is almost entirely suppressed. The body lacks modeling almost entirely and appears somewhat more still and clumsy than the other figures represented in this offering.

Piece No. 22 is, in some respects, one of the finest of the entire lot. It is made of a very hard jade, of bright green color with numerous black spots. In general treatment, this specimen is quite typical of the more conventional variety of Olmec figurines. Its only really exceptional feature is the flat top of the head. Despite the considerable stylization of this piece, the proportions are good, and realistic details such as musculature of the chest are skillfully done.

This brief summary of the specimens contained in Offering No. 4 points up some interesting conclusions. One of these concerns the variation among the figurines themselves. To our knowledge this is the largest single lot of unquestionable Olmec figurines that has ever been found. There obviously was considerable difference in artistic skill among the lapidaries who sculptured these pieces. The specimens pointed out in the preceding paragraphs as inferior are judged so because they lack details of treatment which appear to have been considered desirable by the ancient carvers—details which are represented in a majority of the specimens. Admittedly, we are making a value judgment here, but we feel that it is one justified, for the total range of figurines from La Venta is now a considerable one, if we include those

found in 1942 and 1943. The so-called inferior figurines, however, were nonetheless made by people who were familiar with the artistic standards of Olmec culture, since technologically and in many details they conformed with the essential patterns. This also suggests that we may expect in the course of time to encounter rather more stylistic variation in this art than we have previously anticipated.

Another interesting aspect of this offering is the fact that some of the figurines and celts may have been of some antiquity at the time they were deposited here. The fact that four of the celts were made from an older object, which seems to have been an elaborately incised plaque, was mentioned in the course of the descriptions. Many of the figurines had old breaks when deposited in the offering. Some lack part of a foot; there are two with broken arms, etc. The corresponding pieces were not included in the offering. This suggests that some of these pieces may have been old when the offering was made, and is the basis for our interpretation that the lot of figurines was not especially made to be deposited where we found it, but was assembled from figurines that had been made in times past. In more general terms this interpretation indicates that we still must use considerable caution in attempting to work out a chronology of stylistic development even in cases in which we can actually date the placement of one of these Olmec offerings.

TABLE 4.—Data on figurines in offering No. 4

Spec. No.	Height (inches)	Material	Red paint	Breech-clout	Incised line across bottom of feet ¹	Mutilated teeth	Miscellaneous
7	7 $\frac{1}{4}$ ₆	Conglomerate	?	?	No	No	Surface heavily eroded.
8	6 $\frac{3}{8}$	Serpentine	Feet, face, ears	Yes	No	No	Left foot broken off.
9	7 $\frac{3}{8}$	Jade	do	No	No	No	Extreme stylization.
10	7 $\frac{1}{4}$ ₆	Serpentine	Hands, ears, nose	Yes ²	Yes	No	Right foot broken off.
11	7 $\frac{3}{8}$	do	Face, neck, hands, feet.	Yes	Yes	Yes	
12	7 $\frac{1}{4}$	do	Apparently all over	Yes	Yes	Yes	Left arm broken off.
13	7 $\frac{3}{8}$	do	do	Yes	?	Yes (?)	Drilled pit at center of mouth, top of head, through top of breech-clout; both feet broken off.
14	6 $\frac{5}{8}$	do	do	Yes	Yes	Yes	
15	6 $\frac{13}{16}$	do	do	Yes	Yes	Yes	This and No. 14 are very similar.
16	7 $\frac{1}{4}$	do	Feet, hands, face	Yes	Yes	Yes (?)	Drilled pit, center of upper teeth.
17	6 $\frac{5}{16}$	do	Feet, face	Yes	No	Yes (?)	Drilled pit, center of upper teeth.
18	7 $\frac{3}{16}$	do	do	No	No	?	Nose, mouth, chin broken off; crude workmanship.
19	7 $\frac{15}{16}$	do	Face, head, neck, arms, feet.	Yes	Yes	Yes	Right foot broken off.
20	7 $\frac{9}{16}$	do	Apparently all over	Yes	Yes	Yes	
21	7 $\frac{5}{16}$	do	Face, feet	Yes	No	No	Crude workmanship.
22	7 $\frac{5}{8}$	Jade	Face, hands, feet	Yes ²	No	No	

¹ Purpose of this line was to indicate separation of ball of foot and toes.

² Specimens No. 10 and No. 22 are only ones in which breechclout is indicated on back as well as front.

OFFERING NO. 5

Location.—In Northeast Platform.

Construction Phase.—Phase III.

Description.—This offering was placed in a shallow pit, whose point of origin appeared to be in the next to the last structural phase of the platform mound. This phase corresponded to the old-rose floor series and its accompanying fill in the general Court area. The pit itself penetrated burned clay floors of the preceding structural phase and its base lay 1 foot deeper than that of Offering No. 4. The offering consisted of a series of jade objects, laid out within a rectangle outlined by two rows of four small pieces of volcanic tuff (fig. 41). These two rows of stones defined a rectangle 2 feet 3 inches east-west and 1 foot 1 inch north-south.

Within the small area defined by the stones a considerable amount of cinnabar was sprinkled. The jade objects were laid upon this. A detailed description of the jade materials is given below, but here it may be briefly summarized to make the layout clear. It included a pair of earspools and some cylindrical pieces of jade with longitudinal perforations (objects sometimes described as large tubular beads, but in this case probably parts of an earspool assembly), pendants and a string of beads among other items. As in the case of a number of 1943 finds, the earspools had been placed about 9 inches apart on a line which was at right angles to that of the rest of the layout. This type of deposition in an offering was interpreted by Stirling and Wedel as a burial, since the earspools were approximately in the position in which they might have been found had they been worn in the ears of an interred individual. However, in this offering, as in the case of those in 1943, there were absolutely no vestiges of bone material or tooth caps. It must be noted that the only certain burials uncovered at the site of La Venta were those within the tomb excavated in 1942. They included badly deteriorated but unmistakable fragments of long bones, and quite well-preserved tooth caps. We are, therefore, of the opinion that the offerings found by us, which were laid out in this manner, as well as those found during the 1943 excavations, were not burials at all but simply offerings. The possibility exists that the ornaments such as earspools, necklaces, and the like, have been placed on small effigies of perishable materials, perhaps of wood, or matting. Another point that suggests that there was no actual interment may be noted in figure 41, showing Offering No. 5 in situ. The string of beads may be observed to extend crosswise across the offering area with very little disarrangement, which obviously would not have been the case had it been laid across a body. Certain other offerings found by us in 1955 showed similar arrange-

ments so that this was very clearly a definite pattern of arranging objects in offerings of jade.

At the southeastern corner of the rectangle, just outside the perimeter marked by the stones, was a small somewhat crushed flaring-side bowl of Brown ware in which lay a small Fine Paste Buff-Orange bottle (fig. 42, *a*). The vessel was sufficiently out of line with the rest of the offering so that it might have been considered as a separate offering, except for the fact that a small piece of tuff, the same material as the eight pieces outlining the rectangle in which the jade was placed, also lay to the southwest of the bowl. It may be that the bowl, and perhaps the pieces of tuff, formed, or were part of, an older offering which was cut into by the pit in which the jades were to be placed. The bowl, as well as the rectangular area occupied by the jade, was covered with a coating of a compact yellow clay, very much like the layer that sealed off Offering No. 3.

The specimens in this offering (pl. 37) include the following pieces: a maskette of dark translucent green jade, representing a conventionalized jaguar (?) face (fig. 43, *a*). This piece approaches a hemisphere in form. The specimen, in front view, has a nearly round outline $1\frac{3}{16}$ inches long by $1\frac{3}{32}$ inches wide. The back has been hollowed out, and this brings out the translucent quality of the stone. The features of the jaguar are carved with very subtle low relief, and accented by thin sawed lines which outline the eyes, mouth, etc. There are a number of holes drilled through the edges of the object at the top and sides, either for suspension or for attachment. These perforations are biconical. At the center a biconical perforation drilled from the rear comes out just at the center of the nose of the jaguar.

The two small earspools of light-green jade appear to be a pair, although the shape of the flares is not quite identical. One of them is almost perfectly round in outline, the other has two straight sides so that it would appear to be of the subtype that approaches a rectangle with rounded corners. The round specimen has a diameter of $1\frac{3}{16}$ inches; the rectanguloid one measures $1\frac{5}{32}$ inches by $1\frac{1}{16}$ inches. Both pieces appear to have been cut down, the one with circular outline has no stem and has two holes drilled through the rim. The other piece has only a remnant of stem left. Associated with the earspools were two long cylindrical pieces of jade with longitudinal perforations (these may be noted in figure 41 on the left-hand side of the strung beads). Both objects were ringed so they have a noded appearance. Both are $1\frac{3}{16}$ of an inch long and have a maximum diameter of $\frac{7}{32}$ of an inch.

Another object in this lot is a small jade ornament of concave-convex form with scalloped edges. It is reminiscent of two specimens recovered in 1942 (LV, pl. 54 *c, d*). This piece, however, has a large

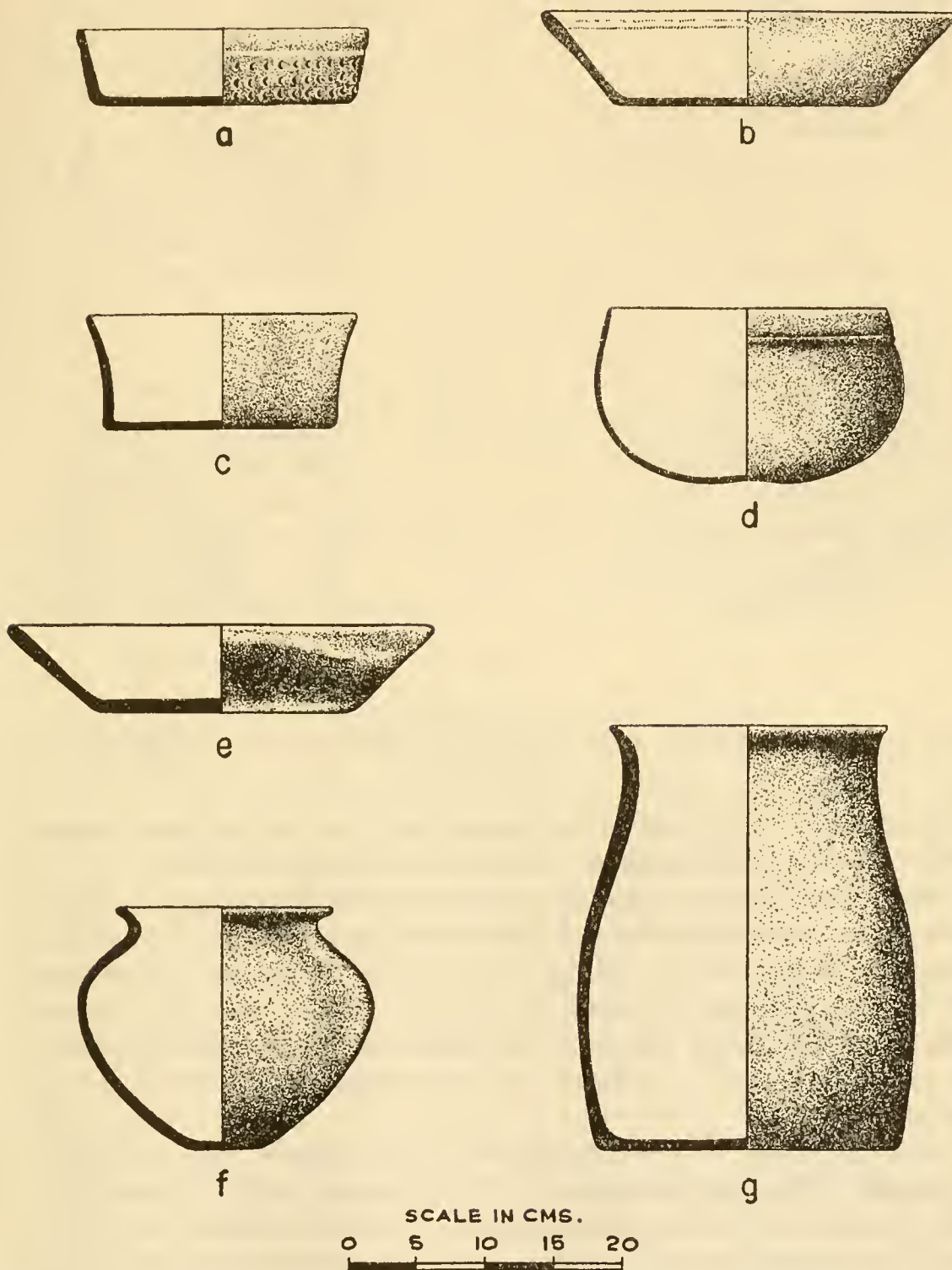


FIGURE 42.—Pottery vessels from offerings. *a*, Offering No. 5. *b*, Offering No. 15. *c*, Offering No. 18. *d*, Offering No. 25. *e*, Offering No. 19. *f*, Offering No. 24. *g*, Offering No. 22.

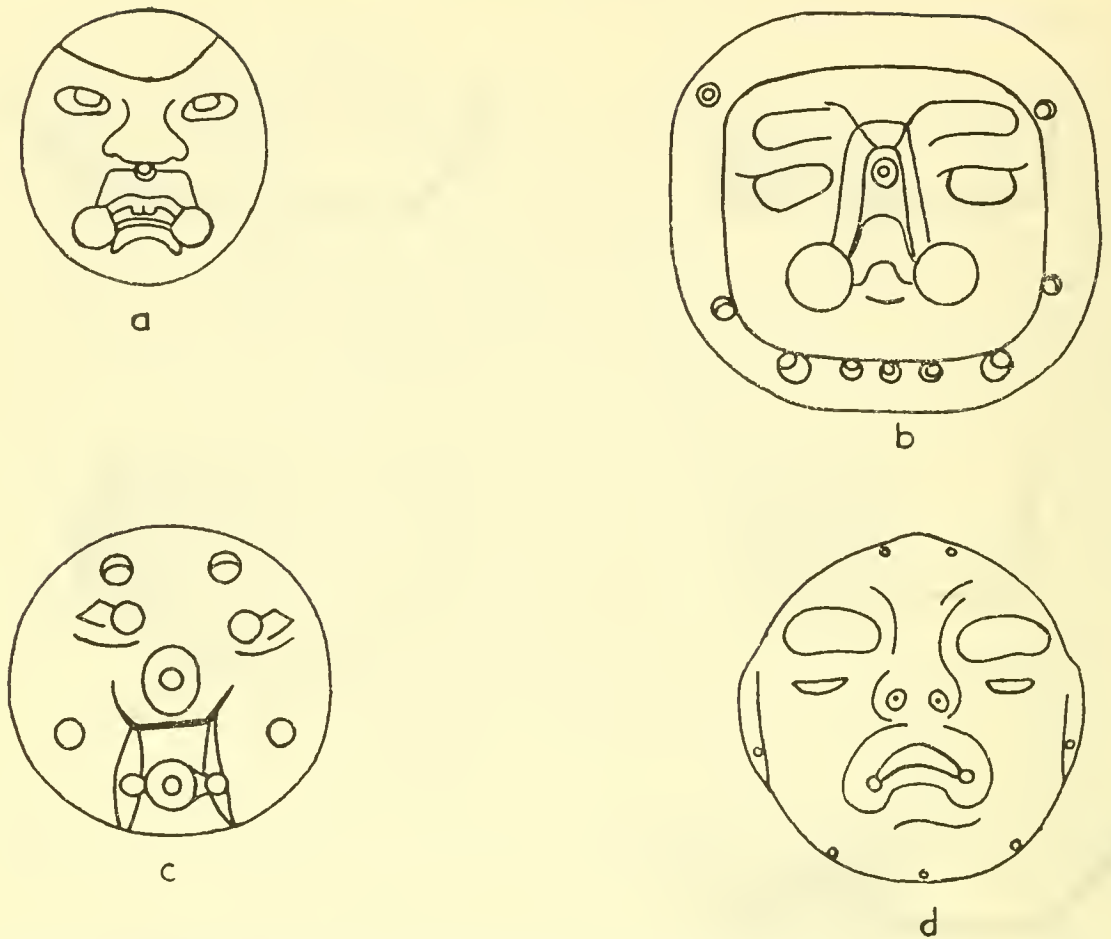


FIGURE 43.—Jade maskettes. *a*, Offering No. 5. *b*, Offering No. 7. *c-d*, Offering No. 6. (Not to scale.)

central perforation slightly off center, and four smaller perforations about the rim. The maximum diameter was $1\frac{3}{16}$ of an inch.

An object which we class as a pendant, because of the fact that it was rather clearly perforated for suspension, is a small irregularly shaped thin piece of opaque light-green jade. It has two intersecting biconical perforations along its straight edge. One side is well smoothed and highly polished; the other side which would appear to be the back, is partly polished. Its dimensions are $1\frac{1}{2}$ inches by $1\frac{1}{16}$ inches.

Also included in this offering were 13 complete and incomplete spangles. These are reminiscent of the spangles found in 1943 (LV, pl. 58) except that these pieces have only one or two perforations each, and some of them more obviously represent birdheads than do those of the 1943 season. One which is particularly noteworthy is quite clearly intended to represent the head of a duck, and has two small bits of crystal set into the perforations. The shortest complete specimen is $\frac{3}{32}$ of an inch long; the longest is $\frac{5}{8}$ of an inch.

At either end of the strand of beads across the offering was a large subspherical bead, approximately $\frac{3}{4}$ of an inch in diameter.

One of these is perforated with a biconical hole; the other was drilled from one side only. The beads include 74 beads of the subspherical-to-pebble type, and 21 small tubular beads. Several of these latter show a slight constriction at the center.

The eight stones which outline the offering, and the ninth that was off by itself near the bowl, all appear to be made out of the same kind of material, probably a coarse tuff. It was found that two of the pieces fit together so that there were actually eight individual fragments. Most of them had been smoothed down into irregular forms. One piece has sort of a mushroom form, consisting of a round disk with a short stub of a rectangular stem attached to one side. None of these pieces were very large. This last one mentioned, the mushroom-shaped one, is the largest of the lot, measuring $3\frac{1}{2}$ inches in diameter. One fragment suggests in its form that it may have been the knee or elbow of a small figurine. Another, which is formed by the two pieces that fit together, suggests a sort of topknot of a type which is more often seen on Olmec clay figurines than on objects of stone. It seems possible, therefore, that these pieces of stone are fragments of a small figurine which was broken up and placed in an offering.

OFFERING NO. 6

Location: In Northeast Platform (Feature A-1-f).

Construction Phase: Phase III.

Description: This offering was placed in the bottom of a rather large pit which apparently originally had a roughly elliptical form. This pit was 4 feet 2 inches long at the top, tapering to 3 feet long at the base. It was oriented north and south. Its point of origin was 1 foot 4 inches below the surface of the platform, in other words a short distance below the contact line between the final red clay cap of the structure and the underlying fill next to the last layer (fig. 14). The depth of the pit was 2 feet 2 inches so that its base was about 7 inches deeper than that of Offering No. 4. The east side of the pit was cut away before it was noted by us so the east-west diameters were not observed. However, if we assume that the offering was laid out approximately at the center of the pit, we may estimate that its east-west dimension at the bottom must have been in the neighborhood of $2\frac{1}{2}$ feet and that at the top it was probably about $3\frac{1}{2}$ feet across. The pit was filled with clays in which brown colors predominated so that it was in marked contrast to the layers of fill through which it penetrated. At the bottom of the pit was a layer of cinnabar nearly an inch thick. On this cinnabar a number of objects of jade were laid (pl. 38, fig. 44). Over the jade was a layer of clay mixed with cinnabar, and over this was a 2-inch layer of compact yellow clay.

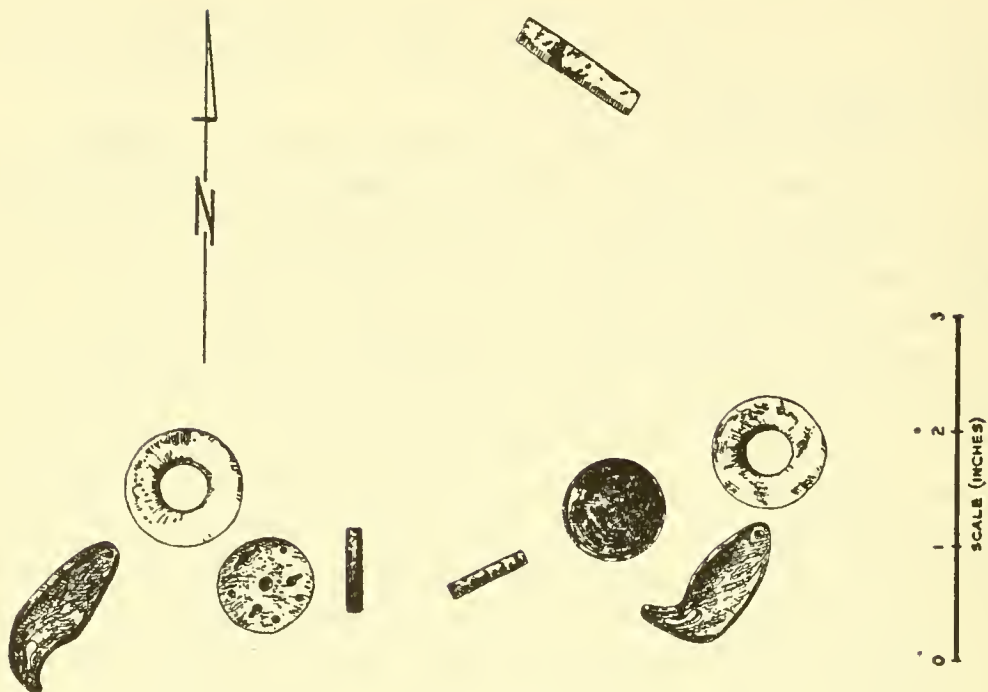


FIGURE 44.—Offering No. 6.

This offering was in several respects similar to the one just described. It also consisted of a pair of earspool assemblies, some pendants, and some beads (pl. 39). The earspools themselves were placed 7 or 8 inches apart. About a foot to the south was a two-strand necklace of small jade beads with a large bead at either end. The general line of this necklace paralleled that of the earspools. In other words the same pseudoburial layout recurred in this offering. However, as in the preceding case there was not the slightest trace of bony materials, and in addition the area of the offering itself was quite small. We consequently do not consider this to be a burial.

This offering, like the preceding one, included a new item in the La Venta cultural inventory, the jade maskette. In fact it included two of these objects (fig. 43, *c*, *d*). One is a small object of green jade with yellowish white spots that appears to represent a human face. We consider it to represent a human face because of the long narrow ears indicated on each side. The carving is quite stylized in the Olmec manner and except for the ears differs but slightly from the jaguar (?) in Offering No. 5. In the front view, the object is almost completely circular, like the one in Offering No. 5. It has been very deeply excavated from the back so that the material is noticeably translucent. The maximum thickness from front to back is $\frac{7}{16}$ of an inch; its diameter is approximately $\frac{7}{8}$ of an inch. There are seven perforations around the rim, two at the top of the head, one at each ear area, and three along the lower edge. Another maskette, much more conventionalized, is a small almost discoidal object of whitish jade with streaks of light green. The maximum diameter is $2\frac{6}{32}$ of an inch, its thickness from front to back $\frac{7}{32}$ of an inch. The back is slightly concave. There are several drill pits suggesting eyes, nose, and mouth, and shallow saw cuts outlining these features of a conventionalized face. There are a number of perforations drilled completely through the front to back, one at the very center and others about the rim.

The two earspools in this offering are very obviously a pair, being of the same size and shape, and also being of pieces of stone very similar in color, possibly both having been cut from the same piece of stone. They conform to typical "A" earspool flares as defined by Kidder, Jennings, and Shook (1946). The two pieces look as though they were quite regular in form, but actually are just a little bit off true, both the outer and the inner outlines being not quite round. The maximum diameter of one of the objects is 1 inch and that of the other is $3\frac{1}{32}$ of an inch. The exterior diameters of the stems are $2\frac{1}{32}$ and $1\frac{9}{32}$, respectively. Both objects are quite highly polished.

Associated with the earspools was a pair of pendants in the form of jaguar fangs. While highly conventionalized in form, there is a realistic touch: the line of enamel of the fangs is clearly marked by an incised line across each piece. Both pieces have small conical perforations at the tip for suspension and below that point two larger perforations which have been cut out to make one continuous one. Both pieces have a curious double curve. The fact that they are made out of what appears to be the same piece of grayish-white jade led us to try to match them up. On doing so it became quite clear that they had been cut from an earspool, the curvatures being due to the fact that they were cut longitudinally from the lip of a flare down to the stem of the earspool.

As in the case of so many other LaVenta earspool assemblies, there was a pair of tubular objects associated with those in this offering. This pair is not at all alike in color, one being of a whitish jade with a few light-green streaks, the other being of green color with white and gray streaks. Both, however, are of the same size, $\frac{3}{4}$ of an inch long and $\frac{5}{32}$ of an inch in diameter. A third and larger cylindrical object is of white jade with streaks of green, $1\frac{6}{32}$ of an inch long and $\frac{9}{32}$ of an inch in diameter. A set of slanting grooves along one side suggests a spiral ornament about the piece; however, these grooves were cut into one side of the specimen only.

The two large beads which had been found at either end of the two-strand necklace were not alike in shape, though roughly both are the same in size. One was a large subspherical bead with gadrooned sides. It is $\frac{7}{8}$ of an inch in diameter, $1\frac{7}{32}$ of an inch long, and perforated by a cylindrical, or nearly cylindrical, hole. The other is rectangular with rounded corners in form, $\frac{1}{2}$ inch at its longest diameter, and $\frac{9}{16}$ of an inch high. It is perforated by a comparatively small conical hole.

This offering included another bead type, one which is extremely rare in Mesoamerica generally. This is the disk bead, the faces of which are ground quite smooth and polished. The sides are not parallel, that is to say, it does not always have a cylindrical form; instead the sides tend to be slightly convex. There were 15 of such specimens in this offering. A fairly typical example was $\frac{1}{8}$ of an inch long and $\frac{7}{32}$ of an inch in diameter. The very common subspherical to pebble bead type is represented in this lot by 72 pieces. The size range runs from one specimen $\frac{9}{32}$ of an inch in length and $\frac{7}{32}$ of an inch in diameter to one $\frac{1}{4}$ inch in length and $\frac{3}{16}$ of an inch in diameter. The proportions of the former specimen, as will be noted, differ slightly from the standard of this type which tends to be either the same in length and diameter, or very slightly larger in diameter.

The unusual little "jar-shaped" type of bead noted in Offering No. 3 was represented in this lot by one specimen.

OFFERING NO. 7

Location.—In Northeast Platform (Feature A-1-f).

Construction Phase.—Phase I (?).

Description.—This offering was not laid in a pit dug to contain it, but appears to have been deposited in the mound fill during the process of Phase I construction of the platform. It was placed at a point very close to the levels at which Offerings Nos. 5 and 6 were laid in their pits. It may be noted that we have, as will be reported later on, other offerings which were deposited in just the same fashion. Prepared bed for the offering was made by mixing an orange sandy clay with very small amounts of cinnabar. This material was laid down so that it formed an irregular, approximately oval area 1 foot 3 inches north-south and 1 foot 1 inch east-west. The layer was a little less than 1 inch thick. On this cinnabar and clay mixture was laid what appeared as a sketchy version of the sort of offerings found in the same platform close to this one. There was a maskette of jade (fig. 43, *b*), and on either side of it two large perforated jade disks (these were not earspools, but they had a superficially similar appearance when first uncovered), a matched pair of tubular, longitudinally perforated jade objects, one large and one small tubular object, and a small pendant in the form of a clam shell (pl. 40). As figure 45 shows, these pieces were laid out in similar fashion to the major component of Offering No. 5 and Offering No. 6. As before, there was no indication whatsoever that this deposit had ever contained a burial.

The maskette from this offering was the largest of those that have been recovered at La Venta. It is of translucent dark-green jade, which in places has faint bluish tones and a few small whitish buff spots. This specimen represents the face of a jaguar. The outline of the face itself is a rectangle. The features are indicated in several ways. The snout, and part of the mouth of the beast, are indicated by modeling in bold relief; very wide and shallow saw cuts are used to indicate the eyes and also the area under the eyes; wide shallow drill pits mark the corners of the mouth; and very lightly sawed lines outline the eyes, the nose, part of the mouth, and frame the sides and lower margin of the face. It is difficult to decide if the carving was actually not completely finished, or if it is to be regarded as very highly schematized. The surface is very highly polished. Framing the face on the sides and the lower edge is a flat flange. This has two perforations on either side, and five perforations along its lower edge. All but two of the perforations are biconical, with small shallow drill

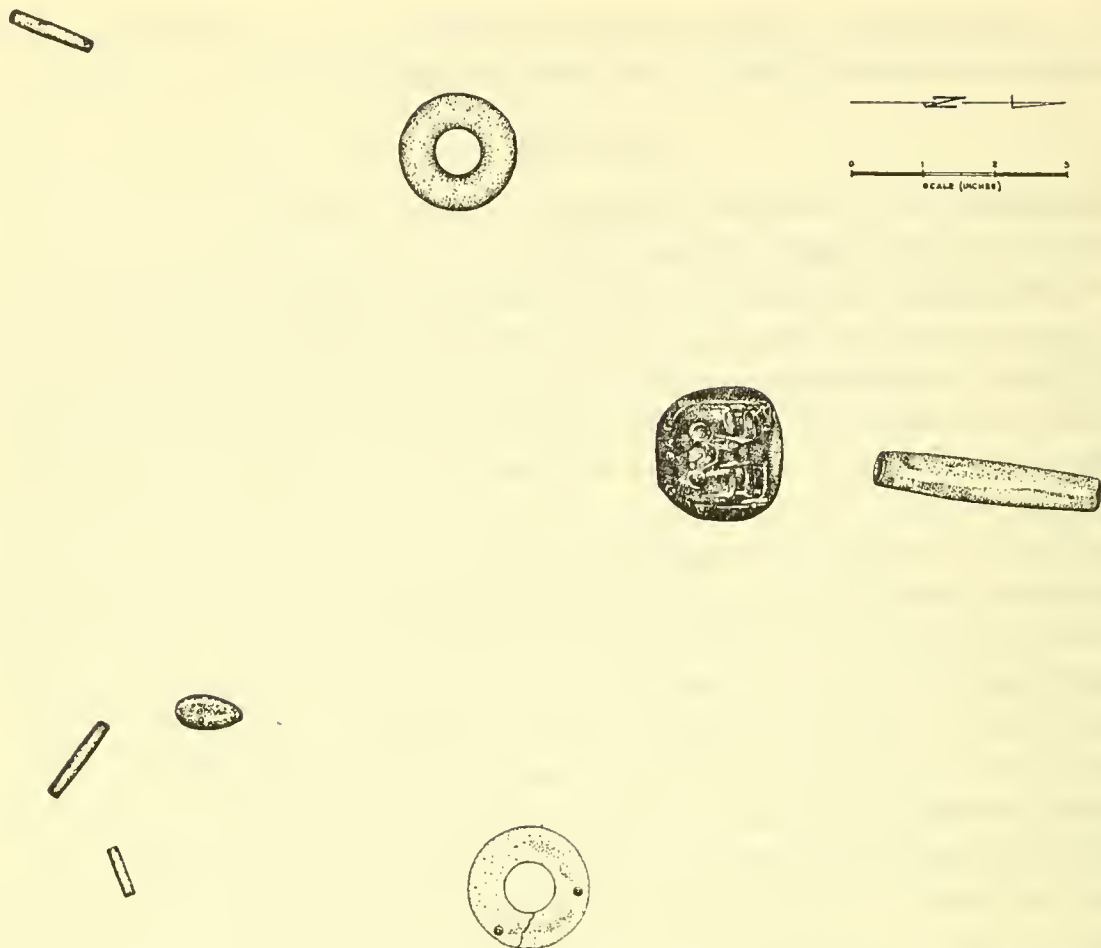


FIGURE 45.—Offering No. 7.

pits from the front side which are intersected by deep conical pits from the rear. One pair of pits on the lower edge of the flange failed to meet, so that the one from the obverse actually goes through to the front. There is also a biconical perforation at the very center of the object, perforating the area of the snout. The back of the carved jaguar face within the area of the flange was hollowed out. The resultant thinness of the carving brings out the translucent qualities of the jade. This hollowing-out process appears to have been done with a very large drill, being roughly reamed out subsequently, since the concavity still retains a certain conical form in cross section. The length (height) of the object is $1\frac{23}{32}$ inches, the width $1\frac{29}{32}$ inches, and the overall thickness is $2\frac{1}{32}$ of an inch. The diameter of the concavity on the rear side is $1\frac{5}{16}$ inches.

The two perforated disks are of an opaque yellowish-green poor quality jade with white and buff spots. The two pieces are so alike in appearance that it seems likely both were cut from a single piece of material. The central perforations of both pieces were drilled out in the same way as the stems and flares of certain types of ear-

spools, that is to say biconically. In the case of the present pieces, however, the drilling from the obverse sides was much shallower than that from the faces. There is no indication that these pieces ever had stems like real earspools, and in addition the flare portion is much too thick for them to have been cut-down earspools. One of the pieces was reamed out after the initial drilling with a wider tool with a more obtuse point than the other, so that the inner slope of the perforation on the face side has a wide flat angle, rather than a curve. Both specimens have a pair of intersecting biconical perforations from the edges and backs, widely spaced in one specimen and close together in the other. The faces are highly polished. The dimensions of the two pieces are as follows:

	<i>Inches</i>	<i>Inches</i>
Exterior diameter-----	1 $\frac{1}{16}$	1 $\frac{21}{32}$
Interior diameter-----	$\frac{5}{8}$	$\frac{5}{8}$
Thickness-----	$\frac{7}{16}$	1 $\frac{3}{32}$
Spacing of perforations-----	1 $\frac{1}{8}$	$\frac{9}{16}$

The function of this pair of objects is a matter of conjecture. They would appear to be too heavy to serve as earspools, or earspool facings, even if they had been mounted on backings of perishable material. Yet the fact that they were placed in the offering in the same manner in which earspools are usually placed, suggests a comparable use for them. It might perhaps be that they were imitation earspools made to be mounted on the retaining straps of some large ornamental head-dress. Another observation that suggests that the two perforated disks were intended to represent earspools at least was the fact that associated with them was a matched pair of tubular longitudinally perforated objects. Pairs of these objects have been found closely associated with every pair of earspools found in offerings at La Venta. These two specimens are small and very thin. Both are of an exceptionally good quality of jade. One is of a translucent bluish-green material, the other of a green jade with a slightly grayish cast and tiny white spots. Two pieces are respectively 1 $\frac{9}{32}$ of an inch and 1 $\frac{1}{4}$ of an inch in length, $\frac{7}{32}$ of an inch and $\frac{3}{16}$ of an inch in diameter. The second piece is actually not quite cylindrical. It has quite plainly been made from a blank which was sawed out so as to have a cross section which was approximately square. The piece was then ground down, but it still retains traces of two flattish planes which join at very near a right angle. Both of these specimens are very thin, since they were drilled with holes of relatively large bore. These perforations are somewhat unusual in that comparatively large cylindrical holes were

drilled from either end, but did not quite meet at the center. They were joined by drilling with a very much smaller drill.

As often occurs in offerings of this general pattern, there was a single large tubular, longitudinal, perforated jade object, and that in Offering No. 7 is much larger than usual. It was made of an opaque light-green jade, speckled with buff spots and whitish streaks. The specimen is actually not quite cylindrical for it tapers from the middle toward both ends. It has a very high polish on the surface. The dimensions are: length 3 inches, maximum diameter $1\frac{9}{32}$ of an inch, diameter at the ends $1\frac{6}{32}$ of an inch. The specimen is perforated longitudinally by two conical holes $1\frac{1}{32}$ of an inch in diameter at each end, which taper rapidly to an estimated $\frac{1}{8}$ of an inch at point of intersection.

A fourth perforated tubular object is much smaller than the rest. It is of a clear emerald-green jade. Its dimensions are: length $2\frac{3}{32}$ of an inch, maximum diameter $\frac{3}{16}$ of an inch. It tapers very slightly from one end to the other. It has a longitudinal perforation drilled through from the thick end to emerge at the smaller one.

The last object in this offering is a tiny piece which we have called a pendant, made also of a very clear emerald-green jade. The piece is carved to represent a small clamshell. The front, that is to say the concave side, has a well-defined "hinge" along one edge. The specimen has a pair of intersecting biconical perforations drilled through from the upper edge of the hinges and from the back. There is also one shallow incomplete drill pit on the back. At the center of the object, a small conical hole was drilled all the way through from the back to the face.

OFFERING NO. 8

Location.—Centerline of the site, in fill underlying old-rose floor series.

Construction Phase.—Phase III.

Description.—This offering consists of three groups of celts, or celtlike objects, set up in a row transverse to the centerline of the site (fig. 46). One group was placed almost exactly on the centerline, the two others flank the central one on either side (pl. 41, *a*). The pieces were found set with their polls embedded in small circular beds of especially prepared clay, the bits upward. There were eight pieces in the group on the centerline. At a point 4 feet 7 inches to the west was a group of five celts. The corner of a deep trench, dug in 1943, passed close to this group, and may have removed some

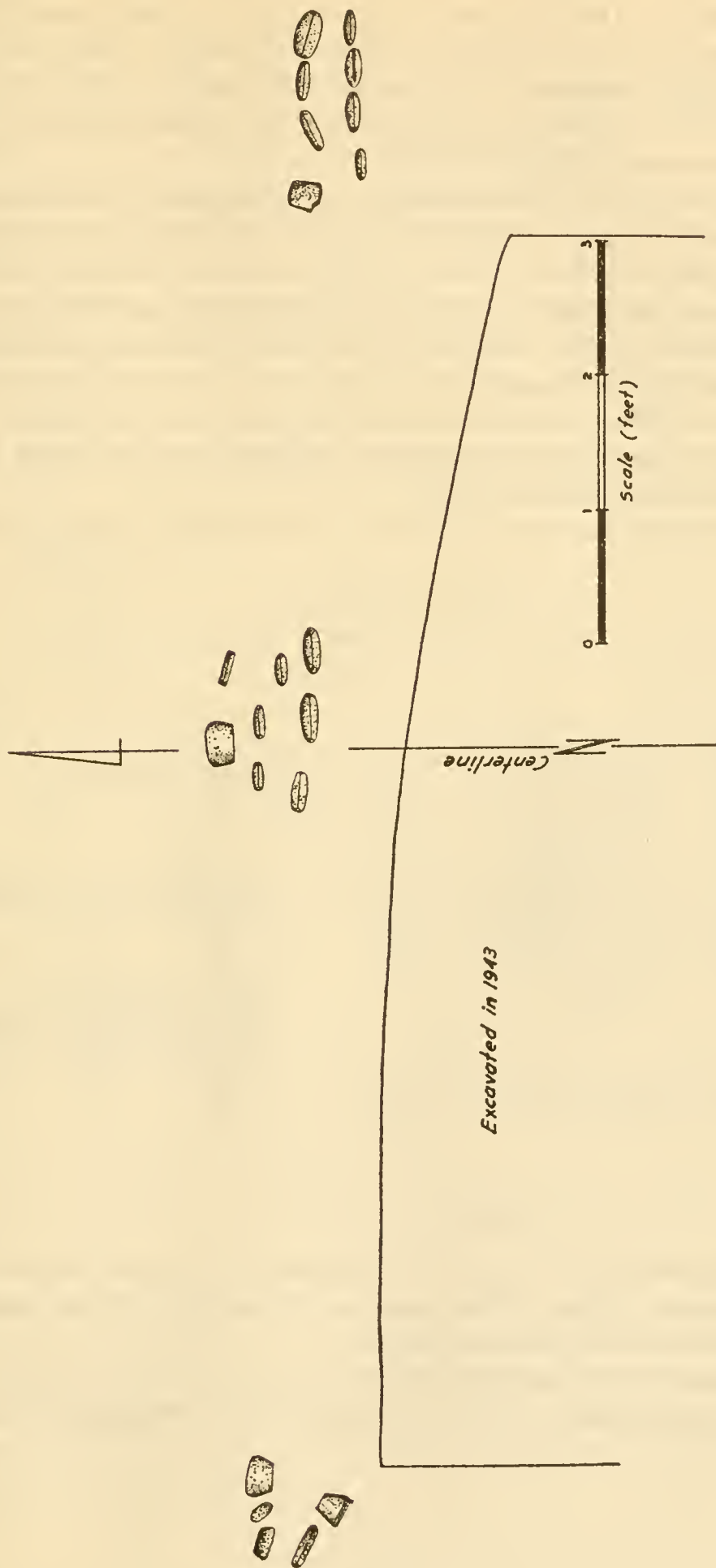


FIGURE 46.—Offering No. 8.

pieces from it. The third lot of celts, eight in all, were placed 3 feet $\frac{1}{2}$ inch east of the east edge of the central group. The placing of this offering is another of the many facts which corroborate the reality of the centerline. This line must have been of great ritual significance to the makers of the site.

Most of the pieces of this offering were of serpentine which showed a considerable amount of deterioration, or else had never been ground down to compact polished surfaces. There were a few pieces of other materials as well. Only a few of the pieces show any finish at all. It is difficult to decide whether they are to be considered pseudocelts, or whether they are roughed-out blanks from which real celts were to be made. Their dimensions for the most part fall within the limits of ordinary celts from the site, differing in this respect from the pseudocelts of Offering No. 1.

Measurements and other details of Offering No. 8 are given in table 5.

TABLE 5.—Offering No. 8

Length	Width	Thick-ness	Cross section	Material	Remarks
<i>Inches</i>	<i>Inches</i>	<i>Inches</i>			
8 $\frac{9}{16}$	4	1 $\frac{3}{4}$	Rectangular.....	Serpentine.....	
9 $\frac{5}{8}$	3 $\frac{7}{8}$	2 $\frac{7}{16}$	Asymmetrical.....	do.....	"Pseudocelt" or blank.
5 $\frac{5}{16}$	3 $\frac{1}{8}$	1 $\frac{5}{16}$	do.....	do.....	Do.
5 $\frac{7}{8}$	2 $\frac{1}{2}$	1 $\frac{5}{16}$	Rectangular.....	do.....	
10 $\frac{1}{4}$	3 $\frac{7}{8}$	2 $\frac{3}{16}$	Asymmetrical.....	do.....	Do.
7 $\frac{1}{2}$	2 $\frac{7}{8}$	1 $\frac{1}{2}$	Rectangular.....	do.....	Do.
6 $\frac{7}{8}$	3 $\frac{1}{4}$	1 $\frac{1}{4}$	do.....	do.....	
13 $\frac{7}{8}$	2 $\frac{1}{16}$	1 $\frac{1}{8}$	Elliptical.....	do.....	
13 $\frac{3}{4}$	4 $\frac{3}{16}$	2 $\frac{9}{16}$	Asymmetrical.....	do.....	Waterworn nodule, slightly modified.
6 $\frac{7}{16}$	3 $\frac{7}{16}$	1 $\frac{3}{16}$	Rectangular.....	do.....	"Pseudocelt" or blank.
6 $\frac{5}{16}$	3 $\frac{3}{8}$	1 $\frac{1}{2}$	Asymmetrical.....	do.....	Do.
7 $\frac{3}{8}$	3 $\frac{3}{8}$	1 $\frac{3}{16}$	Elliptical.....	do.....	Do.
6	2 $\frac{5}{16}$	1 $\frac{3}{16}$	Rectangular.....	do.....	Do.
7 $\frac{7}{8}$	3 $\frac{3}{4}$	$\frac{3}{4}$	do.....	do.....	Irregular sawed-cut blank.
6 $\frac{3}{8}$	3	1 $\frac{1}{16}$	Elliptical.....	do.....	May have been real tool.
5	2 $\frac{3}{16}$	1 $\frac{9}{16}$	do.....	?	Soft, coarse-grained gray stone, flat poll, tapers laterally from midsection to bit.
7 $\frac{15}{16}$	3 $\frac{13}{16}$	1	Asymmetrical.....	Serpentine.....	"Pseudocelt" or blank.
8 $\frac{3}{8}$	2 $\frac{5}{8}$	1 $\frac{3}{16}$	do.....	do.....	Do.
7	3 $\frac{3}{16}$	1 $\frac{3}{16}$	do.....	do.....	Do.
8 $\frac{3}{8}$	4 $\frac{1}{8}$	1 $\frac{1}{16}$	do.....	do.....	Do.
6 $\frac{1}{16}$	3 $\frac{5}{8}$	1	do.....	do.....	Do.

OFFERINGS NO. 9 AND NO. 11

Offerings No. 9 and No. 11 will be discussed together because they were obviously a pair. Their location, layout, and content make it quite obvious that they are duplicates.

Location.—Centerline of site (4 feet 6 inches west and east, respectively, of centerline), in fill overlying Massive Offering 2 (Feature A-2-d).

Construction Phase.—Phase IV.

These two offerings, as indicated above, were placed just 9 feet apart. A line connecting their centers crosses the centerline at right angles. Each of the offerings contained the following objects:

- 1 Concave mirror (Offering No. 9, magnetite; Offering No. 11, ilmenite).
- 9 Jade and serpentine celts laid out in three rows.

The row immediately south of the mirror contained but one celt. The second row and the third row each contained 4 of these objects. The specimens were laid with their long axes north-south, with bits pointing northward. To the south of the specimens just described was a large oval area of clay containing a few scattered bits of cinnabar. There was a small concentration of this material in Offering 9 (pl. 42, *b*). On this clay, in each case a short distance south of the last row of celts, was a large round molded lump of purplish-red cinnabar. Scattered around the surface of the clay bed in each case was a large number of small jade beads. These beads lay close together in a single layer, although in some places they were two layers deep. There was no indication whatsoever that they had been strung, or attached, in any way. It seems clear that they were thrown loose in the area in which they were found. In Offering 9, there were found 895 complete beads and 12 fragmentary ones. In the corresponding area at the south end of Offering 11 (pl. 42, *a*), a total of 1,180 whole beads and 94 fragments were recovered. Some beads occurred scattered over and between the celts in Offering 9, but were concentrated in a separate area in Offering 11. Both offerings covered approximately the same size area, 4 feet long north-south, by 32 to 36 inches east-west (figs. 47, 48).

Both offerings were placed in shallow pits about 5 inches deep, scooped out in the sandy fill, during the deposition of that fill. The objects were laid in place, then covered with a thick layer of olive and yellow clay from 1 to 2 inches thick.

These two offerings were of great interest because of their relation to the centerline of the site. Offering No. 9, the first one found, was encountered in the course of cutting a shoveling platform back from the trench. Since by itself it was so obviously off center, we put our centerline hypothesis to the test by measuring off a corresponding point on the opposite side of the trench and excavating down to the level of Offering 9. Offering 11 was found exactly where measurements predicted it should be. This, we decided, is the way archeology ought to turn out all the time.

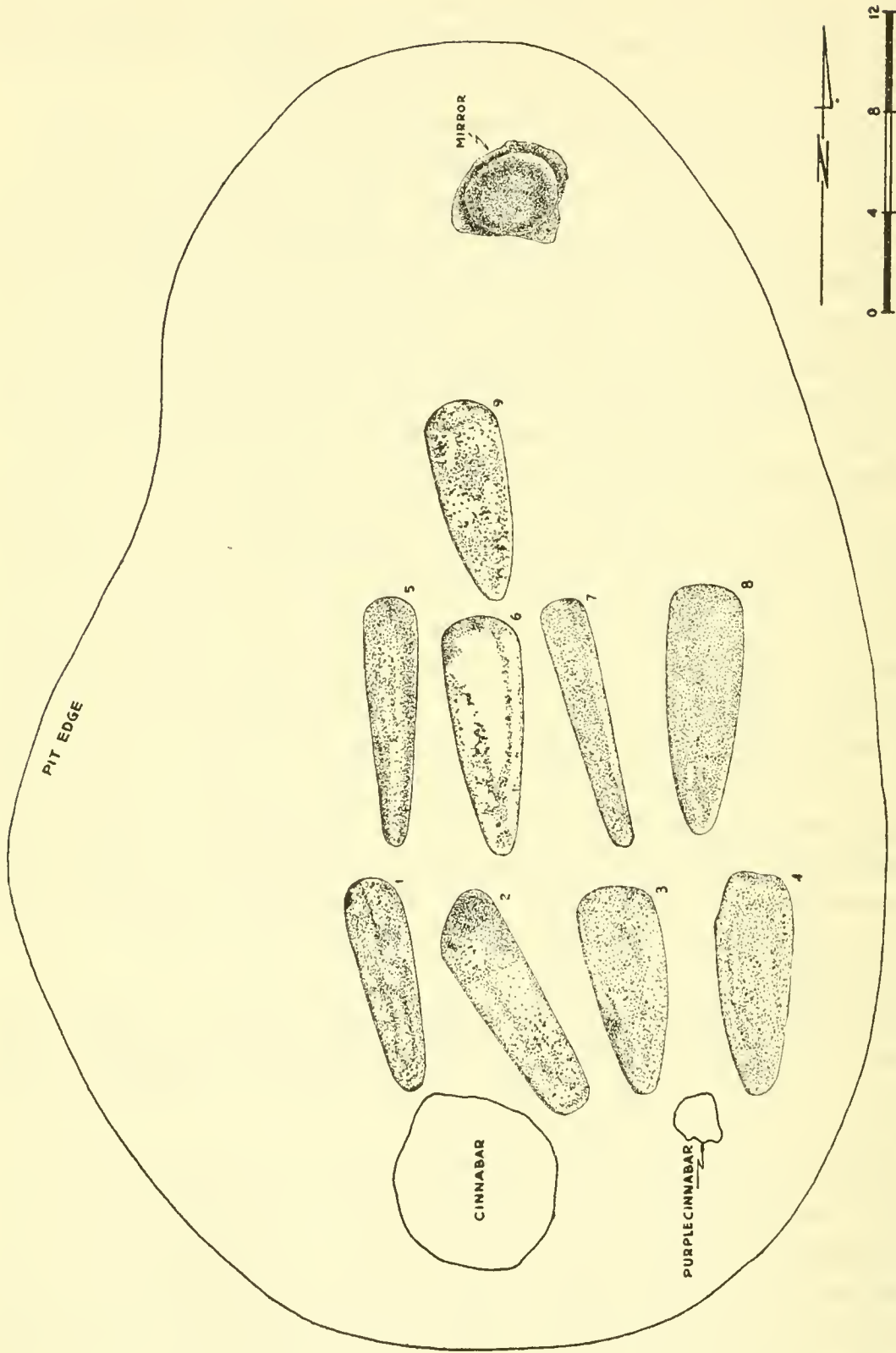


FIGURE 47.—Offering No. 9.

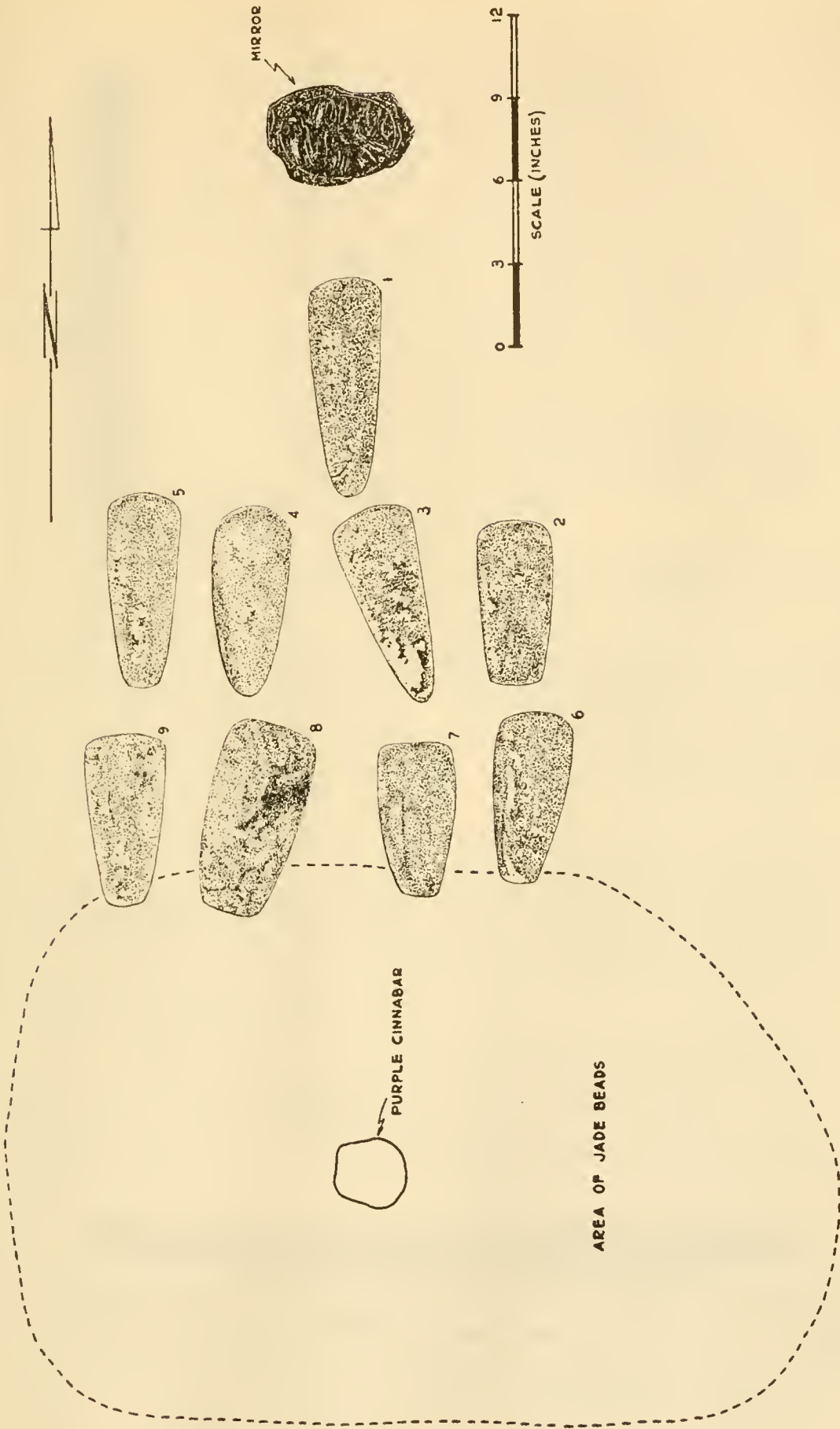


FIGURE 48.—Offering No. 11.

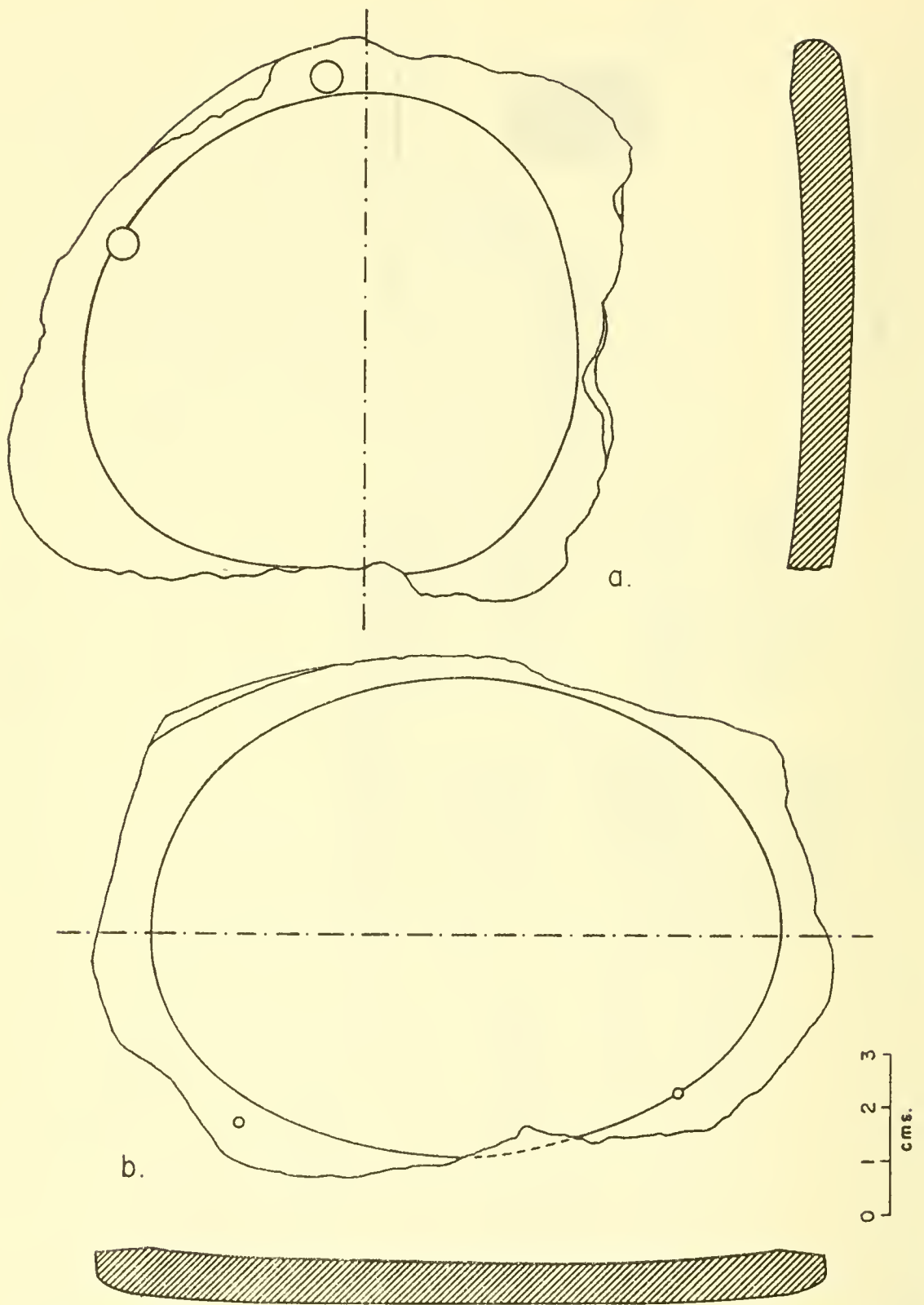


FIGURE 49.—Concave mirrors. *a*, Offering No. 9 (magnetite). *b*, Offering No. 11 (ilmenite). Curvature of mirror faces shown in profile not exact. Compare with plate 62, *a*, *b*.

The two mirrors found in these two offerings (pls. 43, 44), we consider to be exceptional specimens in every respect (see Appendix 3). They are the largest mirrors of this type found at the site, although several smaller complete specimens and several fragments were found in the 1942 and 1943 seasons (fig. 50; pl. 46). Both are of pieces of very hard material, which were initially ground flat on both sides. On one side of each a central concavity was ground out, and then its surface and that of the surrounding flat border, was given an extremely high polish. The concavity of each mirror thus reflects a slightly magnified image (pl. 45). The workmanship appears to have been done with a remarkable degree of precision.

Both mirrors were perforated along one edge (fig. 49) presumably for suspension. It may very well be that the large plaques, usually shown in form of rectangles with rounded corners which are worn by various personages depicted on the stone monuments, represent mirrors of this kind rather than plaques of jade.

Monument 23 from La Venta (pl. 52) wears what is probably intended to be a concave mirror on the chest. The "mirror" is of sub-rectangular form with a raised edge, is very slightly concave, and is attached at its upper edge to a 3-strand necklace which may be intended to represent tubular jade beads. The attachment, indicated by the carving on the statue, of the "mirror" to the 3-strand necklace appears to show the mirror lying over the necklace and suspended from the top strand.

The small kneeling figure found near the jaguar mosaic mask (fig. 63) has a concave depression in the belly which may be a mirror either suspended from a cord or held in the hands. Altar 5 at La Venta (Stirling, 1943 b, pl. 41, *a, b*) bears relief sculptures of figures wearing what are probably intended to be concave mirrors in the same fashion as Monument 23.

It is worth noting also that the small female figurine found in the tomb in 1942 was wearing a tiny round plaque of this material, which appears to be glued or pegged on just below her throat. Also in the National Museum of Mexico there are a number of Olmec type figurines from Tlatilco to which small bits of polished hematite are attached (Porter, 1953, pl. 4, *B*). The Tlatilco pieces so adorned that we have seen, however, have what look like odd bits and scraps of polished hematite rather than carefully made disks such as the jade figurine from La Venta wears.

In figure 50 and plate 46 we illustrate the several mirrors recovered from La Venta in 1942 and 1943. The following tabulation gives data on beads from Offering 9:

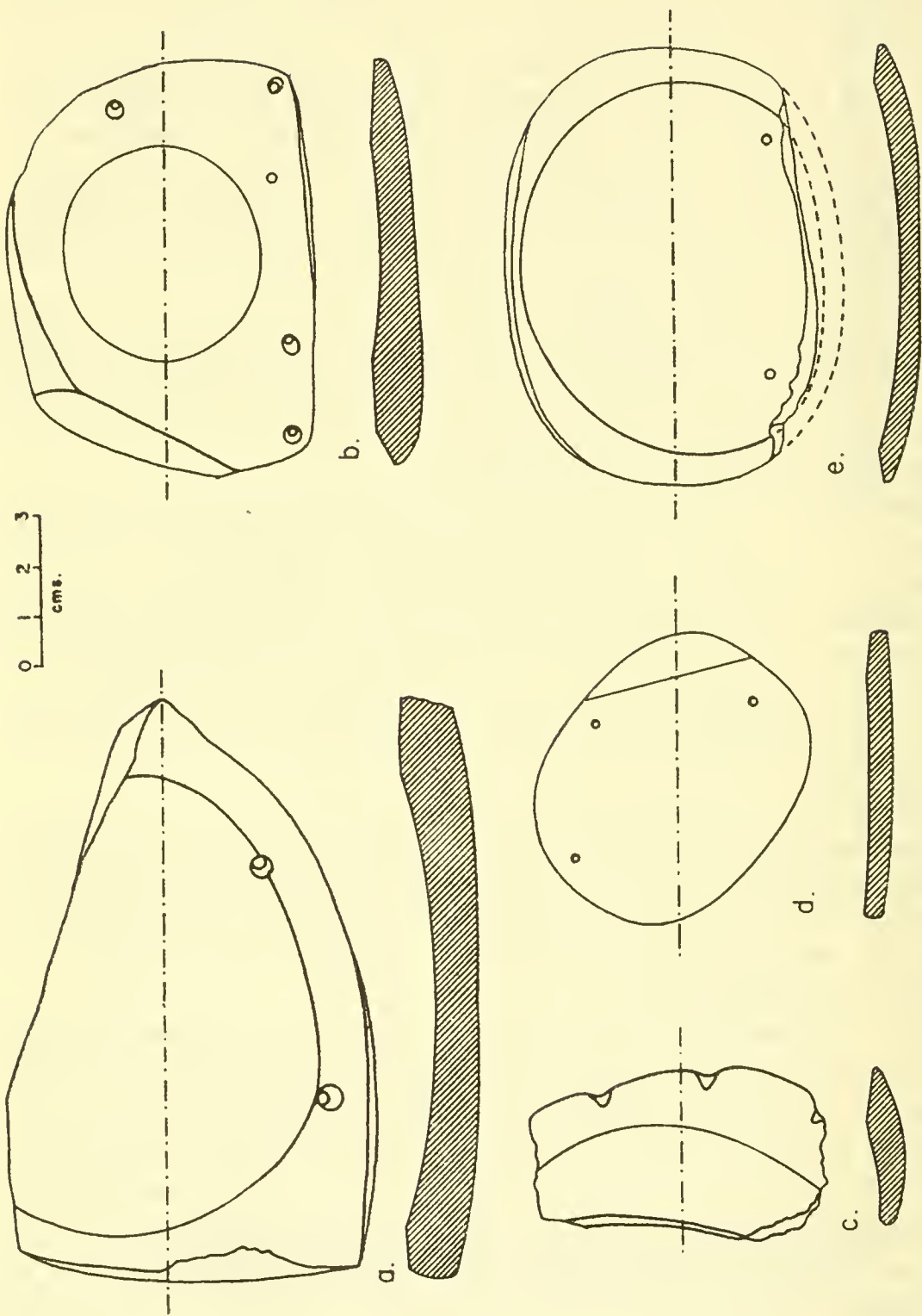


FIGURE 50.—Concave mirrors recovered in 1942 and 1943 seasons at La Venta. *a*, Offering 1943-F (ilmenite). *b*, Offering 1943-N (ilmenite). *c*, From Mound A-2 fill (1942) (magnetite). *d*, Offering 1942-A (magnetite). *e*, Offering 1943-E (hematite). Curvature of mirror faces not exact.

<i>Offering No. 9: Beads</i>	<i>Number of specimens</i>
Tubular beads, short (proportions range from diam.=length to diam.= $\frac{1}{2}$ length)-----	243
Size range: Largest: length $1\frac{15}{32}$ inch, diam. $1\frac{1}{32}$ Smallest: length $\frac{9}{32}$ inch, diam. $\frac{8}{32}$ inch	
Biconically perforated-----	235
Conically perforated-----	8
Disk beads, flat polished faces-----	3
Subspherical-to-pebble beads (proportions: diam. nearly always greater than length)-----	657
An attempt was made to pick out a series of beads of regular shape; out of 48 most regular that could be found, not one was noted that did not have some minute irregularity. The gradual constant increase of irregularities joined the "pebble" beads to these in an unbroken series.	
Size range: Largest: length $1\frac{15}{32}$ inch, diam. $1\frac{17}{32}$ inch Smallest: length $\frac{7}{32}$ inch, diam. $\frac{9}{32}$ inch	
Biconically perforated-----	654
Conically perforated-----	2
Cylindrically perforated-----	1
One specimen each of following (total)-----	4
Gadrooned (subspherical, with 4 deep vertical cuts equidistant about side)	
Pitted (subspherical, with 3 shallow drilled pits around circumfer- ence)	
Truncated conical (with perforation from face of maximum to that of minimum diam.)	
Cross-perforated subspherical (very regular subspherical form, perforated through longest diameter)	
Total complete or identifiable specimens-----	907

All the beads in this lot appeared to be of jade, but of rather poor quality (at least from our point of view). All were opaque, and colors tended toward muddy light greens. Table 6 gives measurements of and other data on celts from Offering No. 9.

TABLE 6.—*Data on Offering No. 9: Celts*¹

Length	Width	Thick- ness	Cross section	Material	Remarks
<i>Inches</i> $8\frac{5}{16}$	<i>Inches</i> $2\frac{1}{16}$	<i>Inches</i> $\frac{7}{8}$	Elliptical-----	Jade-----	Bit nicked; poll battered and cracked, bit straight and laterally inclined, not at right angles to long axis.
$8\frac{13}{16}$	$2\frac{7}{8}$	$1\frac{1}{16}$	Rectangular-----	do-----	
$8\frac{1}{4}$	$3\frac{1}{2}$	$1\frac{5}{8}$	Asymmetrical-----	do-----	Outline irregular; concave area on one side is original waterworn surface of stone. Few fine nicks in bit.
$8\frac{3}{4}$	$2\frac{7}{8}$	$1\frac{13}{16}$	Rectangular-----	do-----	Bit nearly straight.
$9\frac{13}{16}$	$2\frac{9}{16}$	$\frac{7}{8}$	Elliptical-----	do-----	Bit shows fine nicks; piece broken off poll.
$9\frac{1}{8}$	$3\frac{1}{8}$	$1\frac{3}{16}$	Rectangular (?)-----	do-----	Trace original surface shows no poll; biconical perforation, face-to-face, $1\frac{1}{2}$ inches from poll.
$9\frac{9}{16}$	$1\frac{5}{16}$	$1\frac{1}{4}$	Elliptical-----	do-----	Traces original surface show (in un- polished depressions).
$9\frac{7}{16}$	3	$1\frac{1}{4}$	do-----	do-----	Bit nicked (nicks appear partly ground out); traces of battering at poll.
$7\frac{15}{16}$	$2\frac{15}{16}$	1	do-----	do-----	Bit slightly nicked at center.

¹ Illustrated in pl. 41, b.

Offering No. 11: Beads

	<i>Number of speci- mens</i>
Tubular beads, short (proportions range from diam.=length to diam.= $\frac{1}{2}$ length)-----	243
Biconically perforated-----	236
Conically perforated-----	7
Tubular beads, long (proportions range from length=diam. to length=2× diam.)-----	21
Disk beads, flat polished faces-----	4
Subspherical-to-pebble beads-----	802
Biconically perforated-----	801
Conically perforated-----	1
Fragments:	
Probably tubular (short or long)-----	19
Probably subspherical-to-pebble-----	166
Tubular bead, circumferential groove about middle (diam. $1\frac{3}{32}$ inch, length $\frac{5}{16}$ inch)-----	1
	1, 256

In addition, in this lot there was a group of very distinctive small, well-made, highly polished beads of crystalline translucent bluish-green jade, in which the following types occurred:

Disk beads ($\frac{3}{32}$ inch to $\frac{1}{8}$ inch length, $\frac{7}{32}$ inch to $\frac{1}{4}$ inch diam.)-----	9
Subspherical beads-----	2
Barrel-shaped beads-----	4
Cylindrical-----	3
Total-----	18

Aside from this small lot, probably all from one string, the beads resembled those of Offering No. 9 in material and finish.

Table 7 gives measurements of and other data on celts from Offering No. 11.

TABLE 7.—Data on Offering No. 11: Celts ¹

Length	Width	Thick- ness	Cross section	Material	Remarks
<i>Inches</i> 7 $\frac{5}{8}$	<i>Inches</i> 2 $1\frac{1}{16}$	<i>Inches</i> 1 $\frac{1}{8}$	Asymmetrical....	Serpentine (?)....	Has unpolished depressions of original surface.
5 $\frac{5}{16}$	2 $\frac{7}{8}$	1 $\frac{5}{16}$	"Elliptical"-----	Jade-----	Cross section elliptical with flat edges; upper (poll) end thin and asymmetric.
6 $1\frac{5}{16}$	3 $\frac{1}{8}$	1 $\frac{1}{4}$	do-----	do-----	Cross section elliptical with flat edges.
6 $\frac{3}{4}$	2 $\frac{3}{4}$	1 $\frac{7}{16}$	Elliptical-----	Serpentine (?)....	Appears to be same material as No. 1; poll battered (?)
6 $\frac{1}{2}$	2 $\frac{3}{4}$	1 $\frac{1}{4}$	do-----	Jade-----	
5 $1\frac{5}{16}$	2 $\frac{7}{8}$	1 $\frac{3}{4}$	do-----	do-----	
5 $\frac{3}{8}$	2 $1\frac{3}{16}$	$\frac{7}{8}$	"Elliptical"-----	do-----	Cross section elliptical with flat sides.
6 $\frac{5}{8}$	3 $\frac{1}{4}$	1 $\frac{1}{2}$	Elliptical-----	Serpentine-----	Material markedly deteriorated, bit blunt.
5 $1\frac{5}{16}$	2 $\frac{7}{8}$	1 $\frac{5}{16}$	"Elliptical"-----	Jade-----	Cross section elliptical with flat edges; unpolished depressions on surface.

¹ Illustrated in pl. 41, c.

OFFERING NO. 10

Location.—Centerline of the site.

Construction Phase.—Phase III.

Enclosed in fill over Massive Offering No. 3.

Description.—This offering consisted of 38 celts of serpentine and jade (fig. 51), the great majority being of serpentine, laid in a cruciform pattern, approximately 5 feet above the uppermost layer of serpentine slabs of the large "pavementlike" offering designated Massive Offering No. 3. All the celts were laid with their long axes north-south, bits pointing north (pl. 47, *left*). The layout is not perfectly regular. At the center there is a group of six celts laid in two east-west rows of three each. To the right (east) of this central group, separated by a space of $4\frac{3}{4}$ inches, there is a group of nine celts laid in two rows of five and four respectively. On the west side, $7\frac{1}{8}$ inches away, there are two rows with three celts in each, and a single specimen lying immediately to the north of the group. North of the center of the arrangement, three celts are laid in a row with a wide space left between the celt on the east and the central one, which looks almost as though there were a missing specimen. On the south end of the layout there are two rows of four celts each, one row of three specimens, and the southernmost row of two pieces. At the extreme south end there was a small area covered with deep-purple material, which may perhaps be a pigment, or a form of cinnabar. The celts in this offering were laid out on a special bed of reddish-clay, and were plastered over with a layer of yellow sandy clay. As was remarked earlier, the arrangement appears to be somewhat irregular. However, there was no indication that it had been disturbed subsequent to deposition, and the layers of deposit upon which it was placed appeared so compact that it seems doubtful that they might have settled. It is at least worth considering as a possibility that the apparent irregularity may have been intentional, and that the layout actually represents some more complex symbol, and one which we are unable to recognize. We have pointed out above that there is a very definite pattern of association of cruciform celt offerings, similar to the present one, with massive offerings.

The specimens contained in Offering 10 conform, in general, to the usual celt types found at La Venta. No decorated examples occurred in this lot. Table 8 lists their dimensions and other distinctive features.

TABLE 8.—Data on Offering No. 10¹

Length	Width	Thick-ness	Cross section	Material	Remarks
<i>Inches</i>	<i>Inches</i>	<i>Inches</i>			
4 $\frac{9}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	Elliptical.....	Jade.....	
4 $\frac{1}{16}$	2	$\frac{3}{4}$	do.....	Serpentine.....	
4 $\frac{3}{16}$	1 $\frac{3}{4}$	1	do.....	do.....	Edges flat.
4 $\frac{9}{16}$	1 $\frac{5}{8}$	1 $\frac{3}{16}$	do.....	do.....	
4 $\frac{1}{16}$	2 $\frac{1}{8}$	$\frac{3}{4}$	do.....	do.....	Outline irregular.
4	2 $\frac{3}{16}$	$\frac{7}{8}$	Asymmetrical.....	do.....	Nearly straight bit.
5	1 $\frac{3}{8}$	$\frac{3}{4}$	do.....	do.....	Asymmetric longitudinal cross section.
3 $\frac{1}{16}$	2 $\frac{1}{16}$	$\frac{5}{8}$	do.....	do.....	Irregular shape; really "pseudocelt."
4 $\frac{1}{8}$	2 $\frac{3}{8}$	1	Elliptical.....	do.....	Heavily deteriorated; asymmetric out- line; probably blank.
3 $\frac{5}{8}$	2 $\frac{1}{16}$	1 $\frac{5}{16}$	do.....	do.....	Heavily deteriorated.
4 $\frac{1}{2}$	2 $\frac{1}{4}$	1 $\frac{1}{4}$	Asymmetrical.....	do.....	Heavily deteriorated; one flat side.
7 $\frac{3}{4}$	3 $\frac{3}{8}$	1 $\frac{3}{8}$	do.....	Jade.....	Edges flat; one flat face with unpolished natural concavities.
4 $\frac{3}{8}$	2 $\frac{5}{16}$	$\frac{5}{8}$	Rectangular.....	Serpentine.....	Flat faces.
4 $\frac{1}{16}$	1 $\frac{3}{4}$	1 $\frac{3}{8}$	(No record).....	Jade.....	
4 $\frac{5}{16}$	2 $\frac{1}{2}$	1 $\frac{5}{16}$	Elliptical.....	Serpentine.....	Longitudinal section asymmetrical.
5 $\frac{7}{8}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	Asymmetrical.....	do.....	Do.
4 $\frac{7}{16}$	2 $\frac{1}{4}$	1 $\frac{3}{16}$	(No record).....	do.....	
3 $\frac{9}{16}$	2 $\frac{1}{8}$	1 $\frac{1}{16}$	Asymmetrical.....	do.....	One face quite flat.
4	2 $\frac{1}{8}$	1	do.....	do.....	Heavily deteriorated.
4 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	do.....	do.....	Edges flat; bit heavily deteriorated and nicked; asymmetric longitudinal section.
3 $\frac{9}{16}$	2	1 $\frac{1}{16}$	Elliptical.....	do.....	Bit deteriorated and nicked.
3 $\frac{1}{4}$	1 $\frac{1}{16}$	$\frac{5}{8}$	(No record).....	do.....	Heavily deteriorated.
5 $\frac{1}{4}$	1 $\frac{3}{4}$	$\frac{3}{4}$	Asymmetrical.....	do.....	Do.
4 $\frac{1}{2}$	2 $\frac{3}{16}$	1 $\frac{3}{16}$	do.....	do.....	Heavily deteriorated; asymmetrical longitudinal section.
4 $\frac{1}{2}$	2 $\frac{1}{16}$	$\frac{3}{4}$	(No record).....	do.....	Heavily deteriorated; form regular.
5 $\frac{1}{16}$	2 $\frac{3}{8}$	$\frac{3}{4}$	Asymmetrical.....	do.....	Heavily deteriorated; one face flat.
4 $\frac{1}{8}$	1 $\frac{1}{16}$	1 $\frac{5}{16}$	(No record).....	do.....	
4 $\frac{3}{16}$	1 $\frac{7}{8}$	$\frac{7}{8}$	Elliptical.....	do.....	Outline elliptical.
3 $\frac{1}{16}$	2 $\frac{1}{4}$	1 $\frac{5}{16}$	(No record).....	do.....	Outline asymmetric.
4 $\frac{5}{16}$	1 $\frac{3}{4}$	$\frac{7}{8}$	Elliptical (?).....	do.....	Heavily deteriorated.
4	1 $\frac{1}{16}$	1 $\frac{1}{8}$	(No record).....	do.....	
4 $\frac{1}{4}$	1 $\frac{7}{8}$	1 $\frac{1}{16}$	Asymmetrical.....	do.....	Do.
4 $\frac{1}{16}$	2 $\frac{3}{16}$	$\frac{5}{8}$	do.....	do.....	
(Bro- ken)	1 $\frac{7}{16}$	$\frac{3}{4}$	Elliptical.....	do.....	Bit broken off.
4 $\frac{9}{16}$	2 $\frac{1}{8}$	$\frac{7}{8}$	do.....	do.....	Heavily deteriorated.
4 $\frac{1}{8}$	2 $\frac{9}{16}$	$\frac{9}{16}$	Asymmetrical.....	do.....	Bit heavily nicked.
4 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{3}{8}$	do.....	do.....	
3 $\frac{7}{8}$	2 $\frac{1}{8}$	1 $\frac{1}{16}$	do.....	Jade.....	Edges flat; bit nicked; poll battered (?)

¹ The term "deteriorated" refers to a condition in which areas, or entire piece, is soft, chalky. According to Dr. W. Foshag (personal communication), this could result from effect of acid clays on porous serpentine. Serpentine is quite variable in porosity and hardness. Some pieces noted above have one fairly well-preserved surface; and remainder is deteriorated. "No record": This was first lot of celts studied; Drucker neglected to record data on cross section consistently.

OFFERING NO. 12

Location.—Centerline of site.

Construction Phase.—Phase III.

This offering was also in the fill over Massive Offering No. 3. Its center was approximately 5 feet south of the center of Monument 13.

Description.—This offering lay in a small pit of roughly elliptical form, 1 foot 2 inches north-south by 2 feet 2 inches east-west, which penetrated a layer of fill consisting of yellowish clays, and whose base lay in the underlying layer of sandy fill. The depth of the pit was between 5 and 6 inches. In the bottom of the pit were two round masses, lens-shaped in cross section, of bright-colored materials, both

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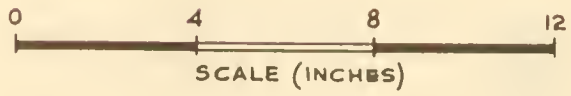




FIGURE 51.—Offering No. 10.

approximately 8 inches in diameter and three-eighths of an inch in maximum thickness at their centers. The pigment on the west was of bright green malachite, rather granular in texture. Some of the particles are quite fine and others are like coarse sand, and all are gritty with sharp edges. The material on the east was of a very bright purplish-red cinnabar. There were no other objects contained in the pit. A layer of yellowish clay, which probably included some of the material from the yellowish clayey fill into which the pit had been cut, was plastered over the offering.

OFFERING NO. 13

Location.—Just east of the centerline of the site (cf. fig. 17).

Construction Phase.—Phase III.

Description.—This offering consisted of two celtlike objects of serpentine which may be either blanks, or pseudocelts, but in any case were not finished celts, which were set upright with the “bits” uppermost, just to the east of the site centerline, and forming a line at right angles to it. They were spaced just 27 inches apart. We have listed these objects as constituting an offering, although at the time they were uncovered they gave the impression that they might have been set up as markers to give a line of bearing out from the centerline toward some point in the eastern half of the Court. We are not altogether sure that it is simply a coincidence that a line drawn through them to the eastward passes through the approximate center of the concentration of offerings in the small platform A-1-f. There is also the possibility that these two pieces may be remnants of a larger offering, removed in 1943. Wedel (LV, p. 39) refers to finding a “dozen or so” serpentine celts in this general area, although he noted no orderly arrangement of them.

OFFERING NO. 14

Location.—Northeast Platform (Feature A-1-f).

Construction Phase.—Phase III (?).

Description.—This offering consisted of six pottery vessels, five of them nested together and in contact with the sixth (fig. 52, *a*). The position of the vessels, particularly the slight angle at which the nested group was inclined, suggested that they had been placed in the bottom of a small pit. We were not able to define the edges of a pit, however, and we are therefore unable to decide whether the offering dates from Phase II or III. The single vessel was a small bowl of Fine Paste Black ware, with incurved rim and three small flat projecting lugs (fig. 52, *e*). This specimen was very badly crushed and, like the others in the cache, the paste had deteriorated to a point where it was impos-

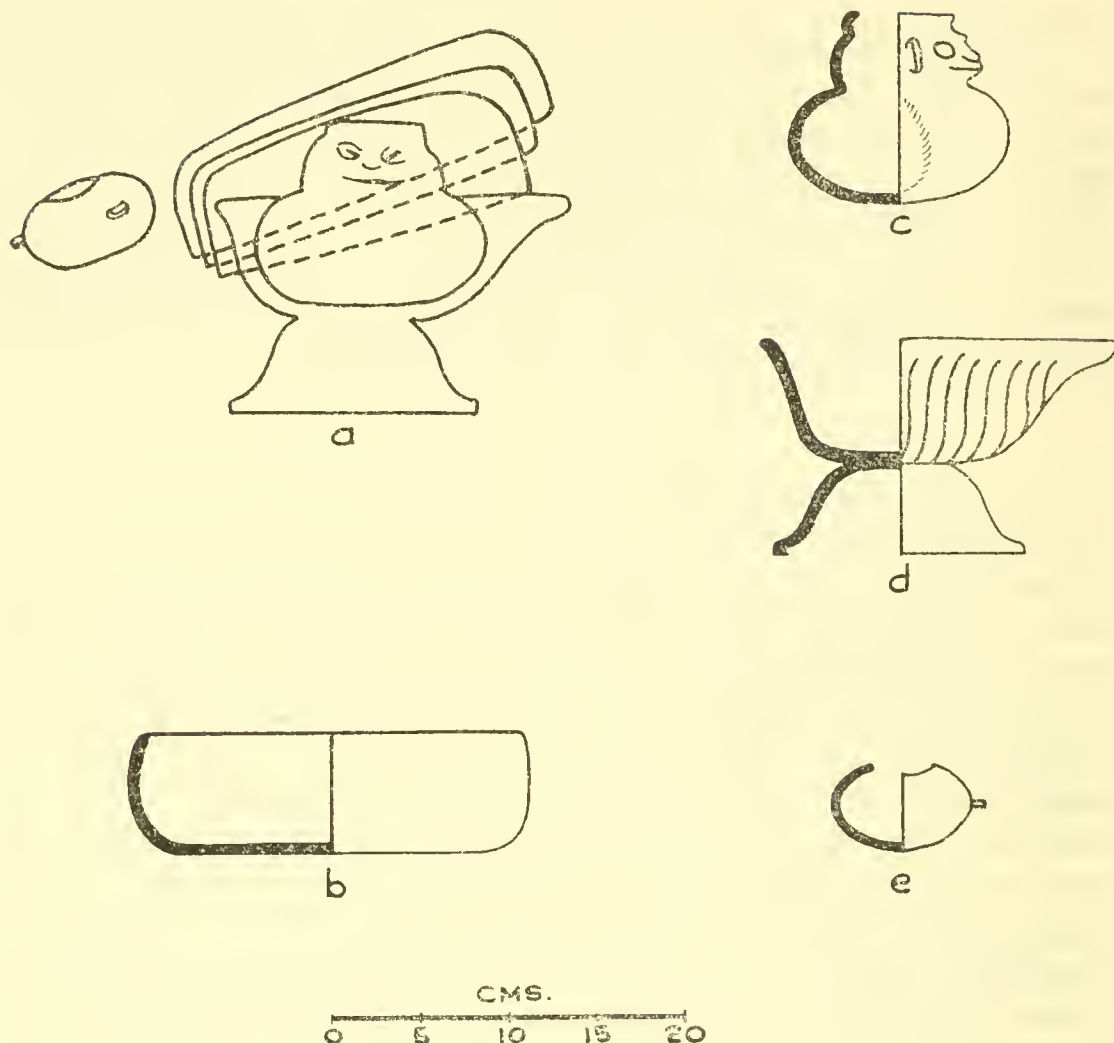


FIGURE 52.—Pottery vessels from Offering No. 14. *a*, Vessels in original position. *b-e*, individual vessels.

sible to restore it. In direct contact with it was the uppermost of the vessels which covered the inverted lot. There were three of these covering vessels, nested in each other. All were shallow bowls with flat bases and out-leaned sides, so that they fitted over one another readily. These vessels were of Fine Paste Orange ware (fig. 52, *b*) identical with the shallow bowl in Offering 5. The uppermost measured 9 inches across the base; its slightly out-leaned sides were 21½ inches high. It had a simple direct rim, separated from the side by a wide shallow channel. The side itself was decorated with small curved punch marks. The other two nested vessels were similar in size, shape, and decoration. Under them, sitting upright, was a vessel of Fine Paste Buff ware (fig. 52, *d*) of a rather unusual shape. The body of this vessel had the form of a small incurved side bowl with recurved rim, about 6 inches in diameter. At one side was an elongated, shallow, open spout. The diameter of the vessel from the tip of the spout to the opposite rim was 8¼ inches. The sides were fluted. It had a ring base 1½ inches high by 3½ inches in diameter. Contained within

this spouted vessel was a small Black ware effigy jar (fig. 52, *c*). The body of the effigy jar, which was of Fine Paste Black ware, had incurving sides surmounted by a short recurved neck with an incurving rim. The body of the vessel had four equally spaced vertical creases that gave it a lobed effect. On the neck of the vessel there was a froglike face modeled in low relief.

The vessels in this offering were in such badly deteriorated condition that they could not be restored. The preparators at the National Museum of Mexico to whom we turned over the spouted vessel, and its enclosed effigy vessel, made every effort to restore the former, but were unable to do so; not only was the specimen crushed into minute fragments, but the pottery had completely lost its cohesive quality and simply disintegrated with every attempt to remove it from the clay in which it was embedded. However, we were able to recognize the wares and vessel shapes while excavating them. We are, therefore, able to say with certainty that the wares themselves are very definitely of types characterizing the ceramic complex of La Venta, as defined in Bureau of American Ethnology Bulletin 153 (LV, 80 ff.). Shapes and decorative features, while not precisely like any previously described, conform to known ceramic patterns. Use of punctate decoration, similar to that noted in the three covering bowls, was noted as occurring in a variety of Olmec wares (LV, figs. 28, 32, and *passim*). The occurrence of three lugs on the small Fine Paste Black ware bowl again fits the general pattern. Lugs, although not common, occurred in ceramics, although handles were quite scarce. The asymmetrical spacing of the lugs on the side has not been reported from La Venta, but that may be because of the scarcity of complete vessels from the site. Open spouts, fluted vessel sides, and ring bases, all are known from La Venta. The fact that they have not been reported in combination, as in the case of the Fine Paste Buff ware specimen in this lot, once more may be attributed to the scarcity of complete specimens from the La Venta site. The little effigy vessel is distinctive, but fragments of effigy vessels have been recovered in the past. The occurrence of this lot of materials, consequently, is of considerable importance because here we have a direct and unquestionable tie-in between the remains found in the occupation deposits as described earlier (LV, *passim*) and those from the nearby ceremonial structures.

OFFERING NO. 15

Location.—Northeast Platform; directly under Offering 6.

Construction Phase.—Phase I (?).

Description.—This offering consisted of a single white-slipped Coarse Brown ware bowl with flat base and out-leaned walls terminating in a simple direct rim (fig. 42, *b*). It was lying inverted at

a slight angle in the fill of the Northeast Platform. This bowl, although considerably broken, apparently because of the weight of the overburden, was in much better condition than the Fine Paste vessels previously described. Diameter across the mouth is 12 inches; height of the walls $2\frac{1}{8}$ inches. There was a considerable amount of charcoal associated with the vessel. This specimen is treated as an offering because of the fact that it was a complete vessel and ceramic materials were not ordinarily included by accident in any of the structural layers at this site. It is considered possible that the vessel may have contained, or may have been inverted over, charred remnants of some burned organic offering.

OFFERINGS NO. 16 AND 17

Location.—Northeast Platform.

Construction Phase.—Indeterminate, Phase I (?).

These two offerings, each consisting of a single small vessel, occurred in Feature A-1-f in the vicinity of the other offerings described above. Since so little pottery was included in structural components of this site by chance, it is almost certain that these vessels were deliberately placed as offerings. Both were small, rectangular bowls of Coarse Brown ware, heavily smudged to a very dark shade. A few fragments of similar rectangular vessels were noted in the pottery deposits tested in 1942 (LV, pl. 17, *b*), and considered to be a distinctive Olmec type. No discernible pits were observed in the case of either vessel. They were situated on approximately the same level as the rest of the offerings.

OFFERING NO. 18

Location.—In shallow pit intruded into Phase I levels at center of Northwest Platform.

Construction Phase.—II (?).

During the clearing of a shallow pit which was intruded from above into the Phase I levels in the center of the Northwest Platform (fig. 21) two pottery vessels were encountered. There is no question but that they were deliberately placed in the pit before it was entirely filled and we have therefore included them as offerings. Since they were found at some distance from one another, we have elected to assign them separate offering numbers. Offering 18, the first found, is a flat-based dish or bowl of La Venta Coarse Brown ware (LV, pp. 92-96) with nearly vertical walls and slightly flaring simple direct rim (fig. 42, *c*). The base and walls of the vessel are fairly thick, averaging one-quarter inch in cross section. The paste is moderately coarse and friable, with numerous grains of what appears to be angular quartz sand. Both interior and exterior are

smoothed. No slip appears to have been applied, but on the exterior there are small areas remaining of what may originally have been a black or dark-brown paint. The rim diameter is $7\frac{1}{2}$ inches; the vertical height is $3\frac{1}{4}$ inches. Vessels very similar to this occurred infrequently in the earlier excavations at La Venta (LV, pp. 110-111, fig. 38, b).

OFFERING NO. 19

Location.—In shallow pit intruded into Phase I levels at center of Northwest Platform.

Construction Phase.—II (?).

In the same intrusive pit in which Offering 18 occurred, lying approximately 5 inches above and 2 feet 3 inches to the south of the latter, was found a vessel of the ware which Drucker (LV, p. 92) has termed White-Rimmed Coarse Black ware. The vessel (fig. 42, e) is a flat-based dish or shallow bowl with flaring sides and simple direct rim. Since the vessel conforms in every particular with Drucker's description of this ware (LV, pp. 90-92), no detailed description need be given here. The rim diameter is $12\frac{7}{16}$ inches; its height is $2\frac{9}{16}$ inches. No decoration other than the special treatment of the rim in firing is present. Sherds of White-Rimmed ware were encountered in fair numbers in Drucker's excavations in the Olmec habitation areas of La Venta, but the present piece is the first to be recovered from the ceremonial complex.

This completes the description of offerings found during the 1955 excavations in clear-cut association with structural components of the Olmec site. A number of pottery vessels were found buried singly and in concentrations at various locations in the drift sands which accumulated after Complex A was abandoned by its builders. These vessels, which comprise Offerings 20 through 27, are described in the section which follows on the "Post-Phase IV" occupations of La Venta.

MISCELLANEOUS FINDS IN COMPLEX A, 1955

A few artifacts not associated with offerings were encountered in the general digging. They were very few indeed because, as has been pointed out before, an effort was apparently made to secure clay or sand fill for the structures from clean undisturbed deposits.¹⁸ Occu-

¹⁸ In 1955 we inspected a number of open sand and clay pits, some of them very large and deep, on La Venta island from which road fill was being excavated. Although generally similar to the colored clays used anciently to construct the La Venta site, we failed to note a single occurrence of the particular heavy clays, sandy clays and sands which had been used in the site. With this limited evidence, and taking into account the Olmec penchant for not sparing effort to secure what they wished, it may be suggested that most, if not all, of the millions of cubic feet of structure fill in Complexes A and C were brought from some distance away from the island. No borrow pits were noted near the site.

pational refuse was not used as structure fill. Some of the objects found by us may have come from older offerings which were disturbed and whose contents got mixed in later structural fill.

Two elongated tubular jade objects, perforated longitudinally, were found in the Northeast Platform a little over 2 feet to the northwest of the center of Offering No. 5, and about 2 inches above the level of that offering. They were encountered outside of the pit in which Offering No. 5 had been deposited and could not possibly be associated with it. Both of these pieces were somewhat heavier in their proportions than the usual specimens of this type. One is of a light apple-green jade, and very highly polished (fig. 53, *a*). It is not cylindrical, but instead has two flat sides. A shallow groove rings it about the center. It tapers strongly from the middle toward the somewhat rounded-off ends. It is $1\frac{1}{16}$ inches long, $1\frac{9}{32}$ of an inch in maximum diameter, and $1\frac{3}{32}$ of an inch in minimum diameter (perpendicular to the flat sides). It is perforated with a pair of long, slender, slightly conical drill holes begun at either end. The companion piece (fig. 53, *b*) is of mottled green jade that also has a high polish. It is cylindrical or nearly so in form, tapering very slightly from the middle toward the ends. One end is cut off square and the other is slightly irregular. The piece is perforated by a biconical perforation which is slightly larger in diameter than that of the specimen first described. Dimensions of the piece are $1\frac{1}{32}$ inches in greatest length by $\frac{7}{16}$ inch maximum diameter.

A fragment of a polished concave metallic mirror (fig. 53, *d*) was found in the backdirt thrown out in the excavations of previous years near the stone column tomb (Monument 7). The fragment has a broad flat rim, approximately three-quarters of an inch wide. A small part of the central concavity is present. The fractured edges show that the mirror was broken anciently.

A small pebble of bright-green opaque jade (not illustrated) with one polished face and beveled sides that round off to the flat, apparently waterworn back was encountered in the fill over Feature A-2-d. The object is approximately three-quarters of an inch in maximum diameter. It is unperforated and suggests by its form that it may originally have been part of a mosaic of some kind.

Two objects made of pale-green serpentine are of interest mainly as further examples of the stoneworking techniques. The first (fig. 53, *e*) is oval in cross section with one side flattened. At one end the specimen was ground down around three sides, leaving a projection $\frac{9}{16}$ of an inch long by $\frac{5}{8}$ of an inch in diameter. A conical depression has been drilled into this projecting end for approximately one-half inch. The end of the piece around the drill hole has subsequently been broken away nearly all the way around the circumference of the hole.

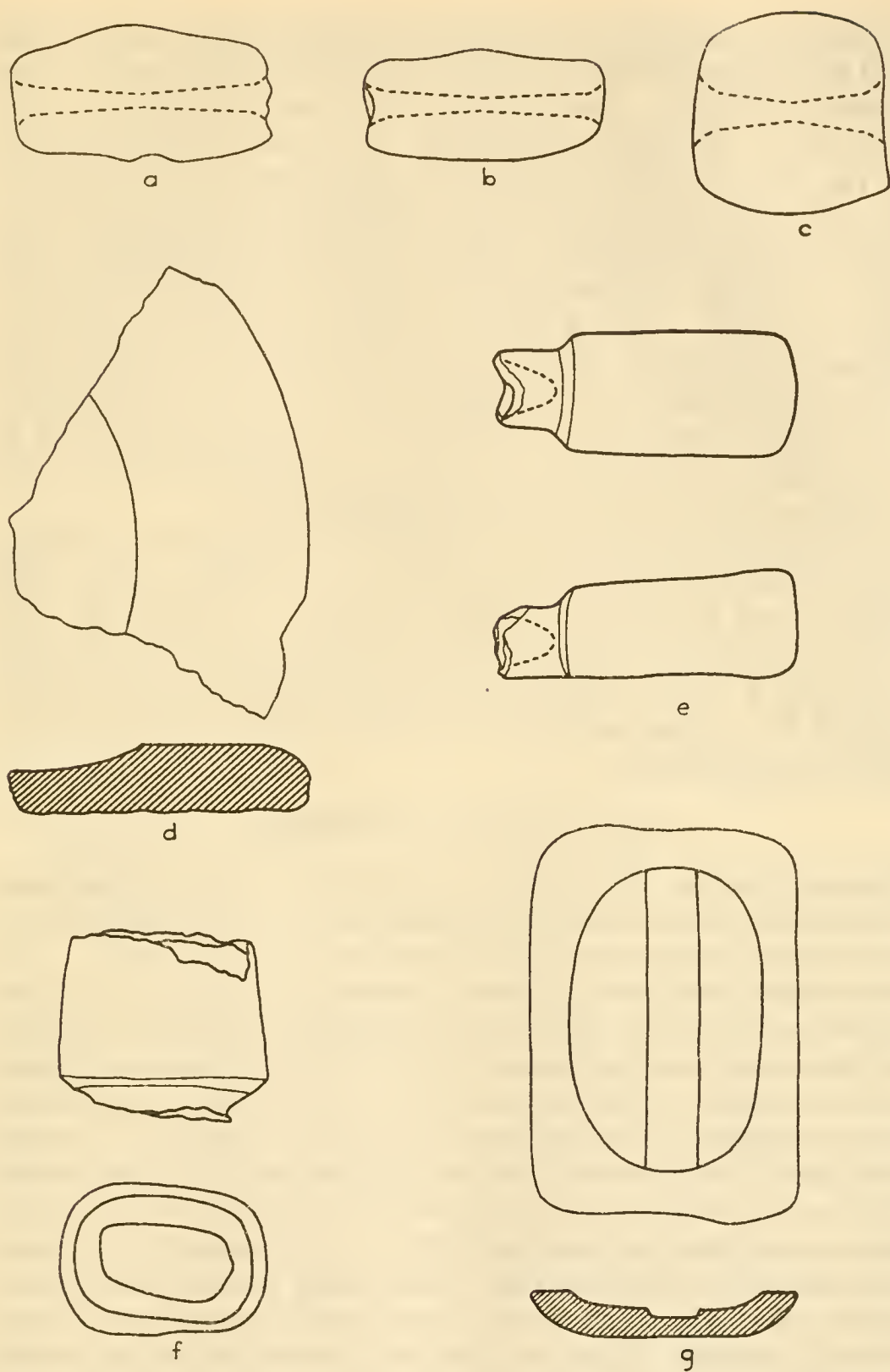


FIGURE 53.—Objects from general digging in Complex A. *a-b*, Tubular jade beads. *c*, “Barrel-shaped” jade bead found inside pottery vessel of Offering No. 22. *d*, Fragment of concave magnetite(?) mirror. *e-f*, Serpentine objects of unknown use. *g*, Modified serpentine pavement block from Massive Offering No. 3.

The piece is polished, but no attempt was made to grind away several pitted areas on the surface. The purpose for which the specimen was intended is unknown. Perhaps it is a handle for an implement which was hafted on the narrow drilled end. The second serpentine specimen (fig. 53, *f*) is a section of a once longer piece, roughly oval in cross section, which has been broken transversely at one end and sawed nearly through at the other. The sawed end shows evidence of two stages of sawing. A broad shallow groove was first sawed entirely around the piece. Then a thinner sawing implement was used to continue the operation. When only a central core $\frac{5}{8}$ by $1\frac{3}{16}$ inches remained unsawed, the piece was broken away from its attached member by either a blow or hand pressure. The specimen found by us is undoubtedly the discarded product of the sawing operation, since no further attention appears to have been given to it.

In addition to the miscellaneous pieces described above, a few fragments of black obsidian flake blades and one small brown chert "scraper" were found in the general digging in Complex A. The latter piece, a flake with part of the cortex remaining, has been chipped by use along a length of about 1 inch on one edge; one utilization of this piece for a scraping operation probably would have sufficed to chip the edge as it now is.

STONE-WORKING TECHNIQUES

Drucker (LV, pp. 146, 172) has treated with certain principles and techniques of stone-working evidenced in the La Venta materials. A few additional observations may be noted here.

Serpentine blocks found in great numbers in the 28-layer "foundation" below the mosaic mask in the Southwest Platform appear to have been rough quarry blocks. These may have been transported to La Venta from their sources with the aim of using them without further refinement. Or, they may represent a "stockpile" of quarry blanks which were intended for squaring and surfacing, to be ultimately used as facing blocks (as in the lower facing of the Southwest Platform and the Northeast Entryway), or elements of a jaguar mosaic mask, or as blocks for one of the deeply buried massive pavementlike offerings. Some of the rough blocks showed preliminary shaping in the form of pick or sharp gouge marks to give the surface an initial dressing. These pick marks are much deeper and larger than the usual pitting resulting from stone pecking. A few showed sawed grooves, either on one surface, or opposed, so as to indicate the intention of cutting it in two (pl. 48 *a*, *b*). This method of stone sawing was practiced by the Maya (Holmes, 1897, vol. 1, p. 198). Some of the rough serpentine blocks were chipped, the work being done presumably with a heavy hammer of some sort (pl. 48 *c*, *d*). The

row of lower facing blocks in the Southwest Platform was made up of three types of stone blocks: (1) rectangular smoothed serpentine blocks (pl. 48 *e, f* shows two; note sawed ends); (2) smoothed rectangular basalt blocks; and (3), roughly chipped, yet regularly formed, basalt blocks (pl. 48 *g, h*). The flakes struck off these latter were thin, and ranged from 1 to 3 inches across, and in our opinion are rather remarkable accomplishments of stone flaking in such amorphous material. The esthetic effect produced by the regular shape of these large flaked blocks is pleasing, and we must assume that the builders of La Venta also received a similar impression since they were placed in obvious positions and in the one case of the lower facing of the Southwest Platform (pl. 13), these blocks covered the ones of smoothed serpentine. The point of this is simply to argue that these chipped blocks are not unfinished, but are a specific La Venta form.

Shown in plate 48, *i* is a serpentine block 13.5 inches long, 9.5 inches wide, and 3 inches thick. The surface apparently has been used for grinding, and there is an oval, concave depression with a wide, flat-bottomed, shallow channel subsequently incised (fig. 53, *g*). Since such soft stone could scarcely have served as a metate (note also that the La Venta metates were different—LV, pp. 144–145), it seems likely that this block was used as a polishing slab. This piece is described because it is unique, all other stone blocks found giving no evidence of having served for secondary uses.¹⁹

Although we were on the lookout for signs of workshop debris in the hope of finding the location and methods of local stone working, we found practically nothing. The top of the Phase II white floor series both in the east-west (bulldozed) trench which cut through the eastern part of the South-Central Platform across the Court and through the Court embankment, and along the inner, Court-facing margin of the Northwest Platform showed a thin layer of finely ground green serpentine which was used for surfacing the Court. Although this layer averaged only one-eighth of an inch in thickness, the quantity required to surface an extensive area (we do not know whether the entire Court was so surfaced at this time) was very great. Either this green dust was deliberately produced by crushed serpentine, or it represents the by-product of finishing serpentine blocks which was put to a useful purpose. We cannot answer the question, but we incline to the opinion that there is a nearby area, still undiscovered, where stone finishing was carried out. It seems improbable that the largest stelae (e. g., Nos. 2, 3), with their delicately sculptured surfaces, could have been transported in finished forms without abrasion of the carvings. For these reasons, among others, we believe that

¹⁹ It may be worth recording that a number of the large rectangular basalt blocks dug by us were carried away by local people for use as metates. These may be found again, but in a form and context different from their original (i. e., A. D. pre-1955).

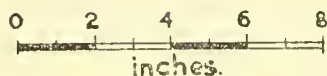
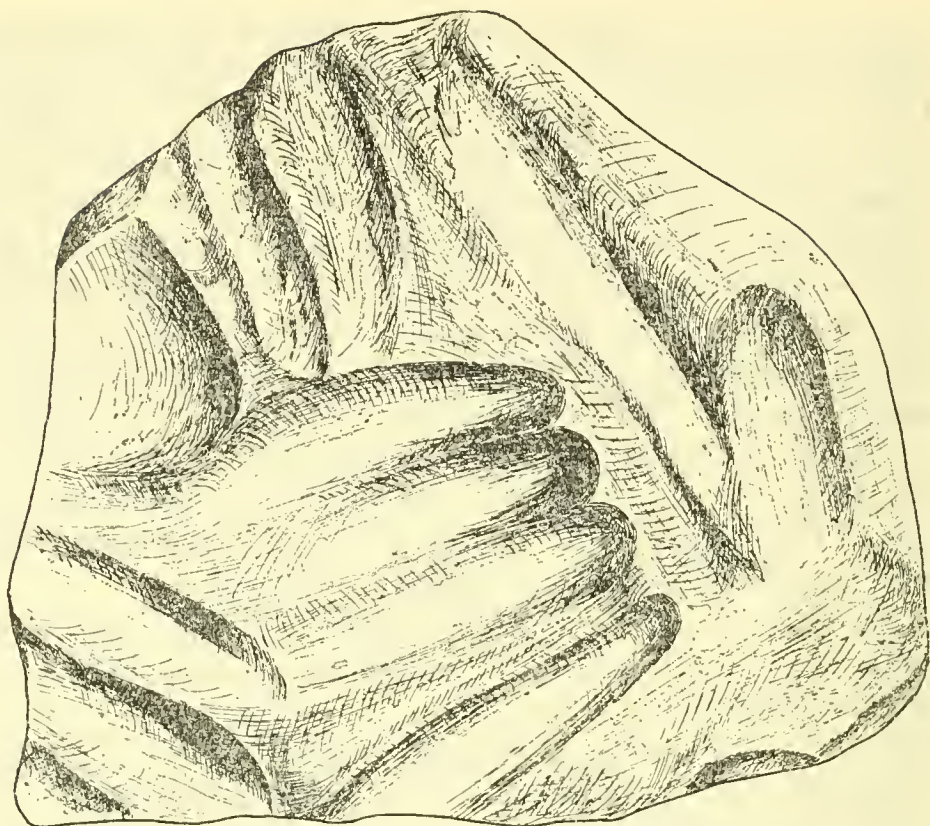


FIGURE 54.—Limestone slab used for celt polishing (?). From occupation area west of Ceremonial Court; probably of post-Phase IV date.

a corps of artisans was attached to the site, at least at certain times if not on a permanent basis, to dress stone and sculpture the great stelae, altars, and monuments now at the site.

On jade working we cannot add significantly to Drucker's (LV, p. 172) account. The incised celt with the rectangular depression (fig. 35, *a*) from Offering No. 2 is certainly a remarkable piece of stone sculpture, though the piece is so perfectly polished that we cannot say whether or not the depression was roughly excavated by drilling or sawing and then polished. The backs of the little apple-green jade maskettes (fig. 43) have been hollowed out in order to bring out the translucence of the material.

The remarkable concave mirrors, two of which were found in 1955, stand out as the most unique pieces of precision stoneworking of the La Venta culture (see Appendix No. 3). A total of 8 complete or fragmentary mirrors have been recovered from the La Venta site to date, and the concave metallic mirror thus appears to be a distinctive Olmec trait.

About 150 yards west of the Ceremonial Court on the south side of the airstrip we noted a large flat white limestone slab (fig. 54) measuring approximately 24 by 21 inches and about 4 inches thick.

This slab is similar to those found in 1955 near the Northeast Entryway and in Mound A-5, and in 1942 in the stone column tomb, and beneath the drift sands in the centerline trench (LV, pp. 23, 38). They are undoubtedly late in the site's history and belong to Phase IV. One surface of the dissociated slab is covered with long shallow concave grooves which appear to be celt-polishing channels. Use of this limestone slab may date either from Phase IV or post-Phase IV, as judged from similar grooves gouged into the tops of some of the Colossal Heads near the La Venta site (Stirling, 1943 b, p. 56, pl. 42). It is reasonably certain that the conical cups, narrow cut grooves, and gouges which are to be seen on the foreheads and tops of the Colossal Heads at La Venta (cf. Stirling, 1943 b, pp. 56-57) are the result of later activity. These gougings on ancient sculptures may imply a lack of superstitious fear of the great heads by later inhabitants of the area, but at the same time it is barely possible that what we interpret as either vandalism, disfigurement, or casual tool-sharpening marks on a handy stone may in fact be signs of some deliberate act directed toward placation of the spirits of the ancient sculptures by later occupants of the area.

STONE MONUMENTS

Appendix No. 2 lists all monuments recovered to date from La Venta and indicates, so far as known, their present whereabouts.

A total of nine complete or fragmentary stone monuments (Nos. 19-27) were encountered by us in the course of the 1955 field season. These include three small monuments turned up by the oil company's bulldozer in the course of building the airstrip that ran in a north-east-southwest direction, just outside the northwest corner of Complex A. We were not able to find out exactly where any of these three stones came from except that most people who claimed to have some knowledge of them indicated that they came from a general area north of Complex A, and south of the row of stone heads (Monuments 2, 3, and 4). All these monuments were assigned numbers by us in the sequence begun by Stirling (LV, pp. 173-184).

MONUMENT 19

Monument 19 (fig. 55) was an irregularly shaped light-gray basalt boulder, approximately 3 feet in its longest dimension, about 2½ feet wide, and just under 2 feet thick. It has one smooth surface which was not completely flat, but instead slopes downward at the ends. The sculpture seems to have accommodated itself to the natural outline of the boulder.²⁰ The thick and irregular base of the stone is such

²⁰ Laying out this sculpture to conform to the irregular shape implies absence of convention-bound art together with great virtuosity of the artist.

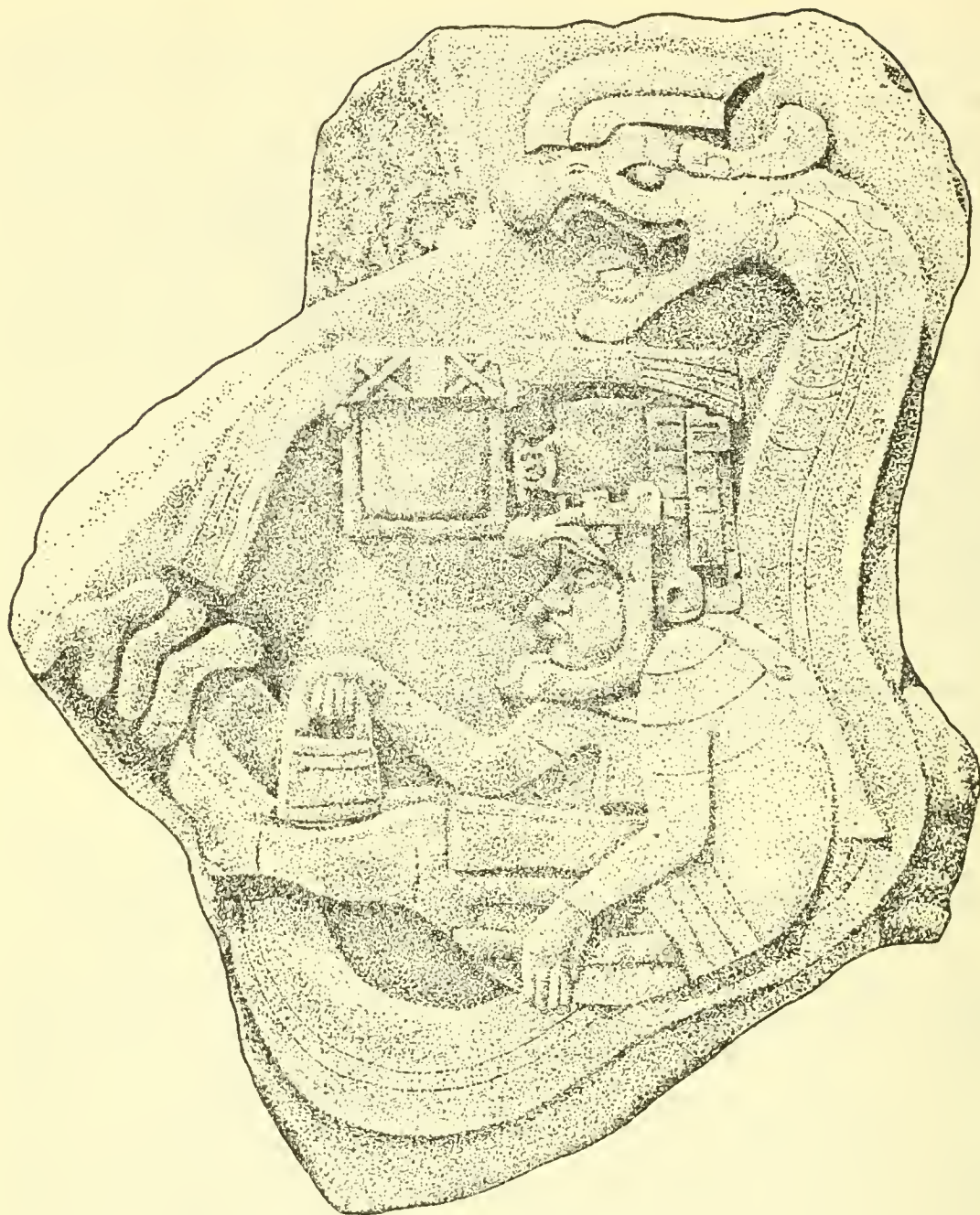


FIGURE 55.—Monument No. 19.

that it is almost certain that the stone was originally partly buried in order to present the flat sculptured surface to view. On the flat upper surface in very low relief, two figures were depicted (pl. 49, *a*). One is a seated human figure shown in profile, facing to the left, the other figure behind and partially surrounding the first figure in a protective attitude is a plumed rattlesnake. The carving is sharp and clear and beautifully preserved. Stylistically, the carving rendering the details and conventionalizations is most like the treatment of the figures on Stela 3 (LV, fig. 50). There is little trace of the exaggerated stylization that characterizes jade figurines, carvings in the full round, or engraving on jade. The human figure is seated with his legs extended out in front. He is shown wearing

a headdress which represents the head of a jaguar. The mandible of the beast is carried downward as though it formed a chin strap, so that the wearer's face is enclosed in the open mouth. This is like the mask worn by the bearded (right side) figure on Stela 3. The features of the human figure are treated realistically. He is wearing what appears to be a large bead as a nose ornament. There is a suggestion of a neatly trimmed beard (cf. LV, p. 196) shown behind the forward projection at the chin of the jaguar mask. A large ear-spool may be seen just behind the chin strap, and a trailer descends the figure's back, behind the headdress. Above the headdress is a rectangular area with some fine details which no longer can be made out. It is not quite clear whether this is part of the headdress or not. Above this set of rectangles is a horizontal rod with a long tasseled end from which hangs a rectangular bordered banner, which looks very much as though it had been intended to contain some glyphs. The flat open center of this banner may of course have been painted. The banner is fastened to the tasseled rod by two X-shaped elements. The body of the figure is very simply shown. The left shoulder is depicted in somewhat clumsy perspective. The left elbow is slightly bent and the left hand, which lies next to the thigh, is turned at the wrist with the palm out. Careful inspection will show that this exact position of arm, wrist, and hand is anatomically difficult or impossible. The right arm is extended, and the hand holds a small bag or pouch, which may be intended to represent a copal bag. The figure wears a wide sash, or belt, and a breech-clout. There appears to be some sort of pendant from the necklace worn over the chest, and some bands are indicated about the calf of the left leg. The feet are shown with peculiar pointed toes very much like figure 1 of Stela 3 (LV, fig. 50). Behind and surrounding this figure is that of the plumed rattlesnake. The upper part of the snake's body is drawn back in a reverse S-curve, as though it were ready to strike. Surmounting the snake's head is a flat crest with two ribbonlike appendages trailing back from the rear part of the head (pl. 49, b). The snake's mouth is shown open, and the fangs are clearly depicted. It is a strictly realistic representation, and is beyond a doubt one of the meanest-looking reptiles in Mesoamerican art. Down the middle of the snake's body is a double line, marking the separation of the back and belly. A few very lightly incised curves indicate the belly scutes, and a few similar lines indicate scales on the back. The tail with three rattles and "button" is shown curled up in front of the human figure.

The occurrence of the Feathered Serpent as a theme in Olmec art deserves some special comment. It is not a common one. In fact Drucker asserted (LV, pp. 203, 209, 219) that it did not occur at all

despite the two realistic serpents depicted in carvings at the site of San Lorenzo (Tenochtitlán) on the Río Chiquito. He was of course in error, although it still may be suggested that stylistically the Olmec reptiles were treated quite differently from those shown in Mayan art. It is worth remarking that this same Plumed Serpent, in fact what is probably the same combination of figures as on Monument 19, a man wearing a jaguar headdress enclosed in the coiled body of a feathered serpent, is shown at the top of Stela 3 (fig. 67). Those figures have been visible, although obscured by props and by the angle at which the stela was inclined, ever since Stirling exposed it in 1941. As soon as we straightened up the stela the Plumed Serpent, which appears in the top right-hand corner of the stone, was most obvious.

MONUMENT 20

Monument 20 (pl. 50), which was turned up by the bulldozer during the construction of the airstrip, is anomalous in a number of respects. We believe that it is a very stylized representation of a cetacean. It is made of greenish metamorphic stone, probably gneiss. The sculpture is 6 feet and 6 inches long, 1 foot 10 inches maximum width, and 1 foot 6 inches thick (fig. 56). Part of the underside has cracked off and been lost. This break appears to be quite old. The modeling of the distinguishing features of the whale, or whatever the animal is, is minimum. There is a rather large blunted head and elongated body, tapering toward the rear to what appear to be wide tail flukes. On the middle line down the back are two low protuberances, which may have been intended to represent a blowhole and the dorsal "fin." The eyes and mouth are indicated by incising. There is an angular incised ornament over the back and sides. This is the part of the carving which is most unusual since it is quite unlike any decorative motifs known to occur at La Venta. The treatment of the figure itself, and particularly this incised ornamentation consisting of angular designs, suggests that this specimen may have been brought to the site already carved. It is possible that Monument 20 is of non-Olmec origin, though it must be remembered that our knowledge of La Venta period sites is limited, and also that other marine elements are known to occur at La Venta (LV, p. 196).

MONUMENT 21

Monument 21 (pl. 51, *a*) is a mutilated human figure in a seated posture with both arms resting on a thick flat-surfaced object which may be a box or a table or an altar (fig. 57). The figure, made of light-colored, fine-grained basalt, is considerably weathered so that most details are lost. The feet and legs are not shown, and the heavy tenoned base is roughly worked. Like Monument 19, it was probably

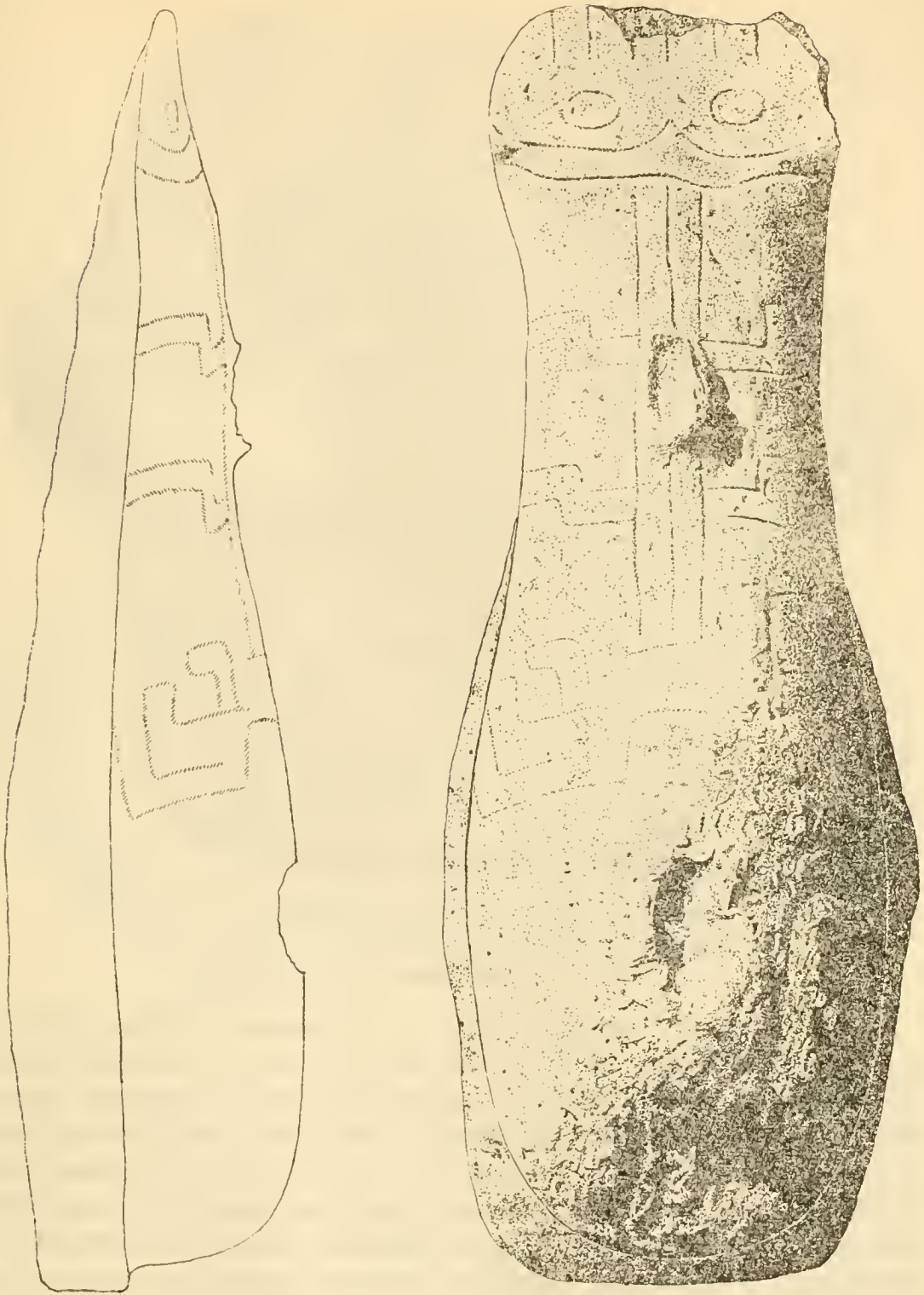


FIGURE 56.—Monument No. 20. Length 78 inches

buried in the ground with the carved surfaces visible. The arms which are rather angular, are only sketchily indicated. Stylistically Monument 21 is reminiscent of Altar No. 6.

This piece was recovered by the oil company while making the airstrip just north of Mound A-2.

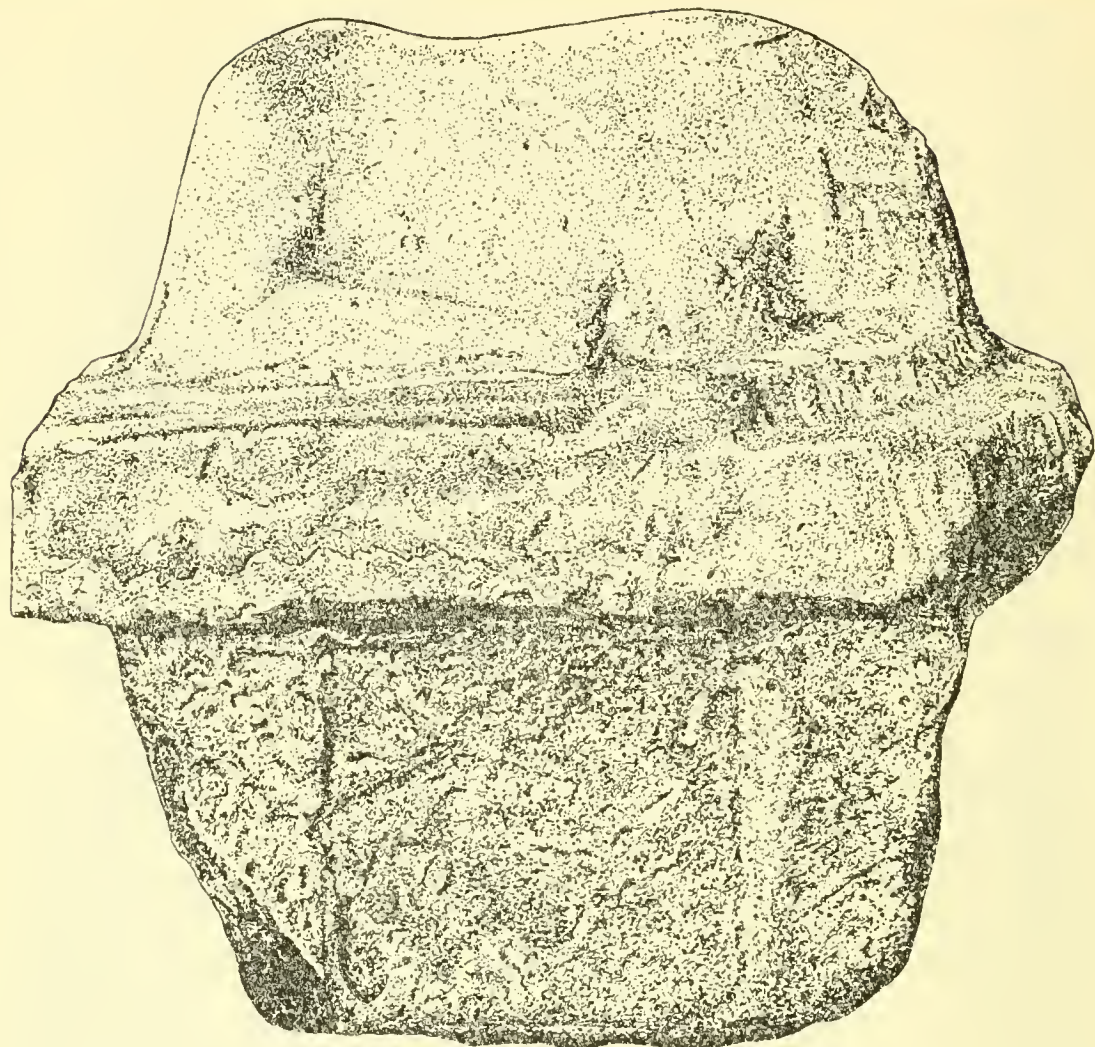


FIGURE 57.—Monument No. 21.

MONUMENT 22

Monument 22 is represented by two fragments of green schist, or gneiss, with remnants of what must have been a very elaborate design carved in low relief. The first fragment found (pl. 51, *b*) was an irregularly shaped splinter of stone, 2 feet 1 inch long, tapering from its maximum width of 11 inches, and 7 inches thick. It was found at the base of the gray drift sand, lying directly on the eroded surface of the red clay cap at the southeast corner of Feature A-1-e (Southwest Platform). Another fragment which is considered as being a piece of the same monument was found in a comparable position on the red-clay structure surface near the southwest corner of the same structure. This indicates that this monument was broken up at or shortly after the end of Phase IV at La Venta.

MONUMENT 23

Monument 23 (fig. 58) is the mutilated human statue which was lying beneath the upper drift sands on a limestone slab on the clay



FIGURE 58.—Monument No. 23.

surface of Mound A-5. This figure represents approximately a life-size human figure seated in a cross-legged posture. The carving is quite characteristic of the best Olmec sculpture. The cross-legged position is, of course, a common one in this art style (LV, figs. 51, 52, pls. 46, 59, 60). Head and arms and one foot of the figure are missing, having been broken off sometime in the distant past. The breaks are not fresh and sharp, but rounded and eroded. The figure wears what appears to have been a 3-strand necklace of large beads about its neck, from which depended a plaque (pl. 52, *b*). This plaque was nearly rectangular with rounded ends, and its outer surface was concave. In all probability it represents one of the metallic mirrors of the sort found in Offerings 9 and 11. About its waist the figure wears a wide double sash, or belt. On the front, a narrow band seems to pass through, or be fastened to, a sort of rectangular buckle. The flowing ends of the sash extend out sideways and continue trailing forward

along the thighs. On the back, this narrow band is tied in a very complicated knot (pl. 52, *a*). The back view also shows, just below the edge of the break, the square-cut edge of a mass which may have been the trailing bottom of a headdress, or else the figure's long hair. Back and torso of the figure are realistically modeled. The only conspicuous exaggeration may be noted in the proportions of the thighs and knees (pl. 52, *c*) which are disproportionately heavy. This was probably done intentionally to provide sufficient weight so that the figure would sit up and not topple over backward. In the front view this exaggeration is scarcely noticeable. It is worth noting that this figure was in all probability deliberately smashed. The head could have been knocked off only with great difficulty. The remnant of hair, or end of the headdress that remains on the back, makes it obvious that the carving was originally quite thick and massive at this point, that is, from the back to the front just above the necklace. The arms likewise are battered off close to the torso. We were not able to find any additional fragments of this statue in our digging in that vicinity.

MONUMENT 24

Monument 24 (pl. 52, *d*) is a more or less rectangular block of green gneiss, one corner of which had been cut away longitudinally to produce a thick L-shaped cross section. There was no indication of any attempt at ornamentation. However, the piece must have been of some significance. It was placed very carefully with the hollow or concave side downward, at right angles to the centerline of the site and intersecting that line, just north of the tomb of basalt columns. There had been considerable disturbance, apparently associated with Phase IV construction and fill in this area. We believe, however, that Monument 24 was put in place during Phase IV. This stone is 3 feet 10 inches long, 1 foot 2 inches wide, and 8½ inches thick across the foot of the L. It is smooth, but not polished. The only pieces remotely like it that come to mind, and the similarity is not very close, are the conduitlike blocks of stone with U-shaped cross section found at San Lorenzo, Tenochtitlán (Stirling, 1955).

MONUMENT 25

Monument 25 (pl. 53, *left*) was made of a large slab of a finely laminated green stone which appeared to us to be schist. The original shape and size of the piece cannot now be determined. What remains of it is rather irregular. One side only is partially squared off and almost all the others appear to have been broken subsequent to carving. In its present form it approaches a wedge shape, wide at the top, tapering gradually toward the base, with the base itself tapering abruptly into an irregular point. The dimensions of



FIGURE 59.—Monument No. 25.

this fragment are: height 7 feet 11 inches, maximum width 5 feet 3 inches, thickness from 6 to 10 inches. The front of this piece of stone was probably fairly smooth when first imported by the La Ventans. There are some slight irregularities that indicate that it was not ground down to a prepared flat surface prior to carving. On this original surface a large jaguar mask, in conventional Olmec style, was carved in low relief (fig. 59). Shallow areas were carved into the surface of the stone in such a way as to leave the important element of the mask standing out as low flat planes. When found by us, the upper portion of the mask had been broken off. This fracture was very heavily weathered and must have occurred a long time ago. Just below the edge of the fracture the nostrils and the square thick upper lip of the jaguar can be seen. Long fangs depend from the upper jaw across the open mouth and apparently extended over the upper-curved lower lip. On the viewer's right there are suggestions of former carvings below the level of the mouth and next to the edge of the stone. It may be that earspools were indicated here. Below the jaguar mask itself, is a peculiar arrangement of three wide, flat, horizontal bands, which appear to be fastened together by two vertical strips, running behind them. The two upper horizontal bands appear each to be marked off into four narrow ribbonlike strips, the lowest band of three. Where the horizontal bands cross over the vertical ones there are indications of carvings which may have represented knots, tying these elements together. A good deal of detail has been lost all over the carving because of the softness of the stone, and its tendency to flake off.

Two limestone flakes serving as shims under Monument 25 suggest that the setting of this sculpture dates from Phase IV.

MONUMENT 26

Monument 26 (pl. 53, *right*) is also of laminated green stone, similar to the preceding, which is much softer or which has deteriorated even more than that of the monument just described. It, too, is incomplete. In this case, at least as we interpret the carving, it is the base, or most of the base, which has broken off. The part that remains appears to include all the upper part of the design. As remarked elsewhere, we found it was upside down. This carving (fig. 60, *right*) also represents a jaguar mask conventionalized in this case to an extreme degree. The combination of this conventionalization and the damage which the monument has suffered, due to the scaling off of loose chips and flakes of stone all over its surface, make it almost unrecognizable. The jaguar in this case is shown with either a headdress or plumes, on top of its head. At the center is a set of three small pointed elements with rounded bases. These rise out of a top of what appears as the remnants

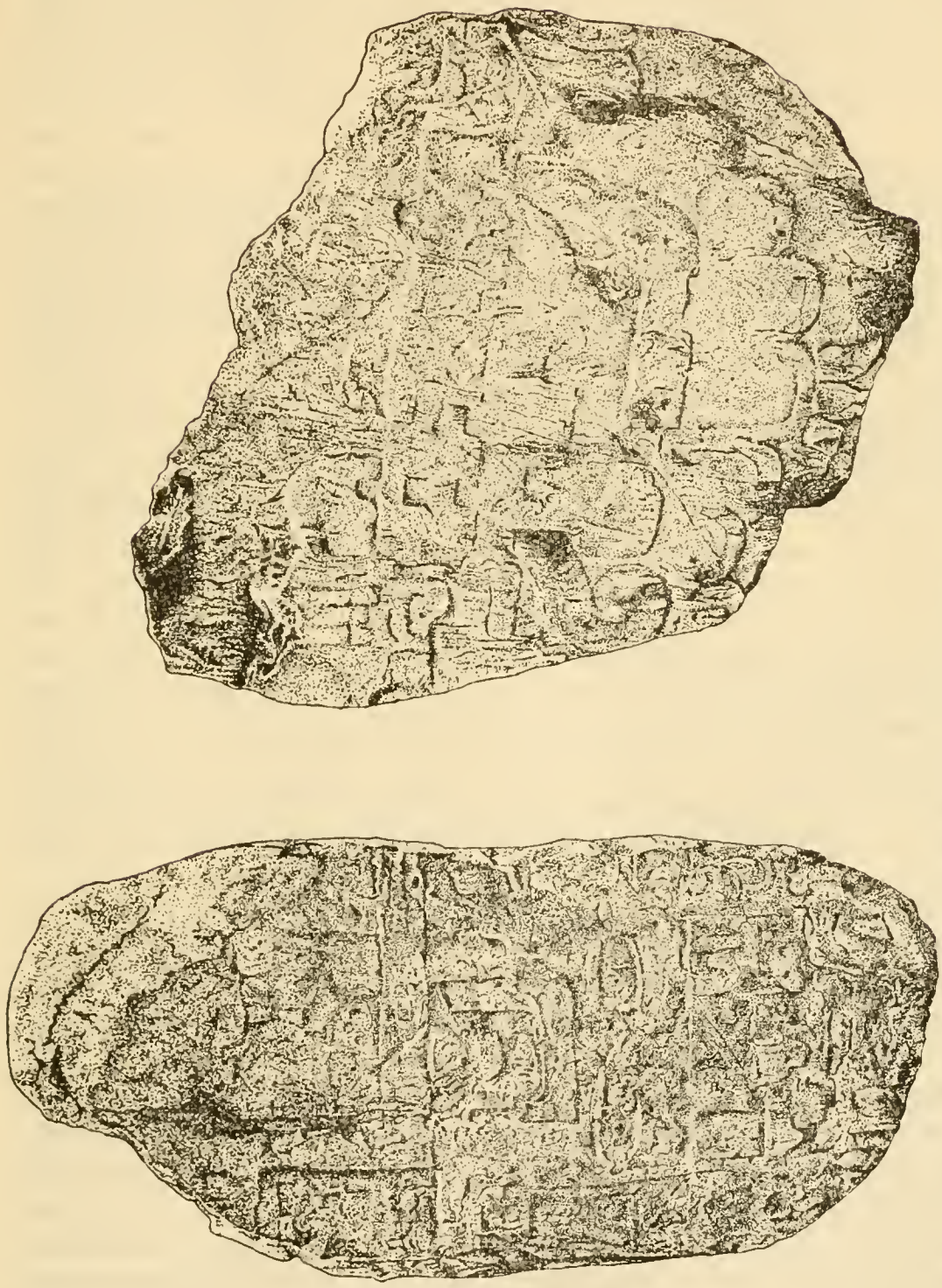


FIGURE 60.—Monuments. *Left*, Monument No. 27. *Right*, Monument No. 26.

of a rectangle with rounded corners, the lower part of which is missing. This figure was given a border by having a shallow line engraved around the inside of its perimeter. Flanking it, on either side, are a pair of similarly shaped elements, which, however, are slightly more rounded off and give more of a plumelike effect. At the extreme edges, close to the edge of the stone, there are on either side remnants of a rounded figure which may have been the terminal part of this headdress, or otherwise the ears of the jaguar. Just below the central one of these figures are the remnants of a small "Y-shaped" element with pointed tips, which suggests the notch in the head of the stylized Olmec representation of the jaguar. On either side of this are long, narrow rectangular eyes. The upper borders of the eyes cannot be seen, but their lower edges are quite clear, cut into the outline of the side flat band which represents the upper lip and nose. The nose is very clearly marked off and was actually the first recognizable clue to the figure. The lower jaw is either missing, or cannot be recognized. There appear to be two flat horizontal bands, running across just below the mouth, with a suggestion of vertical cross elements. Underneath the lower band are the remnants of two curved flowing elements which cannot be interpreted. It is of course quite possible that there was more carving below this point, on the part of the stone which is now missing. The height of the monument, or the portion which remains, is 6 feet 10 inches; the maximum width is 6 feet 1 inch. A diagonal line connecting the two projecting parts of the stone gives a maximum diameter of 7 feet 10 inches. Places on the edge of the stone which seem to be less weathered and broken indicate an average thickness of about 8 inches around the edges and maximum thickness of 10 or 11 inches.

MONUMENT 27

Monument 27 (pl. 54) was made from a block of light-colored faintly greenish gneiss. Unlike the soft material from which Monuments 25 and 26 were made, the stone of Monument 27 was extremely hard. The carving on it is so shallow, and the relief so very low, that it is quite difficult to see. It represents, however, a jaguar mask just like the two companion stones (fig. 60, *left*). As in the case of Monument 26, this monument also is upside down in its present situation. There is a horizontal band across the face of the stone, and indications of some faint elements above it, which may have been intended to represent a headdress. The eyes are very clearly indicated as elongated ellipses. The rectangular outline of the mouth, with an upcurved lower lip, can be made out. A flat horizontal band runs across the bottom of the mask, finishing it off. There appear to be two vertical elements running downward from this horizontal band to the base of the stone.

The dimensions of this piece are: length, 9 feet 3 inches; width, 4 feet 6 inches; average thickness, 1 foot 3 inches.

No facilities were available to remove these stones at the time they were found, and Monuments 25 and 26 were unquestionably destined to be damaged if left exposed in their present deteriorated condition. Consequently all three of these monuments were reburied when we closed down our dig.

FRAGMENT OF MONUMENT

Among the limestone slabs that formed part of the Northeast Entryway was a flat green schist piece bearing traces of curvilinear incising, perhaps representing feathers (fig. 61). It is not part of any monument now known from La Venta, and on account of its small size and fragmentary nature it does not appear worth numbering as a monument.

The edges of the fragment have been reworked by crude chipping, and this indicates that an older monument was broken up and put to a common (i. e., profane) use during or perhaps after the Phase IV period at La Venta.

SMALL STONE CARVINGS

In addition to the stone carvings just described we found various small fragments, some of which could be identified and some of which could not. The distinctive thing about these pieces is that most of them are small carvings in stone. They might have been classed as monuments, but because of their small size we group them separately. The most outstanding of these pieces is a plaque (Plaque 1) of basalt of elliptical shape, measuring $17\frac{3}{4}$ by $15\frac{1}{2}$ inches with a maximum thickness of $3\frac{3}{8}$ inches (figure 62). The surface is flat and bears the design. The back is convex, rounding off on the edges to the flat front surface. This specimen was also uncovered by the bulldozer during the airstrip construction, and one corner of the design was slightly damaged. However, it appears to have been broken along the lower edge long before the bulldozer ever found it. Around the edge of the flat surface is a narrow border about an inch wide which was left standing out in low relief when parts of the adjacent areas were ground away. The design consists of a very typical conventionalized jaguar mask. The long narrow eyes, which are wider at their outer edges, are surmounted by plumed or notched eyebrows in the usual fashion. Two curved, sweeping elements indicate a wide notch which narrows downward toward the muzzle. The nostrils of the beast are indicated by two circular pits. Most of the mouth has been eroded, or broken away, but there is a small element at the center which probably represented a small forked tongue, similar to that shown in the Tres Zapotes Stela C (LV, fig. 62). Unfortunately we

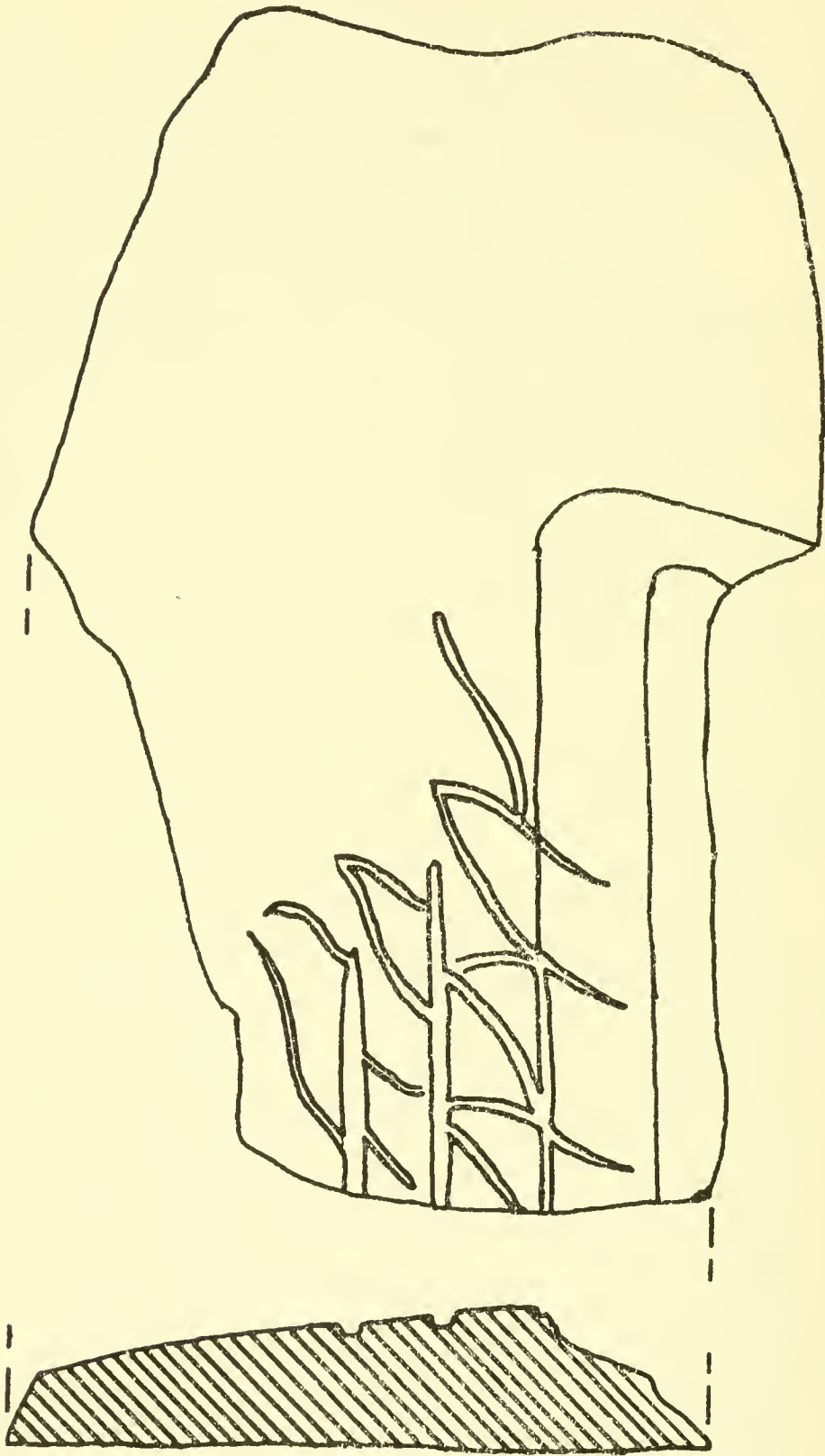


FIGURE 61.—Fragment of green schist monument (unnumbered) found near Northeast Entryway on Phase IV surface. Length 23 inches, width 17 inches, thickness 5 inches.

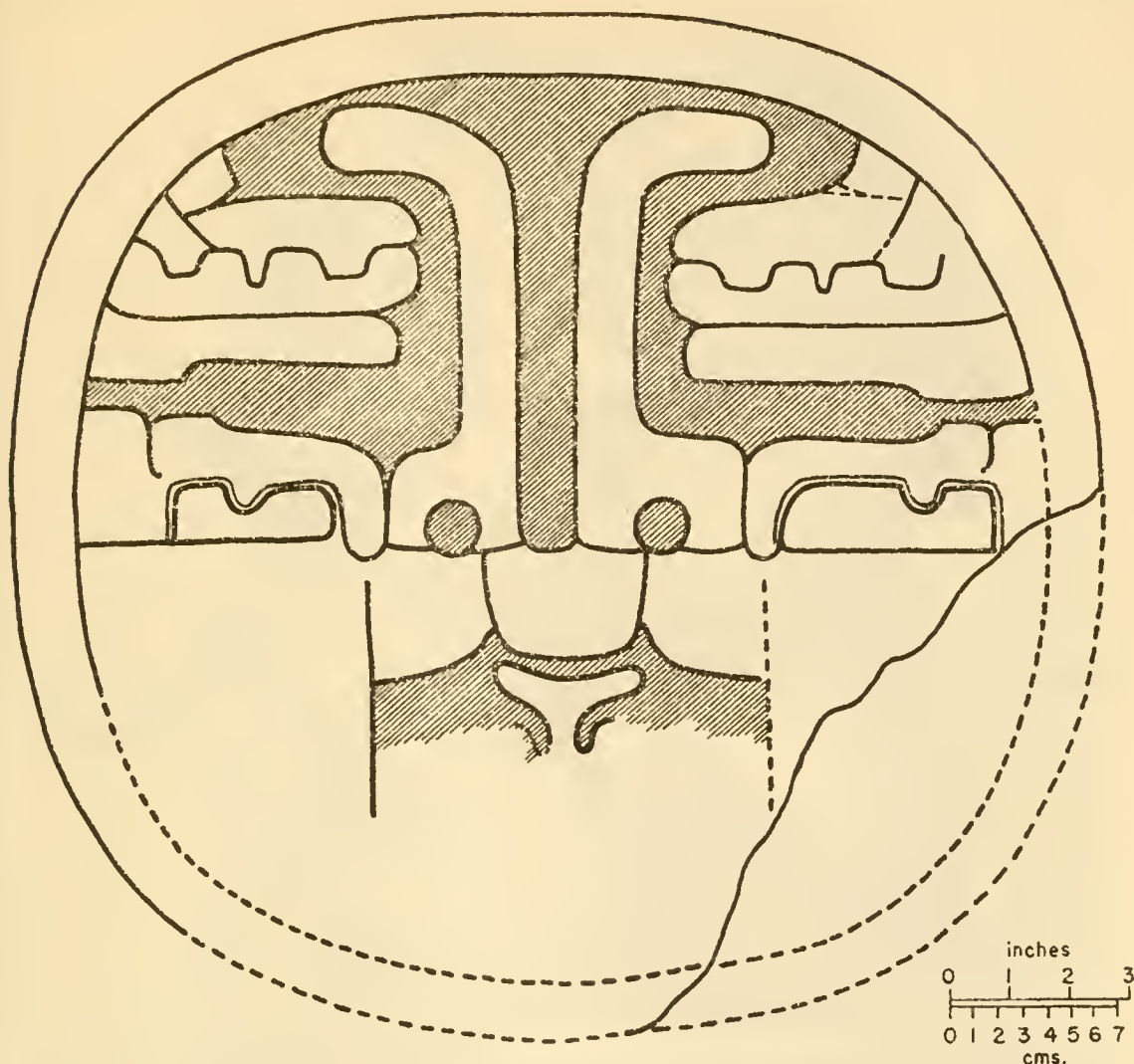


FIGURE 62.—Plaque No. 1. Hachured areas are sculptured out; lower margin broken or eroded.

have no idea of the original location of this specimen, nor do we know how it was used. It could very easily have been set into the clay of the structure as a sort of architectural ornament, similar to those embedded in the walls of the Palace corridors at Palenque.

In the fill, immediately overlying the olive clay envelope of the jaguar mask mosaic in structure A-1-e, we found a small broken stone figure which had represented a kneeling personage (fig. 63). The figure, made of a coarse, granular basalt, was approximately 7 inches tall. The head was broken off before it was deposited in the fill where we found it, and it showed signs of being considerably weathered. The proportions of the figure are somewhat crudely portrayed. It is quite wide through the shoulders and quite thick so it has a pot-bellied appearance. There is a large shallow depression on the front of the belly which may have been intended to represent a concave mirror worn as an ornament. The back shows some sug-

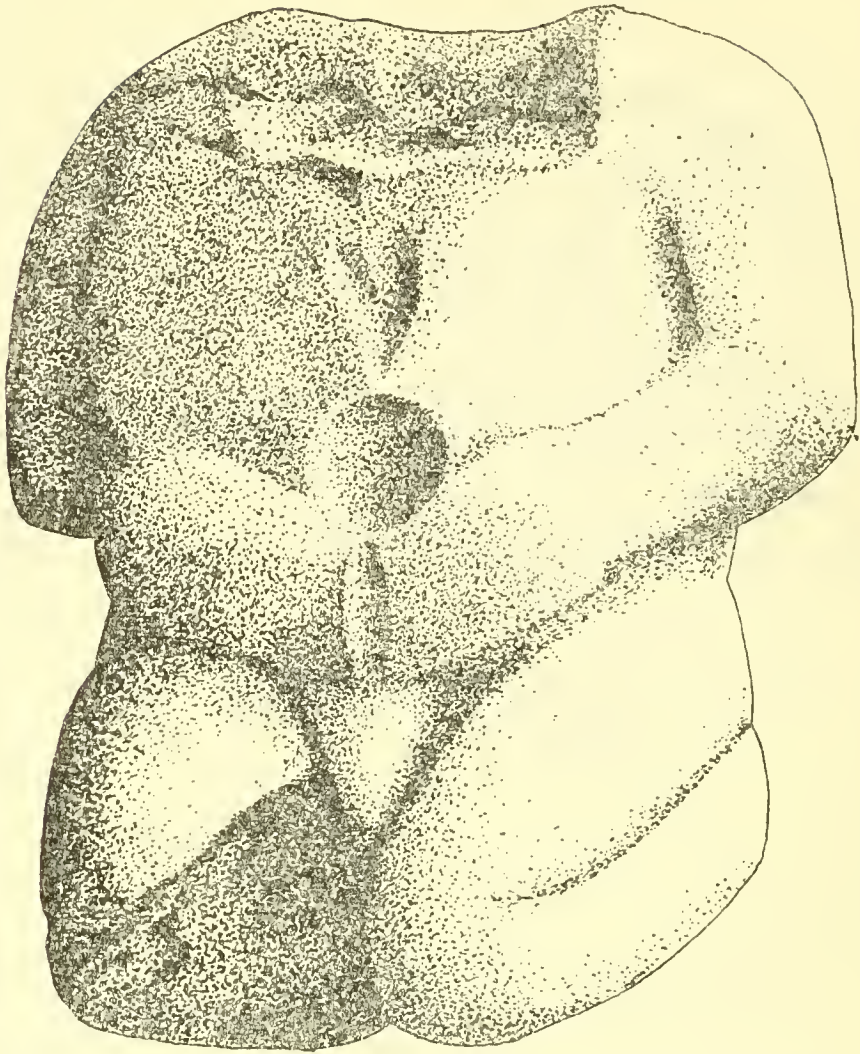


FIGURE 63.—Small sculptured kneeling figure of basalt found near southwest corner of mask mosaic in Southwest Platform. Height 7 inches.

gestion of modeling. The head was broken at the base of the neck, and the figure suffered some erosion so that the edges of the break are rounded off. There is nothing very distinctive about this figure which would enable us to place it stylistically.

ADDITIONAL NOTES ON EARLIER FINDS AT LA VENTA

The serpentine figurine found in Offering 1943-G in Mound A-3 and designated by Drucker (LV, pl. 52, *center*, pp. 159-160) as figurine No. 12 is poorly illustrated in the original report and is shown here in figure 64, *right*. The additional observations worth noting are the engraved ellipses on each cheek and both upper thighs, the "armbands," the engraved circle at a point just above the navel, and the teardrop-shaped element (possibly representing a pendant or mirror?) on the upper chest. In addition there is a shallow drilled pit in the upper arm just below the shoulder on each side. These notes modify Drucker's statement that no superfluous decoration occurs on figurines (LV, p. 187).

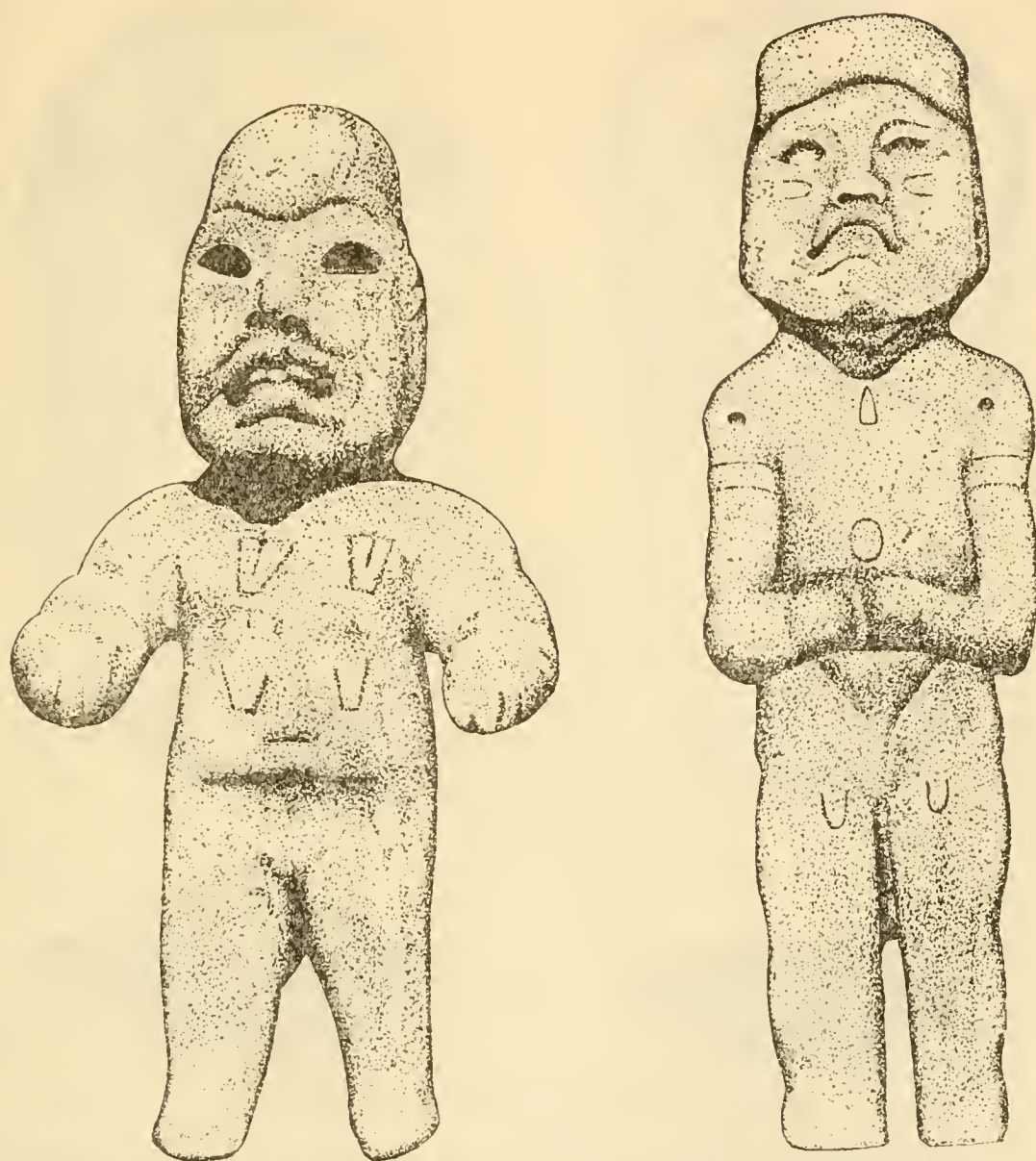


FIGURE 64.—Figurines. *Left*, Serpentine figurine 8 from Offering 1943-M. *Right*, Serpentine figurine 12 from Offering 1943-G.

The figurine from Offering 1943-M designated as figurine No. 8 (LV, pp. 157-158, pl. 50, No. 8) also bears engraved decorative elements (fig. 64, *left*, this report). High on the chest are two sub-triangular elements and on the belly are two more, rather like those shown on the thighs of figurine No. 12 described above.

A restudy of two of the three engraved jade celts found in Offering 1942-C shows some features not mentioned in the previous report (LV, pp. 165-166, fig. 47, *a, d*). The reverse surfaces are not engraved, and show faceting not apparent in any of the other celts recovered from the La Venta site. The peculiar combination of the engraving and faceted reverse surfaces of these pieces may indicate an outland origin for these specimens. The faceting is shown here in figure 65.

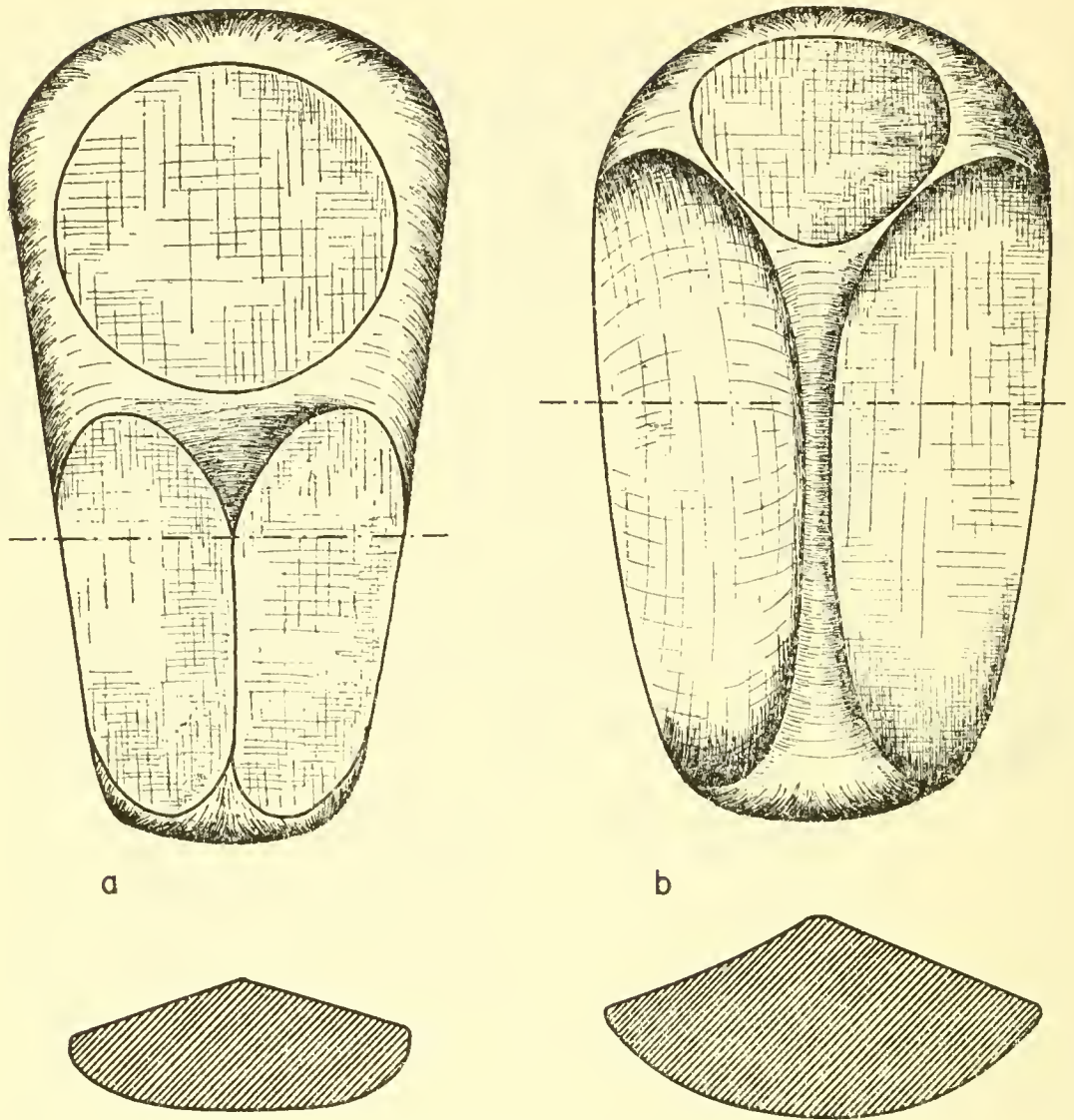


FIGURE 65.—Faceted celts from Offering 1942-C.

A reinspection of the Red on Coarse Brown ware vessel shown by Drucker (LV, fig. 41, *a'*) enables us to add further details on the engraved design shown at the right end of the figure. This consists of three incised "hearts" surrounding a solid red painted circle (fig. 66).

In 1955 with the help of the Pemex bulldozer we were able to set Stela 3 upright and to bring to full view the sculptured surface which faced north. That portion of the sculptured designs which can be determined with accuracy are shown here in figure 67. Sr. E. Contreras has allowed his artistic fancy full rein, and has produced (fig. 68) a version of the original appearance of the stela. It is scarcely necessary to warn the reader that this reconstruction must not be taken literally. The present appearance of Stela 3 is shown in plate 55. Drucker (LV, fig. 50) presents a drawing made from photographs of the stela made while it lay tipped on its face. This is now superseded by the present illustrations. We call attention specifically to the figures at the upper right (figs. Nos. 6 and 7 in LV, fig. 50) which represent a masked and

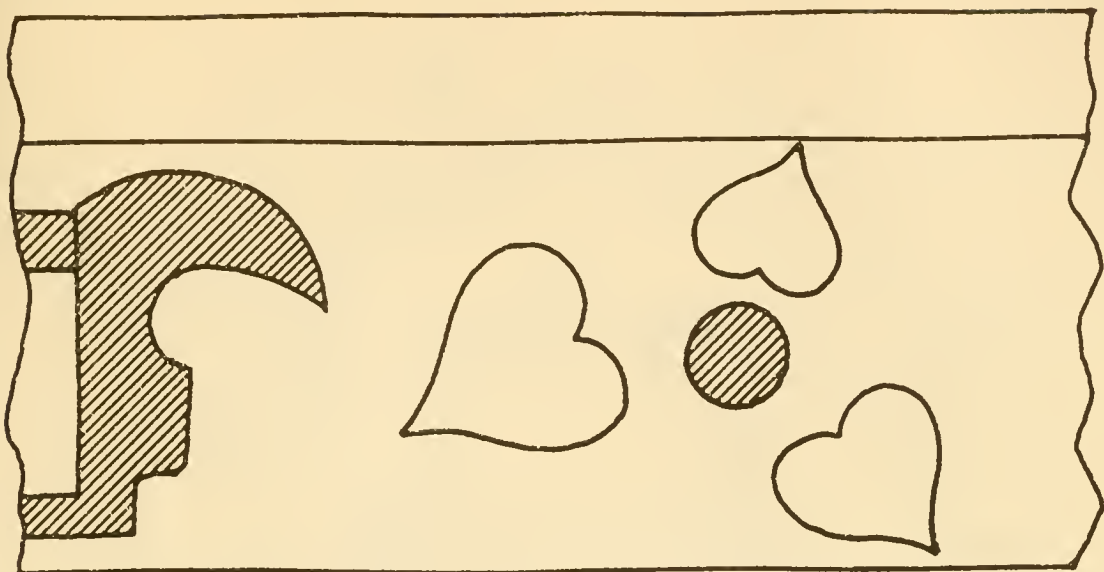


FIGURE 66.—Incised design on Red on Coarse Brown ware bowl found in 1942 at La Venta (Correction of illustration in LV, fig. 41a'.)

belted human behind whom is depicted an animal with open jaws and body curved in nearly a full circle. The end of the tail bears what appear to be rattles of the rattlesnake, but the elements which appear to be legs suggest that this may be a saurian. The fanged mouth also suggests the rattlesnake, but the profile of the head might represent another animal, perhaps the jaguar or alligator. The animal is, at any rate, reptilian, and provides another instance of this generic motif in Olmec sculptured art. Not the least interesting aspect of these two figures is the perspective shown by the human figure in front and the reptilian figure behind it. The two central human figures are standing in front of what appears to be an arched opening very much like those depicted on the altars at La Venta (Stirling, 1943 b, pls. 37, a, 38, c, 39, a, 40). Incidentally, the left figure wears shoes and the right person is barefooted. A careful inspection of Stela 3 showed no traces of colored paint.

Plate 56 shows Stela 1 and Altar 4 which were discovered earlier (Stirling, 1943 b).

Wedel (LV, p. 34) incorrectly calls Stela 5, which lies near the southwest corner of the Southwest Platform, basalt. It is a green gneiss.

POST-PHASE IV MATERIALS FROM LA VENTA

One of our aims during the 1955 season was to pay particular attention to any indications of occupations or use of the site which could be attributed to successors of the Olmec builders. Drucker recognized no evidence of such occupations during his excavations here in 1942. In 1943 Wedel noted a few ceramic finds in Complex A which by their stratigraphic position were later than the La Venta horizon proper

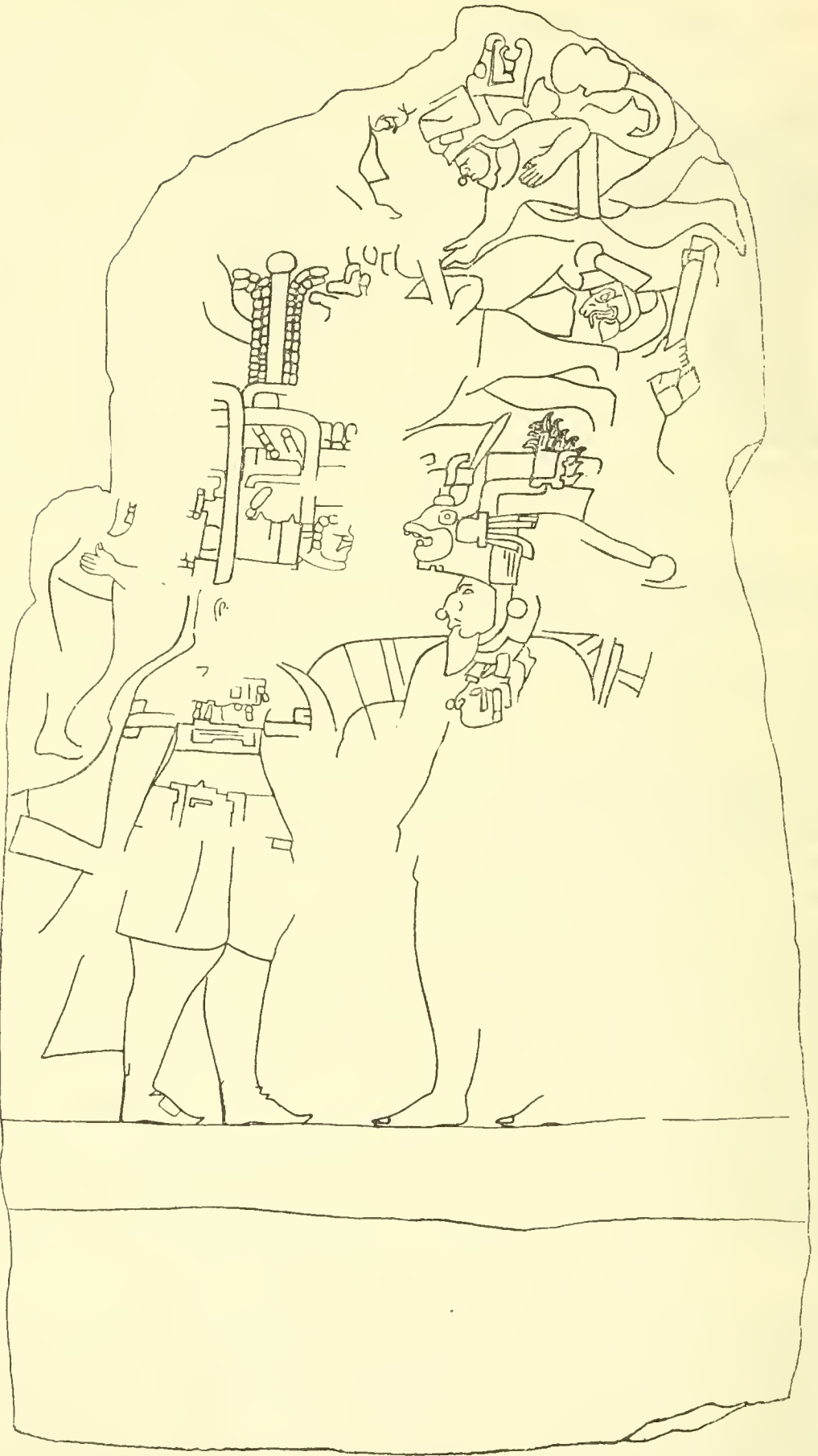


FIGURE 67.—Sculpture on Stela 3 which can be actually determined with accuracy.

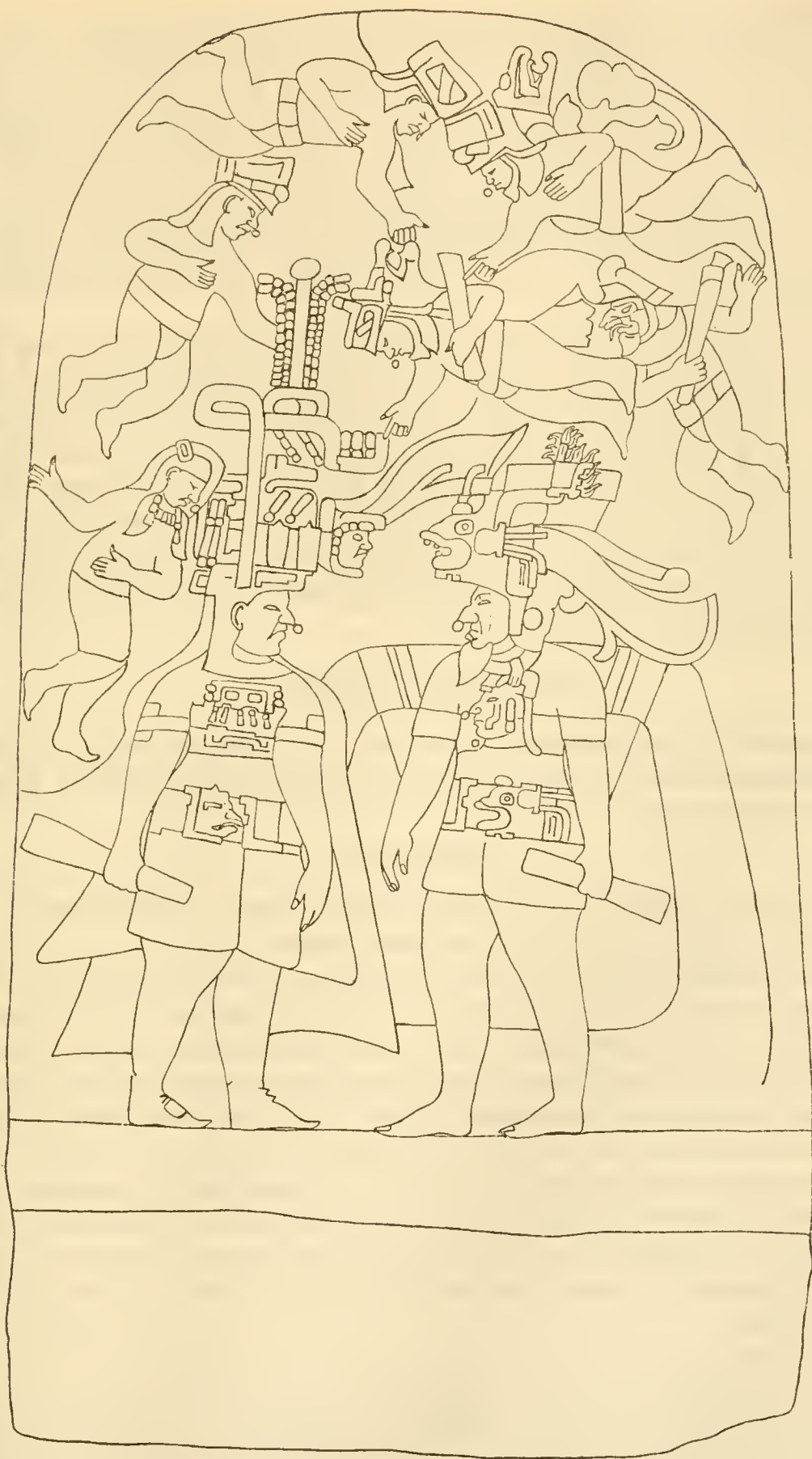


FIGURE 68.—Restoration of sculpture on Stela 3. (This should not be taken as reliable, but it probably indicates the approximate original details.)

(LV, pp. 38, 76). We have grouped these materials as Offerings 1943-A and 1943-O in Appendix 1. In addition, Wedel found an offering of serpentine celts and one concave mirror in the drift sands at the north flank of the Pyramid (LV, pp. 75-76). This we have called Offering 1943-N in Appendix 1 and indicated as questionably post-Phase IV in age. Numerous instances of damage or destruction of the stone monuments have been recorded from the earlier investigations at La Venta (Stirling, 1943 b; LV). Most of this damage almost certainly dates from post-Phase IV times.

In the course of our work in 1955 we encountered several more deposits of pottery which from their nature and stratigraphic position we interpret as offerings of post-Phase IV date. Additional evidences of the displacement and destruction of Olmec stone monuments were found as well. We shall first describe the offerings of pottery. This will be followed by a summary of the evidence of other post-Phase IV activities in Complexes A and C. Several finds of materials from other sites on La Venta island which clearly postdate the principal Olmec occupation will then be described.²¹

POST-PHASE IV OFFERINGS

The offering numbers used below are in continuation of the number series begun earlier in this report for the offerings from the La Venta horizon structures.

OFFERING NO. 20

Location.—20 feet south of the basalt columns of the Southwest Platform, 18 feet west of the southeast corner.

This offering was encountered at a depth of 3 feet 7 inches below the modern surface of the drift sands, its base extending to about 4 feet 10 inches. It consisted of 20 complete and fragmentary vessels. There were 7 pairs of vessels nested together and a quantity of sherds, from which 6 vessels could be restored. The 7 pairs of vessels were turned upside down or stood on edge, giving the impression that they had been empty when deposited (pl. 47, *a*). The offering probably was placed in a shallow pit which was dug in the drift sand, but it was not possible to determine the size of the pit nor its point of origin. The sand covering the vessels was indistinguishable from the mass of the drift sands.

²¹ In a paper read by R. J. Squier at the Fifty-fifth Annual Meeting of the American Anthropological Association in Santa Monica, Calif. (December 30, 1956), the term "Post-Olmec" was used to designate the post-Phase IV materials from La Venta. This term was used in the field to differentiate the obviously later materials from those from our excavations in the La Venta horizon structures. The term "Post-Olmec," like the "post-Phase IV" of the present report, is a cultural, not a genetic, designation.

All of the complete and restorable vessels are of the same ware and form. This ware has been designated as "Crude Reddish-buff ware." It is characterized by a paste of light reddish-buff color, in most cases very friable and apparently poorly fired. The paste contains a moderate amount of what appears to be medium-fine sand tempering material. The cores of many sherds are of a dark olive-buff color. The surfaces of a few specimens of this ware suggest that completed vessels were given a light wash of the same clay which served for the paste. Most pieces, however, lack even this finishing touch. The characteristic surface color is a dull reddish-buff shade. In a few vessels the interior gives evidences of smudging to a dark grayish color. Most characteristic of this ware is the finish of the surface, which typically is extremely rough. No attempt was made to smooth off work marks or small lumps or irregularities in the clay, particularly on the exteriors. Vessel interiors tend to be a little smoother but still show tool marks and are rough. There is no decoration on any of the vessels of this ware which we have recovered. Nearly all of the pieces of determinable form of this ware found in this and similar offerings were variants of the same basic shape, a flat-based bowl with outleaning to slightly flaring sides (pl. 57). Rims in most cases are simple and direct. The principal variation noted is that in a few cases the rim has been slightly thickened and given a slight outward curve. Two vessels were noted in which the rim has a somewhat angular form, as though the edge had been broken off square before it had entirely dried. A very unusual feature was noted in the case of three of these small bowls. The sides had been shaped and the bases had been formed separately and then welded on, producing very sharply defined cleavage planes. This was noted because the bases put on in this way tended to separate from the sides of the vessels. This trait suggests that these vessels may have been made strictly for ceremonial purposes; it is questionable whether bowls of such obviously weak construction could have been used for utilitarian purposes. The extremely rough finish of the vessels also suggests a nonutilitarian purpose. One vessel departs in several respects from the general pattern as just described. It is the largest bowl of the lot, with an estimated rim diameter of 13 inches, a base diameter of $5\frac{5}{8}$ inches, and a depth of $5\frac{5}{8}$ inches. This specimen appears to be made of essentially the same paste as the other bowls in the offering, but is notably smoother and much better fired. Its shape, too, is somewhat more esthetic with the sides flaring more strongly to the slightly thickened, rounded rim. In these respects it is superior to its companion pieces and reinforces the idea that most of the latter probably were made hastily to be used as offerings.

OFFERING NO. 21

Location.—25 feet south, 3 feet east, of southeast corner of columns of the Southwest Platform.

This lot of materials was encountered at a depth of 3 to 4 feet in the drift sands south of Feature A-1-e (pl. 58, *a*). As in the case of Offering 20, no pit could be discerned. This lot consists of 22 vessels, some of which appear to have been incomplete. There are also a good many fragments of other vessels, most of which unfortunately are so small that vessel shapes cannot be determined. All of the determinable pieces in this lot, save one, are bowls of the kind described from Offering 20 and are of the same Crude Reddish-buff ware (pl. 59). The one exception is a bowl, or small jar, with a sharply incurved side and restricted mouth. The rim is returned. The material from which this vessel was made is a medium-brown paste with a considerable quantity of sand tempering. It is comparatively thin and well fired. The exterior surface was only casually smoothed. The interior surface, particularly around the shoulder, still retains the finger marks that were pressed into it when the vessel was given its shape. Apparently very little effort was made to smooth out these work marks.

OFFERING NO. 22

Location.—17 feet south of southwest corner of columns of the Southwest Platform.

At a depth of 3 feet in the gray drift sand south of Feature A-1-e a large jar containing a jade bead was found. The vessel shattered when struck with the shovel during discovery and was subsequently restored in the laboratory. The paste is olive buff in color, moderately tempered with what appears with the hand lens to be quartz sand inclusions of medium size with an occasional coarse-size grain. Large areas of the vessel are clouded with dark, almost black, firing clouds. The texture of the paste is rather dense; sherds break cleanly and at a sharp angle to the surface. The fractured surface is rough and granular. Surface color is the same as that of the paste. The exterior surface is well smoothed and polished, with numerous fine parallel striations. The interior is smoothed but not polished below the neck. Surface texture is medium granular because of the numerous protruding temper grains. The surface is uniformly lusterless. In form, the vessel is flat-based with a sharp basal angle, slightly incurved sides, and gently flaring rim (fig. 42, *g*). The vessel height is $12\frac{1}{4}$ inches. The base diameter is $8\frac{3}{4}$ inches and the rim diameter is $8\frac{1}{16}$ inches. The maximum wall thickness is $\frac{1}{2}$ inch.

The bead found in the vessel is a large, definitely "barrel-shaped" piece, symmetrical in form with squared-off, polished ends (fig.

53, *c*). It is made of a dark-green opaque jade which differs markedly from the general run of the jade found in the Olmec offerings of the site. Length of the piece is $2\frac{7}{32}$ inch; maximum diameter is also $2\frac{7}{32}$ inch.

OFFERING NO. 23

Location.—26 feet south, 11 feet west of southeast corner of columns of the Southwest Platform.

This offering consisted of a single pottery specimen, which was found placed upright in the drift sands. Its base was at a depth of 3 feet 9 inches below the modern surface. It was a shattered but restorable vessel of Red-slipped Buff ware, with post-firing incised design. This specimen is the most distinctive in many respects of all the vessels which we found and which we have assigned to the post-Phase IV period of occupation. The paste of the vessel is of a light yellowish-buff color, with no visible aplastic. The material is similar to, but apparently not as well fired as, the typical paste of the Fine Paste wares of La Venta (LV, 101–103). It had been coated with a fairly heavy wash of the same clay as used in the paste. In form, the vessel is a tall bowl with a flat base which is rounded up slightly to form the juncture of the base and sides. It has slightly incurved and strongly recurved side walls, and a simple rim which continues the direction of curve of the upper part of the sides (pl. 58, *lower left*). The vessel, when restored, measures $10\frac{1}{4}$ inches high, with a diameter at the base of $10\frac{5}{8}$ inches and a rim diameter of 12 inches. From the turn of the base to the inner lip of the rim it is coated with a red paint which in all probability consists of specular hematite. The paint is of a strong red color, and contains a large quantity of minute, shiny black plaques. An elaborate design was incised through this paint (fig. 69). There are a number of noteworthy features in this incised decoration. In the first place, it consists of two motifs irregularly repeated, and secondly, the motifs are simultaneously complex and very carelessly or poorly executed.

The sides of the vessel are divided into three horizontal zones, separated from each other by two groups of triple circumferential lines. The zones thus laid off are not exactly equal in height from top to bottom. They measure $2\frac{1}{2}$ inches, $2\frac{9}{16}$ inches, and $2\frac{5}{8}$ inches in height. Each zone is marked off into a number of panels by vertical incised lines. One of the motifs which was used consists of several vertical elements, each with one straight and one zigzag side, filled with irregular fracture. In most cases, three or four of these units are drawn in each panel. It appears probable that the original intent was to alternate panels of these elements, according to a vertically symmetrical arrangement. However, this was not consistently carried out, for most of the panels are drawn with the wide

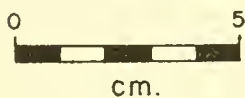
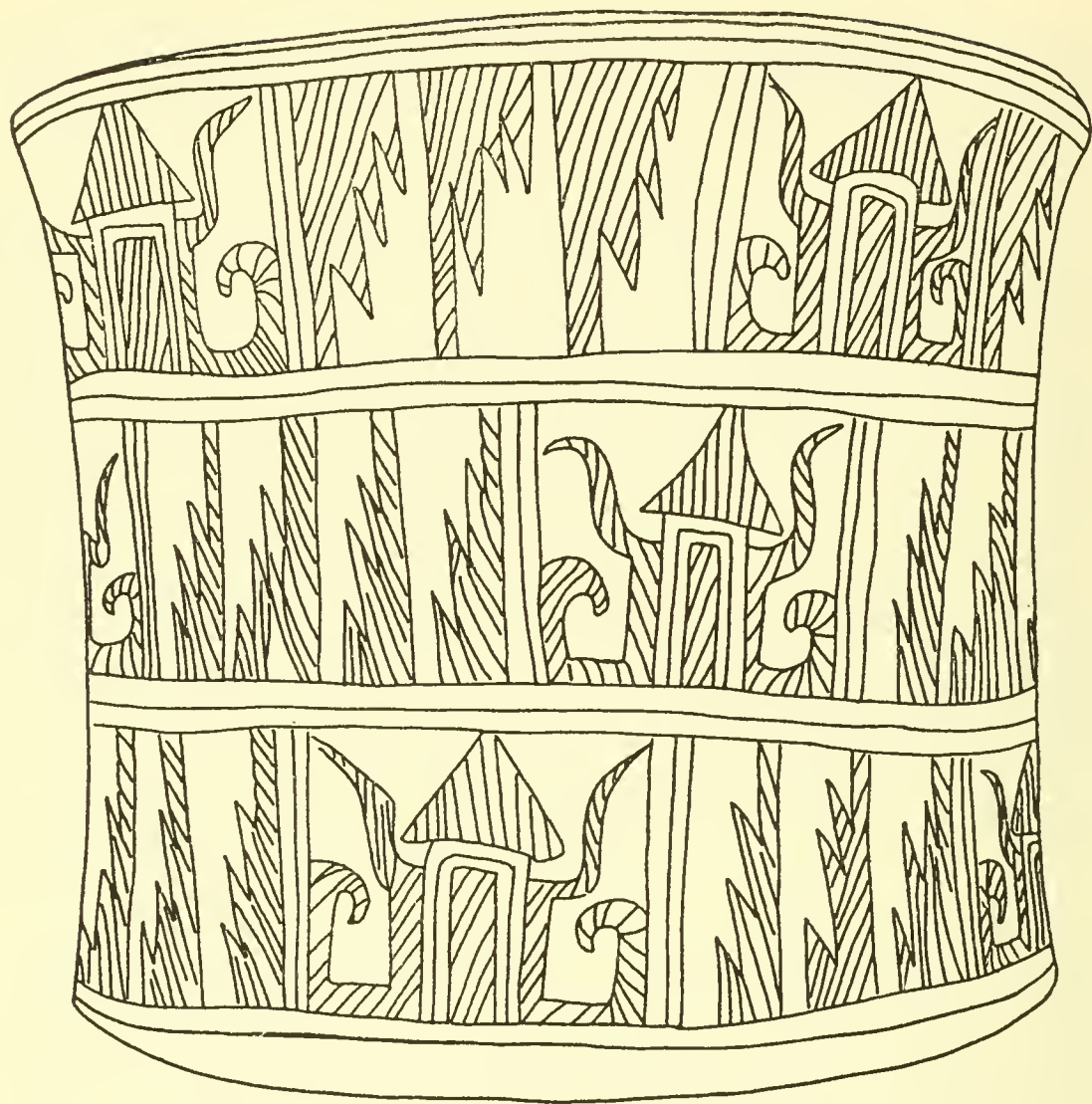


FIGURE 69.—Engraved pottery vessel, Offering No. 23.

portions of the zigzag, or stepped elements at the bottom, but here and there is one drawn with the wide areas at the top. At irregular intervals among these panels of stepped elements a small figure is drawn which suggests some sort of a building with a gabled roof. During the period of its use the vessel had suffered a small break and had been repaired. A sherd had been broken out of the rim and refastened by means of four pairs of mending holes.

The small gabled structure depicted on the vessel may represent a thatched house, or possibly a temple. Representations of temples as an element in pottery decoration occur fairly commonly at Teotihuacán (Von Winning, 1947). It is interesting to note also that a design very similar to the stepped element on this post-Phase IV La Venta vessel is found on a vessel from Pollinapan in the Tuxtlas

district in southern Veracruz which Valenzuela (1945 b, p. 87, fig. 16) attributes to Classic Maya influence.

OFFERING NO. 24

Location.—Approximately 30 feet south, 2 feet west of southeast corner of columns of the Southwest Platform.

This solitary specimen was found in the drift sands at a depth of approximately 4 feet from the surface. The specimen is a flat-bottomed jar with strongly recurved sides and outcurved rim (fig. 42, *f*). It was found in a shattered condition and later partially restored in the laboratory. The vessel stands approximately $7\frac{3}{16}$ inches high and has a base diameter of $2\frac{1}{4}$ inches and a rim diameter of $6\frac{9}{16}$ inches. Our notes on the paste and surface treatment of the vessel are unfortunately incomplete. We recorded only that the paste composition, texture and color, and the treatment of the surface in general are very similar to these aspects of the vessel in Offering 22.

OFFERING NO. 25

Location.—Pit in Phase IV surface of Northeast Platform (Feature A-1-f).

This offering, a single pottery vessel, was found in a shallow pit in the eroded red clay surface of the Northeast Platform. The pit was located very near to the midpoint of the platform. Approximately 3 feet of drift sand covered the offering and platform. The surface of the platform was so badly eroded that it was impossible to determine whether the small pit had actually been dug to receive the offering, or the vessel had simply been deposited in a pit formed by natural erosive forces. No trace of a pit in the overlying drift sand could be detected.

The vessel is a bowl with slightly incurved sides and a shallow concave base (fig. 42, *d*). The rim form is simple and direct. Two shallow grooves encircle the vessel just below the rim. The paste is a compact gray material with very few inclusions visible in the hand lens. These inclusions are minute whitish lumps which may be composed of crushed tuff. The fracture is clean and sharp, leaving a fine, gritty-appearing fractured surface. Both interior and exterior surfaces are badly affected by exposure in the soil. We cannot be certain that any of the surface remains in anything like its original condition. The present surfaces are of the same color as the paste and in texture have the same gritty appearance and feel as the paste in the cross sections. The vessel is $5\frac{5}{8}$ inches in height, with a rim diameter of $8\frac{1}{16}$ inches and a base diameter of approximately $5\frac{3}{16}$ inches.

Offering 25 conforms to a striking degree with the La Venta Fine Paste Gray ware as described by Drucker (LV, pp. 102-103). It is possible that we have here an actual specimen of that ware which was deposited in the shallow pit on top of the Olmec structure shortly

after the original abandonment of the site. Its position at the bottom of the drift-sand layer is a point in favor of this argument. We have no evidence, on the other hand, against the possibility that the production of this or a closely similar ware may have persisted in the Olmec area long after the abandonment of La Venta by its Olmec builders. The vessel could have been buried in the drift sand some time after a considerable layer of that material had accumulated over the platform, leaving no trace of an intrusive pit.

OFFERING NO. 26

Location.—In Platform C-2 on north flank of the Pyramid.

In the course of our excavations in the north platform of the Pyramid a large complete pottery jar was found (pl. 58, *lower right*). This occurred at a depth of approximately 3 feet from the present surface in an area of the platform in which we found it difficult to interpret the stratigraphy. The original clay platform had undergone extensive erosion, leaving in the area in which the vessel was found large washed-out depressions which had later been filled with drift sands. Considerable mixing of the platform clays and drift sands apparently had occurred during the filling of these depressions and the resulting clayey sands filling them were densely compacted, giving the appearance of much greater age than that of the overlying unmixed drift sands. Offering 26 was found in one of these depressions entirely covered by the mixed clay and sand. No signs of a pit into this clayey sand mixture or in the thin layer of drift sand which covered it could be detected. We are assigning the vessel to the post-Phase IV period of activity at the site because of our belief that the matrix in which it lay was the result of later natural forces and because of the condition of the vessel, which differed strikingly from that of the badly leached sherds from the platform clays proper.

The vessel is a large jar with rounded base and narrowly restricted orifice. The paste appears to be identical to that of the crude vessels from Offering 20, which we have termed "Crude Reddish-buff ware," but better fired than was the usual case in the Offering 20 vessels. The surface is very poorly smoothed; numerous coarse grains of the sand tempering material protrude from the surface and work marks are visible over the entire vessel. In a number of places, especially on the lower part of the vessel, wide shallow grooves left by the smoothing tool may be seen. The vessel stands approximately 18½ inches high.

OFFERING NO. 27

Location.—Near base of post-Phase IV drift sands, approximately 40 feet west of northeast corner of Ceremonial Court.

This offering consisted of a single pottery vessel found in fragments which were lying together in a pocket in the drift sands. Over-

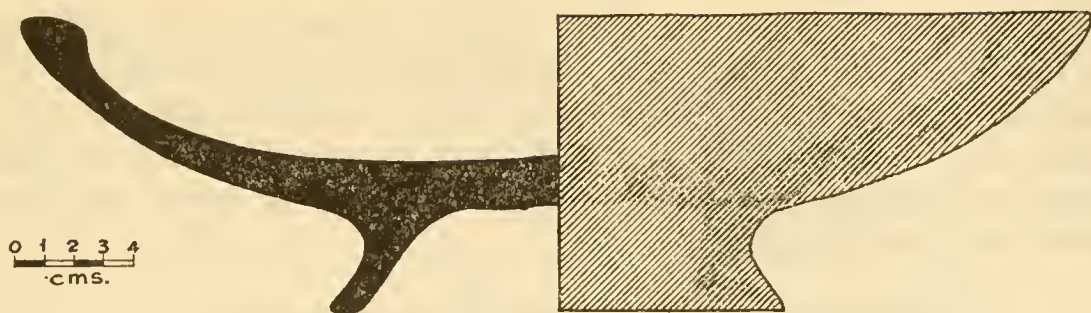


FIGURE 70.—Offering No. 27 bowl from upper drift sands in Ceremonial Court.

lying the vessel fragments were a number of chunks of what appeared to be burned clay flooring. We can offer no explanation for the association of the vessel and the burned flooring; nothing similar to this was encountered elsewhere in the drift-sand layer.

The vessel is a low dish or plate with a pedestal base, gently curving sides and thickened rim (fig. 70). The bottom is flat and fairly heavy, averaging $\frac{5}{8}$ of an inch thick. The wall thickness decreases from the bottom to a point just below the rim, where it averages $\frac{3}{8}$ of an inch. From this point it again thickens by the addition of clay on the interior of the rim to a maximum rim thickness of $\frac{7}{8}$ of an inch. The height of the pedestal base is $1\frac{7}{16}$ inches; the diameter of the base is 6 inches. The vessel stands $3\frac{15}{16}$ inches high at the rim, and the maximum rim diameter is $14\frac{1}{4}$ inches. Decoration of any kind is lacking. The paste color ranges from pinkish buff to gray black over different parts of the vessel, owing to uneven oxidation during firing. The tempering material appears to be angular grains of quartz sand, fine to medium in size, and extremely abundant. Aplastic materials making up 50 percent, or perhaps slightly more, of the volume of the paste are visible with the hand lens. The surfaces, both exterior and interior, are well compacted and smooth to the touch. Numerous fine striations left by the polishing tool are visible.

Curved-side dishes with thickened rims almost identical to Offering 27, but lacking pedestal bases, were found in fair frequency in the Olmec habitation areas at La Venta (LV, p. 111, fig. 38, *c*). A number of low annular bases were found, however, which may have come from vessels of this type (LV, p. 112). This offering may represent, therefore, a continuation in form if not certainly in paste of the ceramic tradition in force during the major Olmec occupation of the site. It is of course possible that the vessel may have come from the Phase IV level in the Ceremonial Court, perhaps torn out of its original position during the looting which very likely followed the abandonment of the site by its builders. It will be recalled that numerous pits were found in the Phase IV surface which suggested looting by later inhabitants of the island. We found no

traces, burned or otherwise, of the original Phase IV clay surfacing in the Ceremonial Court. All evidence indicated that the Phase IV surface had been entirely eroded away before the drift sands accumulated to any depth. We find it difficult to believe, therefore, that this vessel and the associated burned floor fragments could have come from the Phase IV level.

OTHER POST-PHASE IV MATERIALS FROM COMPLEX A

During the removal of the upper drift sands prior to and during the excavation of the various Olmec structures occasional sherds were encountered. Such finds were rarely made except in the area just south of the Southwest Platform where sherds in fair numbers occurred. These were scattered through the sand to a depth of 4 or 5 feet from the surface. Here too were found several isolated complete or nearly complete vessels of the ware found in Offerings 20 and 21 which we have termed "Crude Reddish-buff ware." Examples of the sherds and the complete or restorable vessels are shown in figure 71. From this same area came the majority of the post-Phase IV offerings of pottery described above. The complete vessels and probably many of the sherds, most of which appear to be of the same Crude Reddish-buff ware, are very likely the remnants of offerings like those we have described from this area. Such offerings may have been broken up and scattered about by people who were themselves placing offerings in the sands here, or perhaps they were maliciously destroyed. The appearance of the deposit in this area did not suggest that this was habitation refuse.

One small sherd of Plumbate ware was found in the upper drift sands during the clearing of the eastern half of the Ceremonial Court. This specimen was not observed in situ but was recovered from the backdirt pile. It is known, however, that the sherd originally lay in the uppermost levels of the sand layer since we had excavated no deeper than 2 feet in this part of the Court at the time the sherd was discovered. A careful watch was kept for other specimens of this ware, but none were turned up.

The occurrence of small dressed serpentine blocks in the drift sands overlying the Ceremonial Court has been mentioned in the section on excavations in the Northeast Platform. Many of these were found, lying singly or stacked in groups (pl. 5), in the lower level of the drift sand accumulation throughout the Court. The majority of such blocks found by us were in the northeast Court area, but one pile of neatly dressed blocks was found in our long trench extending east from the centerline in the southern part of the Court, and occasional blocks were noted in the sands around the Northwest and Southwest Platforms. Wedel observed similar dressed stones in the drift sand

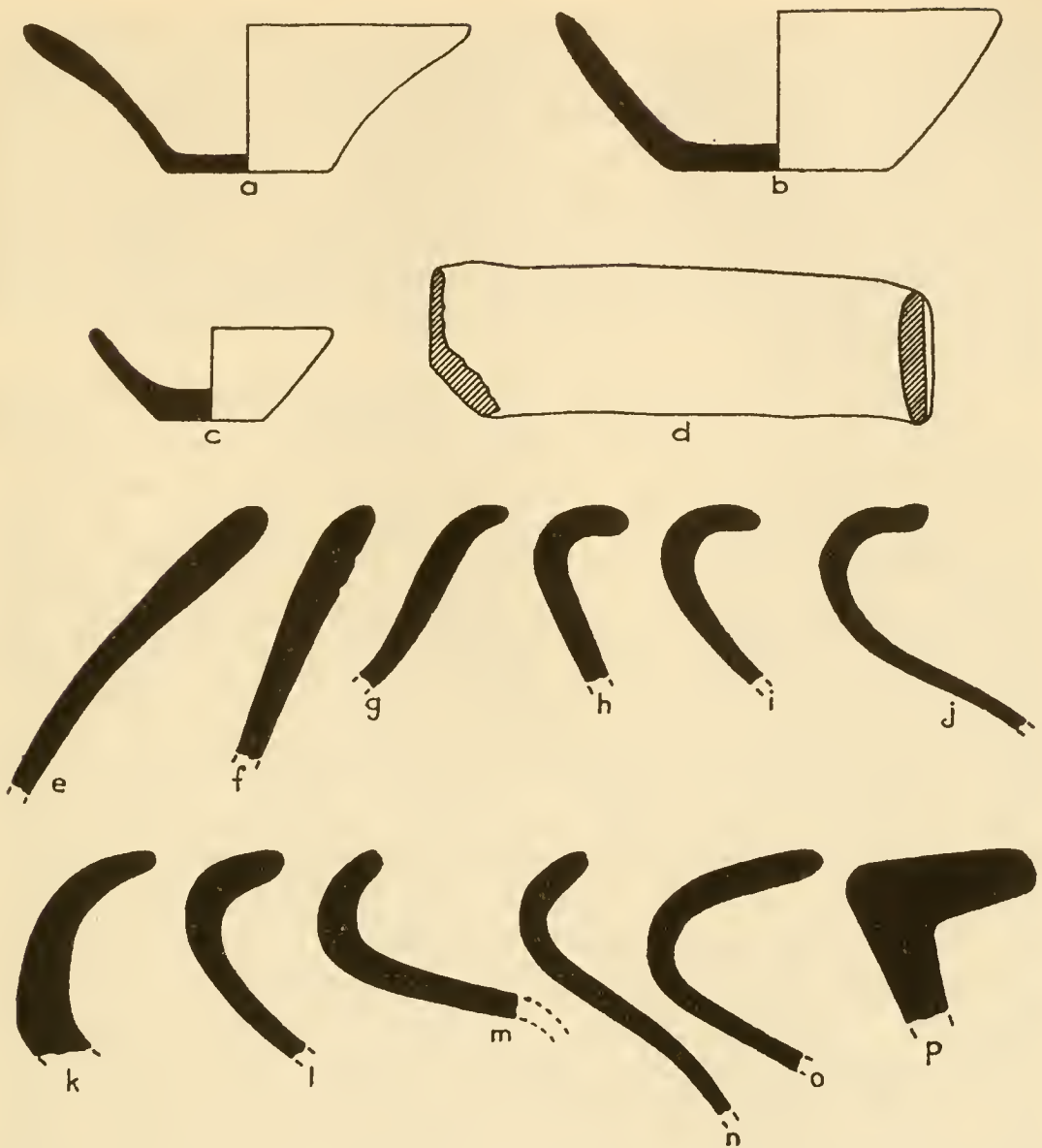


FIGURE 71.—Miscellaneous restored vessels and sherds from upper drift sands south of Southwest Platform. *a*, Rim diameter 18.7 cm. *b*, Rim diameter 19.5 cm. *c*, Rim diameter 10.5 cm. *d*, Strap handle, length 10.8 cm. *e-p*, Rim profiles.

layer during the 1943 excavations in the eastern part of the Court (LV, p. 45).

It is difficult to suggest the source from which these blocks might have come. Some of them may originally have been part of the mosaic mask (Pavement 2) found in 1943 south of Mound A-3 (LV, fig. 24). Approximately 60 blocks are missing from this mosaic, assuming of course that it once was complete. We recorded many more than this number lying in the drift sands over the Court, however, and another source is clearly needed to account for them. We have no reason to believe that they may have been brought in from a distant source; it seems clear that they were removed from an existing feature in Complex A. As we have remarked earlier, it is possible that a row of such blocks may once have formed an orna-

mental facing along the interior base of the Court wall, but our evidence for this is slight. No evidence of the use for which they were intended, after their removal from whatever location they originally occupied, was noted in the Court area. However, dressed serpentine blocks were accidentally discovered by us in a structure lying some distance northeast of the Ceremonial Court. Materials found associated suggest that this structure is of post-Phase IV date. This find, which we have designated the "North Pavement Area," will be described below.

We have several times earlier in this report mentioned the occurrence of fragments of basalt columns in locations indicating post-Phase IV activity. Along both the inside and outside of the east wall of the Ceremonial Court broken column sections were found in great numbers in the drift sands (pl. 5, *c*), often at such distances from the wall as to preclude the possibility of their having simply rolled there. A similar situation pertained in the drift sands around and south of the Southwest Platform. Here column sections were found as far as 40 feet from the south row of standing basalt columns. Also in the Southwest Platform were the three deep pits extending from the surface of the Phase IV red clay cap which contained numerous fragments of serpentine blocks and spalls of basalt columns. In the drift sands a few feet south of the southern end of the Forecourt were found more broken column sections. These occurrences together with those of the shaped serpentine blocks found at various locations in the drift sands covering the Ceremonial Court point to a fairly large-scale effort in post-abandonment times to despoil the Olmec center. How soon after the abandonment this effort began is of course very difficult to estimate. Purely from the stratigraphic position of the column sections and serpentine blocks in the drift sand layer, we may suggest that such activity began relatively soon after the abandonment and that it may represent the earliest evidence of post-Phase IV activity in the Ceremonial Court area.

Very little evidence of constructive use of the presumably pillaged basalt columns and column sections has been found in La Venta. Drucker has mentioned two areas on the island (LV, pp. 9-10) where columns occur similar to those in the Ceremonial Court. These are at the east side of the island and in the area south of the Pyramid (fig. 2). Both of these locations represent possible uses of salvaged basalt columns. Wedel (LV, pp. 60-61) in 1943 recorded a row of columns standing in the drift sand layer just to the east of the Southeast Platform (fig. 4). What relationship these bear to structures in the Ceremonial Court is not clear, but it is very likely that they were erected in post-Phase IV times. We observed a similar use of large column sections in the vicinity of the Southwest Platform. Here a

row of column sections, entirely embedded in the drift sands, extended eastward for a short distance from the northeast corner of the Olmec structure (fig. 4). One of these column sections rested directly on the line of Phase IV facing blocks which ran along the east side of the platform. Our impression at the time of excavation was that these column fragments must have been placed in position long after the Olmec abandonment of the site, since a fairly deep accumulation of drift sands would have been required to hold them in place. We excavated the entire area surrounding this row of columns but found nothing to indicate the purpose for which they were erected.

MUTILATION AND DISPLACEMENT OF LA VENTA STONE MONUMENTS

In Appendix 2 are listed all of the monumental stone works from La Venta which to this time have been given numbers and assigned to one or another category of monuments, i. e. stelae, altars, plaques, and monuments. The total number of pieces of all categories is 40. This number includes some but not all of the fragments of monuments known from this site; several undecorated or only slightly decorated fragments of monuments which have been found have not been given numbers as monuments. The locations of the monuments are shown in figures 2, 4, and 5.

The extent to which the stone monuments of La Venta have been intentionally mutilated and moved about is truly impressive. Probably none but the largest pieces were in their original locations when discovered in recent years. The majority of the monuments have suffered some degree of damage. We have counted 24 clear-cut cases of intentional mutilation out of the total of 40 monuments; several others are so badly eroded as to prevent determination of this, and we lack data on a few others. The damage ranges from cases where only a single area of the monument has suffered, as in Altar 6, to total destruction, as in Monuments 15 and 22. The situation is very similar to that at Tres Zapotes where Stirling (1943 b, p. 11) noted that all of the stone monuments had suffered mutilation in some degree, probably at the hands, he suggests, of an invading people.

It is worth note that only three of the pieces found in the Ceremonial Court area which have been designated as stone monuments were entirely covered by clay structural material. These are Monument 6 (the sandstone coffer), Monument 7 (the basalt column tomb), and Monument 24 (the shaped basalt slab north of the stone tomb); these were all buried in the Phase IV structural clay of Mound A-2. All of the others from this area lay entirely above the Phase IV clay surface or were mounted in clay but protruded for most of their length above the clay surface. Thus it appears that the usual Olmec

practice at La Venta was to raise and reerect the stone monuments when the periodic alterations were made to the site. This practice apparently was followed during Phase IV, leaving all of the monuments fully exposed when the site was abandoned except those few which were intentionally buried. We may with reasonable certainty, therefore, attribute the mutilation of the stone monuments in the Court area either to the Phase IV site builders themselves or to later occupants of the island. The Phase IV Olmec do not appear to be good prospects on whom to lay the blame. We must remember that a large part of the jades which have been found at La Venta have come from the Phase IV levels. (See Appendix 1 and the section above on small dedicatory offerings.) If the intention of the Phase IV people had been to deface their own ceremonial center, we might expect them to have looted their rich jade caches in the process. The mutilation of the monuments in the Ceremonial Court area, and inferentially of those throughout the entire site, was most probably the work of post-Phase IV inhabitants of the island. Most of this destructive activity must have occurred in antiquity since nearly all of the monuments were until their recent discovery completely covered by the thick mantle of drift sands which covers the entire site. The smaller monuments which have been found in situ in the drift sands overlying Complex A have occurred at or near the bottom of the drift sand layer, suggesting that the damage they have suffered must have been inflicted early in post-abandonment times.

The amount of energy required to perform the mutilation of the various monuments must have been considerable. Most of them are made of very hard stone and the damage they have sustained was done mainly by battering with heavy tools. This required energy and determination and suggests strongly that its perpetrators were intent on destroying the works of art of their predecessors. The parallel with similar activities in Mexico following the Conquest is most striking and may provide an insight into post-Phase IV conditions in the La Venta region when the later periods are better known. We have no way of determining, of course, whether the destruction of these monuments was carried out in a single period or during several re-occupations of the island. Nor can we know why certain monuments which lay in the Court area (e. g. Stela 1, Monuments 5, 12, 13, 14, 19, and several others removed in recent times) were spared mutilation. The fact that they did escape, however, may be an argument for a single and relatively brief period during which the La Venta monuments were mutilated; the ones which are untouched may have been hidden by jungle growth and so missed during the period when the despoliation was carried out.

OTHER MATERIALS FROM LA VENTA ISLAND

During our 1955 work at La Venta the island was undergoing a transformation from its former jungle-covered and isolated state. New roads were being built on the island and across the swamplands to the east and west to connect with roads being pushed toward La Venta from these directions. Large areas of the jungle were being cleared for the construction of workers' camps and private homes. An airstrip was built adjacent to Complex A. Certain areas of the island were being utilized for earth for road fill, including some of the mound groups which were known but have never been investigated. Most of this activity was in connection with the recent discoveries of oil in this part of Mexico. The opening up of previously thickly overgrown areas has, as one might expect, brought to light archeological materials which up to this time were unknown from La Venta. We shall briefly describe a jade figurine and three small lots of other materials from different areas of the island all of which appear to postdate the principal Olmec occupation. We are indebted to Dr. William L. Quade of the Department of Geology, University of California, for assistance in identifying the tempering materials in the pottery from the post-Phase IV sites to be described.

JADE FIGURINE

During excavation of earth for road fill in a mound group south of the Olmec center a figurine of pale-green jade was found by one of the workmen. The specimen was subsequently given to Dr. Juan Téllez R. of Petroleos Mexicanos who kindly brought it to our attention and later supplied us with photographs. Dr. Téllez was unable to obtain specific information on the original location of the figurine; it came from a destroyed mound somewhere in the south-central part of the island (fig. 2). The jade is pale green in color, mottled with numerous small whitish and dark inclusions. The figure is probably that of a male who is wearing a skirtlike garment and a peaked cap (fig. 72; pl. 60). It is carved in low relief and with a minimum of anatomical detail. The cap is pulled well down on the head with its bottom level with the top of the nose. A cord or band attached at either end to the cap runs around the face and from this is suspended a subrectangular pendant. A strand of hair, or possibly a band attached to the cap, is shown lying over the top of each shoulder. The face is round with features crudely depicted. The eyes are formed by simple incised lines, lenticular in outline with the points to the outside. The nose is a triangle formed by sawed lines. Three horizontal sawed lines represent the mouth. No integumental lip is shown. The head is set directly on the body with no attempt to

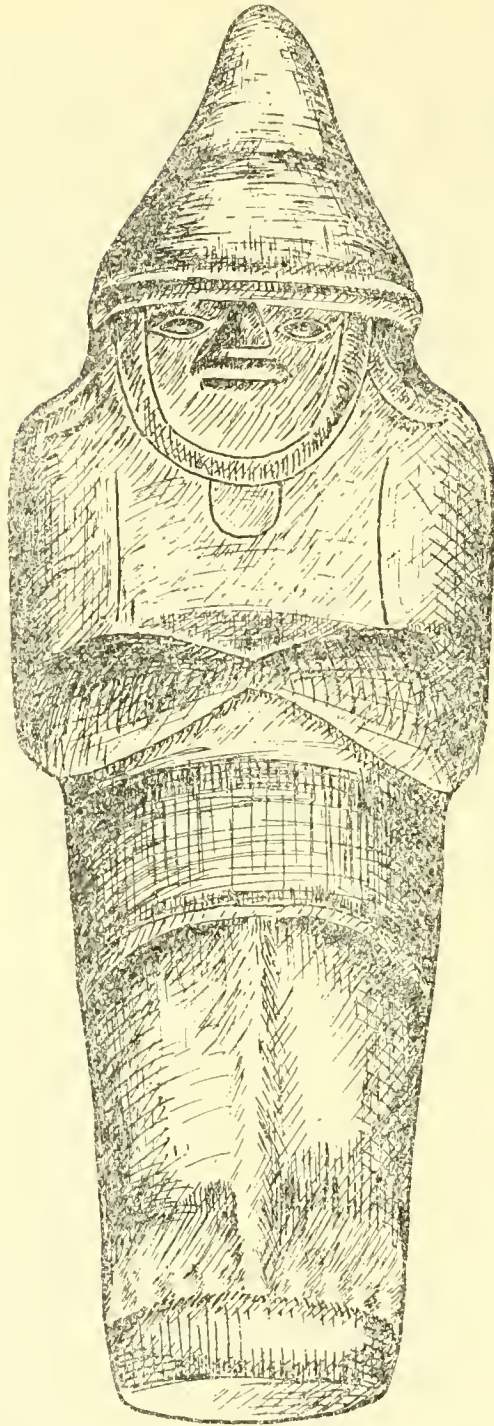


FIGURE 72.—Jade figurine. From La Venta island, probably from mound group south of main La Venta site. Height 6.3 inches (16 cm.).

represent the neck. The arms are shown folded across the belly with wrists touching one another but with no hands represented. It may be that the intention was to depict a person with both hands amputated. The arms and legs are formed by broad shallow sawed lines rounded off by subsequent polishing. The feet are crudely represented with vertical incised lines to indicate the toes. The figure is standing on a low flat pedestal formed by a shallow sawed line. Overall height of the figurine is 6.3 inches.

With its short legs and neckless body, the figurine has a hunched, dumpy appearance. Despite this, the general effect is pleasing to the eye. What detail is shown is well executed and the piece was given a moderately high polish. The peaked cap is similar to the headdress shown on some Olmec figures (Stirling, 1943 b; pls. 39, 40) but in other respects the figurine is entirely outside of the Olmec art tradition (cf. LV, pp. 154-160, 185-189). In certain details it conforms to styles represented by some of the stone figurines from the large Cerro de las Mesas offering (Drucker, 1955; pls. 31-35) but in others it differs significantly. We are unable to assign this presumably late La Venta figurine to any particular art style, and it is presented here principally to place it on record.

NORTH PAVEMENT AREA

While we were excavating in the Ceremonial Court at La Venta, a narrow drainage ditch leading from the newly built airstrip was dug by the oil company north of the Court area. In walking along this ditch we discovered that it had cut through a prepared clay foundation upon which had been laid an arrangement of shaped serpentine blocks identical to those we had found lying in the drift sand layer above the Court. Many of the blocks had been thrown out of place and were lying in the backdirt of the ditch. Those remaining in place in the sidewalls of the ditch suggested that this was a pavement, approximately 20 feet wide and 3 feet below the present surface, similar to the massive offering pavements in the Court. This important find was made too late in the season to allow diversion of our labor force for its investigation. We called the location the "North Pavement area" (fig. 2) and from the sidewalls and backdirt of the ditch collected a few sherds and figurine fragments and one serpentine pendant. Despite its small size, the collection indicates that the North Pavement area is an important site, deserving of further investigation.

Five fragments of solid figurines are included in the collection. Three are body fragments; the others are limb fragments. All are made of a coarse reddish paste which is heavily tempered with rounded grains, medium to coarse in size, of quartz sand. They are poorly fired and have suffered considerable erosion in the clay soils in which they were embedded. Another figurine fragment is the leg or arm of a large hollow figurine. The paste of this specimen is reddish orange in color and moderately tempered with fragmented tuff; no other inclusions are present. The piece is incompletely fired, with a dark core which is approximately 40 percent of the wall thickness. The fragments of solid figurines from this site match well with the illustrations of La Venta Olmec figurines from the 1942 excavations (LV,

pls. 31-41), but they are too badly eroded to attempt to fit them into specific types. The hollow figurine fragment may very well be from a large figurine of the "baby-face" class (Drucker's type III-A-2). Its appearance and paste characteristics are in agreement with this type (LV, p. 134).

Two objects which are almost certainly hollow vessel supports came from the North Pavement locality. Both are made of a fine buff paste which is poorly fired, leaving the interior half of the wall incompletely oxidized. One is conical in shape. The temper material of this piece consists of heavy amounts of very angular glass fragments, probably from fragmented tuff, and rare inclusions of very fine to fine angular quartz grains. The other specimen is probably an elongated hollow vessel leg. It is tempered with moderate amounts of fine subangular and angular quartz grains and sparse amounts of angular glass fragments. The surface of this piece is worn and pitted by erosion. Hollow vessel supports are otherwise virtually unknown from La Venta. One example was found in the 1942 excavations, but it is of questionable Olmec origin (LV, p. 125).

A small subconical solid vessel support was found. The paste is grayish white and heavily tempered with medium and coarse rounded quartz grains. A protrusion at the bottom of the piece gives it the appearance of a crude mammiform support. We cannot be certain that it actually was intended to be mammiform in shape; it may be simply a crudely formed subconical knob.

One small polychrome sherd with a flattened lip was recovered from the sidewall of the drainage ditch. The paste is grayish white in color and dense in texture, sparsely tempered with angular quartz and feldspar inclusions of fine and medium size. Both interior and exterior are smoothly polished. The exterior has been given a thin slip, apparently of the same material as the paste. The interior bears a thin cream slip. A curvilinear design in black paint, outlined in red, is drawn on the exterior surface. A band in red paint one-half of an inch wide extends around the interior below the lip. The rim profile shows that the vessel had strongly incurving walls. The rim diameter is approximately 7 inches and the rim thickness is three-sixteenths of an inch. True polychrome pottery is unknown from the earlier excavations in the Olmec deposits at La Venta.

A large rim sherd which agrees in its characteristics with Drucker's description of La Venta Brown Lacquer ware (LV, pp. 97-98) is in the collection. The sherd is from a large vessel with a flaring neck and strongly everted rim. Its massiveness suggests that the vessel may have been a wide-mouth storage jar. The diameter of the orifice was approximately 13 inches and the maximum rim diameter approximately $16\frac{1}{2}$ inches. Average thickness of the rim is nine-

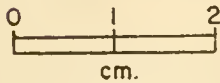
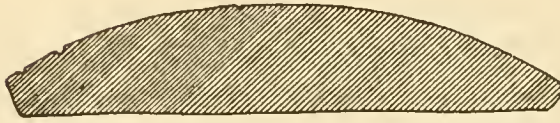


FIGURE 73.—Serpentine ornament from North Pavement area east of Ceremonial Court.

sixteenths of an inch. The paste is pinkish cinnamon in color and fairly friable in texture. It is tempered with sparse fine and very fine angular grains of quartz and angular magnetite grains. A reddish-brown slip covers both the exterior and interior surfaces. This slip is marked by a pronounced crazing over both surfaces, leaving thousands of scales averaging one-eighth of an inch in diameter outlined by cracks. The cracks are deeper on the exterior surface and here many of the scales of slip have spalled off. Three wide shallow grooves encircle the top of the rim.

Several coarse ware body sherds which were picked up from the backdirt of the drainage ditch are so badly eroded as to prevent adequate description. These range from buff to brown in paste color and are tempered with moderate to heavy amounts of what appears to be medium to coarse rounded quartz grains.

The pendant is made of dark-green serpentine with some lighter colored areas. A human head in profile is incised at one end of the specimen (fig. 73). Overall dimensions of the piece are: maximum length, $2\frac{5}{32}$ inches; maximum width, $1\frac{3}{4}$ inches; maximum thickness, $\frac{7}{16}$ inch. Two small biconically drilled holes, 1 inch apart, are spaced a short distance in from the top edge. The human figure wears a netlike headdress, which is drawn in finely incised lines. A forehead ornament consisting of a circular element with a centrally

drilled pit, surmounted by a tall triangular element, is affixed to the headdress. A circular earspool is shown at the bottom of the headdress. The eye is an elongated depression formed by drilling overlapping pits. Two tiny pits are drilled, one at either end, in the bottom of the depression. It is probable that an inlay of some mineral originally filled the eye depression. The mouth is somewhat crudely depicted by a double incised line, the outer element of which does not extend all the way forward along the upper lip. A drilled pit on the cheek probably once held an inlaid cheek ornament. Higher on the face is a crescent-shaped design with two notches which may be a glyph element. It is similar to the "double yoke" design which had a wide distribution in Mesoamerica in the Early Classic and later (Smith, 1955, p. 63). A neck ornament of some sort may be represented by the three vertical incised lines on the throat of the figure.

The head incised on the pendant from this site bears some resemblances to a number of specimens from sites scattered throughout Mesoamerica, but its closest similarities appear to lie with an art style in the early Monte Albán horizons, particularly with the style depicted in the Danzante figures at that site. The treatment of the mouth, nose, headdress, and the vertical lines depending from the chin of our figure are remarkably similar to these features in certain of the Danzante figures (Kelemen, 1943, vol. 2, pls. 57 a, 91 b; Villagra, 1947, figs. 2, 6). It is quite clear that the figure is not closely related to the Olmec art tradition as known from La Venta.

The small size of our collection from the North Pavement area places a limit on what we may conclude concerning the relationships of this site either with the Olmec materials known from La Venta itself or with the materials from other areas. We actually have only a few tantalizing hints with which to work. To begin with the Olmec side of the coin, we may note that the use of serpentine blocks in pavementlike structures, the solid figurines and large hollow figurine, the use of volcanic tempering materials, and the sherd having close affinities with La Venta Brown Lacquer ware are all Olmec traits and point to a fairly close relationship with the La Venta cultural tradition. On the other hand, the hollow vessel supports, the sherd of polychrome ware, and the serpentine pendant with Danzante-like stylistic features do not conform to the pattern of Olmec traits as now known from La Venta. The picture that is suggested by this mixture of Olmec and non-Olmec traits, if anything can be drawn from the small sample of materials, is one of culture change, of a culture which had acquired new traits through external contacts while perhaps at the same time giving up some formerly well-established traits. The North Pavement area, in other words, may represent a reoccupation of La Venta by an Olmec group.

The hiatus between the original abandonment of La Venta and the reoccupation by this North Pavement group need not have been long, perhaps no greater than two or three centuries. In our discussion of the occurrence of dressed serpentine blocks and broken basalt column sections in the Ceremonial Court area we noted that some of these appeared to have been deposited in the drift sand layer not long after the Olmec abandonment of the Court. If the serpentine blocks found in the North Pavement area were taken from the Ceremonial Court, and it is quite possible that they were, we may have a link here between the florescent phase of La Venta Olmec culture and later manifestations of this culture. We put this idea forward only as a suggestion; only more excavation can settle the question.

CERRO DEL ENCANTO

The Cerro del Encanto mound group (fig. 2) has been known since Stirling's initial exploration of La Venta in 1940. A knobbed schist (?) column mounted at the base of the main mound has been described (Stirling, 1943 b, p. 60) and another monument is reported from there but has not been located (LV, p. 10). No excavations have been carried out in this part of the island. Late in the 1955 season we learned that the mound group was being disturbed for road fill. Accordingly, one of us visited the locality and made a small collection of the finer wares from a sherd-bearing area which was exposed. The mound group had been extensively disturbed at that time; large parts of it may be entirely destroyed by now.

The materials collected are divided here entirely on the basis of paste characteristics. Our series is too small to permit us to attempt any finer division. The paste of the first group (fig. 74, *e, f, h-k*) ranges in color from gray through buff to orange. Some sherds show incomplete firing, with dark gray cores composing from 25 to 40 percent of the thickness. One sherd in this group has a gray core which is 60 percent of the thickness. The aplastic materials consist of moderate amounts of fine and medium-size angular and rounded grains of pink and colorless quartz. Sparse grains of iron-stained, reddish rock fragments (magnetic) and magnetite are also present. The paste has a definite gritty quality; sherds break cleanly and nearly at right angles to the surface. Some pieces are unslipped. This is especially so in those sherds having grayish paste colors. Others have an orange or cream slip on the exterior and a white slip on the interior. One sherd (fig. 74, *e*) with an orange paste color is unslipped on the interior surface but has a cream-slipped exterior over which is added an orange slip. The decoration in brown and red is painted over this second slip layer. The undercoat of cream

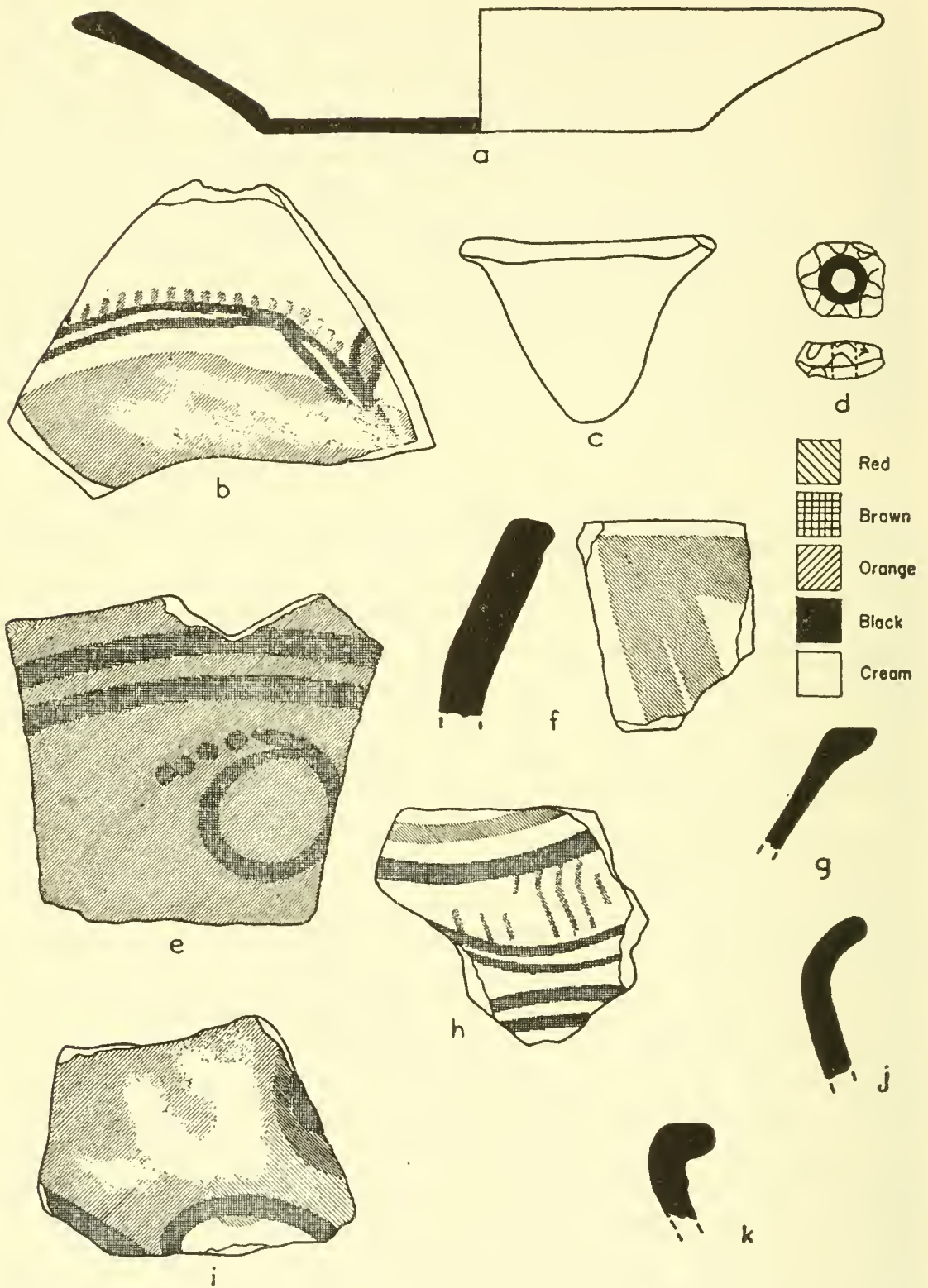


FIGURE 74.—Restored vessel, sherds, vessel foot, and moldmade spindle whorl, Cerro del Encanto site. Rim diameter of *a*, 1,816 cm.; height 2.8 cm. *b-k*, Not to same scale.

color is visible in eroded areas of this sherd. Colors used for decorative painting in our small sample are red and brown (fig. 74, *e, f, h, i*). The painting appears to favor arrangements of parallel lines and simple curvilinear designs. The painted lines are broad and smoothly drawn. No fine-line decoration was observed in our sample. One sherd (fig. 74, *f*) has a shallow groove on the exterior just below the rim.

We have a few sherds, possibly all from the same vessel, which are generally similar to those just described but differ sufficiently in paste to warrant setting them apart. The paste color is a light buff with a thin olive-colored core. The temper consists of very sparse inclusions of very fine and fine angular and subrounded quartz grains. Some limonitic stain is present in the paste. The exterior surface is unslipped. A cream-colored slip covers the interior and the decoration in brown and reddish-orange (fig. 74, *b*) is painted over this. These sherds have been badly weathered and the painted designs were restored only with difficulty. A general similarity in surface treatment of the two groups of sherds described above with part of the Upper Tres Zapotes polychrome ware (Drucker, 1943 a, pp. 36-47) is apparent. The paste characteristics, however, are not the same at the two sites. Valenzuela (1945 a, pp. 93-94) has described materials from the upper levels of Mound 1 at the site of Maticapan, in the Tuxtla district, which are very similar to our Cerro del Encanto materials in paste and surface decoration.

Two sherds in our collection are the same in paste composition but differ markedly in color. The paste is a very fine, compact clay in which are found rare inclusions of very fine angular quartz grains. It is possible that the aplastic materials occurred naturally in the clay. One sherd has a light buff paste with a thick black core. A thin cream slip covers both interior and exterior surfaces. This sherd included a section of both rim and base, permitting an approximate restoration (fig. 74, *a*). The other sherd has a black paste color and thick black slip overall (fig. 74, *g*). Both are dense in texture and break crisply and evenly. The rim form is the same in the two sherds. Both are highly polished and glossy to the touch. The difference in paste color is very likely a function of the different firing techniques employed.

One conical solid vessel support was found (fig. 74, *c*). This is made of an extremely fine paste, orange in color, with no purposefully added aplastic materials. The specimen was considerably eroded and in a very softened condition when found. A fragmentary moldmade spindle whorl (fig. 74, *d*) from this site is apparently made of the same paste as the solid vessel support. A black painted band on both top and bottom surfaces encircles the central perforation.

The few materials which we collected from the Cerro del Encanto locality do not provide a sufficient range for comparison with collections from other sites. In January 1957, the writers inspected the collections made by Valenzuela in the Tuxtlas district. The strong similarity of part of our collection from the Cerro del Encanto with some of Valenzuela's material from the Matacapán site was clear, as we have noted above. The Cerro del Encanto site shared in the late Veracruz coast ceramic tradition, of this we feel sure, but as to how close the affinities were between our site and the site of Matacapán, and other sites in this general region, we cannot say. Only excavation in the Cerro del Encanto site can settle this question. Nor, lacking stratigraphic evidence, can we be sure that the entire Cerro del Encanto mound group belongs to this late complex.

TORRES SITE

In clearing an approach for the new airstrip at La Venta, a small and apparently shallow surface occupation site adjacent to our 1955 field camp (fig. 2) was destroyed by the bulldozer. We discovered that this site had contained polychrome pottery and made an effort to collect as many sherds of this as was possible from the disturbed area. Several figurine fragments and other objects were collected as well. We have named the site after its owner, Don Sebastián Torres, to distinguish it from the other archeological complexes at La Venta.

The polychrome sherds (figs. 75, 76) appear to be from bowls and jars with simple direct rims. They apparently fall into a single paste group. This is a very fine clay matrix in which are visible sparse angular grains, very fine to fine in size, of quartz and feldspar. The paste is hard and densely textured, fracturing cleanly and at right angles to the surface. As a correlate of the paste hardness, vessel walls tend to be thin. The paste color ordinarily is a light buff but a few sherds are fired to a pale orange color and one is nearly white. It was noted that those sherds having the darker paste color also contain a greater quantity of aplastic materials. Most of the sherds have a dark core, ranging in thickness from 15 to 50 percent of the wall thickness. The surfaces of nearly all are well polished. Some of the sherds apparently have been given a thin wash of the same clay as the paste and the decoration is painted directly on this. Most, however, have a thin slip of cream, orange, or white color. The colors used for decoration are red, orange, blackish brown, black and white. Orange appears to have been an especially favored color. Both angular geometric and curvilinear designs are used. Some of the latter are possibly representative designs, but the small size of the sherds prevents us from determining this point. Rows of red dots and reds dots used as fillers occur on several sherds.



FIGURE 75.—Polychrome sherds, Torres site.

Outlining of figures in red or black is common. Nucleated circles (red outlined in black) and S-shaped elements are used fairly frequently. The use of parallel lines to set off solid color or design-filled zones is seen on many of the sherds. Incising appears to have been extremely rare; only one of our sherds showed incising and this consisted of a single line just below the lip.

It is difficult to find materials from other sites which are truly comparable with this Torres site polychrome ware. Perhaps the nearest parallels are with the painted wares from the site of Cerro de las Mesas, particularly with the Complicated Polychrome ware from the Upper I horizon of this site (Drucker, 1943 b; pp. 48-49,



FIGURE 76.—Polychrome sherds, Torres site.

pls. 1, 2). The published illustrations of this ware show many similarities with the materials from the Torres site. There are a number of differences, however, and the Upper I horizon at Cerro de las Mesas is characterized by numerous other ceramic traits which were not found in this La Venta site.

A number of strap handles (fig. 77, *a-e*) are in our collection. Their size and curvatures indicate that they came from fairly large

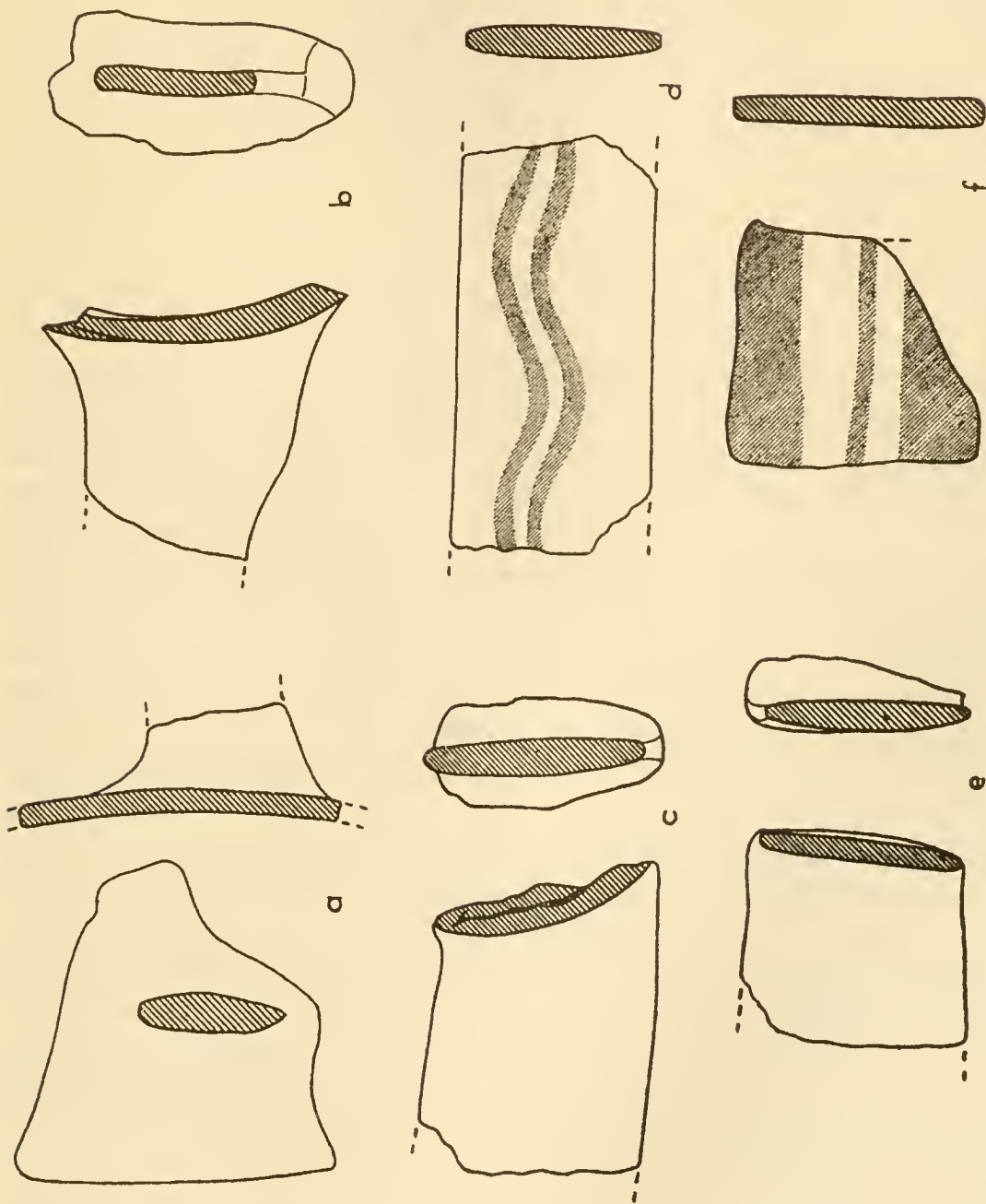


FIGURE 77.—Strap handles and bichrome sherds, Torres site.



FIGURE 78.—Figurine head, Torres site.

vessels. Several are attached to body sherds so that the method of attachment to the vessel wall may be seen. Most are quite thin in cross section, with square or slightly rounded edges. Nearly all are made of the same fine paste as was used in the polychrome pottery at this site. One piece (fig. 77, *b*) is attached to a body sherd which shows traces of an elaborate curvilinear design in red, black, white and orange on the interior surface. One specimen (fig. 77, *d*) is made of a coarser paste containing a moderate amount of angular and sub-rounded quartz grains fine to medium in size. One side and the squared edges of this piece are painted with a thin coat of cream color over which is painted a double meandering line decoration in red.

No loop handles were seen at this site. Strap handles are known in small quantities from the La Venta Phase Olmec habitation areas at La Venta (LV, p. 122). They were not found in the Lower to Upper sequence at Tres Zapotes, occurring at this site only in the very late intrusive burial offerings (Drucker, 1943 a, p. 106). At Cerro de las Mesas strap handles occurred in the Lower II and Upper I horizons (Drucker, 1943 b, p. 76). However they are accompanied in these levels by numerous ceramic features which appeared to be entirely lacking at the Torres site.

One specimen may be a fragmentary and poorly made solid slab vessel support (fig. 77, *f*). This is made of a rather loosely compacted light-buff paste with moderate amounts of angular and sub-rounded quartz grains, fine to medium in size. The piece is unslipped and has poorly smoothed surfaces. One side is painted in three horizontal bands of red. No other types of vessel supports were recovered from the Torres site.

The figurine fragments from this site (fig. 78; pl. 61, *a-f*) are all from solid handmade figurines. They appear to conform very well to Drucker's figurine typology for the La Venta Phase Olmec fig-

urines from La Venta and so will not be described in detail here. The heads are all made of a coarse paste, light gray to reddish brown in color, which is heavily tempered with medium and coarse sand grains. Most of these pieces would fit easily into Drucker's Class I-B figurines; two (fig. 78; pl. 61, *c*) may be his type I-B-3 and two others (pl. 61, *a, b*) may be his type I-B-4 (LV, pp. 135-136). One head (pl. 61, *d*) is too badly eroded to determine its characteristic features. The small tenoned skull (pl. 61, *e*) is much like a specimen found mounted in a small vessel in an Olmec habitation area (LV, p. 138, pl. 43, *b*) which Drucker assigns to his Class III-B, an aberrant figurine class. The fragment of a small crouching figurine (pl. 61, *f*) is made of a very fine dark-gray paste with no visible inclusions. It may when complete have been a crouching baby figure similar to the serpentine piece found in 1943 in Mound A-3 (LV, p. 159, figurine 11, pl. 51) in the Olmec ceremonial center.

Several spindle whorls are in our collection from this site (pl. 61, *g*). All of these are simple handmade specimens. No moldmade spindle whorls were found. Spindle whorls and perforated potsherd disks are unknown from the Olmec habitation deposits at La Venta (LV, pp. 143-144). At Tres Zapotes, perforated sherd disks occurred beginning with the earliest horizon and moldmade spindle whorls appeared first in the Upper horizon (Drucker, 1943 a, pp. 86-87). Perforated sherd disks apparently occurred from earliest times at Cerro de las Mesas, and moldmade spindle whorls began here in the Lower II horizon (Drucker, 1943 b, pp. 66, 76). It is not clear from the published reports when simple handmade spindle whorls first came into use at either Tres Zapotes or Cerro de las Mesas.

A clay object which is grooved along both axes was found at this site (pl. 61, *h*). Several specimens identical with this were found in the Olmec refuse deposits at La Venta (LV, p. 142, pl. 42, *left*). Drucker suggests that these may have been used as weights for fishing gear or as loom weights.

The Torres site materials present us with something of an anomaly. On the one hand, we have polychrome pottery which bears strong resemblances in its color combinations and design elements to late ceramic complexes of Mixtecan genre while at the same time our site appears to be lacking in the other elements of that elaborate ceramic tradition. The figurines, on the other hand, are of types which were at home in the cultural inventory of the demonstrably early La Venta horizon of Olmec culture. It is, of course, possible that in the destruction of the site by the bulldozer, early and much later materials became mixed together. But if this were so, we should still expect to find some traces of the highly elaborated ceramic elements which normally would accompany our polychrome pottery:

the ornate vessel bases and supports, the moldmade figurines, the elaborate incised and modeled wares and many other things. We found none of these nor have we seen anything of this kind on La Venta island.

Our campsite and the adjacent Torres site were located on a clay ridge which was covered with a layer of drift sands several feet in thickness, much like the location of the Olmec ceremonial center. In clearing away the forest the bulldozer did little more in some places than scrape away the surface. Yet in poking through the earth removed from these places we found both polychrome sherds and solid handmade figurines of Olmec type. If the figurines were from an earlier occupation, we would expect them to have been lying at a greater depth in the drift sands and to have remained undisturbed by the bulldozer in these scraped areas.

We do not wish to make too much of this apparently anomalous association of early and late traits. The type of salvage archeology we performed at the Torres sites does not lead readily to the solution of such problems. Excavation in an undisturbed site of this Torres polychrome complex is obviously needed.

The Torres site appears to us at the moment to represent an intrusion of highland ceramic influence into the La Venta region. Whether this was carried by trade or by actual movement of peoples we of course cannot determine at present. If the handmade figurines were before the disturbance of the site in actual association with the polychrome pottery, we may have a case of the persistence of certain ceramic traits in this region to the exclusion of, or at least in preference to, their later equivalents. The persistence of Olmec figurines in this general area is well documented. Drucker found them alongside moldmade figurines in the Upper horizon at Tres Zapotes (Drucker, 1943 a, p. 116), and Sanders reports finding classic baby-face figurines associated with Late Classic figurines of the Jaina type in a site in the upper Tonalá drainage (Sanders, 1956, p. 437).

SUMMARY OF POST-PHASE IV ACTIVITIES AT LA VENTA

The history of events at La Venta following its abandonment by the builders of the great ceremonial center is still very little known. Our corpus of data on this long post-abandonment period is lamentably small and confusing. What the few data on this period have suggested to us may be summarized briefly as follows. After the withdrawal from the Olmec ceremonial center by its Phase IV occupants, the island appears to have been totally unoccupied for a short time. During this time the surfaces of the Olmec structures were eroded and drift sands began to accumulate over the site. The cleared areas were swiftly overgrown by tropical vegetation. Then

the island appears to have been reoccupied, for how long we do not know, by a people who began to plunder the ceremonial center. Ornamental stones were removed from the Olmec structures and pits were dug at various places, perhaps in the search for jades and other Olmec treasure. Possibly during this time many of the stone monuments were mutilated and moved about.

We have no good evidence as to the cultural identity of the group which began the despoliation of the Olmec ceremonial center. It is possible that it was the work of a group of the Olmec culture itself which, having suffered a breakdown of the theocracy or some other kind of cultural upheaval, had turned upon itself and set about to despoil the religious works of its ancestors. The scant evidence from the North Pavement area might be interpreted in this way. We have seen nothing to indicate that the ravaging of the site was done by invading people completely alien to the Olmec cultural tradition, but this may be due simply to the scarcity of our present data. It does seem to be clear, however, that La Venta never again became a great religious center of the florescent, or La Venta phase, of Olmec culture.

A period of some length seems to have followed this initial reoccupation of La Venta during which very little appears to have happened. It was possibly during this time that the offerings of pottery were deposited in the drift sands overlying the ceremonial center. These offerings seem to us to indicate an attitude quite different from that associated with the mutilation of the site. They appear to reflect an attitude of awe and reverence toward the ancient structures. This is suggested by the offerings found along the site centerline in 1943 and by those found by us south of the Southwest Platform and at various other locations in Complex A. The identity of the bearers of these offerings is unknown. They may have been brought by small groups living in the vicinity who came periodically to pay homage to the departed builders of the site. Perhaps associated with this activity were the group of standing basalt columns erected to the east of the Southeast Platform and those we found in the drift sands just east of the Southwest Platform.

At some time in the latter half of the total span of time now known to be represented culturally at La Venta, influences from the highlands of Mexico and from the Veracruz coastal cultures began to make themselves strongly felt at La Venta. Such influences may have come predominantly by way of southern Veracruz but it is also likely that some contacts were established by way of the upper tributaries of the Tonalá River. Some of the smaller mound groups at La Venta almost certainly date from these later occupations of the island. We have some evidence, largely negative to be sure, that highland

influences were received selectively and that there was a persistence of certain archaic traits during this time. This suggests the interesting possibility that Olmec culture may have retained at least some vestiges of its cultural identity and perhaps to a limited extent its territoriality in the Olmec heartland for a very long time during the Classic horizon in Mexico. Some support for this idea is provided by other sites in the general Olmec region.

The element of conservatism appears to have become established early in Olmec culture. We cannot say that it was primarily due to the location of the culture in the lowland jungles, but certainly it was fostered by this semiisolation. It should, at any rate, serve to warn against too easily reaching conclusions concerning the development of Olmec culture in its earlier periods as well as later.

We cannot account for the absence in our late La Venta sites of definite evidences of Lowland Maya influence. The situation may be due simply to accident of discovery, but it is surprising that our post-Phase IV materials show none of the diagnostic features of the ceramic complexes found just a short distance to the east of La Venta (Berlin, 1953, 1956). We may speculate that the inhospitable natural conditions of the Tonalá drainage discouraged further westward expansion of Lowland Maya influence in the Classic and post-Classic, but still we might expect to find some trade materials of Maya affinity. It is possible that the late cultures of the La Venta region acted as a barrier to Maya expansion during this time. The collections made by Drucker and Contreras in 1953 from sites in the eastern Olmec area, now being studied in Berkeley, may provide an answer to this problem.

The above brief review is obviously speculative, pieced together out of scattered bits of evidence. We have simply attempted to set forth the framework which our few data on the long postabandonment period have suggested to us. We probably have overstepped at several points the limits set by our data; this we must leave for the reader to judge. Future excavations in the Olmec area may radically alter the sketchy picture of post-Phase IV events at La Venta which we have presented. Certainly the need for further work in the area has been made clear.

RESULTS AND CONCLUSIONS: CULTURAL AND CHRONOLOGICAL POSITION OF LA VENTA

HISTORICAL RÉSUMÉ

This section will present a summary of opinions to date on the chronological position of Olmec culture. These opinions are given here in the order of their appearance in the literature, and thus re-

flect the development of ideas concerning the Olmec, as well as of Olmec affinities with other Mesoamerican cultures.

Before the term "Olmec" was used by Vaillant (1932) to designate a limited range of cultural items whose nature and distribution are still only partially known, a number of finds of this distinctive art style had been described (Blom and La Farge, 1926; Joyce and Knox, 1931; Melgar, 1869, 1871; Saville, 1900, 1929 a, 1929 b; Weyerstall, 1932). Saville and Vaillant were the first to recognize the Olmec assemblage (as then known) as a distinctive cultural manifestation.

In 1925 Blom and La Farge (1926, vol. 1, pp. 78-90) visited the La Venta site, described and illustrated certain stone monuments, and concluded tentatively that the affiliations of the site were mainly with the Maya culture, but at the same time recognized similarities with non-Maya materials seen earlier by them in the nearby region of Los Tuxtlas not far to the northwest. Beginning in late 1938 M. W. Stirling instituted the combined Smithsonian Institution-National Geographic Society investigations of the archeology of the southern Veracruz-Tabasco Gulf Coast region with the first excavations at Tres Zapotes (Stirling, 1939, 1940 a, 1943 a).

A great impetus to study of Olmec culture came with the Second Mesa Redonda, held in Tuxtla Gutierrez in 1942. By this time Tres Zapotes had been excavated and Drucker's ceramic testing at La Venta had been accomplished. Stirling was able, at this conference, to report on the newly found jade offerings recovered at La Venta. Covarrubias there presented his definition of the Olmec art style, basing his classification upon the materials from the La Venta and Tres Zapotes sites, as well as upon the numerous Olmec-type specimens in private collections (Covarrubias, 1942, pp. 46-49). Among the conclusions of the conference, as indicated in the chronological chart (*Mayas y Olmecas*, 1942, p. 76), La Venta is classed as Archaic, falling into the same "horizon" as Mamon, Monte Albán I, Ticoman and Zacatenco. Jiménez Moreno's expansion (1942 b, pp. 113-145) of his contribution to the Mesa Redonda report (1942 a, p. 19-23) was an attempt to identify the Olmec of the Conquest period who are mentioned by Sahagun, to project backward through time in the Olmec area the language and culture, and to establish the Olmec as the basic Mesoamerican culture.

At about this same time the site of Tlatilco, at the foot of the Cerro de los Remedios on the outskirts of Mexico City, came to the attention first of private collectors and subsequently of trained archeologists. In a preliminary notice, Covarrubias (1943) clearly recognizes certain Olmec influences in the ceramic and stone materials from

this site. This is the first definite statement of Olmec influence in the Mexican Highland.

Drucker (1943 a) presented the ceramic sequence at Tres Zapotes and equated the Lower Tres Zapotes period with early Uaxactun (Mamom). Smith (1955, vol. 1, p. 7), on the limited evidence of two Tres Zapotes sherds, notes that although of different clay and temper from Mamom pottery, they are practically identical in shape, decoration, and general aspects to Mamom flaring-side orange plates, and suggests that they are copies. His interpretation therefore is, by implication, that the flow of cultural influence was from the Petén Mamom to the Olmec area. A limited number of other ceramic correspondences between Uaxactun and Tres Zapotes have been noted by Smith (*ibid.*, pp. 113, 116, 120, 122-123), but he does not indicate that he regards these as pointing to any close relationship between the two sites. Middle Tres Zapotes was equated by Drucker (1943 a) with the Tzakol period at Uaxactun; the beginning of the Middle Tres Zapotes period is assigned as contemporaneous with Uaxactun II or Holmul I.

Covarrubias (1944, p. 27) proposed that the Olmec culture constituted the mother culture from which other Mesoamerican cultures later derived. He employs the term "Early Olmec" to designate the La Venta phase of Olmec culture, "Middle Olmec" for the later Classic period culture, and "Late Olmec" for the later prehistoric and protohistoric culture. This scheme allows no place for Lower Tres Zapotes which, if Drucker's appraisal of its position turns out to be correct, should represent a culture horizon prior to and ancestral to La Venta.

In 1946 Covarrubias (1946 a, 1946 b) again took up the general subject of the Olmec art style, reviewed a large corpus of individual specimens, factored out distinctive Olmec elements (*cf.* LV, pp. 197-204) and indicated in specific terms the nature and characteristics of the Olmec art complex.

Ekholm's report on the Huasteca (1944, table 5, pp. 423-426) assigns early (that is, Lower) Tres Zapotes ceramics to an early monochrome horizon equivalent in time and general type to Mamom and Chicanel of Uaxactun and Monte Albán I and II. This conclusion was anticipated by Drucker (1943 a, 118-120) who suggested an early ceramic pattern extending through the lowland from Honduras (*cf.* Strong et al., 1938) to the Huasteca. More recently MacNeish (1954, p. 624) has extended these correlations to the Panuco area, and equates the Ponce period to Lower Tres Zapotes and Mamom and sees ". . . in the Village Formative stage, a culture area extending from Panuco to at least the Peten." Caso (1947 b, p. 32) holds a similar opinion.

Kidder, Jennings, and Shook (1946, p. 257) recognize no direct Olmec influence at Kaminaljuyu, but in their discussion of the La Venta culture incline to its placing in the Early Classic period, while at the same time recognizing the existence of La Venta type figurines at Tlatilco in the Valley of Mexico which is a site of Middle Culture (i. e., Preclassic or Formative) date.²²

The delayed publication of the full report on La Venta was partly compensated for by Drucker's (1947) brief discussion of the ceramic complex and its general implications. In this paper Drucker proposed the equivalence of Middle Tres Zapotes and La Venta. He indicated his opinion that there was an "ancient and firm establishment of Olmec culture in the zone in which these sites were situated," defined, insofar as the data permitted, the geographical extent of Olmec culture, and suggested that sculptural reliefs in Guatemala and at Chalcatzingo in Morelos were to be explained as evidence of the presence of detached Olmec outposts or colonies in these areas.

In his more recent writings, Thompson has considerably altered the opinion which he set forth in 1941 on the temporal position of the Olmec culture. He has accepted the notion, mentioned above, which was first proposed by Drucker and Ekholm and more recently enlarged upon by MacNeish, of a basic cultural substratum extending through the lowlands from the Huasteca to the Maya region in the Formative (Thompson, 1953, p. 448; 1954, p. 53). This ancient connection, Thompson has proposed (1953, p. 449), may have been the result of the northward migration of the Huastecan Maya, which he believes to have occurred approximately 2,000 years ago. The Olmec culture, by this argument, was simply a manifestation of Huastecan Maya culture on its movement to the north. This suggestion is put forth only tentatively by Thompson and has met with no enthusiastic response from other archeologists. The evidence from glottochronology pushes the date of Yucatec-Huastec divergence much further back in time than Thompson proposes, to approximately 3,200 years ago (Swadesh, 1953, 1954). Thompson's suggestion of an intimate genetic relationship between the Olmec and Huastecs, with, of course, the parental homeland being among the Yucatecan Maya, is not supported by recent archeological research. The problem of the divergence of the Huastecan Maya from the parental stock and their possible relationship to the development of Olmec culture in the lowland region presents questions which can only be answered by future work (cf. Jiménez Moreno, 1942 a, 1942 b; Nicholson, 1955).

²² We do not cite all of the opinions in print on assignment of the La Venta period culture to either the Formative (e. g., Armillas, 1948, table 6; Caso, 1953, p. 233) or to the Classic (e. g., Willey and Phillips, 1955, p. 779).

Wauchope (1950, p. 237) classes Drucker's Lower Tres Zapotes period, on the basis of the ceramics, as Village Formative (i. e., Early or Lower Formative). In a more recent paper Wauchope (1954, p. 29) repeats his opinion that Lower Tres Zapotes is on a Village Formative horizon and gives his reasons for concluding that La Venta and Middle Tres Zapotes are Late Formative rather than Early Classic. He would place the Middle Tres Zapotes period late in the Village Formative horizon, on the Protoclassic time level which, according to radiocarbon dates available to him at the time of writing, covered a time span of 826 B. C. to 127 B. C.

In his 1947 preliminary report on La Venta, Drucker (1947, p. 6) equates La Venta with the Middle period at Tres Zapotes. Differences in the ceramic inventories between La Venta and Middle Tres Zapotes led Drucker to conclude (*ibid.*, p. 6) that "chronologically the La Venta occupation likely overlapped the Upper Tres Zapotes period slightly, or, to put it another way, that the Middle Tres Zapotes-La Venta period persisted a little longer at La Venta." In his 1947 and 1952 reports Drucker places the Middle Tres Zapotes-La Venta period on the time level of the Tzakol period in the Petén (1947, p. 6; LV, p. 150). This derives from his earlier analysis of the Tres Zapotes ceramics (1943 a, p. 120, fn. 43), in which he correlated temporally Lower Tres Zapotes with the Mamom and Chicanel periods at Uaxactun.²³ In view of the apparent continuity of the Tres Zapotes occupation, Middle Tres Zapotes would necessarily then fall into the Tzakol time level. The absence of Tzakol ceramic types in Middle Tres Zapotes, Drucker explains (1943 a, p. 120) as due to the isolation of Tres Zapotes during the period of Tzakol development (see also LV, p. 150).

Drucker's view of the Tres Zapotes and La Venta site occupations may be summarized in the following quotation:

In short, all the evidence, when critically reviewed, indicates that the Middle phase at Tres Zapotes was a continuum, with gradual development and change in ceramics, but no break whatsoever . . . What this means, in terms of Wauchope's (1950) synthesis, is simply that the Tres Zapotes [and the La Venta] region—the Olmec area, as I prefer to call it—was culturally isolated during this [Middle Tres Zapotes-La Venta period] time, pursuing its own trends in ceramics in response to internal stimuli only. The Protoclassic patterns never reached it [see also Drucker, 1943 a, p. 120], so that in effect the culture jumped from a prolonged Urban Formative [terminating with the end of Middle Tres Zapotes-La Venta] into a full-blown Classic pattern [beginning with Upper Tres Zapotes]. [LV, p. 260.]

²³ Smith (1955, vol. 1, p. 114) calls attention to one definite Mamom vessel shape which was reported from La Venta in Drucker's preliminary report (1947, pl. 2, *d*). Additional similarities would undoubtedly result from a careful comparison of the final reports on the ceramics of the two sites (Smith, 1955; Drucker, 1952 a).

In Drucker's report (1955, p. 30), on the Cerro de las Mesas jade offering, he refers to the "Pre-Classic Middle Tres Zapotes-La Venta horizon (a prolonged Urban Formative phase immediately preceding the Classic Upper Tres Zapotes)."

The difficulty of equating the Olmec culture sequence, known from Tres Zapotes and La Venta, with the Maya area is very great. What resemblances can be detected between the two areas on the Formative level appear to be generic. The two areas appear to have been essentially out of contact with each other, so specific diffusion as evidenced by trade wares and the like is lacking or, at best, extremely rare. In the light of this opinion, and in view of the absence of direct Middle Tres Zapotes-La Venta connections with Tzakol, it is clear that Drucker's temporal equation of the Olmec and Uaxactun sequences was questionable from the start. This conclusion is reinforced by both the radiocarbon dates from La Venta and the strong Olmec influences beginning in Middle Preclassic times (as at Tlatilco) in the Highland of Mexico. When Drucker was writing the La Venta report he was hampered by lack of sufficient comparative data from the then recently discovered site of Tlatilco. In 1957, some 9 years later, we are in a better position to fit at least part of the Olmec culture sequence into the better defined culture series in the central Mexico Highland.

GEOGRAPHICAL DISTRIBUTION OF OLMEC CULTURE

The matter of the geographical extension of Olmec culture, a reasonably simple one when dealing with most other Mesoamerican cultures, bristles with problems. Drucker (1947, p. 8) defined the Olmec heartland as situated in the Gulf lowlands lying between the Papaloapan and Tonalá-Blasillo Rivers, never extending into the foothills to the south. A much more precise geographic delimitation of the eastern and southern borders of Olmec territory was drawn by Drucker and Contreras (1953) in a later survey. This survey strongly supported earlier impressions of restricted distribution of Olmec sites per se, showing that these are limited to the coastal lowland regions. Beyond this so-called heartland, there is the problem of accounting for a variety of what are clearly direct Olmec influences far distant from the Veracruz-Tabasco coastal plain. Among these evidences are the low relief petroglyphs at San Isidro Piedra Parada in southeast Quetzaltenango, Guatemala (Thompson, 1943, p. 111, fig. a; Covarrubias, 1946 a, p. 171), the petroglyphs at the Las Victorias Group, Chalchuapa Archaeological Zone, El Salvador (Boggs, 1950), and the reliefs carved on the cliffs and the seated statuette at Chalcatzingo near Jonacatepec, Morelos, which were first adequately described by Guzmán (1934). Preliminary excavation of

the Chalcatzingo site was carried out in 1953 by Román Piña Chán (1955 a). In his report are shown photographs and drawings of the reliefs of the masked figures carrying staffs. Two of the figures with eagle-jaguar faces closely resemble the figure from San Isidro Piedra Parada.

These reliefs clearly indicate, it seems to us, direct Olmec influence in regions far removed from the heartland of Olmec culture. Drucker (LV, pp. 223, 228-229, 232) is inclined to regard these sculptures as possibly deriving from Olmec "outposts" (or "centers" or "colonies") in these regions (see also Drucker, 1947, pp. 7-8).

Covarrubias (1948, 1956) has proposed that Olmec-style pieces, some of which are illustrated in his earlier publications (1942, 1946 a), are so common around Zumpango and San Jeronimo on the Pacific coast above Acapulco in the State of Guerrero that they seem to indicate "an ancient Olmec occupation which marks the western frontier of the Olmec belt from the Pacific to the Gulf coasts" (1956, p. 15). He further believes that the Guerrero Olmec pieces "have a certain archaic style while those of the Gulf coast appear to be more developed and elaborate." Covarrubias has contributed measurably to our understanding of the nature of the Olmec art complex. However, whether stylistic analysis alone, unaccompanied by archeological and stratigraphic evidence, is a reliable means of determining the origin and development of the Olmec culture is open to doubt. Covarrubias (1956) calls attention to the fact that no large Olmec monuments or sculptures such as are notably abundant at La Venta, Tres Zapotes, and the Río Chiquito sites are known from Guerrero. To him this suggests, if we interpret his reasoning correctly, that the Guerrero evidence dates from a period preceding the development of monumental sculpture and that therefore the Pacific Olmec occupation was earlier than that in the coastal lowlands of the Gulf side. In another paper (1954), Covarrubias presents a chronological chart of Mesoamerica in which the "Olmeca" culture is shown as Preclassic and early Classic, Lower and Middle Tres Zapotes are combined, and La Venta is indicated as belonging to the later span of the Lower-Middle Tres Zapotes period. The combined Lower-Middle Tres Zapotes is indicated as extending from about 800 B. C. to about the first century A. D. This assignment is approximately the same as that reached by the Fifth Mesa Redonda conference (Huastecos, Totonacos y Sus Vecinos, p. 535 and table at end).

We have deliberately refrained from citing the numerous instances of undoubted specimens of portable Olmec carved stone art, especially figurines, found outside the Olmec heartland. Many of these specimens are of doubtful, unknown, or, at best, approximate provenience, and in nearly every instance lack archeological context, and, as

Drucker and others (e. g., Shook and Kidder, 1952, p. 121) have suggested, the small, beautifully carved jade figurines were probably anciently collector's items which may have been treasured heirlooms and were ultimately lost or deliberately buried as part of a grave offering or dedicatory cache by people far removed in distance and time from those who made the specimens. In illustration of this, we note the distinctive minority of Olmec jades in the Cerro de las Mesas jade cache (Drucker, 1955, p. 66). The head of the semiportable jade figure (with an estimated original height of 30 inches) from near Santa Lucia Cotzumalhuapa, Department of Escuintla, Guatemala, reported by Shook (1956) may be, to use the British term, another "wayfarer," and the Olmec figurines from Teotihuacán are to be considered as curios possessed by the builders of that site (Rubin de la Borbolla, 1947).

When Drucker's La Venta final report went to press in 1951, the Tlatilco site in the Valley of Mexico had only recently become known. On the basis of a brief inspection of a part of the Tlatilco materials, in which Olmec influence is unmistakable, Drucker stated:

From the point of view of relative chronology, the Tlatilco-Olmec material which stylistically is surely referable to the La Venta-Middle Tres Zapotes horizon hints that one side or the other of our time scale is wrong. That is to say, either the beginning of La Venta-Middle Tres Zapotes must be put two or three centuries, at least, farther back, or we must assume that Olmec art actually attained its peak in the Lower Tres Zapotes period—a suggestion for which there is little evidence as yet, even though we have only a relatively small sample of ceramics from that horizon. To revise the dates of the Valley Archaic upward in time scarcely seems reasonable, as an alternative. [LV, p. 229.]

Piña Chán has been particularly concerned with the Preclassic sequence in the Valley of Mexico (Piña Chán, 1955 b). With the exception of Porter's (1953) monograph on the site of Tlatilco, most of what we know about this site is due to Piña Chán's efforts. In a paper published in 1952, Piña Chán critically examined the cultural sequence in the Valley, which rested primarily upon the early work of Vaillant, and realigned the position of the site of Zacatenco in this sequence. In his study of the Tlatilco assemblage, Piña Chán (1955 b, pp. 103–107) suggests three culture periods. He concludes that Olmec influence appears at the beginning of his Transitional or Middle Tlatilco phase, which is Middle Preclassic in time. On the basis of his comparative trait analysis, he assigns (1955 b, pp. 104–105) to the Lower Preclassic the following sites, which he dates from 1350 B. C. to 850 B. C.: El Arbolillo I, Lower Tlatilco, and Lower Zacatenco. To the Middle Preclassic, dating from 850 B. C. to 450 B. C., he assigns El Arbolillo II, Upper Tlatilco, Middle Zacatenco, Copilco, Gualupita I, Chalcatzingo, Monte Albán I, Lower Tres Zapotes, El Trapiche, El Opeño, and the Mamom period at Uaxactun. The Upper Preclassic

(*ibid.*, p. 106), dating from 450 B. C. to 150 B. C., includes Upper Zacatenco, Ticoman, Cuicuilco, Cerro del Tepalcate, Teotihuacán I, Gualupita II, Chicanel, Middle Tres Zapotes, and La Venta. We are not concerned here with the details of his temporal and cultural placement of the various Mesoamerican site phases and will limit ourselves to a consideration of Piña Chán's Valley of Mexico sequence only insofar as it concerns his views on the nature and time of Olmec influence in the Highland.

Piña Chán proposes that the oldest Olmec manifestations known from the Valley of Mexico appear in the Middle Preclassic sites. The traits marking this appearance are as follows: black pottery in the form of flat-bottomed vessels ornamented with feline motifs excised and incised ("excavados" and "raspados"), gray pottery, black pottery with white rims or mottled white areas, rocker stamp decoration, fine-paste ware ("caolin") vessels, hematite mirrors, feline ("Tigre") masks, dental mutilation, cranial deformation, hollow clay figurines with jaguar ("atigradas") mouths, beads and "colmillos" of jade, jade figurines, Vaillant's type A clay figurines with punched eyes, and small stone yokes. In the same Preclassic period, but of non-Olmec "peasant" manufacture, are a number of pottery types, such as white on red, polished red, yellowish white, red on white, red on yellow, white "laca," incised thin black, yellow "laca," and figurines of the following types: F, B, C5, K, D1, D2, hollow C9, "olmecoid" (*ibid.*, pl. 42), "baby face" (*ibid.*, pl. 41), stirrup-handled bottles. Porter (1953, pp. 31-32) gives essentially the same list, but does not specify jade figurines, mentions one polished dark-green serpentine figurine (illustrated in Covarrubias, 1943, p. 43), and "football-type" headdress on type D figurines. She (1956, p. 569) also states that Late Middle Zacatenco is marked by "intrusion of elements foreign to highland Mexico, but quite at home on the Gulf Coast," and included in this intrusive complex she lists scarcity of painted wares, clay stamps, masks, stirrup spouts, alfresco painting, and "so-called Olmec influence in figurines, design and style." She (1953, p. 28) repeats here her earlier opinion that Tlatilco bridges the lacuna which Vaillant suggested between Middle and Late Zacatenco.

We may note here that Porter (1953, p. 31) regards the Olmec influence at Tlatilco as a manifestation of an already well-developed Olmec culture, of unknown origin. In treating La Venta as a Classic period site, Porter implies that Tlatilco precedes La Venta in time. The alternate possibility that Tlatilco and La Venta are contemporaneous is suggested by Willey (1956) in his review of Porter's monograph.

Piña Chán summarizes his views (1955 a, pp. 26-27; 1955 b, pp. 106-107) of highland Mexican culture history in relation to Olmec

culture, if we interpret him correctly, by saying that the oldest evidence of Olmec culture ("olmecas arcaicos") is to be found in the State of Morelos, with a possible earlier center located in the conjunction of the States of Puebla, Morelos, and Guerrero. In Morelos this earliest evidence is to be seen at the sites of Chalcatzingo, Atlihuayán, El Cortez, Gualupita, Tlayacoapan, and Olintepic. Little or nothing in the way of detail is published on most of these sites and it is impossible to determine the specific nature of the relationships alluded to by him. From the assumed early Morelos seat Olmec people and influences passed to the Valley of Mexico, registering first in sites in the southern part of the basin (Tlapacoya, e. g.) and arriving later in the western region, as at Tlatilco. At about the same time (Middle phase of the Preclassic, 900-850 to 500-450 B. C.) as the Olmec intrusion into the Valley, movement in other directions accounts for the existence of sites such as Lower Tres Zapotes, Monte Albán I, and Panuco (MacNeish's Pavon and Aguilar periods). Once established in the Veracruz and Tabasco coast lowland region, these populations survived up to the historic period.

Piña Chán differs in his interpretation of the origin of Olmec culture from Covarrubias (see above) and from that of the present authors who, while not pointing to a specific location where the Olmec culture generated, nevertheless feel that the culture is of tropical origin in the Veracruz-Tabasco lowland area (see Coe, 1957, pp. 608-609; Drucker and Contreras, 1953, pp. 395-396; LV, p. 228; Sanders, 1956).²⁴

While it is not yet possible to make a detailed comparison of lowland Olmec traits with Tlatilco, since the final detailed report by Piña Chán and his colleagues has not yet been published, some pertinent observations in this regard are nevertheless possible on the basis of preliminary accounts and a hurried inspection of the Tlatilco materials in January 1957, at the Museo Nacional.

We may recognize three categories of traits which help to throw the similarities and differences between the Tlatilco and La Venta sites in sharp contrast:

²⁴ We can present no concrete evidence bearing upon the locus of origin of the Olmec culture. We see no merit in Covarrubias' proposal of a Pacific coast (Guerrero) homeland of the Olmec, nor do we see any indications of origins in the *altiplano*. The great importance of the jaguar to the Olmec would indicate the development of this idea in an area where that animal was abundant. Appendix 5 treats with the present distribution of the jaguar. Dr. Leopold states that the range of the jaguar was essentially the same three thousand years ago except for the Gulf Coast, where recent destruction of the jungle has somewhat reduced the range (personal communication). We are in agreement with Shook (1956, p. 262) who says that the jaguar deity "so permeates Olmec art that it bespeaks a long tradition in this culture, developed possibly through the close association of man and beast in a jungle habitat." This, taken together with the restricted distribution of Olmec sites (Drucker, 1947, p. 6; Drucker and Contreras, 1953), provides some basis for suggesting that the beginnings of Olmec culture should be looked for in the lowland area between the Laguna del Carmen and the mouth of the Papaloapan River.

(1) *Specific Traits Shared by La Venta and Tlatilco*

Pottery vessel forms (shallow bowls, spouted "trays," cylindrical jars, bottles with gadrooned sides).

Ceramic features (annular bases, loop handles, strap handles, main emphasis on monochrome wares, incised wares common, white-rimmed ware, zoned or paneled decorations, rocker stamped decoration, punctate dot design filler, bands of hatched incised triangles, stamped arc pattern or complicated unit design in interior bottoms of shallow bowls).

Small solid hand-molded clay figurines, usually female.

Large hollow baby-face clay figurines, type III-A-2 (LV, pp. 138, 228-229).

Miniature hematite mirrors attached to the chest of figurines (Tlatilco, clay figurines; La Venta, stone figurines).

Representations of adults holding infants in their arms (of probable ritual significance).

Use of cinnabar.

(2) *Traits Rare or Absent (*) at La Venta and Common at Tlatilco*

*Representations of ball players.

*Obsidian projectile points.

*Clay figurines with burials.

*Resist painting.

*Stirrup spout vessels.

*Long solid cylindrical tripod vessel feet.

*Two-headed clay figurines.

*Flat clay stamps.

*Dual representations (human-animal in figurines).

Painted pottery decoration.

Miniature pottery vessels.

Animal effigy vessels.

Excised pottery decoration.

Cylindrical (roller) seals (stamps).

(3) *Traits Common at La Venta and Rare or Absent (*) at Tlatilco*

*Representation of plumed serpent (rare at La Venta).

*Dressed stones used as construction features.

*Work in jade (beads, figurines, earspools, etc.).

*Carved stone monuments, stelae, altars, etc.

*Pyramid-mound-plaza ceremonial site layout.

*Representation of jaguar deity.

*Large concave metallic mirrors.

*Dedicatory caches or offerings (massive pavements, figurines, celts, etc.).

*Stone cists, coffers, column tombs.

*Unfired adobe bricks.

Stone figurines.

It must be kept in mind that the nature of the La Venta and Tlatilco sites are different. Tlatilco is primarily a burial site with a large number of richly endowed graves containing pottery. Some of the pottery is clearly funerary and nonutilitarian. La Venta, on the other hand, is strictly a ceremonial site which was kept free of refuse,

contains only a few special interments (tombs), and produced a very limited amount of pottery. If we are given full information in the Tlatilco report on the materials from the trash deposits (of Zacatenco type?) we could then compare these with the materials from Drucker's 1942 stratipits at La Venta.

LA VENTA IN RELATION TO THE OLMEC SEQUENCE

In our opinion, La Venta represents a culturally "floating" manifestation of classic (or florescent) Olmec culture which at the present time is not firmly anchored to other sites or culture periods either at its beginning or end.²⁵ In other words, there must be pre- and post-La Venta sites and phases which mark the earlier developing and later continuing manifestations of this culture. At the time of the founding of the La Venta site the development of social organization and engineering was already in full flower, as indicated by the magnitude, precision, and elaborateness of the site layout and the ability of its founders to handle both the constructional and logistic problems involved in its building. As regards technology in stoneworking, we have the strong probability that a dressed serpentine block pavement offering (like Feature A-1-h) is evidenced from Phase I of Complex A by the block-filled trench (h-2 in fig. 10) lying over the perimeter of the Phase III 6-layer pavement offering (Feature A-1-h). In addition there is the strong probability that some of the jade offerings in the Northeast Platform are of Phase I date. Finally, the small clay pedestallike platforms, which have proved difficult to interpret, may have served as mounts for sculptured stone monuments. As improvements were made these sculptures may have been removed and reset in other locations and the remnants of the clay mounts may have become incorporated into later structures on the same spot. Due to repositioning of monuments in antiquity and to disturbances by modern excavators in exposing the sculptures for photography, it is not possible to assign any of the stone monuments at La Venta to one specific site construction phase. This does *not* mean, of course, that we have any doubts as to their relationship to La Venta culture in general. For Phase II we have abundant evidence of developed stone technology in the Southeast and Southwest Platforms (jaguar mask mosaics, undressed stone "foundation" layers [offerings?] and lower course of basalt and serpentine facing stones), the basalt facing blocks along the inner toe of the wall encircling the Ceremonial Court, and jade offerings. From Phases III and IV similar evidence is also abundant.

²⁵ This does not deny Lower Tres Zapotes as antecedent to the Middle Tres Zapotes-La Venta period; it means only that we know so little about Lower Tres Zapotes that we can tie it to La Venta only by ceramic comparisons. The San Lorenzo Tenochtitlán site, while obviously related to La Venta, has not been studied.

In view of the above it appears that the culture represented by the structures investigated at La Venta derives from an earlier time and place or places in which this pattern was developed. This pre-La Venta site source may have been on the island of La Venta itself or anywhere within the larger lowland Olmec heartland. Drucker, on the basis of ceramic comparisons, believed Lower Tres Zapotes to be earlier and generically ancestral to La Venta, but recovered no data whatsoever on structural features that could have been forerunners of those from La Venta. Looked at this way, it is not correct to regard the classic development of Olmec culture (La Venta phase) as represented only by what we now know from the La Venta site. In other words, the La Venta site probably represents but a part of the total duration of the florescent development of Olmec culture. By the same token, although Phase IV at La Venta represents in minor measure a departure from the preceding phase pattern, Olmec culture in its florescent pattern was transferred at the end of Phase IV to the site(s) which was its successor as a ritual center for the local population. The jade pieces in the basalt column tomb, the bathtub-like stone coffer just south of the tomb, and the stone cist in Mound A-3, as well as the other centerline jade offerings from this phase, clearly indicate the maintenance to the very end of use of the site by its builders of the main traditional patterns. Our interpretation is that the basic master plan of La Venta was adhered to (with only minor modifications) from Phases I to IV. It is therefore to be anticipated that a post-La Venta site of this classic period will some day be found.²⁶ It is conceivable that the site of San Lorenzo Tenochtitlán on the Río Chiquito (Stirling, 1955) may be just such a site. The test of this gratuitous and unsupported suggestion will come with the analysis of the San Lorenzo materials, which are now in Berkeley.

SIGNIFICANCE OF C-14 DATES IN RELATION TO MAYA AND OTHER CULTURAL PATTERNS OF MESOAMERICA

Our review of earlier work shows that there have been three main opinions expressed regarding La Venta, and Olmec culture in general, in relation to the Mesoamerican scene:

- (1) Olmec was the oldest highly developed Mesoamerican culture and ancestral to all others (Covarrubias and others).
- (2) Olmec was a late minor variant of Mayan culture (Morley, Thompson, etc.).
- (3) Olmec was one of a series of roughly contemporary local cultures, each of which specialized along similar but distinctive lines (Drucker).

The C-14 dates presented here indicate that Drucker's estimate of the chronological position of the La Venta horizon was wrong;²⁷ the

²⁶ Drucker (1947, 1952 a) says La Venta is a one-period site. This does not mean, however, that La Venta encompasses the whole of florescent Olmec development.

²⁷ This statement does not mean that we are certain that the radiocarbon dates are in fact accurate and correct, but merely that we accept them at this writing as correct.

Mayan specialists who placed it even later were likewise in error. This leaves us with two alternatives. Either opinion No. 1, above, must be accepted, or else other Preclassic Mesoamerican horizons—in Yucatan, in the Petén, at Monte Albán, etc., must be pushed back earlier than the dates usually attributed to them. That these horizons probably were actually quite early is suggested by the three radiocarbon dates from Preclassic mounds at Kaminaljuyu (samples C-884, C-886, C-887), which give ages of $3,142 \pm 240$, $2,970 \pm 200$, and $2,490 \pm 300$ years, and the Monte Albán I date (sample C-424) of $2,600 \pm 170$ years. The Kaminaljuyu mounds, assigned to the Majadas and Miraflores Phases, therefore, were approximately contemporaneous with Complex A at La Venta. Construction of clay platform mounds in the Formative period in Mesoamerica appears to have been widespread. It is not possible at this time to determine the area where this trait appears. The earliest known occurrences are at Kaminaljuyu in Mound E-III-3, Miraflores Phase (Shook and Kidder, 1952; Shook, 1951), and at La Venta. Porter's (1953, p. 34) offhand remark on clay platform mounds at Tlatilco remains only that, since no information has been published on the size, construction or stratigraphic position of these structures—they would be, in the light of radiocarbon dates, of approximately the same age as the La Venta and Kaminaljuyu mounds. Elsewhere in Preclassic levels they are noted at Panuco (MacNeish, 1954) and in Yucatan (Brainerd, 1951). Clay platform mounds have recently been found at Cuicuilco, the horizon being Late Formative. Discussions of Preclassic platform mounds have been presented by Wauchope (1950) and Willey (1955, pp. 573, 582-583).

A corollary proposition is that if our view of the advanced development of La Venta is correct—in brief, that it was not the beginning but a full-blown culture which must have had simpler antecedents, then the horizon from which it developed must have dated back prior to 814 B. C.—our average computed for La Venta construction Phase I. Drucker correlated La Venta and Middle Tres Zapotes on the basis of ceramics and figurines, and therefore came to the conclusion that Lower Tres Zapotes was earlier than, and represented a horizon ancestral to, La Venta. This hypothesis is subject to three possibilities: (a) it might be correct; (b) it might be in error in regard to the La Venta-Middle Tres Zapotes correlation; (c) it might be in error as regards the Tres Zapotes stratigraphic sequence. At present there are no data whatsoever in support of *b* and *c*. Therefore we must assume that the earliest Olmec horizon known, Lower Tres Zapotes, ran its course prior to the 9th century B. C., in other words somewhat earlier than currently accepted estimates of the beginnings of other Mesoamerican cultures—Yucatecan Maya, Petén Maya, Highland Maya, Zapotecan, etc. This points up the need for a critical review of

materials from all early Mesoamerican horizons, and for a definite program of collecting datable carbon samples from them. Either all were earlier than is now generally conceded, or hypotheses such as that of Covarrubias—that Olmec culture was the earliest developed Mesoamerican culture and the source of stimulus to all the others—must be seriously considered. We object to the Covarrubias statement on the following grounds:

- (1) Olmec culture (aside from such "outposts" as Tlatilco which was on the La Venta time level) appears to have been restricted to a small geographical region, which was a sort of cul-de-sac, ringed by swamps and uninhabitable savannas.
- (2) Despite reasonably thorough exploration only three major sites have ever been found in this region (though there are hundreds of minor ones): Tres Zapotes, La Venta, and San Lorenzo Tenochtitlán, and these we believe to have overlapped temporally.
- (3) While there are a few widespread Mesoamerican art motifs for which an Olmec source can be argued (although Drucker, 1952, proposed that most of these may have derived from a basic widespread pre-Formative horizon), there are actually very few specific traits in early and/or developed Mesoamerican patterns which are of certain Olmec origin.

Therefore, we believe, until new and more precise data affirm or refute our stand, that carefully selected samples of carbon from controlled excavations will show that early Mayan, early Zapotecan, as well as early Olmec horizons date back into the second millenium B. C.

SIGNIFICANCE OF C-14 DATES IN RELATION TO VALLEY OF MEXICO AND ADJACENT HIGHLAND REGIONS

The nature of the Olmec similarities in the Tlatilco site, insofar as it is possible to judge these on the basis of presently available information, indicates in our opinion that the Tlatilco site was being strongly and directly influenced by the La Venta period of Olmec culture. In saying this we do not imply that it was necessarily the La Venta site itself which was the source of the influence. Our conclusion is contrary to the historical reconstruction proposed by Piña Chán as detailed above. Our belief in the lowland origin and development of Olmec culture therefore indicates Olmec influence in the Highland (as at Gualupita, Chalcatzingo, and Tlatilco) as introduced from the coastal region (cf. Sanders, 1956).

The radiocarbon date from Tlatilco based on "charcoal from various burials at different depths" determined some years ago at Chicago (sample C-199) yielded a date of $3,407 \pm 250$ years ago (B. C. 1456 \pm 250). It is not certain, however, whether all or parts of this sample came from Tlatilco deposits or from adjacent pre-Tlatilco layers. In January 1957, we excavated a burial with abundant offerings at the Tlatilco site and collected a substantial charcoal sample from the

earth in the grave pit. The burial was at a depth of 1 meter from the present surface. The pottery and other burial objects have been studied and classified by Piña Chán, whose opinion is that the burial refers to the final stage of the Middle Preclassic. He suggested at the time the carbon was collected a date of 700 to 500 B. C. for this stage (personal communication). The age of this carbon sample (M-660) has been determined by the Michigan laboratory as $2,525 \pm 250$ years (B. C. 568 ± 250). A second Tlatilco carbon sample was collected several years ago and was supplied for dating by Piña Chán. The charcoal was found in a brown ware engraved bowl accompanying burial number 193, found at a depth of 1.66 meters from the present surface of the site. According to Piña Chán, the pottery belongs to the latter half of the Middle Preclassic, which he estimates as dating from approximately 700 to 500 B. C. The age of this sample (M-661) is $2,940 \pm 250$ years (B. C. 983 ± 250). The arithmetic average of samples M-660 and M-661 is $2,733 \pm 250$ years old (B. C. 776 ± 250). If we accept as correct the two recent Tlatilco determinations and the nine dates from La Venta, the only conclusion possible is that the two sites were contemporaneous. This is consistent with the conclusion already reached by us on the basis of the cultural similarities at the two sites. The tantalizing reference which Porter (1953, p. 34) makes to platform mounds in the Tlatilco deposits suggests that Tlatilco shares in an early, widespread platform mound complex in Mesoamerica.²⁸

SIGNIFICANCE OF C-14 DATES IN RELATION TO "CALENDAR," GLYPHS, AND OTHER FEATURES

The most notable single discovery at Tres Zapotes was Stela C, a fragmentary monument bearing, according to Stirling (1939, 1940 a), an Initial Series date which in the Goodman-Martinez-Thompson correlation of the Maya calendar calculates 31 B. C. and by the Spinden correlation 291 B. C. Both Stirling (1940 a, p. 5) and Drucker (1943 a, p. 118) indicate that it is not possible to attribute Stela C from Tres Zapotes to a definite stratigraphic and ceramic horizon at the site. Drucker (LV, pp. 208, 211) later assumed a Lower Tres Zapotes provenience for the stela.

Thompson (1941; 1954, p. 50) does not agree with Stirling's reading of the Stela C date and assigns the Olmec style to a much later period. Morley (1946, pp. 40-42) shares Thompson's doubts not only

²⁸ It should be noted that Piña Chán, who was in charge of the excavations at Tlatilco, contradicts Porter's statement as to the occurrence of platform mounds at this site (personal communication). This disagreement, although bearing on a matter of great importance to the picture of cultural development in the Valley of Mexico and adjacent regions, in no way affects our conclusion as to the temporal equivalence of La Venta and Tlatilco.

on the reading of the date of Stela C at Tres Zapotes but also the contemporaneity of the stela and its date.

In view of the recent radiocarbon dates for the La Venta site (see below) it seems probable that Stela C, even if dated by the Spinden correlation at 291 B. C. (rather than by the Goodman-Martinez-Thompson correlation), is too late for Lower Tres Zapotes. On the other hand, if Stela C belongs to the Middle Tres Zapotes period and is therefore roughly contemporaneous with La Venta, we are faced with the paradox that no monuments or stelae with calendrical glyphs in the Stela C style are known to occur at La Venta. Stela C at Tres Zapotes therefore may be late Middle or early Upper Tres Zapotes in time. The real problem concerning Stela C is that this is the only monument from the Olmec area done in the classic Olmec style which bears a carved date. A further problem is that the reading of this date, because of the fragmentary nature of the stela, is itself not certain.

RADIOCARBON DATES

Nine radiocarbon dates have been determined for the La Venta site (Drucker, Heizer, and Squier, 1957). All samples are of wood charcoal collected in the 1955 season, after we had determined the basic stratigraphy of the site. The laboratory determinations were made at the University Memorial-Phoenix Project Radiocarbon Laboratory (University of Michigan) under the direction of H. R. Crane. We wish to acknowledge the help of Dr. J. B. Griffin in handling the samples. Laboratory costs were defrayed by the National Geographic Society. The samples may be described as follows:

Sample M-535: Charcoal from Phase I water-sorted floors at northeast corner of Southwest Platform. Age $3,110 \pm 300$ years (B. C. 1154 ± 300).

Sample M-529: Charcoal from Phase I stage at midpoint of Northeast Platform in vicinity of Offering No. 15. Date may or may not refer to time of offering, but was collected to indicate age of Phase I platform fill. Age $2,860 \pm 300$ years (B. C. 904 ± 300).

Sample M-530: Charcoal from bottom of Phase II pit 68 inches below surface of Northwest Platform (see fig. 21). Age $2,760 \pm 300$ years (B. C. 804 ± 300).

Sample M-534: Charcoal from depth of 120 inches below surface at center of Northwest Platform (see fig. 21). This sample is from fill layer underlying and contemporaneous with Phase I floors elsewhere in the Court area. Age $2,670 \pm 300$ years (B. C. 714 ± 300).

Sample M-532: Charcoal from earliest (Phase I) construction layers in Mound A-2 collected from j-3 and j-5 (see fig. 10) components. Age $2,650 \pm 300$ years (B. C. 694 ± 300).

Sample M-531: Charcoal from leveling fill for Phase I platform in Mound A-2 (see fig. 10). This sample immediately predates stratigraphically Sample M-532. Age $2,560 \pm 300$ years (B. C. 604 ± 300).

Sample M-536: Charcoal from bottom of trench cut into North Platform of the Great Pyramid. Charcoal-bearing level consisted of white sands mixed

with La Venta Coarse Paste Buff Ware and Coarse Paste Brown Ware sherds. Phase attribution of this layer is unknown since we were unable to correlate the Pyramid construction layers with those in the Ceremonial Court. Age $2,530 \pm 300$ years (B. C. 574 ± 300).

Sample M-528: Charcoal from lower margin of post-Phase IV windblown sands in vicinity of Northeast Entryway (see fig. 24). This is definitely of post-Complex A date marking a time immediately following abandonment of the site by the Phase IV occupants. Age $2,400 \pm 250$ years (B. C. 444 ± 250).

Sample M-533: Charcoal from burned area lying on disturbed Phase IV red clay surface just west of limestone slab paving near Northeast Entryway. Probably refers to early post-Complex A activity of people following abandonment of site by its builders. Age $2,130 \pm 300$ years (B. C. 174 ± 300).

The radiocarbon dates are shown schematically in the bar chart (fig. 79). The dates are arranged in this figure according to their cultural significance, and each date is represented within one standard error.

Five of the nine samples (Nos. M-535, M-529, M-534, M-532, and M-531) come from levels which belong stratigraphically to Phase I. The dates (disregarding the plus or minus error) range from 3,110 to 2,560 years ago (B. C. 1154 to B. C. 604). There are several alternative ways in which a series of single period dates may be judged for their chronological significance. With reference to the five Phase I dates, it can be pointed out that the maximum range within one sigma runs from 1454 B. C. to 304 B. C. Alternatively, one can view the five Phase I dates as showing a significant overlap by the process of subtracting the sigma of error from the maximum date (854 B. C.) and adding one sigma to the minimum date (904 B. C.), with the result that an overlap of 50 years between the two extremes can be shown. We are not convinced that by such manipulations we arrive at accurate or meaningful dates. Our own inclination is to assume that no important laboratory errors exist in the determinations, and, further, since stratigraphically the samples are contemporaneous, the proper way to judge the five dates is as a group and that the arithmetic average of the five dates which is 2,770²⁹ years, or 814 B. C., is a close approximation to the actual age of the Phase I constructions at La Venta. The application of the formula for determining the error of the average (Wauchope, 1954 pp. 19-20) yields a plus or minus error of 134 years. There is a better than even chance that the true date for Phase I lies between 680 B. C. and 948 B. C., or 2,636 and 2,904 years ago. We therefore select the round number date of 800 B. C. (2,756 years ago) for the Phase I constructions at the La Venta site.

The single Phase II sample (M-530) gives a date ($2,760 \pm 300$ years or 804 B. C. ± 300) which is not significantly different from the

²⁹ This figure was erroneously given as 2,700 years in an earlier publication of the La Venta radiocarbon dates (Drucker, Heizer, and Squier, 1957, p. 72).

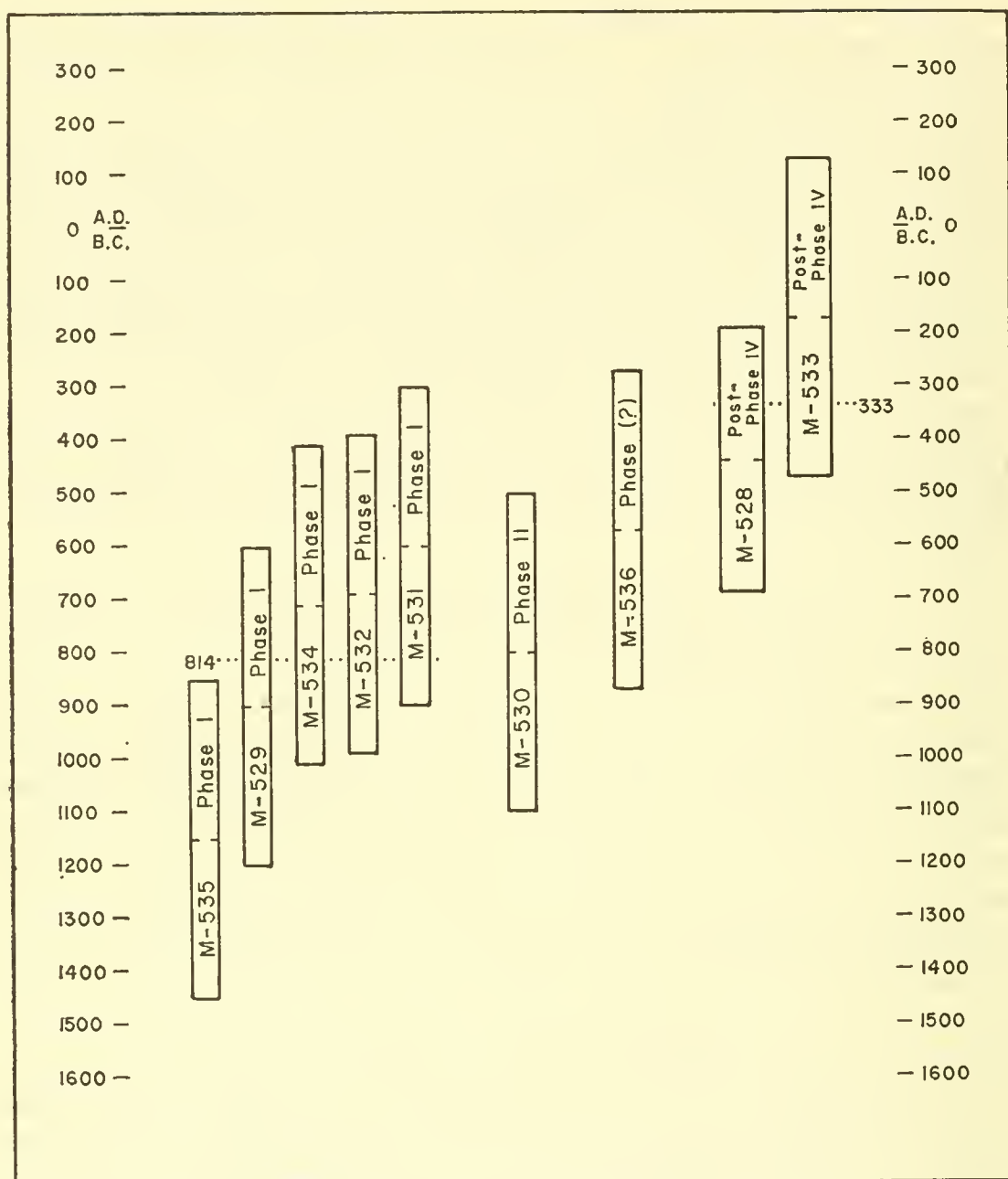


FIGURE 79.—La Venta radiocarbon dates. Each date shown with one sigma range.

average for the five Phase I dates. We note that this date falls in the mid-range of the five Phase I dates; this is not necessarily significant as to the actual age of the Phase II sample, but it is not out of line with its expectable date according to its stratigraphic position.

The sample (M-536) taken from the base of the Great Pyramid cannot be directly related to the construction phase sequence worked out in the Ceremonial Court. The Pyramid stands isolated from the Court and there is no direct stratigraphic connection between the two components. The long trench dug by us through the North Platform of the Pyramid could not be carried to the base of the structure. Furthermore, it is our impression that the trench was excavated into what may be considered the outermost shell of the Pyramid, that is to say a

late stage of enlargement rather than the hearting of the original structure. This impression depends upon the assumption that the Pyramid, like other structures in the site, was built up in a series of enlargements, but of this we have no direct evidence. The date of sample M-536 is $2,530 \pm 300$ years ago (B. C. 574 ± 300) and is generally agreeable with the latter rather than the earlier half of the site's history. This might indicate a Phase III or IV activity represented by this layer.

No charcoal samples definitely attributable to Phase III or IV were collected. We are, however, in a position to provide an estimated date for Phase IV. Two samples (M-528 and M-533) were collected from the lowermost levels of the surface drift sand overlying the Ceremonial Court constructions. The charcoal samples contained in the upper drift sand appear to have been deposited shortly after the drift sand began to accumulate without interruption. The arithmetic average of samples M-528 and M-533 is 2,265 years ago (309 B. C.). Using the method of determining the weighted average (Wauchope, 1954), we derive the figure $2,289 \pm 195$ years ago (B. C. 333 ± 195). We estimate that about a century intervened between the end of the Phase IV occupation and the deposition of the charcoal in the thin layer of drift sands which had by now accumulated. We therefore place the end of Phase IV as falling within the period 450 to 325 B. C., probably near the early part of that span. In round numbers, we have selected the date 400 B. C. as marking the termination of the use of the Ceremonial Court by its builders. The radiocarbon dates from La Venta are interpreted by us as indicating that Complex A was constructed and used during approximately the period 800 B. C. to 400 B. C.

POSSIBLE SOCIOPOLITICAL SITUATION AT LA VENTA

The island of La Venta which lies in the swamp lowland of the lower reaches of the Tonalá River can scarcely be considered a particularly desirable location for habitation. Among the reasons why La Venta island was selected as the site of the ceremonial center of the district may have been precisely its remoteness and general isolation. The elevated area running along the banks of the Tonalá River from Agua Dulce to the river's mouth, or the higher country to the north beyond the potreros surrounding La Venta, or the mouths of the Tonalá and Coatzacoalcos Rivers would seem to have been much more convenient areas which were more central to the districts holding large numbers of people. La Venta was not cluttered up by people. It was a spot where the great ceremonial seat could be placed, and where the important rituals could be conducted by the elite without interference. Although we are accustomed to thinking of the great cathedrals and

religious centers of Europe (e. g., Cologne, Rheims, and the Vatican) as associated with large population centers, there may have been a less intimate connection between economic factors, population numbers and religion in Mesoamerica in Preclassic times. Thus, the Isla de los Sacrificios just off the city of Veracruz (Nuttall, 1910) seems to have been one of these isolated ceremonial centers which was ringed by water, yet lay within relatively easy reach of communication with the nearby occupied districts of the mainland.³⁰ Thus, it can be argued that La Venta was chosen as a site for ceremonialism because of its relative isolation. However, it will be recalled that in the fill of the earliest constructions we found fragments of colored clay flooring layers which must have come from destroyed pre-Phase I structures in the general vicinity. These fragments indicate the earlier use of the locale as a ceremonial site. Thus, if the island had already achieved a significance in ceremonial and ritual, the erection of the La Venta structures we excavated may have been a continuation of the religious regard for the locale comparable to the Christian churches and chapels built atop the mound at Cholula (although probably without the culture change involved in this example). Unfortunately, we cannot even hazard an informed guess as to the nature or location of the pre-Phase I structures, though the series of thin colored clay layers suggests that they came from floors or platform facings of the same general type as the A-2 mound and the various platforms in the Court interior. Our present guess, and it can be no more, is that they were probably small, haphazardly arranged platform mounds in the site area, and that they were destroyed to make room for the integrated plan of Complex A. In other words, it seems likely they were the result of essentially the same religious and ceremonial and even social pattern in a somewhat simpler stage.

It is tempting to speculate on the nature of the society which conceived, planned, built and maintained for four centuries the great La Venta center. The authors of this imposing site we have called "Olmec," but as to who they really were we must confess very little knowledge. Our knowledge of the Olmec of La Venta is limited to the site itself and its contents, and to the results secured by Drucker in 1942 while investigating the scattered deposits of trash accumulation in the vicinity of the site, the excavation of Tres Zapotes and the 1953 Olmec territory survey. The available information, though large in bulk, is mostly limited to one or another aspect of the ritual activities

³⁰ Another parallel in a completely different culture context is the island of Mbau just off Viti Levu in the Fiji group. Here, as observed by Williams (1858, vol. 1, p. 7) "is concentrated the chief political [and religious] power of Fiji." See also, on Mbau, Henderson, 1931, p. 38, pl. opp. p. 38; Gifford, 1952, pl. 30. Compare, also, nearer at hand, the island site of Jaina.

of a vanished people. Our interpretations are admittedly limited, but we here attempt to breathe a little life into our dead data.

Our assignment of La Venta to the Formative or Preclassic period (Wauchope's "Urban Formative") of Mesoamerica is not in agreement with the opinion of some earlier writers who believed that elaborate systems of sociopolitical or socioreligious controls, as manifested by major construction projects, did not come into being until the Classic period. Since 1948, however, evidence has been accumulating that substantial social, economic, and architectural achievements were realized during the Preclassic period (Shook and Kidder, 1952, p. 123; Willey, 1955, pp. 573-575; Wauchope, 1950). Drucker (1947, pp. 2-3) has outlined a reconstruction of La Venta's past which proposes that the ceremonial center was operated by a small resident group of priests, or priest rulers, and their personal servants, the support of this aggregate deriving in the form of tribute from villages in the general vicinity, and with the labor force for the major building efforts being recruited from these villages. Since the island of La Venta is small, containing only 2 square miles of inhabitable and tillable surface, Drucker's proposal seems reasonable, since a definite limit of self-sufficient numbers is imposed by the restricted area, and we cannot suppose that the site was left unattended. We remind the reader of the evidence for frequent resurfacing of structures and the lack of evidence of erosion of surfaces of structures until post-Phase IV times.

To make it possible for a religious elite to maintain the center; to mine the great quantities of serpentine (like those in the "sub-platform offerings" of the Southwest and Southeast Platforms); to transport the stones to the site, and to dress them into the surfaced blocks for use in the jaguar mosaic "masks" and the pavementlike massive offerings; to quarry, transport, and sculpture the numerous altars, stelae, and monuments; to carry in the carefully selected colored clay fills and surfacing materials—in short, the totality of manpower problems posed, and successfully solved, by the sheer effort of building the site with its varied contents, does probably indicate, as Drucker (1947, p. 3) states, "considerable centralization of authority and an elaborate [social] organization."²¹

The fact that the site was in continuous use for about 400 years is a clear indication of quite extraordinary cultural stability and singleness of purpose. The Olmec religion must, at the time of the begin-

²¹ An alternative situation might be argued. Southall (1956, p. 261) says, "Ritual supremacy is often accepted where political control is not, and segmentary states may characteristically be more highly centralized ritually than politically." In one sense Southall's statement is pure semantics. It does not apply in socioreligious systems which called for labor to construct ritual sites—a tenate of pink clay weighs exactly as much whether a "king" or a "high priest" who has the authority says, "Put it on your back and carry it forty kilometers to La Venta Island."

ning of the site, have already been a well-worked-out system which had sufficient meaning, tradition, and purpose to insure its continuance for nearly half a millennium. If we employ the familiar analogy of a hierarchial society in the form of a pyramid with the peasant laborers forming the broad base and supporting the priest rulers at the apex, we can imagine that we would have a situation which, as far as our evidence goes, fits the Olmec La Venta case. Unfortunately, so little is known about other Olmec lowland sites that nothing concrete can be cited to support the proposition. That the society which built and gloried in the La Venta site had an agricultural economy seems quite likely, although we have no direct evidence. That is to say, no actual remains of maize have been found, although the *mano* and *metate*, usually associated with maize agriculture, do occur. That this culture group had master artisans who could sculpture basalt, work jade, and polish the concave metallic mirrors is established; that some small and select group or class acted as caretakers of the ceremonial site seems very probable,³² and that large numbers of workers engaged in the hard labor of excavation, transportation of materials, and construction of mounds can be safely inferred—all this tells us little else than the fact that there was differentiation of labor skills and that some rather elaborate sociopolitical or socioreligious organization was in existence. The trash deposits excavated in 1942 at La Venta can be interpreted as the living refuse of the construction workers and site attendants which was laid down through the time the La Venta site was being built and used. Such ceramics as were found as offerings in the Phase I-IV layers of the site are similar to pottery found in the midden deposits in the near vicinity. The variety of stone materials present in the site (see Appendix 4) is a clear indication of a farflung network of communications and trade by means of which special materials (jade, cinnabar, magnetite, etc.) and building stone (basalt, limestone, greenschist, etc.) were procured in large quantity. Although we can offer no proof, it seems probable that the presence of actual Olmec peoples in the Valley of Mexico (at Tlatilco) and in Morelos State (at Chalcatzingo) may be explained as deriving from a procurement and trading settlement. What commodities these outposts ("trade consulates") were securing can only be guessed at, but

³² If the jade and serpentine figurines in Offering 4 represent priests, and this seems probable in view of the obvious attempt to represent a solemn scene which can be interpreted as a ceremonial event, it occurs to us that the La Venta priests may have been eunuchs. The general body shape and deemphasis of sexual characteristics make these persons appear less vigorously masculine than, for example, the costumed priests in Maya reliefs or the Bonampak murals. Alternatively, the La Venta figurine style may be simply a conventionalization which is peculiar to the culture, although the obvious portrayal of artificially deformed heads, and representation of tooth mutilation argues for an attempt to delineate actual, not ideal, characteristics.

rare minerals such as jade, malachite and cinnabar, or obsidian flake knives, or women, or perishable items serving for ritual paraphernalia (feathers, skins, etc.) may be suggested. Who knows but that the babies held in the arms of priests as depicted on the La Venta altars may not have been sacrificial victims secured from distant peoples? An even more complex rationalization than infants as offerings may likely be true—compare, for example, the legendary account of the birth of Christ or the still surviving belief in the selection of the Dalai Lama in Tibet for religious concepts surrounding infants.

The numerous offerings and sculptured stones (stelae, altars and monuments) at La Venta indicate, by themselves, the sanctity and ceremonial nature of the site. The systems of belief of the society that planned and built this sacred site are architecturally expressed, but the systems themselves elude identification.³³ With more excavation in Olmec sites and with an effort made to gain insight into patterns of belief and behavior, the future will doubtless provide answers which at present we must admit we are unable to recognize.

³³ In illustration we cite the deeply buried serpentine slab "pavements" and the deep stone layers in the Southeast and Southwest Platforms. We are convinced that these are offerings whose placement was a highly ritualized activity. Is it possible that the underlying motivation was to make an offering which was in the form of a tremendous expenditure of human labor? These pavements were never intended to be constructions to be admired by the public or cult devotees, since the evidence is clear that they were covered over as soon as they were deposited. They are not made of precious materials which required deep burial to prevent or discourage their spoliation, nor are they tombs of eminent persons which required protection. They are, in our view, deliberate attempts to deposit in great pits whose excavation and filling required great amounts of labor, impressively large amounts of material which had to be secured at great pains from distant sources. Further, each is associated with the beginning of a major construction phase at La Venta. Taking all these points together, a pattern is obvious, but what the sociological, behavioral and ideological significance of the offering complex was to the Olmec group is in the realm of inference into which our present data do not permit us to venture.

APPENDIX 1
LIST OF OFFERINGS RECOVERED IN 1940-43 AT LA VENTA

Offering No. ^a	Description	Construction Phase ^b	References
1940-A	99 large jade beads (81 subspherical, 18 cylindrical) and 1 subspherical amethyst bead; found in front of Altar 4.	-----	Stirling, 1940 b, p. 325. Stirling, 1943 b, p. 55. LV, p. 166.
1942-A	Contents of Monument 7: 4 jade figurines 1 jade "clamshell" pendant 2 decorated jade rectangles 2 jade hands 1 jade "awl handle" 1 jade zoomorphic object 1 jade heart-shaped object 3 jade "D-shaped" objects 1 jade disk 1 jade stingray-tail tip 6 stingray-tail tips 1 concave mirror 2 obsidian disks 1 shark tooth 9 cylindrical jade beads	IV	Stirling, M. W. and M., 1942, pp. 639-642, 636; pl. I (part). LV, pp. 23-26, 154-157, 162-163, 163, 164, 167, 168-169, 169, 170; figs. 10a, 55 (1-4), 59a, 60p; pls. 1, 46-48, 53, left, and right, b, d, 54, a-d, 56, right, e, 57A, a-g, r.
1942-B	Contents of Monument 6: 1 serpentine figurine 2 jade earspools 2 jade ear pendants 1 jade punch or awl	IV	Stirling, M. W. and M., 1942, pp. 638-639, 640, 641; pl. I. LV, pp. 27, 157, 161, 162, 169; figs. 55 (5); pls. 49, 53, right, a, 56, right, f, g, 57, b.
1942-C	37 jade celts in cruciform arrangement	IV	LV, pp. 27, 165-166; figs. 10, b, 47, 60 g, u, gg, nn.

1942-D	2 jade earspools 1 serpentine figurine fragment Ca. 6 subspherical jade beads Ca. 28 short cylindrical and disk jade beads	IV	Stirling, M. W. and M., 1942, pl. I. LV, pp. 27-28, 157, 161, 166, 167, 168; pl. 56, <i>right, a, c, d.</i>
1942-E	6 serpentine celts found in Southwest Platform.	II	LV, p. 31.
1943-A	Several pottery vessels in upper drift sands in Ceremonial Court.	Post-IV	LV, p. 38; pls. 5, a, 19, d.
1943-B	12 serpentine celts.	IV	LV, p. 39.
1943-C	2 pottery vessels in upper clays in Ceremonial Court.	III	LV, p. 39; pl. 4, b.
1943-D	6 serpentine celts.	III	LV, p. 39; pl. 5, b.
1943-E	20 jade and serpentine celts and 1 concave mirror in cruciform arrangement.	II	LV, 55-56, 164; pl. 8.
1943-F	Offering beneath pile of basalt columns (Feature A-2-b; "Tomb E"): 35 jade celts 2 jade earspools 2 jade ear pendants 2 oval jade pendants 1 tiny jade skull 1 jade disk 1 concave mirror 53 subspherical jade beads (plain, gadrooned, and double biconically perforated) 11 cylindrical jade beads	IV	Stirling, 1943 a; pls. I, IV <i>lower</i> . LV, pp. 27, 64, 161, 162, 165, 167; fig. 48; pls. 13, 55, <i>upper</i> , 56, <i>left</i> , 57, <i>d</i> , 57, <i>A</i> , <i>h-o</i> .

LIST OF OFFERINGS RECOVERED IN 1940-43 AT LA VENTA—Continued

Offering No. ^a	Description	Construction Phase ^b	References
1943-G	Contents of Cist (Feature A-3-a "Tomb C"): 28 jade celts 9 serpentine celts 3 pottery vessels 2 decorated jade earspools 2 jade ear pendants 1 large tubular jade bead 1 jade punch or awl 2 jade "turtle carapace" pendants 1 serpentine figurine 1 decorated obsidian core approximately 110 jade spangles several rock crystal objects 64 subspherical jade beads (plain, gadrooned, and double biconically perforated) 2 decorated cylindrical jade beads	IV	Stirling, 1943 a; pp. 322, 323, 325; pl. II, lower. LV, pp. 70-71, 159-160, 162, 163, 164, 166, 167, 168, 169-170, 171; figs. 22, 29, 41, d, 46, a, b, 48, 55 (12), 59, b, c, 60, k, 1, f, pp; pls. 14, 18, b, 19, f, 52, 53, right, c, 55, lower, 57, c, 57, A, p., q, 58.
1943-H	2 serpentine celts	IV	LV, p. 71.
1943-I	Sandstone "vessel"	IV	LV, pp. 71-72.
1943-J	Small jade mosaic plaque (?)	IV	LV, p. 72.
1943-K	Amber pendant	IV	LV, p. 72.
1943-L	Contents of offering ("Tomb D"): 1 pottery vessel 2 jade earspools 2 jade ear pendants 1 jade disk 1 subtriangular jade object 2 cylindrical jade beads	IV	Stirling, 1943 a; pl. IV upper (part). LV, pp. 72-73, 161, 162, 163, 164; figs. 23; pls. 15, b, 54, e, 57, a.

1943-M	4 serpentine figurines	IV	Stirling, 1943 a, pl. IV <i>upper</i> . LV, pp. 73, 157-159; fig. 55 $\frac{1}{2}$ (8-11); pls. 50, 51.
1943-N	253 serpentine "celts" and 1 concave mirror	IV <i>or</i> Post-IV	LV, pp. 75-76; pl. 15, c.
1943-O	4 or 5 pottery vessels in sands at north flank of Pyramid	IV <i>or</i> Post-IV	LV, p. 76.

^a Offerings recovered 1940-43 are assigned letters prefixed by the year of discovery.

^b Construction phase as determined in 1955 and detailed in this report.

APPENDIX 2
LIST OF LA VENTA STONE MONUMENTS

Monument	Other designations	Primary references	Present location ^a
Stela 1.....	-----	Blom and La Farge, 1926-27, p. 82 and fig. 67 Joyce and Knox, 1931, pl. B Stirling, 1940 b, p. 332 Stirling, 1943 b, p. 50 and pl. 33 LV, figs. 56 and 60	La Venta.
Stela 2.....	Stela A.....	Blom and La Farge, 1926-27, pp. 83-84 and figs. 69-72 Covarrubias, 1946 b, p. 90 and pl. 3 Stirling, 1940 b, pp. 321, 328 Stirling, 1943 a, p. 324 Stirling, 1943 b, pp. 50-51 and pl. 34 LV, figs. 49, 56, and 60	La Venta.
Stela 3.....	Altar 1..... Stela C.....	Blom and La Farge, 1926-27, 82 Covarrubias, 1946 b, p. 90 and pl. 4 Stirling, 1940 b, pp. 324, 327, 326-327 Stirling, 1943 b, pp. 51-52 and pl. 35 LV, figs. 50 and 57	La Venta.
Stela 4.....	-----	Stirling, 1943 b, p. 52 and pl. 33	La Venta.
Stela 5.....	"Unworked boulder".....	Stirling, 1943 b, p. 52 and pl. 33 LV, pp. 34-35	La Venta.
Altar 1.....	-----	Stirling, 1940 b, pp. 327-328, and 328 Stirling, 1943 b, pp. 52-53 and pl. 36 LV, figs. 58 and 60	La Venta.
Altar 2.....	"Jaguar altar".....	Blom and La Farge, 1926-27, p. 84 and fig. 73 Stirling, 1943 b, p. 53 and pl. 38	La Venta.

Altar 3-----		Blom and La Farge, 1926-27, p. 84 and figs. 74, 75 Stirling, 1943 b, pp. 53-54 and pl. 39 LV, figs. 51, 56, 57, 69	La Venta.
Altar 4-----	Altar 1-----	Blom and La Farge, 1926-27, 87 and figs. 77, 78 Joyce and Knox, 1931 Stirling, 1940 b, pp. 329, 323-324 Stirling, 1943 b, pp. 54-55 and pls. 37-38 LV, figs. 56, 58, 60	La Venta.
Altar 5-----	Altar B, "quintuplet altar", Altar 2, "quintuplet altar".	Covarrubias, 1946 b, p. 90 and pl. 2 Stirling, 1940 b, pp. 311, 312, 325-326 Stirling, 1943 b, pp. 55-56 and pl. 40-41 LV, figs. 52, 56, 57, 60	La Venta.
Altar 6-----		Stirling, 1943 b, p. 56 and pl. 38 LV, figs. 56, 60	La Venta.
Altar 7-----		LV, 182-184, pl. 65 and figs. 56, 57, 60	La Venta.
Plaque 1-----		This report, pp. 209, 211	Museo Nacional.
Monument 1-----	Monument A-----	Blom and La Farge, 1926-27, 84-85 and fig. 76 Covarrubias, 1946 b, pp. 89, 98, and pl. 1 Stirling, 1940 b, pp. 310, 311-312, 328 Stirling, 1943 a, p. 331 Stirling, 1943 b, pp. 56-57 and pl. 42 LV, figs. 56, 60	La Venta.
Monument 2-----		Stirling, 1940 b, pp. 331, 332, 333 Stirling, 1943 b, p. 57 and pl. 43 LV, fig. 56	Villahermosa, Tabasco.
Monument 3-----		Stirling, 1943 b, pp. 57-58 and pl. 42 LV, fig. 56	La Venta.

See footnotes at end of table.

LIST OF LA VENTA STONE MONUMENTS—Continued

Monument	Other designations	Primary references	Present location ^a
Monument 4	-----	Stirling, 1940 b, pp. 315, 328 Stirling, 1943 b, p. 58 and pl. 44 LV, figs. 56, 60	La Venta.
Monument 5	"Baby face" -----	Stirling, 1940 b, p. 326 Stirling, 1943 b, p. 58 and pl. 45 LV, fig. 56	La Venta.
Monument 6	-----	Stirling, 1943 a, p. 329 Stirling, 1943 b, p. 59 and pl. 47 Stirling, M. W. and M., 1942, pp. 637-639, 640, 641 LV, pp. 26-27, 178; pl. 2; figs. 9, 58, 60	La Venta.
Monument 7	Tomb B, "stone coffer" -----	Stirling, 1943 b; p. 59 and pl. 48 Stirling, M. W. and M., 1942, pp. 637, 639-643, 636, 638, 649 LV, pp. 23-26; pl. 1; figs. 9, 10	La Venta.
Monument 8	Tomb A -----	Blom and La Farge, 1926-27, pp. 89 and figs. 79-80 LV, pp. 178; pl. 59; fig. 56	Villahermosa, Tabasco.
Monument 9	Idol 1 -----	LV, pp. 178-179; pl. 60; fig. 56	Comalcalco, Tabasco.
Monument 10	-----	LV, p. 179; pl. 60; fig. 56	Finca San Vicente, Tabasco.
Monument 11	"Jaguar monster" -----	LV, p. 179; pl. 61; fig. 58	Finca San Vicente, Tabasco.
Monument 12	"Monkey man" ----- "Monkey statue" -----	Stirling, 1943 a, pp. 325, 327 LV, pp. 179-180; pls. 5, 62; figs. 53, 58, 60 LV, pp. 180-182; pls. 4, 63; fig. 61	Museo Nacional.
Monument 13	-----		La Venta.

Monument 14	-----	LV, pp. 71, 182; pl. 12, <i>b</i>	La Venta.
Monument 15	-----	LV, p. 182; pl. 64; figs. 54, 60	(?)
Monument 16	Mon. 8 ^b -----	LV, pp. 9, 175	La Venta.
Monument 17	Mon. 9 ^b -----	LV, pp. 9, 175	La Venta.
Monument 18	Mon. 10 ^b -----	LV, pp. 9, 175	La Venta.
Monument 19	"Rattlesnake monument"	This report, pp. 197-200	Museo Nacional.
Monument 20	-----	This report, p. 200	La Venta.
Monument 21	-----	This report, pp. 200-201	La Venta.
Monument 22	-----	This report, p. 202	La Venta.
Monument 23	-----	This report, pp. 202-204	Museo Nacional.
Monument 24	-----	This report, p. 204	La Venta.
Monument 25	-----	This report, pp. 204-206	La Venta.
Monument 26	-----	This report, pp. 206-208	La Venta.
Monument 27	-----	This report, pp. 208-209	La Venta.

^a Location as of June 1955.

^b So referred to in LV, p. 9, by error.

APPENDIX 3

TECHNICAL NOTES ON CONCAVE MIRRORS

By JONAS E. GULLBERG

Some of the physical characteristics of the concave mirrors from La Venta are presented in table 1. The mineral identifications given in this table are taken from the determinations presented in Appendix 4.

No verbal description can convey the remarkable technical and artistic quality of the La Venta mirrors. All of the specimens studied are essentially similar, indicating that they must represent a deliberate, tradition-directed form. The dimensions and focal lengths produced were probably influenced to some extent by the blocks of mineral from which they were made. In spite of the diversity in size and curvatures, the uniformity in this group of mirrors is very impressive.

The polish of the specimens is excellent and probably represents the limit of perfection that the material will allow. An attempt to establish the character of the grinding method by microscopic examination failed to show any clear trace of abrasion marks but did show that the polishing method used brings out the microstructure of the mineral. In modern technology, this fine structure is only revealed when polishing and etching are combined. It is possible that polishing by an extremely slow and laborious technique could produce this microcrystalline detail. The photomicrographs, a sample of which are shown in plate 62, *e-g*, show areas of fine and coarse components that determine the quality of reflection for any area.

On superficial examination the mirrors appeared to be spherical and the writer's first assumption was that wooden tools charged with abrasive or a polishing agent were used to produce the concavity. However, a careful study of the curvatures soon revealed a changing radius of curvature from the center to the outer edge of each mirror. The radius of curvature becomes progressively greater as the edge is approached (pl. 62, *a-c*). The effect is almost identical with the modern practice of parabolizing optical reflectors. This outer local flattening improves the performance of a reflector that focuses radiant energy. Such parabolizing is done along both the major and minor axes of the mirrors, so a description of the surfaces must take into account changing curvatures in at least two directions. This

TABLE 1.—*La Venta concave mirrors, measurements, and characteristics*
(Reconstructed measurements indicated by parentheses)

From Offering No.	Museo Nacional Catalog No.	Predominant mineral type	Mirror diameter major axis (mm.)	Mirror diameter minor axis (mm.)	Principal focus major axis (cm.)	Principal focus minor axis (cm.)	Weight (gm.)	Mirror thickness at center (mm.)	Number and type of perforations
9	-----	Magnetite	96	90	24.5	21	391.2	7.9	2 biconical.
11	-----	Ilmenite	117	89	30	16	348.2	7.4	2 conical.
1942-A	13-267	Magnetite	58	46	57	35.5	45.4	4.3	3 conical.
Mound A-2 fill (1942)	13-286	do.	(9)	(9)	(14)	(14)	33.5	(3.8)	Notches only.
1943-E	13-433	Hematite	75	(62)	8	6.5	88.9	3.6	2 conical.
1943-F	13-435	Ilmenite	(91)	(74)	10	8	258.0	8.1	2 biconical.
1943-N	13-438	do.	43	41	11.5	10.5	116.6	6.6	4 biconical, 1 conical.

subtle and almost unbelievable molding of the surface either shows a high degree of sophistication or it inadvertently followed from the type of stroke and pressure used in the hand grinding and polishing. The theory that a characteristic handstroke explains the lesser curvature in the outer zones is contradicted by the sharp clarity of the beginning of the borders of the mirrors (pls. 43-46). The reversed border curvature on these mirrors would seem to demand the use of a tool for grinding and polishing the relatively narrow borders. There are minute, local irregularities in the curvature of the surfaces which suggest that the grinding and polishing were done on small areas at a time. These imperfections detract very little from the general optical quality.

When the focal length of the major and minor axes are quite different, each behaves to some extent as a cylindrical mirror. This is shown in plate 63, where parallel light is focused approximately as a line. The curvature of this line is proportional to the off-axis projection. The number of specimens studied and the similarity in all the curves excludes the possibility of chance accounting for the form of the mirrors. In a culture that lacked metals, the selection of these minerals for the making of mirrors would point to a deliberate choice justified by the favorable semimetallic characteristics of the materials. If the kidney stone form of hematite had been known to these people, its convex curvatures and high degree of smoothness might have served as a model for part of this craft. With the direct evidence available to us, it is impossible to reconstruct the technique used in making these concave mirrors.

After handling these specimens for many hours, the writer feels that they had a very significant place in the culture to which they belonged. They have a gracefulness, dignity, and perfection that makes it hard to think of them as incidental or even only ornamental. The concave side has received a care that would seem to go beyond the standards of even superb lapidaries. The reverse curvature bevel framing the mirrors probably was added to satisfy the esthetic standards of the craftsmen. The backs vary from what might be called a utilitarian finish to polished patches just short of the quality of the mirror surfaces proper.

Since these seem to be optical devices, how were they used? With the sunlight in the Tropics, these mirrors are probably capable of igniting tinder. The smaller mirror (from Offering 1943-E) has the reduced focal length required to maintain the aperture ratio. The question might be asked why these people did not grind a mirror of shorter radius in their larger blocks. But, if the writer's supposition is correct (that they were used to light fires), there is a real physical advantage in not having too short a focal length.

An even more fantastic use could have been as a "camera obscura." These mirrors can throw a picture of the landscape on a surface placed near the principal focus. All that is required is some shading of the screen on which the picture is to be projected. In this case, a mirror of longer focal length would be advantageous. In all speculation on function, it is essential to think in terms of short distance applications. Plane mirrors with sunlight are capable of action at a great distance but these short foci, concave mirrors are only impressive when used near their focal length. The interesting focal patterns and the blotchy patterns projected at greater distances by the varying reflectivity of the mirror surfaces are startling and may have been given some significance by the users of the mirrors. But in the writer's opinion it would be best to regard these capacities of the mirrors as incidental concomitants of certain curvatures and specular powers. With the kind of mastery these people showed in their technique, these focal patterns and reflections would have had a less random character if they were intended for a specific use.

Any concave mirror, when held close to the face, acts as a magnifying device. These mirrors differ somewhat in their effectiveness in forming an image. The mirror from Offering 11, which has a large difference in focal lengths for the major and minor axes, produces a mildly distorted image. The mirror from Offering 1943-E has such a short focal length that it returns little more than a magnified image of the observer's eye.

During a recent visit to Europe the writer examined the obsidian and pyritic mirrors in the British Museum and the Trocadero (Musée de l'Homme) in Paris and discussed with specialists in these institutions the specimens of similar nature in other European museums. All of the specimens listed by Nordenskiöld (1926) were personally examined. The obsidian mirrors are massive rectangular blocks and all are convex. The pyrite mirrors are generally small and convex. It is debatable whether some of the pyrite objects should even be classified as mirrors. No mirror seen or reported to me in Europe even remotely resembles the concave mirrors from **La Venta**.

APPENDIX 4

THE PETROLOGY OF ARTIFACTS AND ARCHITECTURAL STONE AT LA VENTA

By GARNISS H. CURTIS

The materials used for artifacts and construction stone at La Venta may be readily categorized into three principal rock types: metamorphic, volcanic, and sedimentary.

A wide variety of textural types occur in the metamorphic group, but previous to metamorphism most of these rocks were of igneous origin. Some of them, because of their coarse-grain size, might once have been intrusive rocks—serpentine certainly was—but most are fine-grained and probably of extrusive volcanic origin. The mineralogy of these metavolcanic rocks is simple. Most are composed of aggregates of varying proportions of not more than three minerals from the following group: albite, epidote, zoisite, actinolite, ferrotremolite, chlorite, muscovite, antigorite, pumpellyite, and stilpnomelane (?). This mineral assemblage as a whole is indicative of metamorphism under uniform physical conditions of low intensity. Rocks that have been recrystallized under such conditions belong to the greenschist facies of regional metamorphic type. Nephrite and jadeite, from which some of the artifacts were made, indicate conditions of higher grade metamorphism or perhaps of metasomatism. It is probable, however, that these too came from the same general area of metamorphic rocks as the other specimens. Similar occurrences of jadeite and nephrite in greenschist provinces are to be found elsewhere in the world, California being an example.

In terms of the location of the source of these rocks, some though not much significance attaches to this restricted grouping of metamorphic type. Metamorphic rocks belonging to the greenschist facies usually occur in narrow (20—30 km.) belts that are elongated (hundreds of kilometers) parallel to the axes of fold-mountains. Deep denudation is required to expose them, hence they are generally pre-Tertiary in age. Such a belt of metamorphic rocks, including associated granitic intrusions, occurs in Mexico starting approximately 100 kilometers south of La Venta and extending westward almost 600 kilometers. These rocks are believed to be Paleozoic in age.

The principal volcanic rock used at La Venta is olivine basalt, often hornblende bearing. Hornblende pyroxene andesite was also used, though sparingly. In all of the olivine basalts, augite is a major constituent, and it is also present in the one specimen of hornblende andesite examined. In only one of the basalts observed is olivine sufficiently abundant to classify the rock as picrite. Plagioclase is, of course, present in all of the volcanic rocks, but it forms large well-defined phenocrysts only in the hornblende andesite.

Marly limestone, friable micaceous feldspathic sandstone, and black quartzite comprise the sedimentary rocks utilized.

Most of the rocks examined show more or less effect of weathering. In some specimens weathering has converted all of the primary silicate minerals to clay minerals to a depth of 1.2 mm. Such surface alteration is apparently of postoccupation date at La Venta, i. e., has occurred in the last 2 millennia.

There would appear to be nothing unusual about the utilization of the various rock types by the La Ventans were it not for the fact that two of them, the metamorphic and volcanic, are not to be found within a distance of many kilometers from La Venta. The local limestone and sandstone of Miocene age outcropping in the vicinity of La Venta should have been satisfactory for some constructional needs, although it is reasonable that the La Ventans would seek more durable material than the poorly consolidated local rock for their tools. The marly limestone used for flagging (in Mound A-5, the Northeast Entryway, and elsewhere) has been identified by Ing. Hugo Contreras of Petroleos Mexicanos as being without doubt from the Chinameca limestone outcropping in a small hill east of the village of Chinameca, 60 km. west of La Venta (fig. 80). The surprising thing is that not only did the La Ventans have to go great distances for their two harder rock types, and to two widely separated localities for each of them, but they brought back tremendous quantities of both. The nearest volcanic rocks to La Venta outcrop 60 km. to the west in the vicinity of San Martin Tuxtla, where eruptions of basaltic lavas have occurred in historic times; while the nearest metamorphic rocks outcrop in the hills due south of La Venta almost 100 km. away. Only near Oaxaca, 290 km. to the southwest, do both volcanic and metamorphic rocks occur in proximity. Mystery surrounds the sources of both rock types but particularly the volcanic rocks when it is learned that the olivine basalt lavas at San Martin Tuxtla are essentially hornblende-free. Friedlaender and Sonder (1924) in their description of the lavas in the vicinity of San Martin Tuxtla mention only one locality near Lake Catemaco where hornblende andesites occur, and here the rocks are all highly altered and clearly not the source of the material at La Venta. As a further

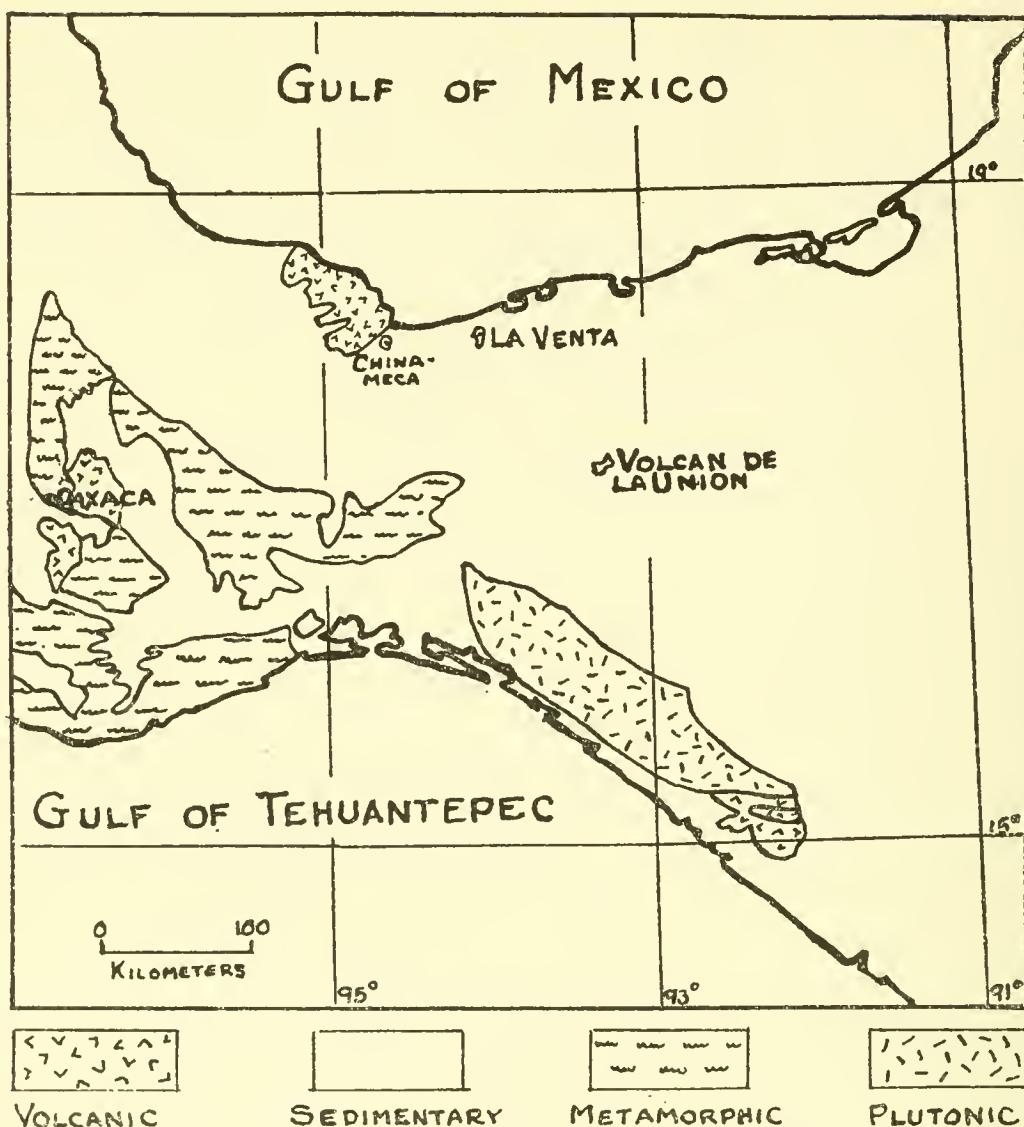


FIGURE 80.—Geologic map of southeastern Mexico.

check on this likely source locality, five specimens were collected from the general region by Ing. Hugo Contreras which all proved to be pyroxene-rich olivine basalts similar to those described by Friedlaender and Sonder. Specimens E and N in the series examined by the late William F. Foshag, a list of which is appended at the end of this report, may have had their source in this region but probably no others of the ones examined.

The next nearest source of volcanic rocks to La Venta is at Volcan de la Union on the Mescalapa River, 125 km. southeast. Six samples collected from this locality by Ing. Hugo Contreras proved to be coarse-grained hornblende andesites containing no trace of olivine or pyroxene. Despite the lack of pyroxene, these rocks are similar in general appearance to the hornblende andesite from Monument 14 and it is possible that this monument, at least, came from there, but the source of the hornblende basalts must be elsewhere.

As to why the La Ventans desired or needed two hard and durable types of rock for monuments and construction, there are no obvious geologic reasons. The metamorphic rocks are somewhat more fibrous than the basalts, hence are probably tougher and less brittle. However, the basalts are composed of harder minerals, which might for many purposes be a more desirable characteristic. Probably esthetic reasons dictated the two choices: the basalts are equigranular and gray to black, while the metamorphic rocks are generally streaked in texture and are varicolored shades of green.

The metallic parabolically concave mirrors of superb polish and craftsmanship almost certainly had their origin in deposits within the metamorphic and granitic province to the south. They were carved from large pieces, 3 to 6 inches in diameter, of ores of iron and titanium. The unpolished sides of the mirrors have the appearance of stream rounded boulders, and it is probable that the La Ventans obtained their material from streams after it had been eroded from its primary source. Optical and Knoop hardness tests (Robertson and Van Meter, 1951) were used to identify the minerals composing the mirrors whose descriptions follow. Further data on the optical qualities of these mirrors are given in Appendix 3. (For information on the other artifacts in the offering from which the mirrors came, see the description of Offerings 9 and 11 in the main body of the present report and Appendix 1.)

<i>From Offering No.</i>	<i>Description</i>
9-----	This is a coarse-grained aggregate of 3 minerals: magnetite, hematite, and ilmenite, of which magnetite is the most abundant and hematite the least. The hematite occurs in streaks which envelop grains of magnetite, suggesting that the specimen is of hydrothermal, i. e., vein origin. The Knoop hardness number of the ilmenite is 740-920, of the magnetite 525-555, of the hematite 330-465.
11-----	Composed of a fine-grained aggregate of optically anisotropic crystals which are weakly magnetic (ilmenite). Under high magnification exsolution intergrowths of hematite comprising about 10 percent of the specimen may be observed. Knoop hardness number of the ilmenite is 740-780, of the hematite 480.
1942-A-----	The specimen is highly magnetic and is composed almost entirely of coarse grains of magnetite whose Knoop hardness number is 525.
Mound A-2 fill (1942).	Same as specimen from Offering 1942-A although the lower Knoop hardness number of the magnetite (485) suggests that they were not cut from the same block.
1943-E-----	Lamellar blades of hematite constitute the entire specimen. Knoop hardness number of the hematite is 600.

<i>From Offering No.</i>	<i>Description</i>
1943-F-----	Composed of a fine-grained aggregate of optically anisotropic crystals which are weakly magnetic and have a Knoop hardness number of 680 (ilmenite). Under high magnification exsolution intergrowths of hematite comprising about 10 percent of the specimen may be observed. Very similar in properties to the specimen from Offering 11 although grain size of the hematite is smaller.
1943-N-----	Same as the specimen from Offering 11 though grain size is coarser. Knoop hardness number of the ilmenite is 870-920.

Identification was made of the materials from which a number of the nonjade celts found in 1955 in Offering 2 were manufactured. These are given in the following descriptions. Specimens bearing the prefix 4A occurred in the upper layer of celts in Offering 2; those numbered 4B were found in the lower layer of celts.

<i>Field catalog No.</i>	<i>Description</i>
4A-1-----	Greenschist: composed essentially of pumpellyite.
4A-2-----	Pyroxene andesite: composed of phenocrysts of plagioclase, augite and hypersthene in a glassy matrix. Weathering extends to a depth of 1.2 mm.
4A-3-----	Metaandesite or metadiorite: fine-grained equigranular rock composed of approximately equal amounts of albite, actinolite, and chlorite.
4A-11-----	Serpentine: almost wholly composed of antigorite.
4A-18-----	Metaandesite or metadiorite: similar to 4A-3.
4A-21-----	Serpentine: antigorite.
4A-31-----	Metaandesite tuff: small fragments of andesite in a matrix of crystals of plagioclase, quartz, chlorite.
4B-15-----	Metadiorite: large phenocrysts of albite in a finer grained matrix of ferrotremolite and white mica (muscovite ? 2V=0).
4B-17-----	Metadiorite: similar to 4B-15 except there is no mica and albite is greatly in excess of ferrotremolite.

A series of rock specimens taken from La Venta monuments and stone constructions were submitted for identification to the late William F. Foshag of the United States National Museum by Philip Druker. It was originally planned that Dr. Foshag would report on these materials himself. After Dr. Foshag's untimely death, his preliminary list of identifications was turned over to me for use in this report. I am reproducing his list here in its original form.

<i>Specimen</i>	<i>Description</i>
A.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Metadiorite: albite-zoisite, actinolite.
B.....	Monument 14. Hornblende andesite: phenocrysts of plagioclase, black hornblende and green augite in a fine-grained ground mass.
C.....	Limestone "flagging" in Mound A-5. Marly limestone; could be from coastal plain nearby.
D.....	Stone cist (Feature A-3-a) in Mound A-3. Micaceous sandstone: angular grains of feldspars and quartz with both black and white mica.
E.....	Basalt column in Southwest Platform. Picrite: an olivine basalt with abundant phenocrysts of olivine in a fine-grained ground mass of pyroxene and plagioclase.
F.....	Squared basalt facing block from Southwest Platform. Basalt or andesite: abundant plagioclase and hornblende phenocrysts, some pyroxene. The hornblende is altered.
G.....	Monument 22. Metadiorite: albite, epidote, chlorite, muscovite.
H.....	Phase II facing block in Southwest Platform. Muscovite-actinolite schist, a metamorphic rock.
I.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Metadiorite: mostly composed of albite with minor amounts of muscovite and actinolite.
J.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Actinolite-epidote gneiss, a metamorphic rock.
K.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Black quartzite: angular and poorly sorted grains of quartz.
L.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Actinolite amphibolite: almost wholly composed of actinolite. A metamorphic rock.
M.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Muscovite-actinolite schist, a metamorphic rock.
N.....	Plaque recovered from road fill approximately one mile south of Pyramid. Olivine basalt: large phenocrysts of augite, abundant phenocrysts of plagioclase, dark microcrystalline ground mass. The olivine is altered around edges to iddingsite.
O.....	Rock from "rough stone pavements" underlying the jaguar mosaic mask in the Southwest Platform. Metadiorite?: albite, chlorite, epidote.

APPENDIX 5

THE RANGE OF THE JAGUAR IN MEXICO

By A. STARKER LEOPOLD

The jaguar (*Felis onca*) is a resident of the tropical forests of Mexico. Records of occurrence, and the presumed normal range of the species, are shown in the accompanying map (fig. 81).

It will be noted that jaguars have been recorded far from their normal range, in the temperate interior and on the northwestern deserts. These extralimital occurrences represent wandering males that take off from home, for reasons unknown, and travel through unfriendly terrain presumably until death. Such vagrant male jaguars have been recorded in all the southwestern states of the United States, as well as in temperate Mexico. But their occurrence should not obscure the normal or natural pattern of distribution.

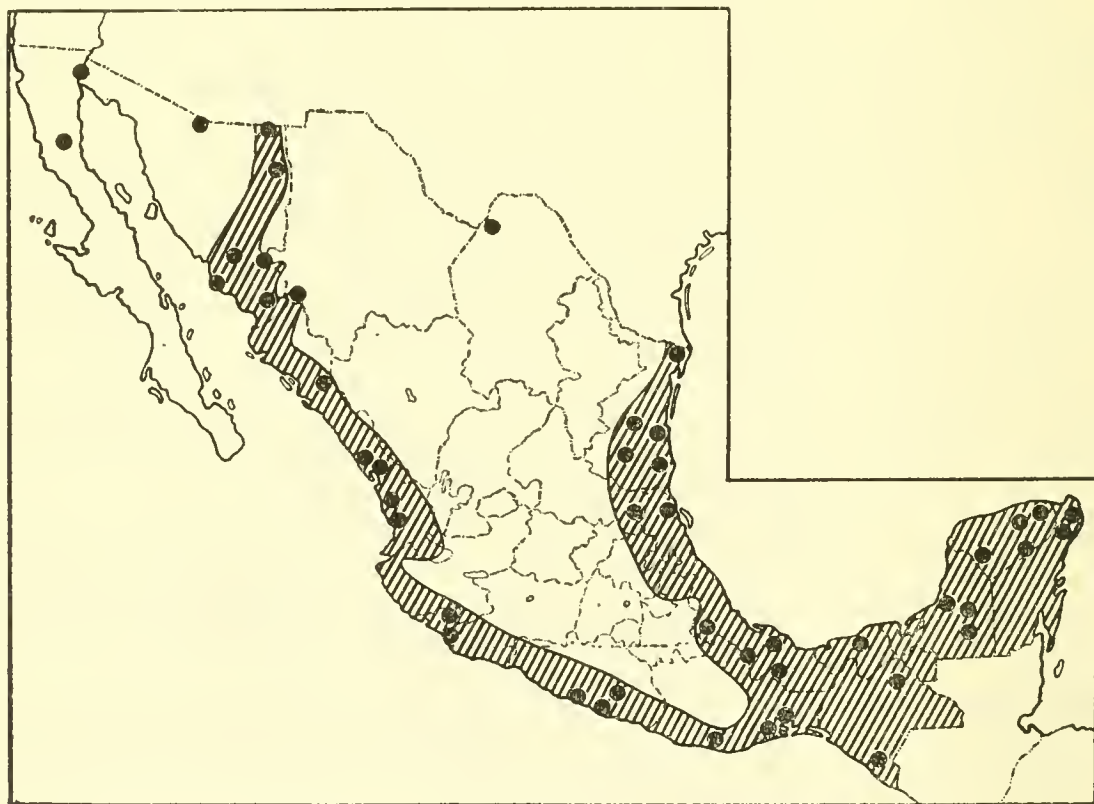


FIGURE 81.—Distribution of the jaguar in Mexico. Normal range is hachured area; solid spots are recorded occurrences.

The realm of the jaguar is the dense tropical *monte*. The big cat is most at home in the tall, cool forests along streams and water-

courses that traverse the coastal lowlands. Highest densities of jaguars encountered during the Mexican game survey (conducted intermittently, 1944-57) were along the heavily forested flatlands and foothills of southern Sinaloa, the swamps of coastal Nayarit, the remaining uncut forests along the Gulf Coast as far east as central Campeche, and the great rain forests of northern Chiapas. Presumably other parts of the coastal lowlands, now cleared, sustained equal numbers of jaguars originally.

LITERATURE CITED

ARMILLAS, PEDRO.

1948. A sequence of cultural development in Meso-America. *In* A Reappraisal of Peruvian Archaeology, pp. 105-112. Wendell C. Bennett, Ed. Mem. Soc. for Amer. Archaeol. No. 4. (Amer. Antiq, vol. 13, No. 4, pt. 2.) Menasha, Wis.

BERLIN, HEINRICH.

1953. Archaeological reconnaissance in Tabasco. Carnegie Inst. Washington, Dept. of Archaeology. Current Reports, No. 7, pp. 102-135. Cambridge.
1956. Late pottery horizons of Tabasco, Mexico. Carnegie Inst. Washington Publ. 606, pp. 95-153. Contrib. Amer. Anthropol. and Hist. No. 59. Washington.

BLOM, FRANS, and LA FARGE, OLIVER.

- 1926-27. Tribes and temples. Tulane Univ., Middle Amer. Res. Ser. 2 vols. New Orleans.

BOGGS, STANLEY H.

1950. "Olmec" pictographs in the Las Victorias Group, Chalchuapa Archaeological Zone, El Salvador. Carnegie Inst. Washington, Notes on Middle Amer. Archaeol. and Ethnol., Div. Hist. Res., vol. 4, No. 99.

BRAINERD, G. W.

1951. Early ceramic horizons in Yucatan. *In* The Civilizations of Ancient America, Selected Papers of the 29th Int. Cong. Amer., pp. 72-78. Chicago.

CASO, ALPHONSO.

- 1947 a. Resumen del informe de las exploraciones en Oaxaca durante la 7a y la 8a temporadas 1937-1938 y 1938-1939. Int. Cong. Amer., 27th, Mexico, 1939, vol. 2, pp. 159-187. Mexico.
- 1947 b. Calendario y escritura de las antiguas culturas de Monte Albán. Mexico.
1953. New World culture history: Middle America. *In* Anthropology Today, pp. 226-237. A. L. Kroeber, Ed. Chicago.

COE, M. D.

1957. Cycle 7 monuments in Middle America: A reconsideration. Amer. Anthropol. vol. 59, pp. 597-611.

COVARRUBIAS, MIGUEL.

1942. Origen y desarrollo del estilo artistico "Olmeca." *In* Mayas y Olmecas, pp. 46-49.
1943. Tlatilco: Archaic Mexican art and culture. DYN, Rev. Modern Art, Nos. 4-5, pp. 40-46. Mexico.

COVAREUBIAS, MIGUEL—Continued

1944. La Venta—Colossal heads and jaguar gods. *DYN, Rev. Modern Art*, No. 6, pp. 24–33. Mexico.
- 1946 a. El arte "Olmeca" o de La Venta. *Cuadernos Americanos Año 5*, Julio-Agosto, pp. 153–179. Mexico.
- 1946 b. . . . Mexico south, the Isthmus of Tehuantepec. New York.
1948. Tipología de la industria de piedra tallada y pulida de la Cuenca del Río Mezcala. *El occidente de Mexico. Cuarta reunión de mesa redonda sobre problemas antropologicos de Mexico y Centra America*, pp. 86–90. Mexico.
1950. Tlatilco: el arte y la cultura preclasica del Valle de Mexico. *Cuadernos Americanos Año 9 (vol. 51), No. 3*, pp. 149–162. Mexico.
1954. El águila, el jaguar y la serpiente. *Tlâtoani, época 2, Nos. 8–9*, pp. 65–70. Mexico.
1956. Mezcala, ancient Mexican sculpture. André Emmerich Gallery. New York.

DRUCKER, PHILIP.

- 1943 a. Ceramic sequences at Tres Zapotes, Veracruz, Mexico. *Bur. Amer. Ethnol. Bull.* 140.
- 1943 b. Ceramic stratigraphy at Cerro de las Mesas, Veracruz, Mexico. *Bur. Amer. Ethnol. Bull.* 141.
1947. Some implications of the ceramic complex of La Venta. *Smithsonian Institution Misc. Coll.*, vol. 107, No. 8.
- 1952 a. La Venta, Tabasco: A study of Olmec ceramics and art. *Bur. Amer. Ethnol. Bull.* 153.
- 1952 b. Middle Tres Zapotes and the Pre-Classic ceramic sequence. *Amer. Antiq.*, vol. 17, No. 3, pp. 258–260.
1955. The Cerro de los Mesas offering of jade and other materials. *Bur. Amer. Ethnol. Bull.* 157, *Anthrop. Pap. No.* 44.

DRUCKER, PHILIP, and CONTRERAS, EDUARDO.

1953. Site patterns in the eastern part of Olmec territory. *Journ. Wash. Acad. Sci.*, vol. 43, pp. 389–396.

DRUCKER, PHILIP, and HEIZER, ROBERT F.

1956. Gifts for the jaguar god. *Nat. Geog. Mag.*, vol. 110, pp. 366–375.

DRUCKER, P.; HEIZER, R. F., and SQUIER, R. J.

1957. Radiocarbon dates from La Venta, Tabasco. *Science*, vol. 126, No. 3263, pp. 72–73.

EKHOLM, GORDON F.

1944. Excavations at Tampico and Pánuco in the Huasteca, Mexico. *Amer. Mus. Nat. Hist. Anthrop. Pap.*, vol. 38, pt. 5, pp. 319–512.

FRIEDLAENDER, I., and SONDER, R. A.

1924. Über das Vulkangebiet von San Martín Tuxtla in Mexiko. *Zeitschr. für Vulkanol.*, vol. 7, pp. 162–187, 1923–1924. Hamburg.

GIFFORD, E. W.

1952. Tribes of Viti Levu and their origin places. *Univ. Calif. Anthrop. Rec.*, vol. 13, No. 5.

GREENGO, ROBERT E.

1952. The Olmec phase in eastern Mexico. *Texas Archeol. and Paleon. Soc. Bull.*, vol. 23, pp. 260–292.

GUZMÁN, EULALIA.

1934. Los relieves de las rocas del Cerro de la Cantera, Jonacatepec, Mor. *Anales del Museo Nacional de Arqueol., Hist. y Etnog.*, 5a época, vol. 1, pt. 2, pp. 237–251. Mexico.

HENDERSON, G. C.

1931. *Fiji and the Fijians, 1835-1856.* Sydney, Australia.

HOLMES, W. H.

1897. . . . Archeological studies among the ancient cities of Mexico. *Field Columbian Mus. Publ. 16, Anthropol. Ser. vol. 1, No. 1, pt. 2.*

HUASTECOS, TOTONACOS Y SUS VECINOS.

1953. *Quinta Mesa Redonda de Antropología e Historia, Jalapa, 1951.* *Rev. Mex. de Estudios Antropol., vol. 13, Nos. 2, 3.* Mexico.

JIMÉNEZ MORENO, W.

1942 a. *Relacion entre los Olmecas, los Toltecas, y los Mayas.* *In Mayas y Olmecas*, pp. 19-23.

1942 b. *El enigma de los Olmecas.* *Cuadernos Americanos, vol. 5, pp. 113-145.* Mexico.

JOYCE, T. A., and KNOX, H. A.

1931. *Sculptured figures from Vera Cruz State, Mexico.* *Man, vol. 31, No. 17.* London.

JUDD, NEIL M.

1951. *A new-found votive ax from Mexico.* *Amer. Antiq., vol. 17, pp. 139-141.*

KELEMEN, PÁL.

1943. *Medieval American art.* 2 vols. New York.

KIDDER, A. V.; JENNINGS, J. D.; and SHOOK, E. M.

1946. *Excavations at Kaminaljuyu, Guatemala.* *Carnegie Inst. Washington Publ. 561.*

LV, *see Drucker, Philip, 1952 a.*

MACGOWAN, KENNETH.

1945. *The orientation of Middle American sites.* *Amer. Antiq., vol 11, p. 118.*

MACNEISH, RICHARD S.

1954. *An early archaeological site near Pánuco, Vera Cruz.* *Trans., Amer. Philos. Soc., n. s., vol. 44, pt. 5, pp. 539-641.* Philadelphia.

MAYAS Y OLMECAS.

1942. *Segunda reunión de mesa redonda sobre problemas antropológicos de México y Centro América.* *Sociedad Mexicana de Antropología.* Tuxtla Gutierrez, Chiapas.

MELGAR, JOSÉ M.

1869. *Antigüedades Mexicanas.* *Bol. Soc. Mex. Geog. y Estadística, vol. 1, pp. 292-297.* Mexico, D. F.

1871. *Estudio sobre la antiqüedad y el origen de la Cabeza Colosal de tipo etiopico que existe en Hueyapam.* *Bol. Soc. Mex. Geog. y Estadística, época 2, vol. 3, pp. 104-109.* Mexico, D. F.

MORLEY, S. G.

1946. *The ancient Maya.* Palo Alto, Calif.

NICHOLSON, H. B.

1955. *Native historical traditions of nuclear America and the problem of their archeological correlation.* *Amer. Anthropol., vol. 57, No. 3, pt. 1, pp. 554-613.*

NORDENSKIÖLD, E.

1926. *Miroirs convexes et concaves en Amérique.* *Jour. Soc. des Amér. de Paris, vol. 18, pp. 103-110.*

NUTTALL, ZELIA.

1910. *The Island of Sacrificios.* *Amer. Anthropol., vol. 12, n. s., pp. 257-295.*

PETERSON, FREDERICK A.

1953. Faces that are really false. *Natural History*, vol. 6, No. 4, pp. 176-180.

PIÑA CHÁN, ROMÁN.

1952. Tlatilco y la cultura preclásica del valle de México. *Anales del Instituto Nacional de Antropología e Historia*, 1949-1950, vol. 4, pp. 33-43.

- 1955 a. Chalcatzingo, Morelos. *Dirección de Monumentos Pre-Hispanicos, Informes No. 4*. Mexico.

- 1955 b. Las culturas preclásicas de la cuenca de Mexico. *Fondo de Cultura Económica*. Mexico, D. F.

PORTER, MURIEL NOÉ.

1953. Tlatilco and the Pre-Classic cultures of the New World. *Viking Fund Publs. in Anthropol.* No. 19.

1956. Excavations at Chupícuaro, Guanajuato, Mexico. *Trans. Amer. Philos. Soc.*, n. s. vol. 46, pt. 5. Philadelphia.

ROBERTSON, FORBES, and VAN METER, WILLIAM J.

1951. The Kentron Microhardness Tester, a quantitative tool in opaque mineral identification. *Econ. Geol.*, vol. 46, No. 5, pp. 541-550.

RUBÍN DE LA BORBOLLA, D. F.

1947. Teotihuacan: Ofrendas de los templos de Quetzalcoatl. *Anales del Instituto Nacional de Antropología e Historia*, vol. 2, pp. 61-72. Mexico.

SANDERS, WILLIAM T.

1956. *Review of La Venta, Tabasco: A study of Olmec ceramics and art*, by Philip Drucker. *Amer. Antiqu.*, vol. 21, pp. 436-437.

SAVILLE, MARSHALL H.

1900. A votive adze of jadeite from Mexico. *Monumental Records*, May, pp. 139-140.

- 1929 a. Votive axes from ancient Mexico. *Mus. Amer. Indian*, Heye Foundation, *Indian Notes*, vol. 6, pp. 266-299.

- 1929 b. Votive axes from ancient Mexico, II. *Mus. Amer. Indian*, Heye Foundation, *Indian Notes*, vol. 6, pp. 335-342.

SHOOK, EDWIN M.

1951. The present status of research on the Pre-Classic horizons in Guatemala. *In The Civilizations of Ancient America, Selected Papers 29th Int. Cong. Amer.*, pp. 93-100. Chicago.

1956. An Olmec sculpture from Guatemala. *Archaeology*, vol. 9, pp. 260-262.

SHOOK, EDWIN M., and KIDDER, ALFRED V.

1952. Mound E-III-3, Kaminaljuyu, Guatemala. *Carnegie Inst. Washington Publ.* 596, *Contrib. Amer. Anthropol. and Hist.*, vol. 11, No. 53.

SMITH, ROBERT E.

1955. Ceramic sequence at Uaxactun, Guatemala. *Tulane Univ., Middle Amer. Res. Inst.*, vol. 1, publ. No. 20. New Orleans.

SORENSEN, JOHN L.

1955. A chronological ordering of the Meso-American Pre-Classic. *Middle Amer. Res. Records*, vol. 2, No. 3, Tulane Univ.

SOUTHALL, A. W.

1956. *Alur society; a study in processes and types of domination*. Cambridge, England.

SPINDEN, HERBERT J.

1957. *Maya art and civilization*. Indian Hills, Colo.

STIRLING, M. W.

1939. Discovering the New World's oldest dated work of man. *Nat. Geogr. Mag.*, vol. 76, pp. 183-218.
- 1940 a. An initial series from Tres Zapotes, Vera Cruz, Mexico. *Nat. Geogr. Soc. Contrib. Tech. Pap., Mexican Archeol. Ser.*, vol. 1, No. 1.
- 1940 b. Great stone faces of the Mexican jungle. *Nat. Geogr. Mag.*, vol. 78, pp. 309-334.
- 1943 a. La Venta's green stone tigers. *Nat. Geogr. Mag.*, vol. 84, pp. 321-332.
- 1943 b. Stone monuments of southern Mexico. *Bur. Amer. Ethnol. Bull.* 138.
1955. Stone monuments of the Río Chiquito, Veracruz, Mexico. *Bur. Amer. Ethnol. Bull.* 157, *Anthrop. Pap.* No. 43.

STIRLING, MATTHEW W., and STIRLING, MARION.

1942. Finding jewels of jade in a Mexican swamp. *Nat. Geogr. Mag.*, vol. 82, pp. 635-661.

STRONG, W. D., KIDDER, A., II, and PAUL, A. J. DREXEL, JR.

1938. Preliminary report on the Smithsonian Institution-Harvard University archeological expedition to northwestern Honduras, 1936. *Smithsonian Misc. Coll.*, vol. 97, No. 1.

SWADESH, MORRIS.

1953. The language of the archaeologic Huastecs. *Carnegie Inst., Washington Notes on Middle Amer. Archaeol. and Ethnol.*, vol. 4, pp. 223-227.
1954. Time depths of American linguistic groupings. *Amer. Anthrop.*, vol. 56, No. 3, pp. 361-364.

THOMPSON, J. ERIC S.

1941. Dating of certain inscriptions of non-Maya origin. *Carnegie Inst. Washington, Div. Hist. Res., Theoretical Approaches to Problems*, No. 1.
1943. Some sculptures from southeastern Quetzaltenango, Guatemala. *Carnegie Inst. Washington, Div. Hist. Res. Notes on Middle Amer. Archaeol. and Ethnol.*, vol. 1, pp. 100-112.
1953. Relaciones entre Veracruz y la region Maya. *In Huastecos, Totonacos y sus vecinos*, pp. 447-454.
1954. The rise and fall of Maya civilization. *Univ. Oklahoma. Norman, Okla.*

TOZZER, ALFRED M.

1941. Landa's Relación de la cosas de Yucatán. *Pap., Peabody Mus. Amer. Archaeol. and Ethnol., Harvard Univ.*, vol. 18. Cambridge.

VAILLANT, GEORGE C.

1930. Excavations at Zacatenco. *Anthrop. Pap., Amer. Mus. Nat. Hist.*, vol. 32, pt. 1.
1932. A pre-Columbian jade. *Nat. Hist.*, vol. 32, pp. 512-520, 556-558.

VAILLANT, SUZANNAH B., and VAILLANT, GEORGE C.

1934. Excavations at Gualupita. *Anthrop. Pap., Amer. Mus. Nat. Hist.*, vol. 35, pt. 1.

VALENZUELA, JUAN.

- 1945 a. Las exploraciones efectuadas en Los Tuxtlas, Veracruz. *Anales del Museo Nacional de Arquel., Hist. y Etnog.*, ép. 5, vol. 3, pp. 83-107.
- 1945 b. La segunda temporada de exploraciones en la region de Los Tuxtlas, Estado de Veracruz. *Anales del Instituto Nacional de Antropología e Historia*, vol. 1, pp. 81-94.

VILLAGRA, AGUSTIN.

1947. "Los Danzantes," piedras grabadas del Monticulo "L", Monte Alban, Oax. Int. Cong. Amer., 27th, Mexico, 1939, vol. 2, pp. 143-158. Mexico.

VON WINNING, HASSO.

1947. Representations of temple buildings as decorative patterns on Teotihuacan pottery and figurines. Carnegie Inst. Washington, Notes on Middle Amer. Archaeol. and Ethnol., No. 83.

WAUCHOPE, ROBERT.

1950. A tentative sequence of Pre-Classic ceramics in Middle America. Tulane Univ., Middle Amer. Res. Records, vol. 1, No. 14. New Orleans.
1954. Implications of radiocarbon dates from Middle and South America. Tulane Univ., Middle Amer. Res. Records, vol. 2, No. 2. New Orleans.

WEIANT, C. W.

1943. An introduction to the ceramics of Tres Zapotes, Veracruz, Mexico. Bur. Amer. Ethnol. Bull. 139.

WEYERSTALL, A.

1932. Some observations on Indian mounds, idols, and pottery in the lower Papaloapan Basin, State of Vera Cruz, Mexico. Tulane Univ. Middle Amer. Res. Ser., vol. 4, pp. 23-69.

WILLIAMS, T.

1858. Fiji and the Fijians. 2 vols. London.

WILLEY, GORDON R.

1955. The prehistoric civilizations of nuclear America. Amer. Anthrop., vol. 57, No. 3, pt. 1, pp. 571-593.
1956. *Review of Tlatilco and the Pre-Classic cultures of the New World*, by Muriel Noé Porter. Amer. Antiq., vol. 22, pp. 88-89.

WILLEY, GORDON R., and PHILLIPS, PHILIP.

1955. Method and theory in American archaeology II: historical-developmental interpretation. Amer. Anthrop., vol. 57, No. 4, pp. 723-819.

ADDENDUM

We append here a few belated thoughts on the La Venta site and refer to a limited number of relevant publications which have appeared in print after the main report was in press.

With reference to the La Venta site, we must note recent reports from Mexico that parts of the site have been disturbed by removal of nearly all of the sculptured stelae and altars to the "Parque Olmeca" at Villahermosa, Tabasco. Available photographs show that the La Venta sculptures, with the exception of Stela 3 which was broken into three pieces during transit, have not suffered, and although these sculptures will not be so easily accessible for study, there is no doubt but that they will be more carefully guarded against vandalism and accidental damage. Thus, the reader can read "Villahermosa" for "La Venta" in nearly all cases in the right hand column of Appendix 2. Known exceptions are Stela 5 and Monuments 25, 26, 27 which are presumed to still be at La Venta.

The excellently conceived and beautifully illustrated synthesis by Miguel Covarrubias entitled, "Indian Art of Mexico and Central America" (New York, 1957) appeared while the present report was in press. In this volume Covarrubias presents in full his concept of Olmec as the *cultura madre* of Mesoamerican civilization, his belief in the origin of Olmec in the Guerrero-Oaxaca region of Mexico, and his idea that the "last redoubt" of Olmec culture was at La Venta and other sites in this region. There is no need to repeat here our judgment of Covarrubias' position with respect to Olmec cultural development; this has been set forth in detail in the foregoing pages. Covarrubias has not changed in this most recent volume from the position presented in several of his earlier works.

Several times while writing the main report we discussed the possibility that the Ceremonial Court might, as a unit, represent a gigantic jaguar mask. We finally decided that the idea was not worth serious proposal and failed to mention it. It occurs to us now that others may have the same idea (as, indeed, Stirling recently writes that he and Wedel discussed the possibility in 1943) and we mention it here only to say that we cannot propose it seriously. The same may be said for the idea that the interior of the Ceremonial Court may have been an Olmec ballcourt—we have discussed the possibility and cannot see any evidence for it.

A point not made clear in the description of Mound A-2 is that we do not know the form of this structure. In the main trench where we cut into the remnant of the older constructions which remained after the c-1 and h-1 cuts (shown in fig. 10) were made, the purple-painted edges of the treads ran straight, not curved. We have assumed, though not before so stated, that the A-2 structure was square or rectangular. It is unlikely, judging even from our limited evidence, that it was oval or round. The impression one gets of the A-2 mound from the surface is that it is round, but this shape clearly can derive from the Phase IV red clay cap that was dumped over the older construction. If the A-2 mound is in fact square, we should have checked the corners for clay masks of the E-VII-Sub Uaxactun type.

If the A-2 mound should be excavated again, it occurs to us that other sections of the structure may produce interesting new finds. We suggest this with the idea in mind that although we have continually emphasized the centerline as a locus for dedicatory caches, the A-2 mound clearly contained some off-centerline offerings (e. g., Offerings 9 and 11 and the large gray sand-filled pits shown as b-5 and b-7 in fig. 12) and the presumption is that lateral trenches in this area running at right angles to the centerline might yield finds of interest.

The rectangular serpentine blocks employed in the massive offerings and the jaguar mosaic masks, and the dressed rectangular basalt facing blocks stand as the only suggestions of stone used as construction elements. La Venta site is, of course, a site built of earth, and the dressed stones that occur here strike an off-key note. The paving and facing blocks at La Venta may represent either the beginning of the use of stone in ritual construction among the lowland Olmec, or (and more probably) a special use of dressed stones which were in use elsewhere in the Olmec area as primary construction elements. Whether these hypothetical sites in which stone masonry or dressed stone-faced structures precede or are contemporaneous with La Venta in time cannot be decided, but the fact that such stone blocks are present surely by Phase II times and probably in Phase I (as evidenced by the block-filled trench lying over Feature A-1-h) suggests that when the site was built the manufacture and utilization of such blocks was already well established.

Another speculation which we did not originally consider sufficiently probable to state, but now mention because it may occur to some readers, is that each building phase was associated with the installation of a jaguar mask mosaic. The two masks built presumably at the same time in the Southwest and Southeast Platforms date from Phase II. The isolated and disturbed mosaic mask found by Stirling and Wedel in 1943 (LV, pp. 56-59) between Mound A-3 and the

Pyramid is a second such occurrence, though its phase dating in the site is in doubt. We think it possible that two more such mosaic masks may lie buried in the area north of the Pyramid. These two hypothetical mosaic masks, together with the pair in the platforms and Wedel's Pavement No. 2, would perhaps prove to be assignable to each of Phases I-IV. The tenuousness of the hypothesis is now apparent. At the same time, the known practice of the builders of the La Venta site in making a massive offering at the beginning of each phase does suggest an element of periodicity for the mosaic masks, and it is this possibility which we belatedly mention here. If the La Venta site could have one final season's excavation most of the problems mentioned in the report could be solved, and the result would be that the site would become one of the best known in Mesoamerica.

We have noted in the report that La Venta has not thus far yielded any pieces suggestive of the great "votive axes" which are obviously Olmec inspired (cf. Saville, 1929 a, 1929 b; Judd, 1951), and have concluded that this type postdates the La Venta site occupation. This is pure inference, but has at least the logical basis that since such axes come from the Veracruz-Tabasco area and do not occur at La Venta in the offerings which comprise, in part, collections of jade and other hard stone celts of diverse forms and condition, we might expect at least one sculptured votive ax to have been incorporated in an offering if they were currently being made and used. A similar situation may exist with regard to the stone "masks," from 4 to 8 inches high, and which are clearly of Olmec inspiration (cf. Covarrubias, 1957, fig. 35, pls. 9-10; Kelemen, 1943, pl. 248). Had such items been at all common in the Gulf lowland region when La Venta was being built and used, one would expect that examples would have got placed in the offerings in the Northeast Platform or along the site centerline. Since they were not, and also because these "masks" are suggestive of those made at a later time and usually ascribed to Teotihuacan, we believe that such masks, if and when found in context by reliable excavators, will prove to come from sites of post-La Venta date.

In the report under "Additional Notes on Earlier Finds at La Venta" we mention features noted on two of the three engraved celts found in Offering 1942-C. The third celt of this trio could not be located in the Museo Nacional in January 1957, but is shown by Covarrubias (1957, fig. 34, *center*) and, like the other two, exhibits concave faceting. The three celts can now be said to stand as a unique group because of their engraved ornamentation and the curious concave faceting that is suggestive of the concave ground surfaces of the hematite mirrors from Offerings 9 and 11. On the celt shown by Covarrubias, just referred to, compare the lower element ("knuckle-duster" is Drucker's term in LV, p. 166) to the objects held in the

hands of the sculptured figure from San Lorenzo Tenochtitlan shown by Stirling (1955, pl. 15, *b*) and Covarrubias (1957, fig. 32, *upper*). Covarrubias' drawing, incidentally, contains minor inaccuracies, as comparison with Stirling's photograph will show. It seems worthwhile to here call attention to certain errors of specimen provenience or description that occur in Covarrubias' "Indian Art of Mexico and Central America" (1957). Figure 19 in Covarrubias (1957) is Monument 15 from La Venta, and is shown as a complete piece. This monument was recovered in two pieces and a reconstruction was proposed by Drucker (LV, fig. 54). Since size and layout are problematical, Covarrubias' sketch, which is based on Drucker's reconstruction, should be treated as such. The sculptured monument shown by Covarrubias in plate 15, *lower left*, is not Altar "B" from La Venta, as stated in the legend, but is Monument 2 from the Potrero Nuevo site near San Lorenzo Tenochtitlan (Stirling, 1955, pl. 23). The sculpture shown by Covarrubias in his plate 13, *lower*, is, of course, Monument 19 from La Venta and is not from Piedra Parada, Guatemala, as stated. The error probably derives from substitution of illustrations and failure to correct the legend. These are errors which Covarrubias would no doubt have corrected had he lived to read proof of his book.

Recent work by one of the authors with the archeological materials collected in the 1953 survey that was aimed at defining the southern and eastern boundaries of the Olmec area (Drucker and Contreras, 1953) has established that many of the sites located during this survey do not belong to the La Venta or Lower-Middle Tres Zapotes phases of Olmec culture. A large number of the sites located date from a somewhat later time; none of them can with certainty be assigned to a period antedating the La Venta site. In view of these findings it can be stated that the tentative classification of Olmec sites suggested by Drucker and Contreras must be revised. It is our opinion also that further work must be done before we can be certain of the boundaries of Olmec territory in the Gulf coastal belt during any of the several phases of Olmec history.

Berkeley, California

May 6, 1958



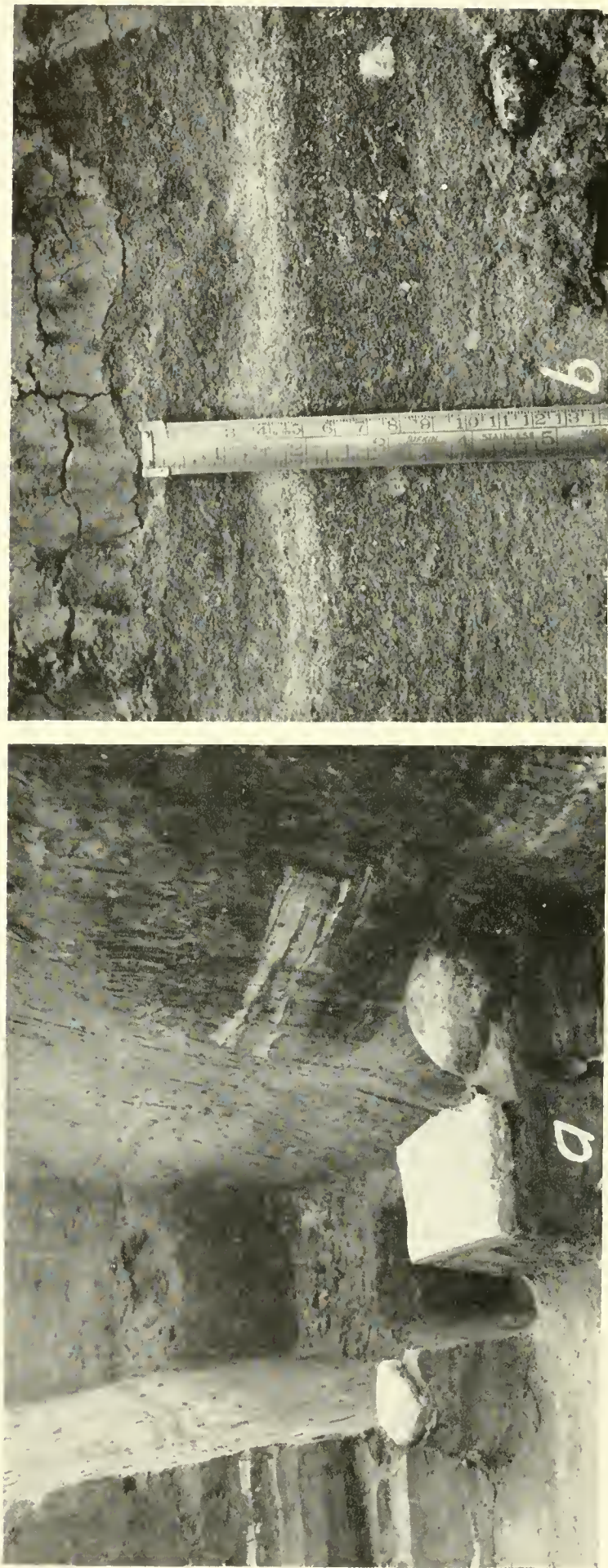
Ceremonial Court. Part of row of basalt columns along east side of Court. Before removal of upper drift sands, only the dark tops of some of the columns protruded above the surface.



General view of Complex A after clearing jungle growth. Photograph taken from top of tomb on Mound A-2 looking south along centerline to Pyramid. Note partly filled 1943 trench and Monument 13 in foreground.



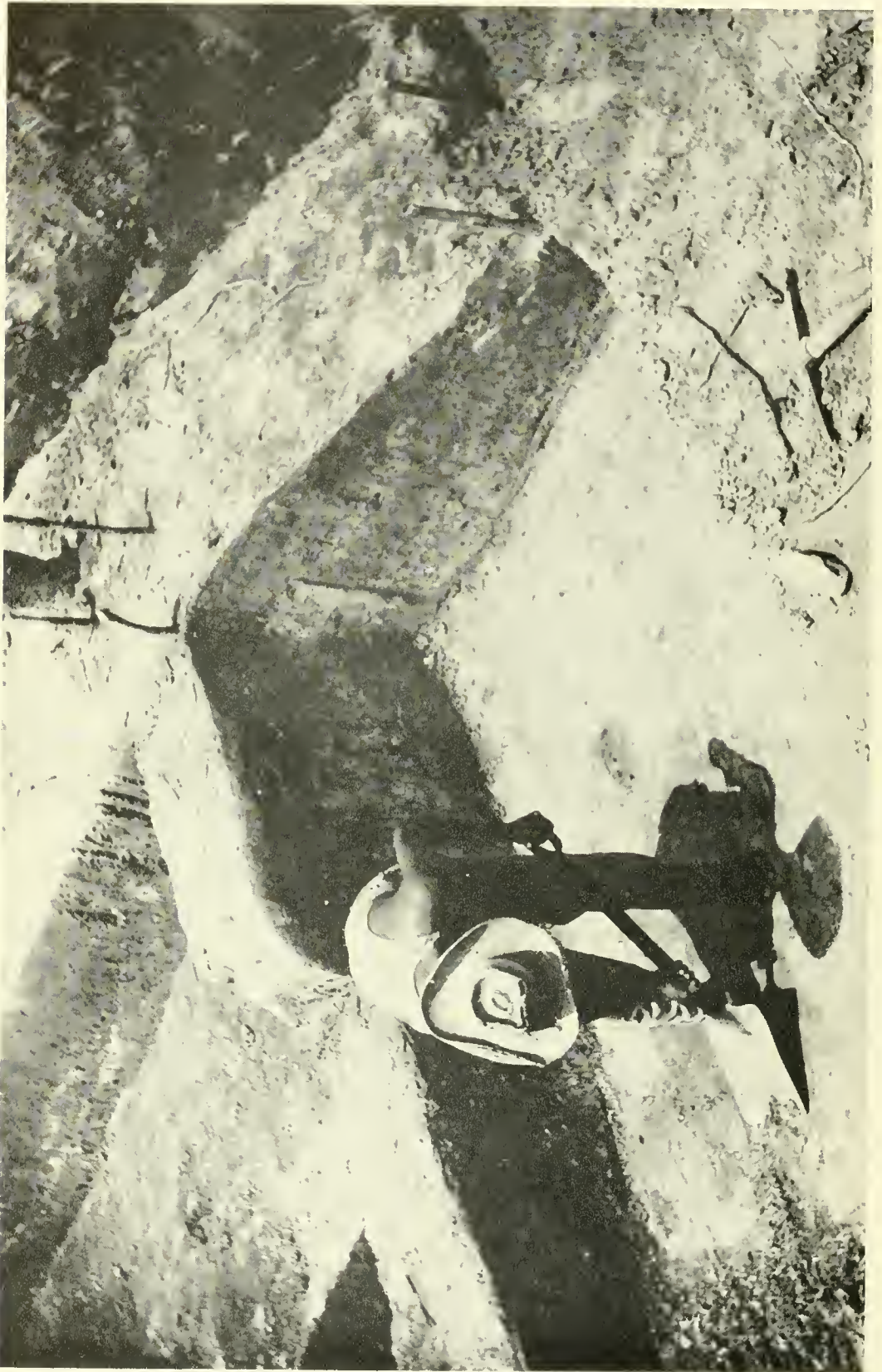
East face of South-central Platform. *a*, Old-rose floor series. *b*, Platform face. *c*, White sandy floor series. *d*, Water-sorted floors.



a, Arrangement of stones in clay block just north of South-central Platform, facing east. *b*, Closeup of old-rose floor series west of Northeast Platform showing contact line with Phase IV red clay cap.



Piles of serpentinite blocks lying in lower drift sands in east half of Court. *a*, Selected pile of complete blocks. *b*, Reject (?) pile of broken blocks. *c*, Same as *b* showing column row and broken column ends lying inside Court enclosure.



Northeast Platform, showing method of excavation and Phase IV surface contour of structure.



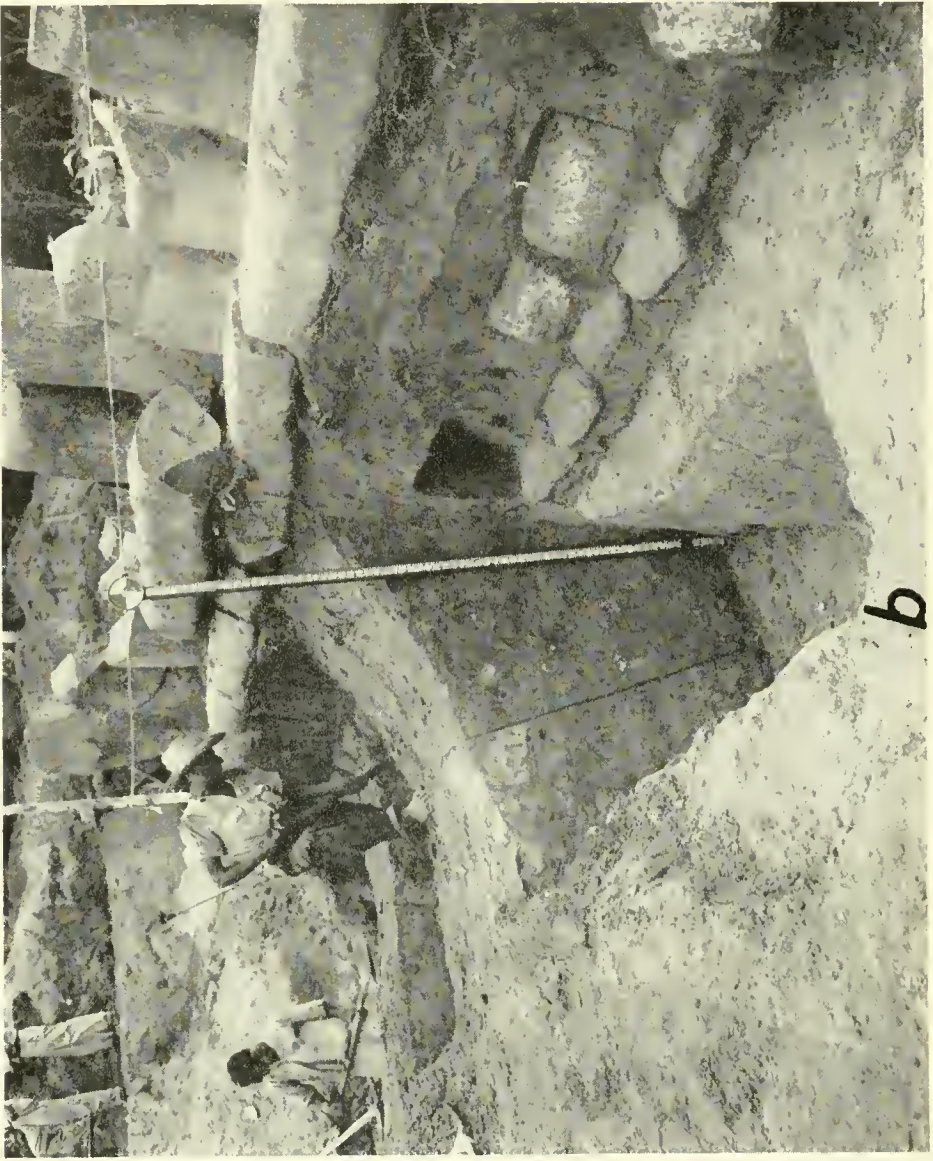
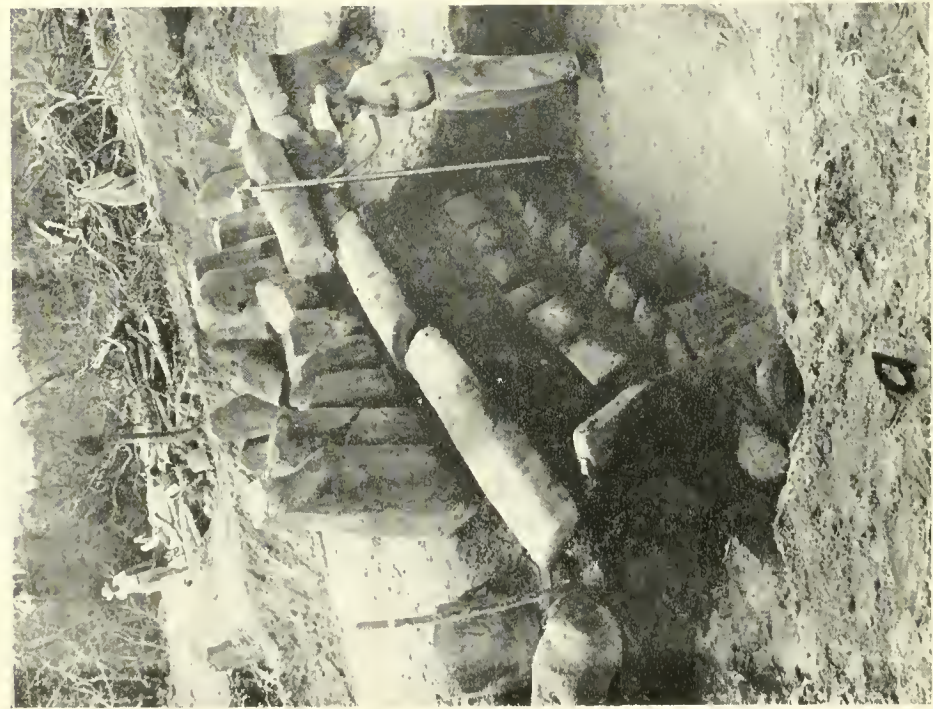
Northeast Entryway, looking southeast from slope of Mound A-2.



Southwest Platform. *a*, Upper surface of platform after removal of upper drift sands (looking north). *b*, Same, looking northeast.



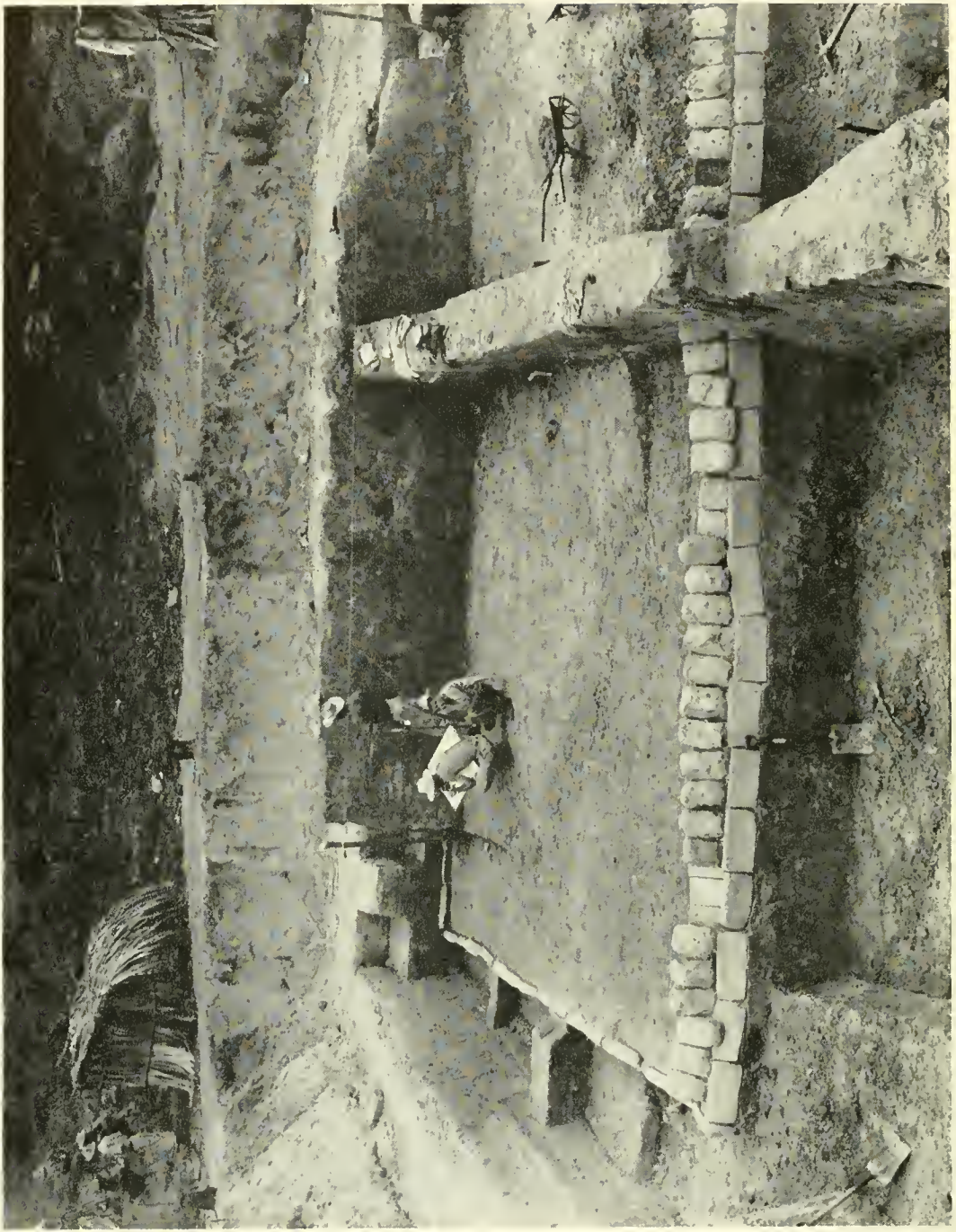
Southwest Platform. *a*, Crew hauling out basalt column with rope slings and poles.
b, Basalt column "steps" at southeast corner of platform.



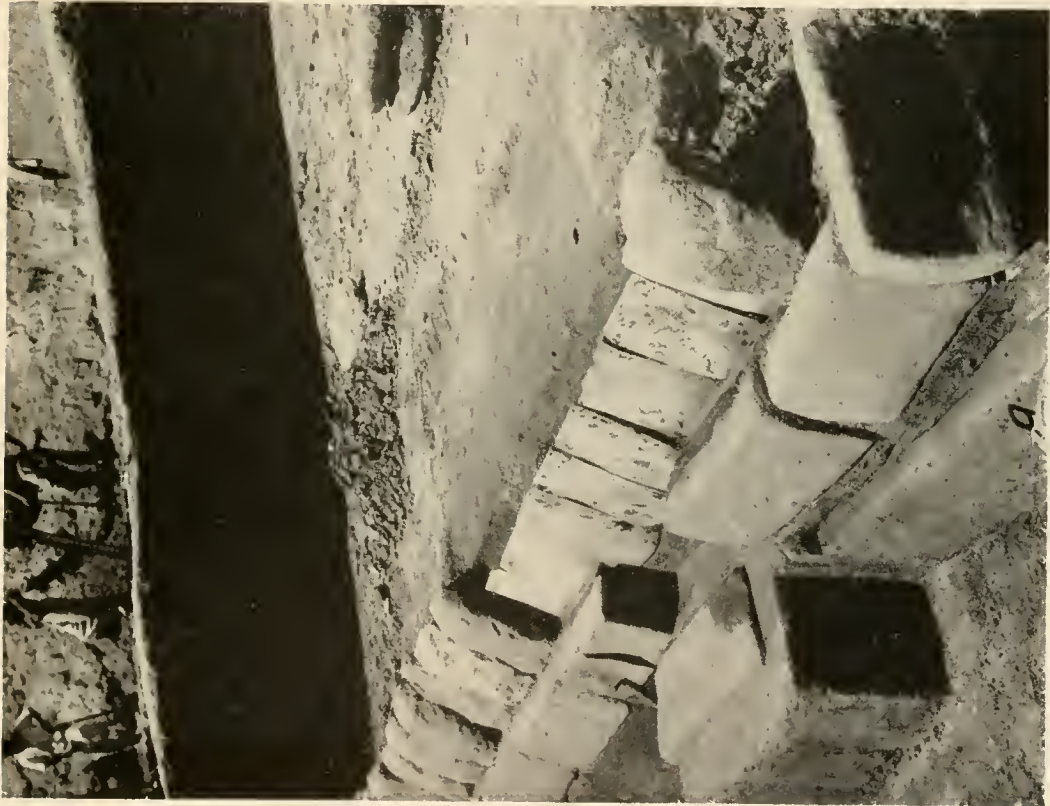
Southwest Platform. *a*, North face (looking west). Note horizontal and vertical columns, upper row of basalt facing-blocks. *b*, Same, looking east. Scored line to left of stadia rod marks north edge of Phase IV trench.



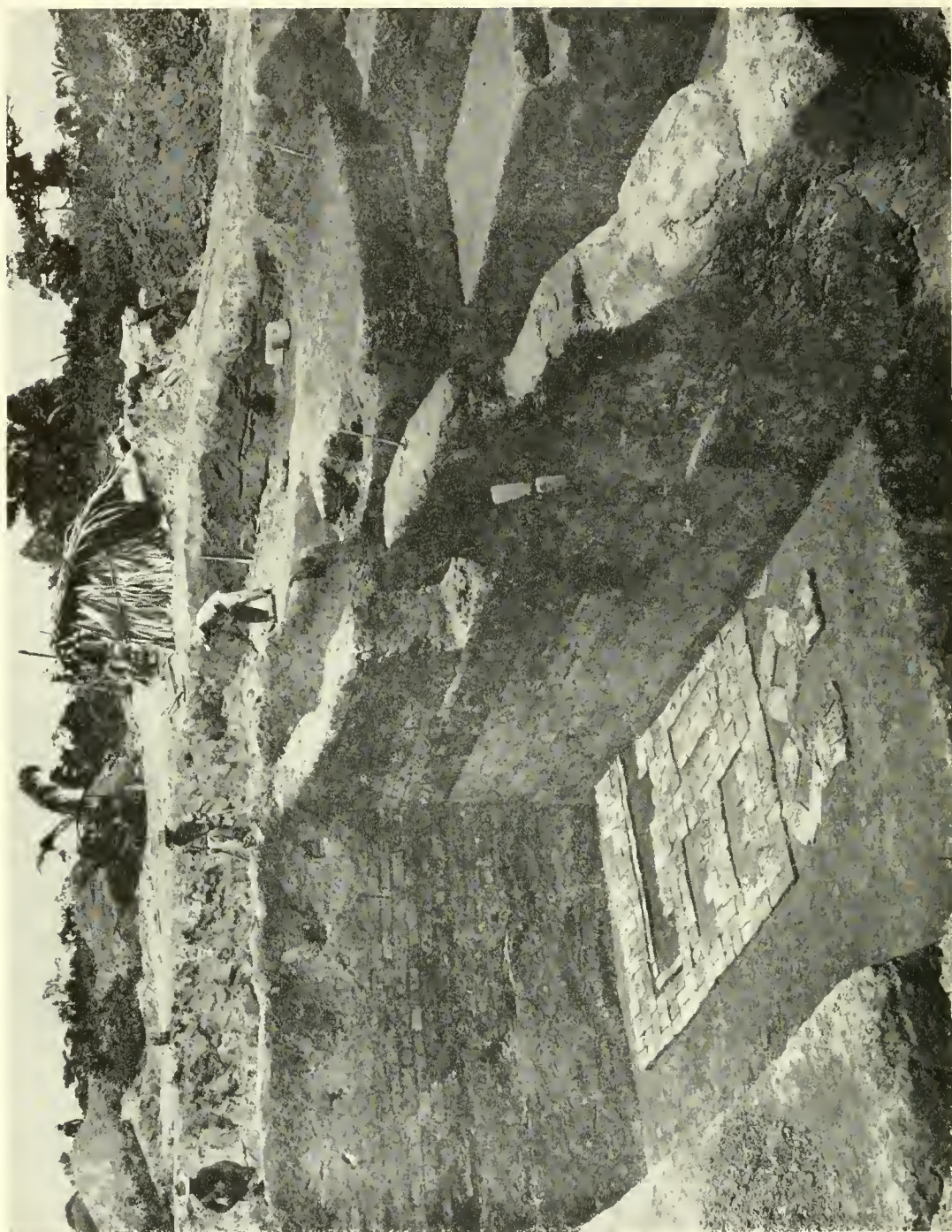
Southwest Platform. *a*, East side of platform showing basalt columns in situ and upper (Phase IV) facing stone arrangement. *b*, One level of adobe in brickwork platform cleared (facing east). Dark rectangle at top of pick handle is test pit dug by Drucker in 1942.



Southwest Platform, looking north. Basalt and serpentine facing-block rectangle marking Phase II foot of platform. Note north-south stratigraphic control wall and brickwork exposed in rear wall.



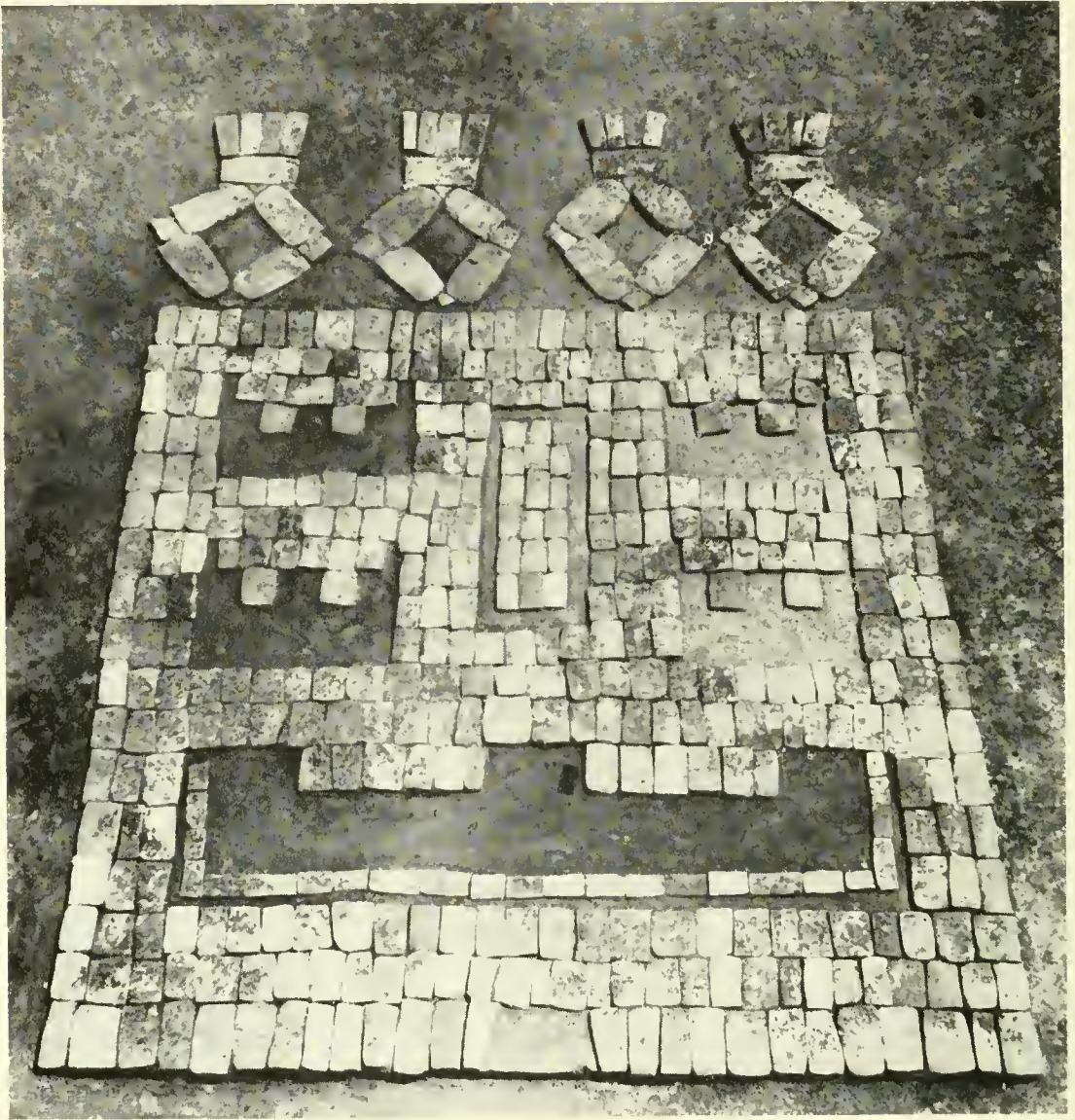
Southwest Platform. *a*, Detail of southeast corner of Phase II basalt and serpentine block footing row. Some upper chipped basalt blocks have been removed to show serpentine blocks beneath. *b*, Southwest corner of facing showing three series of blocks used in facing row.



Southwest Platform, facing northeast, showing mask mosaic and overlying mottled pink clay fill and brickwork platform.



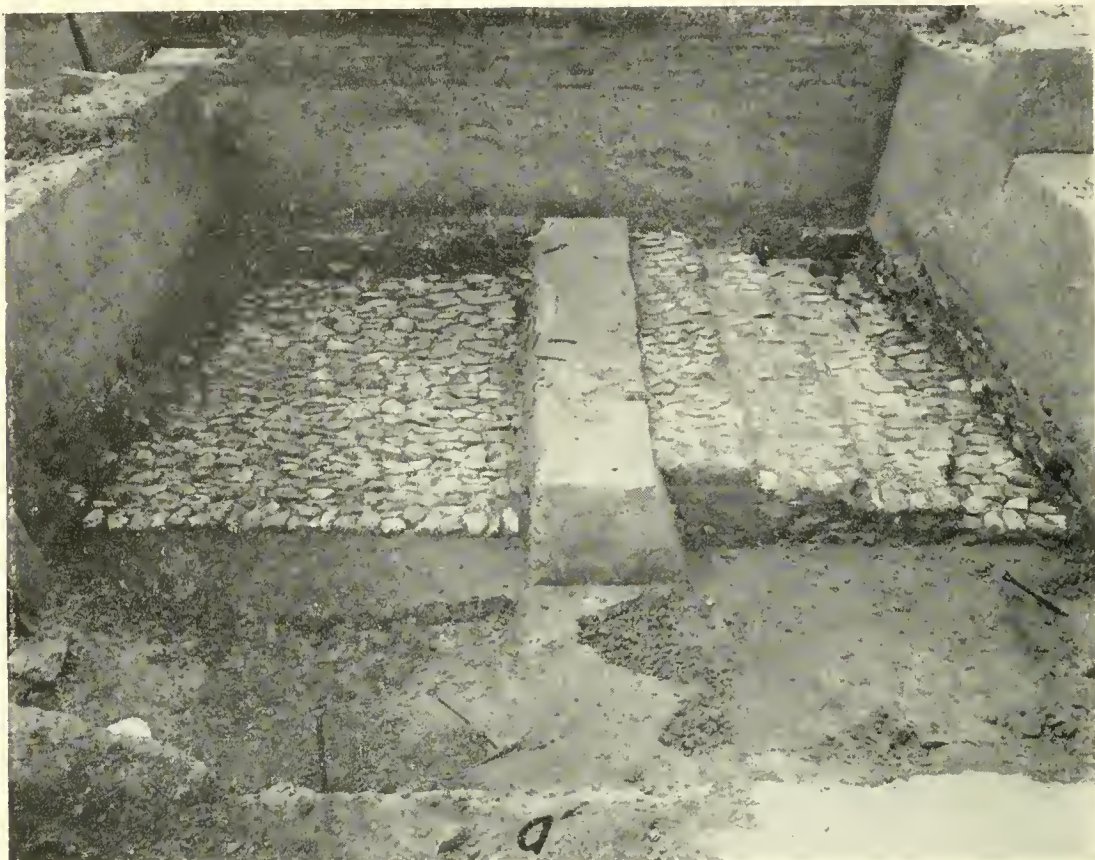
Southwest Platform, facing north. Jaguar mask mosaic in situ. Note mottled pink clay fill and brickwork over mask.



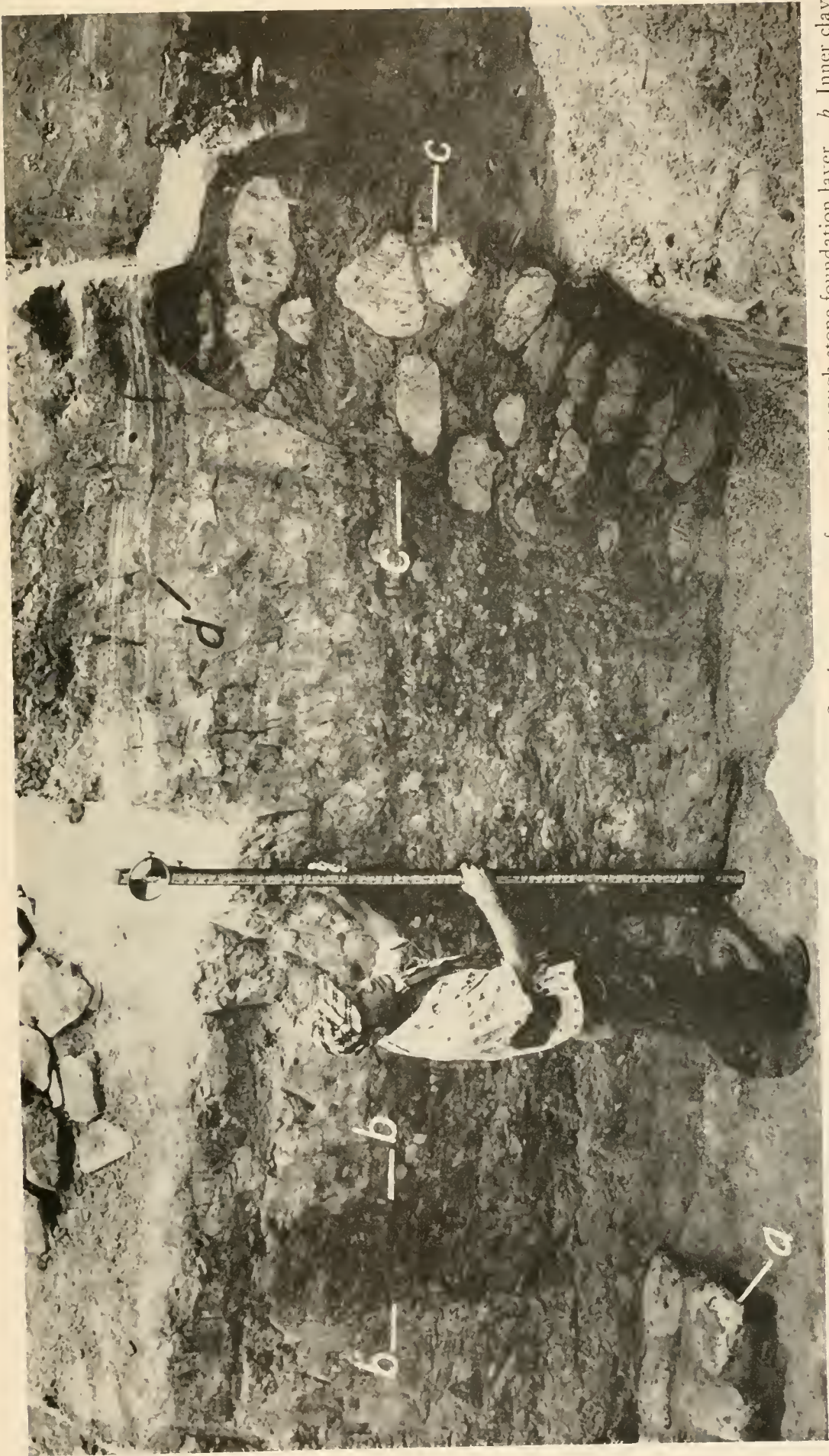
Jaguar mask mosaic in Southwest Platform (looking south). Compare with identical mask in Southeast Platform found in 1943 (LV, pl. 10).



Southwest Platform. *a*, Mask mosaic exposed and top course of rough serpentine blocks partly exposed (looking northwest). *b*, Top course of rough stone paving under the mosaic mask (looking northwest). Top of earth wall marks level of mask.



Southwest Platform. *a*, Rough serpentine block structure underlying mask mosaic, partly cleared to show layering. *b*, Rough serpentine block layers in west side of excavation. Deep excavation to base shows in foreground.



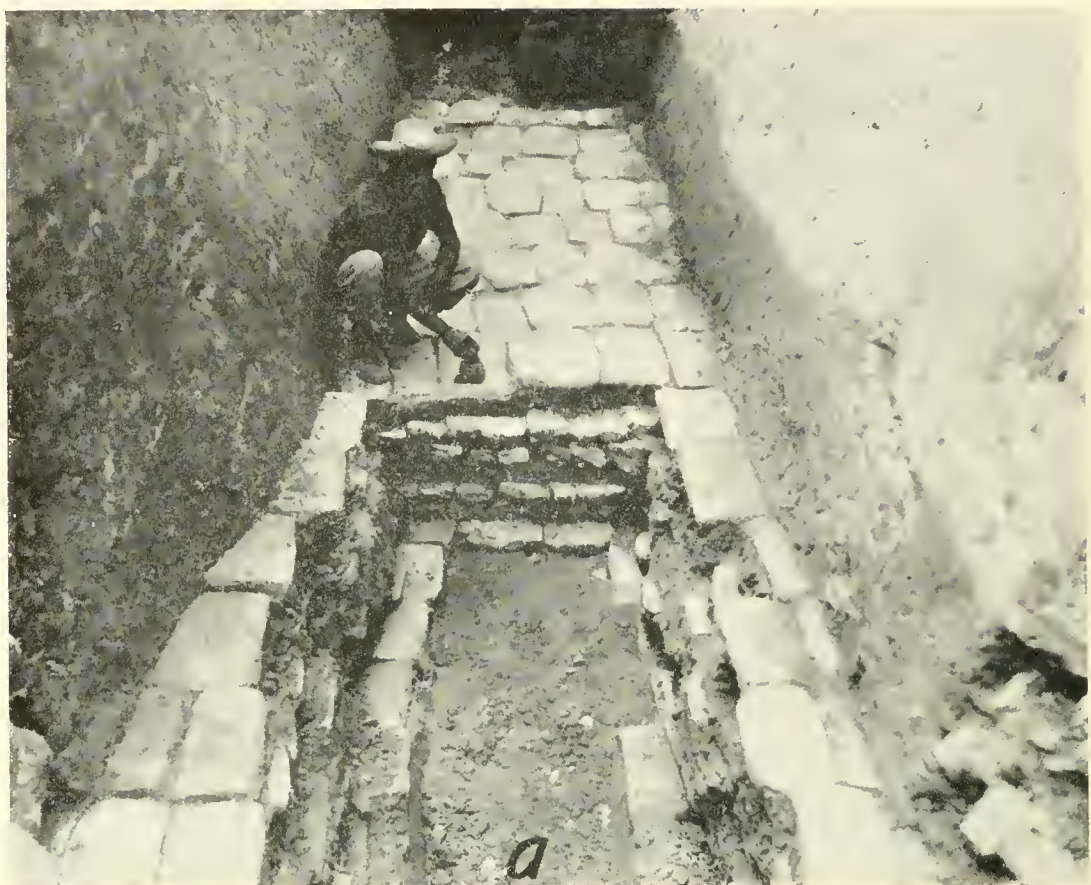
Southwest Platform, North wall of extension trench at southeast corner. *a*, Southeast corner of uppermost rough stone foundation layer. *b*, Inner clay "marker" wall. *c*, Outer clay retaining wall against sand. *d*, White floor series.



Mound A-5 and Massive Offering No. 2 (Feature A-2-d). *a*, Limestone slabs exposed. Monument 23 rested on second slab from left in farthest row. Slabs in foreground were set against walls of large pit. *b*, Feature A-2-d exposed in bottom of north-south trench. Length of section of exposed blocks is 6 feet 8 inches.



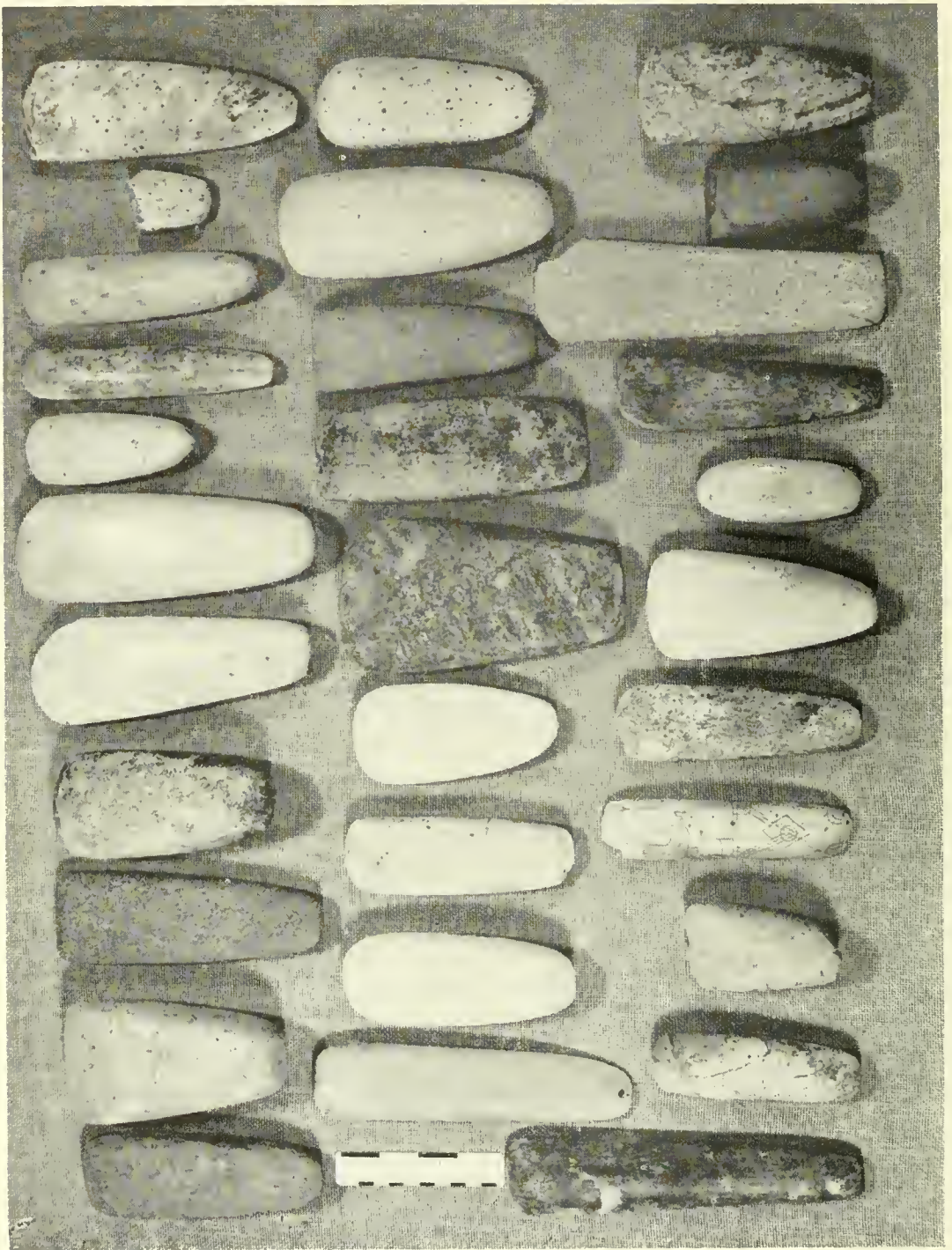
Main north-south trench. In foreground, Massive Offering No. 3 (Feature A-1-h); in background stone column tomb (Monument 7). Upper 5 feet of deposit (mainly red clay cap) has been removed alongside trench to lighten overburden along deep trench.



Massive Offering No. 3 (Feature A-1-h). *a*, Serpentine blocks removed to show 6 layers separated by clay mortar. *b*, Upper surface of pavement, looking north.



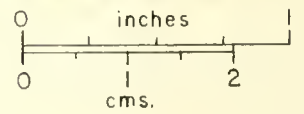
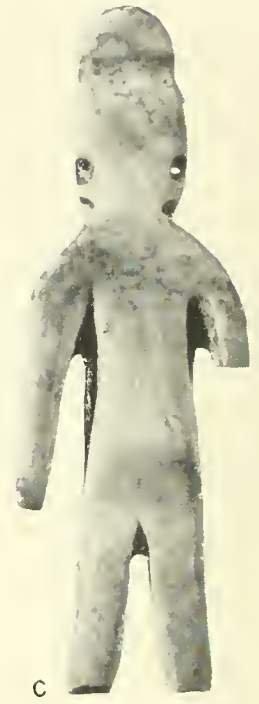
a, Serpentine blocks exposed in ancient trench surrounding Massive Offering No. 3 (Feature A-1-h). *b-d*, Offerings Nos. 1 and 2 in main north-south trench.



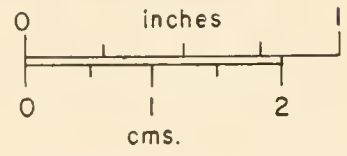
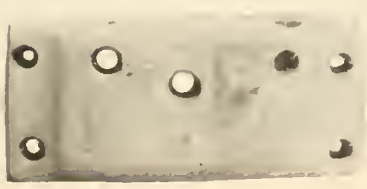
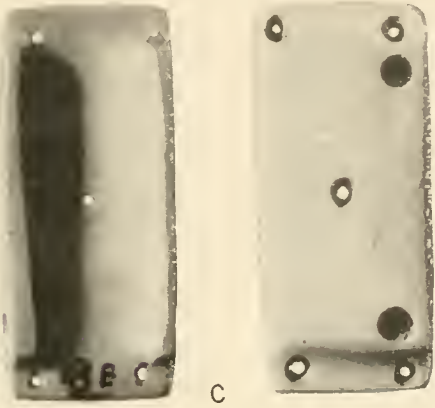
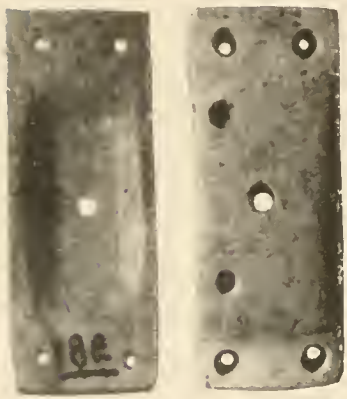
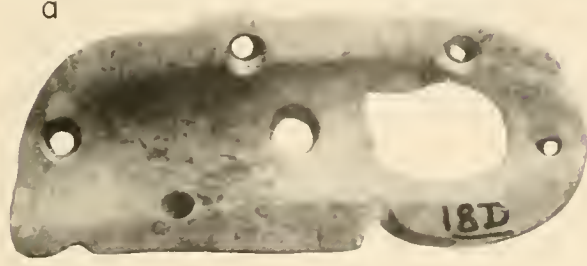
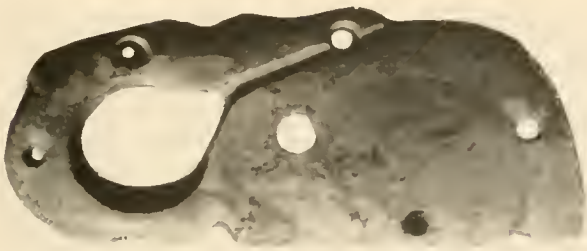
Offering No. 2, celts from upper layer.



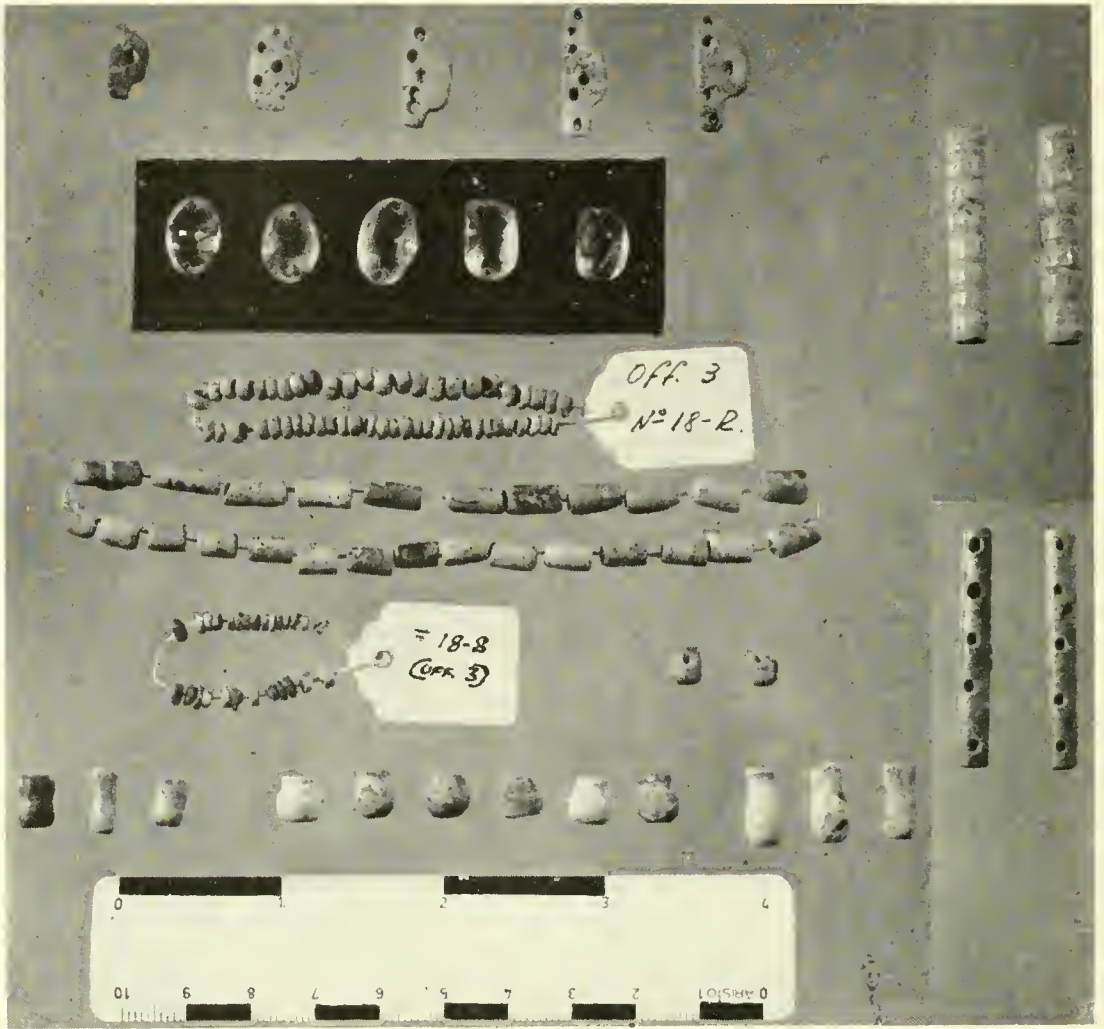
Offering No. 2, celts from lower layer. Note 4 incised celts.



Jade figurines from Offering No. 3.



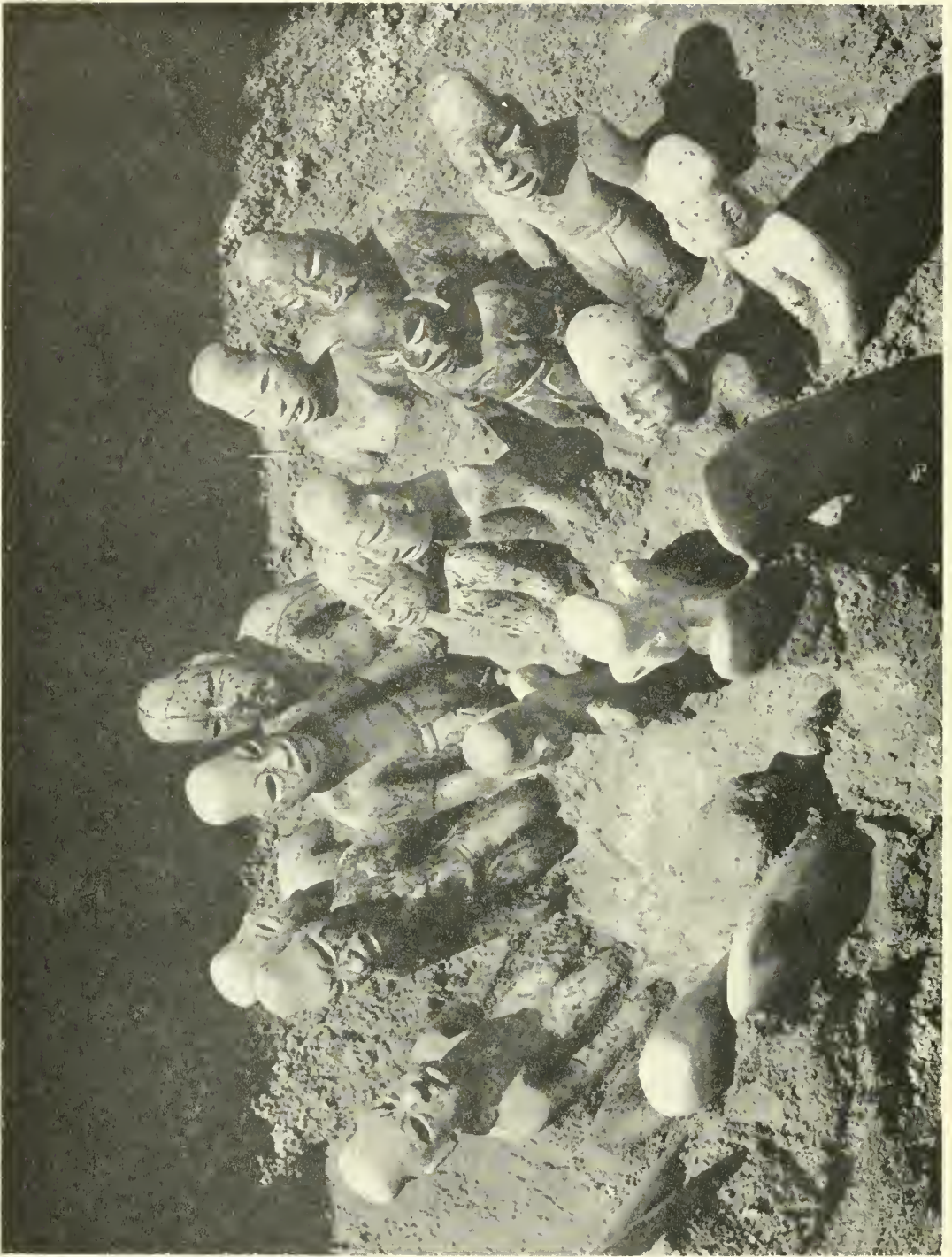
Jade objects from Offering No. 3. *a*, Ornament representing a bird. *b*, Obverse and reverse of rectangular canoe-shaped ornament. *c-e*, Like *b*.



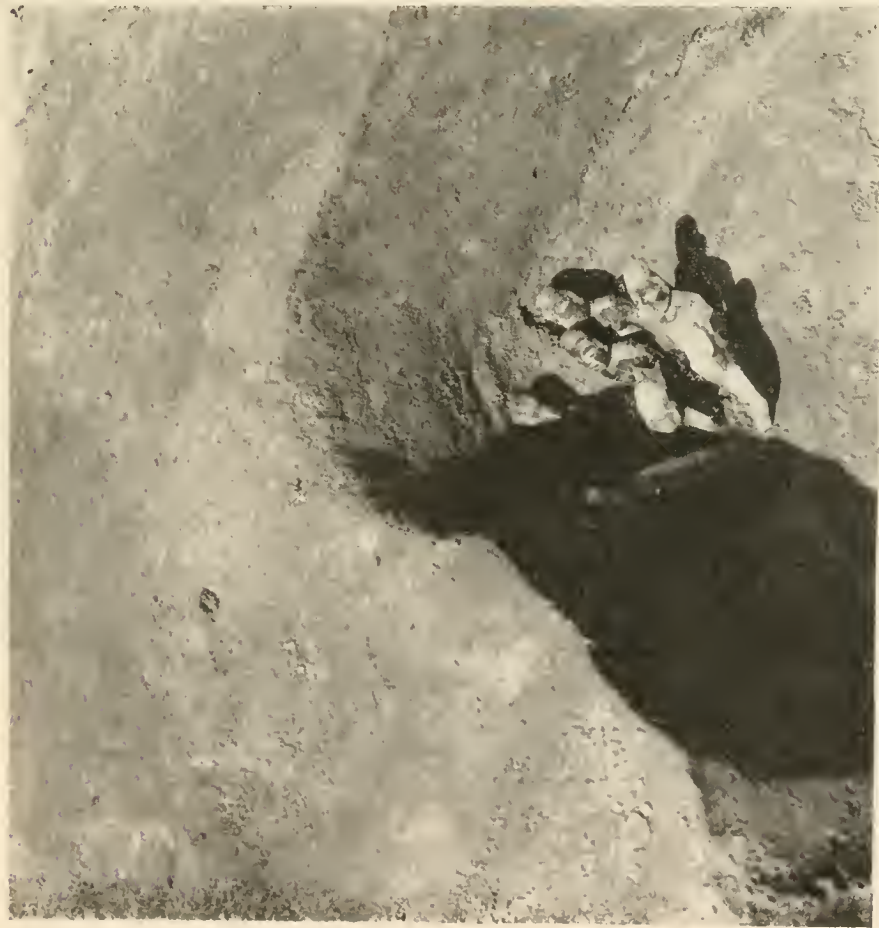
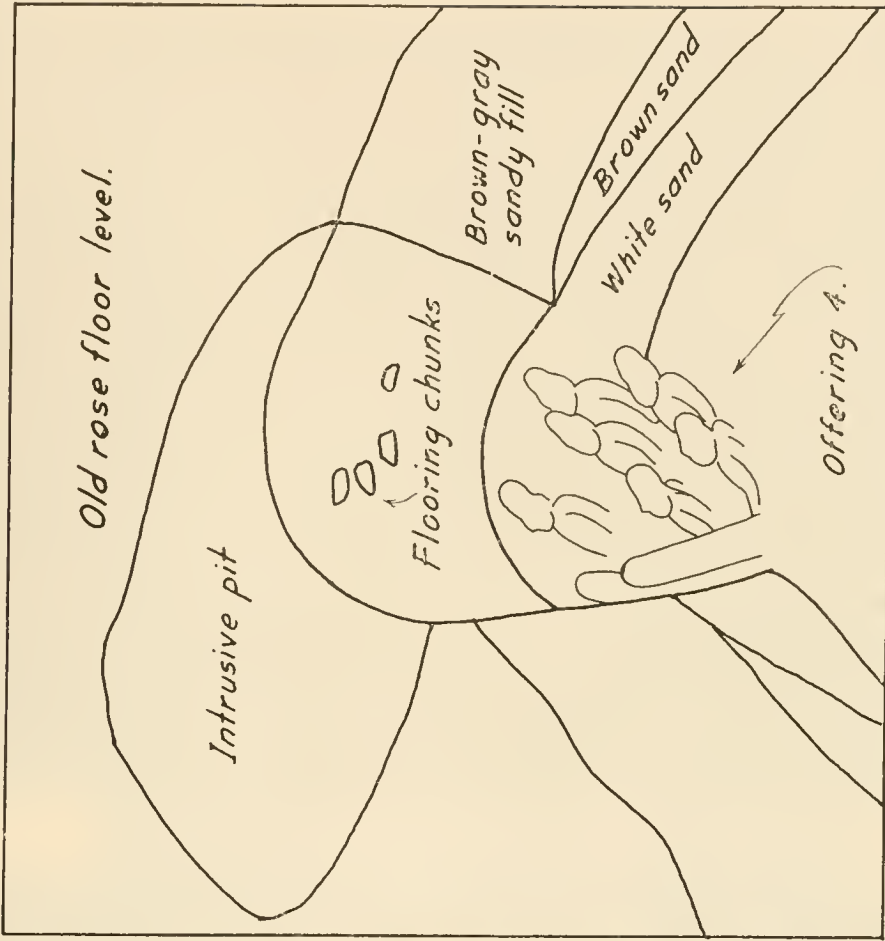
Jade and rock crystal beads and ornaments from Offering No. 3.



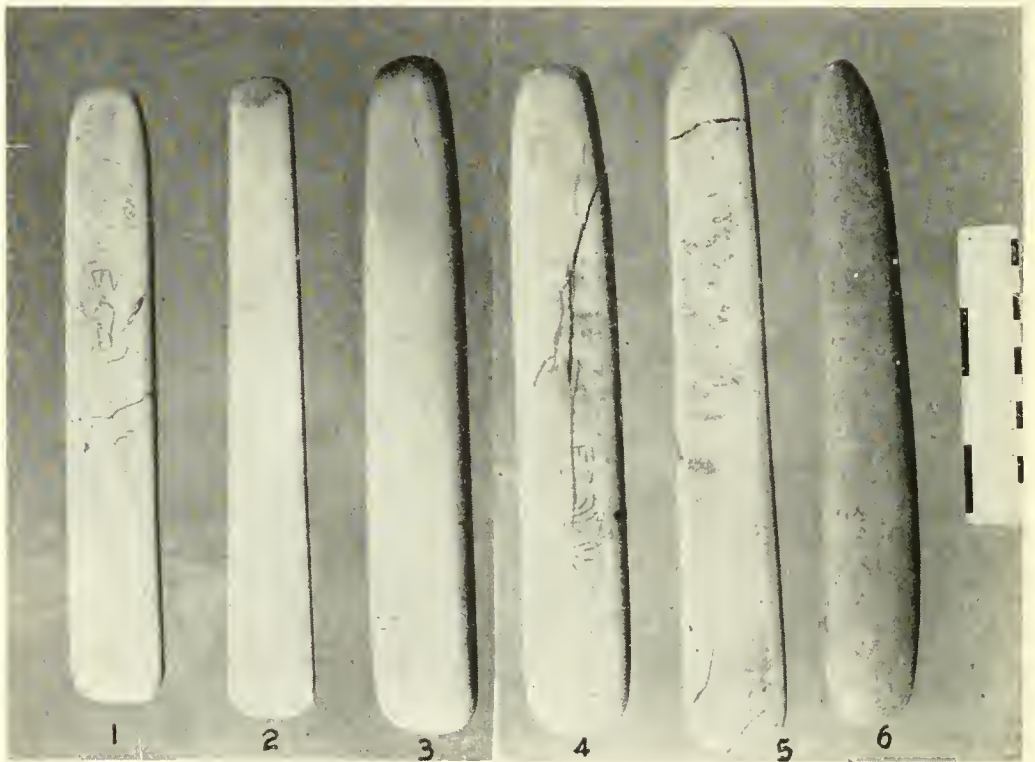
Jade beads from Offering No. 3.



Offering No. 4. Arrangement of figurines and celts (facing west).



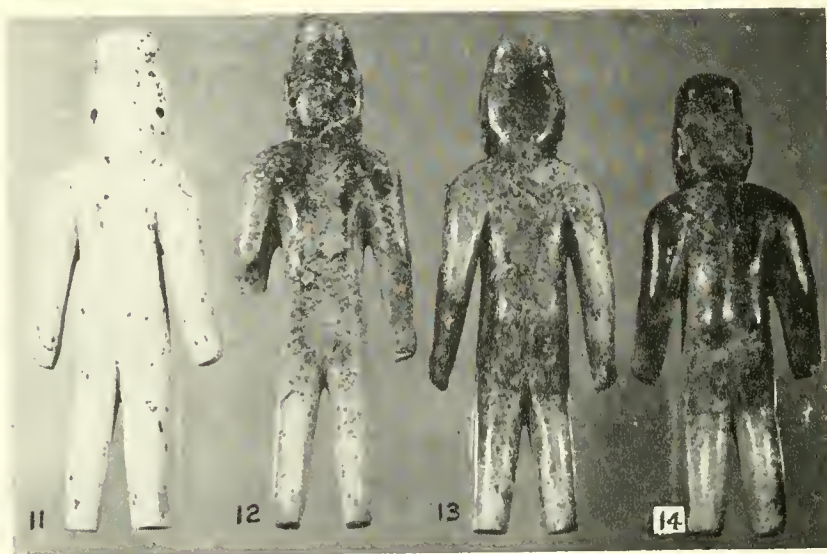
Offering No. 4. *Left*, Photograph taken shortly after discovery. Upper rose floors exposed showing intrusive pit outline. *Right*, Diagrammatic representation of stratigraphy shown in photograph to left.



Offering No. 4. *Upper*, Arrangement of figurines and celts, facing north. *Lower*, Celts from Offering No. 4. Numbers are those used for descriptive purposes in text.



Jade and serpentine figurines from Offering No. 4. Numbers are those of individual figurines as treated in text.



Jade and serpentine figurines from Offering No. 4. Numbers are those of individual figurines as treated in text.



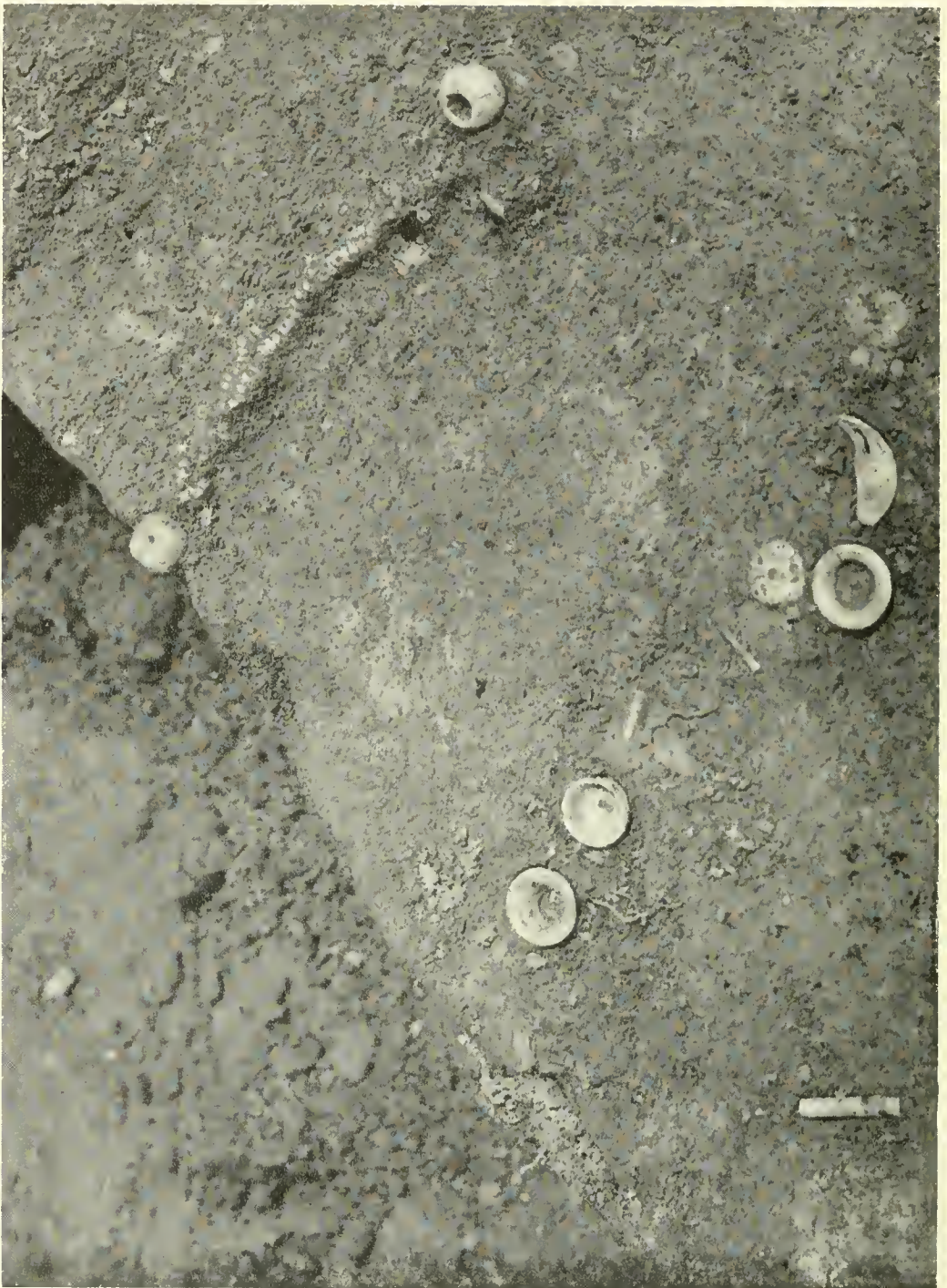
Jade and serpentine figurines from Offering No. 4. Numbers are those of individual figurines as treated in text.



Jade and serpentine figurines from Offering No. 4. Numbers are those of individual figurines as treated in text.



Obverse (a) and reverse (b) views of jade objects from Offering No. 5.



Offering No. 6 in situ.



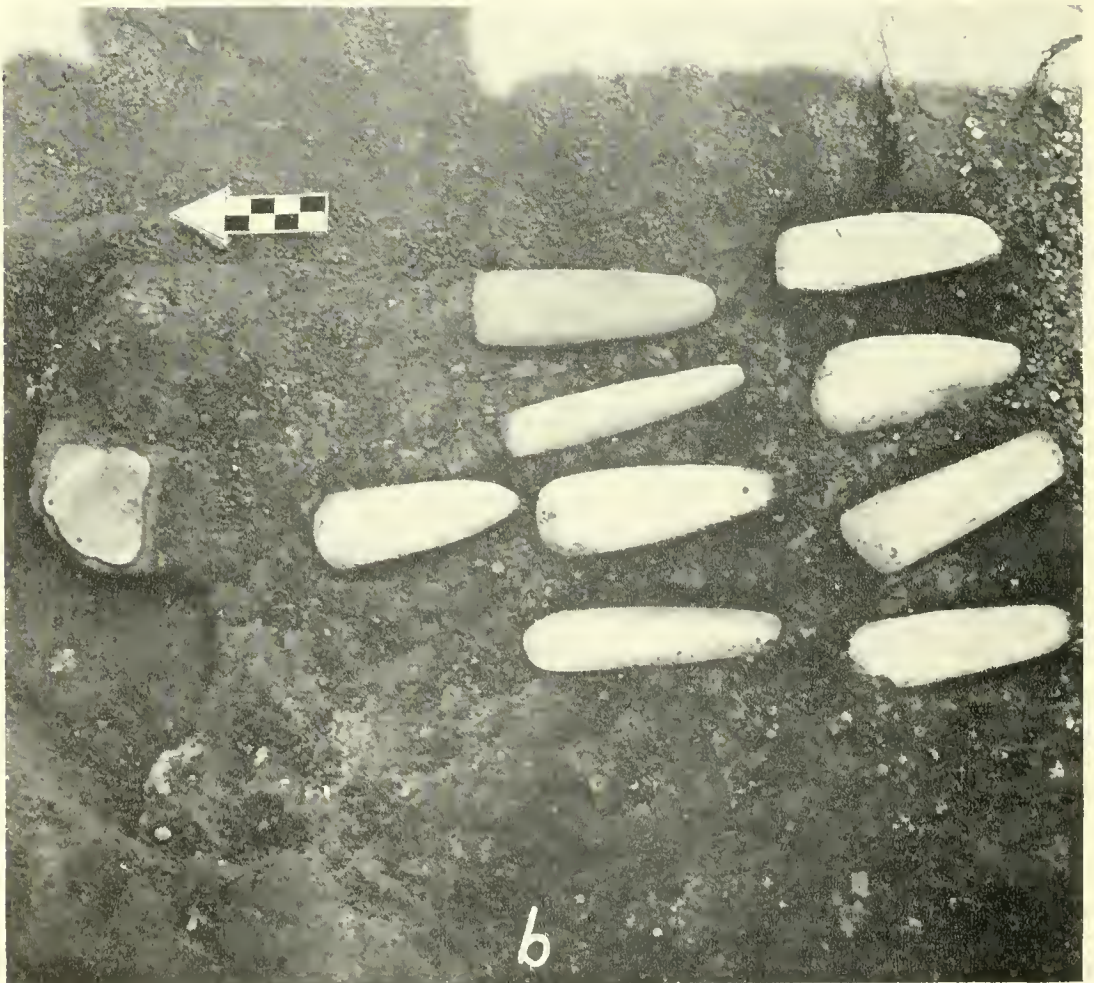
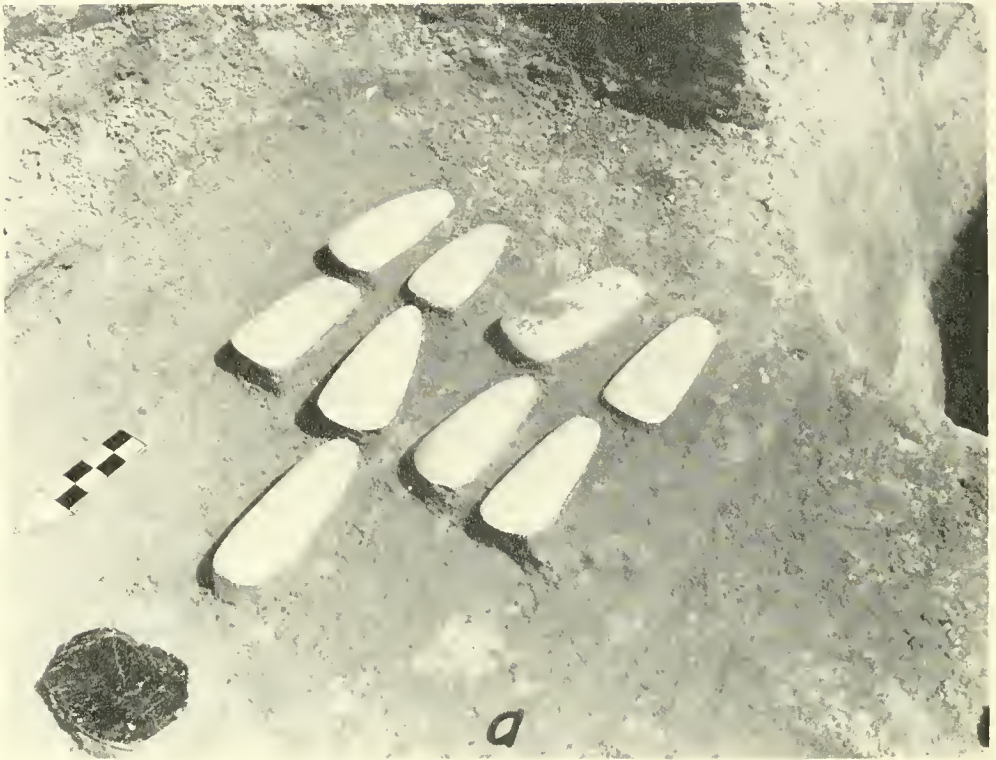
Jade objects from Offering No. 6. *a*, Obverse. *b*, Reverse.



Jade objects from Offering No. 7. *a*, Obverse. *b*, Reverse.



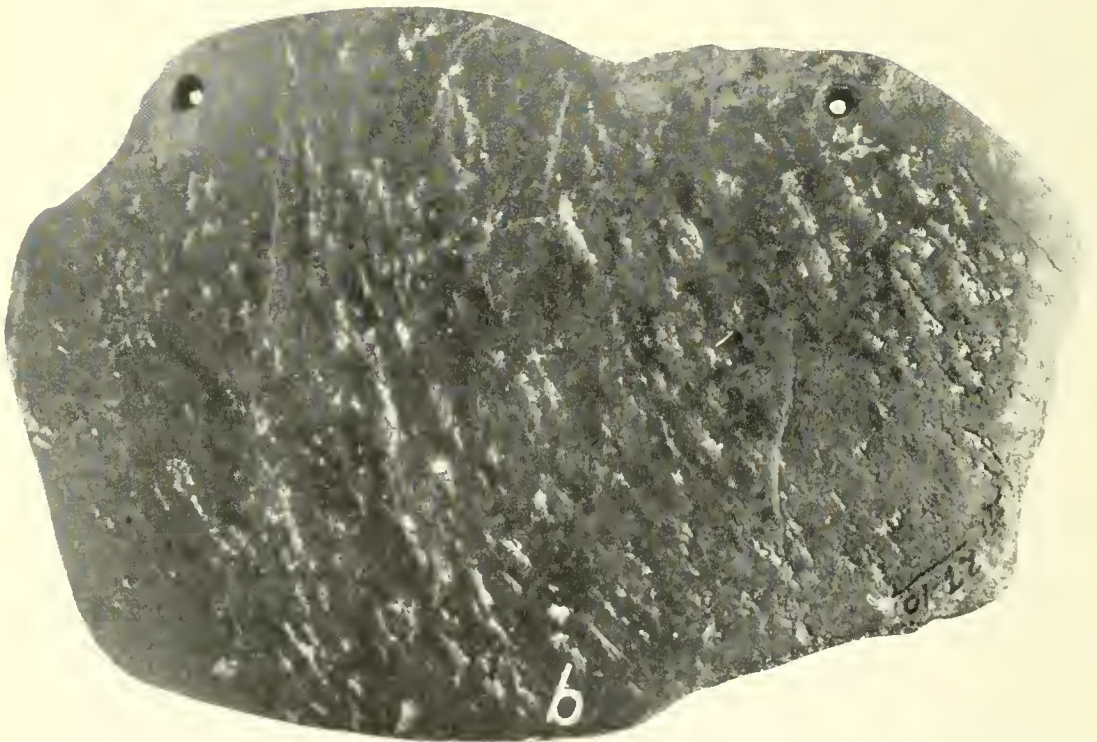
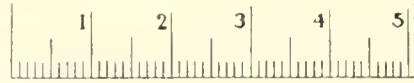
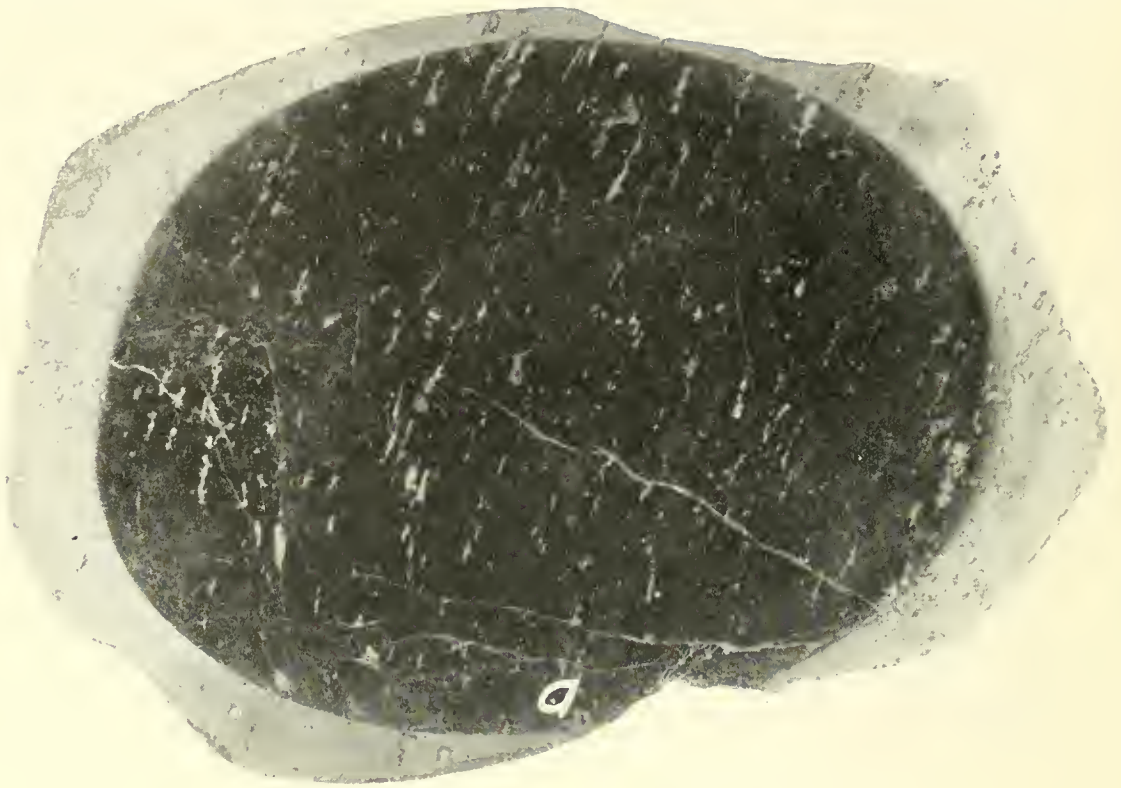
Offering No. 8 and jade celts from Offerings Nos. 9 and 11. *a*, Offering No. 8 (looking south). *b*, Jade celts with Offering No. 9. *c*, Jade celts with Offering No. 11.



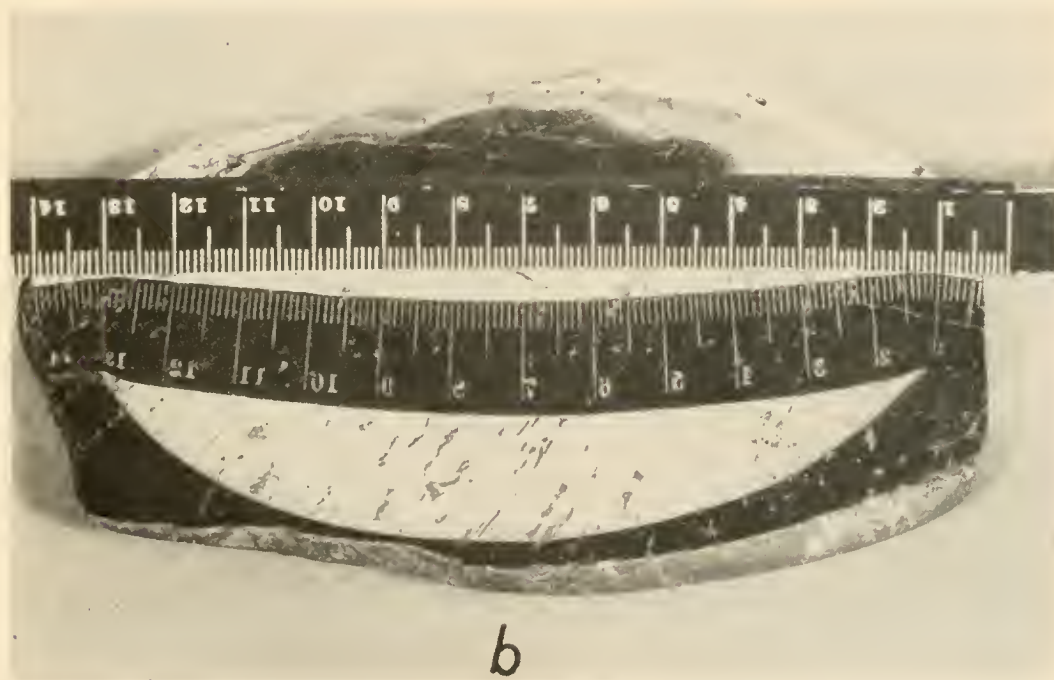
Offerings Nos. 9 and 11. *a.* Offering No. 11 (arrow points north). *b.* Offering No. 9 (arrow points north). Note scattered small jade beads in upper right corner.



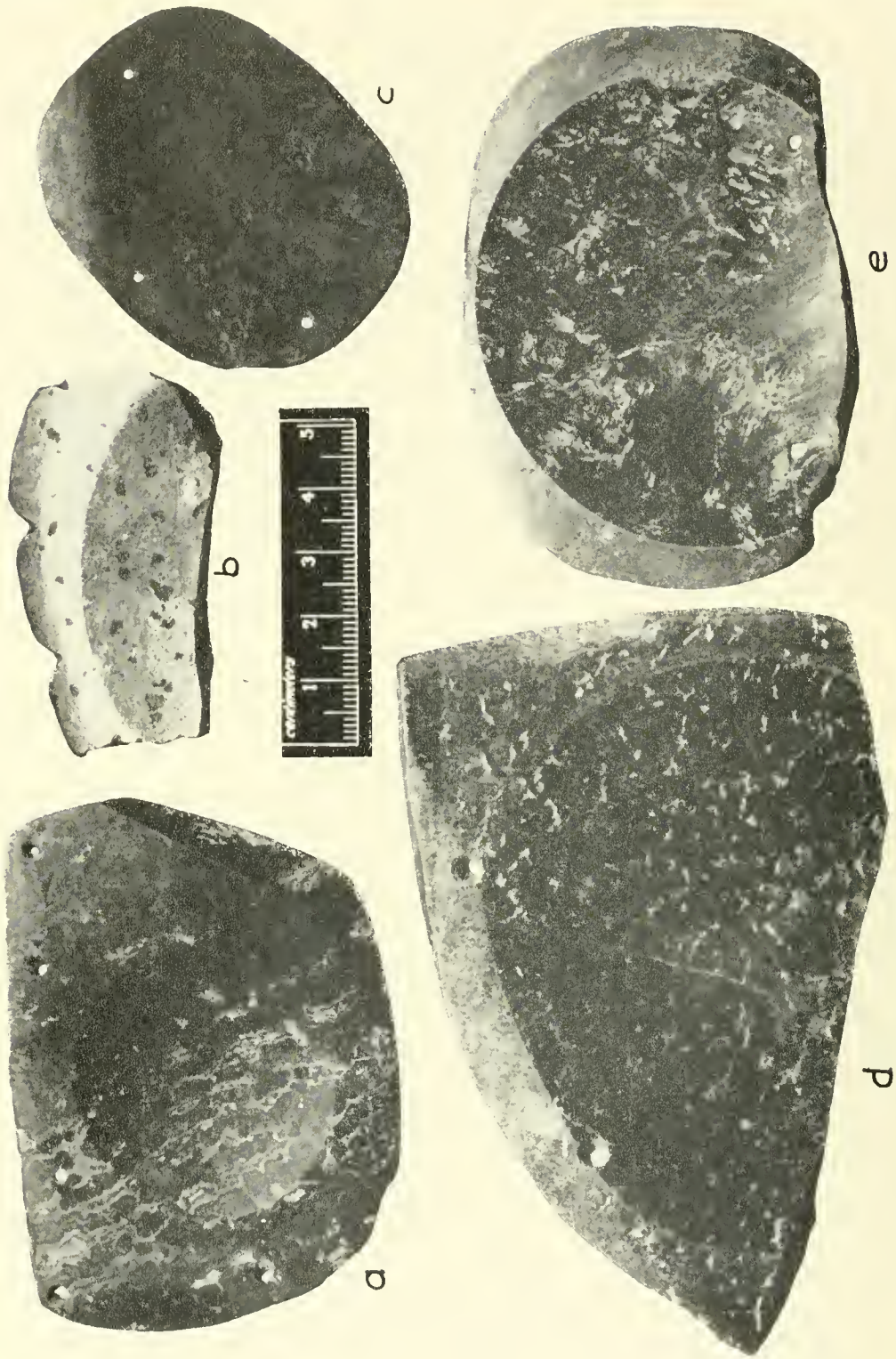
Concave magnetite mirror, Offering No. 9. *a*, Obverse. *b*, Reverse surface.



Concave ilmenite mirror, Offering No. 11. *a*, Obverse. *b*, Reverse surface. (Scale in cm.).



Concave mirrors from Offerings 9 and 11. Oblique photographs of upper polished surfaces to show concavity. *a*, From Offering No. 9. *b*, From Offering No. 11. (Scale in cm.).



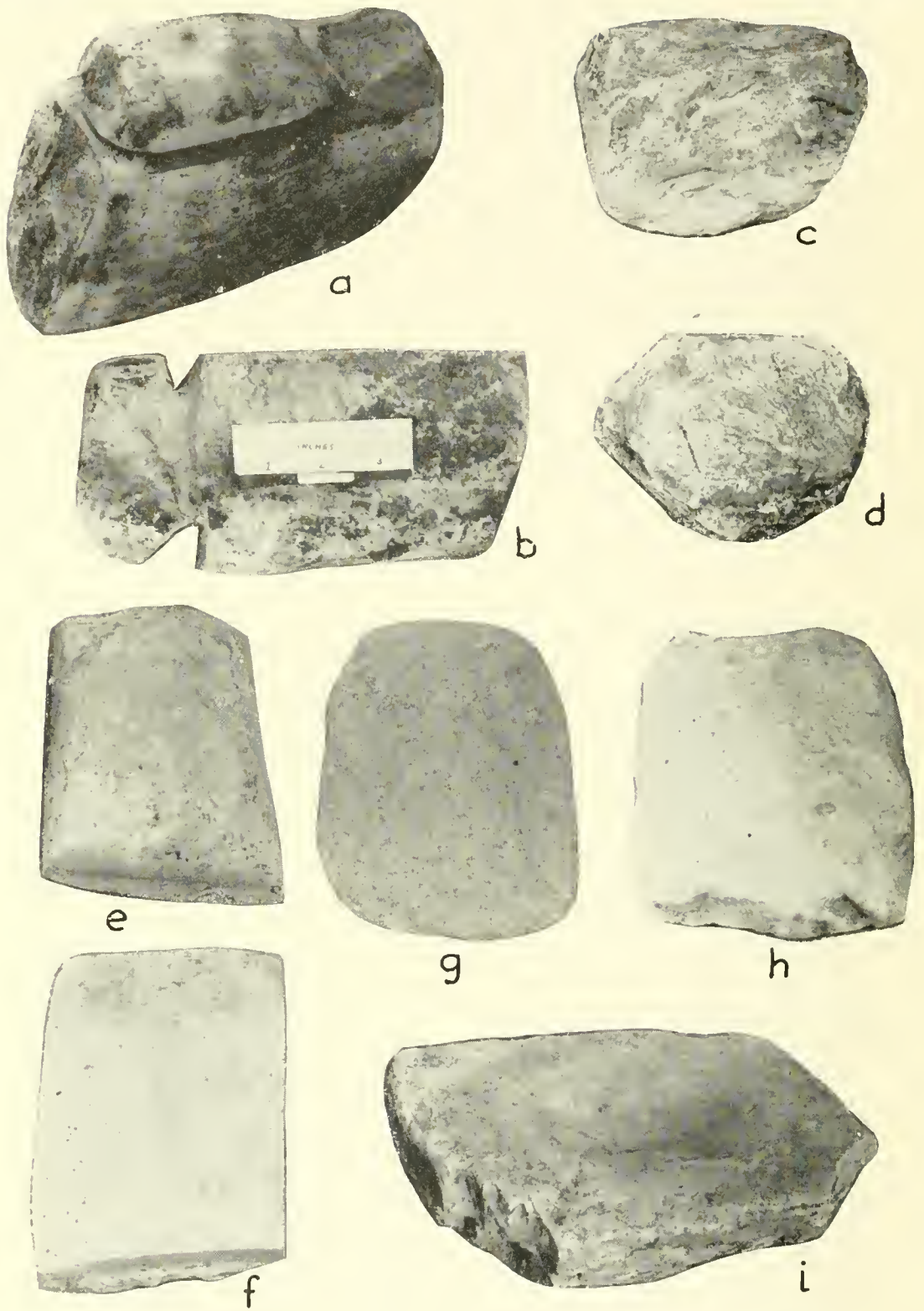
Concave mirrors recovered in 1942 and 1943, inadequately described in earlier publications. *a*, Offering 1943-N (ilmenite). *b*, From Mound A-2 fill, 1942 (magnetite). *c*, Offering 1943-F (ilmenite). *d*, Offering 1943-E (hematite). *e*, Offering 1943-E (hematite).



b



Offerings. *a*, Cruciform celt Offering No. 10 (arrow points north). *b*, Offering No. 20 in upper drift sands.



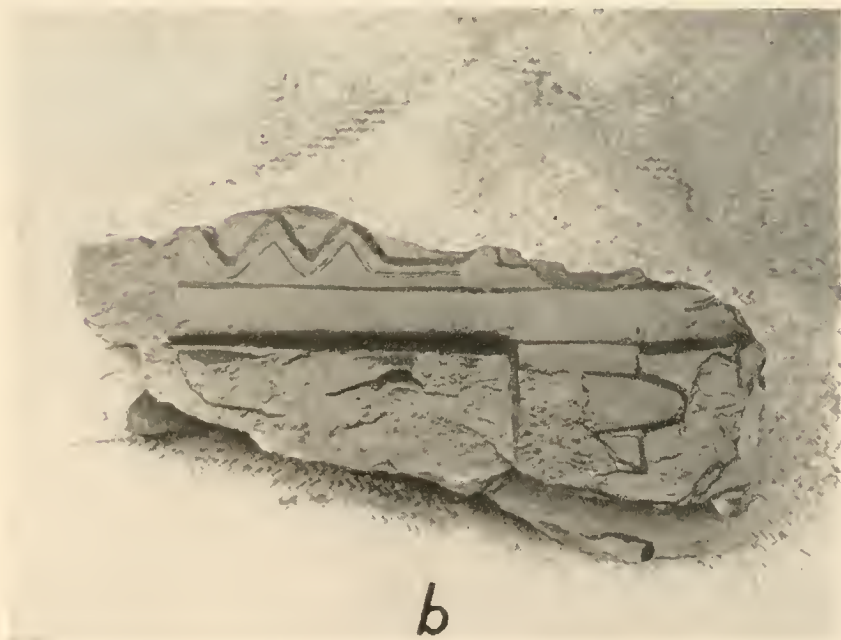
Serpentine and basalt blocks. *a-b*, length 8 inches. *c-d*, length 9 inches. *e-f*, length 9 inches. *g-h*, length $9\frac{1}{2}$ inches. *i*, length $13\frac{1}{2}$ inches. For description, see "Stone-working Techniques."



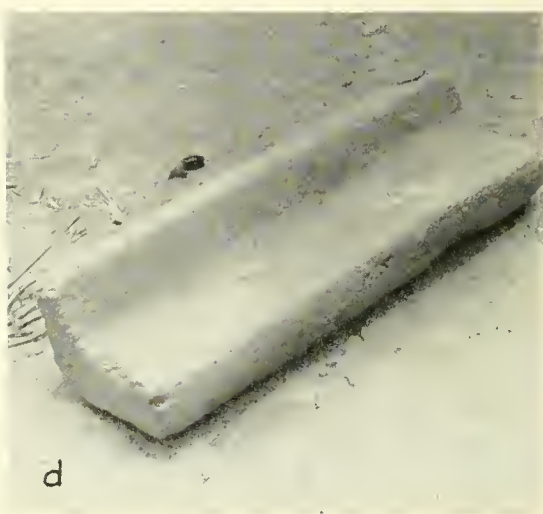
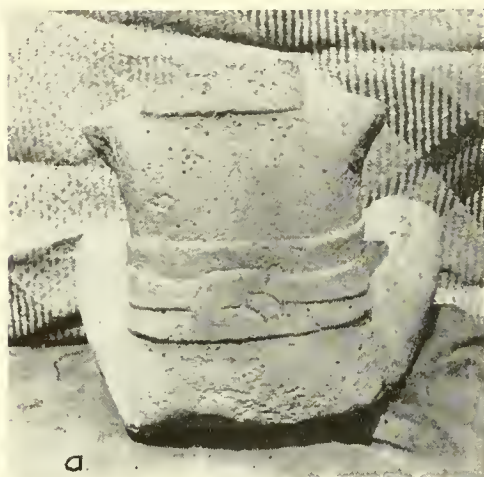
Monument No. 19. *a*, Whole sculpture showing conformity of figures to natural outline of basalt boulder. *b*, Detail of head of Plumed Serpent.



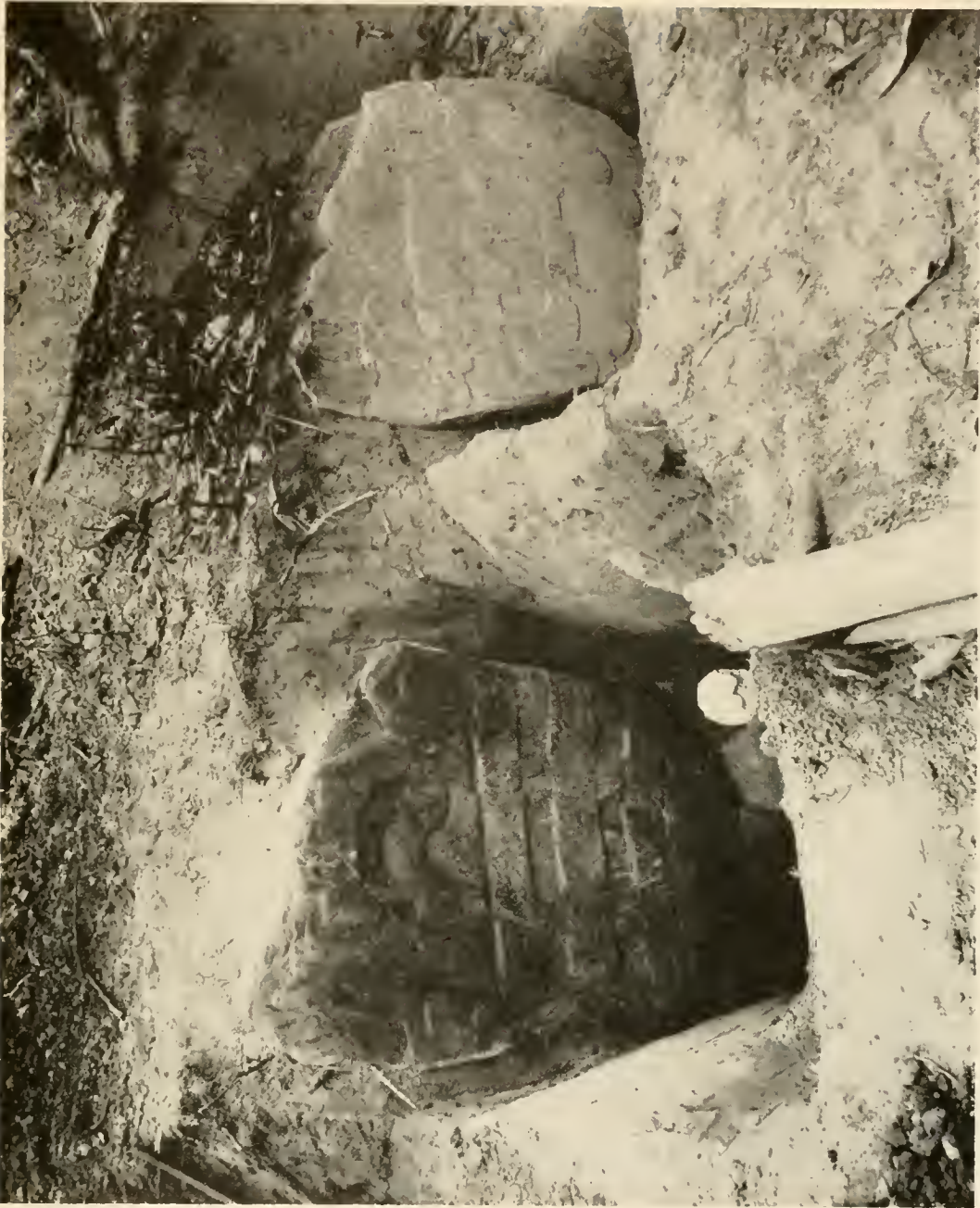
Monument 20.



La Venta stone monuments. *a*, Monument 21 representing a seated human figure with right arm against chest and left arm on what is apparently a table (or altar?). *b*, Fragment of Monument 22 from surface of Southwest Platform at southeast corner. Length 25 inches.



La Venta stone monuments. *a*, Dorsal view of Monument 23. Note knot in breechclout. *b*, Front view of Monument 23. Note concave mirror (?) on chest, and breechclout. *c*, Side view of Monument 23. *d*, Monument 24.



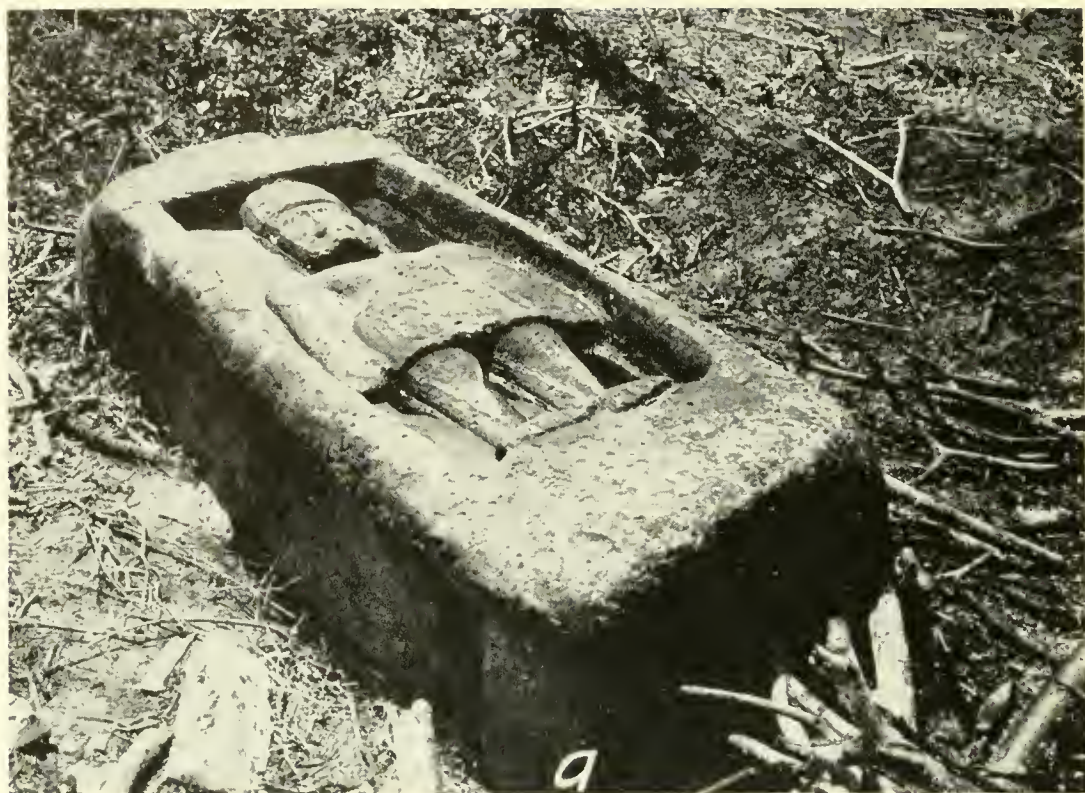
Left, Monument 25. Right, Monument 26.



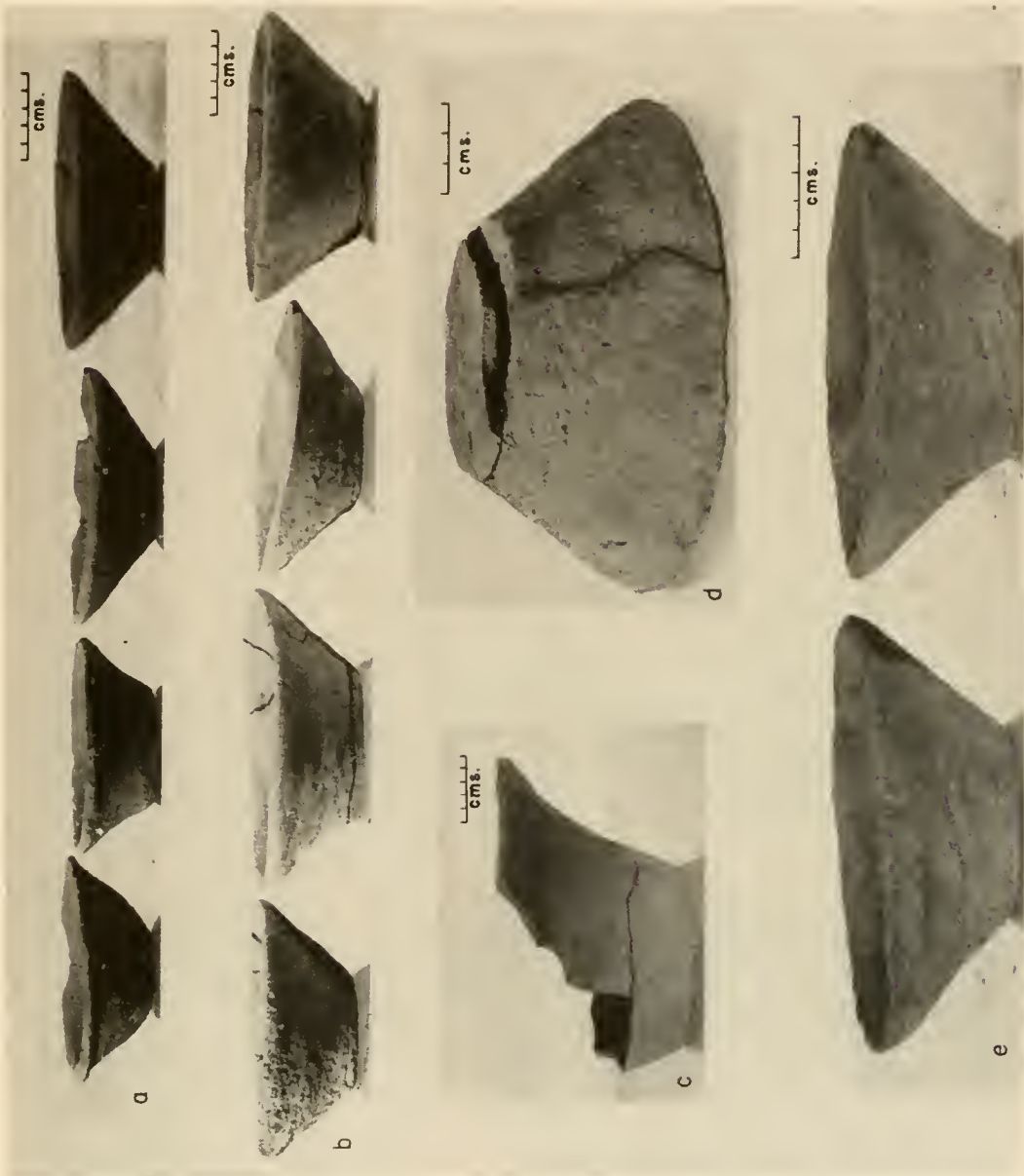
Monument 27.



Stela 3, looking south.



La Venta stone monuments. *a*, Stela I. *b*, Altar 4. Both monuments are described in Stirling, 1943 b.



Pottery vessels from Offering No. 20.

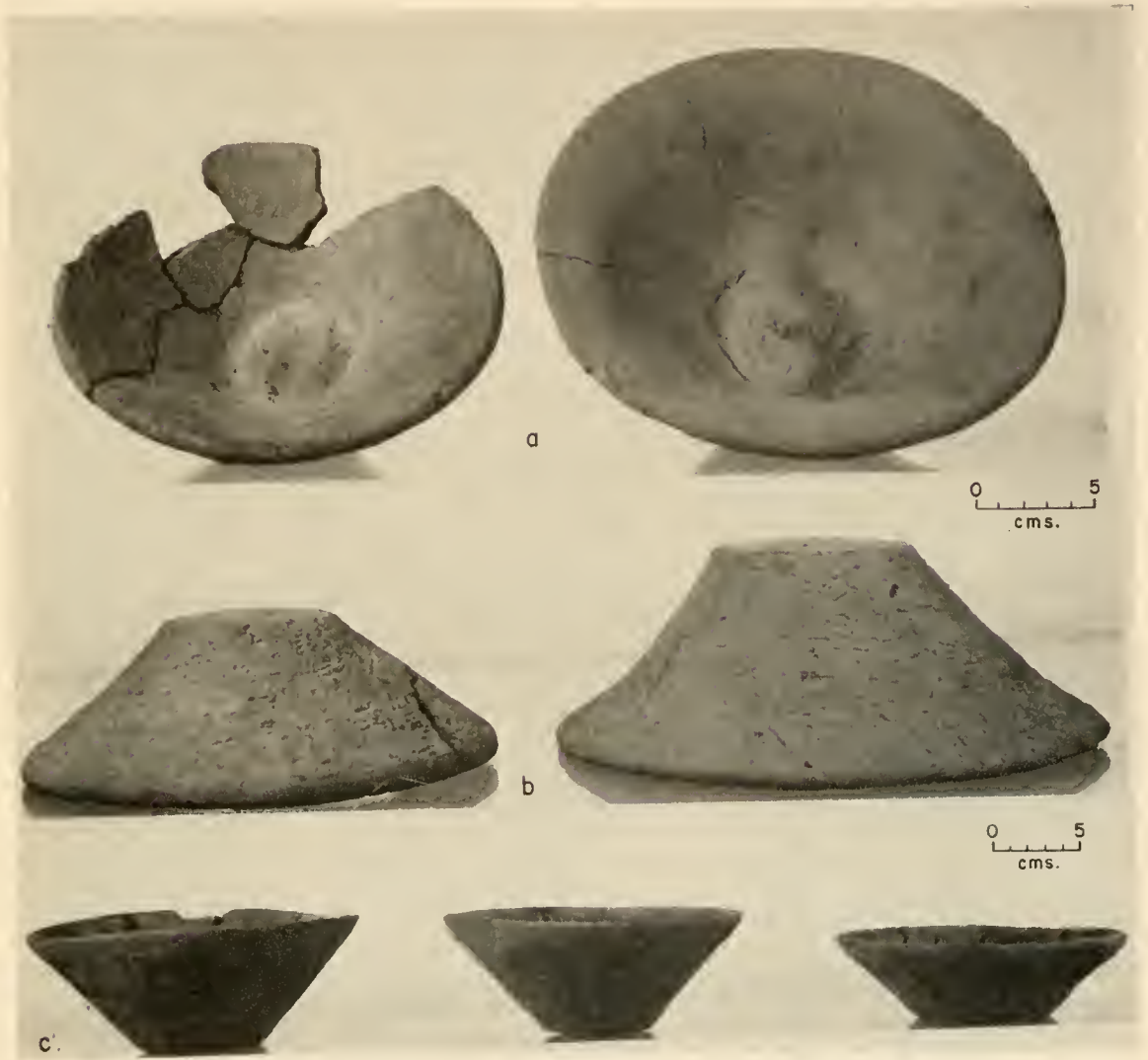


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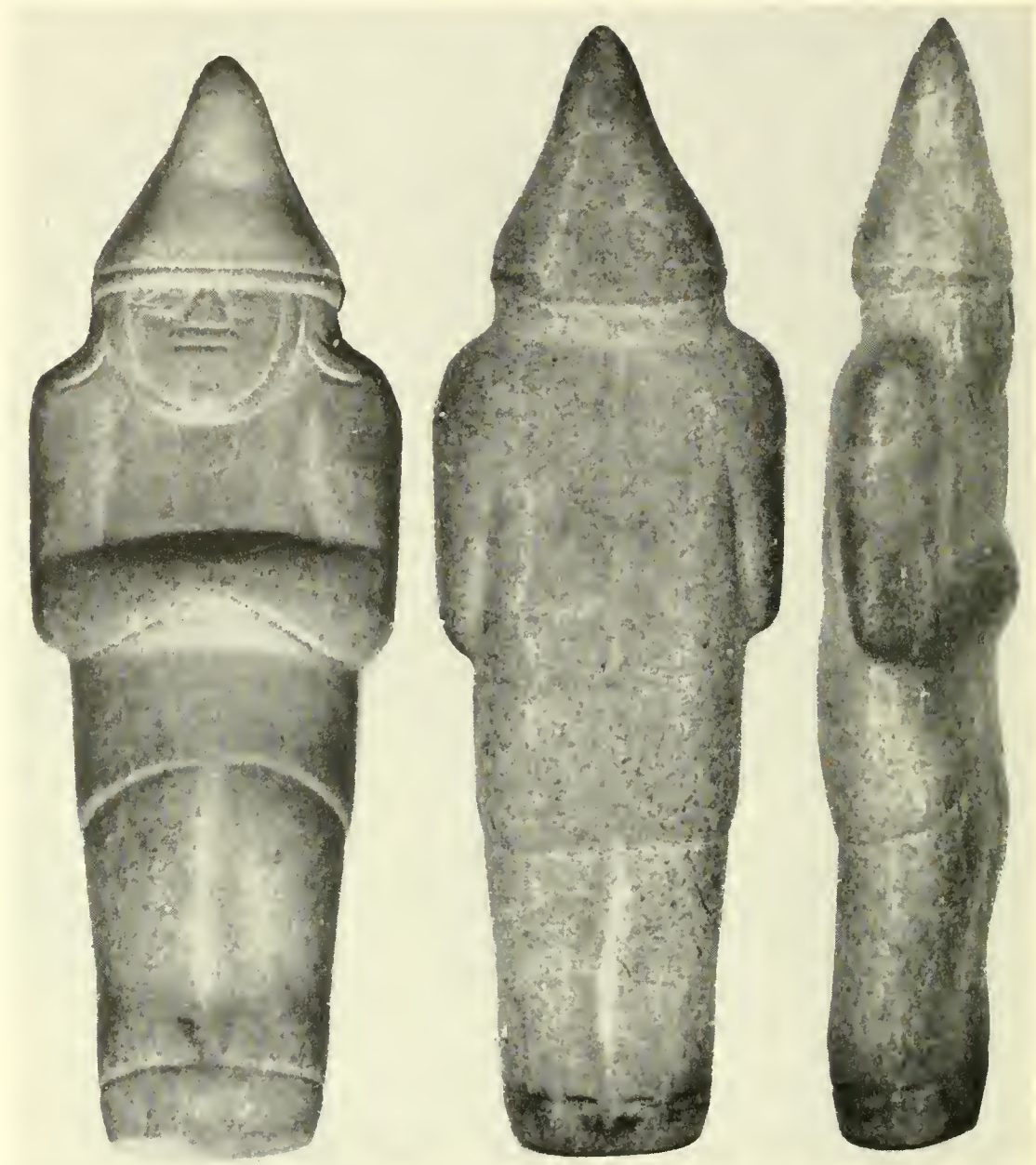


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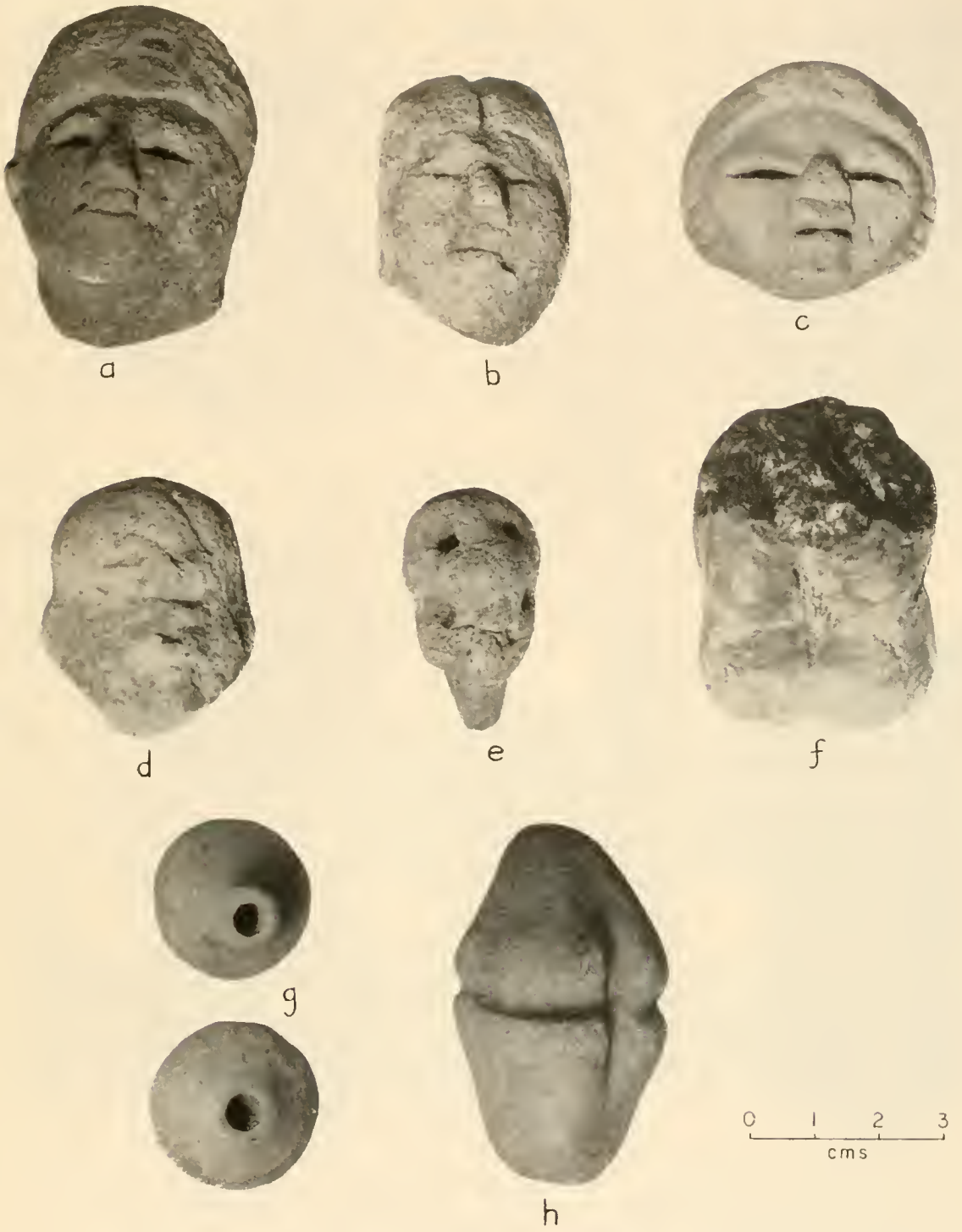
Pottery offerings. *Upper*, Offering No. 21 in situ. *Lower left*, Offering No. 23. *Lower right*, Offering No. 26.



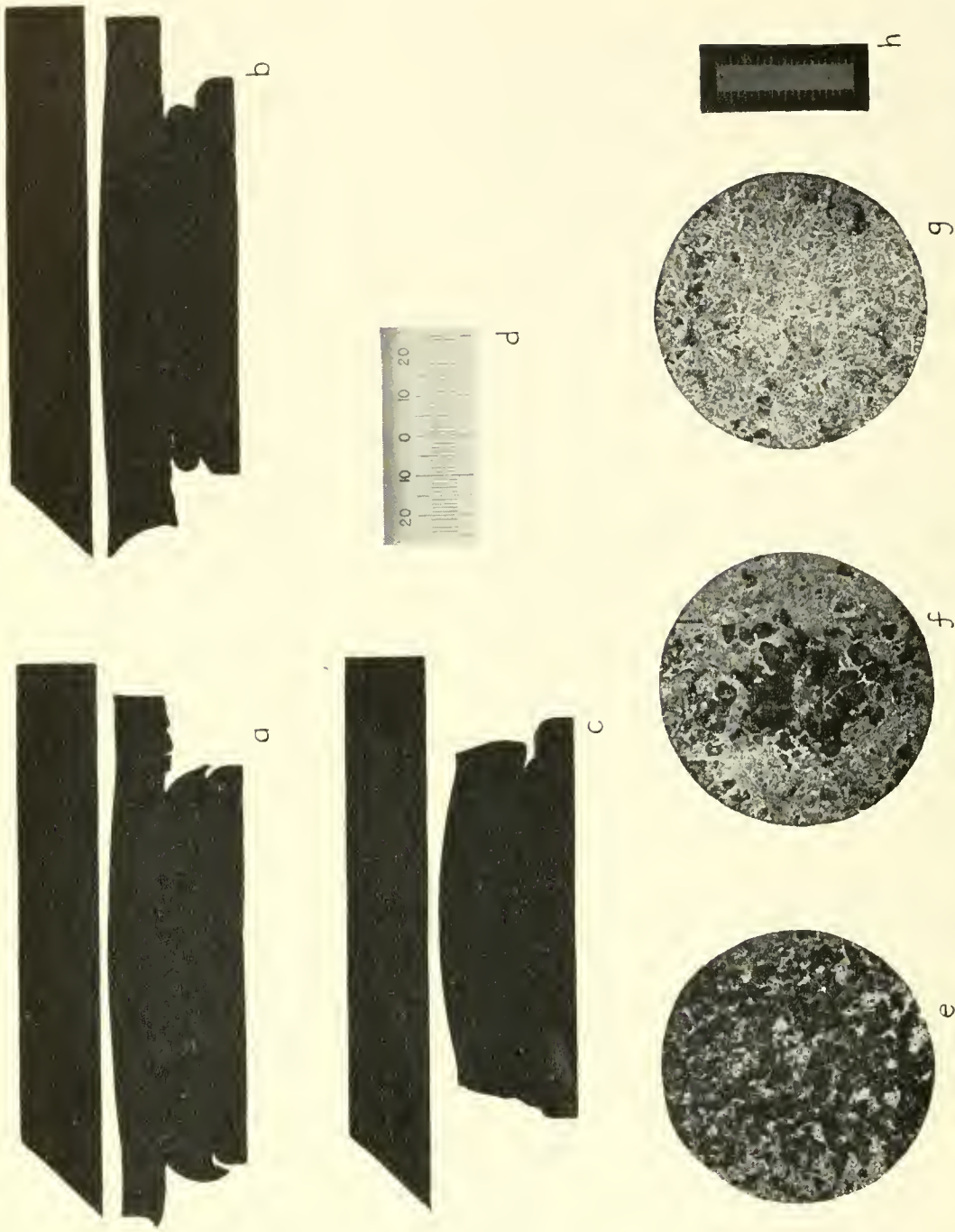
Pottery vessels from Offering No. 21, *a* and *b* to same scale.



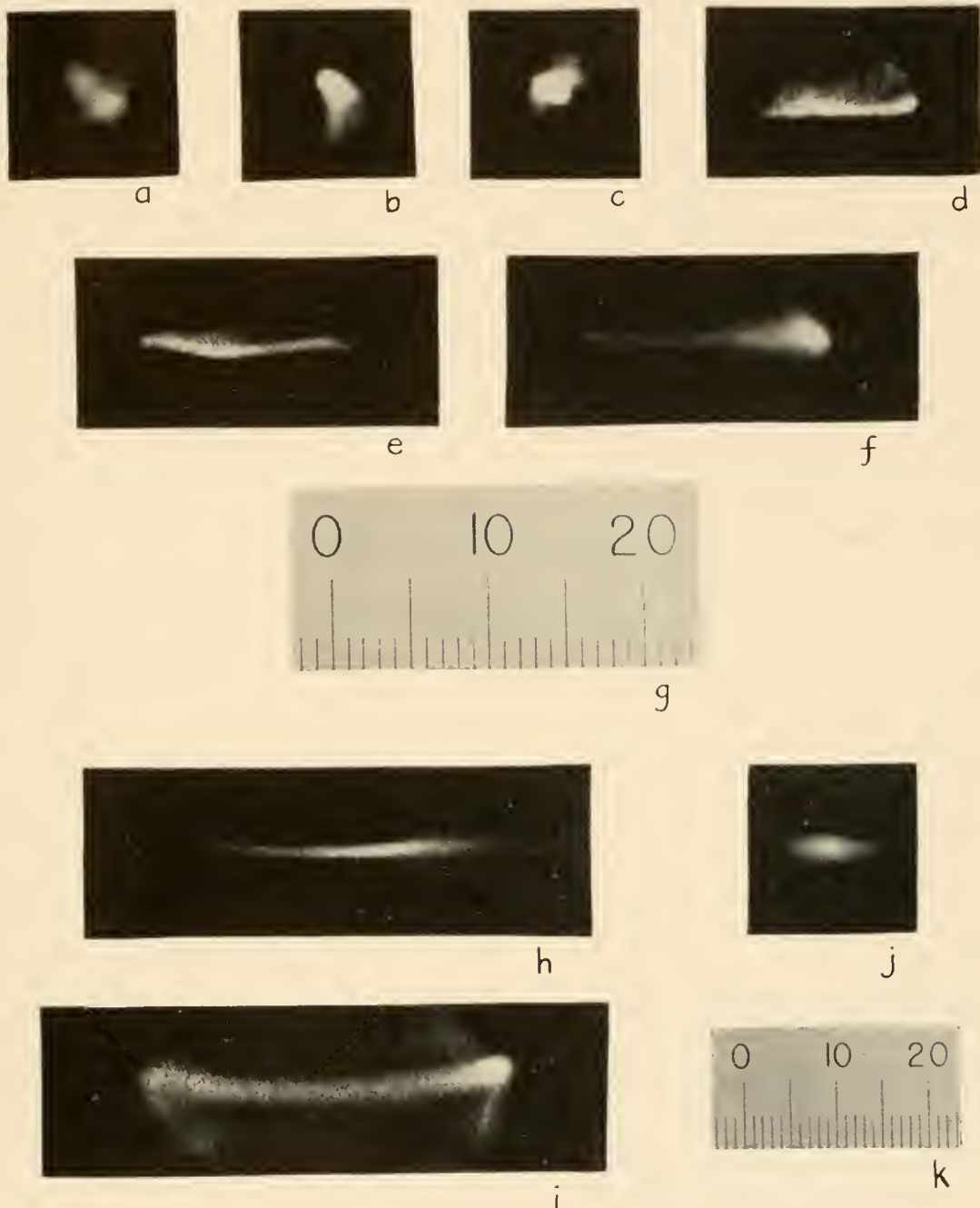
Jade figurine from La Venta island, probably from mound group south of main La Venta site. Height 6.3 inches (16.0 cm.).



Figurine fragments, spindle whorls, and clay weight from Torres site.



Profiles and photomicrographs of concave mirrors. Profiles are of casts which are cut in half and precision ground, photographed with a precision straightedge to show curvature along major axes. *a*, Offering 9 mirror. *b*, Offering 11 mirror. *c*, Offering 1943-E mirror. *d*, Scale in millimeters for *a-c*. *e-g*, Photomicrographs of different areas of Offering 1942-A mirror to show the coarse and fine microcrystalline structure. *h*, One millimeter scale graduated in hundredths for *e-g*.



Focal spots of concave mirrors; image of sun projected on a black matte surface. *a-c*. Compromise focus between the two focal lengths. *a*, Offering 9 mirror. *b*, Mirror from Mound A-2 fill (1942). *c*, Offering 1943-N mirror. *d, e*, Foci of Offering 1943-E mirror; *d*, short, *e*, long. *f*, Long focus of Offering 1943-F mirror. *g*, Scale in millimeters for *a-f*. *h, i*, Foci of Offering 11 mirror; *h*, short, *i*, long. *j*, Short focus of Offering 1942-A mirror. *k*, Scale in millimeters for *h-j*.

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