2 feet 9 inches in width. The roof was built in the form of the horizontal arch, the capstone being 4 feet 9 inches above the floor, which was made of rough stones.

"In this chamber were found four decorated earthenware vases. In the northern end were the remains of a skeleton badly decayed; of the teeth, only the crowns remained. At either side of the head was found a circular ear ornament of green jadeite, about one inch in diameter, with red pigment adhering to the inner surface. Four jadeite beads were found near the head, and a piece of jadeite, about an inch in length, on which was carved a human face. Some charcoal and burnt earth were mixed with the clay which filled the vault.

"At a few paces to the southeast of the mound in which this tomb was found, is another mound of the same dimensions. An excavation made into the centre, at some former time, showed a ruined chamber about 22 feet in length; the roof and most of the walls had fallen in. Over the fallen roof-stones was found the skeleton of a young person, above which some rough stones had been placed. The skeleton lay on the right side, with the knees doubled up to the chin. Nothing was found with the skeleton. On clearing out the chamber nothing was found on the stone floor over which the roof had fallen.

"Tomb 6 is about half a mile from the main structure, in a northeasterly direction, on the lower foot-hills, in an old tobacco field. It was indicated by three large flat stones lying side by side, their upper surfaces about 9 inches above the general level of the ground; they measured 5 feet in length by $2\frac{1}{2}$ feet by 1 foot, and formed the roof of a chamber 6.2 feet in length, 2.5 feet in width, and 3 feet in depth. It lay almost due north and south, was filled with clay, and was divided by a row of stones across the middle of the floor into two sections. In the southern part were found the crumbling remains of a skeleton with a few rude pieces of pottery. In the northern section a portion of another skeleton was discovered lying on the stone floor. Near by were fragments of the skull of a third skeleton. A piece of pottery, $13\frac{1}{2}$ inches long, in the form of a perforated ladle, the end of the handle representing the head of a serpent, was found near the skeleton. This, in all probability, is an incense burner.

"Tomb 7 was discovered at a distance of about 20 rods west of Tomb 6. The chamber lay nearly east and west, and was filled with clay, in which only a few fragments of human and other bones were found, together with a small metate, or rubbing stone, and a plain stone object 3 inches thick by $1\frac{1}{2}$ by 8 inches, with three projections like legs.

"Tomb 10 lies 40 rods south of the main structure and 8 rods from the river, in a level area. The usual roof stones projecting above the surface showed its presence. In removing the clay with which it was filled, four beautiful jars or vases of exquisite workmanship were encountered at a depth of $2\frac{1}{2}$ feet below the surface, and 2 feet from the floor of the vault, together with a small stone celt, an obsidian flake knife, a ladle-shaped piece of pottery similar to that found in Tomb 6. With these were removed a few crumbling fragments of the skeleton of a child."











Human Teeth filed and ornamented with Jadeite. (See page 30.)

THE MONOLITHIC MONUMENTS.

The sculptured columns or tall monolithic monuments of Copan, to which the name of Stelæ has been applied by Maudslay and others, and is adopted here for the sake of uniformity, have not only furnished the chief attraction to travellers, but have given the ruins their principal fame and their distinctive character. Of the twenty-three of these monuments now known, fifteen are situated in or about the great Plaza, and in this group are included the largest and most elaborate; six of their number are standing, the rest are overthrown and broken. The average height from the ground does not exceed twelve feet; the average breadth is about three feet, with a thickness slightly less than the width.

All of this Plaza group of stelæ are indicated by Maudslay on his plan; but some were half buried beneath debris and rubbish, and were cleared for the first time by the Peabody Museum Expedition. A complete set of photographs and moulds were made of these as well as of the better-known stelæ. Associated with each stela, and usually from ten to fifteen feet from its base, is a smaller sculpture, called for convenience of description an altar. These may be said in general to be monolithic, although in some cases associated smaller parts, such as the head and legs of an animal, are carved on separate pieces.

The following is Palacio's description of what he saw of these monuments:—

"In this square are six great statues, three representing men covered with mosaic work and with garters round their legs, their weapons covered with ornaments; two of the others are of women with long robes and head-dress in the Roman style. The remaining statue is of a bishop, who appears to hold in his hand a box or small coffer. They seem to have been idols, for in front of each of them is a large stone with a small basin and a channel cut in it where they executed the victim and the blood flowed off." *

The name "idols" is used to-day by the natives living in the vicinity of the ruins when speaking of these monuments of their predecessors, concerning which they appear to have lost all tradition. So little has been accomplished since Palacio wrote, in the way of interpreting the monuments, that the

* A letter from Diego Garcia de Palacio to King Philip II. of Spain, dated Guatemala, 8th March, 1576. Maudslay's translation. See Appendix for this letter in full.

MEM. PEABODY MUSEUM I.—5

34

description which can be given to-day is scarcely more satisfactory than his, written more than three centuries ago, and must be at best but an enumeration of details in the design.

The following is Maudslay's description: -

"The monolithic monuments at Copan are cut from a somewhat decomposed trachyte rock; for convenience of description, they may be divided into Stelæ and Altars.

"On the front of each Stela,* and in some cases on both front and back, is a representation of an elaborately decorated human figure. On the back (when it is not occupied by a figure), and in some instances on both back and sides, is a hieroglyphic inscription. The design is sometimes completed by the addition of scroll-work derived from the form of the feathered serpent, to which is added a number of small human and grotesque figures.

"The ornamentation throughout the sculptures is no doubt to a great extent symbolical, and in the decoration of the Stelæ more attention appears to have been given to the display of such ornamentation than to securing correct proportion in the representation of the principal figure; but that the errors in proportion did not arise from the want of knowledge is clearly shown by the far superior treatment of some of the smaller figures on the same monuments.

"Almost the whole of the ornamental carving decorating the Stelæ at Copan is derived from the following subjects: The feathered serpent, grotesque human and animal figures and masks, feathers and feather-work, fish, bands and plaits made of some pliable material such as leather or bark-cloth, and loops and ties made from a softer material. Geometrical patterns, except such as are formed by the folds and plaits of a material with straight parallel edges, are not to be found (unless circles and dots can be so considered). Foliations and other vegetable forms are (with possibly one exception) entirely absent from the designs.

"The dress and ornaments of the human figures represented on the Stelæ, although affording infinite variety in detail, are not only similar in general design on all the monuments at Copan, but on all monuments of the same class throughout Central America.

"Until the inscriptions are deciphered, there is little to help us in determining whether the figures on the Stelæ are intended to be portraits of chieftains or priests in ceremonial costume, or whether they are fanciful representations of heroes or deities. The strong individuality of many of the figures gives force to the former view; but, on the other hand, there are two of the figures which cannot be included in the category of monumental portraits, as their faces are covered by grotesque masks. The great exaggeration of the personal adornments would be more likely to occur in imaginative figures than in portraits; but a possible explanation of these exaggerations may be learned from some of the sculptures themselves. The carving on a wooden lintel taken from a temple at Tikal (part of which is figured on Plate XXIII.) represents a central human figure standing under the arched body of a great feathered serpent, on a sort of stepped platform which rests on a framework of poles. This

suggests the probability that images made from some lighter material than stone may have been kept in the temples, and used on the occasion of religious processions. And it may be that the exaggerated adornments of the figures on the Stelæ were copied from the elaborate ornaments with which in all countries and in all ages it has been customary to adorn such processional figures.

"There is not at Copan any certain evidence of the use of textile fabrics, but it is probable that the waist-cloths and turban-like head-dresses of some of the figures were made from woven material.

"Considerable difficulty is met with in attempting to trace the development of the designs used in the ornamentation: firstly, because, with the exception of feathers and the skins of jaguars, we are not certain of the kind of material from which the ornaments and dress were originally made, and can form no idea of how far the design may have been influenced by the nature of the material worked in; and secondly, because the original designs may have been considerably modified when transferred to stone by workmen who had probably no better tools than chips and flakes of obsidian." — Maudslay, pages 33-34.

The stelæ were oriented as follows: A, B, E, 4, face east; F, H, I, J, M, P, 6, face west; C and 5 face east and west, being double-faced; D faces south; N and 3 face north and south.

Each stela is supported upon a base or pedestal, sometimes on a level with the surrounding pavement, and sometimes several feet below. This base consists of a flat slab of stone from 4 to 6 feet square, and about 1 foot thick. In four instances of fallen stelæ, vaults have been found underneath the support of the monument. These vaults consist of two shafts crossing at right angles under the centre, their ends lying in the directions of the four cardinal points. They are built on several large slabs, which serve as a floor and as a foundation. They are constructed of squared stone, laid without mortar, and are very strong and well made. Above the pedestal the monument is usually supported by stonework, laid against its sides.

The vault under Stela M (Fig. 3) was opened in January, 1895. The ends had not been closed, and the clay thrown against it had made its way in, filling it up to within a few inches of the top. The base of the monument (which had fallen) was on a level with the surrounding pavement, which came up against it on all sides, sealing completely the entrances to the vault below. The monument was supported on its base by an oblong block of stone, placed against it on each side. The dimensions of the vault are: length of east and west shaft, 9 feet 8 inches; width, 1 foot; depth, 2 feet. The other shaft has very nearly the same dimensions as this. Considerable care was taken to determine as exactly as possible the direction of the shafts; one was found to bear twenty minutes west of the true north, and the other is at right angles to it. In this vault were found thirty earthenware vessels, of various grades and styles of workmanship. Some of the coarser kind were to a great extent disintegrated; others of a finer

^{*} This cannot be said to apply to Stela J, which has a highly conventional face on its western side but no representation of a figure.

quality were perfect, and several of these were decorated with figures painted in different colors. A small jar was filled with black sulphide of mercury, and covered with a shell (*Spondylus calcifer*). A few rough bits of jadeite and some fragments of stalactites were also found.

The pedestal of Stela C (Fig. 4) is three feet below the pavement; the vault underneath it (Fig. 5) is much the same as the one just described, but is closed at each end by a block of stone; the north, south, and west arms widen towards the outer end; the east arm is shorter, is the same width throughout, and is closed differently. In this vault were found only a few pieces of rough pottery.

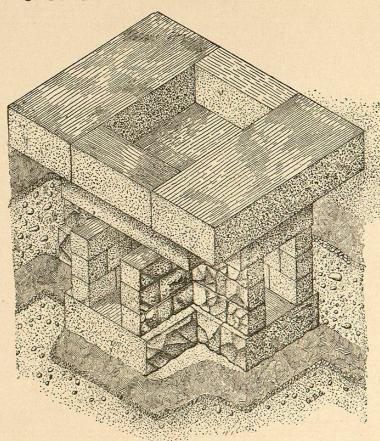


Fig. 3. — Vault under Stela M. Isometric Projection.

In front of Stela I a similar vault was found, containing several vases and jars of a very fine quality, painted with figures.

No vault was found associated with Stela 3; the pedestal rested on three layers of narrow oblong stones, under which was a pocket of pigments of different colors; in this were found four jadeite ornaments, very nicely cut and polished; each is pierced longitudinally by a round hole through which a string could be passed for suspending the object.

Excavations revealed the base of fallen Stela 1 in place on line of second step of stairway forming the western slope of Mound 9. From the vault

beneath were removed five rude earthenware vessels, fragments of stalactites, shells of the *Spondylus calcifer*, a large jadeite bead, and a quantity of cinnabar. At the foot of the stairway stands a circular altar broken nearly in halves and resting upon blocks of stone. A drawing by Mr. Gordon showing this altar and the fallen stela restored in place is given in Fig. 6.

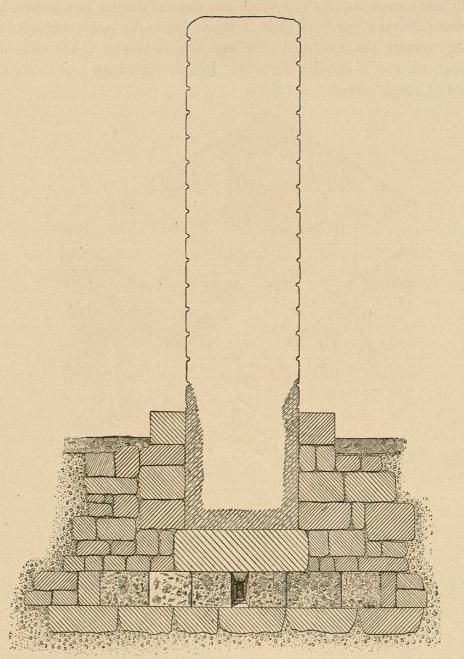


Fig. 4. — Cross-section of Stela C, showing Vault and Stonework at Base. Scale 1 inch = 3 feet.

Outside the principal ruin shown on the plan (Plate I.) seven stelæ are known, including the two on the mountains to the east and west.

Stela 6 is in the bush, several rods to the north of the path leading from the ruins to the modern village. It had fallen, but was in a fairly