approximately east and west, and measuring 5 feet in depth, 51 feet in length, and 2 feet in width, with a smaller chamber running northward from its eastern end, measuring  $3\frac{1}{2}$  feet in length, 3 feet in width, and  $3\frac{1}{2}$  feet in height. The walls of both chambers were of cut stone, regularly laid. The slabs of stone forming the roof were about 1 foot below the surface of the pavement, which was broken, and one of the roof stones thus exposed had been removed at some previous time. The roof of Chamber 2 was 2 feet lower than the roof of Chamber 1, and the floor of Chamber 2 was 11 inches lower than the floor of Chamber 1. The whole vault was filled to within a few inches of the top with brown earth mixed with wood ashes and charcoal. In removing the earth the following objects were discovered: -

EXPLORATION OF COPAN.

"The remains of two skeletons, of which only some of the teeth and a few fragments of the bones could be preserved. In one instance the four upper incisors were inlaid with little circular bits of jadeite, each fitted into a hole drilled in the front of the tooth. These jadeite ornaments are slightly rounded outward and highly polished. The two upper middle incisors were further modified by being filed on the inner corners. The left canine had a circular cavity drilled in the enamel in front, showing where it also had been ornamented like the incisors. An upper left lateral incisor found with the other skeleton had a similar decoration. (See page 32.)

"In different parts of the chambers, twelve earthen vessels of different shapes and sizes were encountered, most of them decorated with figures in different colors. One vase represents the head

Fig. 2.— Cross-section of Tomb 2. Width Inside, 5 Feet.\*

bolical characters. "Tomb 2 was found 27 feet west of Tomb 1. It was marked by a pile of loose building stones, probably the ruins of some structure built

of a wolf, modelled with great

accuracy, and exhibiting an

extraordinary degree of ar-

tistic merit. (See page 48.)

With these were found a num-

ber of shell ornaments and

jadeite beads, a pottery whistle,

bone needles, the upper jaw-

bone of a peccary, the radius

of a deer, and, most interest-

ing of all, the upper portions

of two skulls of the peccary,

one of which, very well pre-

served, is beautifully carved

on the outside with figures of

men and animals and sym-

\* This is a good illustration of the characteristic arch of the ancient buildings in Central America and Yucatan. The drawing also illustrates in a general way the construction of the rooms in the buildings of Copan, and the form of the arch which supported the roof. In a few instances tiers of the bevel-faced blocks of stone, forming a portion of the arch, have been found in place above the side walls of a building.

over it. The chamber lying east and west was 5½ feet in length and 2 feet in width at

the top, and 5 feet between the vertical walls below; the height is 5.2 feet (Fig. 2 cross section). It was filled to within a few inches of the ceiling with dry hard packed earth, very hard to remove. Ashes and some bits of charcoal were found near the top. On the floor were the crumbling remains of a skeleton. Four earthenware vessels, each painted with figures, some jadeite and shell ornaments and animal bones

"Tomb 3 is under the steps of a ruined house, at a short distance to the north of the great Plaza. An old excavation had brought to light a chamber running east and west. A roof-stone, 4 feet 9 inches long and 1 foot 4 inches wide, had been removed, but no attempt had been made to clear the chamber of the clay that nearly filled it. The top of the vault was  $1\frac{1}{2}$  feet above the level of the ground in front of the steps. Portions of the earth had been greatly disturbed by ants. The floor of the vault is at three different levels; at the eastern end was a section  $4\frac{1}{4}$  feet long, the cemented floor of which was 31 feet from the roof. The middle section, 4 feet in length, width 31 feet, was 11 inches lower; like the first it was covered with mortar cement. The western section was 31 feet long, and was 7 inches narrower than the other two, the wall on the southern side being built further in. This section was  $1\frac{1}{2}$  feet above the middle section, and was not cemented. The walls at this part were rougher and not so regularly constructed. The side walls of the vault converged somewhat toward the top, and the roof consisted of seven slabs, averaging 11 feet wide, 1 foot 2 inches in height, and 3 feet in length. In the northern side of the vault, about 5 inches above the floor, and near the eastern end, was a niche 1 foot in length, 10 inches in height, and 18 inches deep. Another niche in the centre of the southern wall, 1 foot 9 inches above the floor, was 10 inches high, 15 inches deep, and 1 foot in breadth. Nothing of interest was found in either. In this vault were found the usual objects of pottery, obsidian, shell and jade, a few fragments of animal bones, a piece of gnawed antler, a horse's tooth,\* and fragments of another. A human skeleton, which lay on the floor in the eastern end, was in an advanced state of decay. The left femur had been gnawed by some animal. The depression in the middle of the floor of the vault had been filled up with clay to a level with the eastern section.

"Tomb 4 was found about midway between the Main Structure and the modern village of Copan, about 100 yards north of the road. There is a mound, 37 by 32 feet, built on the slope of one of the foot-hills. On the eastern side had once been a flight of steps, 15 feet wide, ornamented with several stones carved in a conventional pattern. The land where this mound is situated has been used for planting, and an excavation, made by some native in the top of the mound, revealed a large flat stone, which proved to be one of the roof stones of a vault, 2 feet 3 inches in width, 3 feet 5 inches in length, and 2 feet in height. Nothing was found in this chamber, but the northern wall was open and gave access to a larger chamber, the floor of which was 1 foot 4 inches below the floor of the first. This chamber was 4 feet in length from east to west, and

\* These teeth of a horse had been broken from the jaw, and they may have fallen into the tomb or have been carried there by rodents during the interval since it was first opened and its exploration by Mr. Saville. The gnawing of bones in the tomb and the ants' nest show that there has been considerable disturbance of materials. We must, however, remember that these teeth may possibly have a bearing upon the existence of an American horse in prehistoric time. In this connection, see Cope, note on Equus fraternus, Amer. Phil. Soc., vol. xxxiv. p. 466, 1895.

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

<sup>\*</sup> 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.

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