

chamber is approximately circular in shape, and measures one hundred and fifty feet in diameter, rising to a lofty vault in the centre. The walls of dark gray limestone, without stalactites, present a gloomy appearance. Upon the floor the deposit is the same as that found in the other caves. When discovered, the surface was very even, without tracks or other disturbance, and offered no very firm resistance to the footstep, which sank half an inch in the dry powdery deposit. Numerous small fragments of pottery appeared sticking through, and in places were charcoal and dried-up hard-pine fire-brands, the remains of fires over which had accumulated an earthy dust to a depth of about two inches, representing the depth accumulated since the latest occupation. This surface dust is of the same character as the whole deposit on the bottom of the cavern, the depth of which was finally determined to be at one place fifteen feet. I believe this deposit to be formed by the dry decomposition of the rocks forming the walls.

The walls slope downward on all sides like a dome, meeting the floor at an angle and forming recesses all around. In one of these recesses

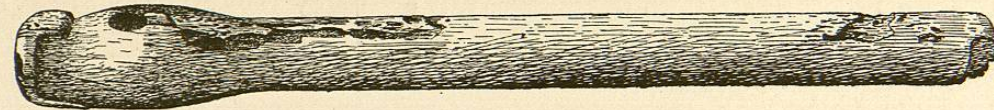


FIG. 1.—WOODEN AXE-HANDLE? FROM CAVE 3. 4.

nearly opposite the entrance I found a wooden object, shown in Fig. 1. It was half buried in the dust, and had every appearance of having lain there a very long time. The state of the wood is not out of keeping with this supposition, because in the absence of moisture there was so little to aid in its decay that it might last for many centuries. A careful search was made in its vicinity for the tool to which it belonged, but no trace of it appeared, and no implement of any kind was found in any of the caverns.

An excavation twenty feet long and three feet wide was made in this part of the chamber. After the surface layer of dust came a thin crust, which must have been caused by the presence of moisture at some period. It was only a few inches in thickness, and beneath it the material was very dry, soft, and loose, so that the men were able to remove it easily without the use of picks. In the surface crust and beneath it to a depth of three feet were found ashes, charcoal, and potsherds. The latter are not numerous, and are of a coarse quality. At a depth of three feet the potsherds and ashes and all signs of occupation disappeared; the material excavated grew lighter in color, softer, and looser. In appearance and behavior it resembled quicklime, of which it largely consisted. Throughout the whole excavation the material removed rose in the air in thick clouds of suffocating dust.

The excavation was carried to a depth of fifteen feet, where the bottom of the cavern was reached in part of the excavation. On the rock floor were absolutely no traces of occupation.

Close under the sloping wall a skeleton was found ready to crumble. The skull was about six inches from the surface, and the earth rested so lightly upon it that it was still entire when found, but crumbled on being touched. By the skull was a small narrow-necked jar (Plate I., a). The body had been placed in a sitting posture, with knees at chin. In the left-hand side of the chamber, looking from the entrance, a small opening on the level of the floor leads downwards at an angle of 15° under the wall. It is just large enough to admit the body of a man lying flat, and is the end of a passage about forty feet long that leads to a small chamber which I have called No. 2. Though smaller—being only about fifty feet in diameter—this chamber was like the first in appearance, except that it contained more ashes. The floor was level and even, but the way it yielded to the footstep did not suggest any very extensive or recent occupation. As in the first chamber, fragments of pottery protruded from the surface, and one rough vessel rested on the floor near the centre. Near it was a slight rounded elevation which proved to be the remains of a fire, a heap of bones and ashes covered with dust. Over a part of these remains a stalagmite had begun to form, the only evidence of moisture having entered this cave. It was about six inches thick in the centre, thinning away at the edges; many of the charred bones were incorporated in its under part, showing that it had formed and had not been placed in that position. The rough jar which stood close by had the marks of fire upon it, and was probably a cooking-vessel. An excavation about eight feet in diameter and six feet deep was made in the centre of this chamber. Over everything, including the stalagmite, was a layer of dust; on the stalagmite it was at least one inch deep. As in the first chamber, fragments of pottery were found in the first three feet of depth, but after that none were found. During the work the whole chamber became filled with clouds of choking dust. From this chamber another passage similar to the first leads in the same direction to a third chamber, a long narrow gallery which looks like a rift in the rock running to a wedge at either end and at the top. It is eighty feet long and twenty feet wide at the widest part. The walls are black, the air close and foul, and altogether it is as repulsive a hole as could be found in the face of nature. The floor seemed more uneven than in either of the other chambers, and gave way still more to the pressure of the feet, and with a crushing sound. I soon discovered that I was walking upon the dust and crumbling bones of decomposed human bodies, mingled with ashes and lime. A mass of charred and calcined bones occupied the entire floor to a depth of about two feet. Among these were a few larger pieces which did not show traces of fire, and around the walls were found a number of small jars (Plate I., b, c, d, e, f). An excavation



was made across the centre of this chamber to a depth of three feet. In the last foot excavated the bones disappeared. It is hard to give a conception of what a disagreeable place this was to work in. Outside the mountain it was intensely hot, and inside the temperature seemed scarcely lower; add to this the close, stifling condition of the atmosphere, that made breathing difficult, and then the thick clouds of unsavory dust that filled the air at every disturbance of the decayed mass on the floor with its associated lime and ashes. The chamber seems to have been used for depositing the partly cremated remains of human bodies. I do not think that fires were built in this chamber itself, for there were no large fragments of charred wood such as would have marked the remains of a fire.

Cave No. 4 is close to No. 3, in an angle of the cliff. The first chamber is a dome-shaped cavity about one hundred feet across and very lofty in the centre. The floor had the usual appearance. At the side farthest from the entrance a rocky incline led upwards to an opening like a narrow doorway, guarded by a projecting wall of rock; this gave access to a small circular chamber from whose top a shaft leads almost vertically upwards to a height of forty feet, where a narrow passage leads horizontally to one side. Following this a distance of fifty feet, a long, low chamber is reached, quite damp and inhabited by myriads of bats. No digging was done here, and I cannot tell whether or not there are any human remains.

An old Ladino who lives at Llano Grande told me one day that there was when he was a boy a very large cave at a certain point in the lower slope of this same mountain. From the entrance a flight of hewn steps led downward a long way into the interior, and there were sculptured figures on the wall on both sides. People were afraid to enter it, but on one occasion he and a companion entered with a torch. They arrived at the bottom of the stairway, and walked on a level floor. There were statues standing around, and there were sculptures on the walls. They thought there might be gold hidden away somewhere, but after they had gone a little way they saw something that looked like the devil, and becoming afraid they ran out. So far as he knew, no one else had ever entered it, and some time afterward the entrance became closed up. He pretended to be able to point out the exact spot where it had been, and I had the bush cut over a considerable space and excavated, but found neither a cavern nor any indication of one. Either the old man was lying or he was mistaken about the location of his cave. They are fond of the marvellous, and like to make others gape with wonder at their experiences and tales. It is not at all unlikely, however, that my informant had known and entered some cave that afterwards became lost, but his imagination aided his memory, and his love for the marvellous made his story easy. There was nothing artificial about the walls of the caves I examined, and with the single exception mentioned there were no sculptures of any kind.

In the eastern part of the same limestone formation is a cave of a different character from those described. In the upper slopes of the mountain, whose top is broad and flat, is an opening in the form of a well about ten feet in diameter and fifty feet deep. From the bottom of this well a shaft leads to a small chamber with a smooth floor of calcite with stalagmites standing like columns around the sides. The whole chamber is lined with white stalactites and delicate incrustations of calcite. At its extreme end the walls of this chamber converge toward the mouth of a vertical shaft a little larger than a man's body. On my second visit I was lowered through this opening by means of a stout rope brought for the purpose. At a depth of a few feet the walls of the shaft receded suddenly, leading to a dome-shaped cavern, very damp. From the enormous stalactites that depend from above, the water is constantly dripping, which keeps the rapidly forming calcareous deposit on the floor quite moist. There was no other opening but the one that I came through; and the only trace of human remains I found were the bones of a skeleton almost entirely embedded in the rock and much decomposed. This skeleton lay several yards from the point directly under the opening at the top, and was extended at full length. The depth of the cave was more than one hundred feet measured by the length of rope paid out, and it is therefore certain that a person falling through the opening would have been mangled, and his remains would have stayed where they had fallen, directly below the opening.

The pottery that was found in these caves is of a character entirely different from that found at Copan. Not a single piece can be said to bear any resemblance to Copan pottery, nor does it resemble the pottery of any other locality with which I am familiar. The facts already obtained do not lead us beyond the positive proof that in this region there once lived a people who made pottery of a different character from that pertaining to the people with whose remains in the same region we were already familiar, and that this people either dwelt in caves or resorted to them occasionally, from motives of practice, custom, or protection.

The evident strength and security of the position suggest their having been selected for defence; and in keeping with this are the natural conditions determining the mode of life, for races have only taken up their abode in caves where the inhospitable climate drove them to seek shelter there from storm and cold. In this region all the natural conditions are such as to induce an open-air mode of life. Then it is to be remembered that the caves now known could not accommodate very many persons, a few families at most, although it is not unlikely that there are other caves.

Again, the facts obtained in the caves do not seem to indicate a constant occupation for an extended period of time; the deposit is not compact and hard, even on top, as such an occupation by a number of persons would tend to make it. The absence of moisture would of course help to prevent