

the cliffs in the canyons hereabouts, and we were told to be on the lookout for them; but after going up the canyon several miles and not finding any we inquired of a boy that we met where the hieroglyphics were located. His face took on a puzzled expression. He evidently did not understand. We explained that they were marks on the rocks made by the ancient Indians. His face brightened; he understood all right now. "Oh, yes," said he, "down there by Sam Robinson's there's a train of cars and lots of things they cut on the rocks long ago."

After a while we found the hieroglyphics, lots of them. They are usually on the face of the cliff, six or eight feet above the ground, and are cut into the rock with some crude instrument, probably a flint knife or stone ax. They are made to represent deer, mountain sheep, lizards, arrow and spear heads, sun circles, concentric circles, grotesque human beings, and a great variety of marks and signs whose meaning or intent we were not able to make out. There were long, wavy lines that branched and ran in different directions and usually terminated in a square or circle. These I took to represent roads through the various canyons to the valleys beyond, and were probably guides to the traveler. Almost every rock of prominence, every cliff for a distance of ten miles or more through the canyon was covered with ancient marks, or hieroglyphics of some kind. There were also a great many modern hieroglyphics and if we were to judge the moral standing of the two people from their picture-writing on the rocks we would say that the ancient race was far superior to the modern.

In point of antiquity it is difficult to form an idea as to how old these writings are. I think they were made at different times and cover a long period, but that they were all executed by the same people. At first we were not inclined to attribute to them a very remote antiquity, for the reason that they were all cut in sandstone and appeared to us to be the work of a crude people, just such as we suppose the ancestors of our modern Indians to have been. Neither did we attribute much importance to them, but were of the opinion that they were executed by young Indians for amusement. This seemed the more probable from the fact that the rock is so soft that with an ordinary pocket knife it would not be a very difficult undertaking to duplicate them.

Since leaving Clear Creek I have been forced to change my mind as to the antiquity of the writings and now attribute to them a greater antiquity than I was at first willing to do for the following reason: When first seen by the white people forty or fifty years ago the writings were about the same as now. That is, they bore the same air of antiquity and the color stains upon them have not changed. In places I noticed that portions of the rock, which were, no doubt, firm when the writings were placed upon them, have since crumbled away and fallen down. Then I thought from the fact that they seemed to avoid the harder rocks was an indication that the engravers neither had the inclination nor possessed the tools necessary to do the work; but I have since seen similar

writings chipped in the surface of the hardest granite rocks, so hard in fact that an ordinary obelisk would hardly make an impression upon them. So that, while it may have been an easy matter to have gouged out the extensive writings in Clear Creek canyon, it was correspondingly laborious and difficult to do the work on the granite blocks of the Rio Virgen; and while it is just possible that papooses may have executed some of the writings in Clear Creek canyon for amusement, it will hardly do to apply the same rule to the hieroglyphics on the Clara and Virgen; papooses are not constituted that way. Similar writings are met with in other parts of the country that are known to be from two to three hundred years old, and much older for aught we know. That the hieroglyphics have a symbolical meaning can hardly be doubted when it is known that writings almost identical with these are found in Peru, Venezuela, Colombia, Mexico and in many parts of this country. So that, notwithstanding the fact that they were the work of a crude people, it can hardly be denied that they had some meaning and that that meaning was not confined to the Indians of Utah alone, but was known and understood by their red brethren as far away as the confines of Bolivia.

Western Utah bears no evidence of having been very densely populated in ancient times. While there are evidences in many places of villages and a settled life, there is only one place that bears evidence of having been long settled by an agricultural people. This was about Paragonah, in Iron county. The mounds or ruins are situated just outside the town, along the road that goes towards Beaver. They are irregularly distributed over an area of probably 150 acres, and consists of what appears to be mere mounds of earth ranging in size from 35 by 25 feet to 85 by 100 feet, and in height from five to fifteen feet. While the mounds appear to be mere heaps of earth identical with the burial mounds I have seen in the Mississippi valley, yet when they are uncovered, well preserved walls are found, so that it is a very easy matter to trace the plan of the ancient house. At different times since the settlement of the country by the Mormons, interested ones have made excavations into the mounds with a view of learning something about their builders; but outside of some broken pottery and some charred bones and ashes, nothing of importance was ever discovered. Last winter Don Maguire came down and made some extensive excavations and unearthed nine or ten well-preserved skeletons and some few stone implements, awls, etc.

The large mound where Mr. Maguire made his excavations seems to have been the principal building of the town and was probably a temple as well as a place of general resort in case of attack. It faced the east and corresponded very nearly to the cardinal points. It was rectangular in form and had an open court in the center around which were double rows of small rooms. It was in the court that Mr. Maguire found the skeletons. At first I supposed from the size and height of the mounds that the building must have been two or more stories high, but afterwards I was led to

change my mind on this point. Mr. Maguire opened up several of the small rooms exposing the walls and removing the rubbish to the floor. This floor level was about eight or ten feet above the level of the plain. We dug through the floor and under the walls and discovered that the mound had been raised to that height before the building had been commenced. Continuing downward, we penetrated layer after layer of clay, and charcoal and ashes, until the level of the plain was reached. The layers of ashes ranged in thickness from half an inch to three inches, and in them were found charred bones, broken pottery, and fragments of stone implements. The bones found in the lower mound were badly decayed and seemed to be much older than those found in the rooms above. Just above the plain level we found several pieces of what appeared to be fragments of burned brick. They certainly were as hard as our common brick and had been made so by the agency of fire.

This fact led us to the opinion that the ruins had been twice inhabited and that the later people had built their houses on the ruins of the former, and that they in turn had been annihilated or driven away. Everything about the ruins indicates plainly that a state of war existed when they were destroyed. Here existed a settled community well advanced in the arts of civilized life. They built houses; cultivated fields of corn and squash; irrigated them with water brought from the mountain streams in canals that are still traceable. In the midst of this peaceful life they were pounced upon by their enemies; they were driven into their houses and murdered; fire was then set to the buildings, and the remains of the inhabitants, charred and burned, were covered by the falling walls. The skeletons found by Maguire all had their skulls fractured by some rude instrument of war, and they occupied positions that would indicate that they had been slain on the spot where they were found. Very few if any whole pieces of pottery have been found in the ruins, and the scarcity of flint arrow head is noticeable. It seems probable that the conquerors carried off as spoils everything of this nature that they could make use of.

The walls of the buildings were about one foot thick and were made of clay, and seemed to be erected much on the same principal as we erect our concrete or cement houses. A layer from twelve to sixteen inches thick was placed upon the wall and left to dry and bake in the sun. When this was done another layer was added, and the drying process was repeated until the walls were raised to the required height. The floors were of a sort of cement made of clay and gravel, and I believe was hardened by the agency of lime. At any rate they were very hard and must have lasted without replacing for a great many years. Some of the pottery scraps that we picked up showed excellent design and finish, indicating that the makers were experts at the business. The decorations were mostly painted with black and resembled very much the decorations in vogue among the Maricopa Indians of the present day.