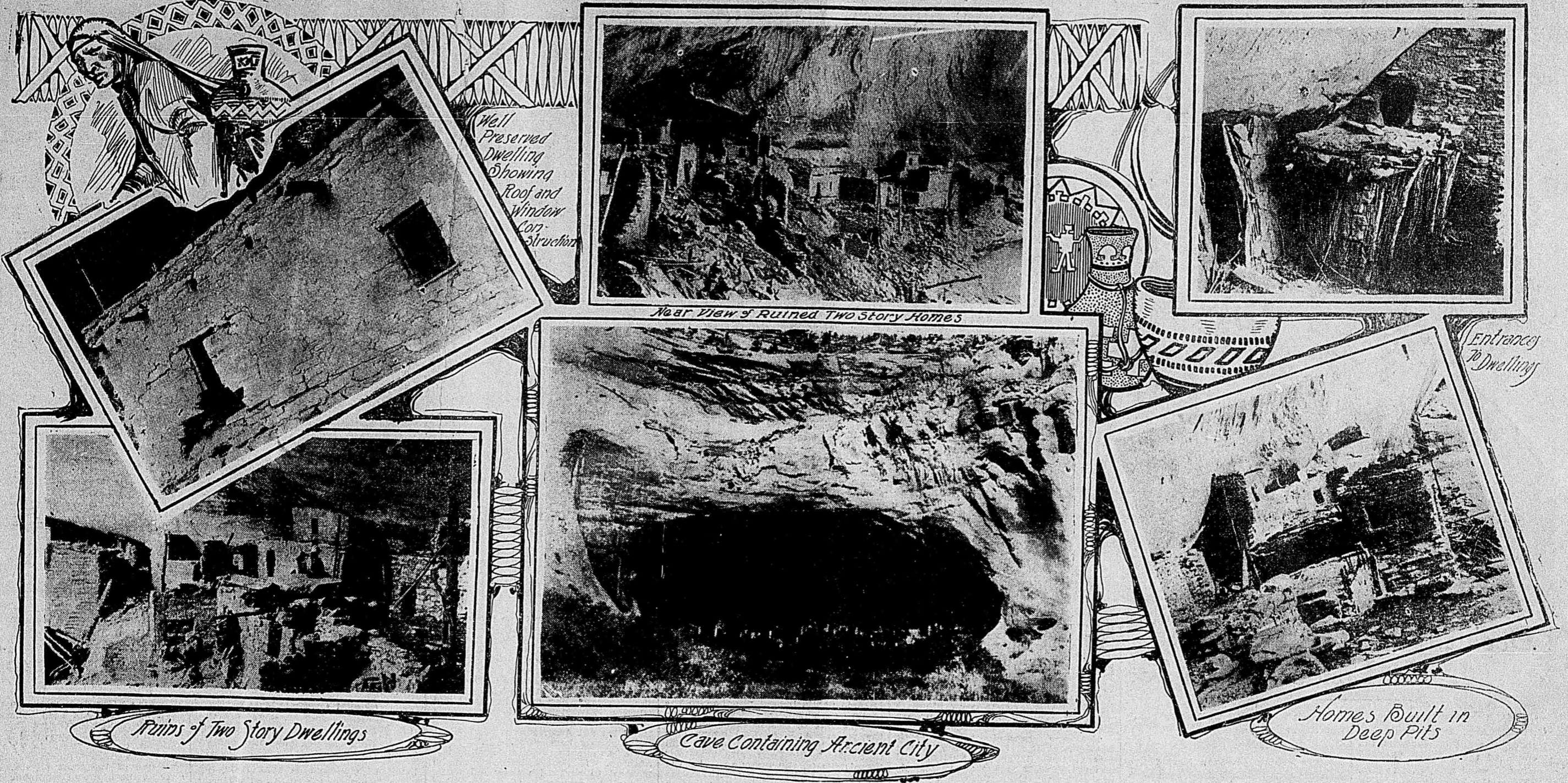


Important Archaeological Discoveries by Utah Explorers



The photographs accompanying Mr. Beauregard's intensely interesting article were taken by Stuart M. Young, official photographer of the Utah Archaeological Expedition and for the first time show the extent of these wonderful ruins in Northern New Mexico. The ruins show the prehistoric inhabitants of America to have been of a higher order of civilization than is ordinarily admitted by scientists. Mr. Beauregard's article also bestows the credit for the discovery of these ruins where it justly belongs.

SEGA CANYON. Keetseel Camp, Ariz., Aug. 15.—The most important cliff ruin brought to the notice of the world since the discovery of the Cliff Palace in the Mesa Verde, Col., has for the first time been thoroughly examined and photographed by our archaeological expedition. It is next to the Cliff Palace in size, containing 150 standing rooms, for the most part in excellent condition. It was discovered in 1894 by Richard Wetherill of Pueblo Bonito, N. M. It was revisited again by Mr. Wetherill in 1897, and then left untouched until this summer when John Wetherill of Oljato, Utah, who has been one of our party most of the summer and one of the most active men in American archaeological discoveries, guided Dr. Hewitt there in June. Later Mr. Wetherill and Prof. Cummings visited the place and our party has finally reached it with the unanimous opinion that we have seen one of the greatest sights in the world.

ERRONEOUS REPORTS.

News has already been flashed by the Denver Post and followed by other influential papers both east and west by the Associated Press that Dr. Hewitt is the discoverer, further mentioning other imaginary finds such as many more caves outmeasuring those of Kentucky and natural bridges greater than those in southern Utah. This is an entirely false report and does grave injury to the expedition and Mr. Wetherill who in conjunction with his wife has been attempting to locate these supposed wonders for several years, following clues and substantiating vague rumors that the Navajos and Utes are loath to let escape. Dr. Hewitt has not discovered any marvelous caves or bridges and he would not have seen the cliff ruin had it not been for our expedition. Last summer Prof. Cummings, Mr. Wetherill and party attempted to locate the place, bearing the expense of the trip themselves, and failing only through lack of information as to its exact location. This summer our party pushed directly for the place and Dr. Hewitt, whose expenses were paid by the expedition, chanced to be the one guided there by Mr. Wetherill, who had succeeded in the meantime in locating the place through information from the Navajos. This to give honor where honor is due and to rectify false and erroneous reports.

NEW LIGHT ON ANCIENTS.

Among educational circles the discovery of such a house marks an epoch of tremendous importance, throwing an entirely new light on prehistoric American inhabitants and giving them a different status of a much higher order in civilization. Heretofore the Cliff Palace has been considered an exception to the usual cliff house, a sort of magnificent specimen that probably required a more than ordinary effort to build. This house, equally as magnificent, in an entirely different part of the country, presents many of the same features, has many new ones of its own, and lies in the most picturesque and remote section of the North American continent, about 10 miles south of the Utah line in Arizona. Contrary to the general belief that

this part of the country is principally a vast plain, it is a confused mass of deep canyons and high mesas, hazardous for the uninitiated to penetrate, and inhabited only by scattered families of Indians. In order to reach our new palace it is necessary to take a pack trail for 200 miles over difficult trails, many times without food for the horses and often without water for the party. This possibly explains why such a house has been lying for so long abandoned by the builders and unknown to the whites.

The canyon in which it lies runs in an irregular half circle heading near Navajo mountain, running southeast and east into the Chin Lee finally emptying into the San Juan river 80 miles above. Kit Carson crossing the canyon in 1886 named it Leguna. The Indians divide it into two sections, the lower being the Kaenta, the upper the Segui, where the ruin is found. Here the canyon is narrowed down to a half mile

wide, cut through by a typical arroyo, and patched up by clumps of oak brush and wild currant bushes—the latter loaded with ripe currants rather insipid in taste but mighty inviting to a fruit-furnished party. On each side the cliffs rise precipitously to the height of 500 feet, making a solid wall impossible to climb or descend.

BIG SHAPED CAVE.

Twenty feet above the base of the cliff and directly above a rather extended talus slope the egg-shaped cave containing the ruin is cut back about 75 feet, inclining gradually upwards and stretching 200 feet across. The vault rises 250 feet above the walls, stained in fantastic designs by rain water coming from the mesa above, and painted here and there by still more unique pictures in the form of hieroglyphics.

The first sight of the palace from across the arroyo, lying there so utterly silent and abandoned with its towers and fallen walls and

projecting timbers, is enough to bring forth ejaculations from the coldest temperament. After working through the entangled brush where all sign of path or trail has been long forgotten and then up the 20-foot ledge where footholds are still visible that were one time chiseled out in stone, and used regularly as a ladder for exit and entrance, one lands practically in the center of the cave, the ruin extending in tiers on either side to the farthest recesses, where rooms are tucked away more nearly like pigeon houses than places of abode for human beings. A sort of narrow hallway or passage runs irregularly between the outer and inner tiers, giving access to the majority of rooms, sometimes leading to the roof, other times downward to cellar-like apartments, and finally to the extremity of the cave where a kind of lookout station is stuck on a narrow projection some 10 feet above the rest of the ruin.

VARIETY OF ROOMS.

Following the hallway to the left one passes rooms of all shapes and sizes, though generally about square, averaging from 15 feet wide and eight feet high to four feet wide and four feet high. The entrance for the upper rooms is generally on the side about two feet wide and two and a half feet high, just large enough to crawl into, while the entrance to many of the other rooms is on top by means of a ladder stuck through a much smaller opening.

NATURE OF STRUCTURE.

Descending into one of the rooms, one is immediately in the dark, receiving but little light from the entrance and blind from the quick change from the dazzling light outside. The ceiling made of cedar rafters lying perfectly flat and covered over by smaller timbers running in the opposite direction with bark and clay on top, is completely soot covered from the smoke of

centuries of occupation. The walls, likewise black and crudely plastered with clay, stand perfectly bare and unornamented, just as they have probably stood since being erected. Very often a small square hole leads again to another room below equally as dark, and so on through a series, forming a sort of apartment, each room serving as dining room, kitchen, parlor and bedroom all at the same time without distinction.

Nestled in the odd corners are numerous small rooms too small for a human being to creep into and usually strewn with corn cobs and various other remains that suggest them to be store rooms or granaries.

WORSHIPPING HALLS.

Turning to the right the passageway is similar but interspersed among the rooms one finds several kivas or worshipping halls occupying the most important positions of the ruin. These are imperfectly round in place of

square with an average diameter of 15 feet and built with the utmost care. When the debris is removed and restoration effected many interesting specimens of worshipping paraphernalia should be found which will tell, in part at least, the ceremonies performed and give us some idea of the details of their religious codes that seem to play such an important role in every ruin.

When the wonder of the place finally permits one to look around a little more closely, one sees all sorts and shapes of pottery that lie in shreds on the roofs and floors where they have been admirably preserved from decay but badly broken. In fact such an abundance of broken pottery is found scattered promiscuously around the ruins that the Navajos have named it Keetseel, meaning broken pottery. This is the name likely to be retained in the future. Most of the pottery is of the finest quality in designs of black and white which indicates a developed art in that direction that has not been rivaled. Some of the large ollas, particularly, measuring two feet across are perfect both in shape and design. Scattered on the roofs of the houses are also numerous mantillas, manos, etc., that were used for grinding grains which shows that they were still an agricultural people and serves also to indicate that during occupation there were many families living there together, each one having their own set of grinders, the most important utensils that they used.

STONE AXES.

Several fine stone axes are lying about evidently discarded ones but of excellent workmanship and on examining the various timbers about the walls and roofs one can easily see that they were all cut with stone axes from the gnarled off appearance of the ends. One huge timber lying directly across the front of the outer walls, possibly used at one time for a prop or support with a length of 40 feet and 14 inches in diameter, was cut and trimmed with stone axes which must have required considerable patience, skill, strength and time to cut, showing an admirable side of their character.

Other than these there are no visible relics of importance and it remains now to thoroughly excavated and restored which means considerable expense and time and undoubtedly rich returns.

SHELTERED FIVE HUNDRED.

Prof. Cummings has carefully estimated that such a house could easily have contained 500 people and the canyon itself with its fine flats of loamy soil could easily produce enough for twice such a number if properly cared for. Where the oak brush and weeds are growing and dying and the years pass by the decay there was once a great civilization mysteriously taken from the earth.

The accompanying photographs are the first ever taken at the place, made by our official photographer, Stuart M. Young. These will give an idea of what the ruin means.

DONALD BEAUREGARD.

MISSOURI ONCE THE HOME OF MAN-EATING RACE

Boone County Antiquities Reveal Archaeological Romance of the Early Inhabitants of Mound Country.

MISSOURI had early inhabitants who were cannibals. Relics found in two Boone county mounds seem to prove this beyond doubt. These early inhabitants lived by fishing. Most of their implements found are well adapted for opening clams and scaling fish. They practiced agriculture. The absence of the mortar and pestle implies that they were unacquainted with the corn plant. The agricultural implements used for digging. As the canals still grow abundantly in the localities of the mounds, it is very probable that this plant was used to great extent for food.

They did not possess the knowledge of working iron. They were familiar with the red oxide and no doubt prized it highly, as it is often found in their mounds. They were familiar with bitumen. They used this substance to coat the inside of their pottery. They appreciated good drinking water. Their largest camps are found near unfailing springs of pure water. Many of them quenched their thirst at the famous Rollins Springs, on the Agricultural college farm.

These Boone county antiquities are very unlike those of the Miami valley, in Ohio. This indicates that either they are of greater age or that the people were less warlike than their eastern neighbors. The difference in the shape and material of their implements is remarkable.

HEADQUARTERS OF THE TRIBE.

The largest camp found was on land now owned by Marshall Gordon, near

Columbia, where must have been located the combined farms, pottery homes and fish preserving establishments of the whole tribe. Five acres of ground are covered with fragments of pottery, stone implements, ornaments, bones and skulls. Many of the implements are of good shape and admirably adapted for opening the shells of clams or mussels. Several curious instruments highly polished, including one made of hematite and neatly wrought, have been found at this place.

In connection with the camp is a group of mounds stationed on the bluff about one hundred feet above the stream. Across the valley to the westward and on a similar ridge is a solitary watch tower. It is made of stone, and at the abrupt ending of a narrow hogback. This ridge extends northward almost to the very door of Mr. Gordon's home. Along the center of the ridge is a deeply worn path and extending its full length. Was not this the sentinel's beat in some unwritten war?

On the Missouri Agricultural college farm, near the old vineyard, are three small mounds. Although these had been opened many years ago they were found on recent investigation yet to contain some rich treasures. Several shapely jars made of pottery were found in one of these. In one corner of this same mound were several skulls piled up like cannon balls. To the southeast of these mounds is a level plain that was once the scene of battle. Scattered upon it are arrowheads and other warlike paraphernalia.

On a ridge only a few furlongs above the battlefield is a mound which once contained the bodies of at least 20 persons. It is a small mound, not more than three feet high. The interior consists of a box made of flat stones. Some of these skulls were placed in such a position as to prove that they were severed from the body before burial. Within the mound and in the center of the mass of black mould, probably the remains of a body, were found two arrow points of an ordinary pattern. In the bottom of this mound was a layer of charcoal, ashes and bones. The bones were those of a human being. Among the mass was the fragment of a skull four inches square and with a re-

markable thickness of an inch. The skulls found above this layer were only one-fourth of an inch thick. Who was this thick-skulled person? Did some unfortunate prisoner of war furnish the substance for a funeral feast at the graves of these fallen warriors?

ANCIENT ARSENAL.

An ancient arsenal has been found where the Providence road crosses the Hinkson, in Boone county. This small piece of ground, less than an acre, has yielded a harvest of several bushels of relics. They represent all ages of the genesis of an arrow point. Many oblong blocks of flint fresh from the quarry are found mingled with the finished product. It is to be regretted that many of these remains must soon become lost to science through the farmer's plough and the hand of the curious and unsentimental vandal.

Covered with trees, one of which is a large oak three feet through at the base, at least 100 years old, is an Indian mound, on the east side of Hinkson Creek, near the William Jewell burying ground. This structure is 50 feet long, 30 feet wide and three feet high. Explorations of the mound showed the character of a race who had been inhabitants of Missouri before the white man came.

Walter H. Ficklin of Columbia, in final explorations, decided that the race of mound builders were not more than five feet tall and that the bones gave no evidence of unusual muscular development. Their heads were small, their foreheads narrow, low and retreating. Their facial angle being only about 65 degrees, they were very prognathous. The statement in regard to small stature may be objected to on the ground that the bones might be those of youths instead of those of adults. While children's bones do occur quite frequently, those of adults are always present, for in every mound skulls are found whose sutures are completely ossified, and in the inferior maxillae the ram is perpendicular to the body of the bone, while in the youth they stand obliquely. Moreover, in many of these maxillae there have been found

full sets of permanent teeth showing wear.

WITH THICK SKULL.

The mound builders, like all other races, had their monstrosities. From the mound was obtained a fragment of a human occipital bone three-fourths of an inch thick in the thickest place. The nearest approach to this in any collection is a piece three-eighths of an inch thick obtained from another mound. The average thickness is three-sixteenths of an inch, at the same as the Caucasian skull. The above mentioned fragment greatly exceeds in thickness the skull of the African. Very near the surface, just inside the wall, was a skull very much deformed and which was destroyed in removal. Almost protruding from the surface were bones, large and small, without any regularity whatever. In trying to obtain one bone complete several others would be shattered. For fully six inches there was nothing but a confused mass of bones, roots and clay. Among these remains were three arrow points, probably in some of the bodies when buried. A skull was found, face upward, with its lower jaw bone resting squarely against the east wall.

Although there were a great many bones found in this place, only a few good specimens could be obtained. They bore no trace of decay, but had been almost consumed by the dense vegetable growth; in many cases roots had started into the hollows of the large bones and gnawed until the bones burst. About a foot below this confused mass, under some packed clay, were some bones in systematic order—the bodies were lying parallel. These last remains were completely charred and, in fact, almost totally consumed.

Among other things was a large flat piece of limestone, having on one side small round holes or depressions, all of about equal size, arranged in geometric figures and having the appearance of a rude stone tablet. At first sight, considering the place in which it was found, the stone could be easily mistaken for a genuine relic of aboriginal art. But after examining it, Dr. G. C. Broadhead said that, while it was possible that the holes were caused by the dissolution of iron concretions, an impurity found in the limestone of this region.

This mound must have been intended for the sepulchre of the bodies in the

lower layer only, for the upper layer bore no mark of fire, and, moreover, considering the three arrow points and the skull with its jawbone resting squarely against the wall and, most of all, from the confusion in which the skeletons were first found, it is evident that they belonged to men slain in battle and who received a hurried burial.

IDENTITY OF RACE UNCERTAIN.

No extensive explorations of prehistoric remains have been made in Central Missouri, but by a ramble over the hills and through the fields it is easily seen that Boone county was inhabited by a now extinct race, for along the creases of every hilltop and cliff, mounds are to be found, and the fields are dotted with the implements of primitive man. Whence he came, how long he lingered, and when he departed will probably never be known, for this illiterate people left nothing save earthen works and rude implements to guide the antiquarian. Whether these are remains of Mound Builders or of early Indians is not finally determined.

The exhumed bones from the mounds are always very badly decomposed and crumble to dust immediately. It has been almost impossible to get a complete skeleton, according to Mr. Ficklin. Of the 200 bones in the body, there would not be found more than 20 in good condition, and in some instances fragments of the teeth are all that remain.

There seems to be an idea prevalent among many that prehistoric man was of larger stature than man of today. In only one instance, in which Mr. Ficklin could estimate even approximately the length of a skeleton has one been found to approach six feet. The skulls are sometimes complete, but are nearly always distorted by the growth of roots and the pressure of the overlying earth. The teeth of even the youths were very badly worn, while those of the adults were worn nearly to the gums. Nothing has been found to indicate the artificial flattening of the head.

The implements are very abundant and vary greatly in size and shape, and were generally made of white or gray flint. One of the smallest arrowheads is one-half inch long, and spearheads have been found eight inches in length. Some of the weapons show very skillful workmanship, while others are rudimentary.

(Continued on page fifteen.)