

Published by

The State Historical and Natural History Society of Colorado

Devoted to the Interests of the Society, Colorado, and the West.

Copyrighted 1925 by the State Historical and Natural History Society of Colorado.

VOL. 2

Denver, Colorado, April, 1925

NO. 2

Report on Archaeological Reconnoissance in Southwestern Colorado in the Summer of 1923

By

FRANK H. H. ROBERTS, Jr.

Continuing its program for the exploration and investigation of archaeological fields located in southwestern Colorado, the State Historical and Natural History Society of Colorado sent an expedition into that section of the state during the summer of 1923 for the purpose of making an archaeological map of the region, collecting specimens of potsherds from the various locations, and determining, as far as possible from surface investigations, the nature of the prehistoric dwellings. The need for work of this nature has been felt keenly for some years and, in one of his reports for 1916, Dr. J. W. Fewkes of the Bureau of American Ethnology wrote:

“As archaeological work in the southwest progresses, it becomes more and more evident that we cannot solve the many problems it presents until we know more about the general distribution of ruins, and the characteristic forms peculiar to different geographical localities. Most of the results thus far accomplished are admirable, though limited to a few regions, while many extensive areas have as yet not been explored by the archaeologist and the type of architecture peculiar to these unexplored areas remains unknown. Here we need a reconnoissance followed by intensive work to supplement what has already been done.”¹

While it had been known for years that prehistoric ruins and house sites existed in the Upper San Juan basin, their extent and number was undetermined; in fact, there was practically no information on this district until the summer of 1921, when

¹Fewkes, J. W. Archaeological Investigation in New Mexico, Colorado and Utah; Smithsonian Miscellaneous Collections, Vol. 68, No. 1, 1917.



Frontispiece—Looking east along the Upper San Juan. Montezuma Mesa is shown in the background.

the State Historical and Natural History Society of Colorado and the University of Denver sent a joint expedition into the field 22 miles west of the town of Pagosa Springs. Here, along the Piedra River, one of the larger tributaries of the San Juan, various types of dwellings were unearthed, and what appears to be the complete evolution of a cultural group established. The results were so promising that a second party was sent to this locality in 1922 by the same institutions. In addition to excavating work, a preliminary survey was made of the adjacent vicinity and many ruins were located. The findings of these two seasons have already appeared in several publications.²

The feeling that a knowledge of the extent of the ruins in this portion of the state was as important as further excavations, and the desire to determine, as far as possible, the place of this group in the culture of the Southwest led to the reconnoissance of 1923. The party left Denver June 11, beginning operations at Pagosa Springs, from which point the expedition started down the San Juan River for the purpose of exploring the river area and its tributary canons. The tributaries of the San Juan as far west as, and including, the Animas River were thoroughly covered. The Mesa Verde, La Plata, Johnson Canon, Montezuma Valley and McElmo Canon fields were not as carefully checked as other areas because of the excellent and extensive work which had already been done there by other institutions. All of the larger and more interesting ruins were visited by this expedition, however, and a first hand knowledge of the house types secured. Where the latter are dealt with, reference will be made to reports and maps of the various investigators who have studied in these regions.

Curator Jeancon, while not accompanying the expedition in the field, directed the general policy of the explorations. The personnel of the party was: Frank H. H. Roberts, Jr., field director; Mr. W. P. D. Clark, Mr. Henry B. Roberts, and Mr. Charles N. Fairlamb.

Topography of the Country

The portion of Colorado in which the remains of prehistoric cultures are found lies to the south and west of the Continental

²Jeancon, J. A. *Archaeological Research in the Northeastern San Juan Basin of Colorado during the Summer of 1921*: Denver, 1922. University of Denver Bulletin XXII, No. 11, Nov. 1921, and XXIII, No. 9, Dec. 1922.

Jeancon, J. A. and Roberts, Frank H. H. *Further Archaeological Research in the Northeastern San Juan Basin of Colorado During the Summer of 1922*: Colorado Magazine Reprint, 1924.

Divide. The region is more or less in the nature of a high plateau with an elevation of 6,000 or more feet. As a result of the erosive forces of nature the general landscape presents flat-topped mesas, sheer walled canons and narrow river valleys. Many of the mountain peaks are above timber line and devoid of vegetation. Below these bare spots are vast forests of quaking aspens, giving way, as lower altitudes are reached, to the pine and spruce; and lower still, to the pinyon and cedar. Along the rivers are found cottonwoods, willows, and, on the benches above, small growing oaks and mesquite bushes. During the wet seasons when water is plentiful, the small valleys and the tops of the low mesas are covered with flowers so that the monotonous hues of the earth and rocks are covered with a glorious splashing of colors.

The eastern part of this region is drained by the San Juan River which rises on the Continental Divide north of Pagosa Springs. Tributaries of the San Juan in order, as one passes west, are: Cat Creek, the Piedra, the Pine and Animas Rivers. Each has its source far to the north, on the slopes of the main range of the Rockies. Still further west are the La Plata and the Mancos, which empty into the San Juan after it has crossed over into New Mexico. North from the Mesa Verde section, is the Dolores River which traverses the so-called Escalante country.

In the region west from the Animas, one finds the northern rim of the Mesa Verde rising 2,000 feet above the floor of the Montezuma Valley, only to slope away to the south into the territory known as the Johnson Canon district. It is in the caves and caverns which dot the walls of the canons which cut their way across the Mesa Verde, towards the Mancos River to the south, that its many cliff ruins are found. North and west of this large tableland is the broad and fertile Montezuma Valley with Ute Mountain on its western border. Running west from this valley, and to the north of Ute Mountain, is McElmo Creek with the canon of the same name. Here the rocks have been worn away by wind and water until many fantastic shapes greet the eye.

The entire region of the southern part of Colorado in which the remnants of a Pre-Columbian civilization, or perhaps it might better be called culture, are found is notable for its rugged beauty. The fertile soil of the valleys and the mesa tops; the practically never failing San Juan, Piedra, Pine, Animas and Mancos Rivers, the many perennial springs; the natural defensive

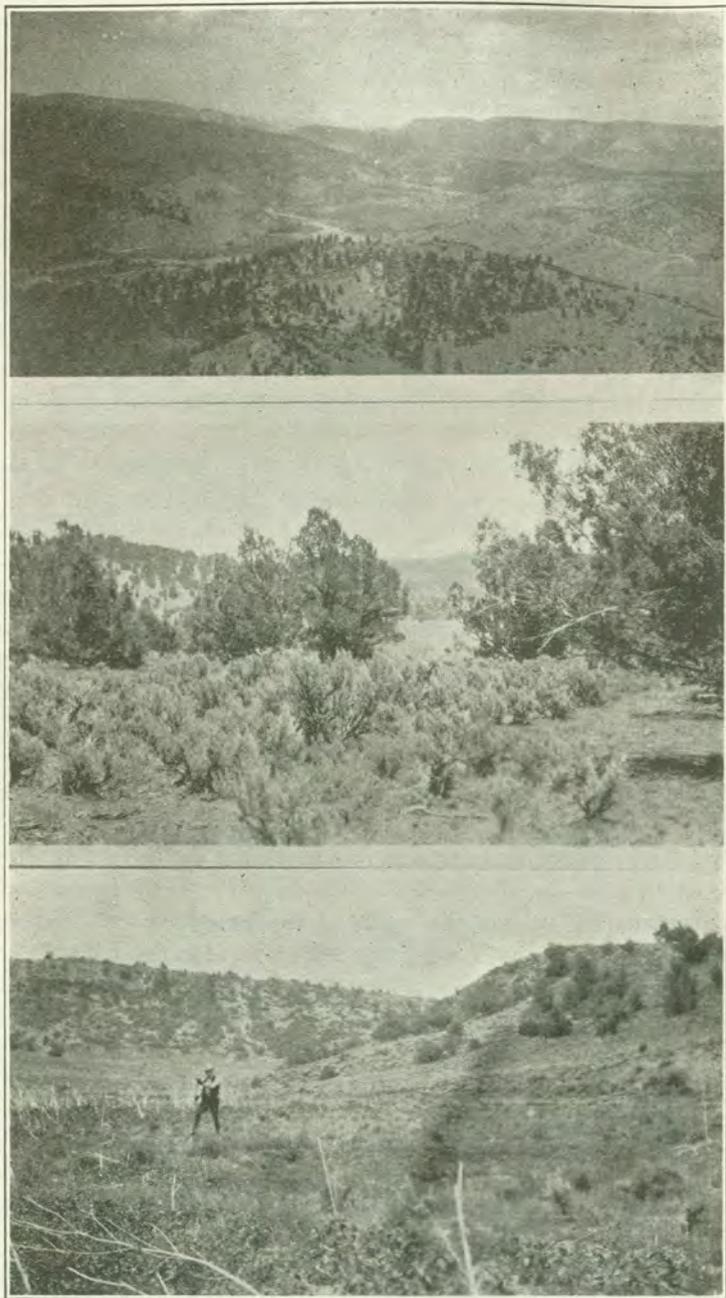


Plate 1, Upper—Looking north along the San Juan. Village of Trujillo may be seen in the valley. Center—Pithouse site east of Trujillo. Lower—Pithouse site on the Aquirre place at Trujillo.

sites of the mesas, together with the pleasant climate could not but attract a primitive people and, judging from the records of their bygone villages, held them for countless generations in this locality.

Game is still fairly abundant in the region and in the higher levels where the inroads of civilization are still to be felt, deer, bear, mountain lion, fox and bob cat are to be found. On the plains and along the streams rabbits are still plentiful and, until very recently, quail and grouse were abundant. During the seasons of the year when the birds are migrating, the pools and backwaters along the streams have their quota of ducks, so that the prehistoric inhabitants in all probability did not suffer from a lack of flesh in their diet. Being a sedentary and an agricultural people, vegetal foods contributed a large part in the makeup of their meals. That they had the squash, bean, and corn is indicated by the finding of these food substances in the ruins. The grinding stones are mute evidence of the use of corn meal and perhaps of the crushing of nuts and other wild foods, such as the seeds of various plants.

Types of Ruins

Before considering the question of the location of ruins it will be necessary to give a general description of the sites found where no buildings are left standing, the probable nature of the domiciles covered by the mounds, and the types of structures still existing. By far the greatest number of houses or house sites along the Upper San Juan, the Piedra, Pine, and Animas Rivers suggest what is termed the pithouse. Along the La Plata River, further west, are variations of the pithouse type which have been termed slab houses; and in the Mancos and Mesa Verde Canons are the far-famed cliff dwellings. On top of the Mesa Verde are community houses or pueblos and in the Montezuma Valley are more of the same type. The tributary canons of the McElmo and the McElmo itself contain cliff dwellings, small in size, while the mesa tops of the adjacent country are covered with the pueblos and towers for which this section is renowned.

The location of a former pithouse is shown on the surface, in most instances, by a low, greatly eroded mound with a circular depression, either in the center or at one side. The mound is usually covered with large blocks of burned adobe, potsherds, and broken stone implements. In some cases, no sherds are found on the surface because of the long period of time during which the mounds have been exposed to the action of

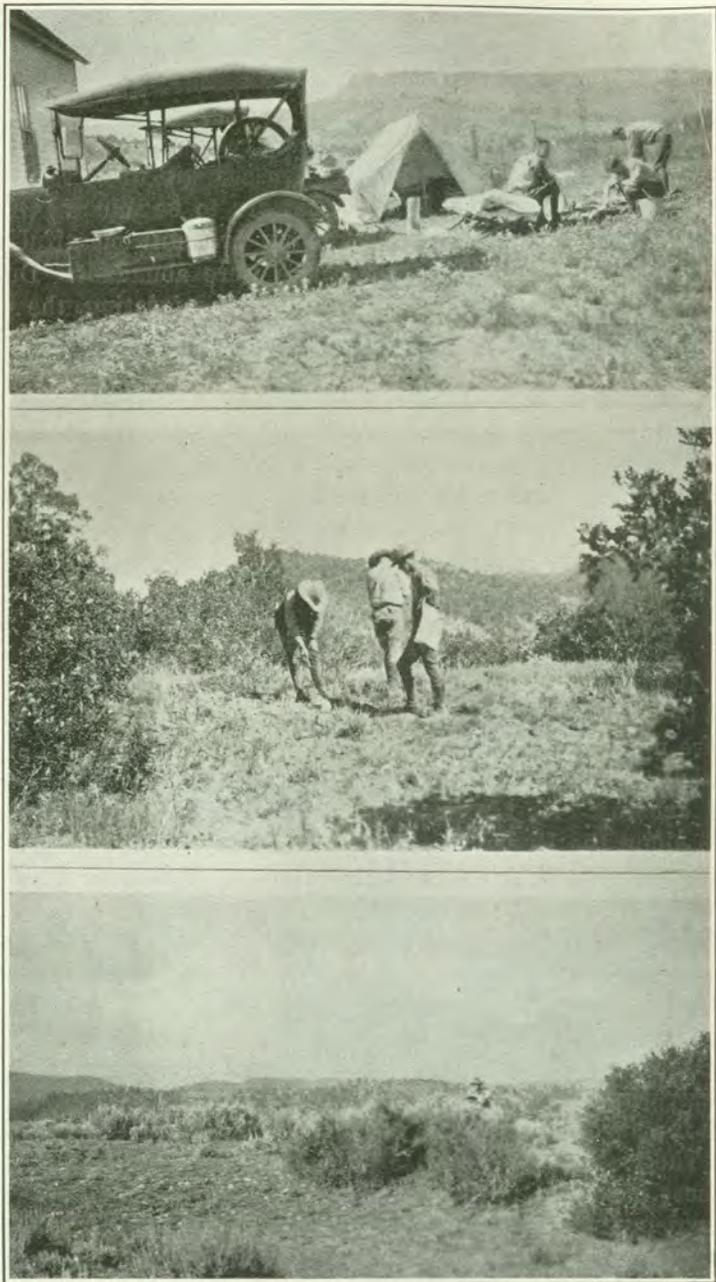


Plate 2, Upper—Montezuma Mesa as seen from the town of Trujillo. Center—Pithouse site on Montezuma Mesa. Lower—Pithouse site on bench west of the river near Trujillo.

the elements. In others, the elevation has been washed over until there is but the slightest suggestion of a depression, or of rooms about the depression. In practically all cases a heavy growth of sagebrush covers the sites. As the name itself suggests, the pithouses were semi-subterranean structures, the lower portion of the dwelling being, as was the case with the sod houses with which the early settlers in the west are familiar, beneath the surface of the earth. In some cases the native earth walls were treated to an application of adobe plaster, in others the walls were lined with stone and the plaster then applied. The depth of these pits varies. In those excavated in the Pagosa-Piedra region, the average is from two and one-half to four feet, while, in other sections, they have been found extending six feet beneath the ground level. In the northeastern basin of the San Juan, the rooms are rectangular, but in some sections, as at Luna, New Mexico, the rooms are circular. The manner in which the roof was applied and in which the upper walls were constructed is still an unanswered question, more or less, because of the small amount of work which has been done in houses of this type. In some of those investigated, the indications are that they had a double slant roof, the heavy ends of the supporting beams embedded in the earth, the entire upper structure being plastered with adobe. In other examples the walls extended above the level of the ground, judging from the indications, and the roof was flat, in the style of the Pueblos and many modern Mexican homes. The wall structure varies according to the locality and, in some cases, even within a given area. Along the Piedra a possible sequence or evolution in architectural features was noted:

“First. Pithouses; these are houses which were semi-subterranean with the plaster applied to the native earth and with a double slant roof.

“Second. Pithouses with cobblestone walls. While these are not in a class by themselves they plainly indicate a step in the sequence of house building.

“Third. Pithouses with cobblestone walls and the paving of the floors with slabs and cobbles. The first use of horizontal slabs laid above the cobblestone walls. Here is probably where the first type of flat roof occurred.”³

In addition to the tentative classification given above, the writer found during the summer of 1923 indications of the type

³Jeancon, J. A. *Archaeological Research in the Northeastern San Juan Basin of Colorado During the Summer of 1921*. Denver 1922, page 5.



Plate 3—Navajo painting on rock in Montezuma Creek Canon, south of Montezuma Mesa.

of wall which has been termed jacal by Morris and other investigators. This refers to a wall formed by the use of upright poles with adobe plaster filling the space between and covering the entire surface. In some cases the larger upright poles were placed at a distance of a foot to two feet apart, the intervals being lined with small willow poles and the adobe then applied. (Figure 1.) In some localities, even at the present time, the Mexican constructs his domicile in this manner. Walls of the same nature were noted by Reagan in his report on the ruins of the Pine River section and information gained during the summer while doing exploratory excavating at La Boca supports Reagan's theory. In speaking of the ruins of this section, Reagan wrote as follows:

"In many respects the ruins resemble those of the 'Small House People' of northern New Mexico previously described in 'El Palacio' but differ from those, in that at least in several instances, they were made of poles stood apparently in upright position and adobe mortar plastered on both sides of these to make the walls."⁴

The ruin at La Boca gave evidence, not only of the type of walls described above, but of the pithouse form of dwelling as the floors of the rooms seemed to lie at some distance below the level of the ground. This could not be ascertained for certain, however, as the erosion due to surface water running across the mound has been so great that a large portion of the walls and flooring has been carried away in some parts of the mound.

Pithouses found further west in the Johnson Canon country, south of the Mesa Verde, have been described by Earl H. Morris and the jacal wall was again noted. Mr. Morris wrote concerning this type of structure:

"The inhabitants of the mesas were an agricultural people whose domiciles were one-storied aggregations of cell-like chambers, usually grouped to form a rectangle. Generally speaking, the rooms extended down into the earth, and with few exceptions, the sections of the walls above ground were constructed of upright poles covered with plaster."⁵

The size of the rooms in this type of house also varies. The more primitive ones are from four to six feet square, while later forms are found with the rooms as large as fifteen feet square. Earth Lodge A, at Mesa Verde, which is one form of

⁴Reagan, A. B. The Ancient Ruins in Lower and Middle Pine River Valley, Colorado: El Palacio, Vol. VII, Nos. 9-12, Dec. 31, 1919, Page 171.

⁵Morris, E. H. Antiquities of Southwestern Colorado: 33rd Annual Report, Bureau of American Ethnology, Page 202.



Plate 4, Upper—J. A. Latta holding one of the yucca ropes found on Montezuma Mesa. Center—Signal point at northeastern end of Montezuma Mesa. Lower—Trees growing out of pithouse site along the San Juan River at the Quintana place.

this class of domicile, is over twenty feet square. In the circular dwellings, the size was found to run from twelve to fourteen feet in diameter.

In the section of the San Juan drainage east of the Animas are found, in addition to the pithouses, remains of stone domiciles scattered at intervals along the courses of the rivers. In some instances large pueblos or community houses were erected. The notable examples of this phase of house building are in the immediate vicinity of the Chimney Rock or Piedra Parada, in Caracas Canon and at one point in the Pine River area. These stone buildings were all constructed above the level of the ground and the walls were composed of rectangular slabs laid in courses bound together with adobe mortar. The farther west one goes the more this form is to be found, as will be noted in greater detail when that section is considered.

While the word adobe is quite generally known and understood in this western country, it might be well, perhaps, to explain just what is meant by the term where it is used in connection with archaeological work. The best explanation of this nature which has appeared is by Neil M. Judd:

“The word adobe according to the Bureau of American Ethnology has been traced back to an Egyptian Hieroglyph denoting brick, thence to the Arab, **at-tob**, **al-tob**, whence the Spanish **adobar**, ‘to daub’, ‘to plaster’. It reached the United States from Mexico, into which country it was introduced by the Spanish conquerors of the early part of the 17th century. In its present most widely accepted meaning, adobe denotes a large tabular, unbaked brick, molded in a wooden frame and dried in the sun, but it may also mean mortar from the same material as the bricks, utilized with them in the construction of walls or in the surfacing of floors, roofs, etc. In addition, it may even mean the dry, clayey soil suitable for use in the manufacture of bricks or mortar.

“Adobe, in the latter sense, occurs widely throughout the arid or semi-arid sections of the southwestern United States. Being a product of aridity, it finds its greatest use, for construction purposes, in regions of little rainfall where other building materials are mostly wanting. * * *

“In North America, the use of adobe as an essential feature in the construction of prehistoric dwellings seems to have been limited to the semi-arid plateau of our Southwest. Considering solely its utility in the framework of such dwellings, it is evident that the adobe was employed in the walls of at least three

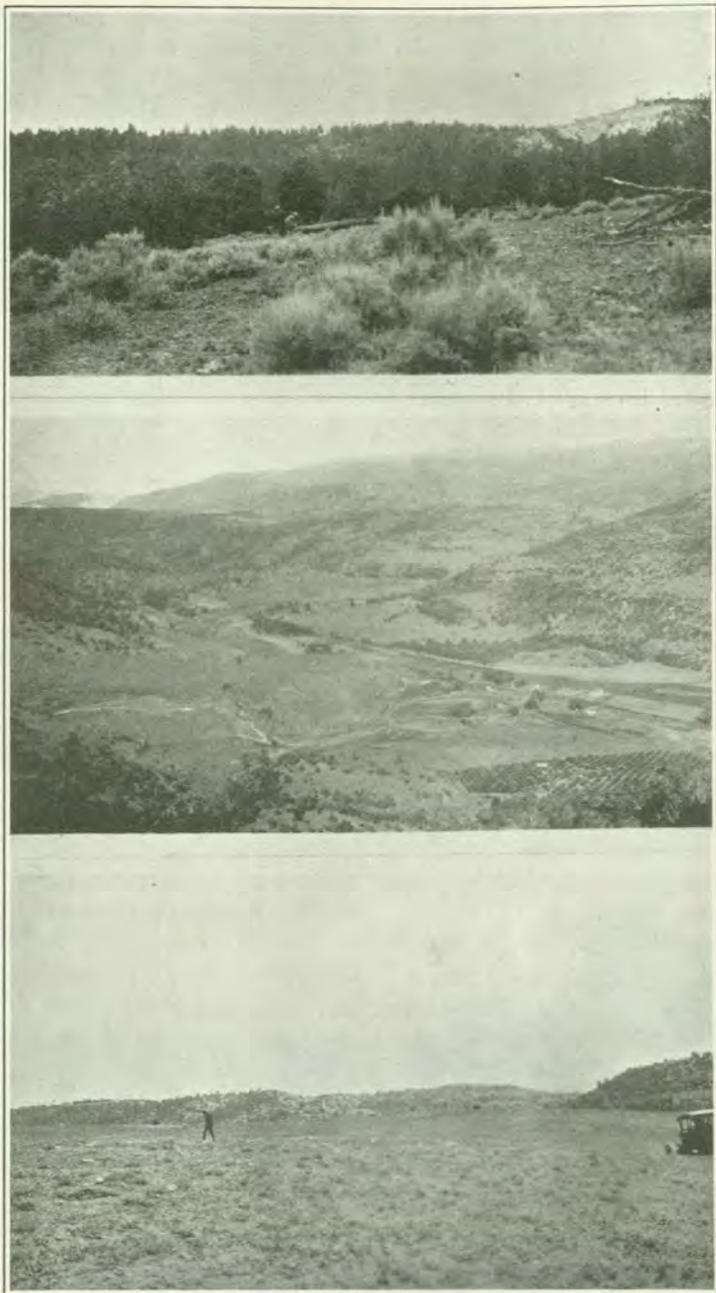


Plate 5, Upper—Pithouse sites on top of the ridge, one mile west of the Latta place. Center—View of Pagosa Junction from high point to the west. Lower—Mounds covering pithouses on the ridge north of Pagosa Junction.

distinct types: (1) those made with fragments of tabular stone, in which adobe was used as the mortar or binding material; (2) those made of closely fitted or interwoven willows, osiers, or reeds, thickly plastered with adobe mud; (3) those built entirely of adobe—the so-called **cliche (caleche)** or **pise** construction as observed in ancient house remains in the Gila and Salt River Valleys of southern Arizona.⁷⁶

Ruins of the first and second groups are found throughout this entire section, although the second group under Judd's classification referred more to the jacal type of walls found in connection with some of the cliff ruins and stone structures in southeastern Utah and northeastern Arizona. The finding of this sort of construction in the pithouses simply makes it possible to increase the number in the variety of types coming under the second group of Judd's classification.

Distribution of Ruins

Having gone somewhat extensively into the matter of the various kinds of structures and the different types of walls to be found in them, attention may now be turned to the distribution and location of ruins in southwestern Colorado. With Pagosa Springs as the starting point, the expedition moved down the San Juan River and at the small town of Trujillo (Map No. 1), found the first indications of habitation by the prehistoric peoples. This village is fourteen miles south of Pagosa Springs and is located in the small valley formed by the river. The situation of the town and the nature of the surrounding country can clearly be noted from the photograph, Plate 1, upper. Ruins had been reported previously at a point several miles north of this spot but members of the party were unable to find them or even the suggestion that a house site might once have existed there. The reported location was such, however, that it is possible that all surface indications could have washed away. Even allowing for such a contingency it seems very improbable that all signs would have disappeared during the period elapsing since they were last claimed to have been seen by the informants.

The house site farthest north along the San Juan which the expedition located was on the east bank of the river, due east of the bridge across the stream, just north of the town of Trujillo. The dwelling had been erected on the first bench above the river at a distance of several hundred yards east of the edge of the rim. The former existence of a domicile was evidenced by the

⁷⁶Judd, Nell M. *The Use of Adobe in Prehistoric Dwellings of the Southwest*. Extract From Holmes Anniversary Volume, Washington, 1916.

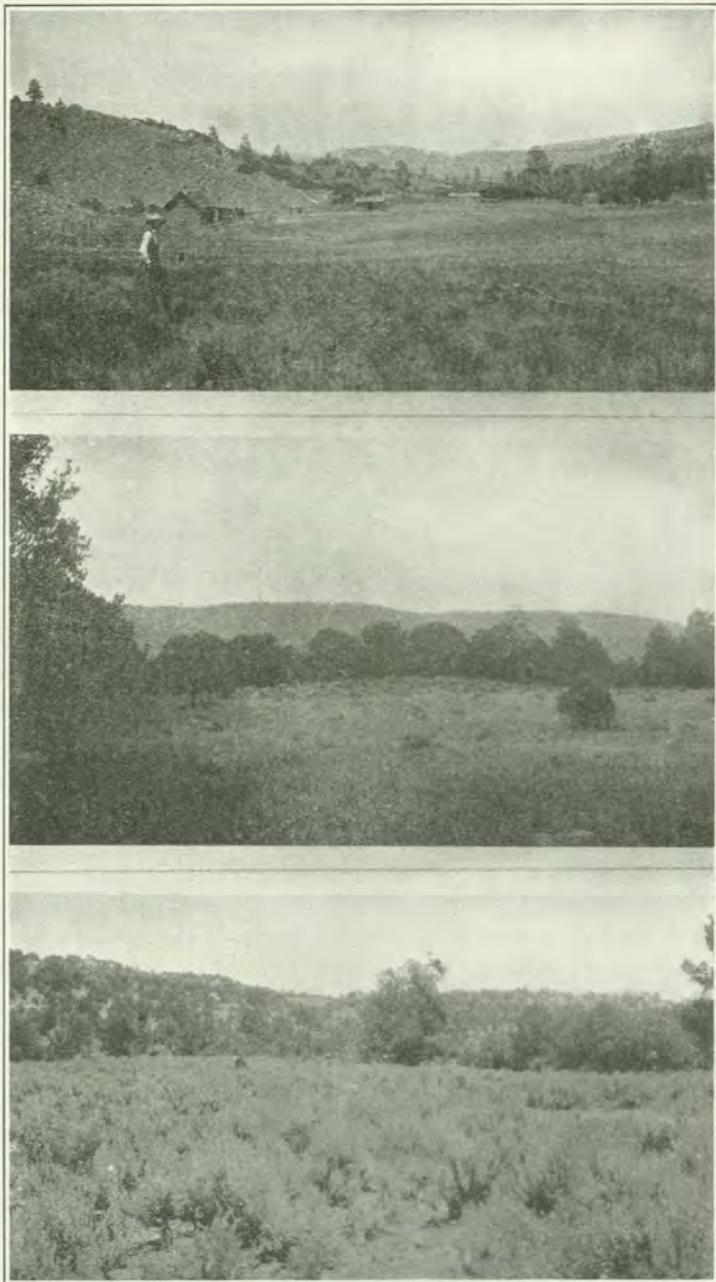


Plate 6, Upper—Former house sites on the floor of Caracas Canon, three miles above Caracas. Center—Mound covering ruin on mesa east of Caracas Canon, opposite sites shown above. Lower—House sites in the floor of valley east of Arboles.

finding of burned pieces of adobe, scattered potsherds, a portion of a mano (the small handstone used in the grinding of corn and other grains), and a small crudely worked stone maul. The action of erosive agents over the entire bench has been such that very little remains of the mounds formed by the debris from the ancient structures (Plate 1, center).

On top of the ridge which lies just northeast of the above site, a few sherds and two broken arrow points were found. The ground has been washed over to such an extent that if at any time ruins were located there, all signs have long since disappeared with the exception of the articles mentioned. Across a draw to the east of the first location, were remains of burned roofing material, but there were no sherds to be found. Continuing on down the east bank of the river from the first location, it will be noted that the bench breaks up into a series of tongues or spurs jutting out from the main formation. On the first three of these, sherds and broken stone implements were found, but it was impossible to tell if houses had formerly existed there, and what their extent had been, because of the ground having been under cultivation at various times. A half a mile farther south, more sherds were found on the first bench above the river, but there was absolutely nothing to indicate a house site.

In addition to the locations described above there is one group of house remains in the valley just below Trujillo on property belonging to Mr. Frank Aguirre. The shape of the mound is roughly rectangular and in the center is a circular depression 41 feet in diameter, on a north and south line. The wall or, better still, the elevation of the mound on the south side of this circle is three feet, while on the north, the erosion has been greater and there is only a rise of a few inches. From the western edge of the mound to the river is a distance of 200 yards. A deep arroyo cuts through the field close to the southern edge of the mound. The field in which the remains of this domicile are located has been plowed many times for the planting of crops and, as a result, the locality has been disturbed to an extent more or less detrimental to the mound (Plate 1, lower).

The first site located on the west bank of the stream was found to lie directly across from the mound on the Aguirre place and on the first bench above the river. The stream at this point flows along the foot of the bluff which rises somewhat



Plate 7, Upper—Portion of Arboles looking across former pithouse sites. Center—Mound on ridge north of Arboles. Lower—View of the Piedra Valley looking north. The Chimney Rocks may be seen in the right portion of the central part of the picture.

higher than do those on the east bank. It is a drop of about one hundred feet to the water line from the top of the bench. There must at one time have been a fairly large village or cluster of domiciles here, as the mounds are 125 feet in length and half again as wide. There are two of the circular depressions, the larger being 37 feet in diameter and the smaller one 27 feet across (Figure 2). The eastern arc of the small circle is just five feet from the edge of the bench; in fact, it appears that the formation has fallen away to a marked degree since the building and the abandonment of the houses, as portions of this structure seem to have disappeared (Plate 2, lower).

A little over a mile down the river from the above mentioned location is another group of pithouses on land belonging to a Mr. Gallegos. The circular depression with all of the other signs which have been mentioned as accompanying this type of mound are in evidence, and, from surface indications, this was simply another dwelling of the same general class as found around Trujillo. All of the sites in this vicinity suggest the pithouse culture and the type of construction in which very little, if any, stone was used.

The next location, on the west side of the river, where house remains are to be seen is at the old Archuleta place at the junction of Montezuma Creek and the San Juan, just across the river from Montezuma or Archuleta Mesa. The Archuleta mound is typical of the culture and has the large circular depression characteristic of these remains.

Montezuma or Archuleta Mesa, both names are in common use by the inhabitants of the vicinity, is one of the most interesting features of the area under consideration. Like the Chimney Rock Mesa along the Piedra, this formation rises abruptly from the floor of the valley and has a commanding view of the surrounding country. This mesa, as seen from the town of Trujillo, is shown on Plate 2, upper, and its situation, as seen from the west, is shown in the frontispiece. There are a number of reasons for the interest aroused by Montezuma Mesa. On its top are found remains of the pithouse culture. The mounds are low and in a number of cases even the circular depressions are missing (Plate 2, center). The bits of pottery and stone implements found on these sites are typical of the pre-pueblo culture, showing that the earliest house-builders made use of this vantage point in considerable numbers, judging from the groups of house sites.

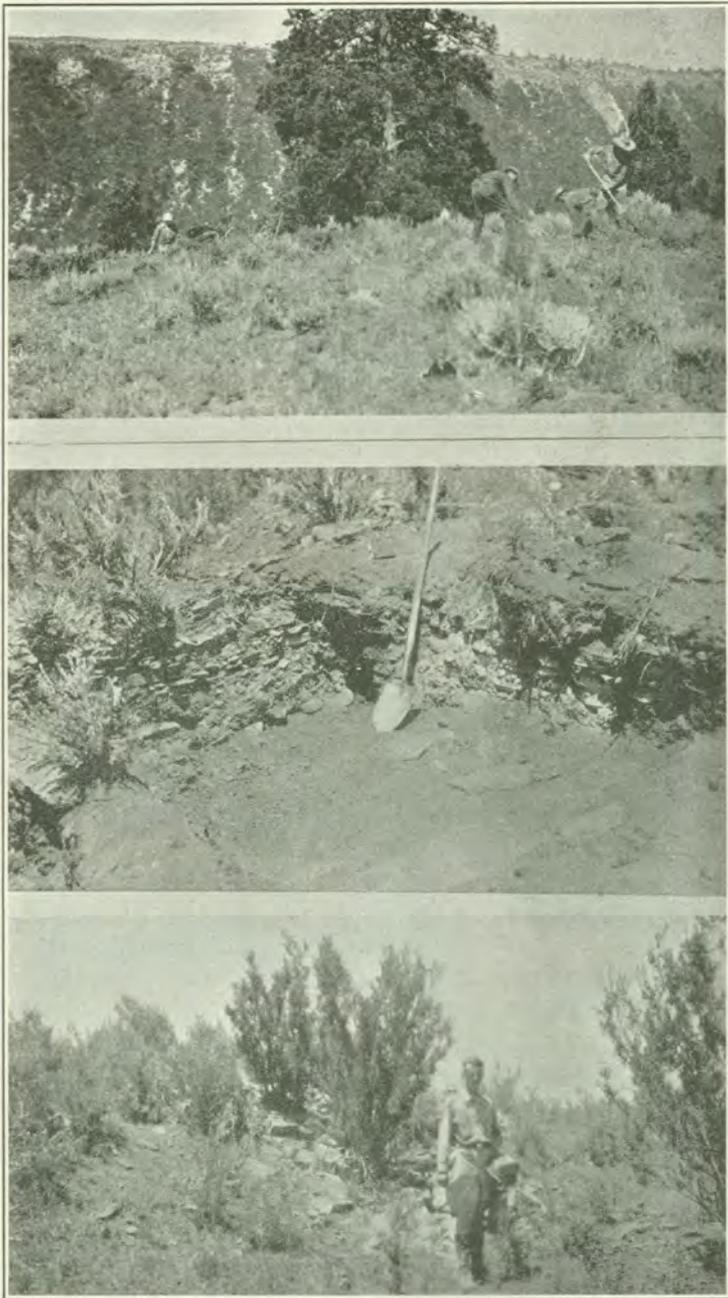


Plate 8, Upper—Pithouse site on the bench above the Piedra. Center—Room in pithouse excavated along the Piedra. Lower—Mounds on the west bench of the Piedra.

Besides the sedentary peoples, there are signs of the nomadic Indians having visited and, in all probability, occupied the region at a later date. This is witnessed by two paintings, one on the cliff forming the southwestern end of the mesa and the other on a large inverted V-shaped rock not far from the road along Montezuma Creek south of the mesa. The painting on the vertical face of the mesa is in the form of a sun symbol, facing almost due south. The body portion of the sun consists of a circle 28 inches in diameter, inside measurement, with a two-inch band of white and red from which the rays extend. Four white lines across the central portion cutting it into eight unequal parts. The inner portion of the symbol was painted red. The rays, numbering 34, are of white pigment and average eight inches in length. As is so often the case in the Southwest, the painting has been disfigured by the writing of names across it and the cutting of initials into the rock around it. There is very little doubt but that this painting or picture was closely associated with the one on the rock in the valley below, the distance between the two being less than an eighth of a mile.

The other picture bears a striking resemblance to the principal figure used in the present-day ceremonies of the Navajo for the healing of the sick. In discussing this painting in the report for the work of the 1922 season Mr. Jeancon wrote:

"It is located about one-eighth of a mile from the junction of the San Juan River and Montezuma Creek in the latter canon, and is on a large block of stone that has fallen off the canon wall. On Plate 4-A (Plate 3 in this report), is shown a photograph of the picture, which is scratched into the surface and afterwards colored. Most of the pigment is gone, but enough remains to show that originally the whole thing was painted. This is especially noticeable in the band holding the line of feathers running down the back. This was colored red, and in places the color still shows fairly well.

"The total height of the picture is about forty inches and the body is four and one-half inches at the widest part. Above the head are two mountain sheep horns attached to the head-dress and three eagle plumes erect. The long line of feathers down the back is very much like that shown on the figure of the Naskiddi, the hunchback god of the Navajo. The lines radiating from the face were probably intended to represent the sun's rays."⁷⁷

⁷⁷Jeancon, J. A., and Roberts, F. H. H. Further Archaeological Investigations in the Northeastern San Juan Basin, 1922, Colorado Magazine, Vol. 1, No. 1, Nov. 1923, Page 17.

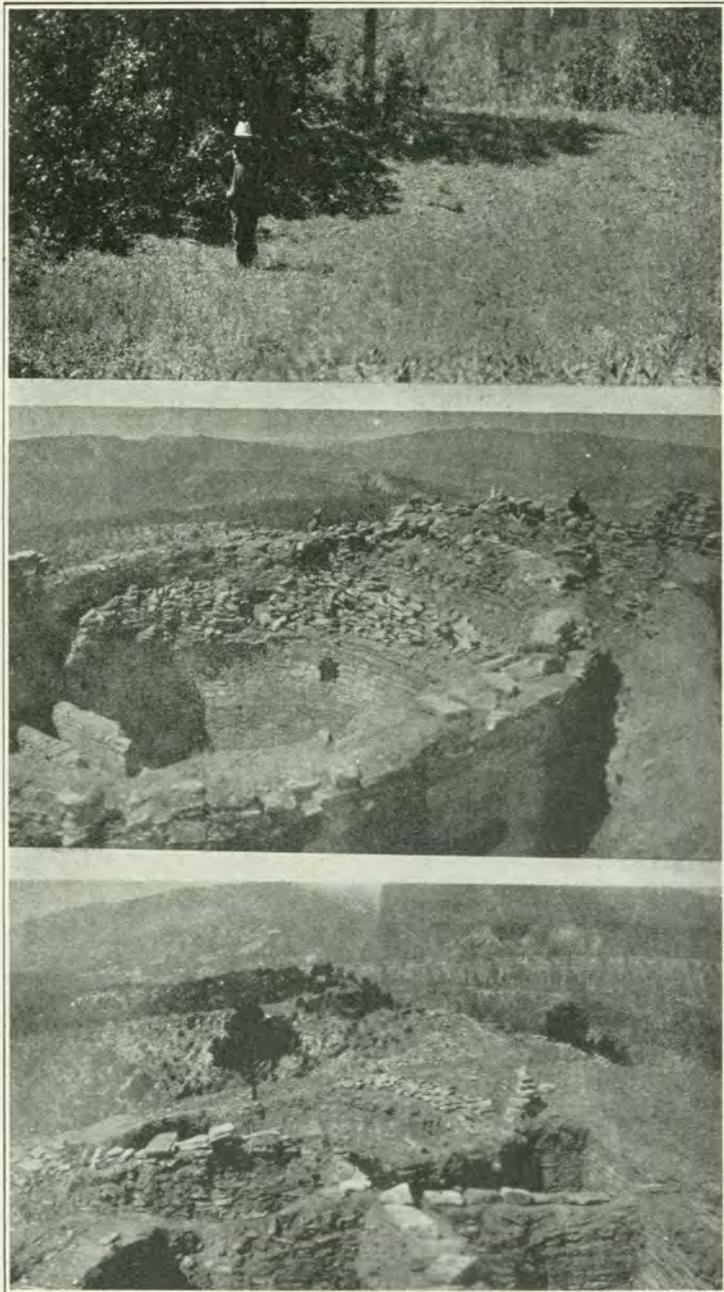


Plate 9, Upper—Mounds on the west bench of the Piedra. Center—View of east portion of the large pueblo on the Chimney Rock Mesa. Lower—Western portion of the same building.

The marked similarity between the picture in Montezuma Canon and the Naskiddi figure of the Navajo healing ceremony, as pictured by Colonel James Stevenson in his article on the Navajo Ceremony of the Hasjelti Dailjis, led Mr. Jeancon to conclude that the pictures under consideration were of Navajo origin.⁸ This would indicate that the Navajos at some time occupied the region in and around the Montezuma Mesa, an area a little farther east and north than had been supposed previously.

There are other features connected with this mesa which are of as much interest and value from the standpoint of the archaeologist and the historian as those already mentioned. About fifteen years ago, Mr. J. A. Latta, who owns a ranch several miles down the river west of the mesa, found a large number of yucca ropes in a cave just below the rimrock on the south side of the mesa, just north of the rock on which the figure of the Navajo god is painted. There were 84 of these ropes lying in a pile at the back of the cave and all were made in the square weave of which the Spanish bridle ropes are a good example. A running noose was fashioned at one end. This noose contains a net of smaller strands of the same material. At the other end, the rope was woven in such a manner that there are two small strands which would make it a simple matter to tie it to some object, such as a tree (Plate 4, upper). The ropes measure 13 feet in length and the small sections at the one end are two feet in length. It has been suggested that they were used in the nature of game traps, being suspended along the paths which animals followed going to or from watering places or feeding grounds. This was done in such a manner that the head of the beast would become entangled in the net and the efforts to pull away would tighten the loop and it would be held captive until the owner of the trap arrived and killed it. Several of these ropes have been sent to various museums about the country and the remainder have gone into private collections. A good specimen was secured for the State Historical and Natural History Society of Colorado through the courtesy of Mr. Latta.

While these ropes are undoubtedly of Indian origin, their nature is such as to suggest the influence of the white man, particularly the Spaniard, and it is likely that they are of the period subsequent to Coronado and his followers. It is very probable

⁸Stevenson, James Navajo Ceremony of the Hasjelti Dailjis, 8th Annual Report, Bureau of American Ethnology, Page 262, Plate CXXI.

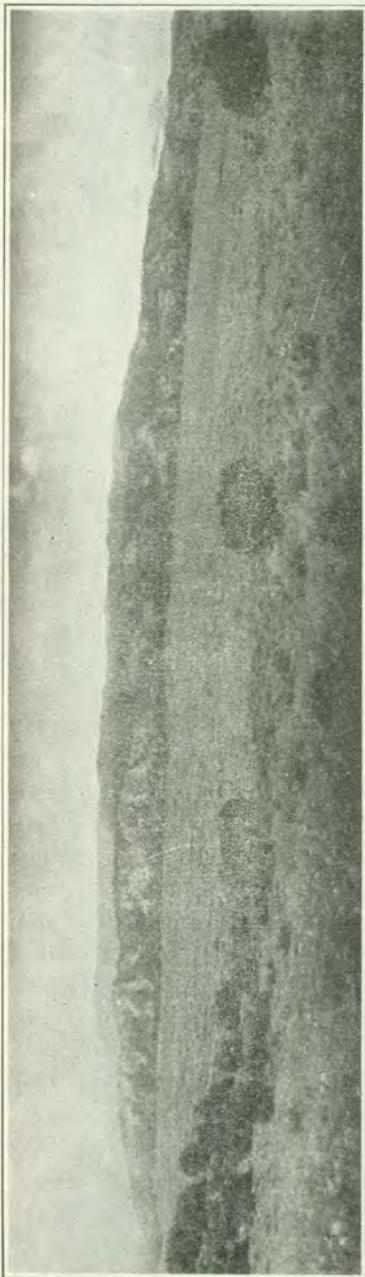


Plate 10, Upper—View of Stollsteimer Mesa, showing area covered by pithouse remains. Lower—Looking north along the Piedra from the northwestern end of the Stollsteimer Mesa. The Chimney Rock Mesa is shown to the right of the center of the picture.

that they are from the time during or immediately following the Pueblo revolt against the Spaniards, which lasted from 1680 to 1692. A contributing factor in the support of such a theory is the finding of a beaten copper plate on top of the mesa not far from the spot in which the ropes were cached. The plate is of the pattern brought into the New World by the Spaniard and perhaps reached the spot where it was found through the agency of the Pueblo Indians who fled to the safety of the mountain fastnesses to the north in order to escape the wrath of the whites when the reconquest was launched. Refugees from Zuni and Acoma are believed to have lived in the Burns, La Jara and other canons of northern New Mexico, southwest of this portion of the San Juan basin, during the so-called 1690 period, hence, it is possible that small bands of them may have wandered further north and east and reached the Montezuma Mesa. Hunting parties would in all probability have visited this section as even at the present time game is plentiful and 200 years ago was undoubtedly to be found in much greater abundance. If these ropes were used as game traps, such an explanation is plausible. The plate which is here described is at the present time in the collection belonging to the town of Pagosa Springs and has been carefully studied by both the writer and Mr. J. A. Jeancon.

On the square, tower-like formation at the northeastern end of Montezuma Mesa is a rock which gives the appearance of having been used as a signal point (Plate 4, center). Fires have been built at this place at intervals over a long period of years, or a continual fire was kept burning for a shorter period, as is shown by the burned condition of the stone and the amount of charcoal and ashes in the crevices and cracks. The heat has been so great and so continued as to have burned a depression into the formation for a depth of several inches. It is highly probable that this "tower" may have been used by the nomadic groups for the lighting of signal fires. The use of the point by the people who built the pithouses is of course more or less conjectural. There is a large mound covering a cluster of pithouses at no great distance along the top of the mesa, southwest of the fire-point, and it is possible that the dwellers lighted fires here for signal purposes or even for ceremonial reasons. A somewhat similar feature may be seen at the Chimney Rock or Piedra Parada Mesa where the rocks of the mesa top, east of the large pueblo, give indications of large fires having been

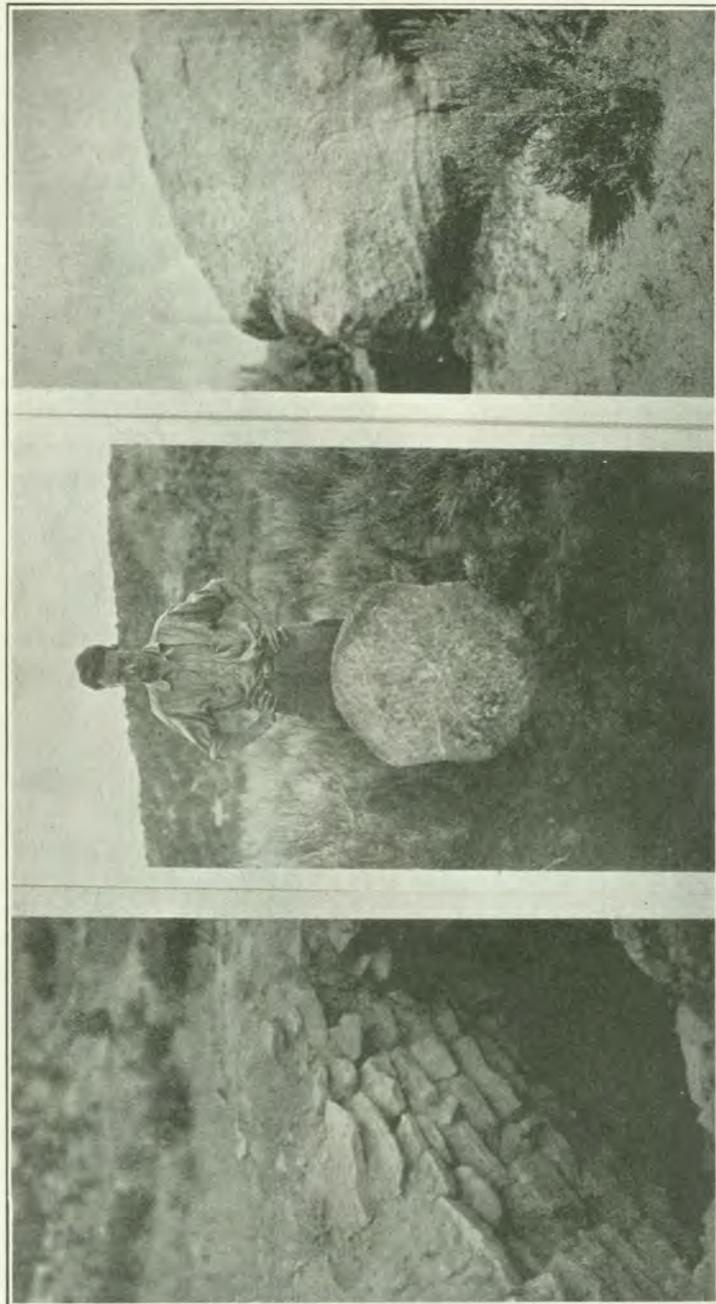


Plate 11, Left—Excavated portion of a room on Coal Hill, showing type of masonry. Center—Stone door removed from a ruin at La Boca. Right—Carving on stone in valley northwest of La Boca.

set. Whatever the motive, there is no question but that there is a close connection between the purposes of the fires at these two places. An extensive view of the surrounding country may be had from the fire-point on Montezuma Mesa as the photograph (Plate 1, upper) shows.

On the top of the ridge across Montezuma Creek, south of the mesa, a number of typical pithouse sites are situated. These remains also extend along down the river on this bank, though in the majority of cases they are to be found no higher than the first bench above the stream, as has been noted previously in other cases.

Just west of an old sawmill set on the north bank of the river, the San Juan swinging west from Montezuma Mesa for a distance of three miles before turning south again, is the site of what was possibly at one time a populous village. There are three circular depressions lying on an east and west line on the first bench above the river. This mound is 275 feet long and approximately 75 feet in width. The depressions from east to west measure 47 feet, 35 feet and 41 feet in diameter. Because of its location and the advantages the spot offers it is now occupied by two Mexican houses, the homes of M. Juan Quintana and his son. Two large cedars are growing out of the mound (Plate 4, lower). A number of stone mauls and a great amount of potsherds were picked up at this place and Quintana stated that when he was making an excavation in the bank, north of the east house, for a storage cellar, he uncovered two skeletons and several pieces of pottery. The skeletons were reburied and the pottery given away so that members of the expedition saw none of them and several hours spent in digging along the bank failed to furnish any specimens. It was thought, and indications are strongly in favor of such a supposition, that this was the dumping ground of the village and that more burials might be uncovered and mortuary offerings secured.

An eighth of a mile on down the river from the Quintana place is a large mound on top of the bench, which appears to cover another rather large number of pithouses. In the center is a circular depression 44 feet in diameter. The wash of drainage water from the higher ridge to the north has been so extensive that there are but a few sherds to be found on the surface. There were bits of manos and two broken metates (grinding stones) lying on the mound, in addition to the quantities of burned roofing material and scattered stones. This loca-

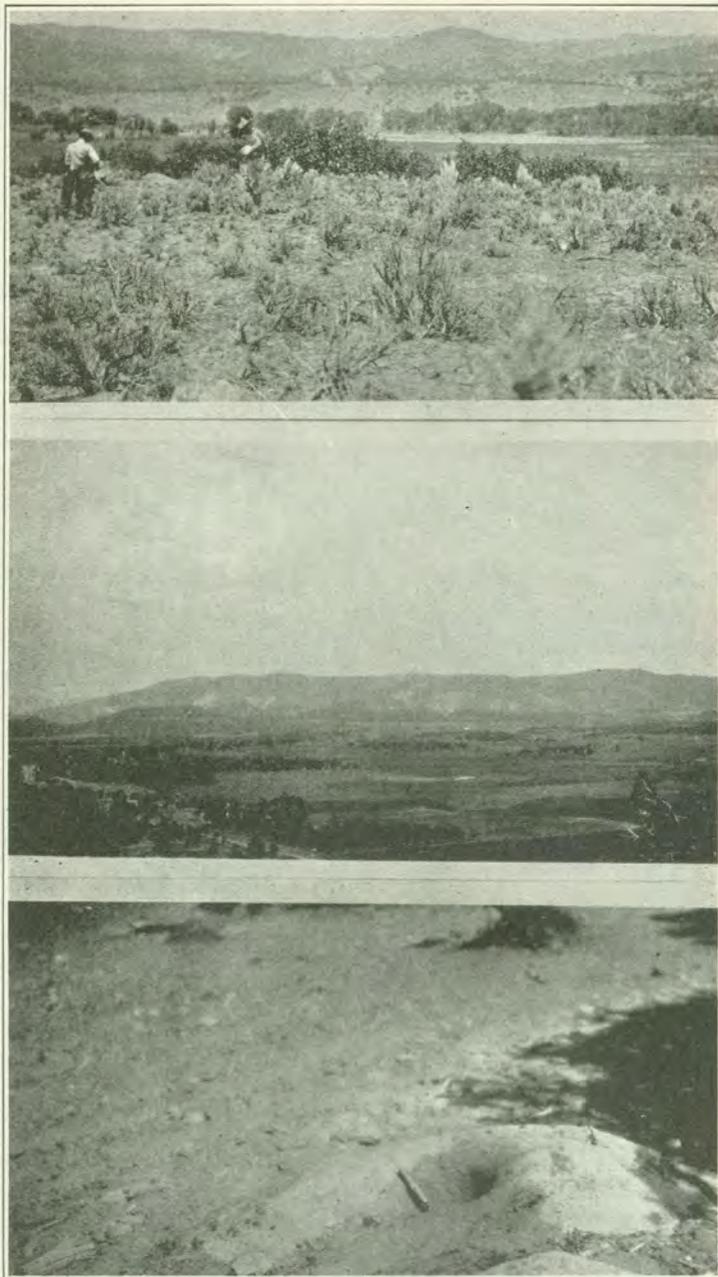


Plate 12, Upper—Pithouse site along the San Juan south of Arboles. Center—Allison Valley, showing Haystack Mountain in the left portion of the central part of the photograph. Lower—Hole cut in stone on top of Haystack Mountain.

tion is on top of the bench just above the point where a number of exploratory tunnels have been started into a vein of coal which breaks out on the surface at this place. On the next ridge to the west were a number of low mounds with circular depressions, which, with the burned adobe and scattered sherds, show unmistakably that they were once domiciles.

Due south across the river, opposite these last mentioned locations, a small butte or mesa rises from the river bottom and on this the Pre-Pueblo peoples erected a number of domiciles along the north and west rims. There are quantities of burned adobe, potsherds and broken stone implements scattered about on the surface. The houses were small and at the present time the floor levels are only a foot below the surface of the ground. In two of them the burned roof material was found lying on the floor, showing that the burning had taken place before the buildings had been allowed to stand exposed to the elements for any length of time; perhaps they were set on fire at the time of abandonment. The top of this butte measures 154 feet on a north and south line and 250 feet from east to west. A good view of the valley in both directions may be had from this spot, and the idea suggests itself that the structures here may have served in the capacity of lookout or signal stations rather than, or perhaps in addition to, true habitations. The writer is not aware of any region in the Southwest where this form of domicile has been found suggesting a use similar to that which has been attributed to the stone towers of the areas farther west, and even the consideration of such a possibility in connection with these sites is perhaps allowing too free a play of the imagination. Through the kindness of the owner, Mr. J. A. Latta, a day was spent in digging at this spot and the two rooms uncovered were typical examples of the pithouse structure in which practically no stone was used.

One mile west of this point the San Juan again moves southward and, from the turning point, the house sites follow two general lines, one on the benches along the river, the other swinging off to the northwest along a valley and up over a ridge to the junction of Cat and Rondo Creeks to the west (Map No. 1). From this locality the second group follows down Cat Creek to Pagosa Junction.

The most striking group of house remains to be found in this vicinity is on top of the ridge to the west of the Pagosa-Junction-Trujillo highway a mile west of the bend in the river.

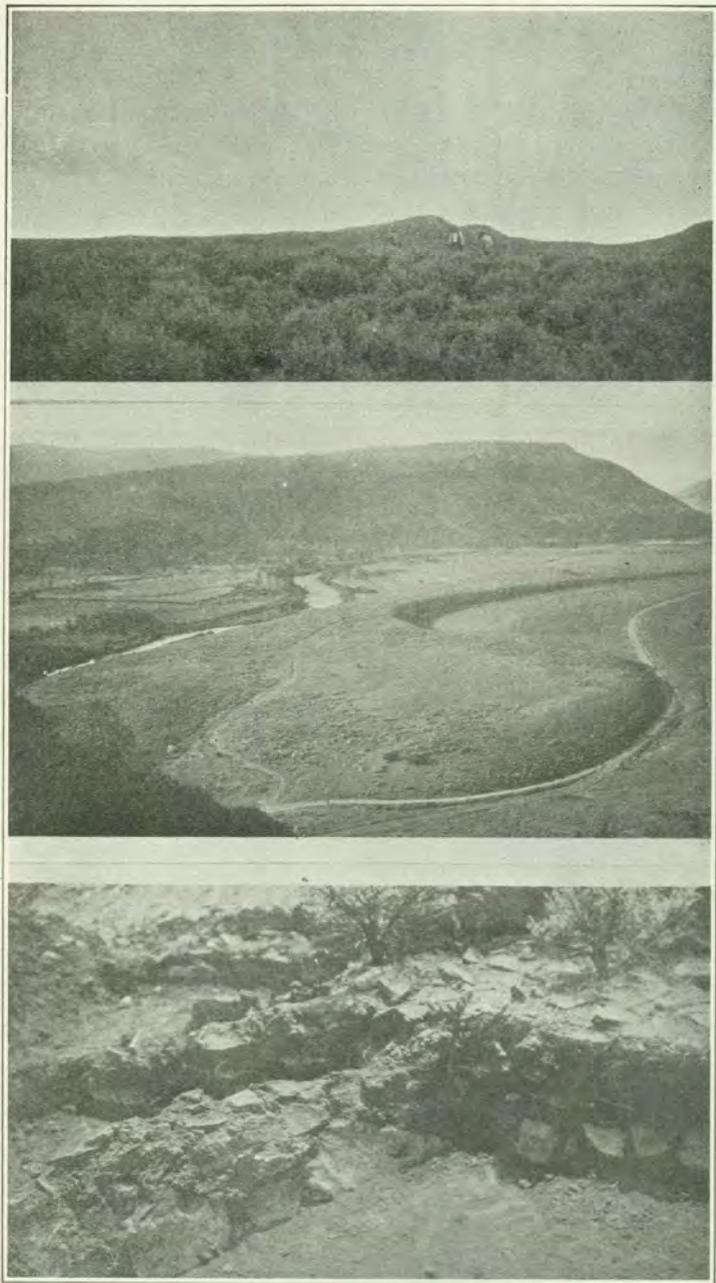


Plate 13—Looking across large mound at La Boca. Center—Ridge between Durango and Animas City, showing location of many pithouse sites. Lower—Portion of house excavated by Morris in Johnson Canon area.

Here is a large series of connected mounds with eight depressions in a row and two on the west side (Plate 5, upper, Figure 3). There must have been a comparatively extensive population at this point at one time or another. Across the canon to the south, on the lower benches, are scattered locations where there were small, isolated pithouses. On top of the ridge to the south, the highest point west of the river, there are a few small, house sites and one large group. At intervals along the benches overlooking the valley running in the northwesterly direction are dwelling sites as will be noted by a glance at Map 1. These are of a similar nature to those already noted. This is also true of the locations following the course of the river around to Pagosa Junction.

Extensive pithouse remains are found at Pagosa Junction. It could almost be said that this seems to have been the main center of population for the immediate vicinity. The largest group is situated on the top of the bench just north of the town. The mounds here follow the top of the bench in a crescent shape. The hill runs in an east and west direction for some distance and then veers off to the northeast to join the higher ridge of the river valley (Plate 5, center and lower). The mounds measure 750 feet on the east and west line and 480 feet along the northeast section. There are five circular depressions averaging between 45 and 50 feet in diameter (Figure 4). Where prairie dogs have dug into the mounds, sherds, charcoal, bits of stone flakes, and other debris have been thrown out. A great many arrow heads have been picked up from the surface. During the building of the road which passes over this ridge, a number of artifacts were uncovered at the point where the southwestern end of the mound is crossed and residents of Pagosa Junction have secured pieces of pottery and other specimens while digging ditches around the base of the hill.

Following north along Cat Creek from the above location, five former house sites are to be seen on the west bank of the stream and two on the east. For some reason or other the people do not seem to have gone farther north than the juncture of Cat and Rondo Creeks where the line of ruins running northwest through the valley from the Latta place crosses over the Divide to Cat Creek. It is very likely that the houses along Cat Creek were merely a continuation of the line which left the river at its turning south and which joins again with the river groups at Pagosa Junction. The erosion at these sites has been marked

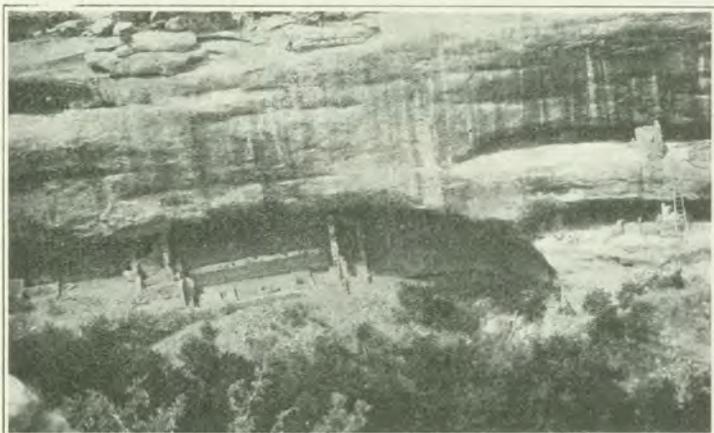


Plate 14, Upper—View of Cliff Palace on Mesa Verde. Lower—Fire Temple group at Mesa Verde.

and very little remains at the present time beyond indications of there having been structures located there at one time.

On top of the highest peak just west of Pagosa Junction is a mound which overlooks a vast stretch of the surrounding territory. In the center is a depression which measures 60 feet across. Burned adobe, sherds and other house refuse indicate plainly a former dwelling place. This is the only point on this ridge where any signs of such remains were found. This location can be reached only after a hard climb and lies at a considerable distance from the river whence the water supply must have been derived. The purpose of a single structure or cluster of pithouses in such a place is a matter calling more or less for

conjecture. It is possible from the house site to look down on all of the territory around the Junction (Plate 5, center), and also to see the top of Montezuma Mesa eight miles northeast. It may be, following out the idea already suggested, that this place served as a signal station and had as its function the keeping in touch of the Junction dwellers with those farther up the river as well as those who made their homes on Montezuma Mesa. The writer realizes that it is dangerous to take so much for granted, but the parallel between using high points for signal purposes, and in fact having long lines of these stations scattered through certain regions, as practiced by some of the early inhabitants of the Mississippi Valley area, and the sites under consideration is rather marked and, if nothing more, at least interesting. It may not be going too far to assume that the pithouse builders of the Upper San Juan had evolved a system of fire and smoke signals. On the other hand, there may be no connection between these stations and they perhaps served only as lookout or watch towers for isolated communities. Either one of these suggested purposes would help to account for the location of apparently single dwellings on the higher elevations along the river. The writer also feels that there is unquestionably some close relationship between this feature and the two places, Montezuma and Chimney Rock Mesas, where indications were noted of the large fires having been built.

Across the San Juan from the town of Pagosa Junction is a shelf-like bench, less than a half a mile in length, which juts out from the main formation (Plate 5, center), that was almost as popular a place for a community center as was the corresponding height north of the Junction. There are a number of scattered house locations at this place. While members of the expedition did not have time to explore the mountains south of these sites, across the line into New Mexico, former pithouse villages were reported in that section by cattle and sheep men who have covered the area at various times.

From Pagosa Junction to the town of Arboles, a distance of 16 miles, there is a continual line of house sites as will be seen from Maps Nos. 1 and 2. Further description of these places would be but a repetition of what has been said already, as far as type and situation are concerned. There are one or two outstanding features to be noted in this locality, however. Two and one-half miles south of the Junction, the San Juan again swings off to the westward. Just west of this bend in

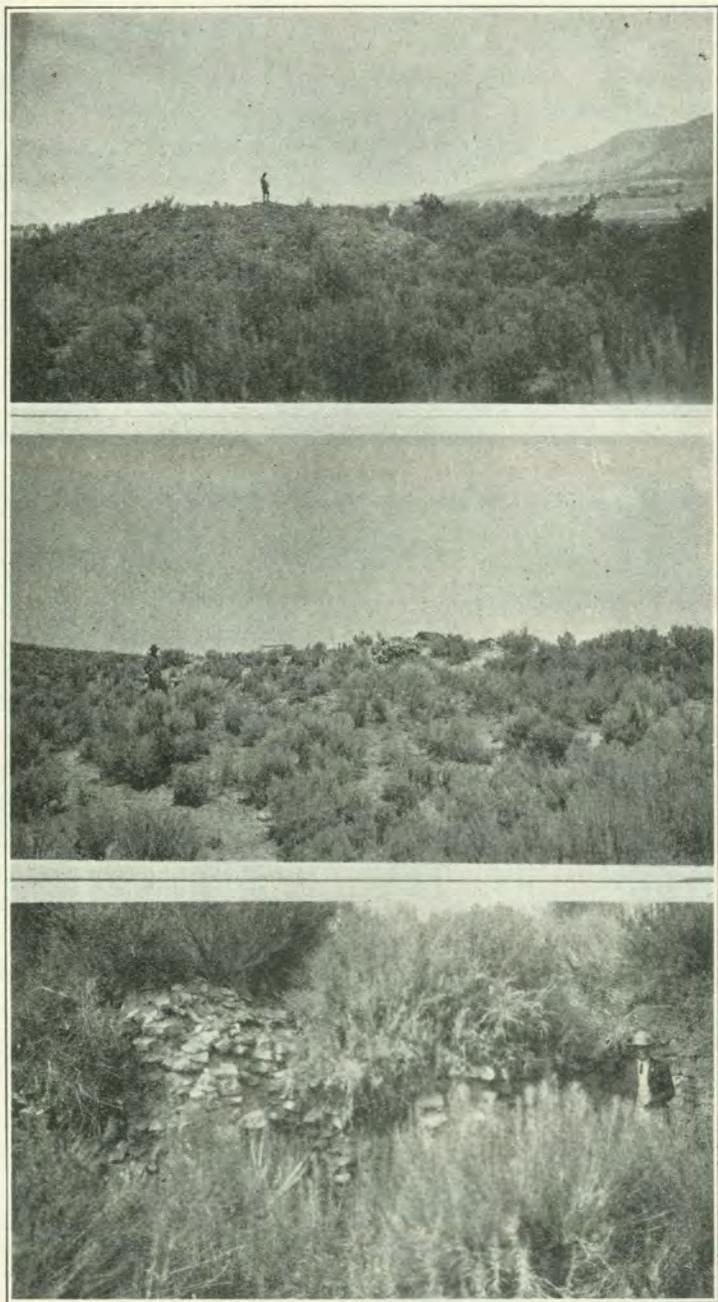


Plate 15, Upper and Center—Mounds at Yucca House National Monument. Lower—Portion of walls at Blanchard ruin north of Cortez.

the river Caracas Canon empties in from the south. As will be seen from Map No. 1, house sites are to be found following up the course of this canon (Plate 6, upper). They are in most cases of the pithouse group, but there is one notable exception on a high mesa on the east side of the canon. Here a large stone pueblo was erected. This contains three circular depressions which were undoubtedly kivas (circular ceremonial chambers). From the size of the refuse heaps and the amounts of debris which were found scattered over the surface, this must have been an extensive village and occupied over a considerable period (Plate 6, center).

Time did not permit the following through of Caracas Canon and the observation of all mounds located along its length, but inhabitants of the locality stated that they could be traced up over the divide many miles to the south until they led into the canons of northern New Mexico where signs of the 1690 period have been found. There was nothing to indicate this period in the history of the Southwest found in the remains of Caracas Canon.

Beginning at a point three miles west of Caracas Canon, the river bottom spreads out forming a comparatively broad plain, the river following the bluffs to the south. At this place the Pre-Pueblos seem to have forsaken, to a degree, the heights and to have taken to the lower levels for the erection of their domiciles. Whether this move was prompted by a desire to be nearer the water supply, to be closer to easily cultivated fields, or whether they thought that the added protection of the higher sites was unnecessary cannot of course be learned, but it is of interest to note that here the flat country begins to have its quota of former villages (Plate 6, lower). Just east of the settlement of Arboles the valley narrows down to such an extent that there is very little land in the river bottom proper and, as a result, the dwellings were again erected on the benches above the stream. One of these, a mile east of Arboles, shows a mound which has been greatly damaged by erosion, but which indicated a late period in culture development, from the sherds picked up from the surface. This was the first indication of differences later noted at Arboles.

Arboles Sites

The junction of the San Juan and the Piedra Rivers occurs just below the town of Arboles (Map No. 2), and it was in this

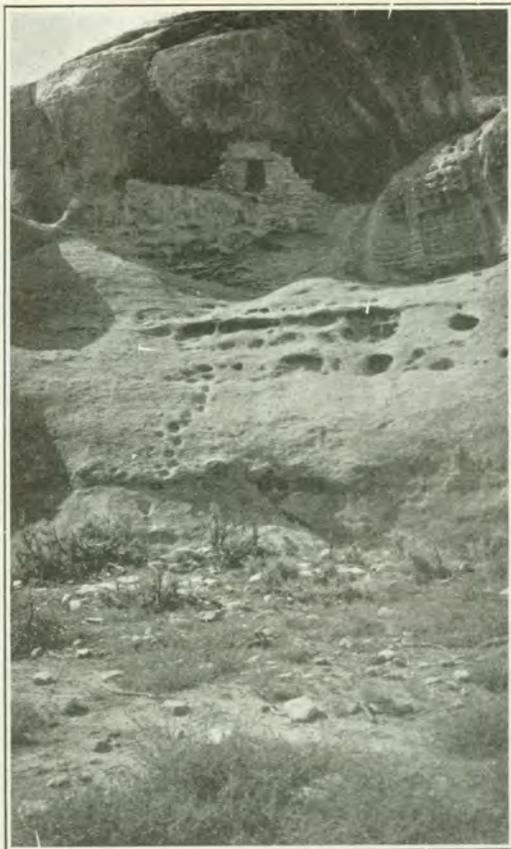


Plate 16, Upper—Small cliff structure near the western end of McElmo Canon. Lower, Right and Left—Towers in the Ruin Canon area.—(Photos by Jeancon.)

locality that some of the most striking variations in the appearance of the mounds and in pottery types were found. A portion of the town is built upon old pithouse sites and the high ground between the two rivers just north of their confluence is covered with the remains of a village of this nature (Plate 7, upper; Figure 5). On the top of the benches north of the town a different type of mound is found and indications are that the houses here were of a later period. These mounds are composed chiefly of large cobbles or river boulders, each of the sites suggesting a structure built of a rubble wall or, to draw a parallel from modern methods of construction, it might be said that they were similar to the coarse cement walls of present day foundations, bearing in mind, however, that where the builder of today uses cement as a binder the pithouse or, perhaps better, the Indian mason used adobe mortar unsparingly. There were no signs of actual walls found, but, from the amounts of stone, the manner in which they lie, and the indicated outline of walls formed by the larger stones of the lowest course, it seems to the writer that the houses could have been of no other type of construction. Because of weathering conditions and the amount of surface water which at times runs over this site, all traces of the adobe mortar have vanished. These mounds are low and measure from 15 to 30 feet across. In some of them, circular depressions, small in diameter as compared with those of the pithouses, are to be found, while in others there is no suggestion of a circular room or kiva (Plate 10, upper). It is the opinion of the writer that these are the remains of domiciles built by people from the south at the time of the Pueblo revolt, or that they are of the period immediately preceding the historic, when groups from New Mexico wandered north into this section for hunting or similar purposes. The houses by themselves would not indicate this fact, but such a theory is strongly supported by the pottery types found on the mounds. This is the first place in the area where three-colored ware of the variety attributed to the 1690 period was found. A number of sherds from bowls of this class were picked up and, at one point where exploratory digging was resorted to, pieces of the same character were uncovered in the debris. Further support of this belief was the finding of pieces of glazed pottery, green on white, at the first site south of Rosa and the locating of three color and glaze wares at two places farther north along the Piedra. These sites are located on Map No. 2.



Plate 17, Upper—Skeleton uncovered along the San Juan, south of Arboles. Lower—Burial found by Morris in the Johnson Canon region.

Just south of the wagon bridge across the Piedra at Arboles (Figure 5), there are a number of carvings on a large rock which has fallen from the face of the bluff into the river. These figures or petroglyphs are almost at the water line, on the south side of the rock, and are so overgrown with lichen that it was impossible to secure a photograph of them, hence the necessity of making a sketch (Figure 6). There are four figures suggestive of the Pueblo symbol for tadpoles and one serpent. The longest of the tadpole figures was four feet four inches in length and nine inches across the body. The smallest of the figures is two feet six inches in length and seven inches at the widest portion of the body. This symbol bears what appears to be two horns. The serpent figure is four feet three inches in length.

The chief difference between these symbols and the Pueblo tadpoles lies in the fact that here the tail is a straight line, not undulating, hence their being called by this name may be erroneous. Their location near the water might be taken as a further suggestion of their being representatives of aquatic forms. There is a petroglyph of this same nature to be seen on the wall of the cliff back of Square Tower House at the Mesa Verde.

The face of the low cliffs from which the rock, bearing these symbols, fell is just west of the pithouse village site mentioned above. This rock did not fall until comparatively recently, the spring of 1911, according to Mr. C. A. Nossaman, who has resided at Arboles for many years.

The Piedra River Valley

The most thickly settled area of this portion of the San Juan drainage was the Piedra River Valley with its bordering benches and hills (Plate 7, lower). As one follows north from Arboles, there is what might be called an unbroken line of former house sites and of ruins. While the preliminary explorations made during the two previous summers, when excavations were being carried on at the Chimney Rock, had shown that here was a vast field for archaeological research, the true extent and number of ancient villages as discovered during the work of 1923 was astounding, to say the least. The great majority of the mounds indicate domiciles of one of the several types of pithouses already discussed (Plate 8, upper and center), but, in a number of instances, the heaps of debris unquestionably cover stone dwellings. As has been brought out in previous reports, the Chimney Rock Mesa and lower spurs jutting out from it are literally covered with stone structures. On the Chimney Rock Mesa proper is the large stone pueblo which occupied the major part of the operations of the summers of 1921 and 1922 (Plate 9, center and lower; Figure 7), and on the lower level of the same formation, there are one hundred and ten mounds containing smaller stone domiciles, none of the latter ever having been dug into.

On the high bench across the Piedra from the Chimney Rock area, there was a large stone pueblo at one time and, in places, indications suggest that the walls are still standing to a height of six or more feet (Plate 8, lower). A glance at Map No. 2 is sufficient to give the reader an idea of the number and extent of the ruins in this vicinity. It might be well, however,

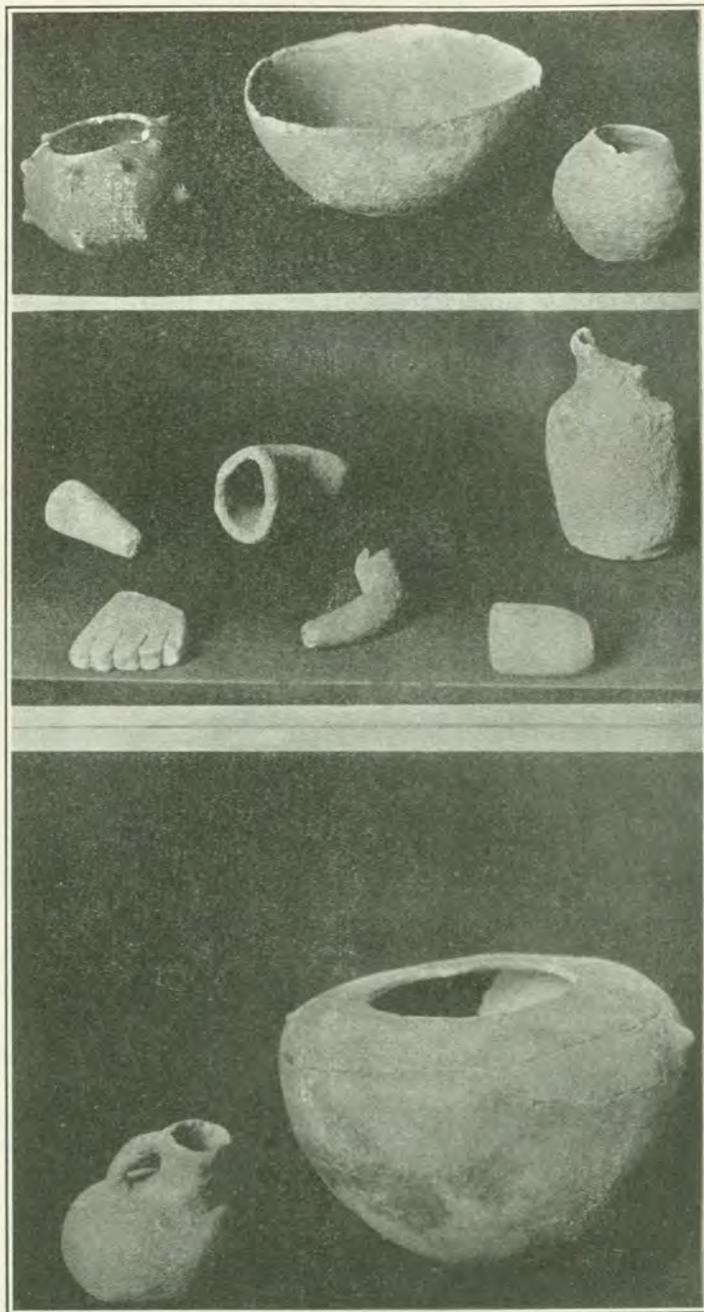


Plate 18, Upper—Typical pithouse pottery. Center—Pipes, bottle and portion of foot from a human figurine found on pithouse sites. Lower—Pithouse wares.

to call attention to Stollsteimer Mesa, or the high point between the Piedra and Stollsteimer Creek (Plate 10, upper). Here at one time a large group held forth, or various villages were occupied at different intervals, if the number of house remains is any indication. There are 30 mounds scattered about over the top of this mesa and in practically all cases each mound indicates a rather large sized village. The largest group of domiciles is located at the northwestern end where there are ten circular depressions averaging 40 feet in diameter. One room was excavated at this site. It measured 15 feet by 17 feet and was two feet deep. The plaster had been applied to the native earth walls and the debris which was removed from the room gave all indications of the jacal type of construction (Figure 1). It was from this room and the immediate portions of the mound that the majority of the pottery specimens obtained by this expedition was secured.

Stollsteimer Mesa is interesting, not only because of its pithouse remains, but also on account of the many indications which it gives of having been used as a camping ground by the Utes. In many places old tipi poles may be seen scattered over the ground. In a few instances, these poles are on mounds resulting from the covering over of pithouses suggesting, as is also the case around Ignacio, that, contrary to popular opinion, the Utes held no fear of the spirits of the departed builders of these fast vanishing domiciles. Many Ute beads were found on the ant heaps surrounding the places where the tents had been pitched or brush shelters erected. In addition to the tipi poles, occasional signs can be found of the ring of earth which was thrown up around the edge of the tent for the purpose of keeping out the wind and water during inclement weather.

On the top of what is known as Coal Hill along Stollsteimer Creek, practically due south of the Chimney Rock or Piedra Parada Mesa with its ruins, is a large group of stone dwellings or a large stone pueblo. It is impossible to tell without excavation whether there was one large community house or a group of smaller ones. There are twelve circular depressions in the mound, all being of the type which suggests the kiva. Part of the mound has been disturbed by plowing, the owner of the land having planted beans there for a number of years. In the center considerable still remains of what was once a large stone structure, perhaps the highest portion of the pueblo. Pot-hunters have done some damage to the walls by careless attempts at

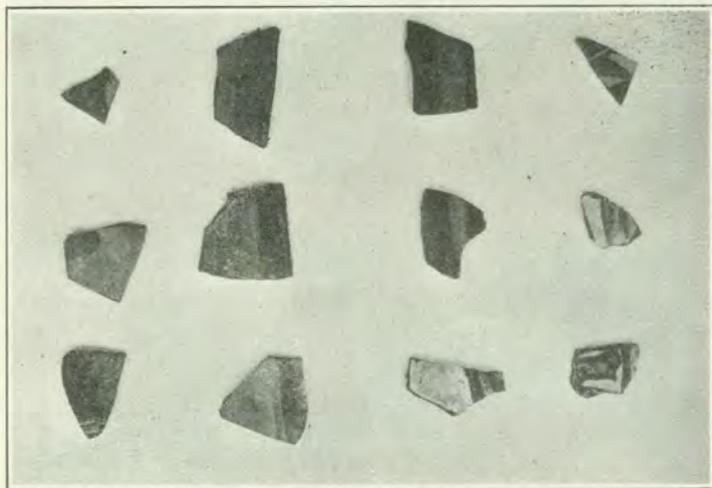
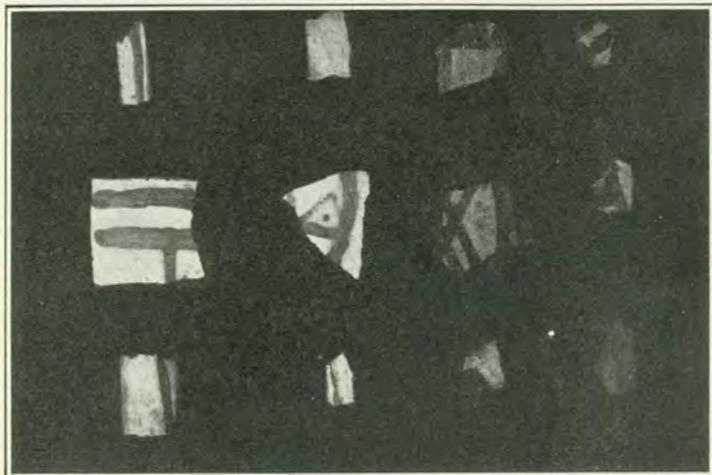


Plate 19, Upper—Biscuit and glazed sherds from the Piedra region.
Lower—Three-color sherds from Arboles and the Piedra.

excavation. From all reports no pottery has been found there, however. The type of wall construction (Plate 11, left) is similar to that found in the buildings occupying the Chimney Rock Mesa to the north and the group is unquestionably of the same period as the other ruins of this type.

In considering the question of new information on the inhabitants of the Piedra section, two locations, the one on the west bank of the river six miles north of Arboles and the other on the east bank one mile farther north, stand out pre-eminently.

These are marked on the map, Pottery in Three Colors and Glaze Pottery Site (Map No. 2), and are of interest because they furnish additional support to the theory which was mentioned in connection with the sites at Arboles, namely, that there was a later occupation of this region by a different cultural group, a group from the south where the three colored pottery, of a later period in the chronology of pottery development, and the glaze ware of the same time was familiar. As already mentioned this was unquestionably due to migration by the Pueblos who were seeking either for hunting grounds or to escape the Spaniard. The finding of these sites moves the boundary of the migratory limits of the later peoples in New Mexico much farther north than it has heretofore been supposed that they journeyed. Northern New Mexico was previously considered as marking the extent of this movement.

South from Arboles, along the San Juan, the ruin sites continue and, while the expedition penetrated only eight miles into New Mexico, it is reported that mounds can be traced without a break to the place where the Pine River, to the west, empties into the San Juan. Trappers and cattlemen, who have covered the entire section, told the writer that the circular depressions and broken pottery were to be found at intervals all the way along the upper benches above the stream (Plate 12, upper).

Allison and Tiffany Area

West from Arboles two general lines were followed by the pithouse builders, one along the Middle Mesa which borders the Allison Valley along the Colorado-New Mexico state line to the south, the other following the tops of the lower benches sloping down from the Piedra Peaks to the north. For some reason or other the floor of the valley was not popular and few house sites are located there. Those noted were on higher levels rising out of the valley so that, strictly speaking, it might be said that in this entire area the higher ground only was occupied. There may have been isolated dwellings at one time in this valley but, if such existed, they have now disappeared because of the extensive cultivation which the American farmers have followed, this being one of the best agricultural localities in southwestern Colorado. The greatest number of house remains found in a small area in this entire section was on the top of what is called Haystack Mountain, a mile and a half north-



Plate 20, Upper—Duck and sheep figurines from Piedra pithouses. Lower—Bowl with duck head, wings and tail.

east of Allison (Plate 12, center; Map No. 2). The top of this small ridge which rises one hundred feet above the surrounding territory is literally covered with mounds. In one of the rocks forming the top of the butte a small cup-shaped depression measuring six inches in depth by six and one-half inches in diameter had been cut. This is similar to one found on the Chimney Rock Mesa and was undoubtedly for the same purpose. It has been suggested that they might have served as mortars for the grinding of corn but there are no indications around the

edge to show the use of a pestle, and it is more likely that they were for ceremonial purposes. The one mentioned on Haystack Mountain is shown in Plate 12, lower.

Two miles northwest of Allison and a mile and three-quarters southwest of the same place, two more sites were found indicating a later period of occupancy, through the finding of sherds with glaze decoration on them. The site to the southwest was a mound covering a stone dwelling while that to the northwest was apparently of the same general type as the others found throughout the region.

Following on west are additional sites until Spring Creek is reached. Here again it will be noted that the inhabitants followed the course of the stream and on both sides former village locations are to be seen. The sites on the east side of Spring Creek are, as a rule, at some distance from the present bed of the stream, but it is very possible that, at the time the domiciles were built, the creek was much closer to the bluffs than at present. Indications are that the stream has shifted its course many times.

The Pine River Valley

Just below the town of La Boca, the waters of Spring Creek empty into the Pine River which is making its way to join the San Juan 26 miles below the New Mexico border. This brings one into the Pine River Valley which was studied at some length a number of years ago by Albert B. Reagan who wrote a report on the ruins of the district. In the summer of 1922, Mr. J. A. Jeancon also visited the valley with members of the State Historical and Natural History Society of Colorado and the University of Denver's Chimney Rock expedition and during the summer of 1923 additional investigations were made. More intensive work was done in the region around La Boca than at any other point in this section. The large number of former habitations here located will be noted by a glance at Map No. 3. Because of Mr. Reagan's work and the explorations by Jeancon, the northern portion of the area was not as carefully worked, but the location of the more important groups of ruins are indicated on the map. As has already been mentioned in this paper, the majority of the mounds of this district suggest the pithouse type with jacal wall construction. The largest of this type of village found was at La Boca where, at the present time, the mound covering it is over 300 feet long and 100 wide at the

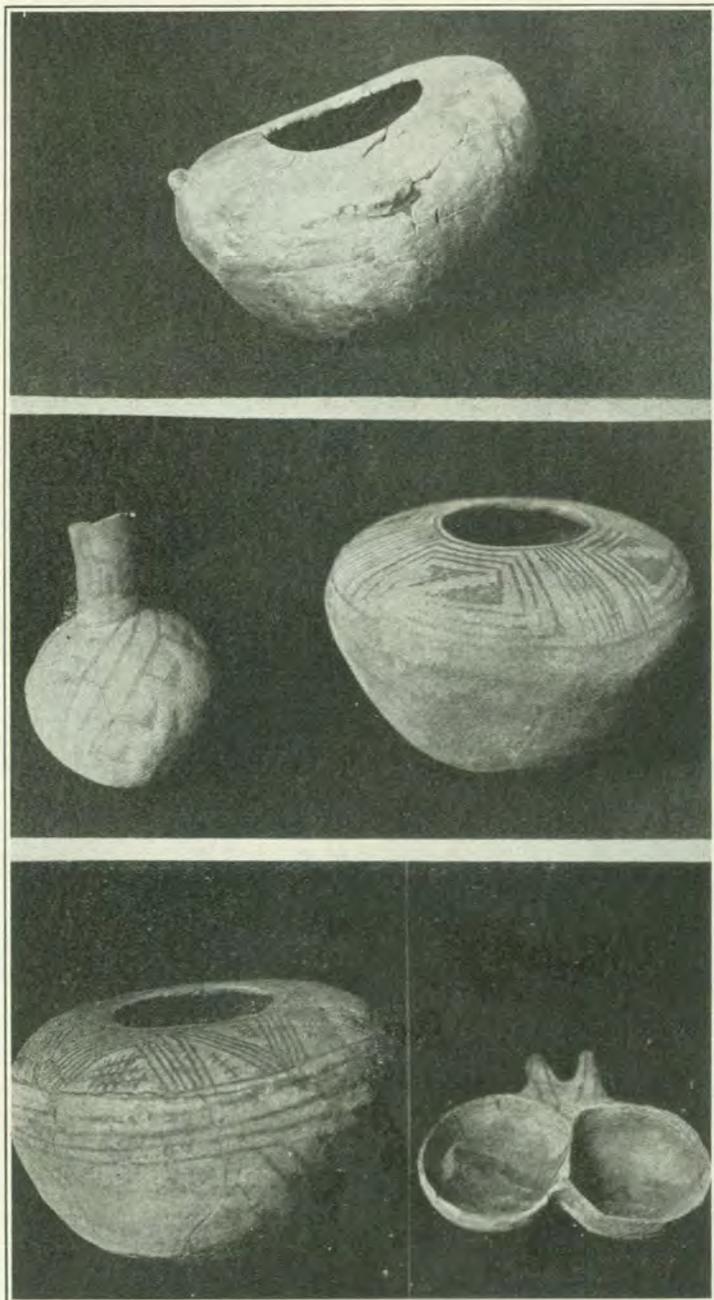


Plate 21, Upper—Duck-shaped bowl from along the Piedra. Center—Black and white wares. Lower—Black and white bowl and ladle.

greatest breadth (Plate 13, upper). There has been considerable erosion at this place and portions of the structures have washed down over the edge of the ridge. In addition to the natural forces of destruction, the eastern end has been disturbed to a greater or less degree by plowing. There are three large circular depressions in the mound, which is situated on an open bluff 200 feet above the river. This spot is exposed on all sides, access from every direction, except that of the river, being easy. It is highly probable that, at the time the village was occupied, it stood at a greater distance from the edge of the bluff than at the present. The distance is now seventy-five feet. The appearance of the face of the bench suggests rapid wearing away due to the action of the stream which washes its base.

The La Boca mound is only a few feet in height and it was thought at first that the accumulation over the buildings was of greater depth than can be seen from the surface, but excavation at two points showed this belief to be a fallacy, as flooring was encountered at a depth of two feet beneath the present ground level. There was practically no rock whatever in the debris and all factors point strongly to the pole and adobe or jacal construction. One room excavated was six feet square and two feet deep with the plastering applied to the native earth walls. A good example of stone door (Plate 11, center) was found lying on the floor of this room. At another part of the mound, an exploratory trench was run which revealed the corner of a room similar to that described above, but the north wall and portions of the east and west walls have been washed away making it impossible to determine the size of the inclosure.

The dump heap of this village was on the north side of the ridge on which the houses were built. This also proved to be the burying ground for the locality as a number of skeletons were uncovered, all in a poor state of preservation, however, because of the moisture in the soil due to the drainage water running down across the slope. Several pieces of pottery were found during the digging at La Boca, some in connection with one of the burials.

Many stories were making the rounds at La Boca relative to the size and preservation of ruins a few miles down the river across the New Mexico line. The writer made a trip ten miles down stream and found nothing different from the type of ruins with which this report has thus far dealt, the pithouse. In two instances structures reported to be of Indian origin and which

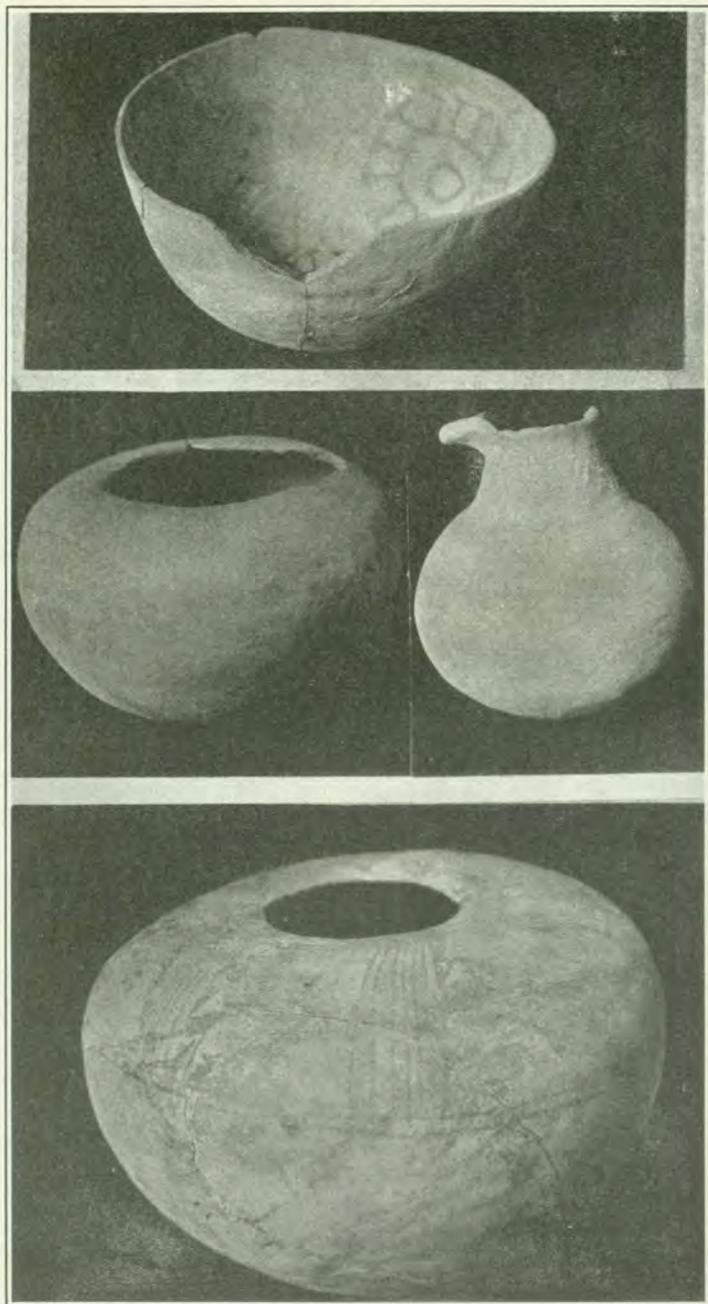


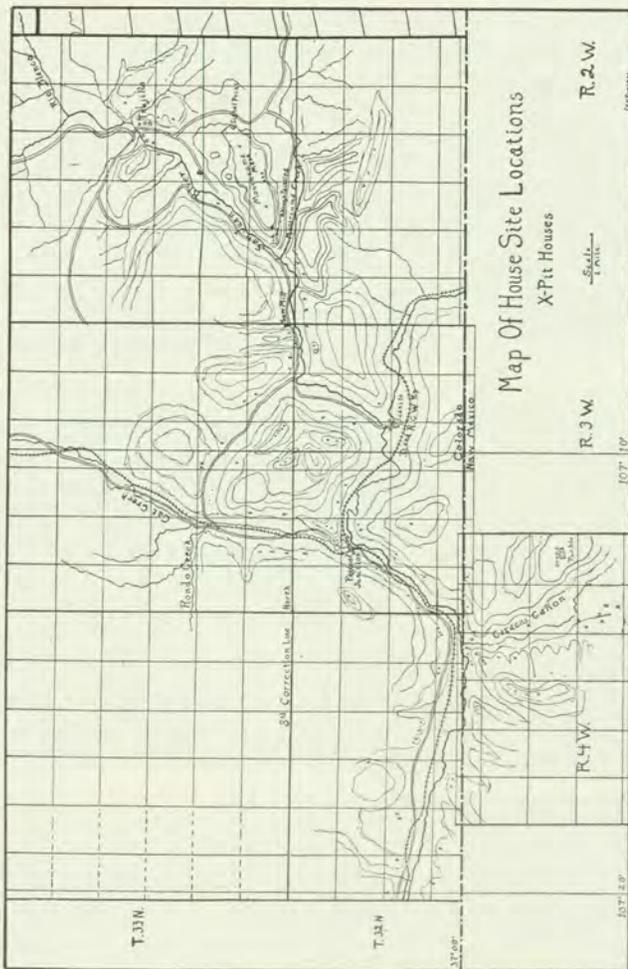
Plate 22, Upper—Large black and white storage bowl from the Piedra. Center—Plain ware vessels from pithouses. Lower—Black and white bowl from San Juan south of Arboles.

still have the walls standing to a height of several feet proved to be Mexican houses abandoned a number of years ago and at present in an advanced stage of decay.

In going north from La Boca to Ignacio, it is necessary to take a road which follows the valley at some distance from the river. Three miles northwest from La Boca there is a large rock lying out on the floor of the valley, on the top of a low rise, and on this rock is a carving suggestive of the water symbol, but more strictly speaking a target (Plate 11, right). Whether this is of Ute origin or was made by the Indians who constructed the dwellings now in ruins along the stream cannot be said, but it is unquestionably very old, the surface of the rock where it has been chipped away, in order to make the symbol, is of the same weathered appearance as the remainder of the stone and at places the design is somewhat indistinct. There were no traces of former domiciles in the near vicinity and no sherds were picked up from the surface, although a careful survey was made of the ground in all directions.

At some distance farther north and west from this spot two small house sites were located at the foot of the range which lies to the west of the Pine River Valley. These are on property belonging to O. H. Buck, who has a number of manos and a crude metate which he found in his field near the piles of debris. It is at this point that one of the old Ute trails starts up over the main range.

“On the east edge of the mesa immediately west of Ignacio is a series of ruins extending in a north and south direction for probably half a mile. They are extensive and for the most part are apparently continuous with outlying villages extending to the northwestward. On account of being under cultivation these ruins are much disturbed and in most cases the original position of the debris cannot be determined. Moreover after the Utes were moved to this region by the government they also made this ridge their village site until they were persuaded to take lands in severalty, they also making their graveyards on the ancient ruins. Consequently in the present disturbed condition, it is hard to tell exactly what is Ute and what is ancient debris. The ruins that can be traced, however, are of the Pueblo type and the fragments of pottery and the buried grinding slabs evidently belonged to that race. The Ute rubbish was evidently only a veneer to the ancient debris before the



Map No. 1—The contour lines on these maps are purely indicative of the first, second and higher benches. Map of house site locations.

same was heterogeneously mixed by the white man's tilling the soil."⁹

This mesa is of the same general conformation found throughout the area and as a matter of fact is simply one of the sage-covered benches of the river boundary, although the stream has shifted its course and is at present at some distance from the high ground. A number of residents of the town have erected their homes along the edge of the bench and have thus further contributed to the disturbance of the sites. In speaking of these locations Mr. Jeancon wrote:

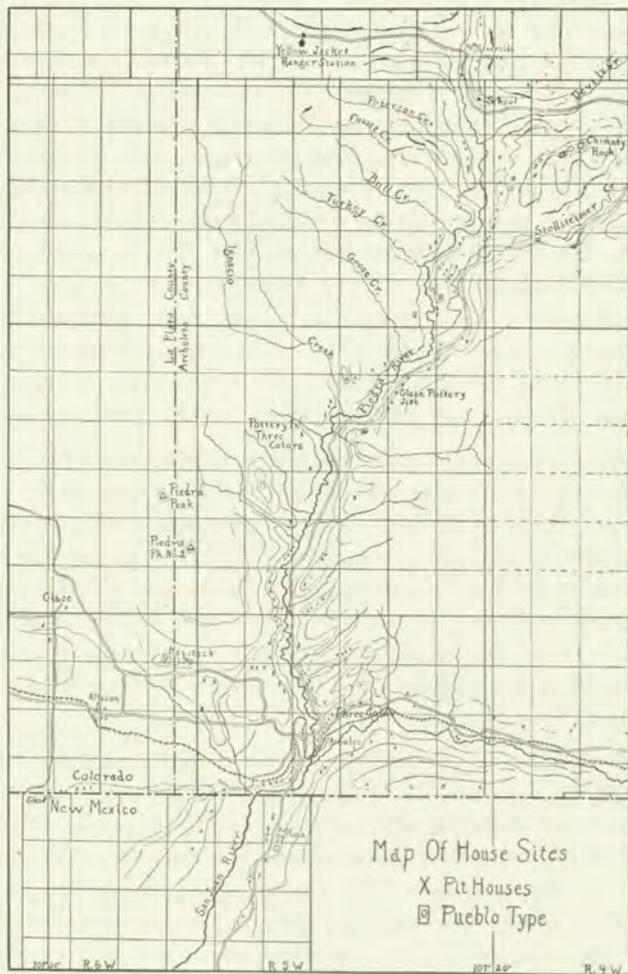
⁹Reagan, A. B. Ancient Ruins in the Lower and Middle Pine River Valley, Colorado, El Palacio, Dec. 31, 1919, Page 173.

"—Starting at a point three hundred feet south of the junction of the road which leads to Mr. Turner's home and the main road, we found a number of indications of ruins. The largest and best defined one is a mound running roughly east and west about one hundred feet in length and running north and south about fifty feet in width. It is only about one and one-half feet in height and shows no surface indications of walls. There are many cobblestones scattered all over it and the walls—the lower parts at least—were probably built of these. Fifty feet southwest of this mound are two large groups of stone suggesting detached rooms. The whole group suggests similar ones to be found along the San Juan River after leaving Shiprock, New Mexico, and running over to the four corners.

"There are many small mounds scattered all over an area comprising about ten acres, but none of them are definite enough to establish them as house remains. In their present condition it is impossible, without excavation, to say whether the stones were taken from the adjoining tilled fields and piled up to get them out of the way, or whether they are really small house remains. On the larger mound spoken of above, there are many fragments of baked adobe roofing material, but on others these indications are missing."¹⁰

On the east side of the Pine River, a little southeast of the Ute school, is a group of three villages running on a north and south line for a distance of over three hundred yards. The most northern of the mounds is in the shape of a horseshoe, it measures 135 feet on the west side, 120 feet wide at the north end, 110 feet on the eastern side and 125 feet across the southern opening. In the center are two circular depressions suggestive of kivas. This is the ruin numbered 1, by Reagan in his article. One hundred and fifty feet south of this is another pile of debris covering what was apparently a circular village or a group of structures around a depression in the center similar to the depressions noted in so many instances in this paper. This mound is about 150 feet across and, judging from the amount of debris and the size, it originally had fairly high walls. Indications are that it is of a later period than that of No. 1. This is the location designated as No. 2 in the Reagan report. The third ruin of the group lies several hundred feet to the south and is another of the horseshoe form of mounds, in this case, how-

¹⁰Jeancon, J. A., and Roberts, F. H. H. Further Archaeological Investigations in the Northeastern San Juan Basin, 1922, Colorado Magazine, Vol. 1, No. 1, November, 1923, Page 24.



Map No. 2—House sites.

ever, the plaza or court faces east instead of south as noted in the first of the group. This mound has suffered greatly from erosion and present indications are that it was originally about 100 feet long. This is No. 3 according to the Reagan plates.

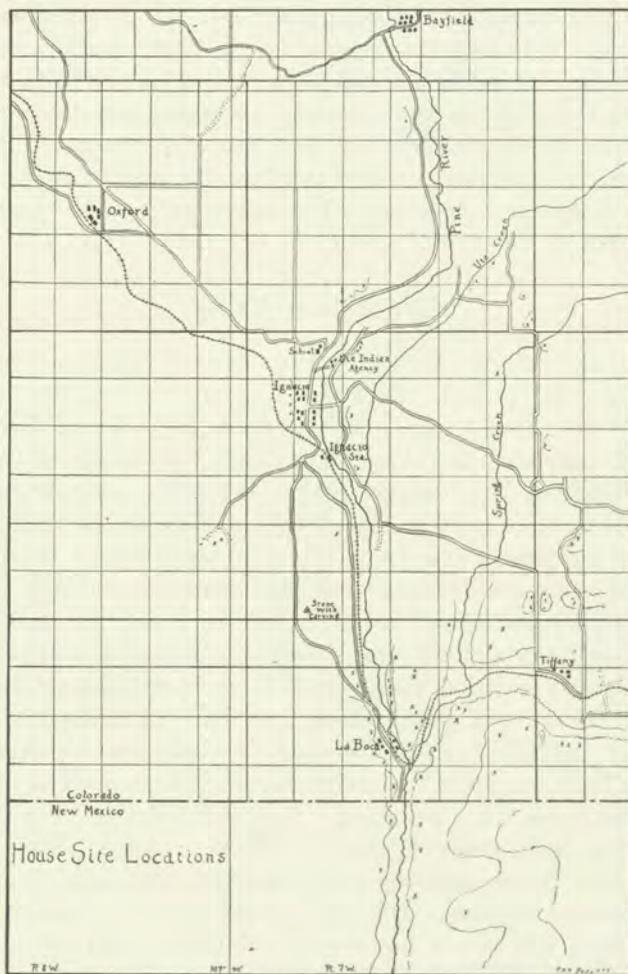
Along Ute Creek which rises in the hills east of Bayfield and which flows into the Pine just below Ignacio Station are many sites of the pithouse appearance. In the majority of cases these are small clusters only and, as suggested by Reagan, may perhaps have been summer lodges where the people lived during the period of the year in which they were tending their crops in the fertile fields which abound in this section.

As will be seen by glancing at Map No. 3, additional sites are to be found along the edge of the first bench above the river to the west, extending almost as far north as the town of Bayfield. All are of the type already discussed and from exterior indications were probably of the jacal construction. Further consideration and discussion of the Pine River district is unnecessary in this report because of the information already available on the subject.

The Animas Valley

Moving on west from the Pine River region one comes to the Animas River and its valley. At one time the Florida Mesa, east of the Animas and lying between the Florida River and its confluence with the Animas, contained its quota of the early house locations but, because of the extensive agricultural practices which have been followed by the farmers in that section, many of the sites have disappeared. Just north of the town of Durango, between Durango and Animas City, on both sides of the river, on the upper benches, can be found traces of early habitations, the mounds and debris suggesting the type of pit-house already noted so many times in the northeastern San Juan basin. The former house sites, just east of the river on the lower of the benches, are interesting from the fact that it is possible that the river was following its old channel at the time these domiciles were occupied. The old river bed can be seen plainly in the picture (Plate 13, center), and a period of 500 years could unquestionably have seen the shifting of the stream to its present location. Due east of Durango, on what is known as reservoir hill, are a number of old house locations and indications are that the reservoir of the city covers a number of them. During the excavations for the foundations of the high school building in Durango signs of walls and other features were uncovered showing that the bench on which the modern structure stands was once the location for an Indian village. Many fine arrow points and other stone artifacts have been found at these various places, as well as countless potsherds, by residents of the City of Durango. There has been some sporadic pot-hunting in some of the rubbish heaps, but no great amount of digging has been done in the region up to the present time.

Following down the Animas, scattered locations may be noted, but not in very great numbers, until the area close to the New Mexico line is reached. It is only a comparatively short



Map No. 3—House site locations.

distance from the state line to the large group of ruins at Aztec, New Mexico, and following on down to Farmington are scattered sites. It is near Farmington that the Animas joins the San Juan and the main line, if it may so be called, of ruins is again picked up.

Johnson Canon Region

West of the Animas is another tributary of the San Juan flowing from southern Colorado, called the La Plata. The region between the La Plata and the Mancos River to the west has

been carefully worked by Mr. Earl H. Morris, who was in charge of the excavations at the Aztec ruin, at intervals during the years from 1913 to 1923. This area comprises what is more familiarly known as the Johnson Canon region and is one in which both cliff houses and mesa dwellings are to be found. In summarizing the information obtained in his researches in this district Mr. Morris wrote of the cliff dwellings as follows:

"From the foregoing discussion it appears that there existed in Johnson Canon a typical example of the rather restricted culture characteristic of the Mesa Verde region. The materials for building, weaving and pottery making were procured in the immediate vicinity, and the fruits of the wild trees and plants, as well as the cultivated crops came with few exceptions from the nearby canons and mesas. The general characters of the masonry, the structural features of the kivas and secular rooms, the methods of burial, and the pottery and other artifacts indicate that the cliff dwellings in this canon southeast of the Mancos River are culturally and approximately chronologically contemporaneous with the large ruins of the Mesa Verde National Park."¹¹

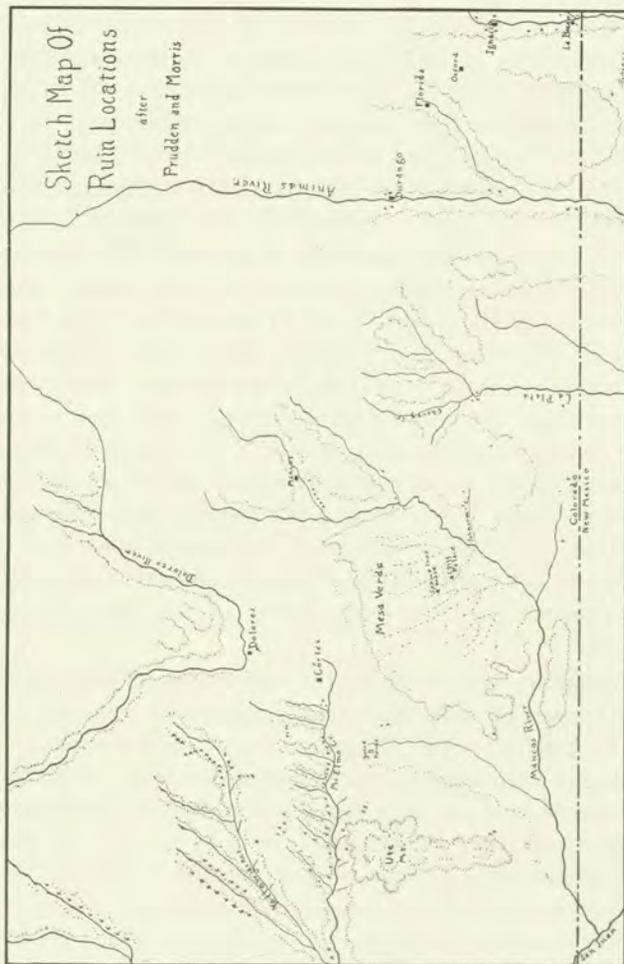
In discussing the ruins on the mesa tops which correspond to the pithouses already considered and which are but a variation of the pithouse type of structure, Morris writes:

"Circular depressions surrounded by low, much eroded, banks of earth, and varying from a few feet to as much as 50 feet in diameter, are of frequent occurrence. It is probable that these depressions are the remains, not of reservoirs, as many suppose, but of circular pit rooms. This conclusion is not based on excavation in that particular region, but is drawn from observations on Pre-Pueblo ruins situated between the San Juan River and the Continental Divide 70 miles east of the La Plata. In that vicinity, near, and even in the midst of jacal structures, the pit rooms extend from three to six feet below the surface. The plastered clay walls slope outward, and in them at nearly regular intervals are to be found the stumps of the heavy posts which supported the roof. Near the center of each room is a fire pit, and dug into the walls, the bottoms extending somewhat below the level of the floor, are receptacles probably analogous in function to the bins so common in the later buildings."¹²

In addition to the types described above, there are many

¹¹Morris, E. H. *Antiquities of Southwestern Colorado*, A. R. 33, Bureau of American Ethnology, Pages 180-181.

¹²Morris, E. H. *Op. cit.*, Page 186.



Map No. 4—Sketch of ruin locations.

stone dwellings scattered about the mesa tops. In several instances, these attain the size of fairly large pueblos. On the top of the bench to the west of the point where Cherry Creek flows into the La Plata River (Map No. 4), there is one of these buildings and some work has been done at this point by Morris. Up to the present no startling variations from the general form have been found in the ruins of this type, only changes of a minor nature which can be attributed to locality. In his conclusion on the types of culture evidenced by the mounds of the pithouse form, Mr. Morris suggested their connection with the Pre-Pueblo pithouse culture, a fact which has been substantiated by the work done in mounds of this group since his report was

written. The recent investigations of this region have developed what Mr. Morris calls the Early and Late Pre-Pueblo, or according to Kidder and Guernsey the Post-Basket-maker and Pre-Pueblo types. Mr. Morris is also of the further opinion that the entire Chaco Canon cycle intervenes between the houses of this period, or of these two periods, and the cliff houses of the Johnson Canon and the Mesa Verde proper. A type of structure of this period as uncovered by Mr. Morris in 1922 is shown on Plate 13, lower.

Mancos Canon and the Mesa Verde

The Mancos Canon to the west contains many cliff houses and tower remains which were discovered as early as 1874 by W. H. Jackson of the U. S. Geological and Geographical Survey. He was followed in 1875 by W. H. Holmes, later chief of the Bureau of American Ethnology, who made an extensive report on his findings in the Geographical Survey for 1876. The failure of the Jackson and Holmes parties to make a thorough reconnoissance of the adjacent canons, tributary to the Mancos, kept the discovery of the Mesa Verde proper with its tremendous ruins for a later period.

Cliff Palace, the largest of the Mesa Verde ruins, was discovered at the end of the year 1888 by Richard and Alfred Wetherill, and since that time the National Park which annually attracts so many visitors has been developed, many ruins have been excavated and restored, and much concerning the culture of its inhabitants learned by the many investigators who have studied the section (Plate 14, upper). On the Mesa Verde one may find the primitive pithouses or earth lodges of the Pre-Pueblo peoples; traces of the preceding culture, called the Early Pre-Pueblo by Morris and the Post-Basket-maker by Kidder, Guernsey and Nusbaum; of the pueblo or community type of dwelling erected on the mesa tops, of which Far View House is an example; and of the cliff dwellings or community houses built in the cliffs, Cliff Palace and Spruce Tree House are perhaps, the best known representatives of this group. In addition to these types of domiciles, the Park also furnishes splendid specimens of towers and of specialized structures for ceremonial purposes as suggested by Sun Temple and New Fire Temple (Plate 14, lower). Information in detail concerning the culture of this center may be secured from the reports of Dr. J. W. Fewkes, chief of the Bureau of American Ethnology, who has

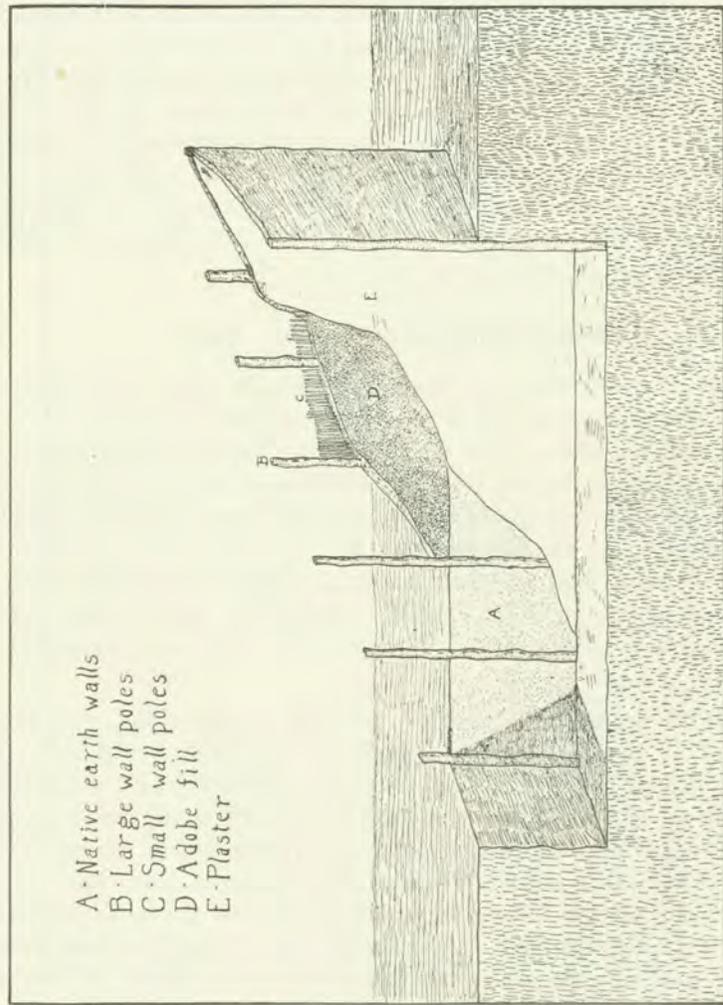


Figure No. 1—Manner in which jacal walls were constructed in the building of a pithouse.

- A. Native earth walls
- B. Large wall poles
- C. Small wall poles
- D. Adobe fill
- E. Plaster

directed the greater part of the excavating and restoration at the Park, and also from the writings of other archaeologists who have contributed to the discoveries concerning these ancient peoples.

Montezuma Valley

To the west of the Mesa Verde is the Montezuma Valley which more strictly speaking is a rugged upland sloping gradually away to the San Juan to the southwest. In the floor of the valley lying between the Mesa Verde and Ute Mountain are to be found many ruins, the most outstanding of which is the

ancient Aztec Springs group or what is now known as Yucca House National Monument (Plate 15, upper and center). In the region around Cortez and north to Dolores there are also many mounds covering the remains of large structures of the pueblo type. Between Cortez and Dolores is the so-called Blanchard ruin from which the material used in the construction of the cliff dwelling replicas near Manitou was secured. This is of the pure communal type of building (Plate 15, lower). West from Cortez and Dolores practically all types of ruins are encountered. On the top of a low hill three miles west of Dolores, is a D-shaped ruin which has been given the name of Escalante after the Spanish friar who passed through this portion of Colorado in 1776 and who mentions in his diary the seeing of a ruin of a house of the type constructed by the Pueblo Indians of New Mexico. Escalante mentions ruins in other writings as well, but in no case, with the above exception, is the description definite enough to warrant the picking of the exact location. In his letter of April 2, 1778, to the Reverend Father Augustin Morfi, Escalante refers to the land 200 leagues northwest of Santa Fe "Which is nothing else than the land from which the Tihuas, Tehuas, and other Indians of this kingdom migrated, which is clearly manifested in the ruins of the pueblos which I have seen, whose form is the same as that which they afterwards gave to those of New Mexico, and the fragments of pottery which I also saw in the said ruins are very similar to those which the Tehuas, referred to, make today."¹³

While practically every type of house construction thus far noted is to be found in the section under consideration, this portion of the San Juan drainage has its characteristic domicile, the most abundant and uniform being the small pueblo erected in the open. The designation "Unit Type" has been given to this form of dwelling by Dr. T. Mitchell Prudden who has made an extensive study of the area. His reasons for the adoption of this name have been set forth in a number of his reports on the research work done in such ruins. In explaining the adoption of the designation Dr. Prudden writes:

"It was so called because this type of habitation, with its accessories, not only represents a concrete and simple phase of the ancient house-builder's culture, and records certain dominant social and religious impulses of his time, but also because

¹³Carta del Padre Fray Silvestre Velez de Escalante, 2 de Abril, A. D. 1778. Archivo General—"Historia" Tomo II, Impresa en la Tercera Serie de los Documentos para la Historia de Mexico, Page 127.

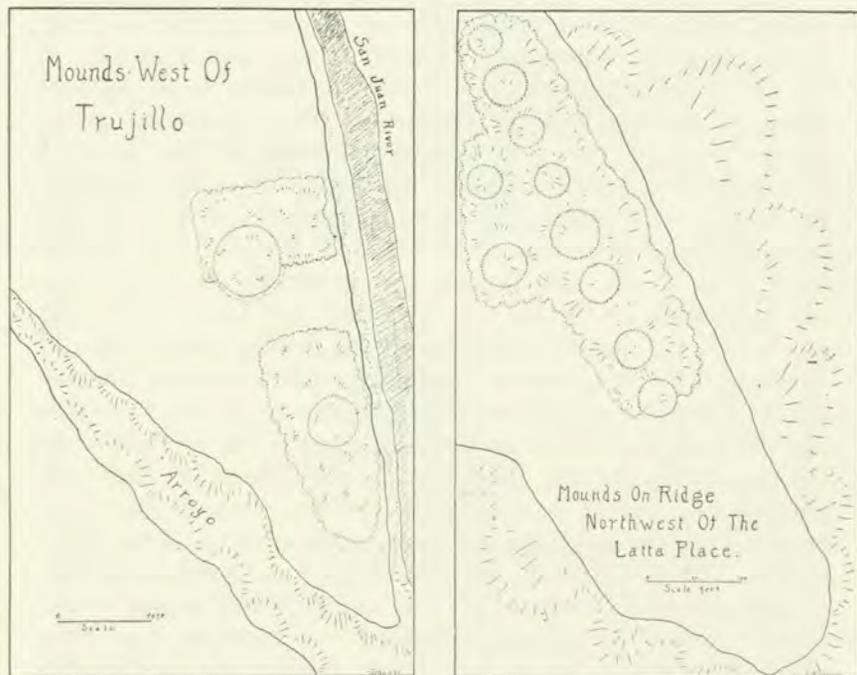


Figure No. 2—Mounds west of Trujillo.

Figure No. 3—Mounds on ridge northwest of the Latta place.

it finds expression in many of the larger and more complex ruins in this region, which are often, in fact, obvious aggregates of these "units," variously modified to suit the requirements of special situations and environments.

"Whether scattered at wide intervals over the pinon and sageclad uplands, or grouped in larger and smaller settlements along the meager watercourses or more favorable sags among the hills, these small habitation units consist first of the pueblo or dwelling.

"This is most frequently formed of a single or double row of small rooms—four or five rooms in each row—or of a single row, with one or more rooms extending forward at one or both ends, forming a shallow court, almost always facing southward.

"Directly in front of the pueblo, close by, and almost invariably to the southward, is a shallow pit or saucer-shaped depression of the ground, whose diameter is somewhat less than the length of the pueblo, and which is considered by archaeologists as marking the site of a ceremonial chamber or kiva.

"Finally, still to the southward and commonly close by, is the burial ground, usually distinguishable at sight by the darker color and the texture of the soil, by fragments of pottery, flint chips, charcoal, etc., and often by the type of plants which flourish upon it.

"The reason for the maintenance of these three structural features in these primitive dwelling places has become comprehensible in a light which a study of the modern Pueblo culture has thrown on these earlier related folk. For if these simplest residences be recognized as marking family or clan units, the practices and traditions of the Pueblo people of today, which center in and are so largely determined by clan or other social relationships, make clear enough the impulse which led small groups of these earlier people, even in the near neighborhood of others, to maintain not only their separate houses but also their separate ceremonial chambers and places of burial."¹⁴

Excavations in mounds covering ruins of this type showed that the houses had been flat-roofed and without doors in the outer walls but in the roofs, and facing southward. In addition it developed that there was usually an underground passageway leading from one of the center rooms of the pueblo to the kiva located beneath the level of the ground in varying distances to the south. The top of the kiva probably formed the floor for a small court or plaza along the southern wall of the structure. Dr. Prudden also points out that many of the larger pueblos were simply composed of a number of these "units" grouped together in such a way as to make an apparently single pueblo of tremendous size. These small houses are also found in close association with ruins of the larger type as well as being scattered at intervals over the area in more or less isolated groups.

Dr. J. W. Fewkes of the Bureau of American Ethnology has made a classification as to house types in southwestern Colorado and has grouped many of the larger and better known remains of this section under these various heads. His classification is in brief:

"1. Villages or clusters of houses, each having the form of the pure pueblo type. The essential feature of the pure type is a compact pueblo containing one or more unit types, circular kivas of characteristic form, surrounded by rectangular rooms.

¹⁴Prudden, T. Mitchell, *The Circular Kivas of the Small Ruins in the San Juan Watershed*. American Anthropologist, (N. S.), Vol. 16, No. 1, January-March, 1914, Pages 33-34.

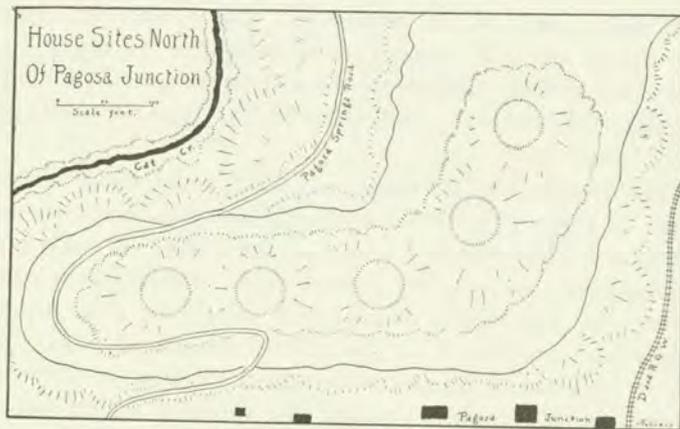


Figure No. 4—House sites north of Pagosa Junction.

These units, single or consolidated, may be grouped in clusters, as Mitchell Spring, Aztec Springs Ruins; the clusters may be fused into a large building, as at Aztec or in the community buildings on the Chaco Canon.

"2. Cliff-houses. These morphologically belong to the same pure type as pueblos; their sites in natural caves are insufficient to separate them from open sky dwellings.

"3. Towers and Great Houses. These buildings occur united to cliff-dwellings or pueblos, but more often they are isolated (Plate 15, lower).

"4. Rooms with walls made of megaliths or small stone slabs set on edge."¹⁵

Under the first group we find in the Montezuma Valley such ruins as Goodman Point, Johnson, Mitchell Spring, Burkhardt or Mud Spring, Blanchard, Acmén, Aztec Spring, now known as Yucca House National Monument, the Cannonball and many others. The Cannonball ruin is in the McElmo Canon region at the head of Cannonball Canon, a short distance across the mesa north of the McElmo at a point nearly opposite the store. Two separate pueblos make up this ruin, the southern one of which was excavated in 1908 by a joint expedition from the Colorado State Historical and Natural History Society and the American School of Archaeology at Santa Fe, New Mexico.¹⁶

¹⁵Fewkes, J. W. Prehistoric Villages, Castles and Towers of Southwestern Colorado. Bulletin 70, Bureau of American Ethnology, Pages 14-15.

¹⁶The work was conducted by the School of American Archaeology in co-operation with the State University and the State Historical Society of Colorado.—Edgar L. Hewett, Director, Amer. Anthropologist, Vol. 19, No. 4, Oct.-Dec., 1908.

The second group in the classification has many examples in this area, though as a rule the houses have been built on a smaller scale than have those of the Mesa Verde, though following the same architectural lines. Many of the small cliff rooms were unquestionably used as storage places, as their size would not permit their serving as habitations. Many of these sites may be seen in the McElmo and tributary canons (Plate 16, upper).

The towers and great houses may be seen to best advantage in Square Tower, Holly, Hackberry and Ruin Canons, although the entire McElmo-Yellowjacket Canon region contains many and varied forms of this type.

The fourth type finds its exemplification on the bluff at the juncture of the McElmo and Yellowjacket Canons along the Utah line and also in regions farther east.

North of the McElmo Canon section is the Dolores River and the so-called Escalante country, the Paradox intervening. Lack of time and the heavy rains during the last of August prevented the expedition from visiting this portion of Colorado, although an attempt was made to survey the region around Paradox, and further work will be necessary before a definite knowledge of the ruins, their types and locations, is secured. Some scattered work has been done at various points in this district but as yet no comprehensive exploration has been attempted.

Burials

The question of mortuary practices of early peoples is one that has, for many, as great an interest as any feature connected with the unraveling of the story of the past. At the present time it is impossible to draw definite conclusions with respect to the burial customs of the people in the area east of the Animas. Most of the material at hand comes from the Piedra cultural center, although there is some evidence from the Pine River district. Along the Piedra the work of three seasons has uncovered a number of forms of interments and has also suggested that cremation was practiced in the disposal of the dead. During the excavations of 1921 indications were found pointing to the use of cremation not only by the residents of the pit-houses on the first benches above the river but also by the inhabitants of the large Chimney Rock pueblo. During the first season's work at this location, a curious mass of rubbish and

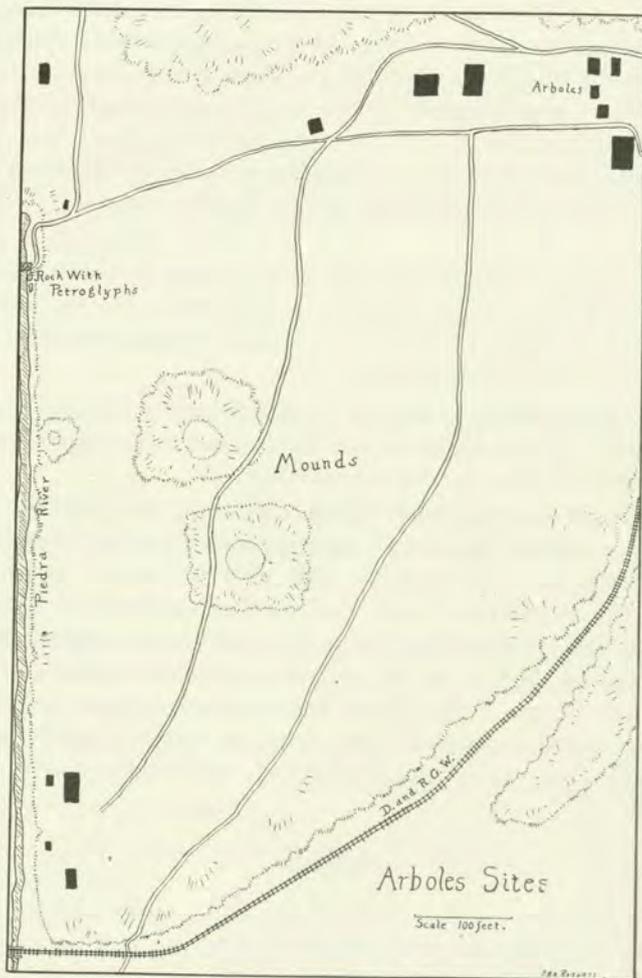


Figure No. 5—Arboles sites.

calcined bones was found on the north side of the Chimney Rock Mesa just below the big ruin, the walls of which skirt the edge of the rim-rock above. An area of 15 by 200 feet is covered by debris which was at first thought to be merely the refuse from the village. Investigation showed, however, that here was a peculiar mixture of burned material, potsherds, broken artifacts, and a large number of human bones all more or less calcined. The entire locality suggested a group of several pyres where bodies had been burned, then covered with earth. In a number of instances it appears that the dirt was thrown

on before the cremation was complete and the bones were found only partially consumed. There was no overlapping of areas or mixing of sites as would have been the case had this been a dump. There were no regular pits but indications suggest that the spots, occupied by the fuel and the body, had been leveled off somewhat before the lighting of the fire.

Four examples have been found of burial in houses. In one instance the body of a woman had been placed in the corner of a pithouse room with accompanying mortuary offerings. The other three skeletons were found in one room of another pithouse. Two of these were in corners in the sitting position, the third was lying across the middle of the inclosure with its head towards the east. In this case the remains were all of men and the accompanying offerings included some very fine specimens of the elbow pipe and also the Mountain Sheep figurine elsewhere mentioned.

A possible urn-burial was uncovered beneath the floor in one of the pithouse sites worked. In this instance a large olla was dug out which contained a heterogeneous mass of bones in a poor state of preservation, a few of them indicating human origin. The bones were probably those of an infant and while it is possible that the body was originally placed in the vessel in which the skeletal material was found, it is more likely that this was done after the remains had been interred for some length of time. Perhaps in making an opening in the dump heap for a new grave the bones were thrown out only to be gathered up and reburied in the olla. Urn-burial is not new in the Southwest, as instances have been noted, principally in New Mexico, where it was practiced, but it is far from common and, in the majority of cases, as was likely along the Piedra, was undoubtedly the result of a secondary interment.

Several cases were noted where inhumation took place in the dump heaps of the village, the skeleton being but a few inches below the present ground level. In the majority of burials of this form, the body had been placed in the flexed or natal position. A good example of a burial of this type is shown on Plate 17, upper. This skeleton was uncovered on the San Juan just below the town of Arboles and is interesting for a number of reasons. As may be noted from the photograph, the body was placed on the left side with the knees bent, the lower limbs being drawn up, the arms at the sides. The right arm had apparently been broken before death and there was a

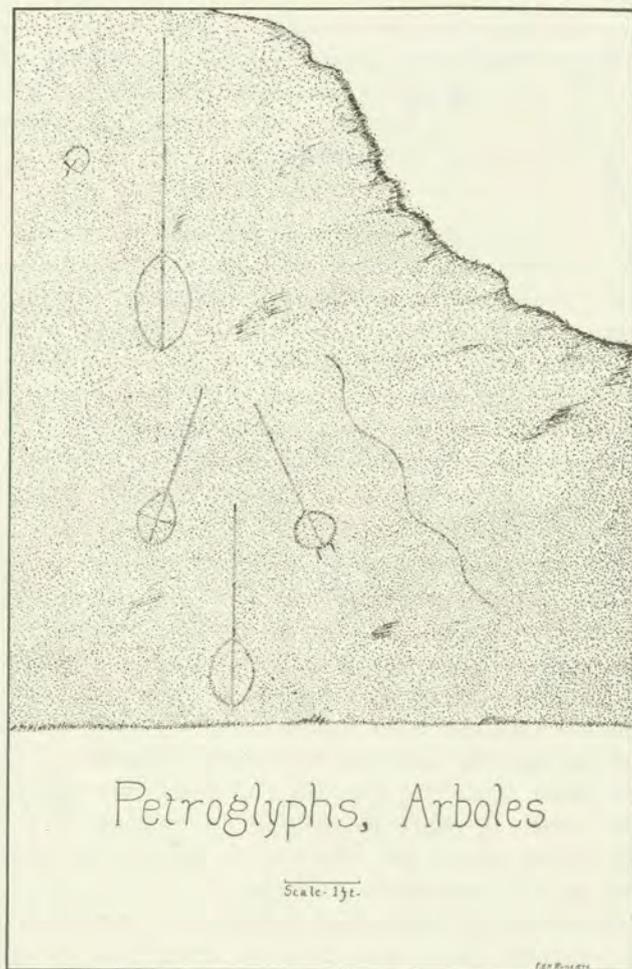


Figure No. 6—Petroglyphs, Arboles.

perforation in the skull indicating a severe wound and suggesting that death was the result of injuries. While removing the earth from these remains, a large metate was found inverted over the thorax, the groove or grinding trough evidently having fitted around the upper portion of the body. Beside the skull were found the pieces of a black on white bowl bearing three sun symbols. No other artifacts accompanied this burial.

During the investigations at La Boca, a number of skeletons were exhumed and in every instance the same form of interment was practiced as in the case just mentioned. In none, however, was the skeleton in a good state of preservation and the bones

crumbled as rapidly as they were removed from the ground. This was undoubtedly due to the great amount of moisture in the earth caused by the drainage water from the mound above.

There has been another type of inhumation reported from this region but neither the writer nor Mr. Jeancon has seen an example of this form in the district. According to Mr. J. A. Latta, he found on his place, east of Pagosa Junction, one of the so-called pit burials. In this type of interment a pit was dug in the ground, the walls were plastered with adobe mortar, and the body placed in it in a sitting position. House sweepings, perhaps ashes or some other available material, was used to fill the grave. In some instances large stone slabs were placed across the opening at the top and in other cases the covering consisted of a mat, this in turn being covered by earth. In the example mentioned the informant stated that the hole was rectangular, about three feet square, but did not recall the type of covering over the opening.

In the Johnson Canon region, burial in the dump heaps formed of the refuse from the village was a common practice and many remains have been found in which the body was interred in the flexed position and lying on its side. In some cases the remains were lying on the back with the knees bent. Instances have been reported where a large stone slab was placed over the body. Many of the refuse heaps of the Johnson area have been greatly disturbed by badgers, these animals having scattered the bones of the skeletons and contributed in no small degree to the breakage of the pottery placed with the burial at the time the last rites were performed. One skeleton uncovered by Mr. Morris in 1922 in this section indicated interment in the flexed position. Many of the bones were missing but some fine specimens of pottery accompanied the skeleton. This burial is shown on Plate 17, lower. In the cliff houses of this region remains have been found in back rooms and in niches behind the buildings at the back of the caverns in which the domiciles were erected.

On the Mesa Verde, inhumation followed a number of forms including the ordinary type in refuse heaps, burial in the back rooms of cliff dwellings, and in the dump heaps in the recesses of the caverns behind the structures; possibly cremation was practiced to some extent and, in one or two instances, pit burials have been found.

Ground Plan,
 Large Pueblo
 Shaded Portion
 Unexcavated

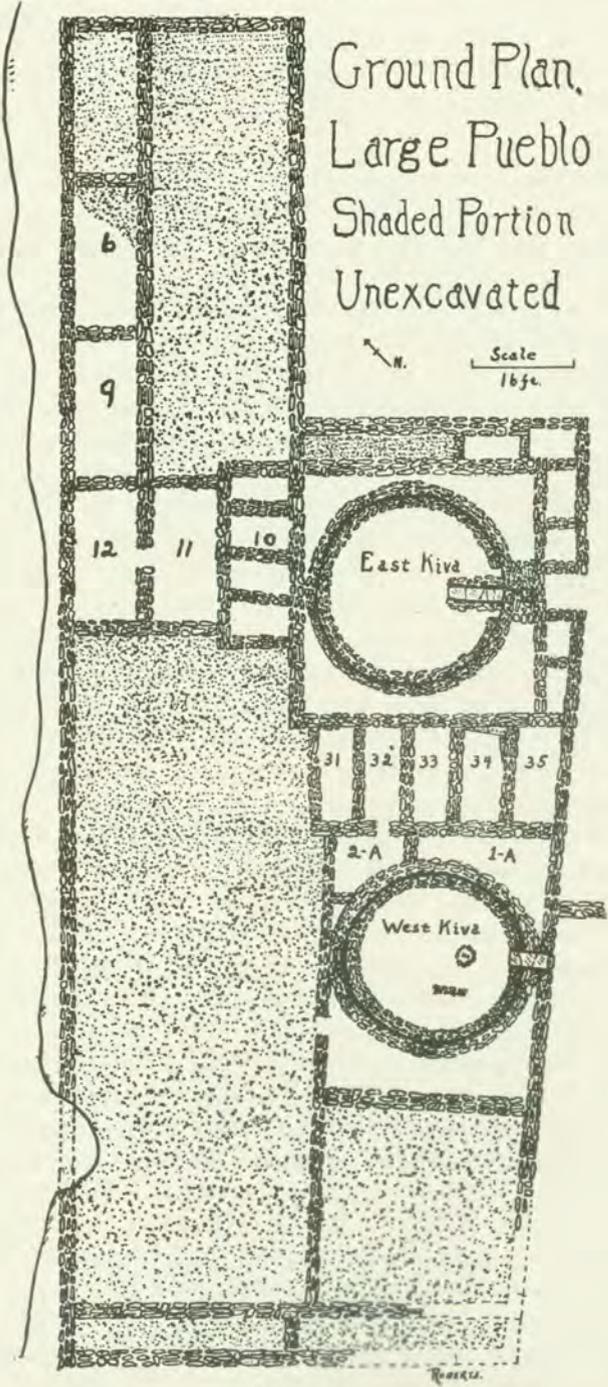


Figure 7

Artifacts

From the standpoint of artifacts the expedition of 1923 brought to light a number of interesting things in ceramics but found nothing unusual in the way of mauls, axes, spearheads, arrow heads, knife blades, crude cutting edges, bone implements or ornaments. All were of the types so frequently found and pictured by investigators in the Southwest and further consideration of them at this time would be but a needless repetition of what has been so ably done by others. Insofar as the least known region in the territory covered by the season's work is that of the northeastern San Juan basin lying to the east of the Animas River, and considering the fact that a majority of the ceramic specimens obtained during the summer were from this section, the greatest amount of attention will be paid to the pottery from this region.

At each site visited, a sampling of potsherds was made from the surface and in a few cases, where the surface quantity was insufficient, digging was resorted to in order to obtain the desired specimens. These were marked as to locality and an extensive study is being made of them, which will undoubtedly furnish some valuable material as to the pottery development of the Southwest. At this time it is possible only to make a few general statements concerning the pottery and the new phases developed during the summer.

From Trujillo to Arboles, the sherds and pottery secured are all apparently of the same general type, belonging to what Mr. Jeancon has tentatively called the first four periods in pottery development in the Pagosa-Piedra region. The majority of the sherds are of the plain, undecorated ware apparently coming from small vessels. Next in abundance are the pieces from the coiled or corrugated forms, then, in much smaller proportion, sherds from very early types of the black on white and a slight percentage of plain red ware. There does not seem to have been as great a development in coiled ware in this region as was noted along the Piedra.

A number of whole specimens was secured at various points in the district east of the Piedra. On Montezuma mesa a small bowl and an elbow pipe were obtained. The bowl is of the general plainware type commonly found in the pithouses, but is of unusual interest because of the double row of lugs which surrounds the exterior. The upper row is just below the rim, while the lower line runs around the body well towards the

bottom. There are seven of these lugs in each row and in every one there is a small perforation. According to Albino Chavaria, a Santa Clara Indian, living in Denver, it was customary to use bowls of this nature in certain ceremonies, small feathers of different colors being placed in the lugs. The colors used were not learned, as the informant stated that he was not able to remember. This vessel measures three inches in diameter and two and one-fourth inches in height (Plate 18, upper, left).

The pipe was found at the same location as the above described bowl and is shown on Plate 27, center. The bowl measures one-half inch in diameter and is one inch in length. From the front of the base of the bowl to the end of the stem is one and one-half inches. It is similar in composition to other pottery forms of the region with the exception of having somewhat finer paste.

During the excavations at the Latta place, on the small butte on the south bank of the river, two specimens were uncovered. One was a small crude vessel (Plate 18, right), very rough in technique, giving the appearance of having been punched out of a piece of clay. The paste is sandy and there was made no attempt to apply a slip or wash to the surface of the clay. It stands two and one-half inches in height and is two and one-fourth inches at the greatest diameter. In close proximity to this small piece of pottery was a larger heart-shaped vessel of the plain ware (Plate 18, lower, right). This had been broken, but all of the pieces were secured and restoration was possible. The paste used was of a little finer texture than that of the smaller vessel, but its general appearance is quite typical of the pithouse culture. It stands five and one-fourth inches high and measures five and three-fourths inches at the greatest breadth. Two small lugs, suggestive of handles, may be noted on either side of this bowl.

At the site three and one-half miles east of Arboles, where the highway crosses the railroad tracks, a pipe and a small turquoise pendant were picked up. The pipe is of the simple bowl form, with a slight curve at the bottom suggestive of the elbow. It has a coarse, sandy paste, a slip of a grayish blue color, and three perpendicular lines in a dingy, faint black pigment on the front of the bowl. It is one and one-half inches in diameter at the top and measures three inches total length (Plate 18, back row, center).

One mile northeast of Arboles, at a mound which lies on

the bench just above the road, several sherds were found which unquestionably belong to the group of the so-called biscuit wares. Biscuit ware differs from that of black on white and other light colored forms in the softness of its paste and its peculiar yellowish and grayish shades. It is rather thick, but the lightness of the paste discounts this in the matter of the weight of the vessel. The decoration is in a clear, sharp black paint without luster. In distribution this type is confined pretty strictly to the Rio Grande drainage, where it is most common in the northern districts—Taos, Abiquiu, the Chama, the Oso basin, Pecos, the Jemez Plateau, etc. Mr. Jeancon has already called attention to the resemblance in general characteristics between some of the early pieces from the pithouses along the Piedra and the early biscuit ware of the Jemez Plateau, but in this instance it is not a matter of similarity but of the true form of the biscuit, and unquestionably the sherds are from an intrusive vessel of this type. This intrusion probably occurred at the same period as that of the three-color-ware sherds found at Arboles and farther north along the Piedra, and also of the glaze ware noted in this vicinity (Plate 19, upper).

The sherds of the three-color group are similar to those from vessels which were made in New Mexico in the late prehistoric and early historic periods, and which resemble in many respects some of the modern pottery from the eastern Rio Grande pueblos. On some of the pieces the slip is a red, and on others a yellowish-buff. The design is in dull black pigment, filled in with red. This form has been found in other sections of the Southwest associated with the better forms of the biscuit wares (Plate 19, lower).

From many viewpoints, the glazed ware is perhaps the most interesting of the intrusive forms found in the Piedra area. By the term glaze is not meant the covering of the entire vessel with a glaze, as is the practice of modern potters among the more civilized peoples, but a form of pottery in which the design is glazed. The ornamentation of the vessel was secured through the use of a pigment in which a flux was evidently mixed which produced, during the firing of the vessel, a vitrification of the lines of the decoration. In practically all cases, these designs are irregular and show effects of the running of the pigment. On the pieces found in this district, the glaze-design was applied to a light surface or slip and, on practically every sherd found, the black has turned to green, and, where especially thin, has

even a yellowish cast. This feature in the glaze-ware is one that is attributed to the last phase in the manufacture of this type of pottery and corresponds to the early period of Spanish occupancy, a factor which adds additional support to the belief that the vessels may have been brought into this section during the so-called 1690 period.

Mention has already been made of the excavations conducted in one of the pithouses on Stollsteimer Mesa below the Chimney Rock, two miles above the glazed pottery site. It was during the progress of this work that some of the most valuable specimens of the season were obtained. From the one room cleared, a duck figurine, a duck-shaped bowl, and a bowl with a duck's head, wings, and tail were secured. In addition to these forms, two medium sized heart-shaped black-on-white bowls and two large black-on-white storage pots of the same type were found associated with a heart-shaped vessel on which there was no decoration; also the pieces of a number of other plain-ware forms. From the mound close by came the two-bowled ladle. The work of the summer of 1922 had prepared members of the expedition for the possibility of finding figurines in this region, through the uncovering of the Mountain Sheep described and discussed in the report for that year, but it was indeed a surprise when the duck (shown on Plate 20, with the sheep form of the preceding year), was discovered. This figurine is very life-like, and at one time bore some sort of decoration, as traces of the black used in the ornamentation can still be traced on the tail, wings, and the back portion of the head. When uncovered, it was lying on the floor of the room in the southwest corner and was partially filled with charred corn-meal. The figure stands five inches high and measures four and one-half inches from breast to tail. The material from which the figurine was made is somewhat coarser than that used in the Mountain Sheep, but the skill of the modeler has more than made up for the deficiency in that respect. Judged from the pottery characteristics alone, it belongs in the Piedra group of the later periods and does not suggest an intrusive type. Its use was in all likelihood ceremonial, the meal which it contained suggesting the sacred meal used in ceremonies. Figurines have hitherto been considered as practically non-existent in the San Juan basin of southern Colorado and northern New Mexico, but the recent discoveries of investigators and the possibility of the finding of additional specimens may necessitate a complete revision of this former belief.

The bowl with the duck head, wings, and tail is of the black-on-white ware, the upper portion being covered with a geometrical design composed of triangular and parallel line elements enclosed by bordering bands from which lines suggestive of the tail and wing feathers radiate. A fairly good white slip was applied to the vessel, and the black is good, although the brush work in the execution of the design was rather poor. This piece of pottery is nine inches in height and ten inches across the greatest diameter. The head rises two and one-half inches from the upper portion of the bowl (Plate 20, lower).

The third form in this group carries out the characteristics of the duck body, wings, and stubby tail, but does not have the head, as is the case with the one mentioned above. It is apparently of the plain, undecorated ware but in general workmanship, materials, etc., appears to belong unquestionably to the same period as the other two. The fact of its having been found in the same room and at no great distance from the others would speak in some measure for its contemporaneity with them. This bowl is seven inches long, five inches across, and stands five inches at the greatest height (Plate 21, upper).

On Plate 21, lower, is shown one of the heart-shaped bowls of the black-on-white type and the two-bowled ladle. Here, one notes a rather involved type of design poorly executed, which seems to be one of the characteristics of the vessels of this class from the Piedra section. The decoration on the ladle is of a somewhat different conception, but the brushwork was again rather rough. The bowl is eight inches in diameter and five and one-fourth inches in height. The ladle measures six inches across both bowls. The bowls are one and one-half inches in depth. The slip in each case was fairly good, the black of a rather dingy quality, the design on the ladle being quite indistinct in places.

The best example of a heart-shaped bowl in the black-on-white wares yet obtained from this area is shown in Plate 21, center, right, and came from the same location. The slip is a good grayish-white and the black of the design somewhat above the average in comparison with the other forms secured at this site. The brushwork is quite good. The design is of the geometric, rectilinear type and can clearly be seen in the photograph. The upper portion of the bowl was divided into four sections by panels of six parallel lines, each section containing one of the interlocking figures. This bowl measures four and one-half inches by six and three-fourths inches.

Plate 24, lower, shows one of the largest specimens of the black-on-white ware in the heart-shaped group yet found along the Piedra. Here again the parallel line elements contribute in large measure to the design. The slip is only fair and the black of the design rather faint with careless brushwork. This vessel stands nine and one-half inches high and is fourteen inches across the greatest diameter. It is practically round, on a horizontal plane, but varies somewhat from the circular, due perhaps to warping during the process of sun-drying.

One other heart-shaped vessel found at this site is shown on Plate 24, center, left. This specimen is of the plain ware variety, presumably, as no sign of decoration can be traced on it, but, from the position in which it was found and the condition in which it is at the present time, there is no question but that it was subjected to intense heat at the time the structure burned, and this could have obliterated the design if it was originally decorated. The pot had evidently been left on the roof of the structure, and when the domicile burned, was apparently in the area of greatest heat, because it is burned a brickish red in color, similar in appearance to the burned plaster and roofing so common in ruins of this type. This object is of about the same size as the others of this form already described, measuring seven inches at its greatest diameter and four and one-half inches in height.

In addition to the vessels described above, coming from this location on Stollsteimer Mesa, a large number of sherds of plain-ware vessels were found bearing basket impressions. In most cases these imprints were to be found on the portion of the pot near the bottom and indicate that baskets were used in the forming of the lower portion of the vessel. This speaks for basketry among these people, although, up to the present time, no specimens of weaving have been found in the pithouses. A small portion of a basket was found on the Chimney Rock Mesa during the first summer's excavations, but it is the only sample of this industry so far located in the area.

The vessel depicted in the same photograph, Plate 24, center, right, came from a pithouse site below the town of Rosa, just south of Arboles. It is of the plain ware and of a form which has not been noted heretofore in this area. It stands six and one-fourth inches high and is five and one-half inches at its greatest breadth. It was found in connection with a burial.

On Plate 24, upper, is shown an open food bowl form which, in all aspects, is similar to other bowls from this area with the

exception of the decoration which, so far, is a new one to the district. This consists of three sun symbols, two large ones on opposite sides of the bowl and a small one in the bottom of the vessel. The bowl is grayish white in color and the design is in a poor black. The vessel accompanied a burial found near one of the pithouse sites on the east bank of the San Juan, just south of the town of Rosa. It is seven and one-half inches in diameter and four and one-half inches in height.

From a ceramic standpoint one of the places of greatest interest is La Boca, at the juncture of the Pine River and Spring Creek, just north of the Colorado-New Mexico state line. Sherds picked up from the mound indicate pottery of several different periods. There is a great amount of the crude, plain ware so common on mounds of this type, a large number of the sherds bearing basket impressions on the bottom. The black on white is not unusual, but a new factor is noted in the apparent abundance of the red ware, many pieces of this group being scattered about the site. In 1922 Mr. Jeancon found a small piece of pottery on this mound that had an orange-yellow slip similar to that on some of the ware found at Sikyatki, in the Hopi country. During investigations at this place, in 1923, two more sherds of the same general type were picked up. The color seems to be an inherent part of the pottery, as washing with soap and water, and even the use of acid, failed to remove it, as would be the result if it were a stain from the soil. The excavations conducted at La Boca furnished a number of specimens, but failed to bring to light any pieces of other than the earlier types of pithouse pottery. On Plate 18, center, are shown two pipes of the cloud-blower group, found at this location, and also a small, bottle-shaped vessel, considerably the worse for wear. This bottle stands three and one-half inches high. It is of very crude workmanship. On this same plate is pictured a portion of a human foot from a pottery figurine. This was all that was obtained from this vessel, despite a careful search of the entire area surrounding the point where it was picked up. The finding of a human figurine would, indeed, be unusual for this section of the Southwest. The fragment is typical of the pottery of the region and does not appear to be of an intrusive form.

The central figure on Plate 18, upper, is a typical specimen of the crude bowl types found in the pithouse wares and came from a burial in the dump heap to the north of the mound at La Boca. It is heavy, with coarse paste, and gives no indication

of ever having had a slip. There was no attempt at design, and the rim was crudely finished off, as can be seen from the photograph. In size it is five and one-half inches in diameter and three inches in depth.

Another typical pithouse form, and one which came from the same spot as the bowl described above, is pictured on Plate 18, lower, left. This is of what might be called the early pitcher form and is exceedingly crude in execution as well as materials. Both this object and bowl, in addition to the other pieces from La Boca, may be classified as being of the beginnings of the pottery of the pithouse period in concept and technique. This pitcher measures three inches in height and the body portion is three inches across.

There remains but one more specimen to describe and that is the bottle-form pictured on Plate 21, left, center. This was found on a mound north of Cortez and is quite typical of the early Montezuma Valley wares. The vessel was originally some form of pitcher, as the upper portion has been broken off and lost and there are indications that the object at one time possessed a handle. The slip is a grayish white in color, and the design is in a rather poor black. The form and elements used in the design can be seen clearly in the picture. The ornamentation on the neck is interesting because it is apparently a conventionalized animal form. The rectangular body, legs, neck and head can be seen distinctly. This object stands five inches high and is four inches at its greatest diameter.

It might be noted in passing that the sherds picked up from the mounds around Durango, and along the Animas to the south, give no indication of a variation in form or ornamentation other than can be attributed to strictly local causes, such as clays used, etc. None suggested other than the early pithouse types of wares, corresponding in general to those picked up at other sites over the region. It must be borne in mind, of course, that a complete study of the sherds from all the sites has not been completed as yet and that the statements made at this time are simply from a cursory examination made at the time the samples were gathered, and while sorting them for study purposes. Detailed examination will undoubtedly bring out certain characteristics and differences not noted in this hasty survey.

While no specimens were secured from the Johnson Canyon region, the Mesa Verde, or the McElmo, it might be well to note briefly the various types of pottery found in those districts. The

State Historical and Natural History Society of Colorado has a fine collection of wares from the Mesa Verde, and also from the McElmo region, which is on display in the Cliff-Dweller Room at the State Museum.

In the Johnson Canyon cliff ruins, three general types of pottery are to be found—the coiled, plain smooth and smooth decorated. In all instances the vessels appear to have been constructed by the coiling method, the resulting corrugations having been obliterated except in the forms of the first class. The dominant type is the decorated smooth ware of the black on white. The chief design elements were geometric, with terraced figures, volutes and triangles predominating. Red ware is extremely rare and in all likelihood intrusive. The pottery from the mesa ruins is structurally inferior to that from the cliff ruins, although presenting a wider range of form and surface treatment. In color, they vary from black to white in the so-called gray group, and, in addition, there are found yellows, oranges, reds and browns. Less than half the bowls have painted decorations. Those having designs have pigment varying from black, through brown, to red. There is none of the true coiled ware from the ruins of this class. One interesting form in the pottery from the mesa villages is that of the gourd shapes. A similar specimen to these types was found in one of the pithouses along the Piedra by the 1922 expedition. Other varieties of forms include food bowls, globular bowls, large ollas, ladles, bird-form vases and cloud-blower pipes.

The Mesa Verde wares have usually been classed under three general headings—the coiled, or corrugated; the black-on-white; and the red wares. In practically all cases these vessels appear to have been formed by the coiling method and, in the plain, the red and the black-on-white wares these coils were obliterated. In the coiled wares the black is found predominating, comprising the group known as the cooking, storage and domestic pots. There is a great variety in this class, the coils being used for decorative effects, in some cases in the coiling itself and, in others, relief designs applied to the exterior. The paste in the coiled ware is rather sandy, and in most instances somewhat coarse. The black-on-white group contains specimens ranging from a very fine black on white to those whose white is more of a dirty cream color, with the decoration in poor black. In some cases the white is almost a distinct yellow, suggestive of the beginnings of the Hopi polychrome wares. Almost all varieties of forms are to be found in this ware, from the primitive to

the highly sophisticated, including bowls, ollas, pitchers, ladles and the so-called beer mug shapes. No pottery figurines have been found as yet on Mesa Verde. The red ware is not common at this place, only a small percentage being found. It is generally considered as being intrusive in the region. The designs of the black-on-white are extremely varied. There is almost every combination possible of horizontal and perpendicular lines, together with stepped figures and filled corners. Life forms are rare in the paintings; sometimes birds are found, but animals are rare and, with perhaps one or two exceptions, human forms are entirely missing. Where the human form has been noted it was generally of the geometric type, or merely composed of straight lines. On the red ware the designs follow the general black-on-white ornamentation.

The ceramic industry in the McElmo region followed in its general aspects that of the Mesa Verde, and we again find that a more or less general classification can be made with the coiled, black-on-white and the red, including variations of these forms. The black-on-white is by far the most abundant in this area, with fairly good colors in the slip and decoration. The designs follow the geometric, although, in one or two instances, vessels have been found with crude attempts at life forms. The coiled ware is quite similar to the entire San Juan development of the type. In some cases a combination of the coil and the black-on-white is found where vessels were made with the coils left showing on the exterior, while the interior was given a white slip and some ornamentation applied in black. The red ware is rather rare in this section, and in form and design does not differ from the black-on-white. In shape, the pottery includes shallow bowls, globular-shaped bowls with lids, mugs, ladles, jugs, ollas and water jars.

Summary

In considering the results obtained by the reconnoissance of 1923 there are certain points which stand out with more emphasis than others, and these may be summed up briefly as follows: the pithouse or Pre-Pueblo culture was more generally distributed over Southwestern Colorado than had previously been supposed; the use of jacal construction was widely practiced over the area; there was a comparatively recent migration of Pueblo peoples into the region of the Northeastern San Juan basin in the immediate area of the Piedra; the early inhabitants of the Piedra section and eastward made use of tremendous fires on certain high

points for purposes unknown; there seems to be indicated a certain progression in pottery types as one proceeds down the San Juan; there is a certain similarity suggested by the mounds of the small house groups along the Piedra to the "Unit Types" of the Montezuma Valley; and last, but not least, there is a distinct need for intensive research in the mounds of the pithouse group to determine, if possible, their proper relationship in the cultural development of the Southwest; the purpose of the circular depression in the center of the mounds, whether it was a kiva, dance plaza, or reservoir, the possibility of the latter being slight, however.

In speaking of the house sites and the ruins of the various sections visited, mention has been made of the three types of culture in Southwestern Colorado and, in bringing this report to a close, it might perhaps be well to describe briefly the stages in cultural development as they are at present considered to have evolved. The Pueblo culture has been noted, illustrated by the large cliff dwellings and community houses in the open; the Pre-Pueblo phase as exemplified in the pit, slab and earth lodges; the Post-Basket-maker of Kidder, Guernsey and Nusbaum, or, as Morris terms it, the Early Pre-Pueblo. There is but one more type found in the Southwest, and up to the present no example of this has been uncovered in Colorado, and that is the so-called Basket-maker. The fourfold development in the sedentary group of the Southwest has been worked out carefully by Kidder and Guernsey, who have offered the following tentative conclusions:

"The Basket-maker culture is still to be considered the earliest in the region. A second culture, which we will call the Post-Basket-maker, followed the Basket-maker. Its probable descent from the Basket-maker is indicated by the dolicocephalic head form and the absence of cranial deformation; by the elaborateness of the sandal weaves; the presence of a degenerate type of twined-woven bags, and the use of fur cloth instead of feather cloth. The absence of cotton from both cultures should be noted. Advances over the Basket-maker are seen in the appearance of pottery (albeit, it is of a crude type), in the presence of permanent house-structures, and in the elaboration of the carrying straps.

"The third culture is the one which we formerly called the slab-house. As that term, based on a feature of architecture, is equally applicable to the Post-Basket-maker, we have discarded it and substitute the name Pre-Pueblo. This group, allied to the preceding one most closely, apparently in house types, and

in the possession of pottery, though its characteristic wares are much the more highly developed of the two; it differs sharply from the Post-Basket-maker in the practice of skull deformation, in the possession of cotton, turkey feather cloth; the bow.

"From the data above it seems probable that the Basket-makers were the direct ancestors, both physically and culturally, of the Post-Basket-makers; the latter, however, had made considerable advance (houses, pottery). A direct line of descent from the Post-Basketmaker to the Pre-Pueblo might be inferred from similarity in house types; but the Pre-Pueblo are in most respects much more nearly allied to their successors, the Cliff-Dweller-Pueblo people, than they are to the earlier group.

"To sum up: Basket-maker is probably ancestral to Post-Basket-maker; Pre-Pueblo to Cliff-Dweller-Pueblo; the genetic relationship of Post-Basket-maker to Pre-Pueblo may be inferred, but is still doubtful. A more detailed knowledge of material cultures of the two middle groups is necessary, as well as studies to determine whether or not skull deformation is capable of producing the marked appearance of brachycephaly exhibited by crania of the two later groups."¹⁷

As has been pointed out already, the representatives of the Pre-Pueblo group are to be found in the pit and slab-houses scattered throughout Southern Colorado. The Cliff-Dweller-Pueblo culture is demonstrated in the large pueblos and cliff ruins, such as Chimney Rock Mesa pueblo; Far View House, Spruce Tree House and Cliff Palace on the Mesa Verde; Yucca House National Monument and similar types in the Montezuma Valley region. For the second phase, that of the Post-Basket-maker, we have but little material as yet. Thus far, traces of it have been found only in the Johnson Canon area and on the Mesa Verde. Up to the present, none of the Basket-maker remains has been found in Colorado. Southeastern Utah and Northeastern Arizona are the only regions which have furnished examples of this early culture. Perhaps future exploration in the Southwestern corner of Colorado will bring to light traces of these people; as to that, however, time alone will tell. We must be satisfied for the present with saying that the Pre-Columbian remains in that portion of the state indicate three periods in the cultural development of the early inhabitants.

¹⁷Kidder and Guernsey, Peabody Museum Arizona Expedition, 1920. Reprint from the Proceedings of the National Academy of Sciences, Vol. 7, Pages 69-71, March, 1921.

NOTE: As Mr. Roberts is in Harvard at present, he did not have an opportunity of reading proof on this article, and therefore was unable to make any corrections which he might have desired to make at this time. J. A. J.