

TENTH ANNUAL REPORT
OF THE
UNITED STATES
GEOLOGICAL AND GEOGRAPHICAL SURVEY
OF THE
TERRITORIES,
EMBRACING
COLORADO AND PARTS OF ADJACENT TERRITORIES,
BEING A
REPORT OF PROGRESS OF THE EXPLORATION FOR THE YEAR 1876.
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PLATE XL.—RUINS AT “AZTEC SPRINGS.”

Another very important group of ruins is located in the depression between the Mesa Verde and the Late Mountains, and near the divide between the McElmo and Lower Mancos drainage. It is stated by Captain Moss and others who have been in this locality that up to within two or three years there has been a living-spring at this place, and the spot has been christened by them Aztec Springs.

The site of the spring I found, but without the least appearance of water. The depression formerly occupied by it is near the centre of a large mass of ruins, similar to the group last described, but having a rectangular instead of a circular building as the chief and central structure. This I have called the *upper house* in the plate, and a large walled enclosure a little lower on the slope I have, for the sake of distinction, called the *lower house*.

These ruins form the most imposing pile of masonry yet found in Colorado. The whole group covers an area of about 480,000 square feet, and has an average depth of from 3 to 4 feet. This would give in the vicinity of 1,500,000 solid feet of stone-work. The stone used is chiefly of the fossiliferous limestone that outcrops along the base of the Mesa

Verde a mile or more away, and its transportation to this place has doubtless been a great work for a people so totally without facilities.

The upper house is rectangular, measures 80 by 100 feet, and is built with the cardinal points to within five degrees. The pile is from 12 to 15 feet in height, and its massiveness suggests an original height at least twice as great. The plan is somewhat difficult to make out on account of the very great quantity of *débris*.

The walls seem to have been double, with a space of 7 feet between; a number of cross-walls at regular intervals indicate that this space has been divided into apartments, as seen in the plan.

The walls are 26 inches thick, and are built of roughly-dressed stones, which were probably laid in mortar, as in other cases.

The enclosed space, which is somewhat depressed, has two lines of *débris*, probably the remains of partition-walls, separating it into the three apartments, *a, b, c*. Enclosing this great house is a net-work of fallen walls, so completely reduced that none of the stones seem to remain in place; and I am at a loss to determine whether they mark the site of a cluster of irregular apartments, having low, loosely-built walls, or whether they are the remains of some imposing adobe structure built after the manner of the ruined pueblos of the Rio Chaco.

Two well-defined circular enclosures or *estufas* are situated in the midst of the southern wing of the ruin. The upper one, *A*, is on the opposite side of the spring from the great house, is 60 feet in diameter, and is surrounded by a low stone wall. West of the house is a small open court, which seems to have had a gate-way opening out to the west, through the surrounding walls.

The lower house is 200 feet in length by 180 in width, and its walls vary fifteen degrees from the cardinal points. The northern wall, *a*, is double, and contains a row of eight apartments about 7 feet in width by 24 in length. The walls of the other sides are low, and seem to have served simply to enclose the great court, near the centre of which is a large walled depression (*estufa B*). No other ruins were observed in the neighborhood of these, although small groups are said to exist along the base of the Late Mountains, a few miles to the southwest.

The dry, sloping plain between the Mesa Verde and the Rio Dolores seems also to have been a favorite resort of the town-building tribes. Numerous ruins occur along the borders of the cañons that drain into the McElmo, and especially near the heads of these cañons where springs usually occur.

At the south bend of the Dolores there are a great number of ruins, many of which compare favorably with the lowland ruins farther south. Dr. Newberry passed through this region in 1859, and his report* gives a brief description of a few of these remains.

I made a hasty examination of such of the groups as I had an opportunity to visit, but had no time to make plans. Other ruins, including the remains of a large circular enclosure, occur on the river-bottom about two miles below the bend. I also noticed the small cliff houses mentioned by Dr. Newberry, but did not visit them. West of the Do-

* Macomb's expedition to the junction of the Grand and Green rivers, Washington, 1876. Dr. Newberry says: "The hill from which I obtained this view is crowned with an extensive series of very ancient ruins. The principal one is a pueblo, nearly 100 feet square, once substantially built of dressed stone, now a shapeless heap, in which the plan of the original structure can, however, be traced. Like most of the ruined pueblos of New Mexico, it consisted of a series of small rooms clustered together like cells in a bee-hive. Near the principal edifice are mounds of stone, representing subordinate buildings. Among these are numerous large depressions marking the places of cisterns or *estufas*."

lores our party was compelled to make very rapid marches, and I found it impossible to turn out of the trail long enough to make a satisfactory study of the ruins that occur by the way.

At one locality which I took to be Surouara* there appeared on our left a very extensive series of ruins, and it was a sore disappointment to be compelled to pass by without even a halt.

About the sources of the Hovenweep and Montezuma creeks there are occasional ruins of no great importance. In the vicinity of the Sierra Abajo I found no traces of ancient occupation further than a few arrow-points and fragments of chipped quartzite. Little or no trace of ancient occupation was observed north of a line between the Sierra Abajo and main peaks of the La Plata Mountains.

A very large and interesting ruin † occurs on the Animas River, near the southeast corner of our district for 1875, which seems to bear a very close relationship in its architecture to the ruins of the Rio Chaco. Unfortunately, no plans of this ruin have been made.

* Of these ruins Dr. Newberry says: "The houses are, many of them, large, and all of them built of stone, hammer-dressed on the exposed faces. Fragments of pottery are exceedingly common, though, like the buildings, showing great age. There is every evidence that a large population resided here for many years, perhaps centuries, and that they deserted it several hundred years ago; that they were Pueblo Indians, and hence peaceful, industrious, and agricultural. * * * The ruins of several large reservoirs, built of masonry, may be seen at Surouara, and there are traces of *aciquias*, which led to these, through which water was brought, perhaps, from a great distance."

† See Dr. Endlich's report, Annual Report of United States Geological Survey, for 1875, p. 177; also, Mr. Rhoda's report, p. 240. See also Dr. Newberry's Report, Expedition to the Junction of Grand and Green Rivers, p. 80.