

THE CLIFF DWELLERS OF ARIZONA.

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The cliff dwellers of Arizona were small of stature, the adult male not being over fifty-two inches in height. Their skulls are brachycephalic (or broader across than lengthwise), like those of the Zunyis, Aztecs and Peruvians. Their skulls have also a little extra bone in the back part of the head, a peculiarity of the Incas, and known as the Inca bone. This bone seems to indicate a close relationship between this mysterious race in Arizona and the semi-civilized races of South America.

The cliff dwellers lived in narrow canyons that afforded water for cooking and drinking purposes, and for irrigating their fields. At the sides of the canyons, under the projecting cliff, they built their adobe houses, so that the cliff protected them both from rain and storm, and from the attacks of an enemy, except at the front.

Besides the cliff home that the cliff dwellers lived in in time of peace, they had caves, natural caves in the rocks, into which they retreated when hard pressed by an enemy. The large cliff cave on the East Fork of White River just east of Fort Apache is an example. At this place a continuous cave, composed of chiseled-out narrow passages, corridors and rooms, runs back along a fissure some 200 feet beneath the surface, it is said, for a distance of four and a half miles.

In case the cliff dwellers could find no cave, they changed their place of habitation, in time of great danger, to the lofty heights above the canyon floor; and there built a village on some projecting ledge. Such a village stands out against the almost perpendicular walls of the Sierra Anches mountains more than a mile in altitude above the floor of Cherry Creek canyon below.

Their dwellings, except of course the caves, were adobe structures. They were built under and against a cliff; and resembled the old Pueblo style of house very much. The second story was set back a little on the floor of the first; and the third story set back a little on the floor of the second; and so on till the "step-front like" house was finished. In each house there was but one door, a hole in the roof of the highest room. From the ground to the top of the first story, and from story to story lad-

ders extended, over which one had to climb to gain entrance to the house. In time of trouble and always at night these ladders were most likely carried to the roof and placed within. The house itself was a fortress.

These dwellers of the cliffs were an agricultural race. They farmed in the little "flats" adjacent to their places of abode, as the remains of their irrigating ditches show, as well as their grain bins. Some of these grain bins were visited by the writer; and were found partly filled with corn cobs and barley heads, from which the barley kernels had been removed by vermin. The barley heads, thus found, seem to indicate that this people knew nothing of the art of threshing grain even with a flail; but in harvesting it they headed it, and stored it away in the head. Then, when they desired to use any of the grain, they threshed it by a hand-rubbing process.

In religion it can at best be stated that the cliff dwellers were sun worshipers, as is shown by the drawings on the vases and urns which they used in their exercises of worship. One of these vases, found by the writer in a Canyon Creek cliff house in Arizona, was jug shaped, except that it did not possess a neck. Around the circular opening at the top were drawn the rays of the sun in red and black. Many more of their vases have similar drawings on them. Further evidence concerning what their religion consisted of, is thus far wanting.

Who these cliff dwellers were, where they came from and what became of them, is a matter of conjecture; and will probably remain so.