

ANCIENT PUEBLOS OF NEW MEXICO AND ARIZONA.



AN APACHE WARRIOR.

COMPARED with the prehistoric monuments of Central America and Peru, which have been so admirably described by Stephens, Squier, and others, the *pueblos* and caves of New Mexico and Arizona have little to boast of in architecture, but present to the student of early American history an extensive field for researches of kindred interest.

Although something has been known of the strange people dwelling in towns in the valley of the Rio Grande and in the mountains of Northern Arizona since Cabeza de Vaca discovered them in 1536, little effort seems to have been expended in tracing their origin or in comparing them with the vast population, now extinct, which has left its monuments scattered over the greater part of our southwestern territory.

Recent military operations against the hostile Apaches have led to the discovery in that portion of Arizona known as the Tonto Basin (bounded by the Black Mesa on the north, the Rio Gila on the south, the

White Mountains on the east, and the Rio Verde on the west) of ruined pueblos and other relics indicating a population of great numbers. Nearly every eminence in this wild and broken region of upward of ten thousand square miles is scattered with fragments of pottery of varied quality and ornamentation, the finer being so skillfully glazed as to preserve its bright coloring for ages. In several valleys are found the stone foundations and walls of cities, each of which at some remote period contained thousands of busy people. Generally these *pueblos viejos* (old towns) are found upon the precipitous cliffs overhanging the streams tributary to the Rio Gila on the north, but sometimes we found them in regions remote from water. In such cases the topography of the country showed that streams which had since changed their courses had run near these towns centuries ago.

In the bluffs of Beaver Creek, a small stream tributary to the Rio Verde, and about three miles distant in a northerly direction from Camp Verde, Arizona, are about fifty walled caves of various sizes, once the hiding-places of some prehistoric people of whom the present Indian tribes of that locality have no knowledge or traditions. At this point the river makes a bend, the chord of which is perhaps an eighth of a mile long. The walls are of a yellow calcareous rock, and about one hundred feet high. These caves are from five to twenty feet in depth. The mouths are closed by mason-work of stone and cement still in a good state of preservation. The larger caves are divided by wood and stone partitions and floors into numerous small apartments, where it would seem that this strange people passed years of doubt and fear, threatened by famine within, and by cruel persecution and torture from a besieging enemy without.

The lower caves are about ten feet from the bottom of the cliff, and may be entered with some difficulty by climbing the projecting points of the bluff. The larger one can be reached only by ladders, which have at best a precarious foot-hold on narrow ledges, along which the explorer must feel his way with the utmost care some thirty yards at a height of forty and fifty feet, from which a careless step might precipitate him upon a mass of rocks below. A solid masonry wall two feet thick, with a curved front about thirty feet wide and fully as high, has been built on the natural floor of the cave, sixty feet above the stream at the foot of the cliff. The wall is bastioned, evidently to afford a flank defense, and has what appears to be a sentry-box of masonry protecting the single entrance at the centre and base of the wall. The top of the



ZUNI OLLA (MODERN) AND FRAGMENTS OF ANCIENT POTTERY.

wall forms a parapet, rising three feet above the upper floor, and within four feet of the natural roof of the cave. Loop-holes, which may have served either for observation or defense, occur at regular intervals at the base of the parapet.

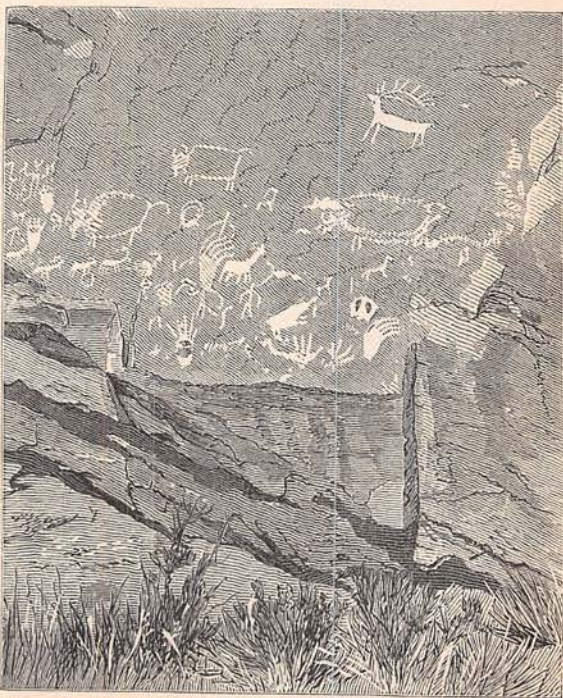
Having climbed with some difficulty about thirty feet of *débris*, we reached the lower ledge, scarcely two feet wide, along which we worked our way with the utmost care to the foot of the first ladder, ascending which we were on the second ledge, from which another ladder of uncertain strength led us to the entrance of the cave. Passing a narrow doorway at a right angle with the main wall we entered a small chamber, from which a man-hole admitted us through the ceiling to an apartment of irregular rectangular shape about twelve feet square and seven feet high. The roof is of natural rock, as is most of the floor; that portion, however, of the latter which covers the lower apartment being of large cotton-wood timbers covered with rushes or small brush, over which is a layer of cement. The timbers used in this and other rooms of the structure were cut with stone hatchets, and are evidently very ancient. From this cave are two exits besides the one referred to, one on either side, through which we crawled on our hands and knees to larger rooms of various sizes honey-combed behind this

wall, which protects three irregular tiers of cells. Nearly all are dark, and the roofs, without exception, are blackened by smoke.

A deposit of bat lime covers the floors to a depth of ten or twelve inches. Digging through this we unearthed many fragments of pottery, which subsequent comparison proved to be identical in material and workmanship with that found later in the old ruins of Tonto Basin and elsewhere in Arizona, as well as with the pottery still manufactured by the Moquis and Zunis.

Directly above the caves, and on nearly every commanding point near Beaver Creek and the Río Verde, are ruins of stone dwellings built without cement, and of such materials as could be adapted without cutting to the rough walls, which appear to have been a protection from the arrows of their foes rather than from the weather. We found no evidence that these or other dwellings in Arizona had been roofed, though it would seem that the people who occupied them must have had some protection against the scorching rays of an almost tropical sun.

That these were the dwellings of the cave-people in peaceful times is quite certain, and that their occupants were to some extent agricultural is shown by the many irrigating ditches and canals (called by the Mexicans *acequias*) found in the vicinity of this and other of the *pueblos viejos* in many parts of Arizona and New Mexico.



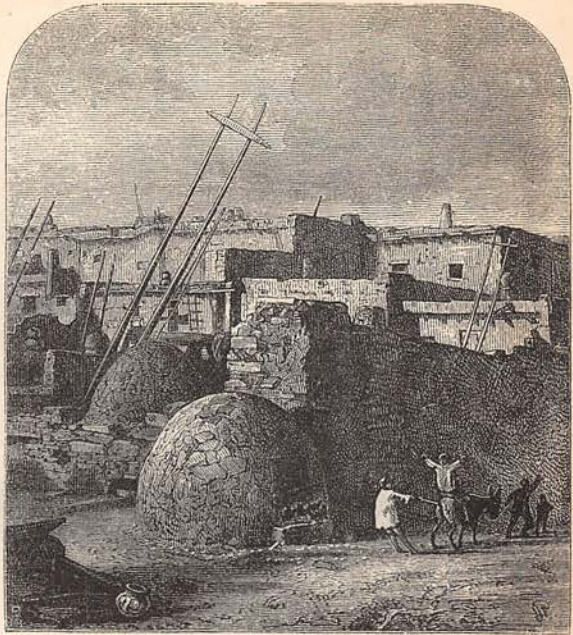
ANCIENT HIEROGLYPHICS ON THE WALL OF A CAÑON OF THE COLORADO. UNINTELLIGIBLE TO THE INDIANS OF TO-DAY.

After this visit we marched by way of the Little Colorado around the northern boundary of the Black Mesa between two hundred and fifty and two hundred and seventy-five miles to Camp Apache, Arizona, near the summit of the Sierra Blanca, finding every few miles of our route both the glazed and the plainer varieties of pottery, and in several places large areas of ground covered by ruins of ancient villages.

Nearly fourteen miles south of Camp Verde is the crater of an extinct volcano known as Montezuma's Well; it is half filled with clear cool water supplied by living springs, and nearly seventy feet deep at its centre. The rim of the crater has a diameter of about three hundred feet. The walls are nearly perpendicular to the water's edge, a distance of thirty or forty feet, and in these are numerous walled caves similar to those already described, while the summit is crowned with many ruins like those of Beaver Creek, and the ground is covered with fragments of pottery.

In the campaigns against the Tonto Apaches and Apache Mojaves during the succeeding winter we twice crossed the Tonto Basin between Camp McDowell and Camp Apache, finding similar indications.

Returning east from Arizona a year since, we camped under the walls of the Zuni Pueblo in New Mexico, and spent a day with its curious people. This place is about sixty miles north of Camp Apache, Arizona, and only a few miles from the line dividing the two Territories. The town stands on the south bank of the Zuni River, some forty feet above its bed. Its appearance is not suggestive of hospitality to the stranger, presenting as it does a rectangular wall of stone, varying in height from fifteen to forty feet. Our camp was hardly pitched, however, before some of the chief men made us welcome, and sent boys to us with bundles of fire-wood, here so scarce as to be almost a luxury. The buildings and walls are of undressed stone, cement, and *adobe*; the only means of approach being by ladders to the roofs, from which narrow scuttles admit the visitor by other ladders to the interiors. Many of the buildings are three, and some four stories high, terraced like the *teocallis* of ancient Mexico, as described by Prescott. Covered ways lead from exits in the wall to the stream, from which the women and



ZUNI PUEBLO.

children carry water for the town in glazed and ornamented vessels, called by the Mexicans *ollas*, already referred to in this paper as similar to the fragments of pottery found by us in Arizona. These *ollas* are adroitly balanced on the head while the bearer is climbing the ladders to the house-tops, and, with the graceful Romanesque costumes of the women, add to the strangeness of the scene, which seems rather Oriental than American.

Noticeable every where in the interiors were eagles of various sorts and sizes, some tied by the foot to perches, and others hanging in cages from the walls. They are to these people as sacred as they were to those of the old Aztec empire. The walls inclose an area perhaps four hundred yards square, and a population of about fourteen hundred souls. From a small plaza in the centre of the town a few narrow streets lead in several directions, but the terraced roofs of the dwellings, which are almost continuous on the four sides of the wall, form the usual means of communication between neighbors. An old Jesuit church on the plaza, which still holds two large Spanish bells in its ancient tower, now shelters innumerable bats and swallows, but is otherwise untenanted. A Latin inscription informs us that the altar was erected in 1776, but the chief men told us that the present edifice was erected at a much earlier date upon the site of their Zuni temple, some of the walls of which form a part of the new structure.

The Zuni Indians are in many respects



NAVAJO SQUAW WEAVING BLANKETS.

similar to those of the Moqui and other Pueblos, but speak a language unintelligible to the latter. Their dress resembles that of the Chinese, and many of them, notably the women, have the physical characteristics of the latter, among which are oval faces, merry, almond-shaped eyes, and a similar complexion.

Dwelling with them, as with the Moquis, are several families of albinos, which have been among them during many generations. These never intermarry with their darker neighbors, between whom and themselves there exists a mutual dislike.

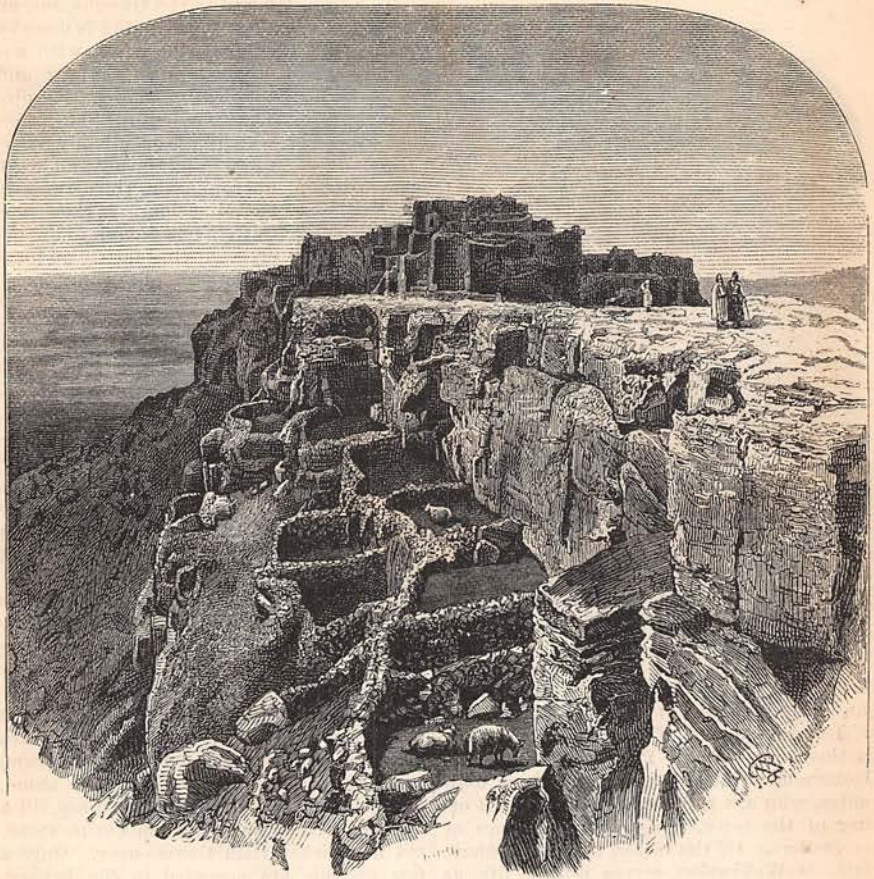
The usual dress of the men consists of a cotton tunic, and loose trowsers of the same material, reaching half-way below the knee, the tunic being often gathered by a leathern belt or a gayly colored woolen sash, in the manufacture of which the Moquis excel. Over all is worn in cold weather a Navajo blanket of brilliant hues and water-proof, varying in value from five dollars to five horses. We have seen several made by the Navajos for officers and traders valued at one hundred and fifty dollars coin each. This finer work in colors seems not to be understood by the Zunis, or they perhaps find it more profitable to exchange their wool for the blankets, devoting themselves to their farms and herds. The women wear always an outer garment of wool falling from the shoulders nearly to the ankle, and gathered at the waist by a broad woolen sash of bright colors, the fringed or tasseled ends of which hang nearly to the feet. Knitted woolen leggings and high buckskin moc-

casins complete the dress of the lower limbs, while their beautiful arms are uncovered, or concealed at pleasure within the ample fold of their dress or blanket, the latter being worn with a grace almost classical. The heavy black hair of both sexes is cut—or, as our ladies have it, *banged*—over the forehead, sometimes restrained by a cotton band around the head, and often with the maidens dressed in puffs at the side and top of the head, in a manner to heighten their resemblance to the Chinese.

Their flocks are numerous, and constitute their chief

wealth. One of the caziques gave his daughter two thousand sheep as a dower a short time before our visit. Their farms extend down the Zuni Valley several miles; in addition to which they cultivate other valleys within a radius of twenty miles, where are smaller pueblos, which have each had thriving populations in past centuries, but which are now occupied only during the summer months by families from Zuni. Their dependence upon irrigation makes agriculture laborious, but their joy at harvest-time, when young and old of both sexes join in gathering and threshing their crops of grain, is contagious in its merriment. Circus rings are formed near the village, the clay soil being leveled and beaten until a firm smooth surface is obtained, and around this horses, asses, and Indians trot in a grotesque procession, with an accompaniment of songs and jokes, threshing the sheaves of grain. The lordly Navajo at such times, visiting there for trading purposes, strides about, a king in stature and grace, or lazily smokes his cigarette, while he watches a labor he despises.

The language of the Zunis is unlike any others with which we have compared it. Dr. Loew, of Lieutenant Wheeler's expedition of 1873, mentions three languages still in use by other pueblos differing from this, and unintelligible to the Zunis. Mr. W. W. H. Davis, in his excellent history of the conquest of New Mexico, states that there are now twenty-six pueblos, with an estimated population of ten thousand people, speaking three different languages, a fourth



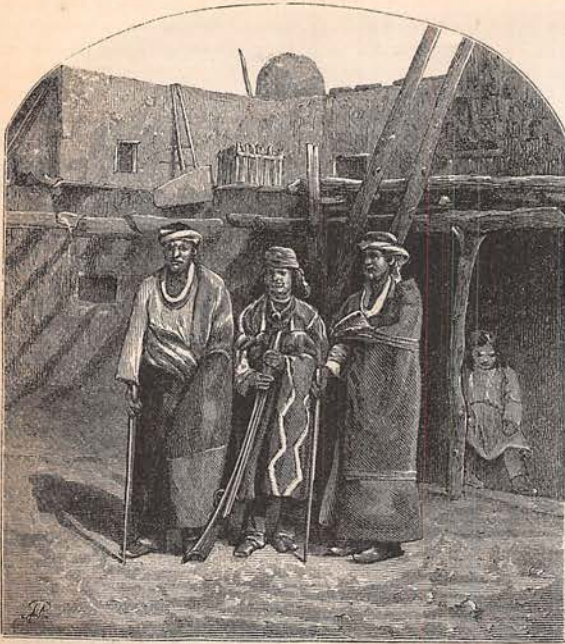
MOQUI PUEBLO.

having passed away with the last of the Tagnos pueblos since the conquest. Mr. E. G. Squier, in one of his interesting works on Central America, gives partial vocabularies of five languages spoken in New Spain at the time of the conquest, including the Mexican or Aztec. In none of these appears the slightest similarity to that now in use at Zuni.

Like the Aztecs, the Zunis have many religious *fête* days, which are celebrated by processions and dances in rich and curious costumes. Some of these may be seen by Americans, but their traditional enemies, the Mexicans, are not permitted in their streets or dwellings at such times. Of their religion they speak with reticence, though admitting that they worship the sun, and look for the coming of *Montezuma*. Until there is more proof of their Aztec origin than we now have, it seems not unreasonable to suppose that the name *Montezuma* may be one of adoption merely, suggested by its oft-repeated use by soldiers and friars, having no association in their minds with the

mighty chieftain over whom Prescott has cast such a glamour of romance. Doubtless the Zunis look for the coming of some one of supernatural power and grace, as do most peoples, but we think it not unlikely that either of the names Messiah, Mohammed, or *Montezuma* may with equal propriety be used to designate him.

We have the authority of Castañeda that the existence of these pueblos was unknown to *Montezuma's* people till at least half a century after the death of that monarch. It is, then, quite unlikely that isolated pueblos, numbering tens of thousands of people, would unite in deifying the dead hero of another nation, when at the same time were presented with all the fervor and ceremony of the Jesuit missionaries the claims of a crucified Saviour. The Jesuit fathers were in several instances murdered and expelled, though tolerated at times until they grasped at civil power, and sought, by the unscrupulous use of Spanish soldiery, to enforce their demands for tribute to the Church and state, when they were finally



GOVERNOR, LIEUTENANT-GOVERNOR, AND "TENIENTE."

compelled to flee, leaving behind them no lingering reverence for their faith.

The government of the Zunis consists of a Governor—Pedro Pino—a Lieutenant-Governor, an *alcalde* or mayor, three *tenientes*, who are responsible for the good order of the town, and twelve *caziques* or councilors. Of the latter, the chief, whose title is *Wakamáno*, serves during life, as does also the Governor; the other eleven *caziques* are elected annually, and may be once re-elected. There is also a war chief, who has no influence in the councils of the nation till danger threatens.

Led by our hospitable friends of the pueblo, we descended from the roof into several of their houses, where we were permitted to observe their domestic habits and economy. Their rooms are large but low-studded, and scrupulously clean. The floors are of clay, and the stone or adobe walls are usually whitewashed. We saw no furniture, nor did it seem necessary to the simple wants of the family, who work, eat, and sleep on the well-swept floors, sometimes sitting on a ledge of stone which extends around the four walls a foot above the floor.

The women looked neat and contented, seeming to be always busy, some weaving their thick woolen dresses, others grinding grain or baking their curious wafer-like bread, accompanying the labor with strange weird songs. The grinding is done by three women, who kneel over stone troughs sunk into the floor. Slabs of stone of different degrees of roughness are placed like a wash-

board in the troughs, and on these the grinding is done by rubbing the grain with another stone of the size and shape of a small rolling-pin. The first reduces the grain, which has been already cracked, to meal, the next makes it finer, and the third turns it out a fine flour. It thus passes from one trough to another, occupying nearly an hour in the process. The women, mostly young, and some of them quite pretty, work with a coquettish merriment, keeping perfect time with their music, throwing their bodies forward together, so as to bring nearly their whole weight upon the mill. Their long glossy hair, which is kept very clean, is tossed freely about their necks, adding much to their grace and beauty.

One room of each house is devoted to grinding and baking, the latter process being even more curious than the

former. A smooth slab of slate two feet square is fixed in the large fire-place and heated by coals. The hand is dipped into a thin dough of the consistency of cream, and then rubbed quickly over the stone, this being repeated four or five times, till a cake is formed covering the entire stone, yet no thicker than tissue-paper. Only a few seconds are occupied in the baking, when the bread is taken off and the operation repeated, till a few quarts of dough are manufactured into perhaps a thousand *torillas*, one of which would hardly make a mouthful, but the thousand would cover the floors of five large rooms. These sheets are made into rolls, a dozen or more being rolled together, and are then eaten literally by the yard.

The *fête* days of the Zunis, as of all the pueblos, occur between the seasons of harvesting and planting. Our visit was too early to permit us to witness their dances, some of which have been described by a member of Lieutenant Wheeler's expedition of 1873, to which last-named gentleman we are indebted for most of the illustrations of this paper.

Much of the night spent by us at Zuni was occupied in a talk with its Lieutenant-Governor and some of the *caziques*, who assembled by request for a chat and a smoke. We were invited to their council-chamber, one of the few buildings having an entrance on the ground-floor. It is lighted by small windows, in which large sheets of mica serve in the place of glass. Their women, like

ours, are most honored in the performance of their household duties, but are permitted to sit quiet spectators in their councils. There were several present on this occasion.

The dignity and deliberation of Indian powwows are well known, and this was not an exception. The traditional pipe was wanting. All the women included, smoked cigarettes. Our talk had to be carried on through two interpreters, one speaking English and Spanish, and the other Spanish and Zuni. The time thus consumed, together with the interludes of absolute quiet, permitted us to gain but little information of value. They told us, however, that their forefathers had lived ten years in this pueblo before the appearance of the first Spanish, which would fix its settlement at 1526. They came here from the Agua Fria, a pueblo viejo which we had seen about nineteen miles back the morning of that day. At the Agua Fria they had lived twenty years, and came there from the Rio Concha, which is about sixty miles westward. After quite a protracted discussion among themselves, they told us their people had lived about fifty years on the Concha, to which place they had come by slow journeys from the west, halting sometimes many years in different places.

Accepting this statement as reliable—and there seems to be no sufficient reason to question it—we are enabled to locate the Zuni tribe as far back as 1456; and as their traditions point to a westward origin, we may, we think, safely conclude that the chain of ancient villages remarked by us between the Rio Verde and Camp Apache, Arizona, as well as the caves near the Verde—still strewn with fragments of pottery, some of which is identical with that still in use by the Zunis—were occupied by this people centuries before the appearance of Columbus on the eastern coast; but whether this is an indigenous civilization, or of Toltec, Aztec, or Asiatic origin, it seems quite impossible, in the light of present knowledge, to determine. The theories concerning the genesis of the Aztecs and Toltecs are almost as numerous as the writers on that subject.

The student is perplexed at the outset by the strange anomaly of communities within rifle-range of each other, having common interests, religion, traditions, customs, and dress, each speaking a language unintelligible to the others, and none at all resembling the known languages of ancient Mexico, or those of the nomadic tribes about the pueblo country, as is the case at the Moqui villages.

Remembering that the ancient Peruvians kept their records by the quipus—an ingen-

ious system of knots tied into a network of variously colored cords, we inquired of the Zunis if they had any thing like it, at the same time picking up a corn husk which lay at our feet, we stripped off a piece and tied it into knots, as an illustration. The older men present remained for some time immovably silent, but looked with an expression of surprise at each other, while the young men and several of the women laughed, with different exclamations of wonderment, and several bowed their heads affirmatively. This drew from the old men unmistakable rebuke, and for fully five minutes an animated discussion was kept up among them, when the women were sent away, and the Lieutenant-Governor briefly informed us that we were not understood; and upon attempting further inquiries and illustrations, he slowly rose and stretched his ponderous frame with a yawn, an example which the others followed in succession. Attaching more truth to the unguarded expressions of the women and youth than to the long-delayed denial or equivocation of the chief men, we yielded the field very reluctantly, but remembering that it is the privilege of royalty thus to terminate audiences, we returned to our camp under the walls of the town at midnight, with an honorary escort of the absent Governor's son and one of the tenientes.



ZUNI GIRL, WITH WATER OLLA.