

THE CITIES THAT DIED OF FEAR

(The Story of the Saline Pueblos)

By PAUL A. F. WALTER.

DECEPTIVE is the country of the Saline Pueblos. Viewed from the slopes of the Manzanos on a spring morning or in late summer after the rains, it seems a veritable paradise. In a sand storm dense enough to shroud the alkali lakes or during a blizzard that hides the massive mountains, it is a land with cruel fangs in which man is heavily handicapped in battling against climatic vicissitudes. Human wave upon wave has swept across the valley to the very top of the lofty western ramparts only to be beaten back again and again by relentless nature. Even now, at this very moment, science and skill are combining to reclaim this magic domain, but the outcome hangs in the balance.

Upon nearer acquaintance, one discovers it to be a country of sudden and sullen moods, a land of an infinite variety of expression, a region of contrasts and of weirdness, a mountain-locked basin whose story has never been fully told. The Spaniards arrived in the nick of time to flash upon the pages of written history a passing impression of the last Pueblo occupants, the Piro and the Tiguas. Less than a hundred years after the first pale-face invaders had sighted the house pyramids in the Manzanos, these had crumbled and became "The Cities That Were Forgotten" so glowingly pictured by C. F. Lummis in "The Land of Poco Tiempo." Romance with more than customary

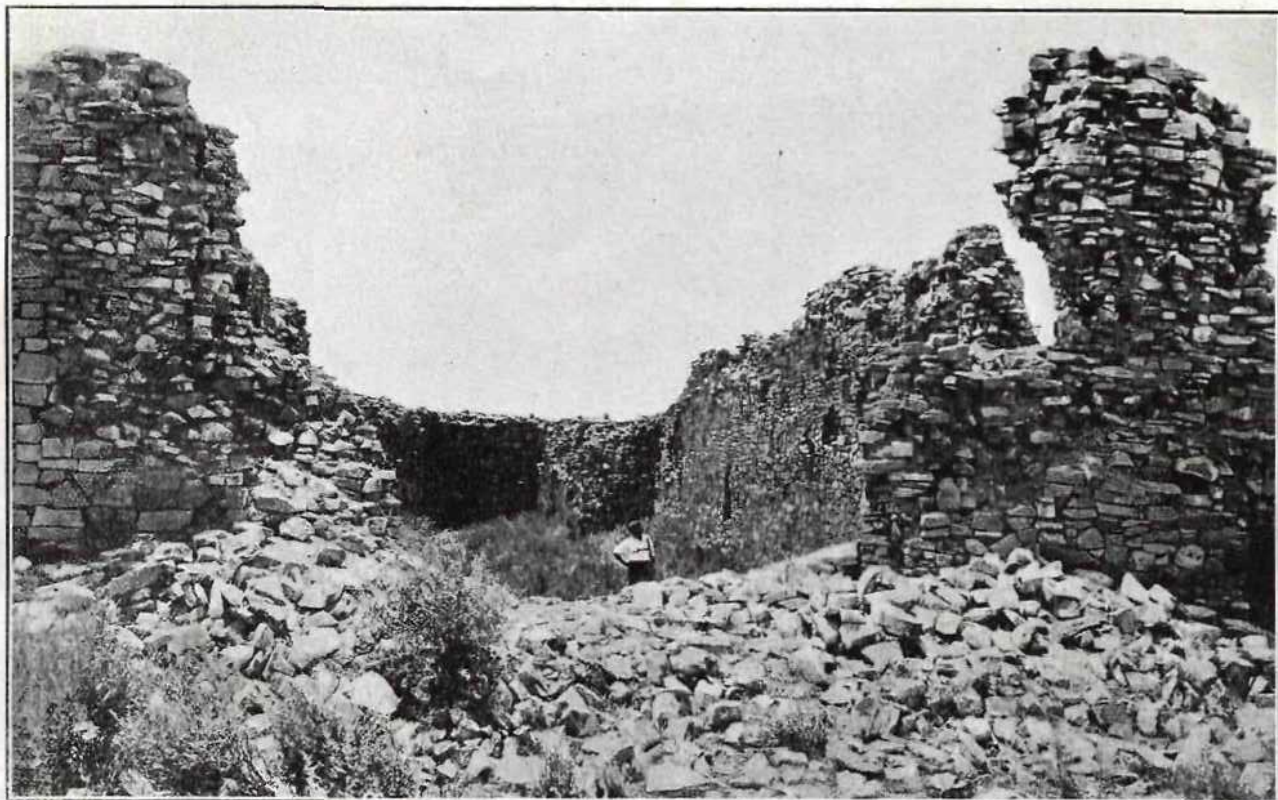
Each was a self-governing, independent commonwealth, compact and fortified; a republic within walls; and as such they seem more fitly entitled "cities," with due insistence upon the special limitations of the word here.—Lummis.

haste enveloped them in the haze of mystery until they became a sort of Fata Morgana that lured treasure hunters across the seas from as far as Brazil and France, as well as from regions nearby where people should have known better. It remained for Adolph A. F. Bandelier, some thirty years ago, to separate the truth from the fiction, and with the keen analysis of a born and trained investigator, to bare some of the innermost secrets of "The Cities That Died of Fear," communities that succumbed because their very preparedness and thrift attracted the less provident rovers of the plains.

But even the critical Bandelier and the cynical Lummis have not dispelled all of the mystery nor destroyed all of the romance that clings about the Saline Pueblos. To this day, the ruins of Abo, Quarai and Tabira inspire awe and are counted among the most striking landmarks of the Southwest. No one as yet knows how and when they were founded nor much of their story before the coming of the Spaniards.

The Museum of New Mexico has acquired title to the site of Quarai and to one-half of Tabira, just as it has to Pecos, whose mission church ruin it has preserved for future generations. The School of American Archaeology has made preliminary excavations at Quarai and has partially confirmed and partially disproved the conclusions of Bandelier. One seal has been broken and the other six* will no doubt yield to further research by the School. "Dig and ye shall find,"

Chilili, Tajique, Manzano, Quarai, Abo, Tenabo and Tabira.



Photograph by Jesse Nusbaum.

MISSION CHURCH RUIN AT TABIRA, LOOKING TOWARD THE ALTAR.

Up to a few years ago, a huge, carved beam rested in the opening shown to the right in the front wall.

is as true among the Pueblo ruins, as it is at Corinth and at Baalbeck.

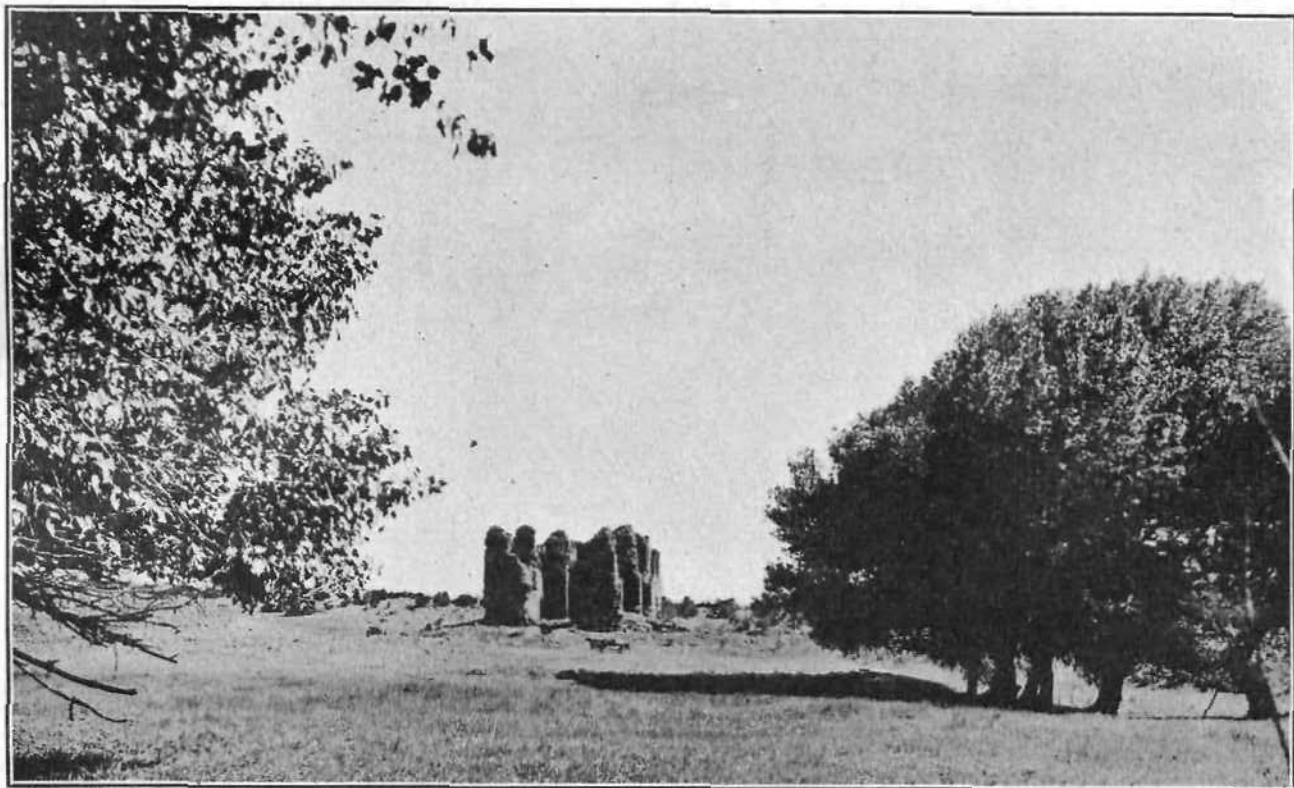
The Estancia Valley, situated just a little north of the geographical center of New Mexico, is included in the land of the Saline Pueblos, *for it is there that the salt lakes that gave the name to the mountain towns are located.* This region is therefore bounded on the west by the imposing and beautiful Manzano mountains, the main feature of the landscape for many miles. These are connected with the geologically remarkable Sandia range by low, wooded ridges, and on the south with the Gallinas, by a series of tablelands and hills, also densely timbered. But few passes give ingress to the valley from the west, those most traveled being Abo and Tijeras, and next to these, Hell Canyon, which lies between them. Toward the north rise the San Ysidro, San Pedro and Ortiz ranges, sloping down to the Galisteo Divide, the natural boundary between the Tanos pueblos of the Galisteo basin and the domain of the Tiguas and Piro of the Salines. The eastern ramparts, the Cerrito del Lobo, and farther south the Pedernal and Las Animas hills, with Rattlesnake Peak, have to the west of them the curious salt and alkali lagoons, well-nigh impassable moats, as inhospitable a barrier as is to be found in the Southwest. To the south lie the Gallinas hills, with but few springs and with long distances to the brackish underground waters.

Viewed from a distance, the western hills and mountains, attaining their greatest elevation in the Sandias and Manzanos, piercing the clouds at an altitude of 10,600 feet, are alluringly blue and well proportioned in outline. Strange to say, the rarity of the atmosphere makes them seem more distant than they are. Approaching their pine and cedar-clad slopes, they appear still more inviting, the country of the foothills laughing with wild flowers

and verdure. But starting from the densely wooded mountain flanks and traveling toward the east, nature assumes a grimmer and grimmer aspect, until finally the heaps of bones of livestock that has perished for lack of water, become more frequent and human habitations fewer, as the forbidding shores of the alkaline and salt lakes with their mirages and bitter waters are approached. South of these, lagoons fill crater-like bowls on the plains, for all the world like cups set there by Titans at play, while others stretch for miles and miles in shallow mazes, to the west of the New Mexico Central Railroad. The lakes shimmer delusively in the sun or moonlight, no matter from which direction one approaches.

Archaeologically, it is only the foothill region that is of interest. Little consecutive scientific work has been done here. In fact, investigations, outside of the one summer's excavations at Quarai by the School of American Archaeology and a preliminary study of the Piro language by J. P. Harrington of the School have not gone beyond desultory reconnaissances. To the north, in the Galisteo basin, however, as well as at Pecos and in the Pajarito, still farther north, archaeologists have excavated extensively, have made a fairly complete and accurate survey of shrines, mounds and community and small houses, and have classified in part the evidences of human occupations from earliest times to the present. But in the Saline region there are still to be found in isolated canyons, ancient ruins, shrines and pictographs that have never been mapped or recorded, and are being reported in a vague way from time to time by sheep-herders, or by the occasional traveler on the remote by-ways of the State.

While no epoch-making discoveries are likely to be made in this region, it is probable that intensive archaeological research will be re-



Photograph by Jesse Nusbaum.

QUARAI MISSION CHURCH RUINS IN THEIR LONELY SPLENDOR,

warded with interesting material, for it is there that the old Pueblo culture was thrust farthest eastward for any length of time, and it was there that it was in constant contact with the Plains Indians of the Southwest.

Except on the slopes of the Manzanos and Sandias, this entire region is without perennial streams. From a few springs in the mountains, rivulets make a brave attempt to reach the valley but they disappear before they have trickled very far. Dry water courses fill with rushing waters during or after heavy storms which at times sweep with great violence over the Estancia Valley, but the torrents sink into the porous soil within a few hours. After the winter's snows or during the rainy season, water holes fill up and shallow lagoons dot the landscape, but outside of the alkali lakes, there are no permanent reservoirs, and in years of drouth, the alkali and salt lakes, too, disappear, leaving the glistening white lakebeds baking in the sun.

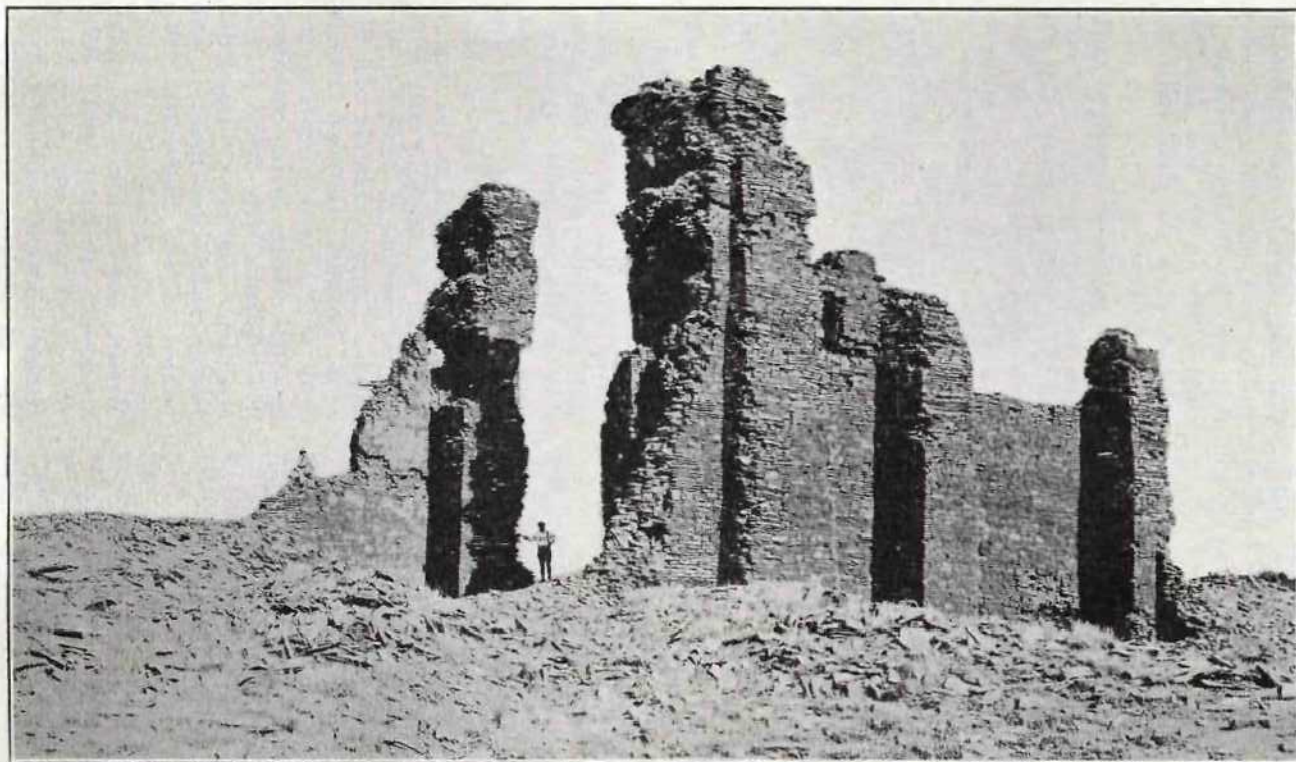
Not until very recent years, was permanent settlement attempted in the Estancia Valley itself. In ancient times, the permanent habitations were only along the rim and on the slope, while the country in between was tenantless. As far as known, there are no prehistoric mounds in the basin, but only in the canyons and foothills that spread out from it in all directions. Today, two railroads cross the valley and a third skirts along its southern edge, while settlements have sprung up along these railroads, especially at Estancia and Willard, where the subterranean water table comes very near to the surface. At Estancia, as well as at Antelope Springs and at Manzano, springs fed by the underground drainage from the Manzano mountains spout to the surface.

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Why no settlements were made at the former two points in ancient times, is difficult to explain, except that both sites are much exposed to attacks from any and every direction and the Pueblos preferred to build either in the less accessible canyons or on the more easily defended hilltops.

It was because of reports of spoliation by treasure-seekers at Tabira, and by vandals at Quarai, that the Archaeological Society of New Mexico, in July, 1916, sent several members of the staff of the School of American Archaeology on an overland trip to inspect and photograph the ruins of these pueblos and their missions, and to report upon the damage, if any, wrought by trespassers. In the party, besides the writer, were Jesse Nusbaum, architect and photographer of the School; Walter Ufer, the Chicago artist; E. J. Ward, manager of the Rocky Mountain Camp Company, Paul A. F. Walter, Jr., and F. J. Coomer.

It was in the first days of July, just before the summer rains set in, that the trip was made. It covered more than 300 miles along the eastern and western slopes of the Sandias, Manzanos and over the Mesa Jumanos. Contrary to the impression given by Bandelier and Lummis, the portions of Sandoval, Bernalillo, Torrance, Lincoln and Socorro Counties traversed include some of the most attractive and beautiful country in the Southwest. The highways were found in fair condition. No more interesting journey could be outlined in any portion of the Southwest. One road lies via Lamy, Galisteo, Moriarty and Estancia to Mountainair, from which latter point Tabira, Abo and Cuarai are conveniently reached. Another highway runs by way of Bonanza, the Turquoise Mines, Cerrillos, the coal camp of Madrid, the Gold Placers of Golden, and copper mines and smelters at San Pedro, to Tijeras; while the



ABO MISSION RUIN, DOOMED TO DESTRUCTION.

Photograph by Jesse Nusbaum.

For the lack of a few thousand dollars, this magnificent and altogether lovely mission church ruin, with a background of almost three hundred years, is about to crumble into a heap of stones, like the heaps on all sides of it. Built by the devoted Pueblo women, it would be a fitting memorial to the womanhood of that day, if the women's clubs of New Mexico were to gather funds to strengthen and preserve the walls, just as the School of American Archaeology has done with the mission church ruins at Pecos.

third road plunges over La Bajada hill in winding switchbacks into the Rio Grande Valley, skirts La Bajada, Santo Domingo, Bernalillo, Sandia and Albuquerque, and thence climbs into Tijeras Canyon. Each road has a charm of its own and permits of easy side trips to such interesting points as the San Cristobal ruins and pictographs, to the wildly beautiful forests on the eastern slope of the Sandias, to partially excavated community houses and villages, to Indian pueblos, old mission churches and ruins and Spanish Plazas.

TIJERAS AND ITS CANON.

Tijeras, at the foot of the Sandias, is as charmingly located as a picture-book Swiss village. High above it, on a steep slope, lies Whitcomb Springs, nestling amidst evergreens and aspens, a popular summer resort that commands a fine view of Tijeras Canyon and the country toward Santa Fe. The stream that tears down the grim canyon is constantly frustrating the efforts to improve the highway that leads up to Escobosa and thence to the Saline pueblos, and has carved the stupendous walls of the Titanic chasm.

It is almost a continuous climb from Tijeras canyon to Escobosa. The road strikes across and along wooded ridges, a typical New Mexico timber country, cut over years ago, but in which nature is reforesting the slopes with astonishing recuperative powers.

"Lovely!" exclaims the tourist, as he scans the mountain and forest vistas that unroll before him. Pine, spruce and oak, grouped in park-like effect, that continues practically the entire length of the journey to Tabira and even beyond, but with constant changes in flora according to altitude and season. The journey was toward the close of a severe drouth, yet the turf was green, the flowers brilliant. There were acres and acres of the glowing Indian

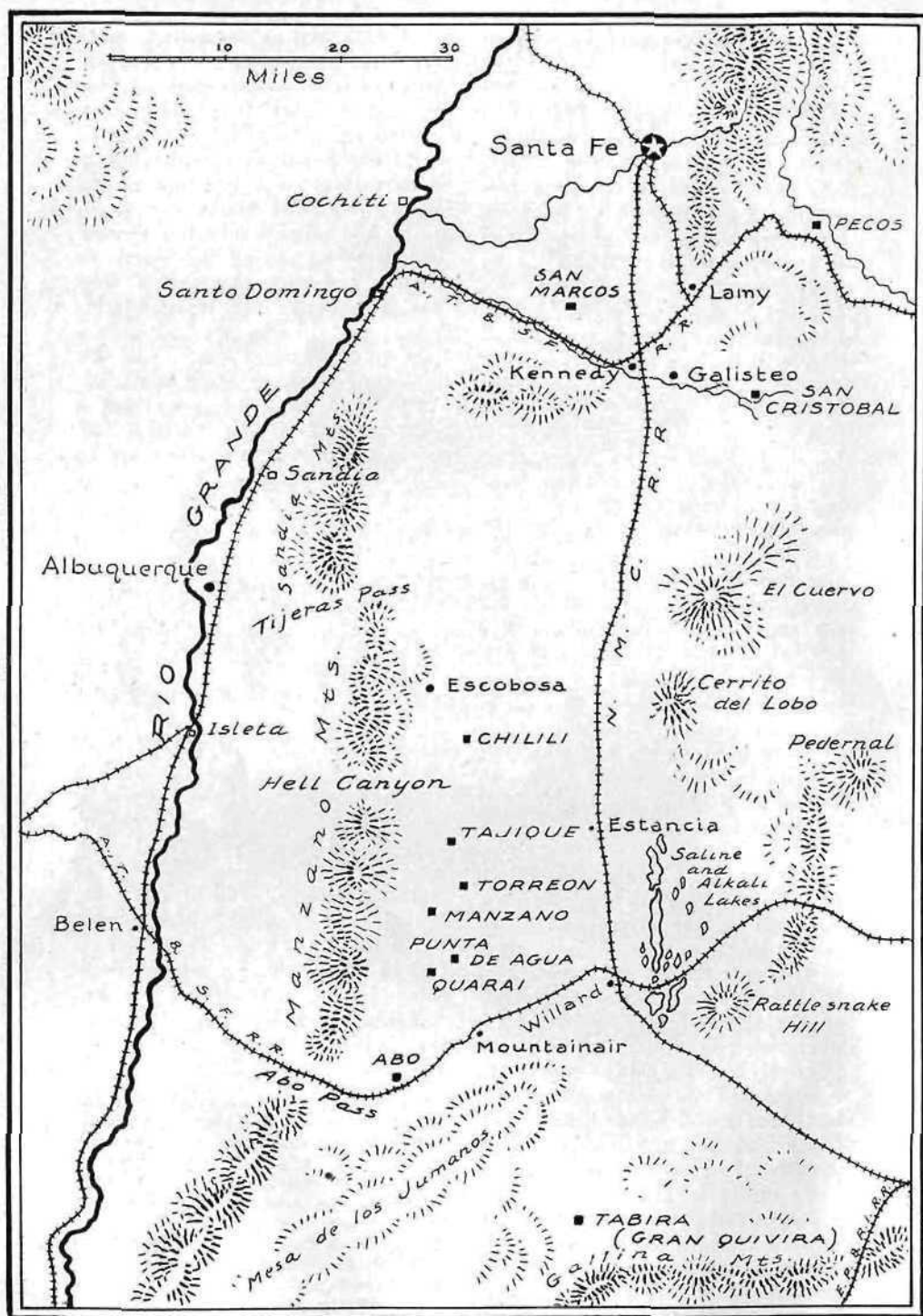
paintbrush, red as the sunset, miles of purple verbena, and scores of varieties of other wild flowers. In the open spaces, cacti lifted their arms four to eight feet high, for all the world like candelabra, with clusters of magnificent red blossoms at the tips of each of the many arms. Every few miles a running stream, or a gushing spring, in marsh or meadow, revealed one aspect of New Mexico that the casual traveler hardly suspects as he speeds through the state in a Pullman car. The Tijeras ranger station, most romantically located, is a reminder that a great portion of the Sandias and nearly all of the Manzanos are in Uncle Sam's Manzano Forest.

CHILILI AND CARNUE.

From Escobosa to Chilili is a scant five miles, but along the highway are encountered some of the steepest climbs and fairest scenery of the entire trip. Modern Chilili is situated on the north bluff of a stream that disappears a short distance below. In the village itself there is no vestige of the ancient pueblo, but on the older site the foundations of the mission church were traced recently by N. C. Nelson, of the American Museum of Natural History. Chilili was mentioned as a "captain" of a pueblo by Onate in 1598, and Benavides refers to it in 1630 as a mission dedicated to Nuestra Señora de Navidad.

Frederick Webb Hodge sums up the authorities on Chilili in his Handbook of American Indians:

"In this church were interred the remains of Fray Alonzo Peinado (after 1617), who went to New Mexico about 1608, and to whom was attributed the conversion of the inhabitants and the erection of the chapel. The village was abandoned, according to Bandelier, between 1669 and 1676, on account of persistent hostility of the Apache, the inhabitants retiring mostly to the Tigua villages on the Rio Grande, but some joined the Mansos at El Paso. According to Vetancourt the pueblo contained 500



Drawn by K. M. Chapman.
THE COUNTRY OF THE SALINE PUEBLOS.

Piros in 1680, and Benavides referred to it as a Tompiros pueblo 50 years earlier; but Bandelier believes these statements to be in error, since the northern pueblos of the Salinas belonged to the Tigua."

Says Bandelier:

"The former Tigua pueblo of Chilili stood on the west side of the creek, but its site is now built over, and only a few traces of the small chapel dedicated to the Nativity of the Virgin are visible on the east bank. The inhabitants of Chilili say that metates and arrow heads are still occasionally found. I noticed some black and red potsherds, and later I saw a handsomely decorated water urn, well preserved and ornamented with symbols of the rain, the tadpole and of fish, painted black on cream-colored ground, which had been exhumed at Chilili. It is in possession of the Hon. R. E. Twitchell of Santa Fe. The brook running through Chilili extends only a mile beyond that hamlet, further down it sinks, like all the water courses that descend from the Manzano chain towards the Salinas. These constantly fill up their own beds with drift and sand, and thus, in course of time, gradually recede. Years ago, so old residents affirm, this brook had permanent water for one mile and a half farther east. It is well to note such local peculiarities, for they tend to explain changes of locality of Indian villages in former times.

"The Sierra de Gallego, also called Sierra de Carnue, divides Chilili from San Pedro toward the north. The Carnue range is not very high and pine forests cover its slopes, reaching to the crests and summits. In ancient times these pine-clad heights must have been solitudes as they are today. The old grant of Carnue mentions a ruin in the mountains, west of the Spanish settlement, that was founded and soon abandoned towards the end of the past century. The grant of Carnue was made by Governor Tomas Velez Cachupin in 1763. In 1771 the settlers petitioned for leave to abandon the place, which had become untenable on account of the Apaches. That ruin is called las ruinas antiguas del pueblo que llaman de S. Antonio. While descending from the crest of Carnue, the traveller obtains an occasional glimpse of the region to the east and south, a vast expanse of singular bleakness.

Desolate plains spread to the east; dismal hills border them along the horizon; only two or three springs rise to the surface between Galisteo and the salt marshes. One of these bears the name of Ojo del Cibolo (Buffalo Springs), 57 miles south of Galisteo. The other springs are Ojo del Berrendo (Antelope Springs), 41 miles, and Ojo Hediondo (Stinking Spring) 27 1-2 miles south of Galisteo."

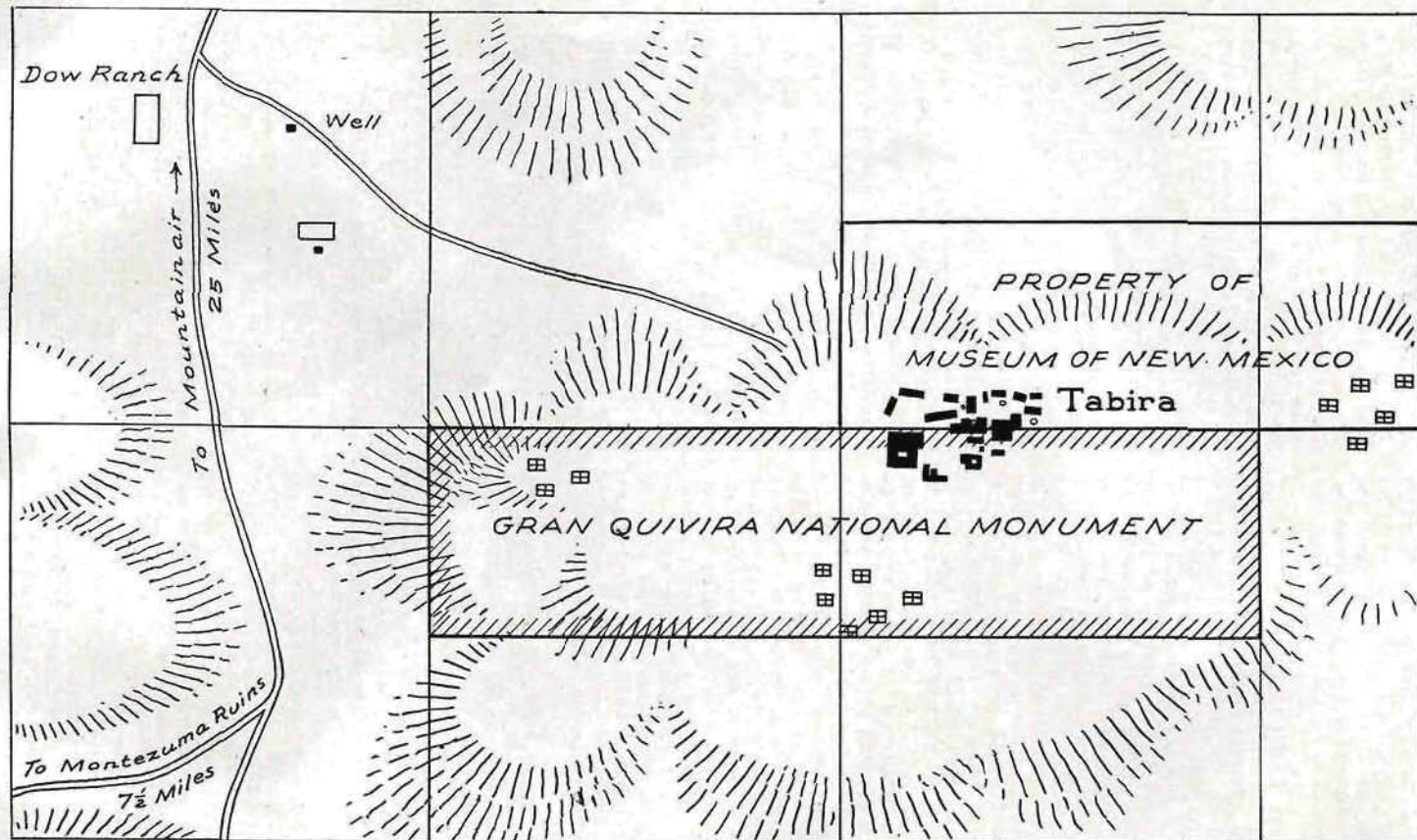
TREASURE HUNTERS.

It is at Chilili that one hears for the first time the stories of buried treasures and treasure-hunting expeditions. Less than two decades ago, so the visitor is seriously informed, a Brazilian succeeded in lifting the hidden gold* underneath the altar of the old church. For weeks he had employed men digging within the ruins of the sanctuary. Then came the hour when he announced that the following day he would unearth the treasure and would divide it with the people. During that night, however, his men made away with it. The people of Chilili sought to wreak vengeance on the Brazilian, who remained, but the proposed lynching was averted. The Brazilian subsequently had a number of thrilling adventures in the Manzanos, which are related with much detail and great gusto by the old timers.

Lieut. J. W. Abert in his official report in 1847 says:

"Two miles further brought us to the deserted village of Chilili; from this place the road continues on in the course to the salt lakes which are fifteen miles distant. The town of Chilili is one of modern construction; the walls of the houses are formed by placing logs upright in the ground, and plastering them over with mud. The roofs of the houses are flat, and composed of the same materials. The town was deserted some years ago, on account of the disappearance of the stream that supplied the place

"Indeed it is very doubtful if the natives even in Benavides' time, knew what gold was."—F. W. Hodge.



Drawn by K. M. Chapman.

TABIRA, THE TOWN OF MYTHICAL TREASURE.

It was the most southern of the Saline Pueblos and in direct contact with the land of the Jumanos.

with water. Part of the inhabitants have formed a new town higher up on the course of this fickle stream."

Benavides in 1630 wrote of Chilili as the "first pueblo" of the Tompiros nation to which he ascribed

"fourteen or fifteen pueblos, in which there must be more than ten thousand souls, with six monasteries and very good churches; all are converted, and for the most part baptized, and others are being catechized and taught, and with their training schools of all trades, as in other pueblos. The land is little fruitful, by reason of the many cold spells and the few waters. In this province are the splendid salines, ten leagues from the mines of Socorro."

TAJIQUE AND TORREON.

From Chilili to Tajique the way seems long, although the scenery is not uninteresting. Occasionally, the traveler gets glimpses of the vast expanse of level land that stretches toward the east, while the Laguna del Perro (Dog Lake) glistens in the sun and a mirage shimmers between the horizon and the cirrocumulus cloud masses. Tajique itself is a village in open formation and like Torreon, a few miles beyond, which it resembles, is not near as picturesque as Tijeras, Manzano or Punta de Agua. Tajique furnished a refuge for the inhabitants of Quarai in 1674, but a year later, Tajique, too, had to be abandoned. There is nothing left of the original town or church but a mound overgrown with vegetation.

Of Tajique, Lieut. Abert says:

"Hunting below the town without finding water, we were forced to encamp higher up on the stream, where we found an abundant supply. At this town we met Mr. E. J. Vaughan, a Missourian. He had, he said, been extremely anxious as to his safety in remaining here, for an insurrectionary feeling was rife through the whole country, particularly at this out-of-the-way place; and this feeling was not a little excited by messages from persons in Chihuahua, stating that they were about to come up by this road, with 11,000 men, and with

the assistance of the New Mexicans would destroy all the detestable heretics. And he accidentally heard some of the inhabitants of this town arranging the partition they would make of his goods; for he was here trading with the people for corn, and the wagons we saw yesterday were some that he had sent on to Santa Fe.* Mr. Vaughan said he had spent thirteen years in this country. He gave me some interesting accounts of the customs of the Pueblos, and tells me that they have a dance, called Montezuma's dance, which is danced around the pole. He also stated that when he first came to this country that the ruins of Pecos were inhabited, and that he had been there and seen the sacred fire."

It was at Tajique, on July 16, 1659, that occurred the death of Fray Geronimo de la Llana, who built the mission at Cuarai. Just one hundred years later, the remains were taken up and transferred to the parish church at Santa Fe and are therefore within the cathedral walls. Bandelier has left us a sketch of the life of the Franciscan, telling also of the discovery of his last resting place in the Cathedral. He says:

TWO NOBLE FRANCISCANS.

"On the 2nd of June, 1880, while preparing to remove the altar of the old cathedral of Santa Fe, preliminary to closing the rear portion of the present edifice, Father Rolly (lately deceased) and Father Gatignol (curate at Belen) noticed, in the wall of the old structure, two ancient inscriptions. Upon deciphering them they proved to indicate the place where two cysts had been immured, each of which enclosed the remains of a Franciscan monk from the 17th

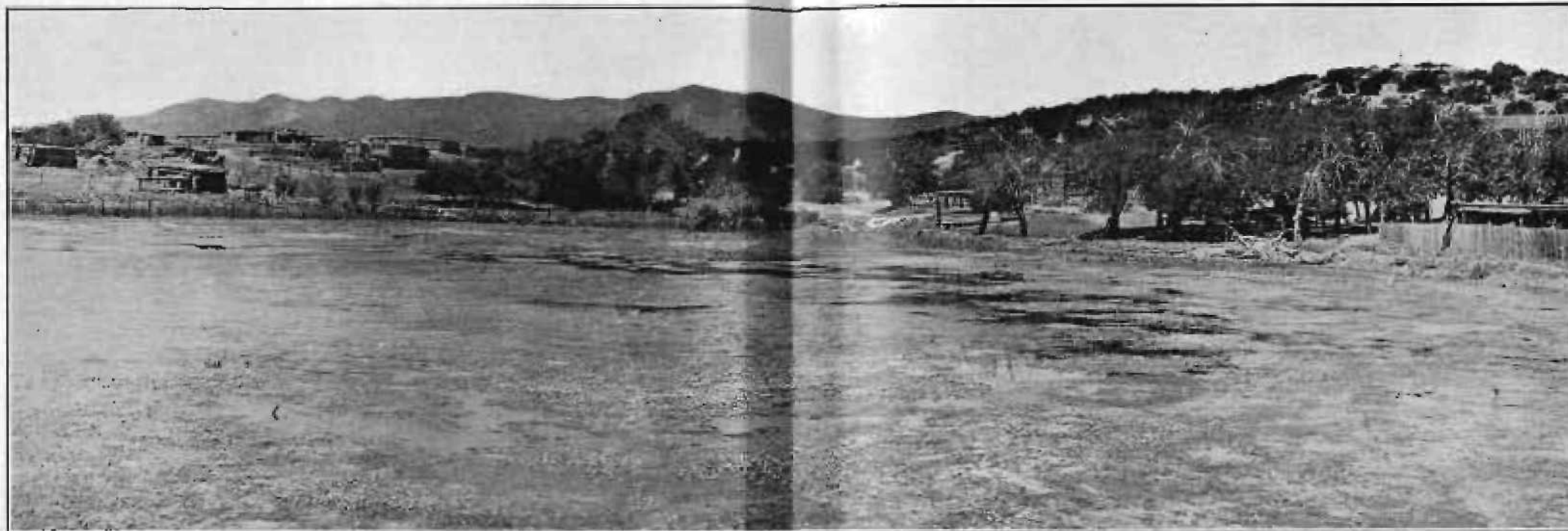
*According to a deposition by the last survivor of the Pueblos who went from Pecos to Jemez, about eighty years ago, the sacred fire was guarded by eight men, who remained in the kiva an entire year, being relieved by another detachment of eight on New Year's Day. Quite often, one or more of the eight succumbed during the year, and according to the deposition, the survivors came out weak and tottering, and were honored with a procession around the pueblo.

century. The inscriptions were carefully cleaned from the adobe which had accumulated over them and today they can be seen, together with the chancel dedicated to the parish church of Santa Fe by the governor, Don Francisco Antonio Marin del Valle, in 1761, in the vacant room behind the main altar.

"A free translation of the two in-

na, etc., of the order of Saint Francis, which were taken from the ruined mission of Quarac at the Salinas, on the first day of April, 1759, by the governor, Don Francisco Antonio Marin del Valle, governor and captain general of the kingdom, at the expense of whom this sepulchre was constructed.

"We repeat that the above are not



MANZANO AND MANZANO LAKE.

One of the most picturesque settlements in the Manzano Mountains. The lake is replenished from a wonderful spring rising in the foothill just behind the clump of cottonwoods in the center of the picture and is covered in greater part with small, fragrant water lilies. It supplies the water for the irrigation of surrounding

scriptions conveys the following information:

"No. 1. Here lie the remains of the Venerable Father Asencion de Zarate, of the order of Saint Francis, etc., which were taken out of the ruins of the ancient church of San Lorenzo of Picurles, on the 8th day of May, 1759, and were transferred to this parish church of the town of Santa Fe, 11th of August of the said year. (The inscription further states that the transfer of the remains of the monk referred to below took place on the same day.)

"No. 2. Here rest the remains of the Ven. Father Geronimo de la Lla-

na, etc., of the order of Saint Francis, strictly translations of the inscriptions, but merely convey the substance of their texts.

"So far these two tombs have been the only ones from the 17th century identified in New Mexico. The sepulchre of Fray Juan de Jesus, the priest whom the Indians of Jemez murdered on the 10th of August, 1680, may yet be discovered, but so far it has not been attempted.

"Concerning the first, one of the two Franciscans whose remains are at the cathedral documentary information is slight. The date and place of his birth are not given in the authors who treat of the ancient New

Mexican missions, but it is known he stood in high repute for his virtues and as an educator of the Indians. He was sent to the mission of Picurles, and died there on the 13th of December, 1632. That his body has been interred in the church of that pueblo was a well known fact in the 17th century.

came the oracle of that custody, and a model for the people. The last years of his life were spent at the pueblo and mission of Cuaray or Cuarac, five miles southeast of the present town of Manzano, where he died (among the Tigua Indians) on the 19th of July, 1659. His body was interred in the church of Cuaray, the

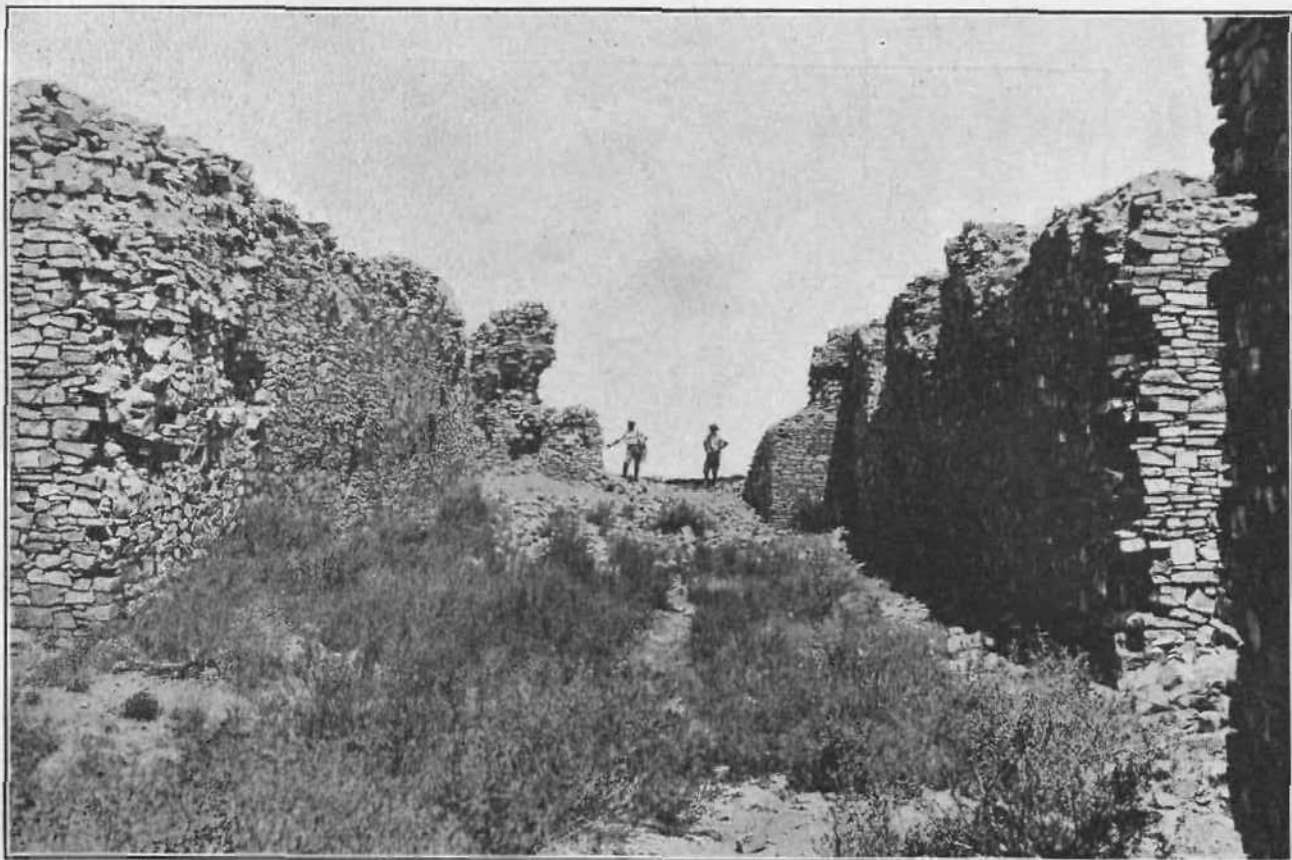
Photograph by Jesse Nashua. fields and orchards. To the right is one of two apple orchards, reputed to have been planted by the Franciscans of Cuaray prior to 1676. On the hill to the right is a large Penitente cross.

FRAY GERONIMO DE LA LLANA.

"Much more definite data exist in regard to Fray Geronimo de la Llana. He was a native of the City of Mexico, the son of Juan de la Llana and Dona Isabel de la Raya. His father was a Spaniard, his mother a Creole lady from Mexico. He entered the Franciscan order on the 21st of November, 1629, and soon distinguished himself by his learning. When he came to New Mexico is not known, but it must have been previous to 1636, since we are in possession of a note written by him at Santa Fe in that year. Vetancurt says of him: He be-

ruins of which today constitute one of the most picturesque objects among New Mexican antiquities.

"As late as 1706 there still lived Indians who remembered Fray Geronimo de la Llana well, and spoke in glowing words of his virtues; nay of miracles which he should have performed. Among the Spanish population his name was but faintly remembered. In that same year, however, a letter was written to New Mexico by a monk who has lately acquired some celebrity (in connection with the notorious governor of New Mexico, Don Diego Bionisio de Penalosa) the latter having attributed to that



NAVE OF THE TABIRA MISSION CHURCH.
Looking toward the main entrance which faced the pueblo on the east.

Photograph by Jesse Nusbaum.

monk a report on a supposed expedition of his to the northeast. It is abundantly proven that the report in question was written by Penalosa himself and that the friar had nothing to do with the document or with the purported expedition. That friar was Fray Niclas de Freytas (a Portuguese) and he certified to the fact that in 1669 he disinterred the body of Fray Geronimo de la Llana inside of the church of Cuarac or Cuaray and removed it to another place in the same edifice near the altar, and where it was less exposed to humidity.

"The pueblos around the salt basin of the Manzano were in the 17th century at least six, perhaps seven in number. It is not certain yet whether there was an Indian village at the Manzano after the occupation of New Mexico by the Spaniards, although the presumption is in favor of it. The six pueblos, about the existence of which there can be no doubt, are, from north to south: Chilili, Tajique and Cuaray, all inhabited by Tiguas; Abo, Tenabo and Tabira, inhabited by Piros. The latter is the place now falsely called Gran Quivira. There was also a village of Jumanos in that vicinity, but its location is not yet definitely ascertained.

"The abandonment and ruin of these villages, all of which were the seat of missions, from documents in our possession, have taken place between the years 1669 and 1675. The villages were abandoned successively, Tabira (Quivira) being in all probability the first. Of the three Tigua pueblos, Cuaray was the earliest one forsaken. The people took along with them the body of Fray Geronimo de la Llana, placing it, in its rude wooden coffin, to the right side of the altar of the church of Tajique. When the latter village and that of Chilili had to be abandoned, and their Indians fled to Isleta, the distance did not allow them to carry along the remains of their beloved priest. So the body of Fray Geronimo de la Llana, after having been twice displaced by pious hands within fifteen years after his decease, remained for eighty-five years in the decaying temple of Tajique, at the mercy of the Apaches, then sole masters of all the region south and southeast of Galisteo. Still the savages did not disturb the body, either because they never noticed it or owing to superstitious dread.

"It is not devoid of interest to notice here how soon after the

abandonment of what were then called the Missions of the Salines distinct recollections concerning their fate and even their location became confused. It may be said that twenty years after their depopulation they had faded out of sight. Still, in documents from the years 1683 and '84, Indians from Tabira, Abo and Cuaray appear as testifying witnesses. But they all dwelt at El Paso del Norte, where their ultimate descendants today occupy the villages of Senecu and Isleta del Sur. But after the terrible blow which the insurrection of 1680 inflicted upon Spanish power and prospects, and in the desperate efforts made for reconquest and the excitement attending them the Manzano region was completely given up. The Apaches swayed over the whole of southeastern New Mexico, any attempt at colonization was out of the question with the feeble means of which the Spanish authorities could dispose; in fact they had more than enough to do to hold their own in the Rio Grande valley and its adjacent sections, without thinking of districts outlying upon the great plains.

"This complete neglect of the ancient missions around the salt lagoons is curiously exemplified in the proceedings of recovery of the body of Fray Geronimo de la Llana in 1759. Gov. Marin del Valle had taken cognizance of the letter written by Father Freytas in 1706, and he determined upon making search for the relic. He therefore caused the work of Fray Augustin de Vetancurt, entitled 'Teatro Mexicano' (1698), to be sent him from Mexico, and in it found a description of the old missions, which, however, contains some geographical errors. On March 30 the party, consisting of the governor, several officers, a notary and three priests, escorted by two squads of soldiers and thirty-five Indians, reached the ruins of Cuaray. The most diligent search revealed no trace of the body. Thereupon one of the Indians informed the governor of a tradition to the effect that the corpse had been removed to Tajique, and the curious discussion arose, whether Cuaray was Tajique or Tajique Cuaray. None of those present could solve the riddle, although it was manifest that the party was actually on the site of Cuaray, about twenty miles southeast of Tajique. Orders were given to return to the latter place, where the ruins of the church and pueblo were still (and are today) plainly visible.



DETAIL OF OLD CHURCH WALL AT TABIRA.

Photograph by Jesse Nusbaum.

Notice the absence of joint at the corner, the regularity of the laid stone and the apparent absence of mortar. This is a portion of the smaller and probably older church.

and very soon the precious relic was found. Enough remained of the vestments to show that it was the body of a Franciscan monk, pieces of cloth and the rosary being still intact. But of the parchment which, according to the certificate of Father Freytas, the latter had placed in the folded hands of the dead, no trace was left. The remains were carefully exhumed, placed in a casket especially brought along for the purpose and carried to Santa Fe, where they were placed in the cyst rediscovered in 1880. The inscription, however, which locates the find at Cuaray is erroneous. The village where the remains of Fray Geronimo de la Llana were exhumed for the last time was Tajique, whither the pious love of his parishioners had removed his body.

"Three times in 100 years was the resting place of that venerable monk disturbed, and always in the best and most pious intentions of saving it from eventual desecration. Exactly 100 years after his death, they suffered their last transfer, and to a place where, it may confidently be expected, they will forever remain. Of the manner in which the remains of Fray Asencio de Zarate were secured, we have as yet no positive information. In that case, as well as in the instance of Father de la Llana, a full 'proces verbal' was certainly executed. But the papers have disappeared or are perhaps lost, a fate only too common with historical documents in New Mexico, and one to which a great many other manuscripts here may still be exposed, unless steps are taken toward their publication."*

THE ANCIENT TAJIQUE.

Bandelier suggests that the name *Tajique* is probably the Hispanized form of the Tewa name (*Tashike*?) of the pueblo, the Tigua name being *Tush-yit-yay*, or *Tuh-yit-yay*. The ruins of the pueblo are situated on the south bank of the stream, north and west of the present village. The houses were of broken stone, but the chapel was built of adobe. Bandelier found the pottery to have been of glazed variety, but he also found a fragment of the ancient black and white ware. In 1630, *Tajique* was credited with 300 inhabitants. It is almost certain

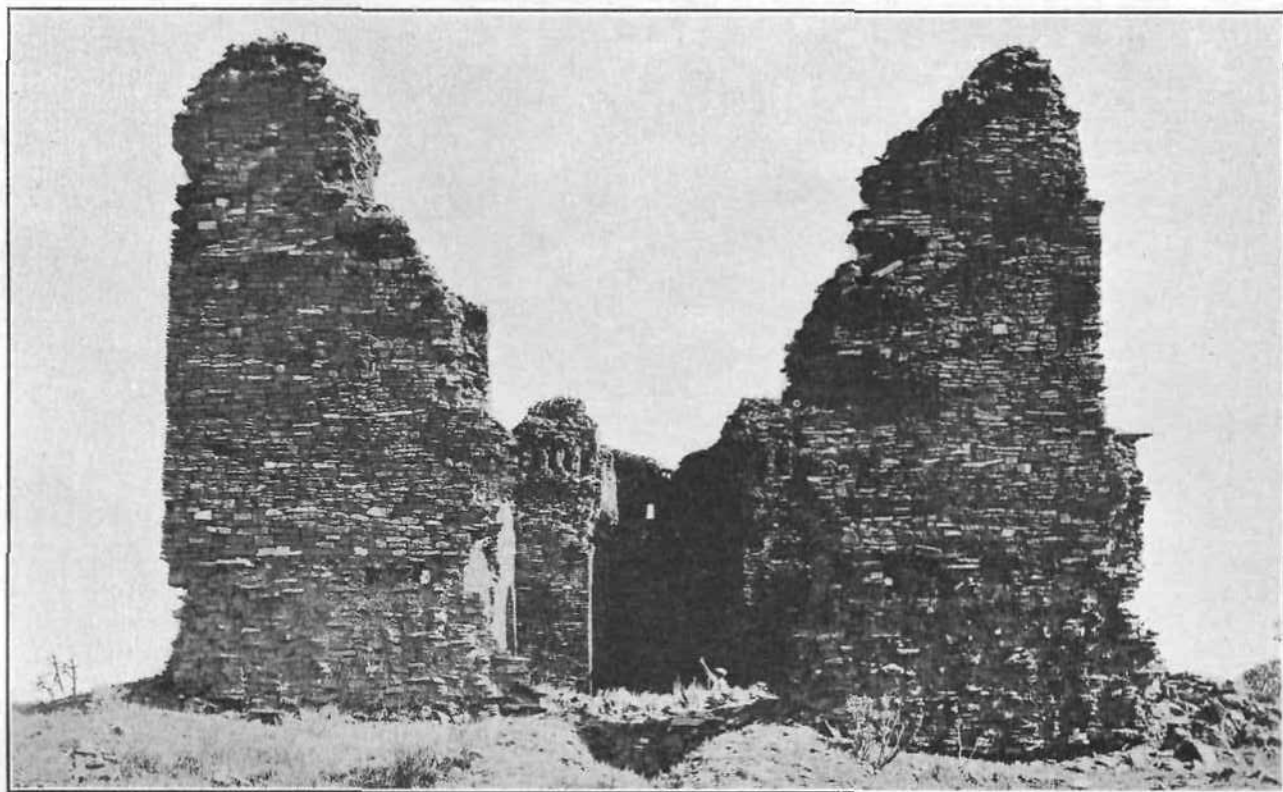
that the pueblo was in existence prior to the sixteenth century. There is reason to believe that, unlike the other Tigua and Piro villages, *Tajique* was abandoned as the result of a direct onslaught by the Apaches, for Vetancurt in his *Chronica* says that the priest of *Tajique* escaped from the pueblo in company with two Spaniards. Like *Chilili* and *Manzano*, *Tajique* as well as *Torreón* have so-called community grants dating from the early decades of the nineteenth century. *Torreón* lies a few miles beyond *Tajique* on the road to *Manzano*. The mounds pointed out as ancient, some distance up the stream, toward the mountains, apparently are those of small houses.

MANZANO AND OJO DEL GIGANTE.

From *Torreón* to *Manzano*, the highway runs partly through smiling fields of corn, barley oats and beans. *Manzano*, itself, is the most picturesque settlement south of *Santa Fe*, and sits proudly at the foot of *Manzano Peak*, 10,608 feet high. On top of the ridge, at an elevation of almost 10,000 feet, lies a farm that has been cultivated for decades. At the base of the peak gushes forth a wonderful spring of ice-cold water, *El Ojo del Gigante*, rivaled in the Southwest only by the spring at *San Rafael* in *Valencia County*. The water fills a sandy basin or bowl that glitters like an emerald. The water is remarkably transparent and the tall pines surrounding the basin are pictured in its depths, the bottom, overgrown with algae of brilliant green, being clearly visible. From the basin issues a good-sized brook, which flows for a few yards in the open and then disappears, reappearing in a vineyard far below. From this point, the stream flows into the *Manzano Lake*, a body of water that gives the town a touch unlike that of any other in the entire Southwest.

The reservoir is about a mile in circumference and around it are grouped the houses of the settle-

*See *Spanish Archives*, by Ralph E. Twitchell.



CUARAI MISSION CHURCH RUINS.

Photograph by Jesse Nusbaum.

The noblest of the mission church ruins in New Mexico. Notice how lower portions of wall are weakened by vandals removing surface tier of red sandstone blocks.

ment. The lake itself, in July, was covered with myriads of small white water lilies, giving out a delicious perfume, but at times the breeze brought the odor of algae, like that on the beaches of southern California. To the south, the bank rises abruptly and is crowned with a cluster of adobe houses strongly reminiscent of a typical Indian pueblo. Northwest of the lake, is a still steeper hill, on the slope of which, roof above roof, rises part of the town, while the summit is topped with a high wooden cross, the entire panorama being a suggestion of mountainous Italy. One of the two old orchards dating back to the early Mission days lies at the foot of this hill. The entire aspect of this portion of the town is decidedly foreign. The other orchard lies east of the lake, just beyond the Spanish "torreon" or tower, built as a defensive work against Indian attacks.

SPANISH TORREON AND ANCIENT ORCHARD.

This tower is characteristic of similar structures still to be found at points that in olden days were outposts of the Spanish settlements. It was built on the main highway and at a point on the lake from which issues, with a joyful gurgle, the main acequia, or irrigating ditch. The patio adjoining it has crumbling adobe and stone walls. The gate is of the old pattern, with a smaller door, or "needle's eye," for the ordinary use of visitors. In the house across the street is a fine type of the primitive form of fireplace.

Taken altogether, Manzano is a place that will delight the antiquarian, the traveler who seeks out-of-the-way places that are different. It is easy to forget that one is in America while visiting Manzano. The people are hospitable, although several decades ago Manzano's reputation as a refuge for horse-thieves

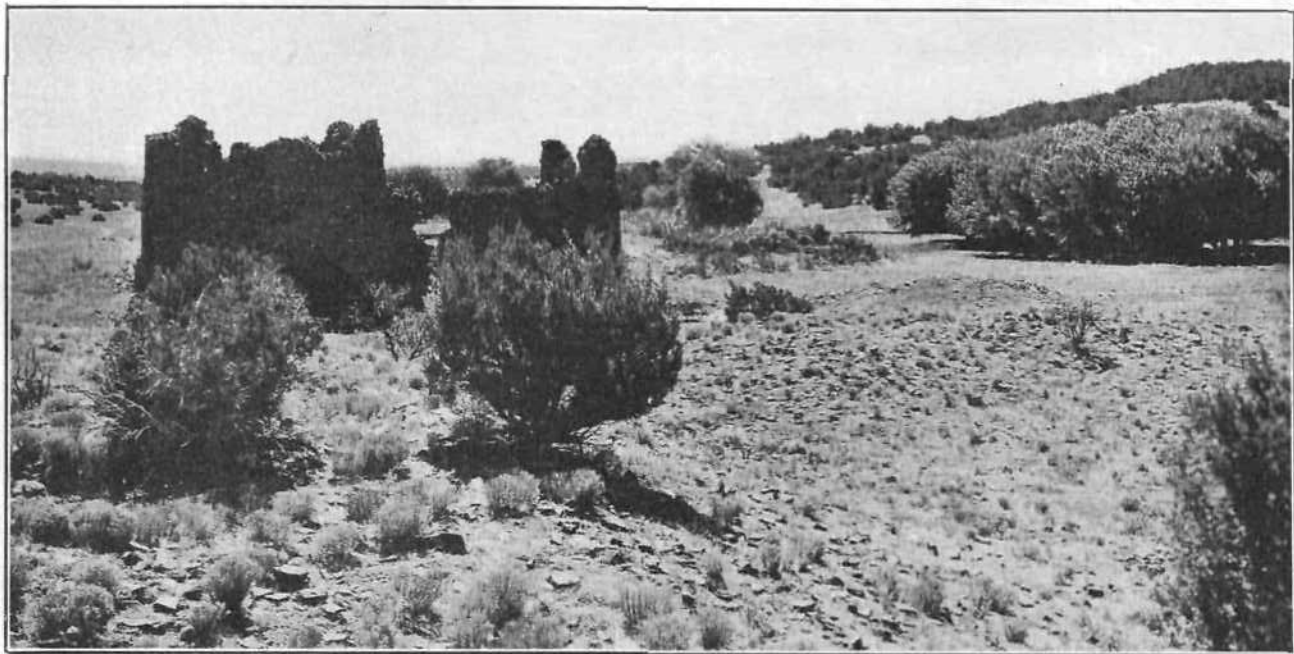
and other criminals was quite unsavory. Today, Manzano finds it difficult to stem the tide of the inflowing settlers who are taking possession of the homestead lands east and south of the Manzano grant.

The altitude of the town is 6,961 feet, almost exactly that of Santa Fe, although the place is somewhat colder in winter and warmer in summer and occasionally experiences a terrific sand or wind storm. The heavy summer rains at times fill up the little dale in which the spring and its basin are located and the surplus waters pour over the rim instead of through the underground outlet. To the east of the town is a wide arroyo, the big boulders in which give evidence of the force of the waters that tear down the mountainside during the rainy season.

Bandelier tells us that he was at Manzano while the weather was peculiarly unfavorable for archaeological explorations, deep snow covering the ground, and one snow-storm following another. He was told that a pueblo existed west of Manzano, at a point where a "morada" of the Penitentes stood. The moradas are small buildings without windows in which the Penitentes practice their secret rites. Another pueblo was reported a few miles down the valley at Ojitos and a third opposite Ojitos on the hills, these being in addition to the small house ruins scattered all over the slope of the Manzanos.

Of the apple orchards he says:

"There stands at Manzano a grove of tall apple trees. The trees are manifestly very old. It is probable that they were planted by some of the missionaries during the seventeenth century, which would give them quite a venerable age. There does not seem to have been a mission at Manzano, and I could not find out whether traces of an old chapel have been noticed; still the name of the place 'El Manzano,' is derived from these apple trees. Consequently, they stood there when the settlement was made in the first quarter of the present



CUARAI BY MOONLIGHT.

Photograph by Jesse Nusbaum.

Ruins of pueblo pyramids in foreground. Cottonwood grove with springs to right. (To paraphrase Scott:

*"If thou wouldst view fair Cuarai aright,
Go visit it by the pale moonlight."*

century, unless, what is hardly probable, some of the settlers planted them before the municipal grant was issued in 1829. Probably the apple orchard of Manzano dates from prior to 1676. After that date, and until the foundation of the village of today, the Salines were a very dangerous region. An occasional hunter or large armed parties ventured into the valley, and beyond, at rare intervals; but nobody dared to establish himself permanently, for the Apaches held undisputed sway. I inquired diligently in 1882 about the apple orchard, but not even the oldest inhabitants of Manzano, Torreon, or Abo were able to give me any other reply than that it was much older than the recollections of their fathers and grandfathers."

MANZANO SEVENTY YEARS AGO.

Lieut. Abert, who arrived at Manzano on November 3, 1846, gives quite an interesting account of his visit:

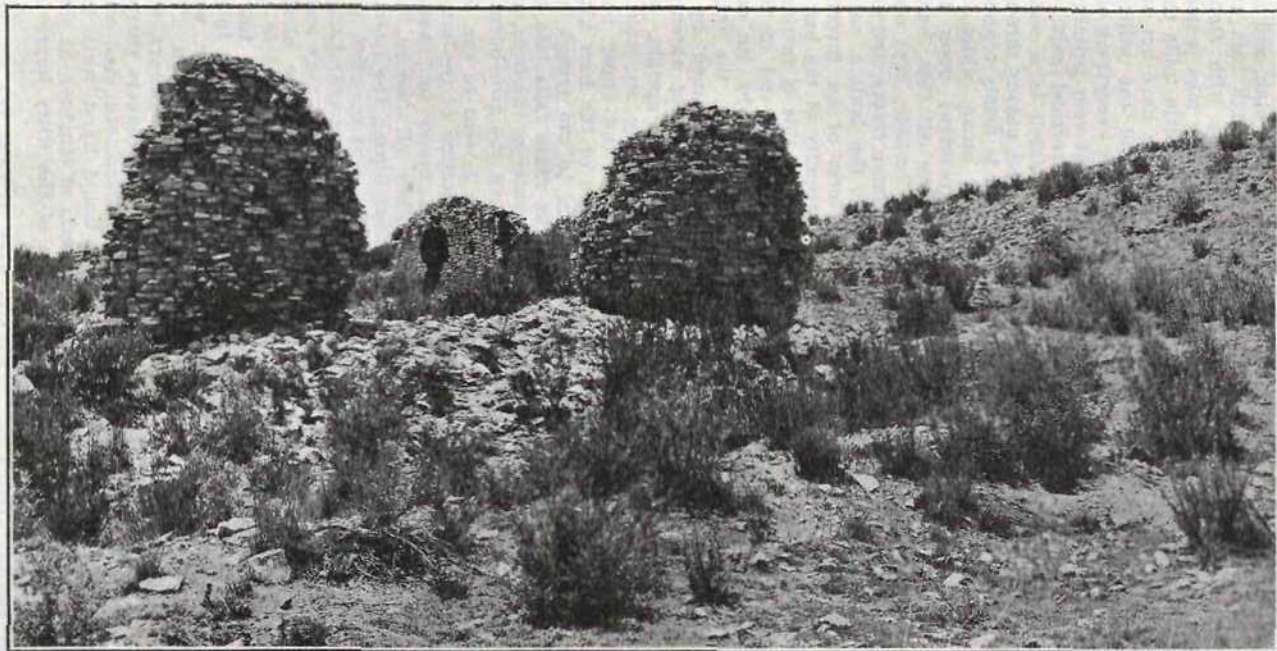
"On the road side, we noticed a great deal of the same species of holly that we had seen in the Canon Inferno (Hell Canon). We also saw the pinon and the varieties of cedar; one of which our Spanish guide called cedro and the other savino. We caught sight of Manzano when but midway between it and our morning's camp. It is one of the largest towns that we have met with on the west side of the river. Many of the houses have their fronts neatly whitewashed, and the church has its whole facade whitewashed with a preparation of calcined selenite. This mineral is often used as a substitute for glass in window sashes.

"When we first neared the town, several of the inhabitants came out to meet us with guns in their hands. The people still have a lingering inclination for the old government, and although none of their institutions have been changed, yet, it will be some time before they will regard the entrance of Americans otherwise than as an intrusion. We encamped close to an acequia that feeds the mills of the town, after passing through the most central streets of the place. Near our camp there was a large grove of apple trees; and on the east side of the town, near the mountains, a second grove. The trees are planted very close together.

"In the afternoon, we visited the town and its environs. On the side towards the mountains, there is a large dam, constructed of crib work, 12 feet wide, and 8 feet high, and 100 feet long, formed of rough logs and the interior is filled up with stones and earth. Just now the lake is nearly dried up, and the little mills that its waters used to turn have not sufficient power to grind the miller's corn. These mills like everything else in New Mexico, are of very primitive style. There is a vertical axis, on the lower end of which is a water wheel; the other end passes through the lower burr, and is firmly connected with the upper stone, which, as the axis turns, revolves upon the lower stone. Above all this, hangs a large hopper of ox-hide, kept open at the top by a square frame, and narrowed off towards the bottom, so as to present the form of an inverted cone. In the extremity of the bag is a small opening, and this is fastened to a little trough. One end of this trough being supported by its connection with the hopper, the other end, or mouth, is sustained by a horizontal strip of wood, of which an extremity rests on an upright, and the other is upheld by an inclined stick that rests on the upper burr, so that the motion of the burr gives a jostling motion to the trough and hopper; thus the grain falls into the opening in the center of the burr, and passes out between the two burrs.

"In the evening I went to the fandango, at the invitation of the mayor and met with a merry and happy-hearted set. They all danced, and scarce a moment during the evening but what the floor was occupied with couples whirling in the graceful waltz. They danced the 'cumbe,' they waltzed and danced again. The alcalde and his wife sat at the head of the room; she had a black bottle full of aguardiente and this she dealt to the most honored; and a peasant went round the room selling apples. The music was produced by guitars, violins and voices. The singers composed their songs impromptu; and often the listeners would burst forth into lengthened peals of laughter, at some happy stroke of the witty improvisation.

"While here, I made the acquaintance of 'El Senor Don Pedro Baca,' one who has charge of the silver mines. He told me that there are, in the mountains, mines of silver, copper, iron, and azogue; by this last



Photograph by Jesse Nusbaum.

OLD CHURCH RUINS AT TABIRA.

According to Bandelier, this is the older church ruin, while the larger and newer church with its great convent was never completed. One theory, thus far unsubstantiated, has it that the smaller church was built for the neighboring Jumanos, while the larger was for the Pueblos.

word, I understood him to mean quick-silver; but in strict mining language, azogue is used to mean silver ore adapted for amalgamation; for the ores that I brought to the United States, and which he called azogue, do not contain any mercury."

Manzano being some distance from the nearest railroad and remote from the stream of tourists that pours through, rather than into New Mexico, has preserved many of the picturesque ways of the olden days so vividly described by Lieut. Abert. It is a prosperous, self-sufficient community that asks no special favors of the world and makes but few concessions to it. However, in these days, when life to many is "one automobile trip after another," Manzano will soon lose its primitive manners that are altogether charming, and those who would get a last glimpse of them must go now to view these mountain-bound plazas with their vistas of valleys, sierra, plains and alkali lakes.

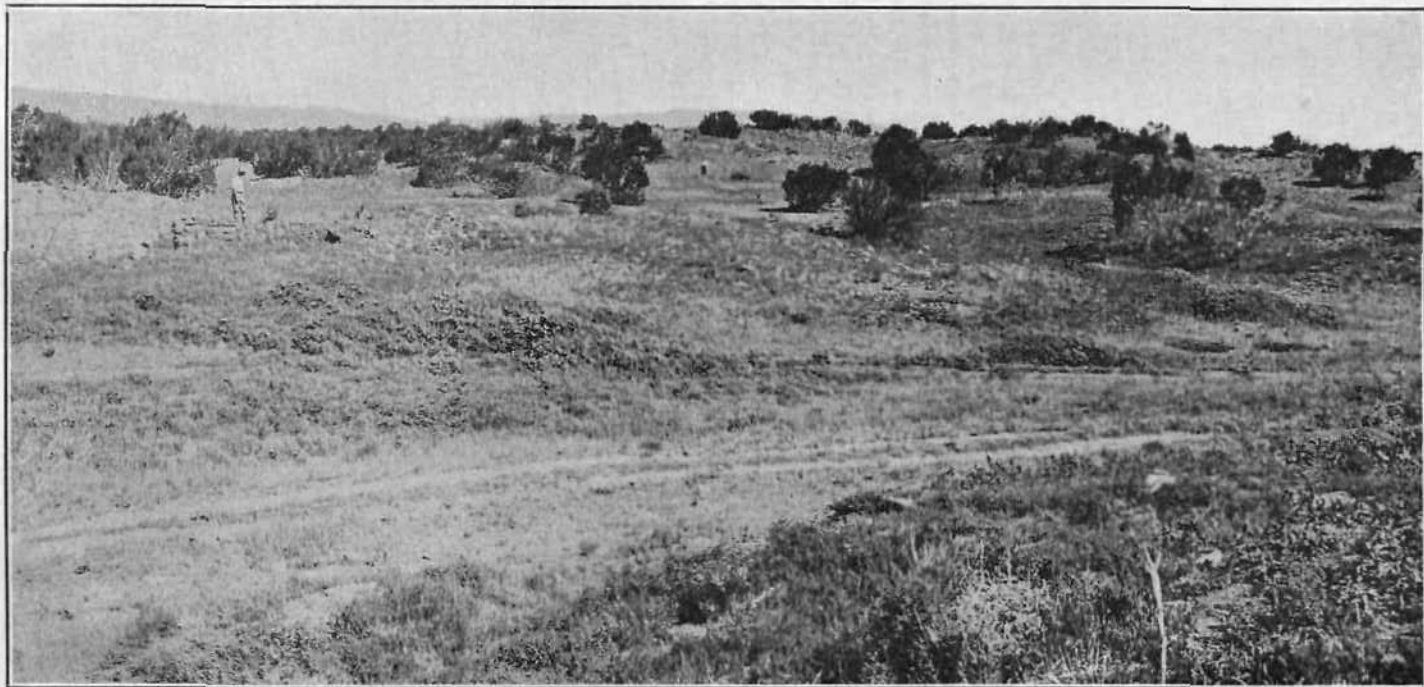
QUARAI AND PUNTA DE AGUA.

From Manzano to Punta de Agua and Quarai is a leisurely hour's walk, while the motor car makes the journey in less than ten minutes. Punta de Agua is neither as large nor as picturesque as Manzano but is nevertheless attractively located. Just beyond the settlement, around the bend of the road, is Quarai with its fine mission church ruins, visible for miles as one approaches the mountains from the east or the south. Considering their vicissitudes and the ruthlessness of treasure hunters, the walls are well preserved. No matter from which side one looks upon the ruin, it is one of striking beauty. The most impressive view, however, is from the top of the mound under which are the ruins of the ancient pyramid pueblo. From thence one looks through and over the broken walls far beyond to the Pedernal hills, while cottonwoods and timbered crests form a charming frame

for the sanctuary. The site has been acquired by the Museum of New Mexico through the generosity of J. W. Corbett, M. T. Dunlavy and W. M. McCoy, but the title has been attacked lately in court and until it is quieted, not much can be done to protect the church and its adjoining ruins. The chief danger to the church edifice lurks in the habit of nearby residents removing from the lower portions of the walls, stones with which to build their habitations, thus weakening the entire ruin. The main walls still stand twenty feet high and are a dark red and brown color, being constructed altogether of thin fragments of sandstone. The foundations of the convent are almost level with the surface but the outline of this structure, which adjoined the church on the east, is still well defined. Of course, there are heaps of fallen stone and rubbish inside and outside of the walls and abundant evidences of gophering by deluded treasure hunters.

Southwest of the main pueblo, lies a meadow, partly swamp land, from which gush forth springs watering a cottonwood grove that makes an ideal camp ground and picnic park. On the edge of it, toward the main pueblo, is located what appears to be the most ancient of the ruins in this locality, which a few years ago was partly excavated and trenched by the School of American Archaeology. It was a round community building, resembling Tyuonyi in the Rito de los Frijoles Canyon of the Pajarito Park, west of Santa Fe. It yielded a number of fine pottery specimens and artifacts that point to a long pre-Spanish occupation. From close against the outer wall twenty-two human skeletons were taken.

The springs in the cottonwood grove furnish the water supply for Punta de Agua, which owes its name to them. They are the natural explanation for the occupation



Photograph by Jesse Nusbaum.

THE MOUNDS OF CUARA.

In the foreground to the right is the edge of the more primitive mound excavated in part by the School of American Archaeology. Across the road are the mounds of the community house, a huge pyramid structure that rose four stories high in parts.

of the site in ancient times. Still farther up the hillside, a distance of about three miles, there are more springs, yielding a much heavier supply of water, which is to be piped from the ranch of Jacobo Chaves to Mountainair. The panoramic views to be obtained from this higher location are magnificent. Still farther beyond, at a considerable elevation, are extensive fields cultivated in ancient times.

For the brief time that Quarai, or Cuara (Curai, Cuaray, Coarac, Cuarac), figures in the Spanish annals, it was an important outpost. It was a Tigua pueblo and had a large church, dedicated to the Immaculate Conception, says Bandelier, basing his statement upon Vetancurt. The conversion of Quarai is ascribed to Fray Esteban de Perea, between 1617 and 1630, but most probably in 1628. Bandelier had in his possession the original of two short notes written by Fray Juan de Salas to Governor Alonzo Pacheco de Heredia, dated "de este Pueblo de Coarac," September 24 and 28, 1643. Among its missionaries, Fray Geronimo de la Llana, 1659, is best known.

In 1669, Quarai was still inhabited, but in 1671 Indians from Quarai were married at El Paso del Norte by Fray Garcia de San Francisco. The road to the Salines was then blocked by Apaches and it is possible that some of the pueblos were already abandoned. It is certain, anyway, that Quarai was abandoned before 1680, and that its people found refuge at first at Tajique and then gradually drifted to El Paso. When the people of Isleta del Sur, just below El Paso, are asked whence their forefathers came, many of them point to the north in reply, saying "From Quarai!"

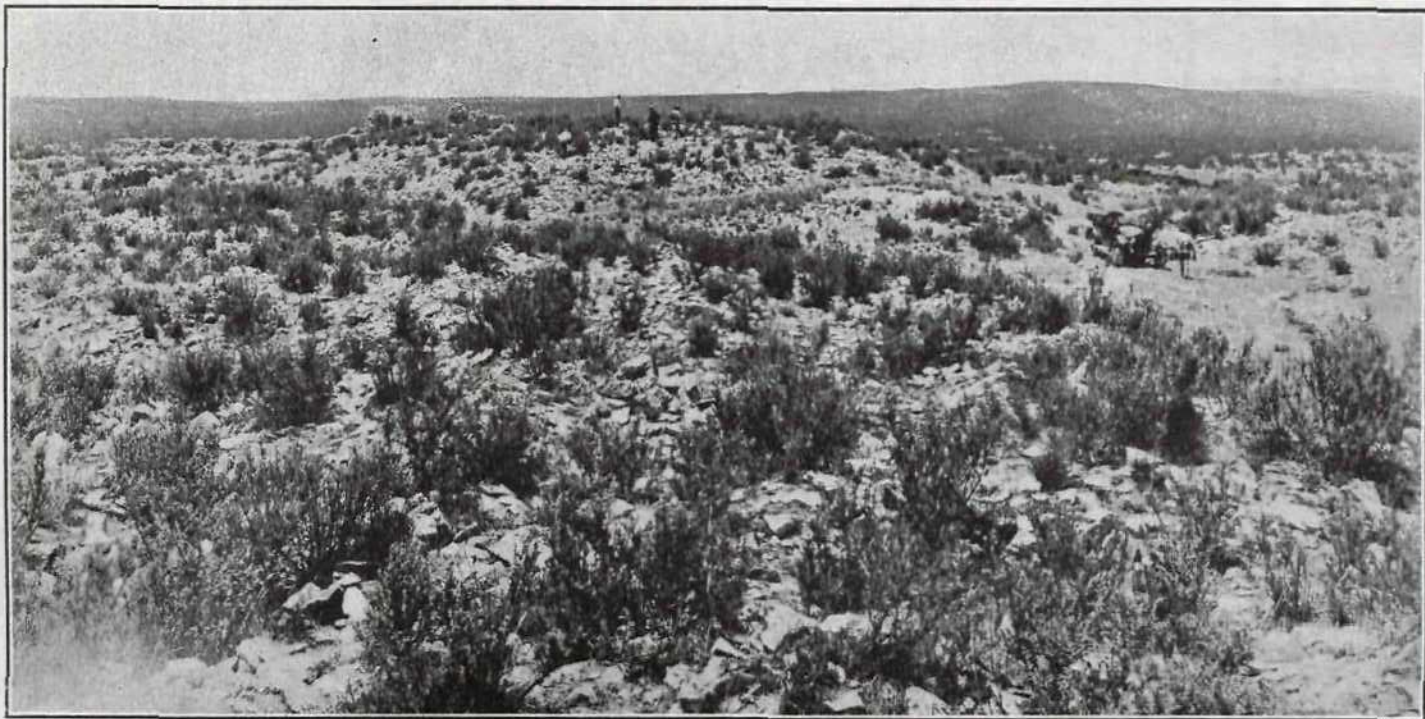
Bandelier, undoubtedly, was right when he declared that the Apaches were responsible for the abandonment of the Saline pueblos. This

was a valid explanation* for the concentration order by the Spaniards, but was given probably as much for their own security as that of the Pueblos. There were, no doubt, contributing causes,—the drying up of springs, sickness, epidemics, such as that which in comparatively recent times caused the abandonment of Pecos, or a period of drouth,—which, together with frequent raids by Apaches, combined to facilitate the task of persuading the Indians to take up their residence with their kinsmen in the Rio Grande Valley. Bandelier tells of an alliance between Quarai and the Apaches, and the Spaniards no doubt felt more at ease to have the several thousand Saline Pueblos gathered in centers where the Spanish civil and ecclesiastical authorities had the support of a fairly adequate military force and had easier access to the base of supplies in Mexico, the direct road from the Salines to El Paso being infested by Apaches.

Despite the statement of Bandelier, that the Saline Pueblos had no defensive works and were not well located for repelling attacks, the present day visitor is impressed with the natural strength of their location and the fact that Quarai, for instance, was a walled city, just as was Pecos. The encircling wall of the former has been located and mapped by the School of American Archaeology. There are traces of at least partial circumvallation also at Tabira.

There is no evidence that the

*The old Pueblo custom of moving a settlement was for the entire population to transfer themselves and their belongings suddenly to a new site. Tradition tells of the moving of some of the villages from one site to another for seven or more times.—J. P. Harrington. Naturally, whenever an abandonment of a pueblo built with such laborious effort, was ordered either by Spanish or Pueblo authorities, some plausible explanation for the removal had to be given.



TABIRA IN ITS GRANDEUR AND ISOLATION.

Photograph by Jesse Nusbaum.

Situated in a vast amphitheater, the hill upon which Tabira was built, dominates the country for many miles around. It is no wonder that myths grew up about this lonely site, with its huge pueblo and church ruins that have been the goal of treasure hunters from time immemorial.

Pueblos were driven out of the Saline villages by Apache attacks, except, perhaps, at Tajique. The abandonment was apparently voluntary and peaceable, inspired by fear of further attacks like those experienced in the past, rather than by any immediate danger. The Pueblos no doubt carried with them the things they treasured and there is no sign of pillage except by modern vandals, and no appearance of conflagration or sudden destruction, despite the rather persistent tradition of volcanic and seismic destruction in this region.

Bandelier gives us a graphic description of Quarai, saying:

"Quarai is among the few picturesque sites in New Mexico that deserve the epithet of lovely. Situated almost on the southwestern edge of the dismal salt lakes, it is separated from them by wooded hills, while to the west and northwest the valley of Manzano and the mountains beyond are in full view. The red sandstone formation of the rocks that crop out in the neighborhood is in pleasant contrast with the sombre green of the trees and shrubbery covering the hills. I saw Quarai several times, always in winter and under the most unfavorable circumstances, and yet carried away with me a vivid impression of its singular beauty."

What would he have said had he seen Quarai as it appeared in the early days of July of this year? The site was carpeted with wild flowers in glowing colors. The splendid cottonwood grove cast dense shadows upon the green turf beneath it. From the meadow came the trill of the meadow lark, flocks of birds rose from the rushes, and water fowl ran along the bank of the stream. The kivas which Bandelier could not find were clearly outlined by purple verbena in the court that separated two wings of the community house, occupying a considerable portion of the narrow patio. The mounds rose above each other in regular tiers to the highest point, where the structure reached the third or fourth story. Europe

may boast of its castle ruins and California of its missions, but one will seek vainly elsewhere in the United States to find ruins more appealing, more redolent of romance and wonder than Quarai on a summer's day.

Let the imagination revert to the past! Let it reconstruct the huge pyramid house of red sandstone, the roofs thronged with a people whose culture is rooted in the dim past. Let it reconstruct the beautiful mission and its convent as they were reared by the women across the wide natural pass that gave ingress to the little republic, a domain of romantic charm. Watch the procession led by the somberly-clad Franciscan padre, attended by acolytes, followed by dark-skinned warriors and gaily clad squaws, the latter carrying their papooses on their backs, all wending their way to the church. Then listen to the chant and orisons ascending to the Supreme Master Builder. As the sun crosses the meridian, keep your eyes upon the kivas. Observe how out of the kiva of the summer people and that of the winter people emerge the men in their ceremonial gorgeousness, to fling themselves with abandon into one of those wild, throbbing dances into which they pour their hopes and prayers, a poetic rite that was the heritage of generations of men who had seen visions and found a way to express them in rhythmic motion. Suddenly, there is an outcry of terror. Despite the watchfulness of the outposts in the hills, of the guards on the rooftops, the Apaches,—the Red Death,—had crept upon the community. There is a brief clash of conflict, the shriek of fury, the moan of the dying. Before resistance is completely organized the invaders are gone again, carrying with them women and children, leaving a trail of blood, driving off the animals in the fields, tramping down the crops. Then comes sunset, the night and

moonlight. More romantic picture human eyes never beheld as the fires blaze up, but above them is heard the mourning of those who have been bereft, the wail of the women for their dead.

Is it a wonder that painter and writer are coming to the Southwest where they find intact historic settings for such episodes? Where every boulder cries out a thrilling story and every hilltop has its shrine? Where there are ruins dimmed by age and hallowed by mystery and beauty? Where the recorded facts of the archives are as colorful as legend and tradition of the Ancients? And all under skies bluer than those of Castile, under a sun brighter than that of Tangiers!

Bandelier continues his description:

"Above the low mounds of the former pueblo rises the stately ruin of the old church, a massive edifice of stone, the walls of which are still at least fifteen feet high and four feet thick. It measures 50 by 104 feet and had two towers on the eastern facade. All the woodwork of the interior has been burned. The convent is reduced to indistinct foundation lines measuring 49 by 58 feet. The pueblo is built of sandstone slabs, and the walls have the usual thickness of 10 to 12 inches. The average

size of a dozen rooms which I could measure was 11 by 14 3-4 feet. The pueblo formed at least three squares, surrounded by the usual large buildings. I am not sure as to the existence of estufas, and deep snow filled every depression, and covered the mounds with a layer at least a foot deep. But on a second visit, when there was less snow on the ground, I think I noticed traces of a circular estufa. On the same occasion I also had an opportunity of examining the manufactured objects. The prevailing pottery, and potsherds of the ancient black and white and corrugated varieties, were exclusively represented on the top of a hill at the southern extremity of the pueblo ruins. This locality, with pottery so distinct from that on the other mounds, and still not farther than twenty meters from the last of them, looked as if small houses had formerly stood on it. Much flint and small obsidian was scattered over the mounds indiscriminately.

"Quarai is credited with having six hundred inhabitants, and I should not consider this to be an exaggeration, as the houses were probably two and three stories high. There is an arroyo running past the village, and a spring nearby with permanent water. The soil is fertile, but I think it probable that most of the fields of the pueblo lay higher up towards the Manzano. Probably, the apple grove of Manzano was the orchard of the former mission of Quarai. Gardens, fruit trees and vineyards in New Mex-



Photograph by Jesse Nusbaum.

MASSIVE WALLS OF CUARAI MISSION.

The Convent adjoined the east wall, shown on the right. The front faced the south.

ico in the seventeenth century were mostly connected with missions, except at Santa Fe, and perhaps in the Río Grande valley, where were the large haciendas of the Spanish colonists. If there was no mission at Manzano, then the old fruit trees must have belonged to the mission of Quarai. There were some Spanish ranchos in the district of the Salines, but cattle and horses, and not fruit raising, occupied the attention of their owners."

Lieut. Abert, almost forty years before, found the walls of the church as they then stood to be 60 feet high. Today, scarcely twenty feet remain. He says:

"Here there are yet standing the walls of a time-worn cathedral. It is composed entirely of stone, red sandstone, the pieces are not more than two inches thick. The walls are two feet wide, and the other face dressed off to a perfectly plain surface. The ground plan presents the form of a cross with rectangular projections in each of the angles. The short arm of the cross is 33 feet 2 inches wide, the long arm is 18 feet 9 inches wide, their axes are, respectively, 50 feet long, and 112 feet long, and their intersection is 30 feet from the head of the cross. The rectangular projections that partly fill the angles formed by the arms are six feet square. At the foot of the cross are rectangular projections, that measure ten feet in the direction of the long axis, and six feet in the other direction. Around the church are the less conspicuous remains of numerous houses, that had been built of the same material, and the surfaces or the walls finished with tools, but these houses are almost level with the earth, while the walls of the ancient church rise to the height of 60 feet."

On sites adjoining the pueblo, both to the north and to the south, in later years, houses were built of stones taken from the church and pueblo ruins, but these newer houses also have been abandoned and are in ruin.

Charles F. Lummis, a master of descriptive word painting, gives us an impressionistic view of Quarai mission, when he writes of it as

"An edifice in ruins, it is true, but so tall, so solemn, so dominant of

that strange, lonely landscape, so out of place in that land of adobe box huts, as to be simply overpowering. On the Rhine it would be a superlative, in the wilderness of the Manzano it is a miracle. Its great shadowy walls are neither so lofty nor so thick as those of Abo, but neither are they so breached. The great rectangle is practically complete, with three walls largely perfect, and part of the fourth. The masonry is quite as fine as at Abo, and the architecture is imposing. Its roof long ago disappeared, but the massive walls stand firm as the mother ledges, and still hold the careful mortises for long forgotten rafters. At the foot of the hillock is a tiny rivulet, sentinelled by a tall and lonely pine, and upon the hillside, a few hundred yards south, is a large, strange, circular enclosure fenced about with upright slabs of stone."

ABO AND ITS MISSION.

Abo is the first of the Piro villages, for Quarai is the last pueblo on the borders of the Salines positively known to have been inhabited by the Tiguas. On the southwestern corner of the basin in which Quarai is situated are ruins which Bandelier presumes to be those of a Piro village. However, the Abo church is the first of the Piro missions whose ruins are accessible today.

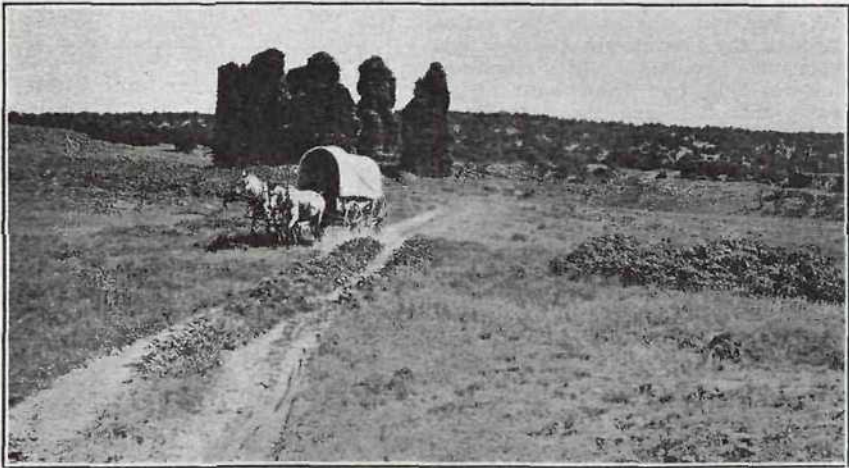
Lummis found the approach to Abo rather sombre and unprepossessing, but at this day it lies through avenues of piñon and cedar, flanked by occasional cultivated fields and dotted by houses of homesteaders. As one steps over the mountain rampart that encloses the Abo valley on all sides, it is difficult to repress exclamations of delight and admiration. A more picturesque setting or a nobler ruin than that of the Abo church it is difficult to imagine. While located in a valley of great beauty, the church and pueblo itself are on a hillock which dominates the immense amphitheatre, mountain-locked all around, for even the Abo river cuts its way through a pre-

cipitous canyon. On the mound of the pueblo have been built a number of houses of stones taken from the church. These houses, too, are roofless ruins now and fit perfectly into the picture. The jagged church walls are of a redder hue even than those of Quarai. In fact, one must go to Granada, Spain, to find anything so exquisite in coloring or form. Time has bitten into Abo more savagely than into the other two Saline mission ruins, but it has left the remaining structure more chaste, more noble. One cannot but help reach the conclusion that the women who laid these walls did it lovingly, caressingly, somewhat with the spirit that animates the artist. The beams are said to have been the most beautifully carved and the most massive in the Southwest. The deep recesses in which their ends rested, at this day have the appearance of stone fretwork. The inside of the church had more light than those at Quarai or Tabira. The window toward the west was very large and had a flare that even at this late date gives distinctiveness to the ruin. But Abo is doomed, for one of the huge walls

has a decided tilt. The other wall is so well buttressed, so massive, that perhaps it would last another decade or two, but should the tilting wall crash against it, as appears to be inevitable, it too will crumble to the ground. Huge heaps of red sandstone show where but recently the end walls collapsed. What a pity that in this age of material wealth a few thousand dollars cannot be found to pay for the work—the material is at hand—of buttressing the walls with supports to such an extent that they could be preserved for ages to come, a historic landmark that would delight thousands, a lasting memorial not only to the Franciscan martyrs but also to the devoted Pueblo women who reared them for the sake of a new religion that supplanted their one-time honored faith.

But let Bandelier tell us of Abo as he found it:

"The Valley of Abo, west of the Mesa de los Jumanos, is a long depression, partially wooded, with a tiny stream, the arroyo de Abo running through it for some distance. The village of Abo itself lies twenty miles south of Manzano, in a pleasant valley, which, both higher up and



Photograph by Jesse Nusbaum.

THE ROAD FROM CUARAI TO ABO.

It also leads to the Manzano Mountains. The Cuaraí Mission in the background. The Cuaraí pueblo mounds in the foreground to the right. Old Spanish house ruins on the left.

lower down, narrows to a canon of moderate depth. The site is quite romantic. Cliffs of red sandstone rise along the little brook, crowned by clusters of pines, cedars and junipers. In the northwest, the Manzano chain like a diadem, silvery white in winter, dark green in summer, crowns the wooded landscape. Nearly in the centre of this valley rise the picturesque ruins of the church of San Gregorio de Abo, with the remains of its convent and adjacent to it are the rubbish mounds of the former pueblo, forming several quadrangles communicating with one another. It was a pueblo similar to Cuaraí, but larger, and built of stone and mud. Abo lies nearly a thousand feet lower than Manzano, and there was consequently less snow on the ground, so that I could make at least an approximate ground plan of the ruins. But I had the misfortune afterward to lose the detailed field-notes upon which this ground plan was based. The church is smaller than that at Cuaraí, and built mostly of stone, with some pillars of adobe. The stones from the pueblo ruins have been used for building the houses of the modern hamlet of Abo, so that these ruins show traces of only one story. But the inhabitants informed me that forty years ago there were three stories visible in places. I saw two circular estufas, and judge the pueblo to have contained as many as a thousand souls, provided all the houses were simultaneously occupied. The pottery is of the coarsely glazed kind, and flint and some obsidian was also noticed by me. Old residents of Abo informed me that, when they first opened the lower cells of the pueblo, they found in some of them unburied skeletons."

Bandelier then quotes Lieut. J. W. Abert, who visited the place on the 4th of November, 1846, his being the earliest published description of the ruins in the English language:

"At sundown we reached Abo, where I found my party comfortably encamped. This town is also one of the ancient ones, there are most extensive ruins scattered around in all directions, all built in the style of those at Cuaraí. Here also, is a large cathedral. Its ground plan is in the form of a cross, the short arm is 22-1-2 feet wide, the long arm is 30 feet wide, their axes respectively 27 feet

and 120 feet, and at the head of the cross there is a projection about nine feet square, this makes the total length 129 feet. The areas, intersected at a distance of 34 feet from the head of the cross, or 43 feet including the projection. The areas of the cross coincide with the lines that pass through the cardinal points. In the east end of the short arm there is a fine large window, the sides of which have what is called a flare, a style often used in Gothic windows. The walls of the church are over two feet in thickness, and beautifully finished, so that no architect could improve the exact smoothness of their exterior surface."

Citing Bandelier further:

"The rocky bed of a small torrent called Arroyo del Empedradillo, separates the church and the ruins adjacent to it from another pueblo ruin consisting of several connected rectangles with faint traces of estufas in their interior squares. These ruins are much more obliterated than those about the church; the mounds are lower and more flattened, and gave me the idea that they were the vestiges of an older pueblo of the same tribe. According to the size of the mounds and their number this second village contained more people than the first. I cannot decide whether there were two pueblos of the Abo tribe successively inhabited, or whether there was but one, built on both sides of the arroyo. The pottery is the same in both, with coarsely glazed decorative lines and symbols, plain red and black. Some corrugated and indented shards also occur. If the size of the church be any indication, I should presume that the historical village was the one near it, and that the ruins beyond the Arroyo del Empedradillo are those of a more ancient town, abandoned previous to the establishment of the mission, or soon afterwards. If, however, both settlements were occupied contemporaneously, that would make Abo a very large pueblo, probably equal in population to Pecos.

"No information on this question is found in the documentary material at my command. Abo is mentioned as early as 1598; but the foundation of the mission dates between 1625 and 1644. Fray Francisco de Acevedo* is credited with having caused the erection of its church, who died in Abo on the first of August, 1644, and his body was buried within the

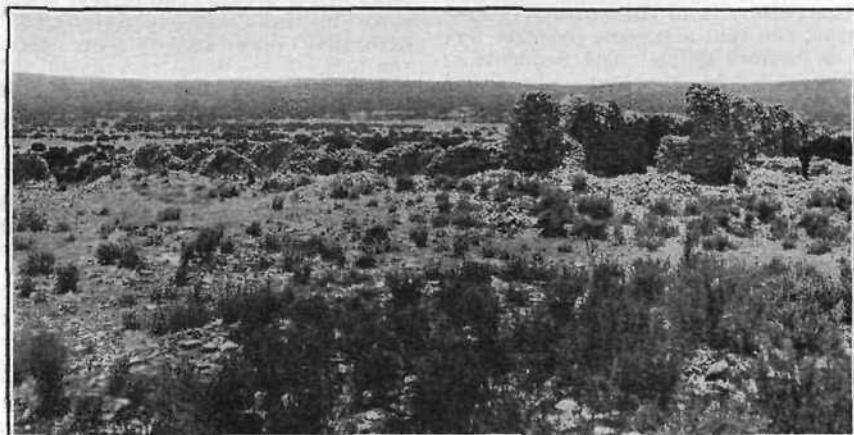
temple. The Apaches compelled the abandonment of the mission and of the pueblo before the insurrection of 1680, and many of the inhabitants were already at El Paso del Norte in 1671. Today the Piros of Senecu in Chihuahua claim to be the last descendants of the Abo tribe.

"I cannot sufficiently insist upon the necessity of studying the folklore of the small remnant of the once numerous stock of the Piros which today inhabits Senecu. With the help of these traditions we may possibly be able to determine which of the other ruins in the Abo valley are prehistoric, and which belong to the historic period. The disposition of the Piros, the long period of complete abandonment of their country owing to the Apaches, and the absence of documentary material concerning the missions, have created a blank which could be partly filled only in Spain, unless the folk-lore of the Piros at Senecu comes to our rescue.

*Francisco de Acevedo. Native of Sevilla, Spain, son of Gonzalo García del Terrero and Isabel de Vargas. Received the habit of his order in the Convento de Mexico, January 10, 1625. Built the churches at Abo, Tenabo, and Tabira, after his assignment to the Piro by Perea; died and was buried at Abo August 1, 1644. Vetancurt, *Menologio*, 260, ed. 1871. See also Bandelier Final Report, pt. II, pp. 273, 274, 290.

"Abo is not the only historic pueblo in that vicinity. Fray Francisco de Acevedo is said to have built a chapel at a pueblo called Tenabo, but where it stood I am unable to determine. I have thought that the ruins at Siete Arroyos, to the left of the road that leads from Abo to the Rio Grande, may be those of that village. I was informed of the tradition that there had formerly been a church on this spot. The ruin at Siete Arroyos, which I was prevented from visiting by the state of the weather and by sickness, is described as that of a pueblo smaller than Abo, but larger than the other ruins found elsewhere in the valley. Of these I visited four with better success than I had at the main ruin.

"Three miles south of Manzano begins a wooded ridge, on the summit of which stands a little settlement called La Cienega. It is a very cold spot in winter, but there is permanent water and fertile soil. Precipitation is also greater at that altitude than lower down, so that irrigation was not required for the corn, beans and squashes which only the Indian cultivated previous to the introduction of plants by the Spaniards. I saw pottery found at Cienega, belonging exclusively to the most ancient kinds. I was not surprised, therefore, to hear that the remains of small houses have been found scattered over the site of the present Mexican settlement. Such ruins also occur farther south,



Photograph by Jesse Nusbaum.

DESOLATION AND LONELINESS.

Perhaps not another spot in New Mexico impresses the visitor with such feeling of awe, weirdness and mystery as the site of Tabira, the Gran Quivira of later-day legend and story. The ruins of the large church building and the convent adjoining, covering the area of a city block, loom up across the entire picture, while in the foreground is some of the debris of the great house pyramid or community dwelling.

near the Abo road, at the Loma Parada, and east and south of Abo.

"About a mile east of Abo, on the Cerro Pelon, a bare hill in the centre of a basin partly overgrown with trees and shrubs, stand some more flat mounds, which were houses of the small type. The pottery on their surface is characteristic, not a single glazed specimen appearing among it.

"At the base of the western front of the Mesa de los Jumanos, about four miles northeast of Abo, at a place which is called Torneada, I examined the ruins of two houses. The foundations are plainly visible, and from the number of cells I infer that at least one of these houses, if not both, had two stories originally. The walls were of irregular blocks of the red sandstone common to the country, of the usual thickness. The pottery was distinctly of the large-house kind, having a thick glaze over the decorative lines and symbols. Traces of a circular estufa appeared near one of the buildings.

"There is an extensive view from the spot on which these ruins stand. The whole valley of Abo spreads out, and west of it loom up the peaks along the Rio Grande, from the Sierra de los Ladrones in the north to the Fra Cristobal in the Jornada del Muerto. The Mesa de la Torneada, at whose base the ruin lies, is an advanced post of the great Jumanos plateau, and the nearest watering place, the 'Aguaje,' is about a mile distant. For the few families, perhaps sixty people, which the two houses could shelter, there is sufficient arable soil in the neighborhood. As to the tribe to which this little pueblo may have belonged, I conjecture that they were Piro, since the latter held the entire valley, and I have no knowledge of any other stock preceding them that dwelt in buildings of the large-house type. The ruins do not show as much decay as some of the mounds at Abo.

"If we follow along the western front of the Mesa of the Jumanos to the southward, a series of dry 'caneadas' are crossed, all of which contain patches of very fertile soil, although there is no water. But the summer rains suffice for the growing of corn, and other vegetables, and the present inhabitants of Abo remove these spots in summer, rather than rely upon the scanty water supply afforded by the inconsiderable Abo Creek. The Canada del Largo is the most considerable of these gulches,

which all descend from the Great Mesa, and through two of which old trails lead to the famous ruins of Gran Quivira, or Tabira. Not far from the Puerto Largo I found a number of ancient summer lodges, or ranches, of Pueblo Indians, which were indicated by posts stuck in the ground, and by forked branches, half buried, scattered about them.

"At the first glance these vestiges resembled those huts of nomadic Indians; but a number of glazed potsherds scattered about indicated that earthen vessels had been used on the spot for a certain length of time; and, besides, the appearance of foundations of rubble proved that I had before me the remains of ancient summer ranches of sedentary Indians. At this day the people of Abo spend part of the summer there to watch their crops.

"There is a very characteristic cluster of small houses on a wooded mesa above the bottom in which the ruins of the church and pueblo stand. This cluster lies in a direct line not over a mile from Abo. A number of foundations of rubble, little mounds of rubbish, round as well as elongated, indicate buildings varying from 3 meters (8 1-2 feet) square to 3 by 6 meters (8 1-2 by 17 feet.) The potsherds are characteristic, and as different from those at the large pueblo as is the pottery of the small-house village above the mouth of the Parida, near Socorro, from the pottery of the compact ruin in the bottom below. Here also were vestiges of the two types of buildings in close proximity to each other, indicating two successive occupations, perhaps by tribes distinct from each other, perhaps by one and the same tribe changing its architecture and house life in the course of time.

PICTOGRAPHS OF THE PINTADA.

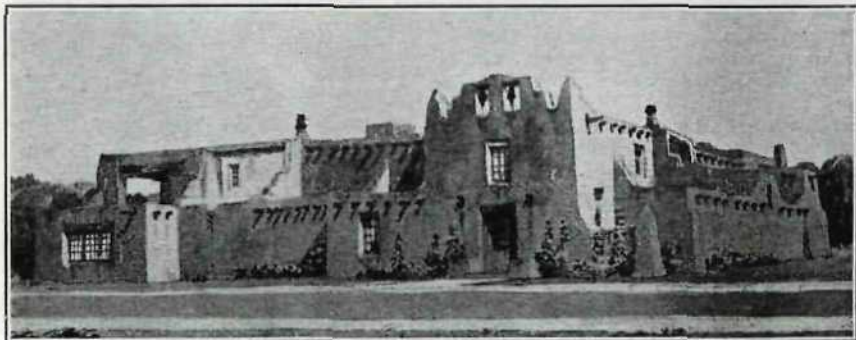
"The mesa or loma on which these small houses stood overlooks a gorge bordered by low cliffs, called the Canon de la Pintada. The name is derived from a number of aboriginal pictographs, executed in red, yellow, green, black, brown, and white, in sheltered places on the walls of the cliffs. They are mostly human figures and their colors led me to suspect that they date from the historical period, for the yellow looks like chrome-yellow and the green is far too bright not to be some faint unknown to the primitive Pueblo Indian. Some of the figures are interesting;

for example, a man in yellow, with a round cap on his head. This figure is called by the people of Abo "El Capitan." Really important are two figures of Indian Dancers, one of them masked, showing the naked and painted chest and the gaudy kilt worn by the men on solemn occasions. The other plainly represents a 'delight-maker,' or jester, with his body painted black and white after the manner of the Koshare, Kosare, Kuenshare, or Ship'hung, as these clowns are called among the Queres, Tehuas, Jemez and Tiguas. By the side of the human figure stands a snake, apparently rising to, or descending from the face of the dancer. When I showed a copy of this pictograph to one of the leading Shamans of San Juan, he appeared startled, and finally confessed that it was a record of the snake dance, in the shape of a Koshare playing with the reptile. As the paintings are probably of the time when New Mexico was already Spanish, I believe that the Piros of Abo made them. The snake dance is a Cachina, and these pictographs therefore confirm what my Indian friend from Cochiti stated in regard to the paintings at the Cueva Pintada,—that such records of the Cachina were usually executed whenever a pueblo was to be forever abandoned. Should this hold good in the light of future investigations, it is quite likely that the paintings in the Canon de la Pintada date from the time when Abo was definitely abandoned, or from about 1671. Besides the human figures, there are various symbols, such as the rain, shields, and head-

dressess, all of which figure in Pueblo Indian dances, and more particularly in the Cachinas.

"An arid plain separates the pass of Abo from the Rio Grande bottom, and neither on that plain nor in the pass itself have I heard of or noticed any vestiges of Indian habitations. Absence of permanent water and lack of precipitation, combined with the want of arable soil, render it likely that these sections will be found to contain no ruins. West of Abo there were Piros pueblos along the Rio Grande, at Sabinal and La Joya; but at least twenty miles in a straight line separated them from the nearest village in the Abo valley, at Siete Arroyos. This separation of the two clusters is interesting. It may bear upon the problem of how and from which direction the Piros reached Abo and the Salines, in time anterior to the sixteenth century; and whether their pueblos on the Rio Grande are not the result of gradual withdrawal from earlier settlements still farther east."

Pleasant is the trip along the Abo highway, from the Cave, with its pictographs and its innumerable swallows' nests of clay, eastward to Mountainair. The road skirts the cuts and embankments of the "Belen Cut-off," a splendid piece of railroad construction of the A., T. & S. F. The scenery is of the Cyclopean type, a variation of which is exemplified by the Grand Canyon. It is easy to figure the outlines of



From Water Color Sketch by K. M. Chapman.

THE EAST FACADE OF THE NEW MUSEUM BUILDING.

A strikingly beautiful replica of the Laguna Mission Church. The new Museum building has two fronts, the longer and main front on Palace Avenue and facing the south, and the other facing the east and separated from the Palace of the Governors by Lincoln Avenue, a beautiful resident street dominated by the Federal Building and Park, as well as the public school buildings and park at its northern terminus, two blocks from the Museum structures.

huge temples and palaces in the colossal buttes and escarpments that seem to bar the road over Abo Pass at every turn. Each hour of the day their aspect is changed by the shadows which they cast and by the sun's rays striking them at different angles.

At Abo is the last flowing stream as one travels southward. Even Mountainair, a typical new western settlement with aspirations for culture and an established Chautauqua, depends on wells and windmills for its water. The Santa Fe Railway has piped the water from Abo Canyon to its tracks, as for miles and miles along its lines it had difficulty in finding a satisfactory water supply for its engines. From Mountainair south to Tabira, there is not a spring, hardly an arroyo or a water hole.

This gives a somber, almost sinister aspect to nature. Not that this part of the country is a desert. It is an anomaly of nature here that the folds of the hills are studded and spangled with gorgeously colored wild flowers in summer, that the grass is knee high, that the cedar and piñon timber cover hundreds of square miles so that the landscape is green even in winter. While scientists discuss learnedly how it was possible for people to live in this region hundreds of years ago, homesteaders are pouring in, fencing the land, building houses, raising crops and supplying their need of water from wells. Instead of being a trackless wilderness, as it was only thirty and even ten years ago, the roads, especially along section lines, have multiplied in a bewildering way. The main highway is marked at infrequent intervals with white posts made of iron piping, but nevertheless it is difficult not to stray from it at the frequently recurring cross roads.

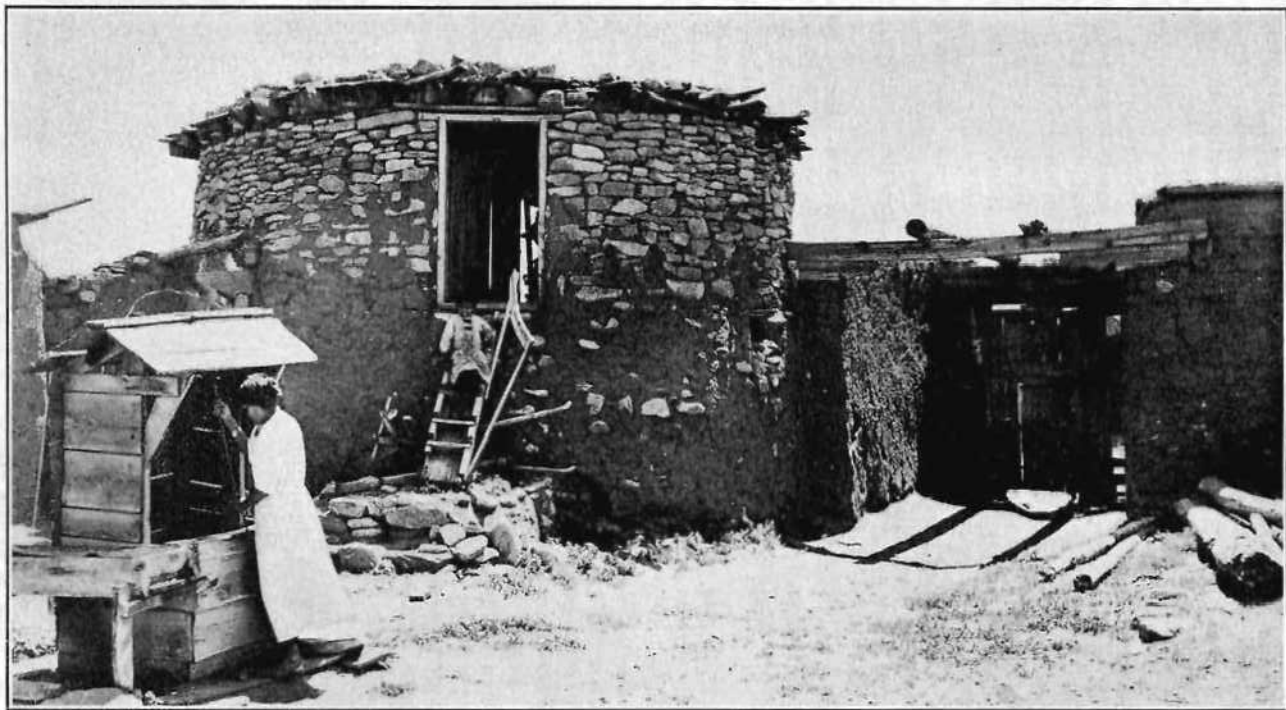
Despite the occasional farm houses and the increasing number of acres planted in corn and beans,

the region gives the impression of isolation. The darker hues of the mountains and trees, the undulating contour of the land which cuts off the far view, combine to make the land one of austerity, something like Cornwall, or Brittany, or the moors of northwestern Germany. One of the most desolate hills of all is crowned with the blue-gray ruins of Tabira, the Gran Quivira of the latter-day treasure hunters, the mysterious pueblo with the remnant of its two mission churches and huge convent. The walls of the larger of the two churches are visible for miles and dominate a huge amphitheater of far greater extent than that of Abo.

Approaching from the north, after leaving the main highway, which has become a transcontinental road, the traveler sinks ankle-deep into sand. As he climbs higher and higher, he is convinced that the sand known as the Medano is not a river bed, as Bandelier suggests, but more likely the beach of a vast and ancient lake that gradually subsided. This theory is supported by tradition and it explains some otherwise well night inexplicable phenomena of this weird and unusual land. The salt and alkali lakes, "The Accursed Lakes" of two of the legends told by Lumis, are perhaps the remnants of this vast body of water, which may have extended from the Galisteo Divide to the Jumanos Mesa, on which Tabira is located, and from the Manzanos to the Hills of Pederal, and that within comparatively recent geological times. Perhaps the surplus waters of the lake poured down the Tijeras, Abo and Hell Canyons on the west, wearing a deeper and deeper groove, at the same time seeping away also toward the east and the south.

TABIRA THE GHOST CITY.

Tabira is situated on top of a limestone hill that is honeycombed with subterranean clefts and cav-



ANCIENT SPANISH TORREON AT MANZANO.

Photograph by Jesse Nusbaum.

A reminder of the days when the "Red Death" (The Apaches) descended upon the settlements of the Manzanos. A typical court yard entered by the gate with the "Needle's Eye."

erns. There are spots on the hillside where the sound of the footfall awakens a resonance below. It is such spots that have been favorite points of operation for the treasure seekers. There are shafts on all sides, some of them opening subterranean caverns and tunnels. Only a few weeks ago, District Judge Herbert F. Reynolds of Albuquerque was invited in all seriousness by several citizens of Chilili to finance a treasure-hunting expedition to Tabira, where the Chilili promoters by sinking a shaft had uncovered a tunnel. In this they had proceeded sixty feet and then feared to go farther because of danger from falling roof. The promoters were not aware that they were violating federal as well as state law in trespassing on the site, for Tabira has been made a National Monument which preserves the misleading though romantic name of Gran Quivira. In July of this year Governor McDonald of New Mexico received a long letter from the Soldiers' Home in California, making detailed inquiry about the legendary treasure, the story evidently still finding wide acceptance.

At one spot just beyond the confines of the pueblo ruins a shaft has been sunk, at the bottom of which, 60 to 70 feet below the surface, where treasure hunters had been gophering recently, Mr. Nusbaum and Mr. Ward found a wooden crucifix. Lime rock, crystallized on its surface, formed the lower walls of the cavity. But none of the shafts and tunnels examined had seriously damaged the ruin and all diggings appeared to have been fruitless as far as lifting any treasure-trove was concerned. In the main sanctuary, the altar recess had been quite extensively excavated and there are prospect holes all over the convent and within the smaller and, presumably, older church.

There is a local story, no doubt of recent origin, for no trace of it

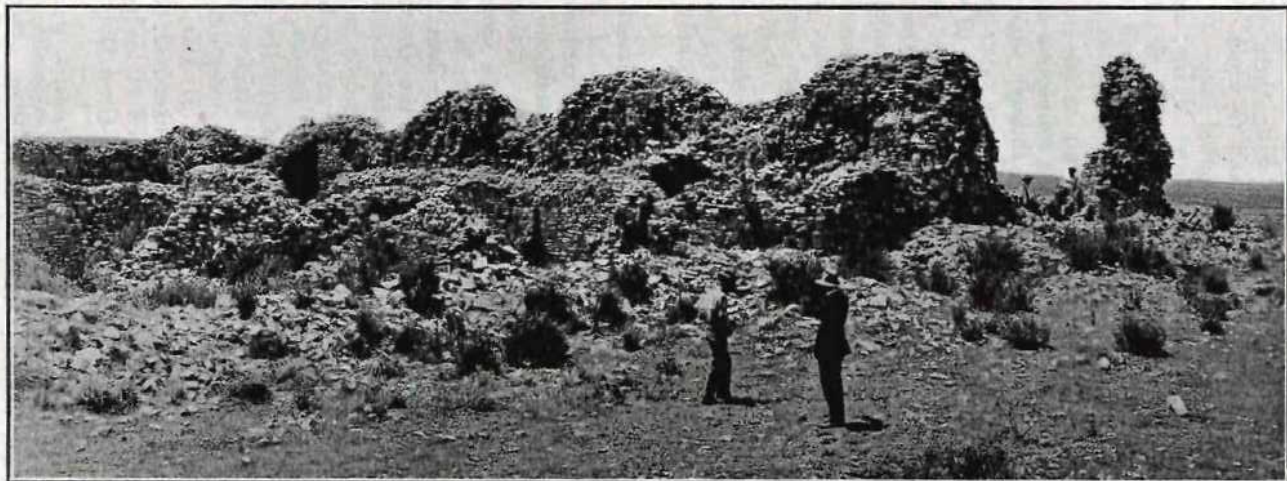
is found in the older literature, that there is a large cavern under the hill to which the last of the Piros retreated with their precious belongings and to which the Franciscans entrusted huge treasures brought from Mexico, and that an earthquake cut them off from the outside world. Upon the recent visit Mr. Nusbaum felt a distinct current of air in one of the shafts, indicating a connection with the outside world through some crevice or opening at some other point. The tunnels, the openings of which have been found, probably are tiers of connected rooms on the lower floor of the ancient community structure.

Bandelier has thoroughly disposed of all traditions, legends and mystery with which years have enveloped the place. Yet, it is difficult for the visitor to shake off a feeling of awe as he surveys the scene of desolation in this lonely and silent land.

The blue-gray limestone from which this outpost of Pueblo culture is built differentiates it from the dark red sandstone pueblos of Abo and Quarai. Tabira is more of the color of the moonlight and its desolation makes it spectral.

Not entirely accidental, therefore, the fact that the Quivira* traditions finally became localized at Tabira. The legend is one that led Coronado on a wild-goose chase as far as eastern Kansas. Unfortunately, there is only the Spanish account of the expedition, with its story of the deception by "The Turk." W. H. H. Davis and other writers have exercised much ingenuity in the effort to identify Tabira with the Gran Quivira sought

*The name Quivira was first employed by the chroniclers of the Coronado Expedition, 1540-1542, to designate the Wichita and their tribal range in the present Kansas. Benavides speaks of the provinces of Quivira and Aïxos.—Hodge. Dr. Peter Heylyn in 1636 describes the Southwest under the heading "Quivira."



Photograph by Jesse Nusbaum.

CONVENT RUINS AND SOUTH AND EAST WALLS OF THE CHURCH AT TABIRA.

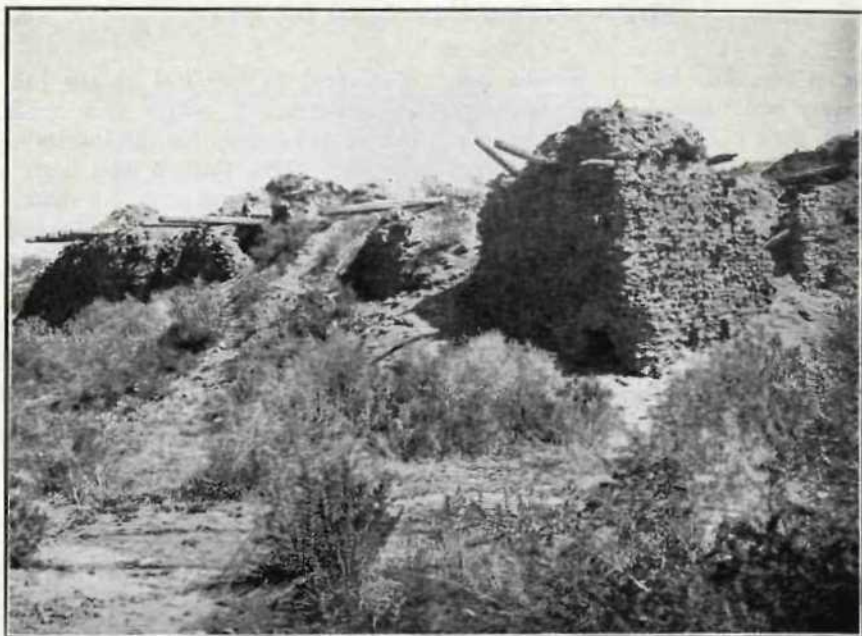
It is difficult to shake off a feeling of awe as one wanders amidst the solitary desolation of these ruins and surveys the heaps of blue-gray limestone which attest to the devotion and industry of the Pueblo women who reared them, for it was the Pueblo women who built the temples, the houses and the government buildings, according to Benavides.

by Coronado, but historians are pretty well agreed upon the route and goal of the Coronado expedition and utterly repudiate the supposition that Tabira was the Gran Quivira sought by Coronado. Still, local tradition, with characteristic stubbornness, persists in denying that Tabira was situated so many miles from Quarai and Abo. It locates Tabira much closer to Abo and insists that the ruins so indisputably designated as Tabira are those of the pueblo of the Jumanos. Bandelier concedes that Tabira and the pueblo of the Jumanos may be one and the same. But tradition goes farther and insists that the pueblo of the Jumanos was the Gran Quivira and that there is to be found the great treasure which has been sought so diligently from the time of Coronado.

And how people have sought it! They have spent treasure and effort, have even given their lives to locate it. Armed with copies of ancient charts or maps, purported to have been found in the great Library of Paris or of the Vatican, or Seville, they have come from distant countries to gopher into the limestone hill over which brood the ruins of Tabira. One of the latest and most fantastic of the treasure hunters was Mrs. Clara A. B. Corby, a blind woman, who battled with the officials of the Department of the Interior to acquire homestead rights on a portion of Tabira. She finally won, after several appeals, and traveling from coast to coast, solicited funds to finance her visionary undertaking and died of a broken heart because of its failure. To aid the enterprise she wrote a musical romance and had it published under the title of "La Gran Quivira," though the name she bestowed upon the pueblo ruin was "Lo Quien Sabe Muy Grande." In her story she tells of conflicts with vandals, of rambles in underground passages, of a sealed spring

discovered at the foot of the hill, of subterranean noises and music and of the search for the inevitable treasure. Mrs. Corby died recently at Los Angeles and her homestead was acquired by the Museum of New Mexico. It has upon it the northern portion of the pueblo ruins, the major part, with the mission church remains, being within the boundaries of the adjoining National Monument. On the adjacent Dow ranch, to the west, are the remains of summer houses built by the ancient inhabitants, who from them watched their fields. The abundant pottery shards on these sites promise much material to the archaeologist who will excavate them.

Various have been the explanations by archaeologists to account for so large a community house in a district apparently void of all water. Today it is not necessary to explain at all, for settlers in all directions from Tabira are raising crops and are finding sufficient water for stock and domestic use. At the very foot of the height upon which are the ruins, a well has been sunk and furnishes water the year around. Mrs. Corby discovered a small spring that had been choked up or plugged. The flow started by opening it up ceased after some days, but a steady water supply was obtained by digging a shallow well at the point. In spring, and after the summer rains, the water holes in all directions are filled. The system of reservoirs and ditches among the ruins are evidences of water storage by the early inhabitants. There is also the possibility of the existence in ancient times of a spring like that at Manzano, which may have disappeared by seepage or breaking into a limestone shaft or cavern with which this vicinity abounds, or having been plugged, as was the custom of Indians when they abandon a site permanently. There are instances suf-



Courtesy of F. A. Wadleigh of Denver.

THE OLD RUIN AT AZTEC, N. M.

Here, Earl Morris, formerly with the School of American Archaeology, is finding a large amount of interesting material in his excavations for the American Museum of Natural History, which has acquired the ruins for an extensive excavation campaign.



Courtesy of F. A. Wadleigh of Denver.

ANCIENT ROAD NEAR AZTEC, N. M.

The road is perhaps thirty feet wide, its sides being marked with pebbles and boulders. It is very well defined and may be seen from the train several miles away. It was used in hauling stone from a quarry two miles over the hill.

ficiently authenticated in this very region of streams and springs disappearing as if swallowed by subterranean forces, or of being plugged up effectually by the Pueblos, and then reappearing again almost as suddenly as they had vanished.

Says Bandelier:

"The most diligent search revealed no trace of springs in the neighborhood, yet there appeared in the middle of the narrow street formed by the principal buildings of the pueblo a groove not unlike a channel. Following this channel in the direction of the northeast, that is up the crest of the eminence, I noticed that it was in places from two to three meters wide (6 1-4 to 9 5-8 feet) and about 0.50 m. (22 in.) deep. Potsherds lined its course. Three hundred meters (980) feet northeast of the most easterly house of the pueblo the ditch terminated in an artificial pond thirty-five meters in diameter (115 feet.)

"A short distance southwest of this pond I found another, thirty meters (98 feet) in diameter and nearly three meters (9 feet) deep. Fifty meters to the eastward of the first was a third reservoir, forty meters (130 feet) across and two meters deep. It stood on the highest point of the ridge, and still shows traces of a rim of stones. In several places, this rim is broken through by gullies. The fall from this uppermost tank to the first house of the village is ten meters (2 1-2 feet) in a distance of a quarter of a mile. The rims of all three tanks and of the channel were covered with fragments of pottery, showing that much water had been carried from them to the pueblo; also that washing and cleansing had been performed along the channel and at the ponds.

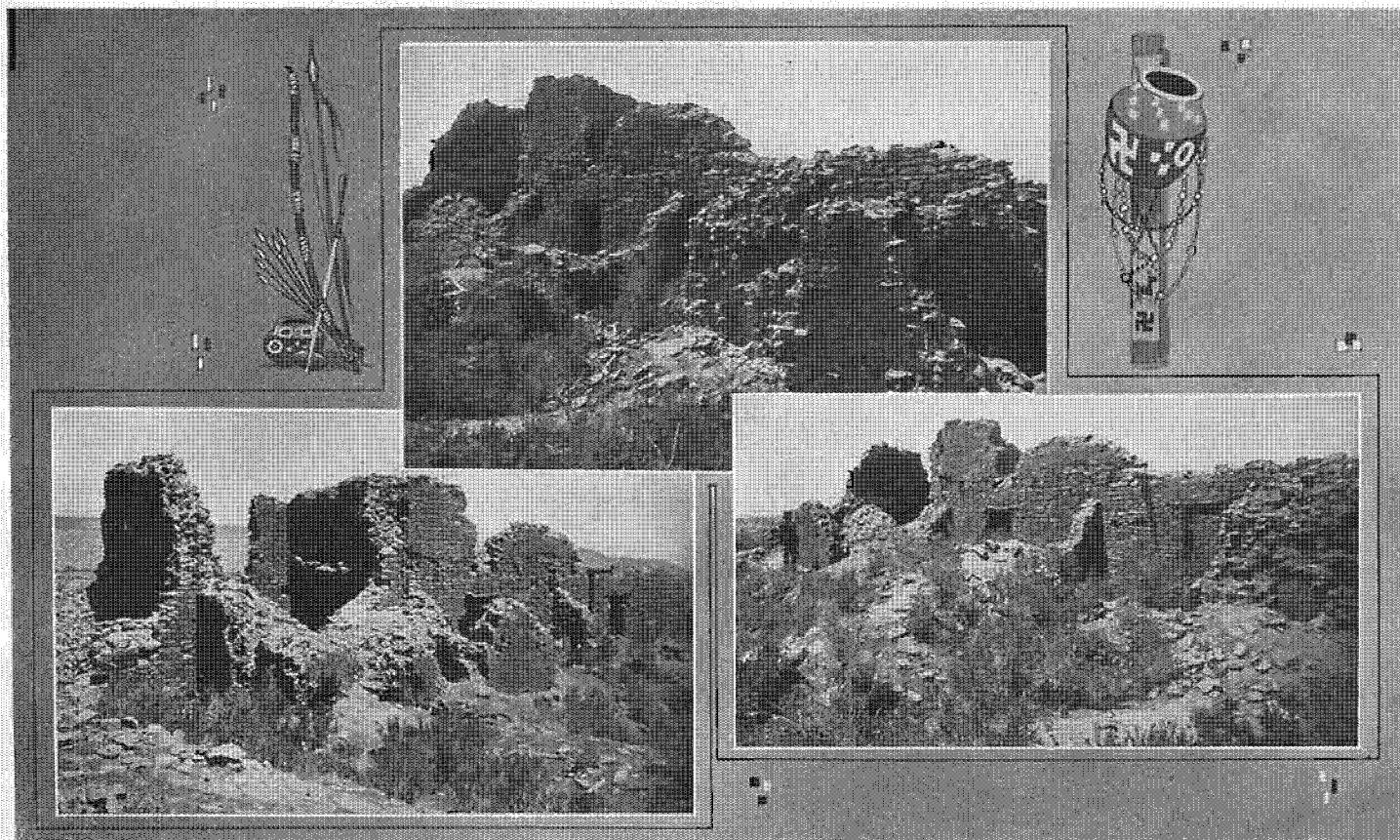
"This system of reservoirs, so arranged that the highest one emptied into the others, fully explained the mystery of the water supply for the Gran Quivira. From the lowest tank the water was led not only to the pueblo, but through it, to the western slope of the ridge on which the village stood. I followed this channel back, and found that it emptied at its lower end into a fourth artificial pond constructed about thirty-five meters west of the northwestern corner of the pueblo, on the declivity, some distance below the church and northwest of it. This last reservoir is as wide as the largest of the upper ones. Its depth is still three me-

ters, and the rim of stones around it is perfect, from the northeast by north to west. In the direction of the north and northeast, two artificial channels run from it down the slope, by means of which the small garden plots could be irrigated.

"As the aggregate area covered by the four ponds is about 4,100 square meters, or 44,075 square feet, that is, very nearly one acre, it follows that they afforded enough water for the daily supply of a population of fifteen hundred souls, but for the irrigation of the fields which this number of people would require they were of course inadequate.

"But Quivira, as well as all the other pueblos in that region, did not require irrigation for the crops which they raised before the Spaniards brought them wheat, barley, and other European plants. The grass on the Jumanos plateau shows, as all those acquainted with the country know, that the precipitation is ample in ordinary summers for raising corn, squashes, and beans. All that was needed, therefore, was water for drinking, cooking, for making adobe mortar, and for the limited amount of washing performed by the Indian. For such purposes the reservoirs sufficed, and they were in such close proximity to the houses that it was not easy for a prowling foe to cut the water supply. The fact, repeatedly stated to me, that the other ruins on the Medano were all provided with artificial reservoirs, further shows that it was not a device peculiar to Quivira, but one generally adopted by the Pueblo Indians of that region.

"On the last day of my stay at Quivira I satisfied myself of the truth of this conclusion. About three miles south-southwest of it, at the other end of a level covered with splendid grass, rises the Loma Pelada, hill thirty-five meters (98 feet) above the surrounding plain. This bald eminence bears the remains of a pueblo similar to that of Quivira, but considerably smaller and much more decayed. The mounds are shapeless, flat; and, instead of being in long rows, are disposed in a circle around the top of the hill. I noticed two estufas, and only nineteen meters southwest from the village an artificial pond twenty-two meters in diameter. About one mile farther, at Lagunitas, is another pueblo ruin with an artificial water reservoir. It seems, therefore, that all over this arid region the villages relied upon such contrivances, in the



ANCIENT RUINS AT AZTEC, SAN JUAN COUNTY, NEW MEXICO.

By Courtesy of F. A. Wadleigh of Denver.
 Here, during the present summer, Earl Morris, formerly with the School of American Archaeology, has been at work for the American Museum of Natural History and has been making interesting finds. An excavating campaign to cover several years is planned.

same manner as they do today at Acoma.

"Well may we ask: What could have induced the Indians to settle and to remain in a region where they had to forego the great convenience of a natural water supply? We may conjecture that necessity, the result of being driven back from other points, had something to do with it; still it cannot be denied that, however unprepossessing to the eye, the country offers many advantages to the sedentary native. The soil is far from sterile, wood is everywhere within reasonable distance, and game abundant; and every pueblo on the Medano stands, as far as I could ascertain, so as to be easily defended and to afford excellent lookouts. They are all specimens of that peculiar kind of Indian defensive positions, in which the absence of obstacles to a wide range of view becomes the main element of security. The roving Indian seldom could have taken a pueblo by surprise, still less by direct assault; against both, the villages on the Medano were almost impregnable; against persistent attacks on a small scale, however, the sedentary Indian could not long hold out.

"Having shown that the ruins of the famous Quivira not only have nothing mysterious about them, but that they belong to the category of ordinary Indian pueblos, and that the water question can be solved in a very simple manner, it remains to investigate what Quivira was during historical times, and to which stock or tribe of Pueblo Indians it belonged. There is no doubt that it was a historic pueblo, for its churches and their convents are of Spanish origin, but that Quivira was not its true name is also certain, since the Quiviras, as I have elsewhere proved, were a nomadic tribe, and no permanent mission was ever established among them, still less churches built and convents erected."

How and when Tabira first received the name of Quivira, is told in the "Leading Facts of New Mexico History," by Col. Ralph E. Twitchell. But why this name has so tenaciously clung to it, is more difficult to explain, as is also the origin and meaning of the word, although Hodge intimates that it is a Spanish corruption of Kirikurus, the name which the Wichita Indians

gave themselves. Another writer declares that it is merely a corruption of the Spanish word "caverna," a cave.

Lummis gives us his impression of Tabira so eloquently that it is worth while quoting it in part:

"Mid-ocean is not more lonesome than the plains nor night so gloomy as that dumb sunlight. It is barren of sound. The brown grass is knee-deep—and even that trifle gives a shock in this hoof-obiterated land. The bands of antelope that drift, like cloud shadows, across the dun landscape suggest less of life than of the supernatural. The spell of the plains is a wondrous thing. At first it fascinates. Then it bewilders. At last, it crushes. It is sure as the grave and worse. It is intangible but resistless; stronger than hope, reason, will—stronger than humanity. When one cannot otherwise escape the plains, one takes refuge in madness. But on a sudden, the tension is relieved. A mile to the south, where a whaleback ridge noses the uncanny valley, stands out a strange ashen bulk that brings us back to earth. Wan and weird as it is, it bespeaks the one-time presence of man, for Nature has no such squarenesses. I do not believe that the whole world can show elsewhere, nor that a Dore could dream into canvas a ghostliness so apropos. Stand upon the higher ridges to the east, and it is all spread before you, a wraith in pallid stone—the absolute ghost of a city. Its ashen hues which seem to hover above the dead grass, foiled by the sombre blotches of the junipers; its indeterminate gray hints, outspoken at last in the huge, vague shape that looms in its center; its strange dim outlines rimmed with a flat, round world of silence—but why try to tell that which has no telling? Who shall wreak expression of that spectral city? Come nearer, and the spell dwindles but it is never broken. Even as we pass our hands over that forgotten masonry of pale limestones, or clamber over fallen walls with tangible stubbing of material toes, the unearthliness of the haggard scene does not wholly cease to assert itself. Only, we know now that it is not a ghost-city, which the next breeze may waft away. It is a ruined pueblo again—but such a pueblo! Not in size nor in architecture—there are several others as large, and some as

imposing—but in color and in setting it is alone. **** And in the western terminus of the village, just on the brow of the slope that falls away to the strange valley that looks cross to the sombre Mesa de los Jumanos, is another and a gigantic ruin, whose like is not in all our North America. Its walls, thirty feet high and six feet thick, roofless and ragged at the

that at Tabira is most extensive, covering 13,377 square feet. The walls of Abo are much the noblest and most massive, and those of Tabira the crudest, though no less solid. The pueblos of Abo and Cuaraí had each a tiny but sufficient rill; but Tabira is absolutely dry. There is neither spring nor stream in thirty miles. But this is hardly a rare



THE STATE MUSEUM OF NEW MEXICO.

To the right is the west end of the Palace of the Governors. To the left is the new Museum Building, on the site, according to Historian Ralph E. Twitchell, of what may have been the first church built at Santa Fe. Between is the home of the Director of the Museum, remodeled into a Santa Fe Mission style structure by the owner, Hon. Frank Springer. Progress on the new Museum Building is rapid. The basement and first floor are completed, while the entire structure will be under roof before the first frost. It is hoped to dedicate the beautiful edifice in August, 1917. In excavating for the basement a large amount of interesting archaeological material and many historic relics were found. The strata indicated successive occupations in pre-Spanish as well as later times. Artifacts of the neolithic times were abundant. The pottery remains were classified into seven chronological classes.

top, 202 feet front and 131 feet in greatest depth, are of the same spectral bluish-gray limestone, broken into irregular but flat-faced prisms and firmly laid in adobe mortar.

"Of the three great churches that of Cuaraí is largest, having a floor area of 5,020 square feet. That of Tabira comes next, with 4,978 square feet; and then Abo with 4,830. These figures are for the auditoriums alone and do not include the extensive convents, attached to each, of which

thing among Pueblo ruins; and it is well known that the aborigines were wont to kill their water when forced to abandon a town, lest it give comfort to the enemy. We know, not only by record, but by eyesight, of several cases where, with infinite labor, the Pueblos actually obliterated a spring to keep it from their savage neighbors."

But to return to Bandelier, who, after all, gives us all that is def-

initely known or understood about Tabira. He formulates the following conclusions:

"1. That the pueblo, although considerable, by no means justifies the extravagant descriptions of tourists and prospectors. The population of Tabira cannot have amounted to more than fifteen hundred souls.

"2. That it was a scattered large-

mine in the main, and that I have not underrated the extent of the settlement. Tabira presents nothing unusual to one who is familiar with pueblo architecture, either of the past or of the present time. And yet for nearly a century, these ruins have been looked upon as something unique among the antiquities of New Mexico, in size and in manner of construction, and as mysterious on ac-

From Water Color Sketch by K. M. Chapman

A skeleton resting on what appears to be an ancient adobe floor, seven feet below the present street level, had with its cervical vertebrae, the fragments of a necklace of abalone shells and turquoise. In the spine was a shattered arrow of quartz. At the deepest point in the excavation for the heating plant, three well-modeled bowls of black ware were found. Animal remains were plentiful and included a skull with horns of what appeared to have been a mountain sheep. The jaw of an elk with teeth and buffalo bones were abundant. There were also numerous relics of Spanish colonial days, including chinaware, iron bullets and implements, a sun dial and compass and other objects of the early Spanish days. Typical specimens were arranged into an exhibit for the vestibule of the Palace.

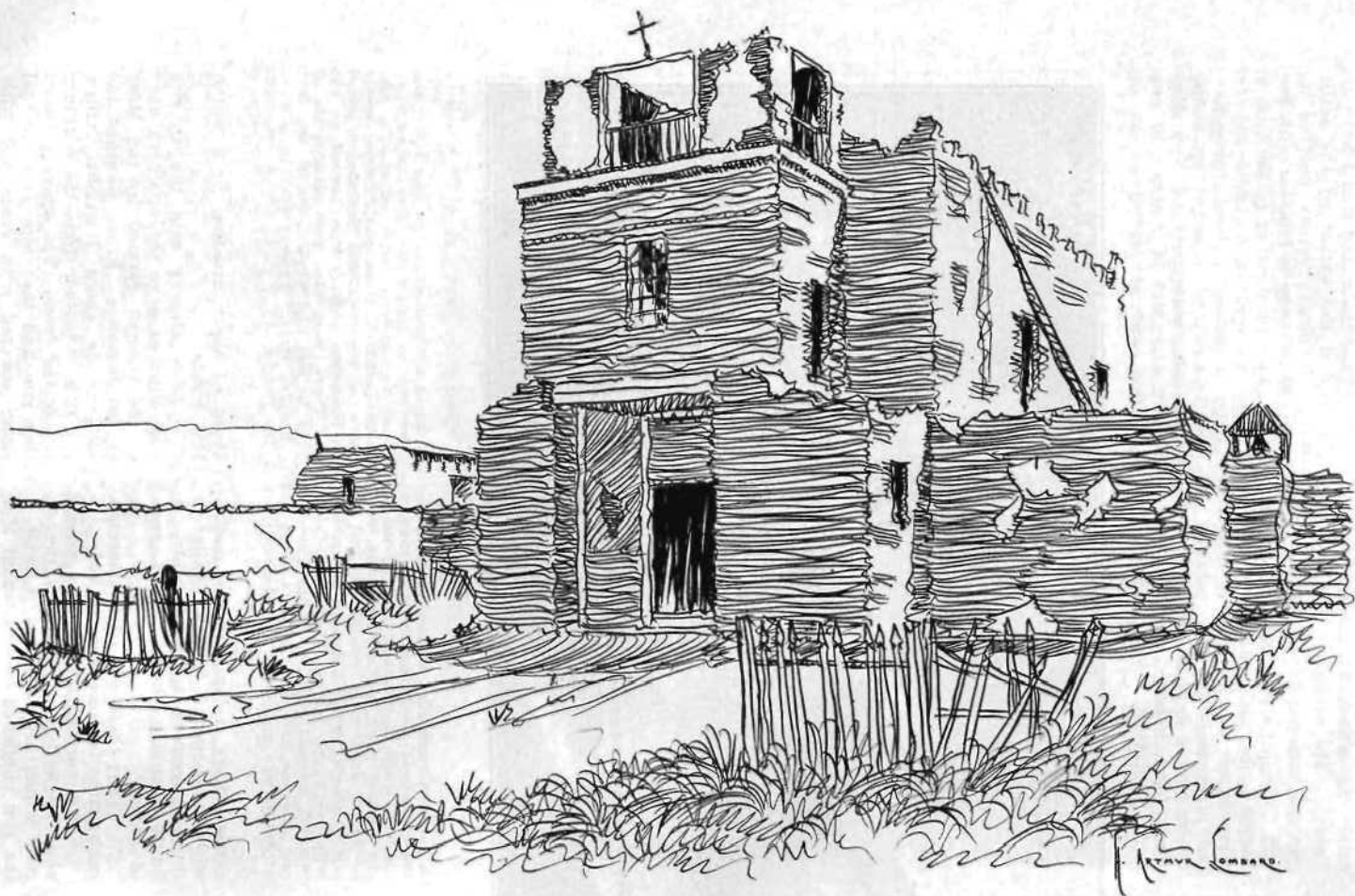
house village, a long, narrow pueblo, with many-storied houses, similar in its arrangement to the pueblos of Santo Domingo, Jemez and Laguna, of today.

"3. That there were two churches each with its convent attached.

"For a corroboration of my ground plan, as well as of some of the details which are to follow, I refer to the plat published by Lieutenant Morrison, United States Army. It will be seen that his survey agrees with

count of their situation in a waterless waste.

"I have already said the Quivira was situated near the southern apex of the triangle formed by the Mesa de los Jumanos. From Manzano the distance is about thirty-five miles, and it is seventeen from the northern rim of the mesa. The space between that rim and the ruins is a gradual slope, covered with grass and without permanent water. At the foot of the ruins, on the west, lies the Me-



From Pen and Ink Sketch by H. Arthur Lombard of Berkeley, Calif.
SAN MIGUEL'S AT SANTA FE BEFORE ITS LAST RECONSTRUCTION.

dano, a sandy gulch, above which rises a hill of gray limestone, a promontory of the ridges bordering the Medano on the east. On this hill, which is quite narrow and dotted with the usual scrubby conifers, lie the ruins, the larger church occupying its westerly brow and overlooking a vast expanse of singular bleakness. In the west, the summits of the Socorro and Magdalena mountains peep over the wooded border of the Jumanos plateau; in the south, an undulating level dotted with black shrubs stretches towards the dim mass of the Sierra Blanca; in the east, over dreary ridges and hills, rise the mountains of Carrizozo, the Sierra Capitana, and the Gallina, rugged, dark, forbidding; while the north is occupied by the sloping surface of the plateau. Not a trace of a spring has been discovered near the ruins; not a brook trickles down from the heights in their vicinity.

"In this arid solitude the massive edifice of the church, with the mounds of the pueblo, look strangely impressive. From the west the church can be seen miles away, a clumsy parallelopiped of gray stone; from the northeast, through vistas of dark cedars and junipers, the ruins shine in pallid light, like some phantom city in the desert.

"An examination of the details dispels the illusions created by distance and surroundings. We find in all eighteen Indian houses of various sizes, and six circular estufas. The largest houses measure respectively 14 by 70 m.; and 14.7 and 51.3 by 8.8 m. The walls are of irregular pieces of gray limestone, laid in adobe mortar, and from 0.33 to 0.35 m. thick. As the stone is quite hard, the work on these walls looks more carefully executed than in many other ruins, but on the whole the difference is not considerable, and the statements that the stones were hewn are utterly without foundation. The pueblo had certainly three stories, in some places perhaps more. The estufas vary in diameter from 6.6 to 8 meters. They are still quite deep, and may have been, like those of Taos, completely under ground. Among the rooms I measured one which was 6.2 m. long by 2.3 m. wide (19 by 7 feet). But the average of 196 cells is 2.8 by 3.7 m. (9 feet 2 inches by 12 feet 6 inches.) I saw some doorways, low and narrow as at Pecos, with lintels of stones. Traces of the roofs, consisting of occasional

beams, of pieces of brush, and of frozen earth, proved that the roofing was the usual one. The estufas had thin stone walls. In short, after three days spent in examining every part of the ruin, I found nothing that was not strictly in accordance with the characteristics of ordinary pueblo architecture. That the village is longer than pueblos of the older kind usually are, and does not appear so compact, is not surprising, since the configuration of the ground compelled the inhabitants to build the houses along the crest of the ridge, and therefore to stretch them out, instead of arranging them in squares. To a certain extent, it might be said that Quivira consists of two rows of houses, forming an alley or narrow street.

"A great deal of pottery was strewn over the ruins, the kind with glossy ornamentation largely prevailing; but there was also some corrugated, indented, and plain ware, and a few pieces of black and white. Much flint and some obsidian lay about, and arrow-heads were comparatively numerous. I also found a flint awl, and broken metates and grinders were abundant. In short, the artificial objects fully sustained the impression conveyed by the architecture, that Quivira was an ordinary pueblo of considerable size, whose inhabitants stood on the same level as the other Pueblo Indians of New Mexico.

"Southeast of the smaller of the two churches, I noticed a structure forming approximately a hollow square, and measuring 19.2 meters from north to south and 18.2 meters transversely. It had but one entrance, in its southeastern corner, which was one meter wide. The walls were 0.22 m. wide and only 1.6 m. apart. What this construction was intended for I am unable to conjecture.

"I have stated that there were two churches at Quivira. The smaller one stands south of the main rows of houses, the larger on the brow of the hill, overlooking the western plain and the Medano. Connected with the former is a yard, some of the circumvallation of which is still visible. The church is much ruined, only the corners standing erect to the height of a few feet.

"The larger, and from all appearances newer, church at Quivira is a building of considerable size, since it measures 35.6 meters (116 3-4 feet) from east to west, and 7.4 meters



Photograph by Carlos Viera.

PRIMITIVE STELA NEAR QUIRIGUA.

The monument is seven feet high by four feet wide by three and a half feet thick. It has three faces covered with inscriptions, while its south side is a sculptured figure badly weathered. The monument is in the plaza of a small village site, a mile west of the northernmost stela of the Quirigua group. The picture shows the north side with the initial series, giving a date five years older than the oldest at Quirigua.

(23 feet) from north to south. Adjacent to it, on the south, are the ruins of a convent, containing a number of cells and a refectory, all built around an interior court yard. This convent is 30 meters (98 3-4 feet) long from east to west and 40.8 meters (133 3-4 feet) from north to south. The temple is therefore somewhat smaller than that of Quarai, while the convent is larger,—so large even as to suggest the thought that it was destined for the residence of several missionaries. Both edifices are built of the same material as the pueblo houses, but the work is a little more carefully executed and the walls are much thicker. The east front of the church is nearly two meters (six feet) in thickness, and flanked by two buttresses or towers 4.4 meters (14 1-2 feet) square. Huge beams, quaintly carved like those at Pecos, but more massive, fairly hewn, and approximately squared, are still in place across the doorways and in some parts of the interior of the church, but the roof is completely gone. Much rubbish fills the interior, and from appearances I should judge that the roof was never completed over the whole church, and that the walls of the convent had not been reared to their full height when work on them was given up. The whole has an unfinished appearance, and the same impression has been made by the ruins upon several other visitors. It looks as if the work had been suddenly interrupted, and was never resumed.

"As it has been ascertained that 'Quivira' was not the proper name of the place, and that the village was still inhabited after the year 1600,—and as we know that up to that date the Spaniards had built but a single church in New Mexico, the one at Chamita on the Upper Rio Grande,—for the identification of the place we must inquire which were the missions founded in the seventeenth century east of the Rio Grande valley and south of the Tanos region, where they were located, their names, and which of them were provided with churches and with the abodes for resident missionaries. In addition to the Tigua missions already spoken of, to wit, Chilili, Tajique, and Cuarai, there existed in the seventeenth century in the vicinity of the Salines three missions of the Piros, Abo, Tenabo, and Tabira. A pueblo of the Jumanos is also spoken of, but while repeated efforts were made to

Christianize that tribe, I have nowhere found any mention of a permanent mission with a church or chapel. A priest had in his charge several "ranchos," or gatherings of lodges of the Jumanos, who lived about fifteen leagues (forty miles) east of Abo; but the distance does not agree with that of Quivira from Abo, and still less does the fact that these Christian Jumanos were ministered to from Cuarai tally with the two churches and convents at the Quivira. Our choice is therefore limited to Tenabo and Tabira; since at both places small churches had been erected by Fray Francisco de Acevedo, and a special priest attended to them. Tenabo appears in but one document of the seventeenth century, while Tabira is repeatedly mentioned; the latter, therefore, must have been the more important settlement. If the report is true that at the ruin called 'Siete Arroyos' in the Abo valley there are the remains of a chapel, I hold that this was the pueblo of Tenabo; in which case Quivira can have been no other than the pueblo of Tabira. Thus far documentary evidence from the time anterior to the uprising of 1680 has been followed.

"On a map of New Mexico bearing date 1705, the original draft of which was transmitted to the French Academy by a Spanish grandee, Tabira is marked at a short distance south of Abo but southeast of Cuarai. On a manuscript map, however, of the second half of the past century, preserved in the National Archives at Mexico, Tabira appears exactly in the position which the Quivira occupies; and the name is also accompanied by the figure of a large church.

"Lastly, an Indian of San Ildefonso, now deceased, but with whom I was acquainted, assured me most positively that Quivira was the old pueblo of Tabira; and this was afterwards repeated to me emphatically by an old Indian of Santo Domingo, who was well acquainted with the locality.

"From all these indications I conclude that Tabira is the proper name of what today is called 'La Gran Quivira.'

"Tabira was a settlement of Piros beyond all doubt, and was abandoned, probably before Abo and the Tigua villages of the Salines in consequence of the Apaches. Its evacuation therefore dates from between the years 1664 and 1671. The smaller and older church had been erected during



Photograph by Carlos Vierra.

THE NEWEST AND THE OLDEST.

Stela near Quirigua, whose discovery was announced by Director Edgar L. Hewett after the latest expedition of the School of American Archaeology to Guatemala. This shows the west side of the stela, with glyphs.

the lifetime of the founder of the mission, Father Acevedo, prior to 1644, though after 1628. The new church must be subsequent to 1644, and was probably commenced, but never completed, between 1660 and 1670."

Bandelier does not dismiss entirely the possibility of the abandonment of Tabira having been caused by seismic or volcanic disturbances, although he finds absolutely no evidence to sustain the tradition, saying:

"While the fact that the Apaches compelled the evacuation of Tabira seems beyond all doubt, the silence of documents in respect to seismic phenomena does not authorize us to deny their occurrence within historic times. An earthquake may have been severe at the Salinas in the seventeenth century, and the northern part of the territory may not even have heard of it."

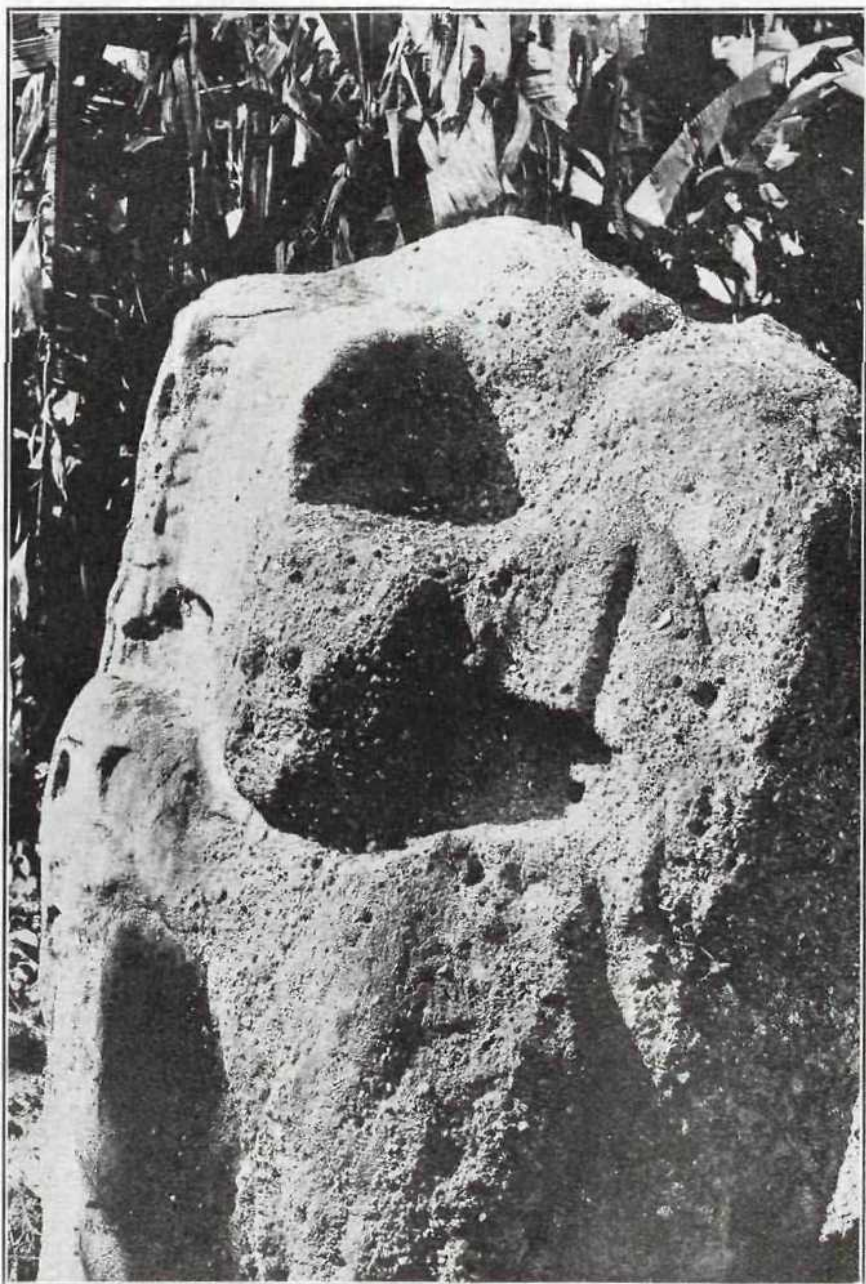
Robert Willison, a United States surveyor, gives us a description of Tabira shortly before Bandelier visited the ruins, and while a bit more fanciful, in the main agrees with that of the scientist. He says:

"The ruin is passed through by the line in Sec. 34, R. 8 east. The most prominent building is the church, which, as well as all the other buildings, is of limestone laid in mortar. The ground plan presents the form of a cross. The dimensions of the building are as follows: Width of short arm of cross 33 feet; width of long arm of cross 42 feet. Their axes are respectively 48 feet long and 140.5 feet long and their intersection 35 feet from the head of the cross. The walls have a thickness of six feet and a height of about 30 feet. The main entrance has a height of 11 feet, and an outside width of 11 feet, and an inside width of 16.5 feet. The church is situated due east and west, having its front to the east. Extending south from the church a distance of 160 feet, and connected with it by a door in the short arm of the cross, is a building containing a number of apartments. On the window frames of this building the mark of the carpenter's scribe is still plainly visible, though doubtless exposed to the action of the atmosphere for nearly two centuries. The carved timbers in the church are still in a good state of preservation; a portion of the roof still remains; some of the timbers

must have weighed 3,000 pounds at the time they were brought to this place, and they could not have been procured within a less distance than sixteen miles.

"The site of the ruins is elevated about one hundred feet above the surrounding country, and embraces an area of about 18 acres. The town has been well and compactly built, and probably contained a population approaching 5,000 souls. Numerous excavations have been made by the Mexicans in search of treasures and to have been left by the Franciscans when they were expelled by the Indians. In one of these excavations I found a large quantity of human bones including a skull. From the formation of the latter, and its thickness, it was undoubtedly that of an Indian. The questions that arise in contemplating these ruins are, how was it possible for such a number of people not only to exist, but to build a town of such superior construction at a point which is now entirely destitute of water,* and to which water cannot be brought from any present source, the nearest water being fifteen miles distant? what was their occupation? and what has become of them? That water was brought there from some distant point—and distant it would have been—cannot be the case, as the face of the country would have required the construction of numerous aqueducts for its conveyance, remains of which would be found at the present time; and why would a people bring water a long distance for the purpose of working lands no more valuable than such as could have been had at the water? Where, then, did the inhabitants get the water necessary for their subsistence? There are two arroyos between the ruins and the Mesa Jumanos, within a mile of the town, having well-defined watercourses, which might have contained permanent water at the time that the town was in—

*The inhabitants of Tabira and Tenabo depended entirely on the storage of rain water for their supply. It is not improbable that the now ruined villages by the Spanish names Pueblo Blanco, Pueblo Colorado and Pueblo de la Parida were among the eleven inhabited settlements of the Salinas seen by Chamuscado in 1580, but at least three of these were occupied by Tiguas. Juan de Onate in 1598 also visited the pueblos of the Salinas.—Hodge.



Photograph by Carlos Viera.

Rear of Primitive Stela, discovered in the jungle at Quirigua, Guatemala, by the last expedition of the School of American Archaeology to the Country of the Mayas.

habited. Even at the present time, the drainage from these arroyos furnished water for a laguna some five miles below, that lasts during about one half of the year. Again, springs may have existed around the rise upon which the town is situated that, from natural causes, have become dry. The phenomenon of the failure of water is no uncommon one in this region, as is evidenced by the numerous vents where the surrounding rocks show the action of running water.

"A case directly supporting the assumption of the failure of the water is furnished at a place about 35 miles northerly from the Gran Quivira, known as La Cienega. At this point a stream of water furnished by two springs, and running to a distance of about a mile at all seasons of the year, which has never been known to be dry within the memory of the oldest inhabitants, has, within the last year entirely disappeared; and even digging to a considerable depth in the bed of the late springs fails to find the stream, or the channel by which it has so mysteriously disappeared. (These springs have since reappeared. Ed.) To those at all familiar with the cretaceous formation of the southeastern portion of New Mexico, and who have seen the numerous rivers flow hundreds of inches of water within a few yards of where they make their first appearance, and the total disappearance of these streams within a few miles, who have seen the water flowing in caves and subterranean streams, and the fact that the whole country is cavernous, can easily imagine the possibility of a stream acting upon its cretaceous bed, and eventually wearing a channel, to connect with some immense cavern and disappearing at once from the surface beyond all reach of human power. To the south of the Gran Quivira, at a distance of about 20 miles, commences a mal país, an immense bed of lava, 60 miles in length from north to south, and covering 500 square miles. To the southwest commences a salt marsh, which has an area of 50 square miles, and which is fed entirely by subterranean springs."

RUINS ALONG THE MEDANO.

Bandelier refers to the other ruins and vestiges of early occupation in this region. He says:

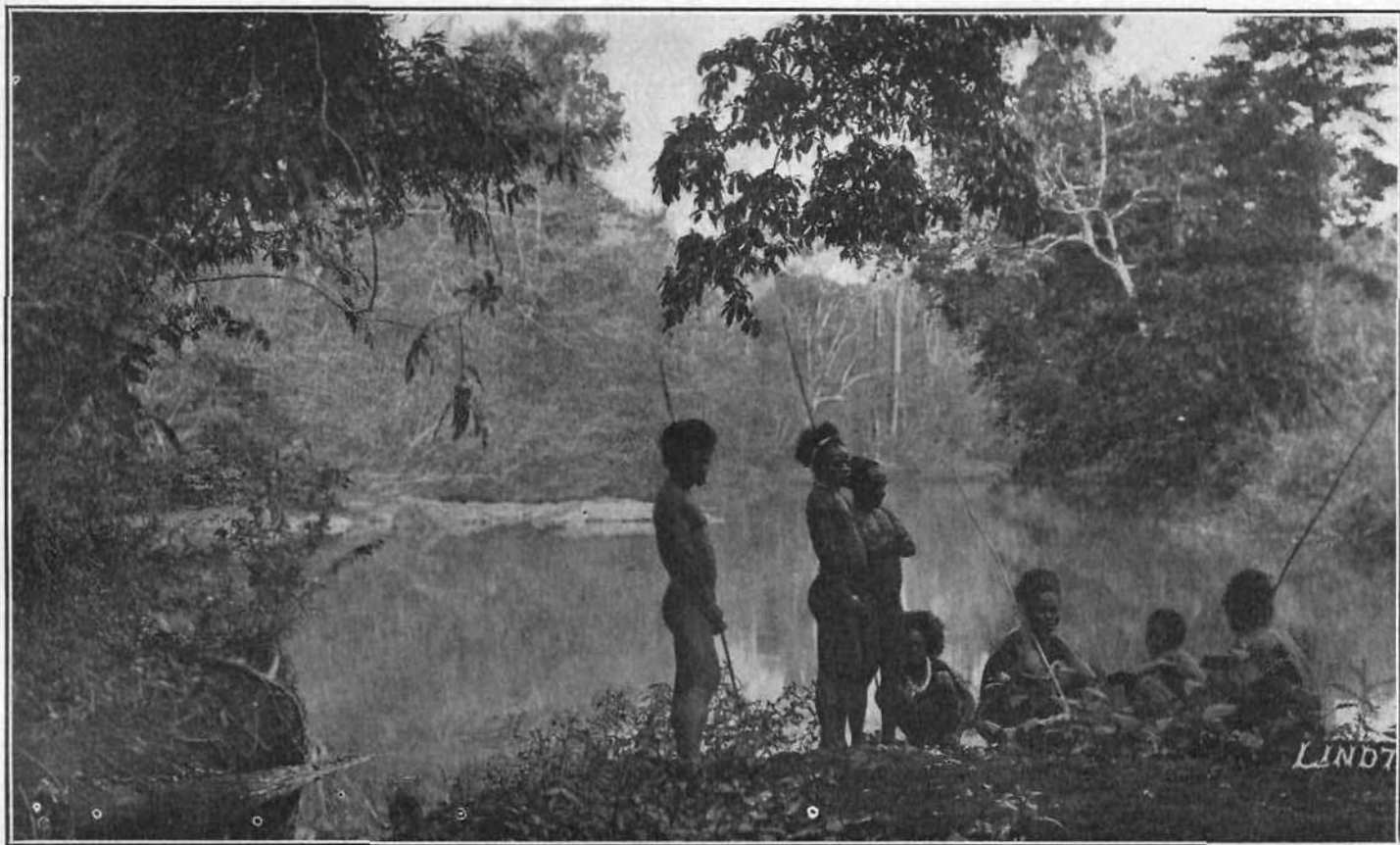
"Along the western rim of the Me-

dano extends a line of pueblos, among which the Pueblo Blanco, the Pueblo Colorado, and the Pueblo de la Parida are best known. On account of continuous snowstorms, I could not visit any other than the so-called Quivira, and two smaller ruins, three or four miles south of it. Southwest of these, Chupaderos is the next place where pueblo remains are found, and thence on towards Socorro the ruins on the Parida gulch continue the series. Indian villages of the large-house type, seem to have extended on a line from Socorro northeastward as far as the southeastern corner of the salt lake basin. Presumably they were Piros, and the line indicates either an advance of that tribe from the Rio Grande valley towards the Salines, and perhaps beyond, or the contrary.

"A volcanic mesa rises east and south of Chupaderos. This plateau has been regarded by some as of modern origin, and the destruction of the pueblos on the Medano, especially of Quivira, has been attributed to its upheaval. That seismic disturbances may have proved disastrous in such remote regions, and remained unnoticed by the inhabitants of the Rio Grande valley except as violent but harmless earthquake shocks, is not impossible, but there is no doubt that Quivira, for instance, had to be abandoned on account of the Apaches, and not owing to volcanic phenomena of a destructive character.

"Of the ruins south of Chupaderos I shall treat hereafter. I have already noticed the ruins east of the Medano, at the Sierra Capitana, and perhaps beyond, nearer to the Pecos river. On the Mesa del Camaleon, towards the Sierra de la Gallina, there is said to be a considerable ruin, which was described to me as that of a large-house or typical pueblo.

"The ruins on the Medano north of the so-called Quivira have also been described to me as regular pueblos, and as provided, each of them, with one or more artificial water tanks. There are no traces of springs near any of them. Aridity is characteristic of the Mesa of the Jumanos and its surroundings, and it has perplexed all those who have investigated the region and paid some attention to its antiquities. Many have been hypotheses resorted to in order to explain how agricultural Indians could subsist in such a waterless country, destitute not only of means for artificial irrigation, but even of the water ne-



NATIVES OF NEW GUINEA.

From a set of superb photographs recently added to the Australian Collection of the Museum by Mrs. George H. Wallace of Toledo, Ohio, but formerly of Santa Fe and before that of Australia.

cessary for personal use. The Medano has been imagined to have been a large river during historical times, which dried up in consequence of the volcanic upheavals at Chupaderos.

"The tale that within historic times a great river flowed southward east of the Sierra Oscura, Sierra de San Andres, even of the Sierra de los Organos and of the Paso range, which stream had been interrupted by the upheaval of the great lava bed south of the Gran Quivira and north of the Sierra Blanca, is deeply rooted and often told. There is very positive evidence to the effect that within the documentary period no such cataclysm has occurred, and the cause of the abandonment of what is called Quivira now is well known.

"To this I will add, that, since it is well established that the Salines were visited by Chamuscado in 1580, probably by Espejo in 1582, and certainly by Onate in 1598, one of them could not have failed to notice this river had it existed; for a stream of such magnitude, second in size only to the Rio Grande, must have attracted their attention, and would have become an important factor in the subsequent settlement of the country. There is no trace of it in any of the documents of these periods. Hence it is legitimate to conclude that, if the Medano ever formed a considerable stream, it was prior to the sixteenth century, and if the obliteration of that river was due to the upheaval of the Chupaderos Mesa, that disturbance also took place before the Spaniards arrived in New Mexico. Lastly, since, as I shall hereafter establish, the pueblo called Quivira was in existence as late as the seventeenth century, its destruction cannot have been due to volcanic phenomena at Chupaderos.

"I should not be surprised if, in the course of future historical investigations, it should be found that the pueblos of the Medano, or some of them besides Quivira, were occupied as late as the middle of the seventeenth century. That they were Piro villages is almost certain; and we must remember that Chamuscado, in 1580, saw eleven pueblos around Salinas, and Benavides, half a century later, speaks of fourteen or fifteen. Even allowing three pueblos to the Tiguas at Manzano, it leaves for the Piro a greater number than are positively identified as having belonged to them. The cause of the abandonment of these settlements was doubtless the inroads of the Apaches.

"I have also heard of vestiges of detached houses on the eastern edge of the mesa, but this needs confirmation. The chief interest for the antiquarian, however, lies in the ruin called "La Gran Quivira." In the first part of this Report, I have already stated that this designation is a misnomer, and that these remains, long a mystery, are those of the Piro village and mission of Tabira."

JUMANOS, APACHES, COMANCHES.

This was also the domain of the Jumanos, or rather the region in which they came in direct contact with the Pueblos and fell in part under the influence of the Spaniards. Benavides tells in most interesting manner the story of their conversion. It was a semi-agricultural tribe; apparently with permanent habitations and yet roaming from south of the Rio Grande in Chihuahua to the Wichita Mountains on the north, as far west as the Salines and east almost to the Missouri. They have left no recognizable trace of their language or their culture, as far as known. Col. Twitchell, in his "Leading Facts of New Mexico History," sums up what the authorities have to say about the Jumanos, the literature discussing them being quite voluminous. The Jumanos were the only Indians in New Mexico who were accustomed to striate the face, either to paint or to tattoo it. It is certain that as late as 1697 a Jumano Indian, a female known as "a striated one of the Jumano nation," was sold at Santa Fe for a house containing three rooms and a small tract of land besides. This woman had been sold to the Spaniards by other Indians who had captured her. The name of the "Mesa de Jumanos" appears the only permanent heritage the tribe left to New Mexico.

They differed somewhat from the Comanche, whom the Pecos people called Ko-mant'-sesh.

F. W. Hodge was informed by the venerable Jose Miguel Peco (Zuwa-ng'), a native of Pecos, then residing at Jemez, but since de-



Courtesy of F. A. Wadleigh, Denver.
 DETAIL OF WALL OF RUINS AT AZTEC, N. M.



Photograph by Sheldon Parsons.
 SANTA FE AS IT WAS, IS NOW, BUT TOO SOON WILL PASS.
 From the painting by Walter Ufer, first exhibited in the Palace of the Governors.

ceased, that he remembered having seen some "Humanesh," as he called them, many years ago. They lived in tipis, he said, not in houses, a month's journey from the Rio Grande, in the "Sierra Jumanos," which, by the way, in the form of "Jumanes Mountains," is the name by which Josiah Gregg, author of the excellent *Commerce of the Prairies*, knew the Wichita Mountains.

It is the Apaches who remained masters of the Estancia Valley after the Piros, Tiguas and Jumanos had departed, and they were the last to yield complete obedience to the whites. Tradition has it, and it is quite likely, that at least some of the pictographs in the canyons south, east and west of the Salinas are reminders of Apache days. Still later, the Comanches came as far as Santa Fe by way of the Saline Lakes.

THE PIRO TONGUE.

Bandelier promised himself much from the linguistic study of the Piros and Tiguas at Ysleta and Senecu, near El Paso. But recent investigations indicate that little light will come from that source. J. P. Harrington, of the School of American Archaeology, has carefully gathered what remains of the Piro tongue. He takes the few place names recorded by Bandelier, a version of the Lord's Prayer in Piro, first printed in Mexico in 1860, and cited by Bancroft but with twelve errors, a brief vocabulary recorded by John Russell Bartlett in 1850, and a brief vocabulary obtained by James Mooney in 1897. To this Harrington adds the results of his visit to Senecu, which he says were unsatisfactory. A list of some 300 words is given and analyzed.

Harrington says that the name Piro is not known to the Tewa and Jemez Indians and he suggests that the term "Tewa language" be extended to include Piro. Benavides

refers to them as Tampiros and includes the Tigua villages with those of the Piros under the term Tompiros. Benavides gives the date of their conversion definitely as 1626, but does not state positively that the mission churches were built in that year. He speaks of them as "a people clothed and of republican government, subject to their captains, great cultivators of all sorts of seeds, their own as well as those we have brought them; making very great hunts of deer, cottontail rabbits, jack-rabbits, and many sorts of fish in the river."

The area occupied by the eastern branch of the Piro extended from the pueblo of Abo to Abo Pass, southeastward to and including the pueblo of Tabira, a distance of about 30 miles. The habitat of the eastern Piro was even more desert in character than that of the eastern Tigua, which bounded it on the north. In addition to the three pueblos named, it is not improbable that the now-ruined villages known by the Spanish names Pueblo Blanco, Pueblo Colorado and Pueblo de la Parida, were among the eleven inhabited settlements of the Salinas seen by Chamuscado in 1581. Oñate, in 1598, visited the pueblos of the Salinas, and in the same year the first missionary labors were begun in this section by Fray Francisco de San Miguel, a chaplain of Oñate's army. The headquarters of this fraile were at Pecos, but he ministered also to the Indians of the Tigua pueblo of Quarai and to the inhabitants of the three Piro villages above mentioned. The first actual missions among the Piro of the Salinas were established in 1629 by Francisco de Acevedo at Abo and Tabira, and probably also at Tenabo, but ere the massive-walled churches and monasteries were completed, the village dwellers of both the Salinas and the Rio Grande suffered so seriously from the ever-turbulent Apache, that every village of the Salinas was deserted before the Pueblo insur-



By Courtesy of E. Knight of Albuquerque, N. M.

PICTURES BY THREE ENGLISH ARTISTS,

Who exhibited at the Museum of New Mexico in the Palace of the Governors this summer and will exhibit again, in oils and water colors, at Santa Fe, early next Spring. The first picture, "A Flower," is by Harold Knight and was exhibited in the Royal Academy in 1915. The second is "Artist and Model," by Laura Knight, and was first exhibited at the International Society in London in 1914. The lower picture, "Round the West'ring Corner of the Woods," by S. I. Lamorna Birch, was first exhibited at the Royal Academy in 1915.

rection of 1680. The few Piro who remained in New Mexico were doubtlessly absorbed by the Tigua.

To let Bandelier sum up:

"The salt marshes in front of the Manzano range gave the Tiguas, as well as the Piros of Abo and of Tabira, an influential position through their control over the supply of salt.

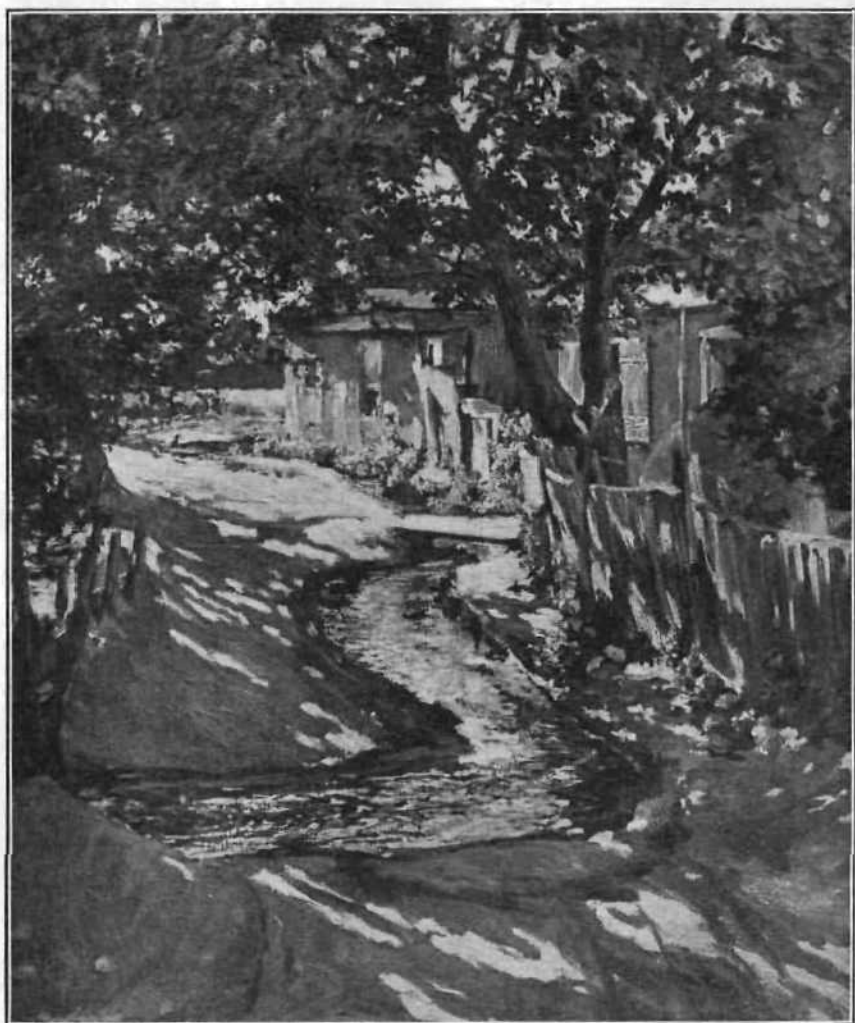
"Between the Rio Grande Tiguas and the Tiguas of Quarai, Chilili and the Manzano, both groups of one and the same linguistical stock, the uninhabited region is from 35 to 40 miles wide, and there the Apaches could lurk and assault at any time. The Pueblos, far from being masters of New Mexico previous to the coming of the Spaniards were on the contrary hemmed in and hampered on all sides by tribes, who while not mere savages were of wild habits, and having no permanent abode, were swift in their movements and had a great advantage in number over the Pueblos. The Pueblos besides, were not harmonious among themselves. Divided into seven linguistic groups, the difference of languages created a barrier that often led to intertribal hostility. Moreover, there was not even unbroken peace between the villages of the same stock.

"South of the Tanos villages, on the east side of the Cordillera which runs at some distance east of and parallel with the Rio Grande, began the settlements of the Tiguas, with their pueblos of Chilili, Tajique, Manzano and Quarai. These towns ranged along the west and southwest of the salt marshes; it seems that they were not the only ones inhabited by the Tiguas in that vicinity, as their number is variously stated from "many" to a half a dozen. The latter number is probably correct. I am only positive about three, Tajique, Chilili and Quarai. Of the Manzano, I have not as yet been able to find anything reliable. There are vestiges of Indian remains there, but I do not know whether they belonged to the communal or to the small house type. During my stay at Manzano in 1883 the ground was covered with snow. But the Piros also had crept up towards the coveted salt lagunes of the Manzano. The picturesque valley of Abo contained at least two of their villages, Abo proper, Tenabo, probably the ruin called today "El Pueblo de los Siete Arroyos." Lastly, still east of it at the foot of the Me-

sa de los Jumanos there was Tabira, now famous under the misleading surname of "La Gran Quivira." It lay very near the range of the New Mexico Jumanos, so that it is not unlikely that the Pueblo de los Jumanos, mentioned as a Piro village, is but another name given to Tabira. Of these three or four pueblos, it is only known that they were abandoned between 1670 and 1680, probably about 1675 or a little previously. The descendants of their inhabitants today live at Senecu, Chihuahua. Of the cause of their abandonment there is but one report, namely, that the Apaches compelled the people to leave. Fr. Juan Alvarez places the loss of the six pueblos of the Salines immediately before the slaughter at Senecu, and after the massacre of Hawicu in 1672. Fray Silvestre Velez de Escalante mentions the event. Of these it seems that Quarai fell first. The people fled to Tajique. Those of the Piro villages retired to Socorro and Alamillo or to El Paso for safety. The chief interest, historically, centres in the ruins called La Gran Quivira. There is no doubt that they simply are the remains of the pueblo of Tabira. The name of Quivira was given to them in the latter part of the past century in consequence of a misunderstanding. The mission at Tabira was founded, and the older and smaller of the two churches built, by Fray Francisco de Acevedo, between 1625 and 1644. The large church and convent are posterior to that date, and were evidently never used not even finished. There were Indians (Piros) from Tabira at El Paso in 1684. Whether the pueblo "de Jumanos" was the same as Tabira it is difficult to determine. I suspect it to have been the same. In the document entitled *Confesiones y Declaraciones de varios Indios de los Pueblos del Nuevo Mexico*, 1683, there is the deposition of an Indian calling himself Juan of de nacion Piro natural del pueblo de Jumanos en el Nuevo Mexico. There was one Jumanos village, if not more, but this particular one strikes me as being possibly a surname given to Tabira, owing to the latter being situated on the southern declivity of the Mesa de los Jumanos."

THE ACCURSED LAKES.

The lakes which gave the name to the entire region are most easily



Photograph by Sheldon Parsons.

THE ACEQUIA MADRE AT SANTA FE.

From the painting by Walter Ufer. It was first exhibited in the Palace of the Governors.

reached from Estancia. Only one of these is in reality a "salt" lake, and to it people from far and near still come to get salt. The other lakes are alkali. Attempts to make them commercially useful have thus far failed.

Quoting John Peabody Harrington in his "Ethnology of the Tewa Indians":

"The Indians of the various pueblos in ancient times used to make long pilgrimages thither on foot for the purpose of gathering salt, an operation which was regarded as a religious ceremony. After wagons were introduced among the Indians they hauled heavy loads of salt in them from the deposits. This is still done at the present day. An Indian of San Juan hauled a wagon load from the Salinas district last year. Mexicans from various parts of New Mexico get their salt from the Salinas as they have done for generations. The salt was formerly free to all, but a few years ago an American, in possession of the best deposit, at a place eight miles east of Willard began charging for it.

"The Tewa insist that formerly the salt was not considered the property of any one tribe of Indians, but the divine gift of Salt Old-Woman (The Salt Mother), who gave of herself freely to the Indians who came to seek salt. The Tewa state further that the Pueblo Indians who used to live near the salt deposits did not own them or interfere with other Indians getting salt, but that the Apache, when on the warpath, would kill people who went to the salt marshes.

"The Tewa when fetching salt used to go in groups of several men each and deposit prayer sticks in the lake and throw coarse meal into it. They would pray long by the lake. They brought the salt home in bags.

"The Santa Clara myth describes Salt Old-Woman's personal appearance. She wore white boots and a white cotton manta, and in her hand instead of a handkerchief she carried a white abalone shell. It was so soft that she could fold it—and white."

The Salt Lake is in a region of forbidding aspect and Lummis, in his masterly way, gives a vision of it as follows:

"Climbing that rugged barrier, on threading one of its passes the traveler thence descends through park-

like pineries to the edge of the infinite eastward plains. In the centre of this bare, brown vista gleams a chain of ghastly white salines, the "Accursed Lakes" of Tigua folk-lore. These once were fresh—the story runs—the home of fish and waterfowl, the drinking place of the bison and the antelope. But in one of them dwelt an unfaithful wife, and for her sins the lakes were accursed forever. Beyond them the dead plain melts upon the indeterminate horizon. Between them and the cordilleras, dark, low ridges fade from pineclad slope to barren prairie. Far southeast and south are the spectral peaks of the Sierra de la Gallina, the Sierra Capitana, the Sierra del Carrizo and the Sierra Blanca; and to the farther north the dim blue shadows of the range of Santa Fe. It is a strange, weird outlook—a visual leap into space."

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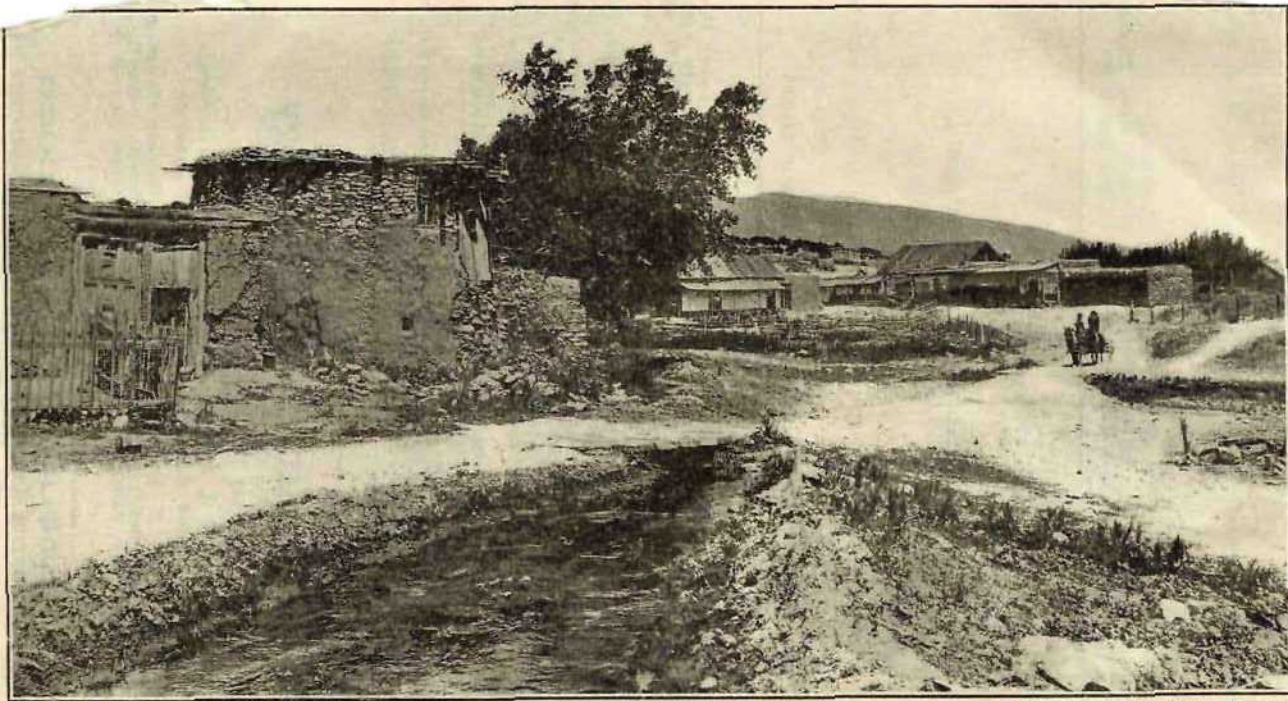
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SPANISH TOWER AT ENTRANCE TO MANZANO.

Photograph by Jesse Nusbaum

See "The Cities That Died of Fear." Notice the ancient gateway with the "Needle's Eye," or gate within a gate. The Irrigation Ditch in the foreground is the main outlet of the Manzano Lake and waters the Apple Orchard which is reputed to be a quarter of a thousand years old.