

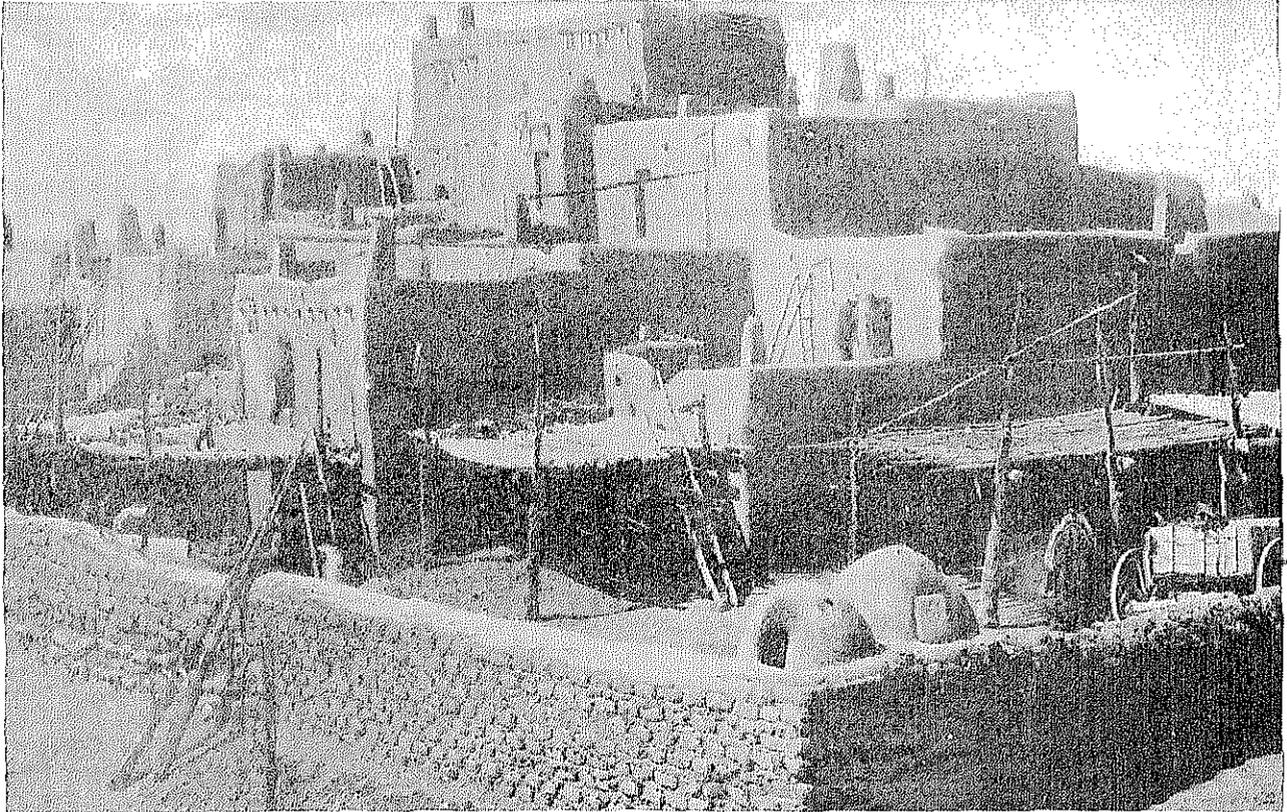
entrance was had through trapdoors in the roof reached by ladders from without, which in time of danger might be pulled up and so allow no opportunity to the invader. In front of both pyramidal structures stands a row of huge bake ovens, conical in shape, each provided with a large door and hole for draft, which are seldom used save by the dogs, which find them snug kennels at night. After a fire has been made and allowed to burn for some time, the oven is cleared, heat sufficient remaining for a number of bakings. I give a close description of an Indian dwelling, as, with the exception of the height to which the structures rise at Taos, one is typical of all others throughout the pueblos. Mounting one of the many ladders, we gain the first platform. The door confronting us is about two-thirds the height of a man. The room probably measures 15 by 20 feet, with a height of 7.5 feet. In one corner is the open fireplace, about which lie pots, large and small, used in cooking, also a pile of piñon branches and mesquite roots for fuel, and a large olla with open mouth, serving as a depository for ashes. Along one side is the bed, with its cushions of skins and blankets, under which are concealed the few valuables of the occupant. From the rafter hangs the cradle, a stout wicker basket, furnished with soft skins, and near it are strung festoons of many colored ears of corn, red peppers, jerked meat, bear grass, and feathers. The floor is of hard cement, sometimes blackened and polished by application of beef blood, and the walls at their junction meet in a curve. At the height of 2 feet is a broad band of yellow ocher encircling the room; from this to the top the walls are either whitened with washes of ground gypsum or allowed to remain the original color of the clay. The ponderous cottonwood timbers overlying the walls are barked and left clean, and suffered to protrude several feet, more or less, on the outside. A multiplicity of ladders of all sizes, charred and cracked pots capping the chimneys, a bake oven large enough for a night's lodging, trapdoors, poles of odd and unnecessary lengths, which serve as occasion requires for jerking meat and drying clothes, are what confront one on each exit from the dim interiors into the intense sunlight. Mounting higher, the walls are found to be more delicate and the ceilings lower, the highest story of the north pueblo barely accommodating a person in a sitting posture. Here and there on a balcony by itself may be seen a large wooden cage, which indicates ownership in an eagle, though usually the bird, with wings clipped, is espied enjoying his probatory freedom on a clothespole or on the lofty summit of a tree in the sacred grove, which extends along the stream for 2 miles behind the town, a sort of park for the villagers, and back of all, though near enough for the eastern sun to cast therefrom long shadows over the pueblo, rise the magnificent summits of the Taos mountains, attaining a height of more than 14,000 feet. Linguistically, Taos belongs to the Tigua (Tequas) group, of Tewan or Tanoan stock. The Taosans braid 2 side locks of hair with fur or worsted, parting it back and front in the center of the head. Like their northern neighbors, the Utes and Apaches, they dress largely in skins, though calico serves them for working garments. In respect to communal organization and religious ceremonials, they conform to other pueblos, and their Indian language is identical with that of Isleta, the pueblo farthest to the south. This pueblo has a range of almost 500 acres of fine pasture land inclosed by a wire fence. Here all the flocks and herds of the community graze, horses, cattle, and goats. All save the horses are driven back to the pueblo and corralled at night. Taos has a grant of 17,361 acres. One-half is inaccessible and about one-third of the remainder is unavailable either for grazing or agriculture.

SAN JUAN.

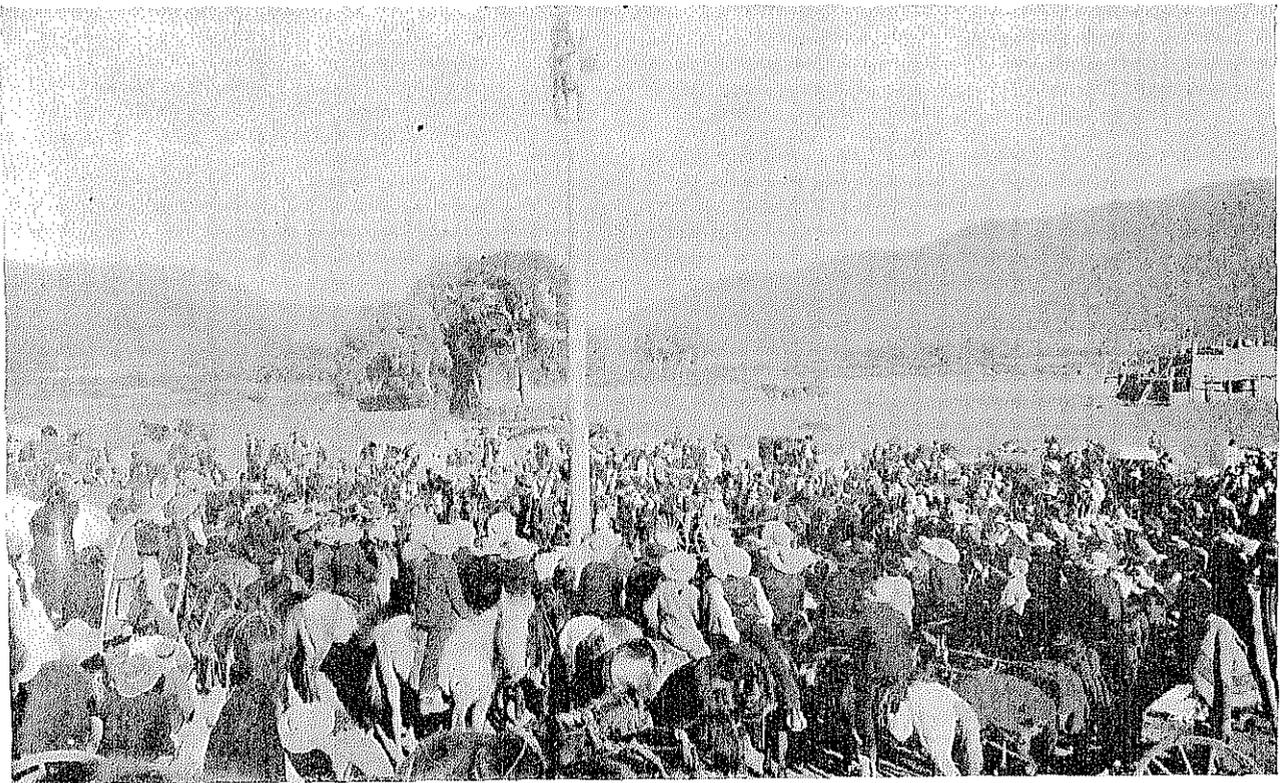
San Juan lies upon the sand dunes, 20 feet above the left bank of the Rio Grande. From this slight elevation the fields stretching to the north, west, and south show by their different colors that a variety of crops is produced. Compared to Taos, the character of San Juan is more that of a great garden. Crossing the broad acequia, one leaves the arid sands to enter rank verdure. Trim fences of cedar limbs driven into the ground in close line or dry brush fastened upon posts with thongs of leather inclose little holdings of half an acre or more, growing cabbages, melons, beans, squashes, oats, peppers, and corn. Dense and diminutive orchards of apple and plum trees alternate with these garden plots. Branches overhang and trail upon the hard clay floors beneath. Children play here, and old people on couches enjoy the coolness of the shade. The acequia close at hand spreads its waters by a labyrinth of subchannels and lesser courses through the verdure, losing itself among tall grasses and reappearing to inclose in its sinuous lines hillocks of pease and beans. Little houses of adobe or of wicker, often adorned by a booth of boughs on top, where the family partakes of its meals, surprise one at almost every exit from the dense shrubbery.

At San Juan, out of a population of 406, there are 80 Indians owning land. While some are found to have 20 and 25 acres others have none, but make their living by working for neighbors. The official schedule for this pueblo states that 342 acres are under cultivation. This is too low a calculation by at least 300 acres. The enumerators' blanks call for entries of farms of more than 3 acres only. Very many farms contain less than this. The nominal régime of a commune has not produced equality of condition; rich and poor live at San Juan. This disparity has resulted in the willingness of the slothful to sell their allotments and the readiness of the industrious to buy.

They have no flocks of sheep and but a few goats and cattle. Their meat is purchased or received in lieu of work on cattle ranches, and eaten by the well to do on an average of once a month. As vegetarians, however, they maintain a vigorous degree of health. The land lying above the large acequias, especially south of the town,



TAOS PUEBLO.



FEAST OF SAN GERONIMO, HELD AT TAOS PUEBLO, NEW MEXICO, SEPTEMBER 30, 1889.

is level and well adapted for farms. Almost 1,000 acres could be saved by ditch construction at a higher level. The government could not undertake a better work for the Indians than to aid in this scheme. The necessary expense of surveys, overseeing, and material might be met by a tax on the products of the land reclaimed, the first payments being made by a loan from the government.

The land here yields 15 bushels of wheat and 20 bushels of corn to the acre. The method of thrashing wheat is the ancient one of treading by animals, either horses or goats. An inclosure is formed by long poles driven into the ground. Connecting these are ropes of rawhide, which support blankets, giving the slight framework an appearance of strength. A band of horses or a flock of goats tramping all day will thrash 20 or 25 bushels. The grain of each farm is thrashed separately, animals sufficient being had by uniting the resources of a number. There are 6 thrashing floors at San Juan. At the thrashing season a man and wife may be seen entering the store of a trader, she carrying in her dress and he in a blanket the little results of half a day's thrashing, sifting, and cleansing. Taking a box holding 10 pounds they scrupulously fill it time and again, turning the contents into the trader's bin. The equivalent is at once taken in trade at the counter, where husband and wife discuss calico patterns or the purchase of a new hoe.

The town is built of adobe houses 1 and 2 stories high. The plaza is long and irregular, the streets running at right angles and parallel to it. Fewer ladders are seen than at Taos, entrance being had on the ground floor.

A large Catholic church stands beyond the western end of the plaza, and in front of it has recently been placed a gilded statue of the Virgin, heroic size. This is erected upon a pedestal and inclosed by an iron railing, a gift to the pueblo by the residing priest. Twenty yards from this, and in the plaza, a neat chapel of stone has recently been built at a cost of \$10,000, also a gift of the priest, who is a Frenchman, one of the 9 now among the pueblos recently installed in the places of Mexican padres.

The school, under the management of a Mexican, numbers 35 to 40. The school is Catholic. One of the most potent influences for education in the pueblo is the counsel and example of a resident for 22 years, trading in the community. He has a flower, fruit, and vegetable garden of 2.5 acres, kept by an experienced German, whose experiments and results are at once a surprise and an incentive to the Indians. He has been called upon for many years for advice in matters of personal grievance and neighboring encroachment. Although frequent opportunities were offered for acquiring land in the pueblo, he owns only what his house stands upon.

San Juan holds 17,545 acres, little of which, outside of the bottom lands of the river, is available for pasture. But few flocks and herds, therefore, are maintained. Every man in the pueblo owns at least one horse and one burro, and some have several of each kind. Small reserves are left among the bottom lands for grazing purposes.

SANTA CLARA.

Santa Clara is poor. The valley which widens toward San Juan closes again on its approach to Santa Clara. The pueblo occupies a site on the right bank of the river at its junction with the canyon. The stream running from this is apt to dry up before the end of the summer. A system of acequias has been constructed here, and corn was planted this year. But little water was flowing during my visit in the middle of August, and most of the acequias were dry and dusty. The corn was not mature. A reservoir in the canyon would relieve much anxiety and prevent frequent loss of crops to the Indians. From the northern boundary of the grant toward the town (the town invariably occupies the center of pueblo grants) little or no farming is done, the mesa here running close to the river. Below the village on the right bank lies most of the tilled land. Three hundred and fifty acres are here devoted to corn, wheat, alfalfa, and a variety of vegetables. There are but few orchards. The largest plot owned by one man is 30 acres. From this the holdings decrease in size to 3 and 2 acres. There are 22 horses, 4 oxen, and 30 burros in the pueblo. Some who have horses have no harness and no money to purchase. The agency granted 2 plows for the village, which are used by lot. The only revenue outside of their farms comes from work on the railroad, where they receive from 50 to 75 cents per day and board. The women manufacture fine pottery, and some families are quite constantly employed by orders for the eastern market. On the left bank of the river their land, 3 miles long by 1 mile wide, is at present in litigation. There are 2 cases now pending in the courts against the pueblo. The inhabitants of the town are divided by party controversies. This has involved them in intricate troubles over their land. Indians of one faction have come into the courts of Santa Fe and sworn that they did not own or care for certain portions of land. The pueblo has a grievance against 8 Mexicans and 1 American who have fenced in portions of their second grant in the canyon several miles from the village, and have seized the water supplies. A title to the grant dated 1763 from the Spanish authorities has been placed in evidence. This case has now hung for 9 years in the courts. As possession for 10 years is the best title to be had in the territory, immediate action is necessary.

In the *pueblito*, or little village of the canyon, live 5 families. Their houses are constructed of cedar posts and mud, and are small. They farm small patches here and there, in all about 40 acres. The water supply is limited.

Santa Clara has a grant of 17,360 acres.

SAN ILDEFONSO.

Santa Clara's neighbor on the south is San Ildefonso. The village lies on the opposite side of the river, 5 miles below, and at the intersection of Pojoaque river, which meets the Rio Grande at right angles from the east. The dwellings are built upon a large, well kept plaza of rectangular shape, and the only plaza in the pueblos having shade trees. From this center the buildings are found variously placed. Close to it on the acequia are several Mexican houses and in the fields at a distance several others. Inquiries developed the fact that years ago these families were allowed to enter the pueblo, and land was sold to them. By degrees they have enlarged their boundaries. No land, however, has been sold them for a number of years. All acts of violence are tried by the justice of the peace, the Mexican alcalde court.

The available land for cultivation remaining to this pueblo is a strip on the east bank, and between one-third and one-sixth of a mile wide. The largest plot, 7 acres, under cultivation is owned by a widow, growing corn and wheat and a few fruit trees, the only fruit trees in the village. This land is tilled for her by the community, and her gratuities in return have won for her the name of the "Mother of the Pueblo". The size of other farms is from 2 to 3 acres. This pueblo had originally 17,293 acres. The contracted range of the bottom lands to which water is accessible would not measure a section and a half, or 960 acres. Above the line of irrigating ditches the land is useless even for pasture. The high mesas closing upon the river a mile south of the town leave no land below this point for cultivation.

POJOAQUE.

The grant to this pueblo originally contained 13,520 acres. Owing to shrinkage in population the inhabitants have parted with most of their land. At present they have but 25 acres.

The pueblo, situated a mile east of the junction of the Pojoaque and Tesuque rivers, contains 20 persons. They have been in litigation for 4 years with two Mexicans who have settled on the river a mile below the village. This land was not farmed by the Pueblos. The Mexicans therefore appropriated it. The governor says he has wasted much time at court during harvest season over this case. He has attended sessions for 4 years. The sum total of property in Pojoaque is 8 cows, 12 burros, 2 wagons, 7 pigs, 1 set of harness, 1 ox cart, 1 small wagon and 4 plows.

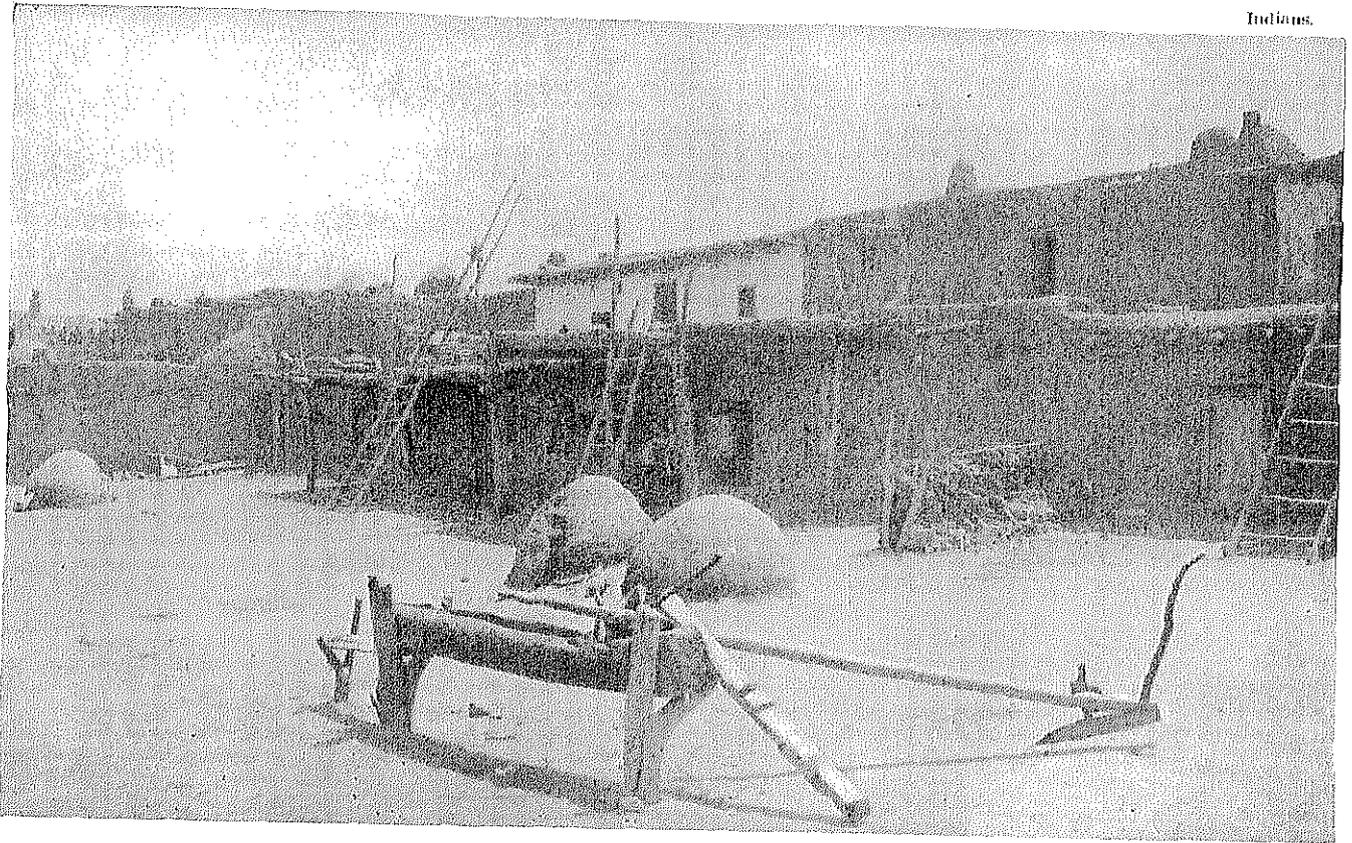
TESUQUE.

One approaches Tesuque, situated on the left bank of the river of that name, over a road winding through small orchards fenced by an abatis of cedar boughs driven into the ground, while apple and peach trees tangle their branches overhead. Small patches of wheat and corn lie on either side of the road. The village is built about a quadrangle 240 feet long by 150 feet broad. The houses are mostly of 2 stories. The Catholic church is small and in a neglected condition. Methods of farming are crude. Both wooden and steel plows are used. Corn is planted too closely, seldom in rows. The result is fair. There is more uniformity in the size of the farms than at any other pueblo. The greatest amount of land owned by one person is 18 acres, the lowest 6 acres, an average of 9.3 acres. Orchards of an acre contain about 20 trees, yielding liberally. The fruit, however, is small and of little flavor. That found in the pueblos farther south is invariably fine. From 14 acres the owner has realized \$110; from 10 acres, \$65. Out of a population of 91, 25 maintain farms, cultivating 230 acres. Pottery is an industry in this village. Proximity to Santa Fe supplies their kilns with orders. The products are usually fanciful and not characteristic of the Indian design. They still grind corn by stone rubbing. Four bins, each supplied with a stone fitted into it like a washboard, are found in many houses. The grain thrown first into the bin having the stone of roughest surface is there broken by bearing down upon it with a stone similar in shape to a "twist" loaf of bread, using the motion of washing clothes. In the next bin, over a smoother surface of stone, the grain is ground a degree finer. After passing over 4 stones of graded surface the product is ready for sifting. Passable flour and corn meal are thus produced. Much of the raw material is exchanged for necessaries at Santa Fe. The rooms of the houses, usually of small size, contain an occasional chair or table. A painted door is observed here and there. The walls are decorated with broad bands of yellow ocher or red clay to a height of 3 feet and above this to the rafters are whitened with gypsum. Occasionally the wash has been applied to the exteriors of the houses. Large porticoes, or atria, the pillars decorated by flat wooden capitals engraved in shallow design, are found upon the ground floor or second story. Glass is used in most of the windows, unfortunately preventing ventilation. The men wear overalls and vests, but hats never.

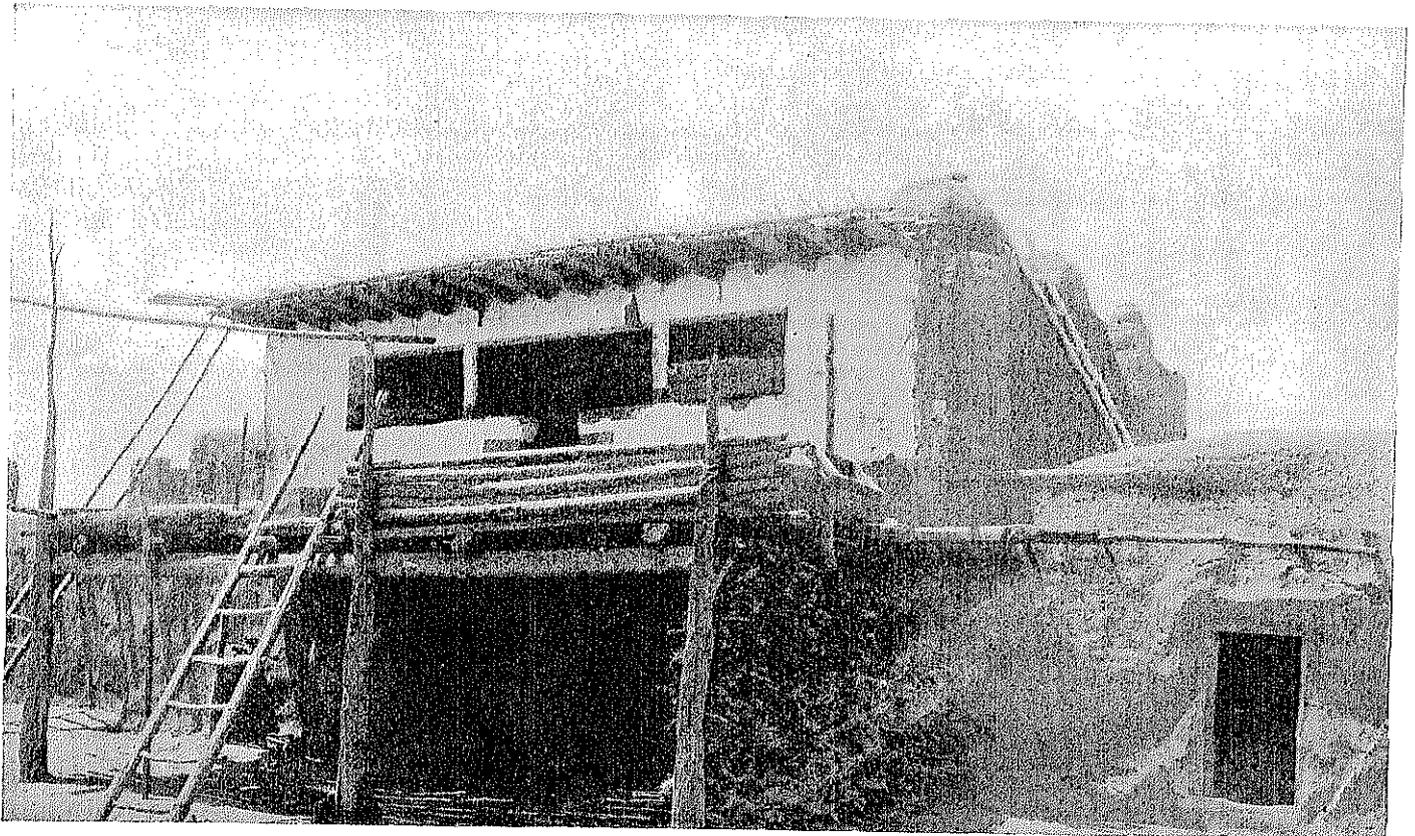
Tesuque has a grant of 17,471 acres.

NAMBE.

Nambe is found by following the bed of the Pojoaque river for three miles after leaving the government road. Its difficulty of access causes it to be rarely visited. The hills surrounding it to the north and east are fast crumbling by disintegration, showing some of the best sculptured forms of geological structure to be seen among the pueblos. The town is situated at the intersection of a small stream with the Pojoaque river, affording an unfailling supply of water and abundant crops. The population numbers 79, with farms covering about 300 acres.



TESUQUE PUEBLO (INDIAN VILLAGE) NEAR SANTA FE, NEW MEXICO.



GOVERNOR'S RESIDENCE IN PUEBLO OF TESUQUE.

There are 20 landholders, the largest having 40 and the smallest 6 acres. The average size of farms is 15 acres, larger than in most of the pueblos. Save a few beans and vegetables, their crops are entirely of wheat and corn. Alfalfa, harvested 3 times a year, is grown by all those owning stock. The wealthiest Indian in the pueblo has realized \$360 from his 40 acres, and few Indians in this section do better than this. This man has assistance on his farm, and, selecting him as an extreme example of Indian industry, I state his crop for the present year as follows: wheat, 38 bushels; corn, 160 bushels; alfalfa, 30 tons. He owns 2 horses, 2 burros, and 20 cows, which bore 8 calves last year. From this herd he was able to sell 6,000 gallons of milk and make 200 pounds of cheese.

Nambe has no orchards. One Indian has made a beginning and shows a young grove of apple and plum trees not yet in bearing. The original grant to this pueblo contained 13,586 acres. Some of the land has been rented to Mexicans, several of whom live at the pueblo, 1 being married to an Indian woman. A member of the tribe marrying at San Juan sold out to Mexicans. The Indians own a few goats, but no sheep. They seldom eat meat, having to buy it, or receiving it occasionally in payment for labor. The pasture here is very scant, and the Indians complain that what they have is overrun by the stock of their neighbors, and no attention is paid to their remonstrances. Marauding herds of cattle and sheep approach close to the village and often overrun the crops. For the past 3 years these depredations have increased, and the owners have no redress. In my opinion, before these grievances kindle into acts of violence, their agent should get an appropriation sufficient for rediscovering the corner mounds of their survey, and have painted and erected at these points signs bearing a warning in Spanish to the effect that all stray stock found ranging within the bounds of the pueblo would be driven to the pound and released only on payment of a fine by the owners, and that all encroachments for purposes of agriculture would meet with prompt prosecution in the courts. After the posting of this manifesto there should be an energetic exercise of authority for its enforcement. The town has been built about the sides of a rectangular plaza, in the center of which stand 3 houses, which, like many of the structures, are falling into decay. The interiors of the dwellings are uniformly neat and often decorated with pictures. A rude image of Christ, of old design, with a calico gee-string of modern pattern thrown around it, indicates the modesty of the proprietor. White sheets and pillowcases are occasionally seen. The church is large, and, together with other evidences, proves that at one period Nambe had many times the present population, but the pulpit is tottering and ready to fall, and the walls need repair. The priest visits the town every 3 or 4 months.

Nambe contains much of archaeological interest. Pottery of ancient make and design, some of which is glazed, is to be found here, and stone relics are occasionally discovered.

Nambe has a grant of 13,586 acres.

COCHITI.

Cochiti has an extremely favorable site. It faces the river at a height of 25 feet and is surrounded on 3 sides by tillable plains. The buildings in the town, 50 in number, are generally separated, not more than 3 dwellings being contiguous. The larger portion are of 1 story. Eight Mexican families dwell here and fraternize with the Indians. As long ago as 1820 the Mexicans acquired land here. They are regarded as under the jurisdiction of the pueblo, and perform communal work upon irrigating ditches and roads by command of the governor of the tribe. This community has made several removes since the beginning of the seventeenth century. The town was abandoned in 1681 on the approach of Don de Otermin with a small force, the tribe returning to the mesa of Portero Viejo, there constructing a new pueblo. Don Diego de Vargas 13 years after took this new pueblo by surprise and compelled the Cochitinos to resettle on their old site. In June of 1696, after participating in the uprising of the Jemez, Tehaas, Taos, and other tribes, they fled to the highest mountains; but through negotiations with the Spaniards, they again occupied the town of Rio Grande. Here they remained under the surveillance of Spanish and Mexican regiments until 1846, and here they continue to the present time.

The arroyo De la Peralta joins the river just above the town, its breadth giving evidence of large volumes of water during the spring freshets. It can not be counted upon for irrigation. Cochiti has no orchards, and no trees are to be seen here save the cottonwoods and willows on the sandy island of the river. South of the town the island is clear, and affords fine pasture, which is held in common for all animals. Upon this island small patches of 1.5 to 2 acres are planted in corn. Adobe houses of a single room are found where land is farmed at a distance from the pueblo. A number of incidents were cited by the governor showing the various ways in which these houses had been gotten by Mexican neighbors. The houses of the town are better built and more healthful than in many pueblos. Paneled doors, window sashes, and glass are generally used. Open antechambers for sleeping are noted. This is the most northern pueblo in which are to be seen inclosures, or yards, in front of houses. These are called corrals, and are used as such for horses in waiting for one or two hours. The fences are formed of cedar trunks driven in the earth at close intervals and bound together with telegraph wire, thongs of leather, and horsehair. The plaza is unusually large and the streets wide. The Catholic church is in good repair, the Mexican contingent taking a greater interest than the Indians in its ceremonials. The grant of Cochiti is 24,256 acres.

JEMEZ.

The village of Jemez is situated at the mouth of one of the most romantic canyons of New Mexico. Just above the northern boundary of the pueblo grant the walls of the mesa on either side rise suddenly to a height of 1,900 feet. The remains of the ancient pueblo of Jemez are still seen 13 miles above, and upon the mesas between that and Jemez appear the ruins of more recent pueblos, built by insurrectionary communities. Approaching from the terminus of the valley, which penetrates the mountains for many miles, we cross the Viaceta creek, dry in summer, and 2.5 miles below this line the pueblo, inclosed on the northwest by numerous little orchards of apple, plum, and apricot trees, emerges from beneath this deep tangle of green. On entering from this direction, the Presbyterian mission schoolhouse, corral, and dwelling, built of adobe, are passed, and shortly after a line of cedar corrals extending entirely along the east and south sides of the town. At the extreme end of these is a Catholic church, and near it a 2-story frame building of the Catholic mission, its schoolroom below and dwelling apartments above. The plaza of Jemez is irregular and unusually narrow. The houses, built closely about this, are mostly of 2 stories. On either side, north and south, are 2 other streets, upon which the houses have been less closely placed. There are 85 houses in the town, and surrounding it on both sides of the river are many little summer lodges. Southeast of the town are 9 thrashing floors, where, for almost 2 months, since the 9th of July, the slow processes of thrashing grain by horses, and winnowing it by means of wooden shovels and the aid of the never failing southern breeze, have been in progress. About 1,400 acres are farmed, mostly on the west side of the river. The marks of an ancient irrigating ditch are seen on the east side, and an old Indian, who recently died, declared that it was used when he was a child. The Viaceta creek was then a small stream. By the increased size of its bed the acequia which crossed it, bearing water from the canyon at a higher level, was endangered and frequently broken. The ditch, and the land below which it commanded, were therefore abandoned. The Jemez Indians have a wide reputation for industry. With the exception of about 70 acres in scattered plots, all land to be reached by water is cultivated. There are 15 heads of families who own none and obtain subsistence by working on shares for their neighbors. The fields between river and town are surrounded by high mud walls. A door, with padlock and key, protects little plots of vegetables, fruit, and grapes. Of wine 40 barrels are made per year. Their dried peaches are excellent and command higher prices at Santa Fe than eastern fruit. This year Jemez will have 10,000 bushels of wheat and nearly as much corn. They are just beginning to fertilize their fields. An immense bank of manure, 9 feet deep and covering an acre, has been discovered, the site of former corrals. This the storekeeper has prevailed upon some of them to use. The same supplies are to be had at all pueblos, but little appreciation of the effects of fertilization is apparent. Their plowing 10 years ago was done by wooden plows and oxen. Since that time they have broken many horses to harness and are discarding oxen. According to some authorities they own 3,000 head of horses, according to others only 750. These are kept on an immense range of unconfined pasture land 50 miles long by 12 wide, claimed jointly by Zia, Santa Ana, and Jemez. It is impossible to get at the correct number of either horses or cattle. The Indians do not know how many they own. The possession of horses is doubtful wealth, the Navajos having broken the market. The Indians are as willing to take a journey on foot as on horseback, and are able to cover as much ground by one means as the other. The above mentioned grant was given under Spanish authority for pasture purposes, that government reserving the right of pasture for cavalry in the valley of Spirito Santo. Lately valuable mineral deposits have been discovered upon the grant, especially on the Rio Perco and near Salisaro. A 15-foot vein of lignite coal, also copper, gold, and silver, have been discovered by prospectors. The Indians threaten all comers to this valley who carry picks and shovels, though they show no inclination to mine themselves. A confirmation by government of the original grant for the purposes just mentioned (pasture), and its opening for mining would be advisable. Complaints are made that immense flocks of sheep range on the land. Stock from the adjoining Mexican village of San Ysidro frequently invades their corn and grain fields. The agency supplied them with wire for fencing, which was used for protection on this side. The fence has been broken, and there is much irritation in consequence. Some years ago the Mexicans obtained a foothold on the pueblo territory, and formed a settlement of 6 houses. Negotiations were entered into whereby exchange was made for an equivalent portion of land on the southern side of the grant. The Mexicans still held on to their houses and certain portions of land about them. A writ of ejectment was served, but the Indians seemed timid about using the land until their agent had the vacated houses destroyed. In 1830 the pueblo of the Pecos, linguistically allied to Jemez, abandoned its land and joined this community. A Presbyterian school was started 10 years ago and secured a large attendance from the pueblo. The Catholic mission 3 years ago established a school at Jemez, which also receives aid from the government. The result of having 2 schools in the community is that the children rotate between both, and regularity of attendance at either is broken.

The grant of Jemez contains 17,510 acres, 3,500 of which can be made available for agriculture.

ZIA.

Approached from any direction the little town of Zia stands forth boldly against the sky, a low line of gray and white buildings capping the stony promontory, which rises abruptly from the river to the height of 250 feet, and finds its connection with the mesa beyond in a narrow ridge to the north. The church of the Jesuits, occupying the highest site, is not large, but built for a much larger population than is to be found here. Evidences of shrinkage

are everywhere apparent in the ruined foundations of houses long since deserted, as well as in the dilapidation of vacant tenements. From the church to the plaza at the other end of the town, a distance of 200 yards, stand the houses that now remain. Little regularity in construction is observable, save that the buildings have been placed in parallel lines and face the 4 cardinal points. They are constructed of cobblestones and volcanic scoria, great care being observed in the selection of stones of one size. These are joined in rows of adobe mud. Occasionally the surface is plastered and the whole whitened. To the west of the town is a series of stone corrals. Every Saturday night the stock is driven into these and the herders are changed. Up the rocky sides come lines of horses, burros, mules, and cattle in headlong precipitation, hurrying to escape long whips carried by the herders and by the awaiting members of the community. Zia owns 300 horses, 40 mules, 100 burros, and 650 cows and oxen. The herders appear in the village with the necks of their horses garlanded with wood rats and other game which arrows and clubs have secured. Sunday, therefore, is a day of feasting. Toward the town from the west the river winds slowly through its wide bed for 3 miles. Above this its course lies northward. On the north and south are vast tracts of sandy and unproductive territory, and to the east following the river, thence until it joins the Rio Grande, the soil produces nothing. There are 26 spademen in this community, and they cultivate, in isolated patches, less than 100 acres of wheat and corn. The farming is performed in a shiftless and half-hearted manner. Neighboring Indians call them lazy, and this bad opinion of them was manifested by their Santa Ana brethren 2 years ago. When sending to them for aid in time of starvation, offering ready money obtained by selling their trinkets, the Santa Ana Indians refused them supplies, saying it was time they perished from the earth. Their neighbors at Jemez were more considerate. In 1876, out of good fellowship, they aided them for 3 days with a force of over 100 men in the construction of an acequia. This was allowed to fall into decay, and is now overgrown. They complain that much of their property was damaged by marauding bands of cattle, especially from Santa Ana. On application to the agent a paper of warning was given them, but as no one could read its contents it became a matter of derision, and the authority it was said to contain was held in abeyance for proof. The women are able to supplement by their skill in the art of pottery the modicum of support provided by their husbands. The kilns of this village have a just reputation for the shape of their models and for refinement of decoration. The olla is first sun baked, the painting is then applied, and the whole fired. Powdered gypsum is used for a white ground. Colored powder, obtained from red sandstone and trachyte, is mixed with water and applied by short stub brushes of grass. The sharpness of the edge and cleanness of the line thus effected is surprising when compared with the clumsiness of the implements. The design upon pottery is never a matter of fancy, but has significance, historic or mythological. The shapes frequently assume the form of animals and birds. The art is practiced entirely by the women, who show considerable steadiness of hand in applying their colors without the aid of a maul-stick.

Besides their scanty crop of wheat and corn, red peppers are grown. These do well in this soil and are produced in most of the pueblos. The chili verde is used as food. Only 2 small orchards are maintained in Zia, most of the inhabitants preferring to live upon their rocky site to descending and maintaining a home upon the plain.

Zia has a grant of 17,515 acres.

SANTA ANA.

One leaves Zia to follow the Jemez river directly east toward the Sandia range of mountains. The soil from this point rapidly becomes sandy and unillable, and at Santa Ana, 9 miles below, it is entirely unproductive. The inhabitants of this town have long since abandoned it as a place of summer abode, and use it only for autumn and winter residence. The town is built upon 2 streets running parallel with the river, and on its bank a single cottonwood tree is the only one seen in a range of many miles. Half a mile back of the town, to the north, the mesa rises to a height of 1,200 feet. On the top of this the cattle find scant pasture. They roam without herders, returning by a trail down its precipitous side every 2 days for water. They remain in the river for several hours, and then return to other dry table lands. To the south, beyond the river, as far as the eye can reach, lie undulating plains of wind-swept sands, dotted by stunted cedars growing at intervals, and often forming the nucleus of new mounds during wind storms. This tract is given over to coyotes and rattlesnakes. The trail through it to Bernalillo is almost obliterated by the shifting of the surface. While the tribe is farming its ranches on the Rio Grande below, 1 man, together with a messenger, is deputed by the governor to guard the pueblo. They occupy their time in making thread and moccasins. The thread from cow tendon is made by splitting the tendon carefully with the thumb nail and rolling it in a little spittle on the knee. The town is built on 2 streets running parallel with the river. On the outskirts are numerous cedar corrals, and near these a guest house, the most comfortable lodge in the village. Here strangers are entertained and, on the occasion of private feasts or dances, imprisoned. The church is a sizable structure with some pretense to architecture, and the bell on it bears the date of 1710. The dwellings are well built, generally of 2 stories, but at this time are deserted. The 2 I entered had fireplaces running the width of the house and having a draught from two chimneys. A complete removal is made in March. Furniture, cooking utensils, mural ornaments, as well as the eagles, dogs, and live stock necessary to farming, are taken to summer quarters 8 miles below. The cats alone remain, prowling like gaunt specters over the roofs and through the deserted streets.

At the ranches of Santa Ana are 2 small villages half a mile apart. Each is surrounded by orchards of peach, apple, and plum trees and small vineyards. The corn crop is one of the finest to be seen on the Rio Grande. It is grown in several sections, located apart, the boundaries of individual owners being indicated along one side. My guide pointed out his own portion, 80 feet in width by 400 yards long; others have sown more. About 750 acres have been cultivated. More land than is necessary is used for pasture. This is irrigated. The river divides above Santa Ana and meagerly occupies the 2 broad bottoms. By a boom construction in the river one bed could be made to accommodate all of its water, allowing the land lying in and contiguous to the other to be reclaimed. The grant of the ranches touches the town of Bernalillo on the south. Nine years ago the first Mexican house was built upon this land; there are now 11, inclosing 85 acres. The Indians are well supplied with stock, most of which is herded on the large grant, used also by Zia and Jemez. They count about 600 horses and 2,000 cattle, besides 30 yoke of work oxen and 150 burros. On the way from this pueblo to the river I passed 8 wagons, drawn by 4 and 6 oxen, carrying half a ton of grain each. Most of the crop is stored and ground by hand during the winter.

Santa Ana has a grant of 17,361 acres.

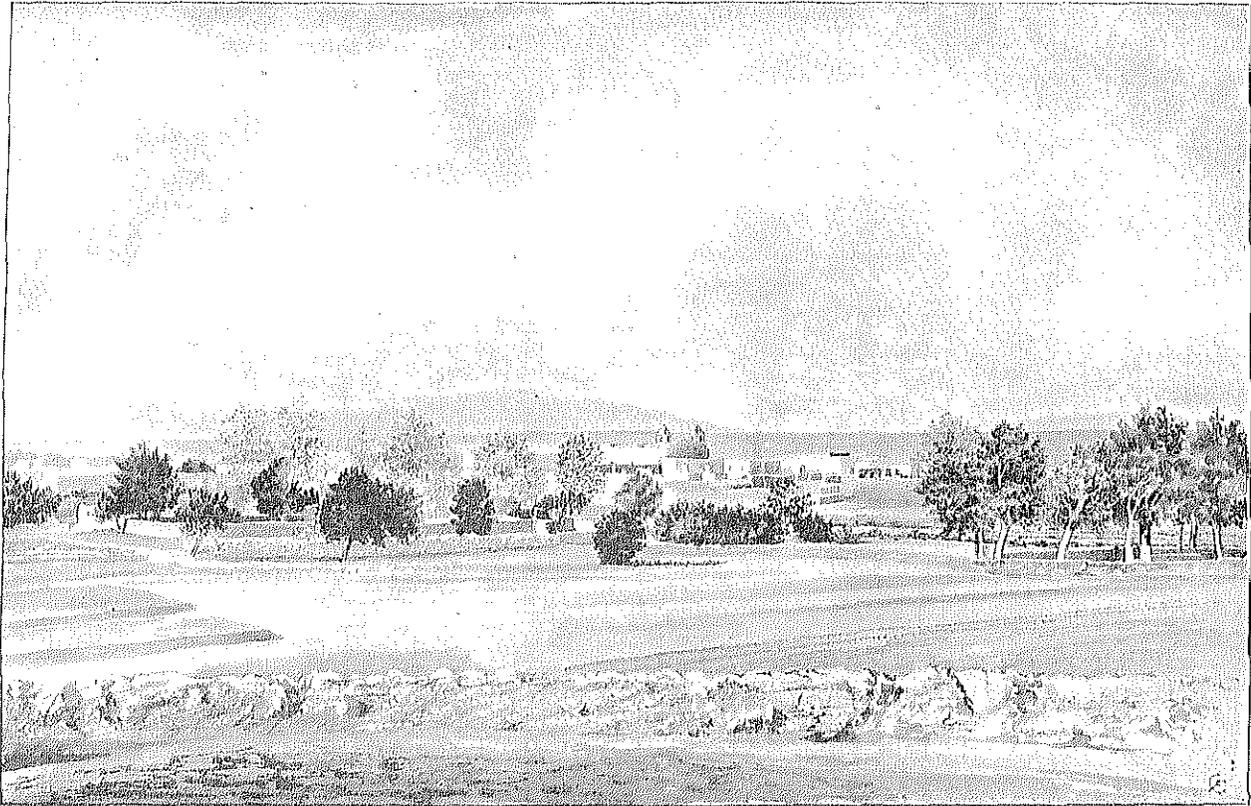
SAN DOMINGO.

This pueblo touches Cochiti on the north and San Felipe on the south, where its line runs at an angle of 50 degrees with the river and invades the square northern corners of the latter. Its population of nearly 1,000 is industrious and utilizes all available land. Hundreds of acres, however, are wasted in the river bed, as they are unwilling to risk crops upon it. An island overgrown by cottonwood trees serves no other purpose than that of a great park for the pueblo. Including this and the river bed, which varies from 1.5 to 1 mile wide, there are about 10 sections within the reach of water. I calculated that less than one-fifth of this is under cultivation. At the village notable changes have been wrought since my visit to it 10 years ago. The church, which then stood some distance from the river, has since dropped into it, showing the rapidity with which the water invades the clay banks. Many houses have disappeared, their owners removing to higher levels at the other end of the village. On the left bank of the river, surrounding the pueblo, are numerous little orchards, lately planted, but already bearing plums, peaches, apples, and apricots, a sale for which is found at the railroad station of Wallace, 3 miles below. Small plots only of fruit, vegetables, and corn are found on this side of the river. Opposite the town are the great fields of grain, with divisions marking ownership hardly perceptible. The grain is cut in common, a force of 6 or 8 working together. There seems to be no other reason for this custom than love of company. The plowing exhibits the same thing. Often as many as 10 yoke of oxen, awkwardly coupled by the horns, are seen following the footsteps of a child, which insures a straight line across the fields, and the boisterous hilarity which follows the slow company and sends back its bedlam of voices from the bottom lands is significant of the delights of all yeomen.

This tribe has made 3 moves. During the Spanish occupation of the territory it was situated at Galisteo and was then a band of marauders. The Spanish troops demolished its pueblo and subjugated the inhabitants. Their village was located within 3 miles of the present town of Wallace, and after a short residence at this site it was abandoned for the greater advantages found on the Rio Grande. There are evidences that all the pueblos, from San Juan to Sandia, came from higher sites, and often from distant mountain locations, sometimes by 2 or more stages, toward the river.

The village of San Domingo has now no regular plaza. There was once a plaza west of the church, whose site was some time ago claimed by the river. The streets, 4 at right angles and 1 parallel with the river, are very broad. The houses are of 1 and 2 stories, and show less care than any other dwellings in the pueblo range. The air is usually foul, and the personal habits of the inmates make occupancy by a stranger well nigh impossible. The windows, formerly fitted with 3 slats as a barricade to thieves, have recently been filled out with gypsum or glass, lessening ventilation. The grant has but 5.5 miles lying upon the river. Pasture is found east of the pueblo, where large herds range. The people own about 1,200 horses, 1,200 cattle, besides burros and work oxen; also a few goats, but no sheep. These are herded in common, both private and pueblo brands being used. When a destitute member of the community wants a horse or an ox to aid in his labor, he applies to the governor of the pueblo and is supplied. No sales are made without the consent of the governor and of the man's family. The objection on the part of a child, if it persists, is sufficient to prevent a sale. The Atchison, Topeka and Santa Fe Railroad Company offered \$500 for the land occupied by their tracks, which were to pass through the pueblo, but the amount was refused, it being feared that the signatures necessary would be appended to the deed of their whole territory.

The grant of San Domingo contains 74,743 acres, extending from the river equally east and west.



PUEBLO OF ISLETA.



PUEBLO OF SAN FELIPE.

SAN FELIPE.

At my first visit to San Felipe I was denied entrance to the pueblo, owing to a secret dance which was in progress. The next day, coming on invitation, I found the council of principals already assembled and anxious to make amends for the inhospitable treatment of the day before. We discussed 2 large tracts of land, each available for cultivation, one needing an extension of the acequia and the other a boom in the river. Upon leaving the line of San Domingo, along which every foot was cultivated, one enters a tract of the same sort of land, 2,500 acres, covered with sagebrush, where a large band of San Domingo horses ranged. The land cultivated by the San Felipeans lies on the left bank above and on both sides below the town. A mile south of this the river divides, leaving an island of the richest loam 1.5 miles long and a third of a mile wide.

The grant of San Felipe extends for 9 miles on the west and 8 on the east along the river. An irrigating ditch lines the east side for about 7 miles, passing the little Mexican village of Corero, whose inhabitants use the water. This settlement has been here for a long time. I was unable to find whether it had been found before the confirmation of their grant in 1858. In proportion to the population (554), San Felipe has more land available for agriculture than any other pueblo. It has, therefore, become wasteful of its privileges. The town, of recent construction, is laid out with the precision of a military camp, surrounding a plaza 250 by 175 feet. The houses facing this have been whitened for the first story, the second, when there is one, being left in its original color. The effect is striking. At the corners of the plaza are openings wide enough for a horse to pass through, and on the north and south sides are gates for wagons. To the south stands the church, a large building of greater architectural pretensions than any other among the pueblos. Many images are found in their houses, pertaining both to their own and the Catholic religion. Opposite the center of the north side is the great circular estufa, and on the center of the east side a lesser estufa. Between this and the river, which flows about 100 yards from the plaza, runs a line of cedar corrals, and directly opposite these, on the west side, another series parallel with the line of houses. Outside the fort-like inclosure a few houses have been reared without regard to regularity. All the land of the town is drained toward the plaza, and the result during the rainy season is a rectangular pond to be circumvented or forded by the inhabitants. Two hundred feet of pipe would drain this into the river. The whole town is shadowed on the west by a high volcanic mesa, which rises abruptly to a height of 650 feet. On the top of this, half a mile above, are the ruins of the old pueblo from which the inhabitants moved. Pasture for burros and cattle is found on the mesa, but the 400 horses range on the bottom lands. But few orchards, very small, are found at this pueblo, all lying directly opposite the town on the east bank of the river. A bridge was built a few years ago, but it is now partially destroyed. San Felipe raises only cereals. I was not able to go over the whole tract and estimate the crops. The land lying idle and easily utilized is about 3,000 acres. San Felipe has food and to spare. The land grant of the pueblo is 34,767 acres.

SANDIA.

Like San Felipe, this community holds more land than it can improve. The large Mexican town of Bernalillo presses upon the north side of its tract of 24,187 acres. In 1824 the Indians of the pueblo gave the land on which the town stands, but no patent of this transaction is in existence. Sales are consummated in the town and await confirmation. Passing 1,200 acres of open land, here and there developing weak traces of alkali, left as a pasture open to the use of the town, cultivation begins half a mile from the pueblo. The acequia, at a high level, is supplied from a source 2 miles above. Bernalillo lies just south of the line of the ranches of Santa Ana. The water flows for 6 miles before it is utilized, most of the farming being done south of the pueblo. I found the governor alone setting a worthy example to his people, working in the mud to his knees at the point where the Rio Grande forms a junction with his ditch. The office of governor, he informed me, after he had gained solid ground and had reduced the weight of his legs by kicking off the chunks of clay, was an honorary one, yet so exacting in its demands as to compel a neglect of one's own interest by any who accept the preferment. The pueblo is prettily situated on a gentle rise from the bottom lands of the river. Most of the course of the acequia is sheltered by large cottonwood trees. Grape culture becomes here an industry, though corn and wheat are the staple crops. The land upon the left side of the river only is cultivated. The sand hills rise abruptly from the right bank. On this side, some distance below where the land assumes a lower level, a few Mexicans have established themselves, and cultivate small plots of vegetables. The efforts to raise water to the height necessary to command this land were so commendable that the Indians approved its occupancy by them. A boom was made upon a small arm of the river, which forced the water upon an undershot wheel fitted with buckets. Water was raised and started in the acequia at a height of 10 feet.

Between the junction and the pueblo several large tracts of island land, now covered by groves of cottonwood and willows, could be made available for tillage. The level of these islands is 6 feet above the water, and no evidence of inundation is observable. There are 700 acres in the upper island and as much below, but less wooded.

ISLETA. (a)

On arriving in Isleta one immediately marks numerous points of difference between this community and the more northern pueblos in matters of dress, building, and customs. The town is composed entirely of 1 story dwellings, for the most part detached, though not isolated from neighboring habitations. These are always commodious and built frequently after the Spanish custom, about a court, or plaza. Tables are generally found within, though not always dined upon, and chairs of American manufacture are usually to be had to offer a stranger; but the ease of a roll of blankets on the floor is not forgotten by the Indian. Couches on the hard cement have not been superseded by beds, though some have introduced this comfort into their dwellings. Trousers and overalls are common, but the white zouave breeches, with the red trimmed leather leggings, are still more generally worn. The leggings are not tied by garters, as in all other pueblos, but fastened by silver buttons, buttons being used wherever available upon their costume. This is a hat wearing community. Broad brimmed, light felt hats have taken the place of the red handkerchief tied in a band about the head. The hair is cropped at the junction of the neck with the shoulders, and its frequent cutting has been productive of most luxuriant shocks. It is often parted on the side. The women, however, still cling to their picturesque costume; sensible in all respects save the binding of the legs below the knee with heavy bandages of doeskin, intended as a protection against snake bites. The superstitious regard of these Indians for snakes, inasmuch as they hold a prominent place in religious rites, protects them and renders them abundant among the villages. A snake on being found in the pueblo is merely disabled, and is then carried off upon sticks and laid outside of man's immediate range.

On the north of the plaza, 100 by 130 yards in extent, is the Catholic church, a commodious and well kept structure, and to the right of it the padre's garden and house and the Catholic school. At the southeast corner of

^a Of the pueblo of Isleta, Mr. Charles F. Lummis, in "A Tramp Across the Continent", 1892, pages 140-153, writes:

"There was little dream in me, as we rambled through the strange little city of adobe and interviewed its swarthy people, that this was some time to be my home; that the quiet, kindly, dark faces were to shine with neighborliness, and to look sad when the tiny blood vessel in my brain had broken anew and left me speechless and helpless for months, or when I fell bored with buckshot by the midnight assassin, nor of all the other strange happenings a few years were to bring. But though there was no seeing ahead to that which would have given a deeper interest, the historic old town, which was the asylum of the surviving Spaniards in that bloody summer of 1689, had already a strong attraction for me. There were more fine looking Indians and more spacious and admirable houses than I had yet seen; and, indeed, Isleta, which is the next largest of the 19 pueblos, numbering over 1,100 people, has the largest and best rooms, the largest and best farms, and most extensive orchards and herds, and other wealth, though it is one of the least picturesque, since its buildings are nearly all of but 1 story, while in some pueblos the houses are 6 stories high.

"The pueblo of Isleta is one of the strange little city republics of that strange Indian race which had achieved this quaint civilization of their own before Columbus was born. Its people own over 115,000 acres of land under United States patent, and their little kingdom along the Rio Grande is one of the prettiest places in New Mexico. They have well tended farms, orchards, and vineyards, herds of cattle, sheep, and horses, and are indeed very different in every way from the average eastern conception of an Indian. It is a perennial wonder to me that American travelers care so little to see the wonders of their own land. They find abroad nothing more picturesque, nothing more marvelous, in scenery or in man, than they could easily see within the wonderland of the southwest, with its strange landscapes, its noble ruins of a prehistoric past, and the astounding customs of its present aborigines. A pueblo ceremonial dance is one of the most remarkable sights to be witnessed anywhere, and there are many other customs no less worth seeing.

"I have lived now in Isleta for 4 years, with its Indians for my only neighbors, and better neighbors I never had and never want. They are unmeddlesome but kindly, thoughtful, and loyal, and wonderfully interesting. Their endless and beautiful folklore, their quaint and often astonishing customs, and their startling ceremonials have made a fascinating study. To relate even the small part of these things which I have learned would take volumes; but one of the first and least secret customs I witnessed may be described here. The Chinese feed their dead, beginning with a grand banquet, which precedes the horse, and is spread upon the newly covered grave. The Pueblos do not thus. The funeral is decked forth with no baked meats, and the banquet for all the dead together is given once a year in a ceremonial by itself. The burials take place from their Christian church, and the only remarkable ceremonies are those performed in the room where the soul left its clay tenement. All that is a secret ceremony, however, and may be seen by no stranger, but all are free to witness the strange rites of the Day of the Dead."

Mr. Lummis then, in the same work, writes of the Fiesta de los Muertos as follows:

"To-day the aborigines who sleep 6 feet deep in the bosom of the bare gravel graveyard in front of the quaint church of the pueblo of Isleta have the first square meal they have enjoyed in a twelve month, for to-day the Day of the Dead is celebrated with considerable pomp and ceremony. It is to be hoped that death somewhat dulls the edge of an Indian's naturally robust appetite, else so protracted a fast would surely cause him inconvenience; but the rations are generous when they do come.

"The bustle of preparation for the Fiesta de los Muertos has been upon the pueblo for several days, in a sort of domestic crescendo. While the men have been, as usual in the fall, looking rather devotedly upon the new wine when it is a shallow red, and loading themselves by day to go off in vocal pyrotechnics at night, when they meander arm in arm about the village singing an aboriginal 'won't go home until morning', the women have been industriously employed at home. They never seem to yearn for the flowing bowl, and keep steadfastly sober throughout the temptations of wine making, always ready to go out and collar a too obstreperous spouse and persuade him home. It is well for the family purse that this is so. We have a governor this year who is muy bravo, and woo to the convivialist who lifts his uitation where Don Vicente can hear him, or who starts in to smash things where the old man's eagle eye will light upon him. In a brief space of time two stalwart alguazils will loom up on the scene, armed with a peculiar adjustable wooden yoke, a mammoth handcuff in design, which is fitted around the culprit's neck, and off he is dragged by the handles to the little adobe jail, there to repent of his folly until he has added a dollar or two to Don Vicente's treasury.

"For the last 3 days the dark little store of the trader has been besieged by a crowd of women, bearing fat brown babes in the shawls upon their backs and upon their erect heads sacks of corn or wheat, or under their arms the commonest fractional currency of the pueblo, the sheepskin, worth 10 or 15 cents, according to weight. Some bring coin of the realm, for this is one of the wealthiest pueblos as well as the largest. Their purchases were sugar, flour, lard, candles, calicoes, and occasionally chocolate, all with festal intent.

"For 3 days, too, the queer mud beehives of ovens outside the houses have been 'running to the fullest capacity' all over town. Betimes in the morning the prudent housewife would be seen instigating a generous and persistent fire in her horno. Then, when the thick adobe walls were hot enough, she would rake out the coals and ashes and swab the interior with a wet rag tied to a pole. Next, a brief disappearance into the house, and a prompt emergence with a broad, clean board, covered with the most astounding freaks of ingenuity in dough. In most things the pueblo appears unimaginative enough, though this is a deceptive appearance, but when it comes to sculpturing feast day bread and cakes the inventive talent displayed outdoes the wildest delirium of a French pastry cook. These ordinary monstrosities could be safely worshiped without infringing the Decalogue, for they 'are like unto nothing that is in the earth, nor in the heavens above the earth, nor in the waters under the earth'. Their shapes always remind me of ex-Treasurer Spinner's signature, and they are quite as unapproachable. Having been placed in the oven, the door of which was then closed with a big, flat stone and sealed with mud, the baking remained there its allotted time, and then, crisp and delicious (for there are few better bread makers than these Pueblos), it was stowed away in the inner room to await its ceremonial use.

"Yesterday began more personal preparations for the important event. Go into whatever dooryard you would you found anywhere from one to half a dozen dusky but comely matrons and maids bending over brightly painted tinajas, and giving careful ablution to their soft, black hair.

"Inside the house, mayhap, gay red calicoes were being deftly stitched into simple garments, and soft, white bookskins were being cut into long strips to be wound into the characteristic female 'boot.' The men were doing little, save to lend their moral support. But late last night little bands of them wandered jovially

the plaza is the Presbyterian mission school. Along the center of the east side is the trader's store, opposite which are dwellings. All buildings in Isleta are of adobe. Occasionally houses have small front yard attachments reaching into the streets. The thoroughfares are crooked and wind their way without system through the town. A second store, kept by an enterprising Indian, does a good business. The town lies upon the right bank of the Rio Grande. North of it the river clings to the left side of the valley, leaving the entire space west of it open to cultivation through the whole breadth of the valley, 1.5 miles. This, for 2.5 miles toward the town, is solidly cultivated, bearing a luxuriant crop of wheat and corn. As the valley approaches the town a slight rise in its level renders further irrigation below its site impossible with the exception of a narrow strip on the right bank. Below the town, on the left side, other tracts are cultivated, although, owing to high floods 4 years ago, much of this has been abandoned. With proper engineering ability 500 acres could be saved here. The Mexicans have a scant footing on the southeast line. Isleta has about 60 acres of fruit trees, bearing peaches, plums, and apricots of a high order. Its vineyards are well kept and highly productive, though not extensive. The inhabitants consume nearly all the wine made, and it lasts rarely more than 4 months. The women send fruit to Albuquerque and along the line of the railroad. The men make long journeys with burro trains and wagons, carrying peaches and grapes as far as Gallup and to intermediate points. This pueblo had a mill 20 years ago, at which most of its grain was ground. Afterward a larger one was built, but both have been abandoned, and their flour and meal are now either ground at Los Lunas from their grain or obtained in trade for raw material at Albuquerque. Their practice of medicine is still crude, Indian remedies, some of which indeed are potent, being used. A bottle of wizard oil was brought from Albuquerque 10 years ago, and having worked wonders in a few cases it is now regarded as a cure-all. The Isleta Indian seldom works for Mexicans, though some seek employment on the railroad in winter.

over the pueblo, pausing at the door of every house wherein they found a light and slinging a pious appeal to all the saints to protect the inmates, who were expected to reward this intercession by gifts of bread, meat, coffee, tobacco, or something else, to the prayerful screeners.

"Thus anticipated, the Day of the Dead dawned clear and warm. As the sun crawled above the ragged crest of the Sandias the gray old sacristan, in shirt and calzoncillos of spotless white, climbed the crazy staircase to the roof of the church and assaulted the bell, which has had comparatively few breathing spells the rest of the day. The ringing of the church bell of Isleta is an experience that is worth a long journey to enjoy. The bells hang in two incongruous wooden towers, perched upon the front corners of the huge adobe church. There are no ropes, and tongues would be a work of supererogation. The ringer, stepping into the belfry through a broken blind, grasps a hammer in his hand and hits the bell a tentative rap, as if to see whether it is going to strike back. Encouraged by finding that it does not, he gives it another thump after a couple of seconds, then another, then, growing interested, he whules it 3 times in half as many seconds, then, after a wee pause, he yields to his enthusiasm, rushes upon the bell, drabs it in a wild tattoo, carries it down from crown to rim with a multiplicative scrub, and thenceforth devotes himself to making the greatest possible number of sound waves to the second. As a bell persecutor he has no superior.

"All this feverish eloquence of the bell had no visible effect for awhile. The people evidently knew its excitable temperament, and were in no hurry to answer its clatter. But by 9 o'clock there was a general awakening. Along the aimless street across the big, flat plaza, long lines of women began to come churchward in single file. Each bore upon her head a big, flaring basket, the rush eliquite of home make or the elegantly woven *Delta* pacho *fierra*, heaped high with enough toothsome viands to make the soundest sleeper in the *campo santo* forget his fear of fasting. Each woman was dressed in her best. Her moccasins and queer aldermanlike boots shone bright and spotless; her dark skirt of heavy home-woven stuff was new, and showed at its ending by the knee a faint suggestion of snowy white; her costliest corals and turquoise and silver beads hung from her neck; the *tapala*, which covered all her head except the face, was of the gayest pattern. One young girl had a turkey red table cloth for a head shawl, and another an American piano cover of crimson, with old gold embroidery.

"Marching through the opening in the high adobe wall which surrounds the graveyard, each woman went to the spot whose gravel covered beloved bones, set her basket down there, planted a lot of candles around it, lighted them, and remained kneeling patiently behind her offering. It was a quaint and impressive sight there under the bright New Mexico sun, the great square, shut in by the low adobe houses (for Isleta has none of the terraced houses of the more remote pueblos), the huge adobe church filling the space on the north, with its inadequate steeples, its 2 dark arches, and its long dwindle into the quarters of the priest; the indiscriminate graveyard, whose flat slope showed only the 3 latest of its unnumbered hundreds of graves; the hundred kneeling women weeping quietly under their shawls and tending the candles around their offerings while the dead ate to their heart's content, according to the belief of these simple folk.

"The big clumsy doors of the church were open, and presently some of the newcomers entered with their basket offerings, crossing themselves at the door, and disposed their baskets, their candles, and their knees at certain points along the rule floor of loose boards laid flat on smooth adobe. It was not at random that they took these scattered positions. These were they whose relatives had enjoyed the felicity of being buried under the church floor; and each knelt over the indistinguishable resting place of her loved and lost. The impressive mass was profaned by a short, business-like talk from the now priest. It had always been the custom for the women to wail loudly and incessantly over the graves all through mass; but the now padre intended to inaugurate a reform right here. He had told them the Sunday before that there must be no 'keening' during divine service, and now he gave them another word of warning on the same subject. If they did not maintain proper quiet during the mass he would not bless the graves.

"The warning was effective, and the mass went on amid respectful silence. A group of Mexican women kneeling near the altar rail sang timidly in pursuit of the little organ, with which they never quite caught up. The altar flared with innumerable candles, which twinkled on ancient saints and modern chromos, on mirrors and tinsel and paper flowers. Through the 3 square, high, dirty windows in the 5-foot adobe wall the sunlight strained, lighting up vaguely the smooth round vigas and strange brackets overhead; the kneeling figures, the heaped up baskets, and the flickering candles on the floor below. Near the door, under the low gallery, stood a respectful knot of men, Indians and Mexicans. The gray-headed sacristan and his assistant shuffled hither and thither, with eager eyes, watching the candles of the women lest they burn too low and kindle the floor, and now and then stopping to snuff out some threatening wick with their bare fingers and an air of satisfaction. Sometimes they wore a little too zealous, and put out candles which might safely have burned 3 or 4 minutes longer. But no sooner were their backs turned than the watchful proprietress of that candle would reach over and relight it. There should be no tallow wasted.

"At last the mass was over and the padre went into the retiring room to change his vestments, the women and baskets retaining their positions. Directly he reappeared, and the sacristan tottered beside him with a silver bowl of holy water. Stopping in front of the woman and basket nearest the altar, the priest read a long prayer for the repose of the soul over whose long deserted tenement she knelt, and then sprinkled holy water thitherward, at once moving on to the next.

"The woman thus satisfied rose, put the basket on her head, and disappeared in the long side passage leading to the priest's quarters, while the *ayudante* thumbed out her candles and tossed them into a wooden soap box which he carried. So went the slow round throughout the church and then through the 100 patient, kneeling waiters on the gravel of the *campo santo* outside. As soon as a grave was blessed, the woman, the candles, and the basket of goodies vanished elsewhere, and the padre's storeroom began to swell with fatness. The baskets were as notable for neat arrangement as for lavish heaping. A row of ears of corn standing upright within the rim of the basket formed a sort of pallade, which doubled its capacity. Within this cereal stockade were artistically deployed those indescribable confections in bread and cake, funny little 'turnovers' with a filling of stewed dried peaches, half-dried bunches of grapes whose little withered sacks of condensed sunlight and sweetness were like raisins, and still displaying the knots of grass by which they had dangled from the rafters; watermelons, whole or sliced; apples, quinces, and peaches, onions, and occasionally candy and chocolate. The beauty of it all was that after the dear departed had gorged their fill there was just as much left for the padre, whose perquisite the remainder invariably is. He treated me to a peep into his storeroom in the evening, and it was a remarkable sight. Fully 2 tons of these edible offerings assorted as to their kinds filled the floor with enormous heaps, and outside in the long portal was enough blue, and red, and white corn to fill an army of horses. Bread led the list, and as the liberal proportion of land in this bread keeps it good for months, the padre's housekeepers will not need to bake for a long time to come.

"With the blessings of the last grave the services of the *Fiesta de los Muertos* were over, and the population settled down to the enjoyment of a rare repose, for they are a very industrious people and always busy, save on holidays, with their farms, their orchards, their houses, and other matters."

They frequently work for each other. Whole families have continued for many years in the bondage of debt as serfs to proprietors. The cacique has the power of nominating the governor and council in all pueblos, and although the community has the right to set this aside it is rarely done.

Isleta farms perhaps 2,600 acres, and uses all the available land. The farms absorb their attention; herding interests are secondary. On the west of this lies the Rio Puerco, unavailable for irrigation. The remainder of the grant, 107,480 acres, offers meager pasture. The grant, extending on either side of the river, is estimated at 110,080 acres.

OBSERVATIONS ON THE CENSUS OF THE PUEBLO INDIANS: 1800.

For various reasons statistics compiled from schedules of enumerators as applied to the area under cultivation would be misleading. Upon the ordinary blanks used for agricultural statistics the instructions were that no entry was to be made of farms under 3 acres. Very many farms among these villages do not contain that amount, and were therefore not included. Again, in a number of cases enumerators were not faithful either in inquiries or entries. On the schedules of Jemez, Cochiti, and San Domingo the number of farms and not their area was given. The enumerators of San Felipe, Sandia, Santa Ana, and Zia put down 5,000 acres as the amount cultivated by each. Even as the amount available for cultivation this estimate is highly exaggerated. In the foregoing comments on these pueblos I have noted the area actually cultivated and that available for cultivation. At Zia, for instance, less than 100 acres are tilled, and more than 900 could be irrigated and utilized. At San Juan most of the holdings were placed at 5 acres, giving the impression that great equality existed. In fact, it is a community of rich and poor, and there is a great disparity in actual possession. The schedules from Nambe, Pojoaque, Tesuque, San Ildefonso, and Santa Clara I believe to be as correct as faithful endeavor and long experience in dealing with Indians could make them.

For Taos and Picuris, owing to a lack of blanks, the farms and their products belonging to several owners were entered as one item. A failure to differentiate the schedules of Taos and Picuris renders it impossible to get from them the number of acres cultivated by each pueblo. The schedules of Isleta were late, and did not come under my observation.

In compliance with instructions to special agents, bidding them to obtain assistance from any and every reliable source, I went to the Indian agency with the schedule marked "General schedule for the entry of totals in the various departments" of which the agent is overseer. I learned there was no record of the amount of land cultivated in the pueblos. Having completed a tour through 15 of the 19 pueblos I am able to compare facts with approximations from the agency. I find 8,750 acres under cultivation by three-fourths of the whole number of villages. The average worth of a cultivated acre is between \$7 and \$8 to an Indian. From their land, therefore, the proceeds of these Indians of the 15 pueblos is about \$70,000. Their population is 5,250; an average, therefore, of \$13.50 to the individual per year.

The question of taxation for the Pueblo Indian, though legitimately resting upon his right of citizenship, is naturally influenced by a knowledge of the opportunities which his environments present for obtaining from taxable property the means of subsistence. Out of nearly 1,000,000 acres owned by the Pueblos of the 19 villages, including Zuñi, Acoma, and Laguna, less than 13,000 are tilled. By proper engineering much land could be saved in river bottoms and much reclaimed at higher levels; but in a number of pueblos land easily commanded by water is lying idle. A speedy, direct, and just method of rectifying this disparity between privilege and practice, ownership and occupation of territory, would be by taxation, based on all cultivatable tenure.

Their present need is legal protection. Before the law they are citizens, and they are supposed to avail themselves of the courts, hiring their own counsel. The office of agent is merely advisory, in which no real power exists, but to which, even in its insufficiency, the Indian clings, knowing no other source of help. So many of the encroachments upon the Indian domain on the part of land thieves are at first only experimental that prompt measures and energizing advice from an agent upon the ground would suffice to protect them and dishearten interlopers. The people having attained a degree of knowledge available for subsistence from the soil, are content to consider themselves, by comparison with their migratory neighbors, incapable of further advances; they are sedentary in habits and fixed in an intricate system of religious and civil laws. Open to educational influence only up to a given point, the barriers behind which the deep rooted religious superstitions hide and entrench themselves can only be broken by the pressure of varied forces working simultaneously and in harmony. Faithful teachers have found that children of brightest promise, whom their parents have allowed to adopt the dress and ideas of our own, are suddenly recalled by a power from within. The child, happy for a number of years in civilized clothes and with fair knowledge of English, is suddenly seen to come out in full Indian outfit, and through lack of association rapidly forget the language acquired after many months of patient labor. Young fellows returning from the schools at Carlisle, Sante Fe, and Albuquerque for a time maintain themselves against heavy odds in their higher grade of civilization, but in 9 cases out of 10 relapse sooner or later; and frequently, like the soul out of which the unclean spirit was cast, having acquired added capacity by education, not only inviting back the old but also finding room for new and more dangerous occupants.



FEMALE DANCER.

Tablita (Tablet) or Corn Dance. Pueblo of San Domingo, New Mexico. August, 1890.

A graduate of Carlisle in a council of elders declared with eloquence and force that his influence should be against any change and so-called advance. He had tried both civilizations and knew that what the Indian had maintained and preferred for centuries was still best suited to him. Fortunately, to the encouragement of philanthropic endeavor, it may be said that this opinion is not openly shared by all among the Pueblos.

FOOD OF THE PUEBLOS.

Cows are seldom milked, and are made available only for meat and hides.

The diet of these Indians is largely vegetable, fresh meat being regarded as a great luxury, and eaten perhaps on an average of once in 3 weeks. Strips of dried flesh appear more frequently in stews of beans and red peppers. Goat flesh, beef, and mutton are easily cured, and after slight drying in the sun may be kept for an indefinite period. Peaches and apples are dried and stored for winter use. Muskmelons are peeled, cleaned, and hung upon the branches of young cottonwood trees which the owners of all melon patches cut in groves to surround their summer lodges. All branches unable to support the weight of a melon are removed, and on the dry racks thus formed the surplus of this much prized fruit is preserved. Corn is converted into meal or roasted green and eaten as a vegetable. Tortillas are made of flour partially leavened with sour dough, a heavy flapjack cooked upon copper plates. Beans and stews are eaten with scoops; scoop and frioles disappear together. The scoop is an article called guayave, made of thin corn meal, cooked upon hot rocks, resembling brown paper, and plastic enough to be rolled up and used as a scoop: an advance upon fingers, but a degree below pewter. Coffee is universally used and seldom without sugar. Wine is made at Jemez, Santa Ana, Sandia, and Isleta. No statistics of quantity could be obtained. With fruit in its season, the above is the bill of fare to be found in the pueblos. Stoves are used in Sandia, Isleta, Laguna, and Acoma, but are rarities in all other pueblos.

THE TABLITA OR CORN DANCE.

The question of physical condition is one less dependent upon diet than the mode of life which renders general development a result. No better test of a high grade of physique could be found than the prolonged and fatiguing dances, lasting for the greater part of a day, indulged in at all of the pueblos. I have witnessed three of these great dances and several minor ones. At San Domingo, August 12, 1890, 200 dancers, male and female, participated, led by 2 choruses, each of 40 male voices. This display being regarded the finest to be seen among pueblos, with the exception of that at Zuñi, I confine my description to the dance as I saw it there, with occasional allusions to those of Santa Clara and Laguna.

The tablita or corn dance has for its purpose supplication for rain. Most of the choruses chanted by the attendant musicians are invocations to the clouds. The tablet worn by the women upon their heads is figured with the scalloped lines of cumulus clouds, and on either side and between them a bolt of lightning. In common with many of the old Indian rites among the Pueblos, this also has been utilized by the Catholic church and made to serve for the support of a church ritual. Early in the day mass is said in the church and a sermon preached. The body of the congregation at these services is usually composed of visiting Mexicans, the Indians maintaining an indifferent and fluctuating attendance. Throughout the village meanwhile active preparations are in progress for the dance. Feasting and bartering are at their height. Every door is open and food spread, and a welcome ready for any comer. The religious services being ended, unrestrained freedom is proclaimed by the irregular discharge of a dozen muzzle-loading army rifles, and immediately after the statue of the patron saint, a relic of early Spanish art, is hurried at quickstep, to the notes of a violin, from the temporary booth, which in San Domingo, serves in place of the church, to a shrine formed of green boughs and lined with blankets set up in a plaza. Here it is deposited amid another volley from the muzzle loaders, and the assembly disperses.

In the 2 great estufas of the village most active preparations have been in progress. A descent into one of these green rooms was permitted me at Santa Clara. Ascending a ladder to the flat roof of the estufa, we approached the open skylight in the center, whence issued from below a chorus of voices accompanied by a drum. With uncovered head I followed my guide down the almost perpendicular rungs of a huge ladder, and stood upon the hard, clay floor of the Indian council chamber. The apartment is 40 feet square, unfurnished save by the adobe fireplace placed beneath the skylight and a few poles suspended from the rafters, upon which hang the garments of the dancers. In the cool tenement, dimly lighted, the athletes move to and fro, perfecting their ensemble with grave deliberation. Neither haste nor confusion is noted; conversation is indulged in sparingly and in low tones. Young lads are given assistance now and then, though this is never asked.

The naked body is first covered with a thin glaze of clay mud, rubbed smoothly over the body many times more than is necessary to effect an evenly laid ground. This massage lubrication being indulged to the full sensuous delight of the subject he finally stands forth red, yellow, or blue. These under colors are important as designating the line which one is to occupy in the dance; the super-decoration is largely a matter of fancy. From the knee to the instep may be repainted another color, but the body and arms are never touched save by bands of ocher, which are here admissible. The face from the outer corner of the eyes and over the cheek bones is dashed with vermilion.

Upon the body thus decorated the details of the scanty costume are applied. Small bunches of red, blue, and yellow feathers are tied to the forelock and fall like a bang over the eyes. The hair, glossy from its recent washing with soapweed, is freed from its queue bindings and falls at full length. Around each biceps is bound a bracelet of woven green worsted, 3 inches wide. The waist is covered with a light, white cloth, often a flour sack, the brand rendered available as decoration. Over this, falling from the hips, hangs a narrow woven pouch supporting long strings, each ending in a small ball and reaching to the ankle. From the buttock to the ground trails the skin and tail of a silver gray fox. Below the knee a band of goathide is tied with goat and pig hoofs or tiny sleigh bells attached. The feet are moccasined, the heels fringed with wide tufts of deerhide. Necklaces of coral, turquoise, mother-of-pearl, and silver beads, and sprigs of cedar introduced in the belt and armlets complete the costume.

While the principal actors are thus being made up, the leader of the chorus, squatted upon the ground and surrounded by his 40 singers, is leading a final rehearsal. Again and again is the intonation criticised and the gestures practiced. The magic influence of deep-toned harmony makes rapid impress upon susceptible natures. In rapt gaze the coal black eyes flash with lustrous fire, nostrils dilate, the gleam of handsome rows of teeth breaks out now and then with an expression of ecstasy which captures the entire figure, heads are swaying from side to side, and lips drool in the happy frenzy which has overtaken the group. But the master, like the typical leader of music the world round, is unmoved, displeased, despotic. To the singers, led by the rapid and changeless bass drum beat, the chants they are practicing seem to possess almost electrifying power.

Now come rain! Now come rain!
 Fall upon the mountain; sink into the ground.
 By and by the springs are made
 Deep beneath the hills.
 There they hide and thence they come,
 Out into the light; down into the stream.

The arms are extended above the head, the fingers are given a fluttering motion, and the hands slowly lowered. This is frequently repeated. A violent storm and slanting rain, the rush of a tornado and lightning flashes are occasionally indicated, but the gentle rain with its sweeping motion seems to be the favorite.

Another chorus is thus translated:

Look to the hills! Look to the hills!
 The clouds are hanging there,
 They will not come away;
 But look, look again. In time they will come to us
 And spread over all the pueblo.

Another chorus, which is the main one during the entire day, is as follows:

Look at us! Look at us!
 Notice our endurance!
 Watch our steps and time and grace,
 Look at us! Look at us!

The women, who have been arraying themselves at their own homes, are now descending the broad ladder in groups of 2 and 3. The tablita, or headdress, worn by them is put on in the estufa. It is a light board, 9 by 14 inches, set upright and cut at the bottom to fit the head. It is painted malachite green, and notched on either side like stairs toward an apex at the top. Little posts tufted with feathers are left on either side of the acute angle thus made. The center of the tablet is cut out in the shape of a short mallet and its surface decorated with figures of clouds on either side, lightning between these, and below the serpent, which is an object of worship throughout the pueblos. The young men assist in tying on these unwieldy appendages, for which much care is necessary to render it possible for them to be carried in an upright position. They are similar to Moqui or Zuñi manufacture. They then select for them sprigs of pine and cedar stems, a bunch for each hand. These attentions of husbands to wives and of the young lover to the idol of his affections form one of the most charming pictures to be seen among the Pueblos. This is the day for marriages, which are performed early in the morning at the church. These Indians always receive the rite of baptism, marriage, and burial from the Catholic church. At San Domingo 10 happy brides and grooms, all under 20 years, took part in the dance. The women mature early, are uniformly pretty, and are blessed with remarkable chest and waist development. Fatigue under physical effort is unknown to them.

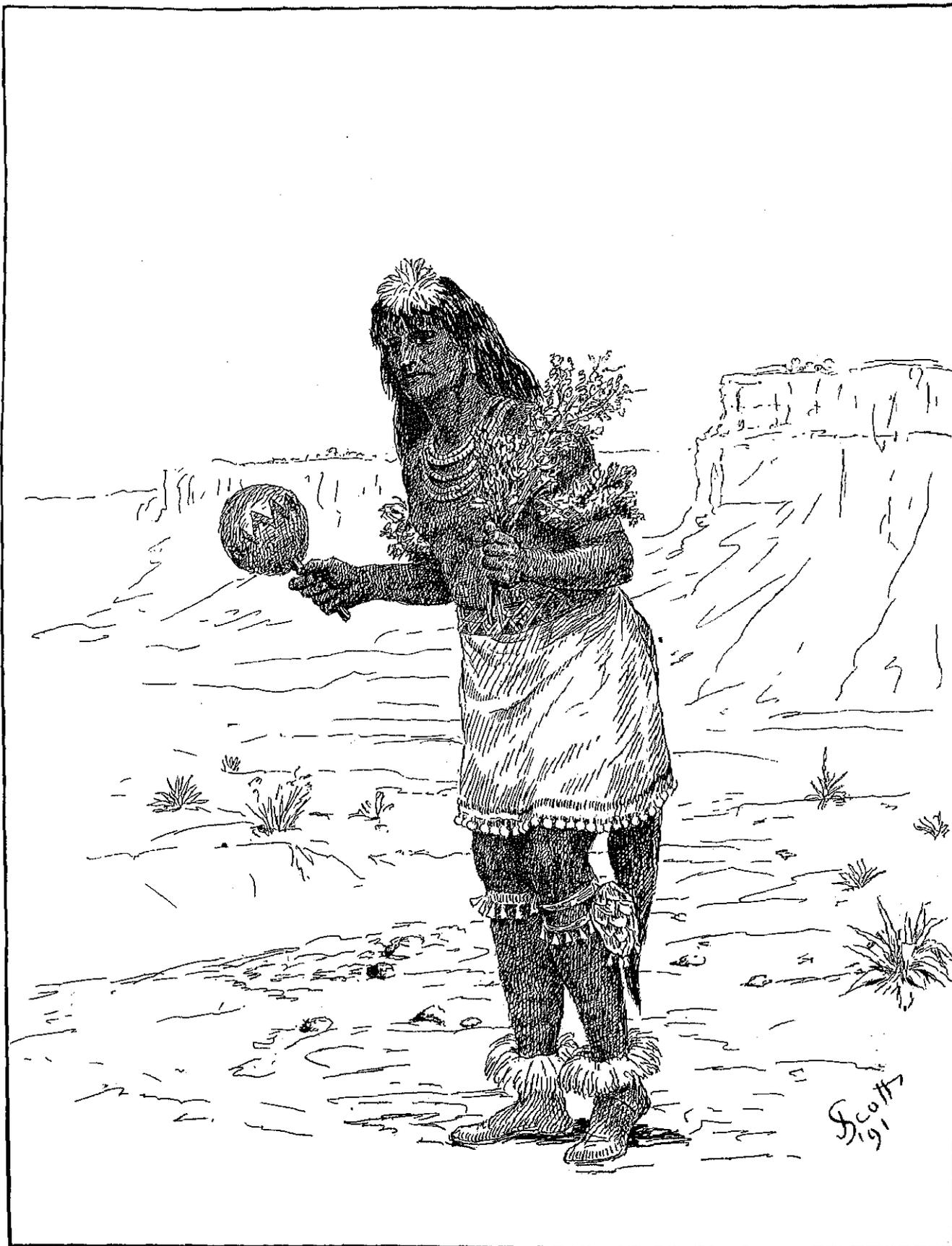
I selected for my point of observation a broad, second story platform.

From the end of the main street the rapid approach of 6 figures, fantastically decked, is the announcement that the sights of the day have begun. These figures are buffoons, or, as the translation of the Indian word signifies, grandfathers, having all the punitive privileges of the patriarchal head of a family. Free lances they are, piercing with the broad point of their practical jokes any victim from the ranks of the spectators. Even the governor is not exempt. Their mirth, however, is harmless, seldom pressed further than the incarceration of some hapless innocent, led off amidst loud fulminations against his reputation, or the unbending of some absorbed onlooker whose superdignity renders him a target.



CLOWN DANCER.

Tablita (Tablet) or Corn Dance. Pueblo of San Domingo, New Mexico. August, 1890.



MALE DANCER.

Tablita (Tablet) or Corn Dance. Pueblo of San Domingo, New Mexico. August, 1890.

The disguise of these clowns renders them unrecognizable. Mouths are expanded by broad lines of paint, imparting a grinning expression. Their eyes flash flames of vermilion. Straws and corn husks are crammed promiscuously through their hair, which, being arranged a la pompadour, forms a heavy mass on the head. This, together with the whole body, is "grayed" as a sign of age by a wash of ground gypsum. Over the arms and legs bands of light purple clay, followed by the horizontal lines of the body decoration, give a zebra appearance, which adds to the grotesqueness of the figure.

A large bustle of cloths is bestuck with turkey buzzard feathers and upheld by a girdle about the waist. A tortoise shell, with a string of pig toes hanging either from the belt or about the leg, provides the wearer with an accompaniment to his never ceasing activities. The tour by these 6 clowns, singing as they move in close line through the center of each street in the village, is watched with great interest by the spectators, who walk in crowds by their side or arrange themselves thickly along the housetops, and so keep them in view until they disband. This disbanding is done like a flash, the 6 scattering in as many directions, disappearing through doors, up ladders, down skylights, to reappear behind fleeing women and screaming infants. But in contrast with such reckless confusion is the measured advance of 2 solid lines of figures slowly pouring out of the crater of the estufa like an army of ants aroused from their citadel. No shout welcomes their oncoming, though the bearer of the lofty pole, crowned with sacred eagle plumes and hung with flying regalia, lowers it now and again to the awaiting crowds. Awe and reverence are expressed in the contemplation of the scene. Crowded about their leader the chorus attends the head of the column, and when the end of the long line has cleared the estufa the drummer, covering with his eye the completed display, commences with a sudden staccato rap from his single stick a quickstep beat, which does not cease for the rest of the day. At this signal every left foot in the procession is instantly raised and every right arm extended, to fall again as instantly. The feet are planted squarely on the ground, heel and toe striking together, and, tufted as they are with a broad fringe of deerskin, the action calls to mind the stamping of a heavy horse with shaggy fetlocks. Dry gourds, containing parched corn, are carried by the men in the right hand, so that every extended motion with that arm is accompanied by a rattle. The women follow implicitly the lead of the men, and besides this, their only occupation is to beat time in swaying motion from side to side with the sprigs of piñon. While the men elevate their feet from 6 to 8 inches, the women barely raise theirs from the ground, but proceed with a shuffling movement. This rapid treadmill exercise has continued for 5 minutes, and hardly as many feet of ground have been covered from the spot where the dance commenced. The impression of what at first was fascinating by its great precision is getting monotonous, when suddenly the drumhead is struck close to the edge, a slightly higher tone is produced, and the dancers dwell for an instant on one foot and then proceed. The relief to both spectator and participant thus introduced is of wonderful effect. It is, in fact, the salvation of the dance. The chorus is meanwhile led by a high falsetto voice in a monotone of weird incantations. Each member crowds toward the center, stamping hard as he does so, and giving tongue with all the fervor of a pack of hounds in sight of the quarry. The neck veins have become whipcords, eyes are strained and protruding, and above heads stretch hands and arms tossed in loose and sweeping gestures.

At the end of 40 minutes the front of the second column of 96 dancers, led by a chorus of 40 voices, makes its slow approach from the other estufa. As the standard bearers meet the staves are lowered, and when the 2 columns are parallel the drum of the second gives the signal for its singers and dancers to commence. The first chorus thereupon stops, its columns of dancers retiring slowly to the music of the second. It returns to the shelter of its own estufa, to reappear from a side alley near the dancing ground after an interval of 40 minutes. Upon each return new figures are introduced in the dance, some very intricate and decorative, calling to mind parts of the Virginia reel and the lancers.

As the day wears on the throngs of spectators in the plaza are thinned by attractions outside the village. A favorite gambling game is played with stones representing horses of a corral with as many gates as players, into which the horses are taken according to the throw made with sticks serving for dice. The great event of the day, and second in importance to the dance itself, is the chicken race. A cock is buried in the sand, with his head and neck protruding. At this the horsemen ride at full gallop from a distance of 75 yards, striving to lay hold of the agile prize as they pass. When the cock is unearthed, the whole cavalcade starts in pursuit of the hero and his screeching victim, who when caught must pass the prize to the one outriding him. Thus the race continues until miles of country have been covered, usually in a circuit and in sight of the spectators, and until nothing remains of the dismembered fowl.

It is now late in the afternoon. The sun has burned its slow course almost to the dim, blue limit of the distant hills. The dance has continued since 10:30, but the last hour was entered upon with greater courage and gusto than the first. Countless lines of perspiration, marking their way from shoulder to ankle, have effaced most of the decorations of the body. The dust arising from the trampled arena has sifted into every crevice of the adornments of the morning, but though the splendor of the ritual has departed, none of its exacting requirements are neglected. The dancers are still oblivious of all surroundings. Backs are rigid, gestures are calm, eyes abased, and the heavy hair of men and women, blown by the ever freshening currents from the south, rises and falls to the movement of their bodies in instant time with the resolute tones of the chorus.

PICURIS.

The following report was furnished by Mr. Frederick P. Müller, of Taos, New Mexico, February 26, 1891:

I have just returned from the pueblo of Picuris. On the journey I and my horse came near freezing. The snow on the mountains and on the trail is 4.5 feet deep. No human being has passed through there this winter. The Indian land under cultivation at Picuris amounts to 555 acres. Out of this every family owns an average of about 15 acres. The sanitary condition can not be called good, as the statistics of the pueblo show that they are every year decreasing. They have never had any school at the pueblo, nor do they send their children to school unless they are compelled to do so by the government. The main occupations of these Indians are farming in the summer and deer hunting in the winter. The pueblo is situated at the foot of the Picuris mountain, about a mile west of the little town of Penasso, whence they get all their groceries and provisions from the sale of their grain.

The amount of land that could be cultivated by the Indians is 2,055 acres. They can also get a sufficient supply of water to irrigate all this land, but, not being at all industrious, they are satisfied with cultivating only the acreage necessary to produce grain or crops to sustain them; besides, they have not the tools or machinery necessary for cultivating more. The average of grain raised is about 30 bushels to the acre.

The Picuris people are about the same in all respects as those of Taos, only they are poorer in worldly goods. They greatly resemble the Taosans in form, features, habits, and customs. Deaths much exceed the births. The pueblo is small and poorly built of adobe, and not at all clean. While good and patient, these people have but little thrift.

The Picuris land grant was 17,461 acres.

PUEBLOS OF LAGUNA, ACOMA, AND ZUÑI.

BY JULIAN SCOTT, SPECIAL AGENT.

The following report was prepared during September and October, 1890, and August and September, 1891:

LAGUNA.

The night of October 17, 1890, found me a lodger in the railroad station at Laguna.

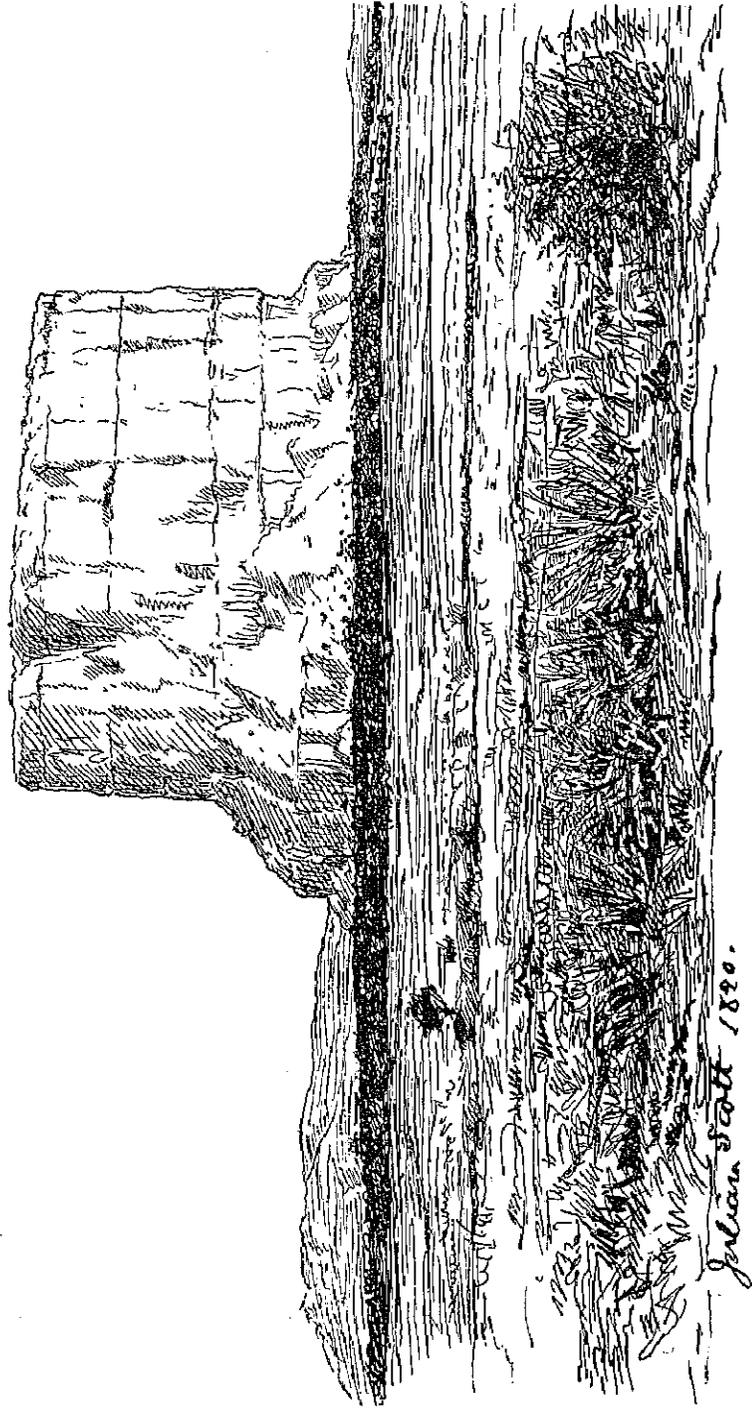
The day after my arrival I went to the pueblo, which is but a few minutes' walk west of the station, and was introduced to the principal men of Laguna, who, learning the nature of my visit, received me with every expression of respect. The town is built upon a sandstone ledge, the southern base of which is washed by the San Jose. The streets are narrow and winding, and in some places very steep, requiring stone steps. The houses are constructed of stone and adobe, the walls projecting above their flat roofs from 12 to 15 inches. They are kept neat inside and out, and there is a general air of cleanliness throughout the pueblo, no doubt greatly owing to the natural drainage of the sloping sides of its rock foundation. Except the large court where the dances are held, but few of the buildings are more than 1 story high; about the court they are 2, and sometimes 3. The town, conforming to the irregular surface on which it is built, presents a pleasing picture from nearly every point of view outside its walls. The Catholic mission, erected in the earlier days of the Spanish rule, occupies the apex, commanding views of a large part of the town far up and down the valley and far to the south beyond the sand hills, where are the mesas She-nat-sa and Tim-me-yah. Near the mission, in front and a little below, is the schoolhouse, the walls of which resemble the battlements of a mediæval castle. This old pueblo furnishes the quaintest and drollest of street scenes. There were children in scanty clothing playing with good natured, gaunt looking mongrel dogs and riding young burros, regardless of the dirt and fleas with which their canine companions were covered, and heedless of the uncertain hind legs the otherwise patient and stupid asses possessed; the women glide (almost flit) about attending to their various duties, some bringing ollas of water poised upon their heads from the spring a mile away, and others occupied at the dome shaped ovens, from which they draw forth large, rich looking loaves of bread; groups of old gossips, men and women, whose usefulness was limited to the caring for their very young grandchildren, who contentedly rested upon the backs of their gray haired elders, securely held there in the folds of variously colored blankets; men going to the fields and coming in with loads of bright corn and dark melons, carried in brightly painted modern wagons drawn by scrubby horses, and in primitive carts pulled along behind sleepy oxen with yokes attached to their horns. Hens and chickens were scratching everywhere for stray kernels of corn, sometimes stealing upon the tempting piles of ears, husked and unhusked, that lay about the yards and housetops, only to be driven off by the watchful maidens engaged in husking and storing away. The people of Laguna, as to customs, habits, dances, and ceremonies, are similar to the other New Mexico Pueblos. (a)

a Of the dance at the pueblo of Laguna in 1884, Mr. Lumis, in "A Tramp Across the Continent", 1892, pages 101-105, writes:

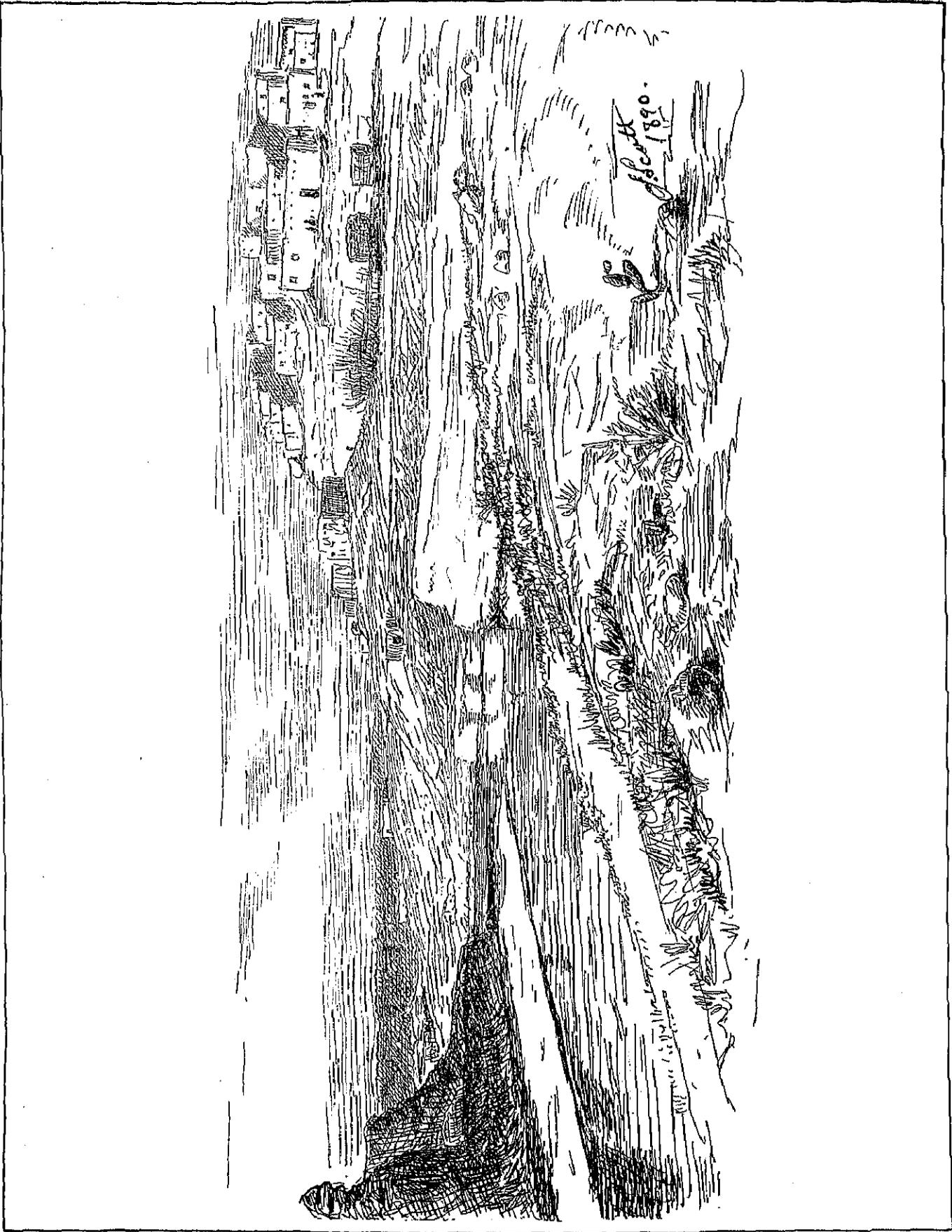
"Laguna is the most picturesque of the pueblos that are easily accessible, and, as the railroad runs at the very base of the great dome of rock upon which the quaint terraced houses are huddled, there is no difficulty in reaching it. On the summit of the rock is the plaza, or large public square, surrounded on all sides by the tall housewalls and entered only by 3 narrow alleys. We hastened up the sloping hill by one of the strange footpaths, which the patient feet of 2 centuries



A WOMAN AND CHILD, Pueblo of Laguna, New Mexico.



MESA ENCANTADO, NEW MEXICO, 1890.



THE PUEBLO OF LAGUNA, NEW MEXICO, FROM THE BANKS OF THE SAN JOSÉ, 1890.

From the town we walked to the spring, a little more than a mile away. Following the path along and around the foot of a high hill of lava and volcanic rock, beneath which crops out a sandstone ledge, we came to the fountain, which I was told had never failed in its supply during the most severe droughts, and it had always been the favorite trysting place of the young. The pretty group we found there did not regard our presence as intrusive in the least. Down the smooth sides of the sand rock are deep grooves worn by the children, who use it on pleasant days for the innocent pastime of sliding. We climbed up over this spot to the lava and volcanic rock and to the top of the hill. From the summit I was shown the ancient shores and now fertile bed of the lake that was once there, and from which the pueblo takes its name, Laguna. One morning I rode to the mesa She-nat-sa. It is nearly 3 miles south, between a billowy sea of sand hills and the mesa Tim-me-yah. It was accessible only on the east side. Leaving our horses, we walked up the rather narrow and difficult path, and spent a great part of the forenoon examining and poking about in its ancient ruins. They cover an area of about 10 acres, the entire surface of the mesa. My companion found a copper bracelet, which he gave me, and I was further fortunate in finding a stone ax of considerable size and weight and many pretty pieces of broken pottery. The place was undoubtedly selected as an abode on account of its position and natural defensive strength. This country for many miles about can be seen from any part of the silent mesa. In the days when it was peopled, and the lookout sat in the old watchtower, the marauding Indians of the plains could not approach without being discovered in time to signal the herders to come in with their flocks and the husbandmen to leave the fields. That part of the plain north to the San Jose river was used in those early days for agricultural purposes; the canals and ditches, dug and graded for irrigation, are mostly buried under the sand hills. The sand hills are literally moving from the southwest to the northeast, the changes being noticeable after the high winds that prevail at different times of the year. Remains of the old canals and ditches are constantly coming to light, which must have been buried during centuries. To the south and west the plain gradually rises up to the Tineh and Coyote mesas; on the south, looking far over Laguna, are the beautiful peaks of the San Mateo mountains, which rise over 11,000 feet above the sea, and away to the northeast down the San Jose valley stand the glistening walls of the mesas of the Canyon Cajoe, all affording pleasing views. We descended to our horses, mounted, and reached home just in time to escape a severe sand storm, which began about noon and continued for 2 days.

Several small villages belonging to the Laguna government are: Mesita Negra, about 5 miles east; Paguate, 10 miles north; Encinal, 9 miles northwest; Paraje, 6 miles a little north of west; Santa Ana, 4 miles west; Casa Blanco, 6 miles west, and Seama, 8 miles west. The people of these smaller towns, aside from the corn they cultivate, raise abundance of fruit, such as grapes, peaches, plums, and melons. I was told that a great deal of bad feeling existed between Laguna and Acoma on account of a storage reservoir which they had built together for mutual benefit.

Acoma is but 16 miles from Laguna, and the road by way of Casa Blanco is very good, from which point it leads up a gentle ascent to the upper valley or plain. Reaching the top the first object of interest that attracts the eye is the mesa Encantado, standing in the middle of the plain, its perpendicular walls of red sandstone rising 1,000 feet. Our way lay to the right of this enchanted table rock and through a considerable growth of stunted timber, pine and cedar, beyond which, to the right and left, the mountains rise to great heights and take every form imaginable; gothic spires, towers, domes, and eastern mosques are distributed, one after another, in grand

have worn 8 inches deep in the solid rock, and entered the plaza. It was a remarkable sight. The housetops were brilliant with a gorgeously arrayed throng of Indian spectators, watching with breathless interest the strange scene at their feet. Up and down the plaza's smooth floor of solid rock the 30 dancers were leaping, marching, wheeling in perfect rhythm to the wild chant of the chorus and to the pom, pom of a huge drum. Their faces were weirdly besmeared with vermilion, and upon their heads were war bonnets of eagle feathers. Some carried haws and arrows, some elaborate tomahawks (though that was never a characteristic weapon of the Pueblo Indians), some lances and shields, and a few revolvers and Winchesters. They were stripped to the waist and wore curious skirts of buckskin reaching to the knee, ponderous silver belts, of which some dancers had 2 or 3 apiece, and endless profusion of silver bracelets and rings, silver, turquoise, and coral necklaces and earrings, and sometimes beautifully headed buckskin leggings. The captain or leader had a massive necklace of the terrible claws of the grizzly bear. He was a superb Apollo in bronze, fully 6 feet 3 inches tall, and straight as an arrow. His long, raven hair was done up in a curious wad on the top of his head and stuck full of eagle feathers. His leggings were the most elaborate I ever saw, one solid mass behind of elegant beadwork. He carried in his hand a long, steel pointed lance, decorated with many gay-colored ribbons, and he used this much after the fashion of a drum major.

"When we first arrived upon the scene, and for half an hour thereafter, the dancers were formed in a rectangle, standing 5 abreast and 6 deep, jumping up and down in a sort of rudimentary clogstep, keeping faultless time and ceaselessly chanting to the 'music' of 2 small bass drums. The words were not particularly thrilling, consisting chiefly, it seemed to my untrained ear, of 'Ho! o-o-o-h! Ho! Ho! Ah! Ho!' but the chant was a genuine melody, though different in all ways from any tune you will hear elsewhere. Then the leader gave a yelp like a dog and started off over the smooth rock floor, the whole chorus following in single file, leaping high into the air and coming down first on one foot and then on the other, one knee stiff and the other bent, and still singing at the top of their lungs. No matter how high they jumped, they all came down in unison with each other and with the tap of the rude drama. No clog dancer could keep more perfect time to music than do these queer leapers. The evolutions of their 'grand march' are too intricate for description, and would completely bewilder a fashionable leader of the german. They wound around in snake-like figures, now and then falling into strange but regular groups, never getting confused, never missing a step of their laborious leaping. And such endurance of lung and muscle! They keep up their jumping and shouting all day and all night. During the whole of this serpentine dance the drums and the chorus kept up their clamor, while the leader punctuated the chant by a series of wild whoops at regular intervals. All the time, too, while their legs were busy, their arms were not less so. They kept brandishing aloft their various weapons in a significant style, that 'would make a man hunt tall grass if he saw them out on the plains,' as Phillips declared. And as for attentive audiences, no American star ever had such a one as that which watched the Christmas dance at Laguna. Those 800 men, women, and children all stood looking on in decorous silence, never moving a muscle nor uttering a sound. Only once did they relax their gravity, and that was at our coming.

"My nondescript appearance, as I climbed up a house and sat down on the roof, was too much for them, as well it might be. The sombrero, with its snakeskin band; the knife and 2 six-shooters in my belt; the bulging duck coat; long fringed, snowy leggings; the skunk skin dangling from my blanket roll, and last, but not least, the stuffed coyote over my shoulders, looking natural as life, made up a picture I feel sure they never saw before, and probably never will see again. They must have thought me Pa-puk-ke-wis, the wild man of the plains. A lot of the children crowded around me, and when I caught the coyote by the neck and shook it, at the same time growling at them savagely, they jumped away, and the whole assembly was convulsed with laughter. For hours we watched the strange, wild spectacle, until the sinking sun warned us to be no 'ug, and we reluctantly turned our faces westward."

array. Among the most curious to me were Roca Ventana and Olla (pronounced Ole-ya). All have Spanish names, which the natives use in designating them.

ACOMA.

Reaching the open plain, we came within view of the rock of Acoma, and were in a little while watering our horses at the reservoir over which the 2 pueblos are quarreling. The water was very low and there were evidences of recent neglect. The rock of Acoma bears the pueblo of that name. It seems unreasonable that such a site should have been selected by its founders for a habitation except for protection against the more warlike tribes that infested the great plains, roaming at will, preying upon their fields, and later their herds. The distance to wood and water, the enormous daily labor required to provide for the necessaries of life, could not have been endured through all the centuries the Indians have lived there but for the absolute security the natural fortress gave them. Its walls of sandstone rise 200 feet out of the plain and are studded with deep recesses and grottoes that look more and more gloomy and forbidding as they are approached. Arriving at the southwest side of the rock, we left our team in the shadow of one of the towering monoliths that have been separated by erosion from the parent mesa and took a short cut along the ridge of an immense sand hill, the upper end of which banks against the rock about halfway up. Originally there was but one path that led to the top, the larger one of two now used; the other has been made practicable by the sand drift which has formed in recent years. The climb from where the sand stops is steep and difficult, and in some places steps have been cut out of the solid rock. (a)

The pueblo of Acoma consists of several long rows of 3-storied buildings, all facing the south, built of flat stone and rubble. The upper stories are used for dwellings, the lower for storage. From the sides they present the appearance of 3 giant steps, the lowest reached by a forest of ladders. There are narrow partition stone stairs that lead to the upper stories. These landings are the private front yards and balconies. In one of the upper dwellings we got dinner. We sat on the floor. The first course was watermelon, then came a kind of mutton stew, with vegetables, mostly chili, and piping hot, served in large bowls, and a kind of hard graham bread, served in one of the curious Apache willow baskets. The coffee, made of parched pease, over which boiling water was poured and allowed to stand for a time, was very pleasant. North of the town is a great natural reservoir, where the people obtain the water ordinarily used. That part of the mesa is slightly lower than the town and receives the rainfall of a considerable area, through which source and melting snow the reservoir is supplied. Their drinking

a Mr. C. F. Lummis, in "Some Strange Corners of Our Country", 1892, page 263, thus writes of the pueblo of Acoma:

"Of all the 19 pueblos of New Mexico, Acoma is by far the most wonderful. Indeed, it is probably the most remarkable city in the world. Perched upon the level summit of a great 'box' of rock, whose perpendicular sides are nearly 400 feet high, and reached by some of the dizziest paths ever trodden by human feet, the prehistoric town looks far across the wilderness. Its quaint terraced houses of gray adobe, its huge church (hardly less wonderful than the pyramids of Egypt as a monument of patient toil), its great reservoir in the solid rock, its superb scenery, its romantic history, and the strange customs of its 600 people, all are rife with interest to the few Americans who visit the isolated city. Neither history nor tradition tells us when Acoma was founded. The pueblo was once situated on top of the mesa Encantada (enchanted table-land), which rises 700 feet in air near the mesa now occupied. Four hundred years ago or so, a frightful storm swept away the enormous leaning rock which served as a ladder, and the patient people, who were away at the time, had to build a new city. The present Acoma was an old town when the first European, Coronado, the famous Spanish explorer, saw it in 1540. With that its authentic history begins, a strange, weird history, in scattered fragments, for which we must delve among the curious 'memorials' of the Spanish conquerors and the scant records of the heroic priests. Cubero is the nearest station to the most wonderful aboriginal city on earth, cliff built, cloud swept, matchless Acoma. Thirteen miles south, up a valley of growing beauty, we came to the home of these strange sky dwellers, a butte of rock nearly 400 feet tall and 70 acres in area."

In "A Tramp Across the Continent", 1892, pages 165-169, Mr. Lummis says:

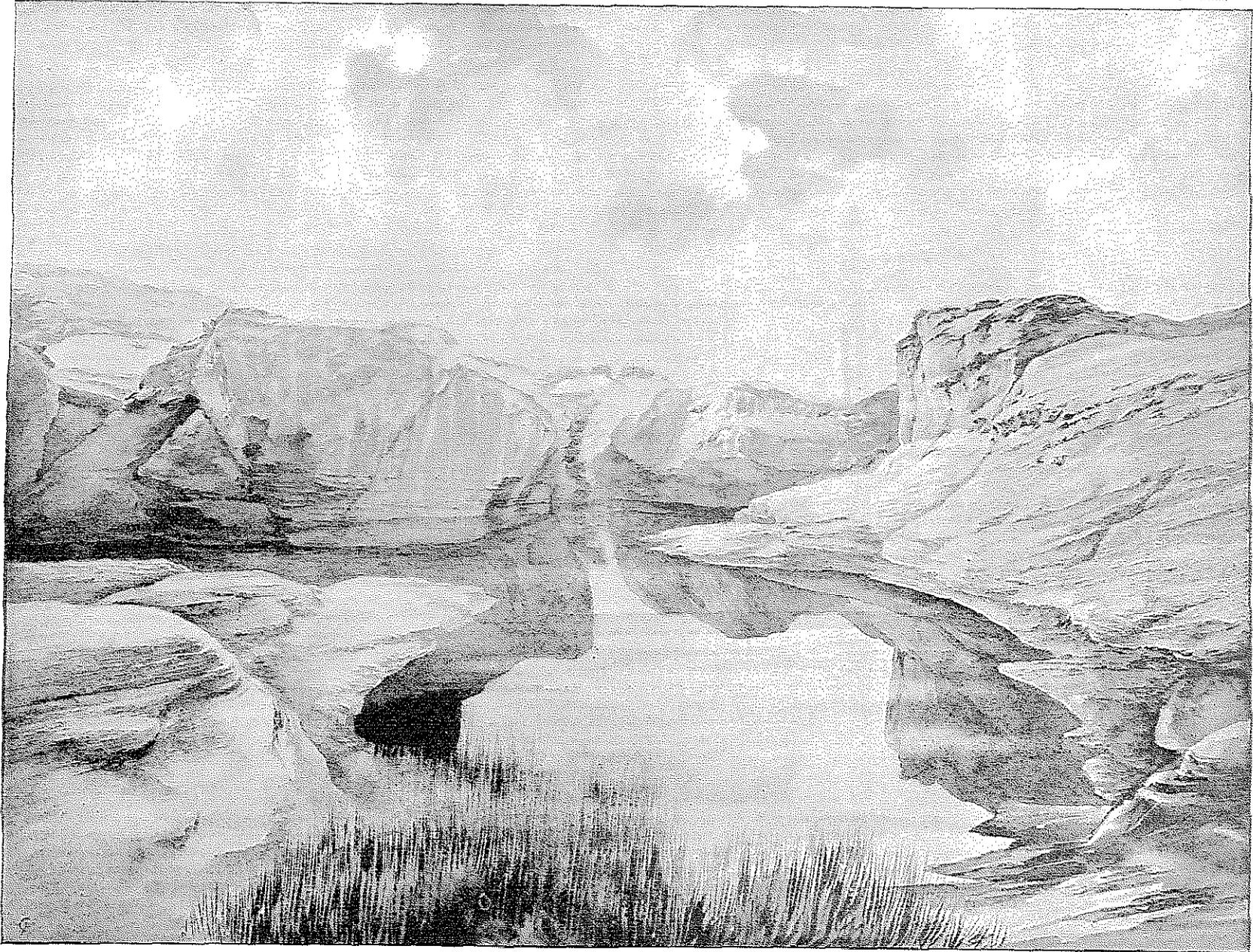
"We were handsomely entertained in the comfortable and roomy house of Martin Valle, the 7-times governor of the pueblo, a fine faced, kindly, still active man of 60, who rides his plunging bronco to-day as firmly as the best of them, and who in the years since our first meeting has become a valued friend. With him that day was his herculean war-captain, Faustino. I doubt if there was ever-carved a manlier frame than Faustino's, and certain it is that there never was a face nearer the ideal Mars. A grand, massive head, outlined in strength rather than delicacy; great, rugged features, yet superbly molded withal; an eye like a lion's, nose and forehead full of character, and a jaw which was massive but not brutal, calm but inexorable as fate. I have never seen a finer face—for a man whose trade is war, that is. Of course, it would hardly fit a professor's shoulders. But it will always stand out in my memory, with but 2 or 3 others, the most remarkable types I have ever encountered. One of the council accompanied us, too, a kindly, intelligent old man named José Miguel Chino, since gone to sleep in the indeterminate jumble of the gray graveyard.

"In a 'street' paved with the eternal rock of the mesa were a hundred children playing jubilantly. It was a pleasant sight, and they were pleasant children. I have never seen any of them fighting, and they are as bright, clean faced, sharp eyed, and active as you find in an American schoolyard at recess. The boys were playing some sort of Acoma tag, and the girls mostly looked on. I don't know that they had the scruples of the sex about boisterous play. But nearly every one of them carried a fat baby brother or sister on her back in the bight of her shawl. These uncomplaining little nurses were from 12 years old down to 5. Truly, the Acoma maiden begins to be a useful member of the household at an early age!

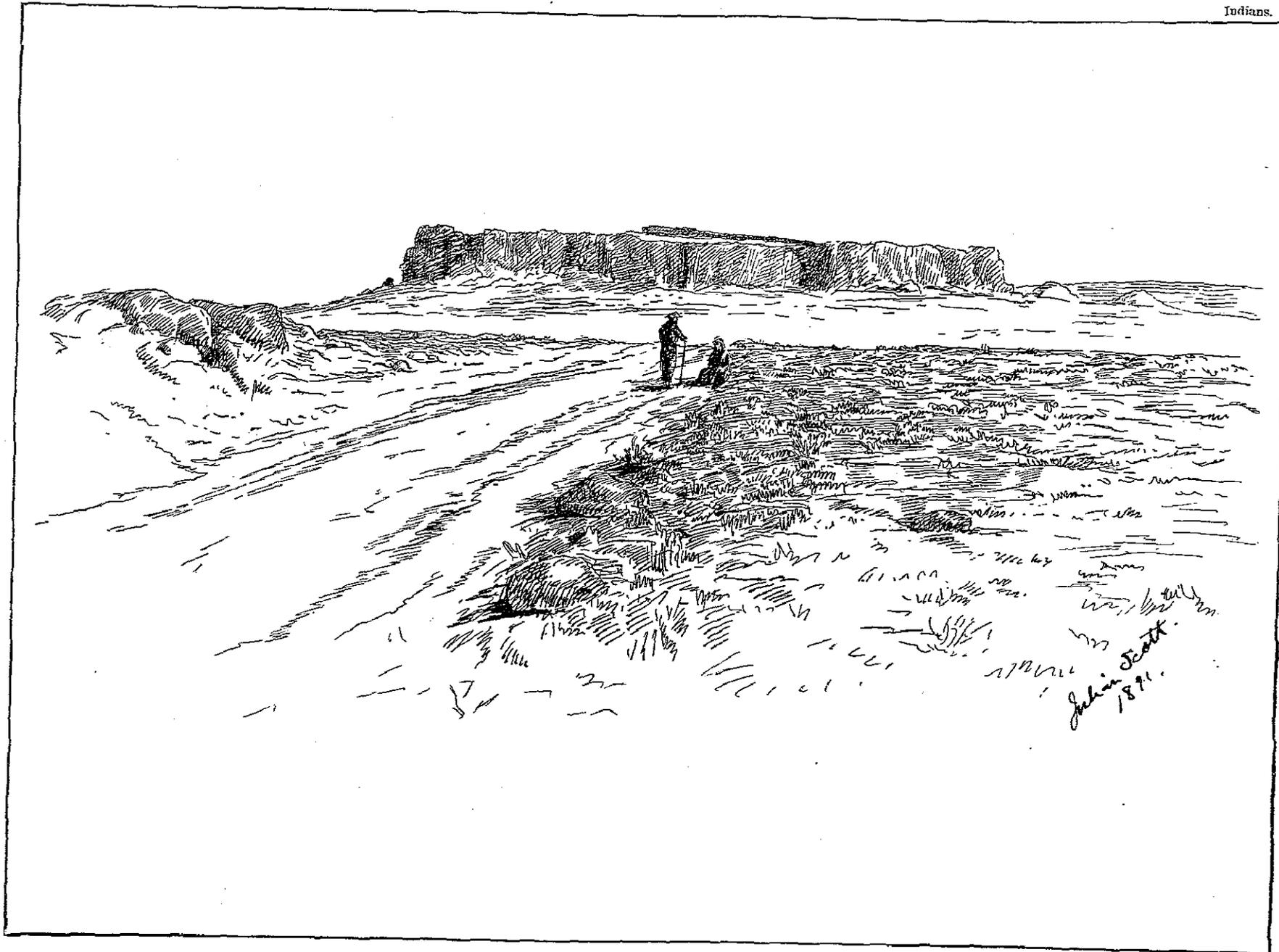
"Coming back from an exploration of the great church, with its historic paintings and the dizzy 'stone ladder' where the patient moccasins of untold generations have worn their imprint 6 inches deep in the rock, I found the old governor sitting at his door, indulging in the characteristic 'shave' of his people. He was impressively packing away at his bronze cheeks and thinking about some matter of state. The aborigine does not put a razor to his face, but goes to the root of the matter, plucking out each hairsute newcomer bodily by pinch of finger nails, or with knife blade against his thumb, or with tweezers. The governor's 'razor' was a unique and ingenious affair. He had taken the brass shell of a 45-60 rifle cartridge, split it nearly to the base, flattened the 2 sides, filed their edges true, and given them a slight spread at the fork. Thus he got a pair of tweezers better adapted to his work than the American style. With this he was coolly assaulting his kindly old face mechanically and methodically, never wincing at the operation.

"As we talked in disjointed Spanish, I saw a very wonderful thing, such a thing as is probably not to be seen again in a lifetime. An old crone came in carrying a 6-months' babe. She was 100 years old, toothless (for a wonder, for Acoma teeth are long lived), snow haired, and bony, but not bent. She and the infant were the extremes of 6 generations, for it was her great-great-great-great-grandchild that dangled in her shawl. I saw the grandmother, great-grandmother, and great-great-grandmother of the child afterward, the mother being absent at Acomita. Poor old woman! Think of her having cared for 5 generations of measles, croup, colic, and cholera infantum!

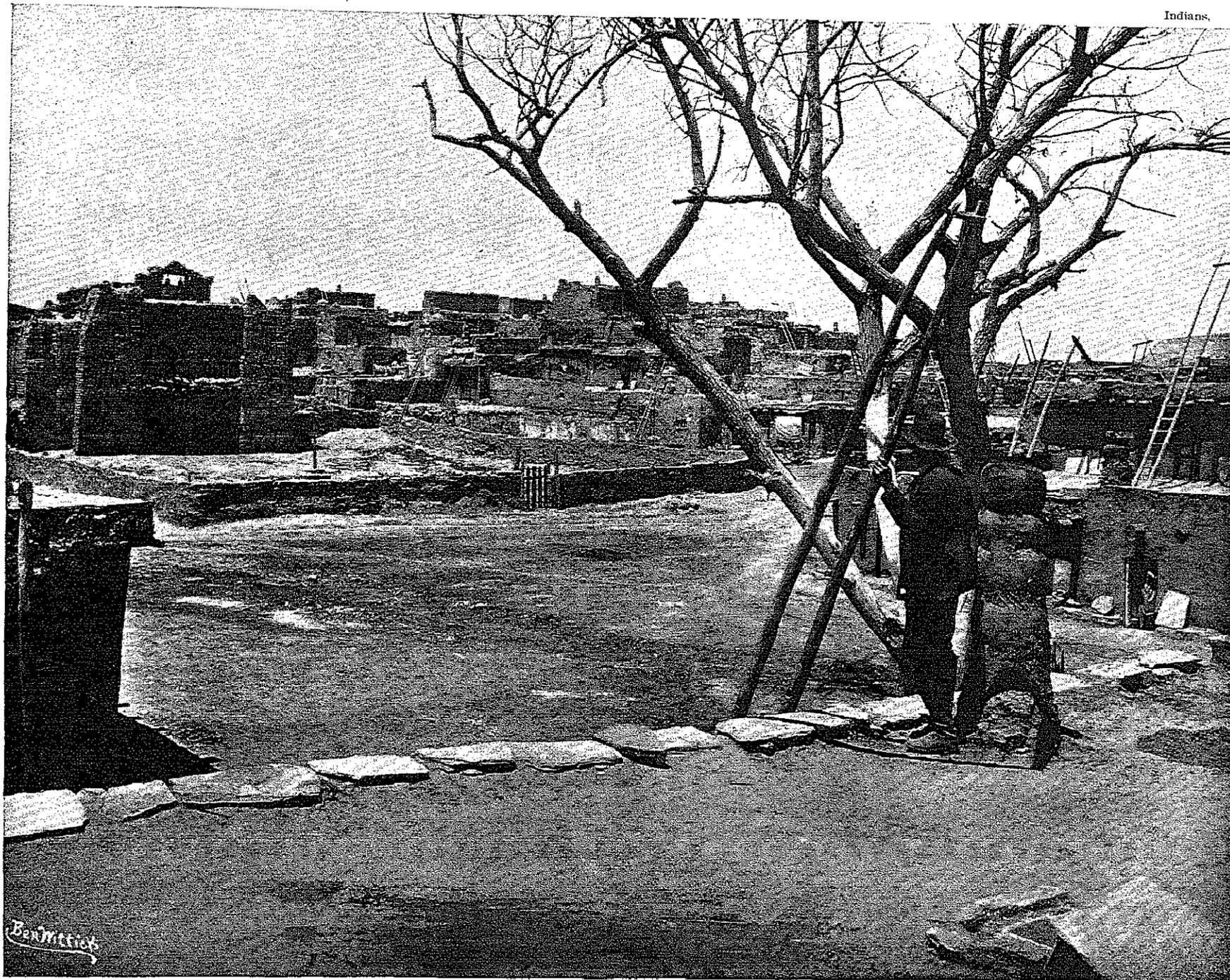
"There was a wonderful foot race that day, too, between half a dozen young men of Acoma and an equal number from Laguna. There were several hundred dollars' worth of ponies and blankets upon the race, and much loud talking accompanied the preliminaries. Then the runners and the judges went down to the plain, while every one else gathered on the edge of the cliff. At the signal the 12 lithe, clean faced athletes started off like deer. Their running costume consisted of the dark blue patarabo, or breechcloth, and their sinewy trunks and limbs were bare. Each side had a stick about the size of a lead pencil, and as they ran they had to kick this along in front of them, never touching it with the fingers. The course was around a wide circuit, which included the mesa of Acoma and several other big hills. I was told afterward that the distance was a good 25 miles. The Acoma boys, who won the race, did it in 2 hours and 31 minutes, which would be good running, even without the stick kicking arrangement."



PUEBLO OF ACOMA, SHOWING RESERVOIR.



THE ROCK AND PUEBLO OF ACOMA, NEW MEXICO.
The elevation on the top of the rock is the pueblo.



Ben Mitchell

PUEBLO OF ZUNI, 1890.

water is obtained from springs far away from the rock, though I was told many of the families used that of the reservoir, which must be very unhealthy. On the southern side of the pueblo, commanding an extended view of the country below and beyond, stands the old Spanish mission, facing the east. It is built of adobe and is wasting away.

The walled yard in front of the church has been the burial place since the edifice was raised, and many thousand bodies are said to be interred there. The natives in earlier times invariably buried pottery, ornaments of silver and beads of shell and turquoise, and other kinds with their dead. The church was locked, but we found a door within an annexed building, which admitted us to the gallery. The hour was getting late, and the diminishing light would not permit of our seeing distinctly the altar and decorations at the other end of the long auditorium. We met a young, intelligent looking Indian as we left the churchyard, who, speaking in good English, asked to talk with us. He said he was educated at Carlisle and had returned to Acoma, his former home, to live, but had taken up a temporary abode at the small station 14 miles north on the railroad, called McCarty. He desired to live and dress as white people did. He had long been convinced that education was the only salvation of his people, and sadly regretted that a large majority were opposing the efforts to enlighten them. He said that his brother and he owned a herd of sheep and goats; that his brother believed in the new road, but would remain at home and look after their joint interests while he went out into the world to further improve himself; that it was his intention to take his young wife to Albuquerque and put her in the government school there; that he would find work at his trade, slating, and devote his leisure time to mathematics. He hoped his people would open their eyes to the new condition and throw off their old ways. At this moment a pretty little Indian woman rode up astride a burro with gay trappings. He told us she was his wife, which she understood, and gave in acknowledgment a graceful nod of the head and one of the sweetest of smiles.

Continuing, he said, "If you can say a good word for us do so, please; we ask no other assistance, for we both are young and can look after ourselves". Shaking hands, he jumped on the burro behind his wife, and they soon disappeared down the trail. We descended by the old trail and met numerous herds of horses, burros, sheep, and goats coming up, followed by their attendants, who made the rock walls ring with occasional song and merry laughter.

Mr. Robert Marmon, who enumerated the Zuñis for the Eleventh Census, gave me a paper containing some complaints and requests which the Zuñis desired he should make known to the proper authorities in Washington, which I afterward gave to the Commissioner of Indian Affairs while journeying from Fort Wingate to Keams Canyon.

ZUÑI.

Zuñi lies in a great plain, or valley, through which the Zuñi river flows.

On account of the severe storm that had prevailed for a number of days the streets of the town were in a horrible condition, and looked as if they were never cleaned. They are now higher than the ground floors of the houses, though they were evidently once on the same level. Some of the terraced buildings are 5 stories high, reached by clumsy ladders and narrow partition steps of adobe or stone. All those visited were very clean inside, but as a general rule cheerless and sadly lacking in comforts. In a corner is always to be found a large and prettily decorated olla, filled with water, and a gourd by its side for a dipper. The people use bowls of their own make about the size of a washbowl to mix their bread in. Only the inside of these bowls is decorated. Among other bits of their pottery the canteen, or small water jug, is very pretty, and they bestow great pains on its ornamentation. To its ears they tie gaudy looking sashes of different colors and design, made broad so as to enable them to more easily carry the burden of precious water when on a long journey. Almost every family possesses willow baskets, some of which come from the Moqui country, some from the far Cojonino, and others from the Apaches. These baskets are made in the fashion of a shallow bowl, or more like a saucer, except those from the second Moqui mesa, which are the large oval, and almost flat. The Cojonino basket is so perfectly braided that it will hold water, but is seldom used for any other purpose than holding meal, corn, or bread. I saw great quantities of dried peaches wherever I went. When stewed they are quite delicious.

The Zuñi people pay little attention to the great fertile valley or plain in which they live. It could all be put under cultivation and exceed in products a hundredfold more than their requirements, but they pass out of the plain and plant their fields in the little side valley, where they have even set out their peach orchards. I asked the reason for this, and learned it was a "policy" adopted by their wise men; that the plain in greater part was once under cultivation, but when the white men began to come they made a change. The plain was naturally very rich and productive wherever irrigated, but to keep the white man off they took possession of the little valleys and watering places on its border, by doing which their great valley and home are the better protected, and the change only requires a little extra labor.

The old Catholic church is in a dangerous condition; its walls are giving way, and it is no longer used for religious services. The buildings of the Presbyterian mission are very good, except the roofs.

The people engage in eagle farming. It is in this way that they obtain so many eagle feathers for their own use and trade among other tribes.

The principal complaints they make are against the Navajos, who steal their cattle, sheep, goats, asses, and horses. The people of this pueblo, in common with the people of Acoma and Laguna, want an agent to live near them.

The pueblo embraces in its government 3 other towns, Nutrias, Pescado, and Caliente. They are all within the Indian reservation, and distant from Zuñi proper from 8 to 15 miles.

The civil government consists of a governor, who is appointed by the caciques, or heads of the different orders, or gentes. This governor holds office from 1 to 3 years, at the option or pleasure of the caciques.

The governor appoints an assistant, or lieutenant governor, but the person selected to fill the position is suggested by the caciques. The lieutenant governor acts in the absence of the governor. The governor, too, appoints 6 deputies, whose duties are to see that all the governor's orders are obeyed. This constitutes the machinery of their so-called civil government. Back of this power there is a greater one, the council of the caciques, headed by the chief of the bow, who hold secret meetings and settle all questions within their body that pertain to the management of public affairs. In all there are some 8 caciques, 1 or 2 of whom are reported to be women.

There are 17 orders, or gentes, in this pueblo, according to the Indian trader.

There are about 263 houses in the pueblo, including those which have recently been built on the outskirts of the old town. There are a few small courts, or squares, through the town, where dances are held at the call of the caciques, and where children, dogs, and burros gather to play and rest on the shady sides during the daytime. The rows of houses connected as they are, encircling the courts and spanning the covered ways that lead from street to street or court to court, might properly be called one vast communal dwelling or beehive. They are built in terraces from 2 to 5 stories high, their walls being of stone, rubble, clay, and adobe bricks. The lower and upper stories are principally, though not wholly, used for living apartments. The aged and very old are relegated to the ground floors. The dwellings, as a rule, inside and out, are very tidy; the walls are whitewashed with a preparation of their own invention, consisting of burnt gypsum, ground to powder, making plaster of paris, and mixed with water and a little flour. The mixture is put on with the aid of strings of wool, not twisted, but matted together like a mop. The women do this work and are the housebuilders.

The appointments of a Zuñi dwelling are simple. There is in the corner of the main room a fireplace, where the cooking is done. The adobe or stone bench built along the side of the room is covered with a sheepskin or blanket, laid to make the seats more comfortable.

The beds consist of sheepskin and blankets, generally of Navajo make, which are rolled up during the day and spread out at night, and more than one family will occupy a room at a time.

Ollas, or water jars, constitute the larger vessels they use, while earthen trays, bowls, and dippers are employed for mixing dough, and dishes peculiar to them. They generally eat out of a large bowl of clay in common; whether it be a stew or boiled meat it makes no difference. Some of the families use all the modern household appliances.

Few of them possess chairs or tables; boxes, however, which they get from traders, supply the places of these articles; but as a rule they sit on their heels or on an old blanket folded into a wad or on the conventional bench of stone covered with clay and gypsum whitewash. The rooms are all lighted by small windows. Some buildings, the more modern, have the factory sash and 6 by 4 glass, but the old dwellings still have the quaint gypsum plates in every conceivable irregularity, which are placed so as to light the bins where they grind their corn upon inclined slabs of stone (metáte), using long and quite heavy pieces for the purpose. These bins about complete the list of household furniture, and they are the first of their necessities.

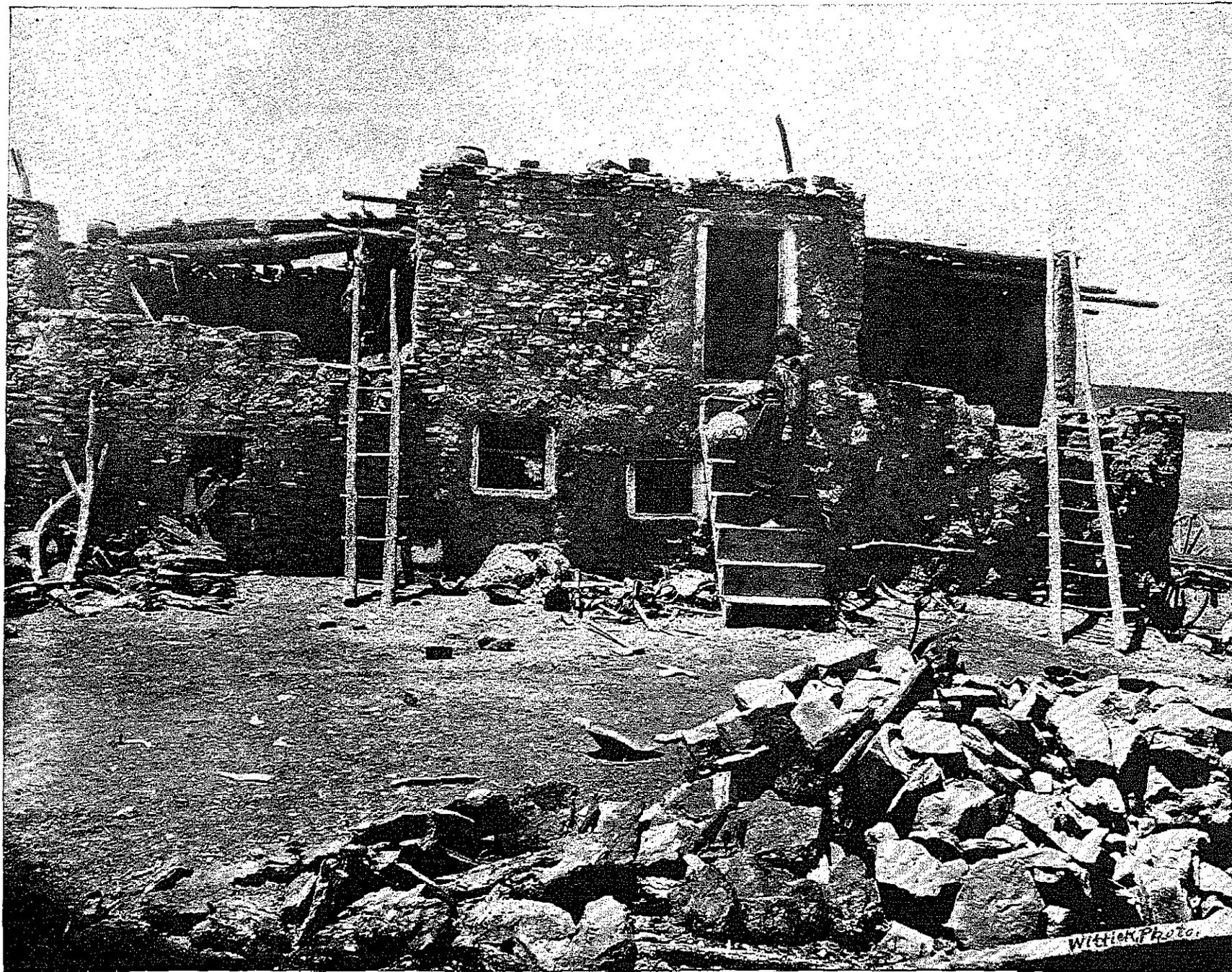
Bows and arrows are seen sometimes hanging on the walls, and very often a good repeating rifle. Occasionally the old mortar and tethestone and the stone hammer and ax, also the stone dart and spearhead, can be found among the very old people; but these relics of the past are fast disappearing. Men belonging to the different orders carry little stone fetiches when hunting to bring good luck. These are now very scarce, and an Indian owning one will part with most anything else before letting it go.

The Indians cultivate the fields that border the great basin in which they live, also the side canyons and little valleys through which streams run and where irrigation is made easy. It is a very primitive agriculture. The whole of the valley could be made productive, but it mostly lies fallow by reason of the policy of the caciques to let it alone and duly keep under cultivation the fields where they are now located, and so keep off the white man. Their principal agricultural products are corn, wheat, oats, beans, chili, onions, pumpkins, and melons of all kinds. They also have numerous peach orchards, which are situated in the sand hills and along the little washes that skirt and come into the valley. On the east, south, and west sides of the pueblo are numerous walled gardens, as many as 200. Some of these gardens are in terraces rising up from the river bank toward the top of the mound on which the older part of the pueblo stands. The women plant and wholly care for these gardens.

The manner of life of these Indians can be taken as a type of the methods of the other 18 pueblos of New Mexico. During the dry season they patiently toil, keeping their fields well watered from the river, from which the women carry the water in ollas on their heads. The men weave blankets and sashes similar to those made by the Moquis, and they make a simple kind of willow basket, but not so fine as those of the Moquis, the



AN ACOMA (New Mexico) WOMAN with water jar. "Tinajas," 1890.
PATRICIO PINOR or PALOWABTE, ex-governor of pueblo of Zuni, 1890.



HOME OF "WE-WA," PUEBLO OF ZUNI, 1890

Apaches, or the Navajos. Most of the families possess one or more specimens of these finer baskets, which they have obtained in trade. The dress or toilet of the women is similar in all respects to that of the Moquis, except the cart wheel hairpuffs worn by the young women. Their places for holding religious ceremonies differ from those of the Moquis (in estufas). The places of worship, instead of being built underground or excavated out of the solid sandstone, are large rooms, established in such parts of the pueblos as will best conduce to secrecy. Some of their religious ceremonies evince the nature of phallic worship. They do not have the snake dance, which seems to be confined to the Moquis.

The Presbyterian school is doing well.

While the people in habits and customs are generally similar to the other Pueblos, they are very tenacious in holding to their ancient faith, and, while manifesting the same desire for educational aid and agricultural implements, they wish to hold to their old religion and desire to worship after the manner of their fathers, adopting only such parts of the white man's ways as will be of practical use to them. The Zuñis, in common with all other Indians, are very superstitious, and regard with great fear a supposed witch. It is the common belief that a person charged with witchcraft brought before the caciques for trial, if found guilty is promptly executed in an extremely cruel manner. It is also believed that a persistent thief is regarded as beset of the devil and his fate is much the same as that of the witch. Stories are told of the execution of an old woman in 1890 who was charged with bringing a plague of grasshoppers into the valley, and of the killing of her son. The place of execution is said to be a little, low adobe annex to the old Catholic church on its southwest corner. It would seem as if the government ought to investigate these reports.

Indians are living in neighboring pueblos in exile, according to common report, having been charged with witchcraft. There are certain white men who are reported to have seen executions such as indicated above. It is also a matter of report that these Indians pursued and shot down two Mexicans, well known for their sobriety and industry, on account of some possible connection with the stealing of horses supposed to have been stolen by Mexicans or white men.

The force and power of the United States should be made clear in a proper and dignified way. No one outside knows what they do within the pueblos of New Mexico in the matter of administering their laws, and it is important that the United States government should understand it.

My observation in the 3 pueblos of Laguna, Acoma, and Zuñi is, that the so-called control of these people by the United States government makes them expectant, and they hurry to Santa Fe to the United States Indian agent on small matters. Their civilization from an Anglo Saxon standpoint is nominal, still they are more provident than their New Mexican neighbors. These people should at once be dropped by the nation and required to assume the duties of citizenship, to which they are legally entitled.

The Indians of Laguna, Acoma, and Zuñi have many intensely interesting traditions. Their religious beliefs are founded upon a theology of their own, which while it is unlike the Christian in most respects it greatly resembles it on the moral side; their superstitions are endless.

The Indians of Acoma and Laguna speak the same language as those of the pueblos of Zia, San Domingo, Cochiti, Santa Ana, San Felipe, Taos, and Isleta, in New Mexico, and Tewa, on the first Moqui mesa, in Arizona. They live by agriculture and stock raising; besides, they manufacture a large amount of pottery, which they sell to tourists and in the large towns accessible to them and along the Atlantic and Pacific railroad.

Their stock consists of horses, cattle, burros, sheep, and goats. They raise corn in their fields. Wheat was once one of their chief products, but it is not now. It is not so reliable as corn, and they are able to purchase flour of the traders as cheap as they can produce it. Their garden stuffs are chili, onions, melons, pumpkins, beans, and fruit, such as apples, peaches, and grapes. Their meat supply is from sheep, goats, and cattle.

I found it very difficult to get at any figures respecting the number of acres these pueblos have under cultivation or the amount of corn or wheat they raise; neither could I find any way to ascertain the size of their herds, scattered as they were on the mesas and through the canyons for grazing. It is very difficult to get information from these Indians, and particularly so if they even suspect you of being a government agent.

I asked a Laguna man how many horses he had; he answered by holding up both of his hands, meaning 10; then, on inquiry of another what the number of his horses was, he gave me the same reply. I found out that the men were part owners in the same 10 horses. There were others in this partnership, all belonging to the same family.

The fields are scattered through the San Jose and Acoma valleys and along the little streams and washes in side canyons where water can be stored and irrigation is practicable. Where there is a spring, however small, there too is a garden, large or otherwise, according to the water supply.

The seasons for crops are very irregular; but the people try to raise as much corn over their annual consumption as possible, to guard against a future small crop or a famine; so in a good year they will have for storage and to barter double the amount they will consume, and perhaps more. From all I could learn after a good deal of "talk" and much smoking of cigarettes and old pipes and many inquiries I have made the estimate of the number of acres of corn they cultivate.

Acoma has a population of 566 souls. Allowing for consumption, waste, barter, and storage (surplus) 1 pound a day per capita, a total of 3,689 bushels a year, and 12 bushels per acre of yield on the average, 308 acres may be given as under cultivation at Acoma: consumption, including waste, etc, 1,475; stored for contingency, 1,475; for barter, about 739; making a total of 3,689 bushels.

Enough vegetables and melons are raised for both consumption and trade.

Laguna is situated 16 miles northeast of Acoma and is directly on the Atlantic and Pacific railroad. The people are similar in every essential to those of Acoma, and speak the same tongue. I was told by one of their old governors, Santa Ago, that Laguna was originally settled by a colony consisting of disaffected members of all the pueblos, whose languages they still speak.

The soil in the San Jose valley, in which Laguna stands, is similar to that of the valley of Acoma, and the advantages for irrigating, although much better, are not improved, owing to a lack of engineering skill. The average yield of corn and estimates of consumption are about the same as for Laguna.

Laguna has a population of 1,143. Consumption of corn, as noted per capita, for the year is within a fraction of 7,450 bushels, and allowing 12 bushels yield per acre, 621 acres may be given as under cultivation. They may produce more corn to the acre, but such cornfields as I saw were not promising.

Consumption, including waste, 2,980; storage for contingency, 2,980; for barter, about 1,490; making a total of 7,450 bushels.

Vegetables and melons are raised for consumption, trade, and storage.

The people of Laguna, Acoma, and Zuñi want the government to give them a police force sufficient to protect their interests against the bands of horse thieves and to keep in submission some of their own unruly ones.

So far as I was able to observe, the people of the 3 large pueblos, Laguna, Acoma, and Zuñi, resemble each other in all particulars. The people of Laguna are in some respects more advanced than the other Indians in the direction of household comforts, many of the families there having in use modern beds, chairs, and tables, but all of them, including the other Pueblos, have taken up with the modern tin coffee-pot, teacups and saucers, plates, knives, forks, and spoons, and are adopting modern ways of cooking.

While nearly all the men have adopted in part the dress of the white race, principally the waistcoat, the women cling to the old blanket dress, clumsy, deerskin leggings and moccasins, and small tunics of some one color; a few wear calico waists. Except in the manner the young women have of putting up their hair, the costumes of both men and women are the same as described in my report on the Moquis.

That the Indians of the 3 pueblos are improving from year to year is certain, but the evolution from their former state to a higher condition is slow. They are jealous of their religious beliefs, and suspect that the interest taken in their welfare is only to force upon them the doctrines of a new faith.

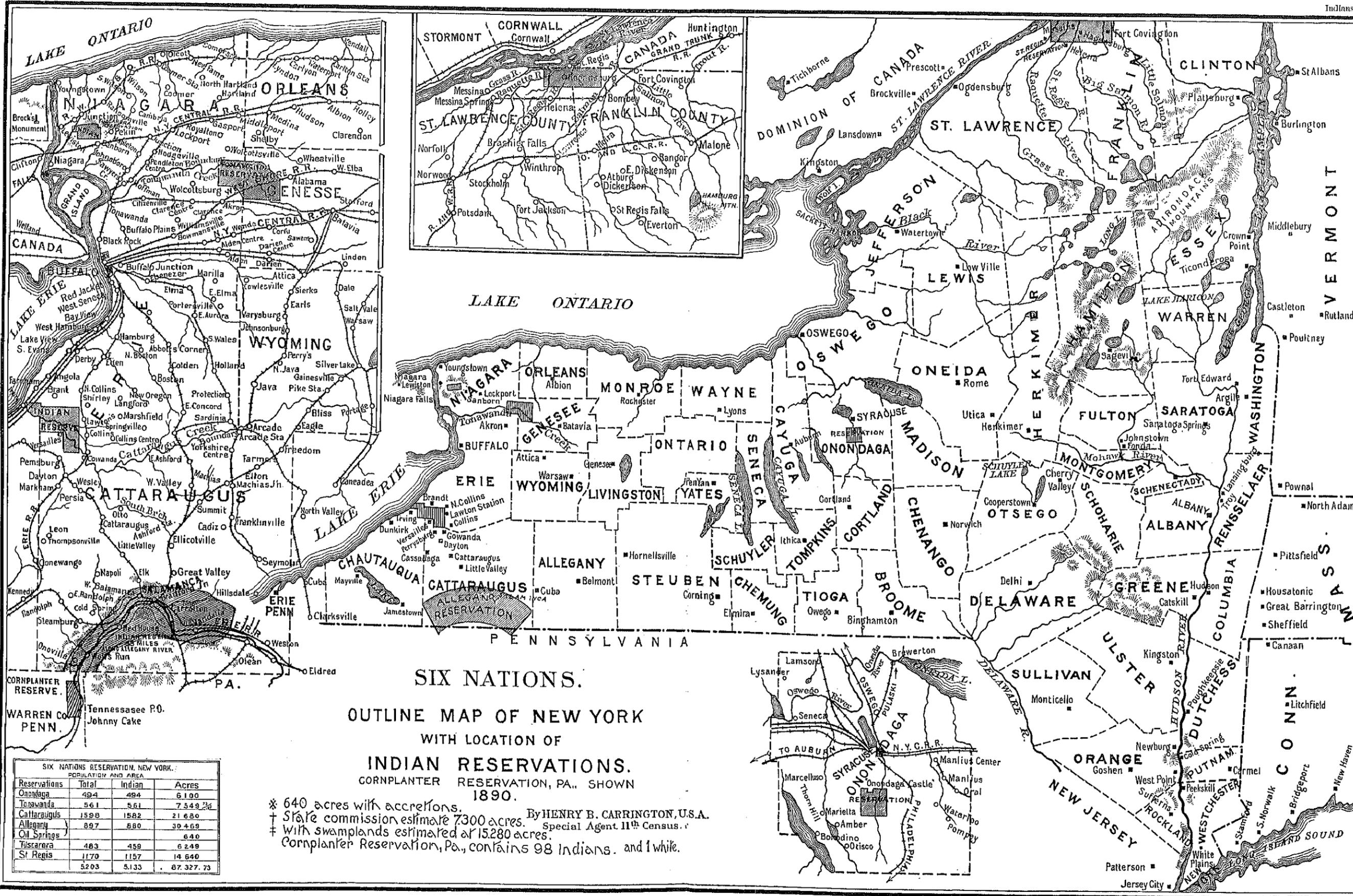
The testimony of whites and progressive Indians was that the death rate was decreasing.

The lands of these Indians are secured to them by United States patents of date 1863, or reserved, and they have an agent, who resides at Santa Fe. While nominally under control of the United States they are self-supporting in all these pueblos. The people manufacture pottery, blankets, jewelry, and clothing, in addition to engaging in general agriculture. I found that the census of Laguna, Acoma, and Zuñi had been most satisfactorily taken by the United States enumerators.

Colonel Walter G. Marmon, of Laguna, requested me to add to my report the following respecting Indian schools and issue of fruit trees for the Pueblo Indians:

Let there be a compulsory school law passed by Congress complete in itself, giving full power to collect from each tribe such children as are wanted for the schools; the government Indian boarding schools in the states and territories where the tribes are located to be primary and industrial schools, the term to be 5 years. At the end of the 5-year term let all pupils who have shown ability be sent to a higher grade of schools away from their people, such as Carlisle and Lawrence, or to colleges in the east until they graduate.

Issue of fruit trees should be made to Indians. Let it be a requirement before issue that the Indian shall fence in and properly prepare the plot of ground where he intends to plant his orchard. Let it be the duty of the agent who issues the trees to inspect each plot, and if properly prepared then make the issue. This to apply to the Navajos as well as the Pueblos.



SIX NATIONS.
 OUTLINE MAP OF NEW YORK
 WITH LOCATION OF
 INDIAN RESERVATIONS.
 CORNPLANTER RESERVATION, PA., SHOWN
 1890.

SIX NATIONS RESERVATION, NEW YORK. POPULATION AND AREA			
Reservations	Total	Indian	Acres
Onondaga	494	494	6 100
Tonawanda	561	561	7 549 2/3
Cattaraugus	1599	1592	21 680
Allegany	897	880	30 469
Oil Springs			640
Tuscarora	483	459	6 249
St Regis	1170	1157	14 640
	5203	5133	87 327.73

* 640 acres with accretions.
 † State commission estimate 7300 acres.
 ‡ With swamplands estimated at 15280 acres.
 Cornplanter Reservation, Pa., contains 98 Indians. and 1 white.

By HENRY B. CARRINGTON, U.S.A.
 Special Agent 11th Census.