

the door, and never moved them until he was safely in the witness-chair. Other witnesses testified to the similarity between the words on the proof and Captain Risley's handwriting. Risley was recalled, and simply and stolidly denied the writing.

For half an hour Cleary shrilled against bankers, usury, fraud, and oppression; and for a full hour Haggis bellowed anathemas at trickery, shiftlessness, and printers. In that community, dependent for its material and political support upon the bucolic population, a lawyer would as soon have inveighed against the Constitution and the Ten Commandments as to have whispered a suspicion that farmers were not the deserving and oppressed of earth. It took the six farmers and laborers who composed the jury not six minutes to return a verdict for the plaintiff.

As the crowd was leaving the room, Huntley, for a moment, turned his huge and jubi-

lant grin upon Potts, at whom Cleary also ducked his head and smiled. At the door Risley brushed by, and Potts clenched his hands and looked him squarely in the face. The banker's malevolent glance fell, and he walked on with long, heavy steps.

At six o'clock, as the mules trotted by the "shack," Huntley's face still wore that enormous grin. There was flour in the wagon, and in his pocket, besides red stick candy and plug tobacco, there was actually a roll of bills: for Mr. Huntley had mortgaged the mules, paid Cleary, and had money enough left "to run him through."

Potts went down to his printing-office, where he locked himself in for half an hour. When he came out there was dust on the knees of his trousers; but his freckled, red-whiskered little face was serene, and he walked home with a step in which there was no hesitation.

Will Payne.

LAND OF THE LIVING CLIFF-DWELLERS.



NE of the most interesting and least known portions of the North American continent is that lying along the boundary line between the Mexican States of Chihuahua and Sonora, in the northern part of that republic. Early in March, 1889, a small party under my charge crossed the boundary between the two republics just south of Deming, New Mexico. On crossing the boundary we came to a rich and fertile country that contrasted strikingly with the well-known arid region of the southwestern part of our own Territory. Beautiful mountain streams spring from the flanks of the Sierra Madre range, and water profusely the foot-hills of the Cordilleras in a country which, judging from our own near by, we expected to find almost barren of water. Here the wild Apaches loved to graze their ponies on the sweet grasses of the rolling hills, and in view of its fertility the obstinacy with which for many years they closed this country to civilization can be easily understood.

In this portion of Chihuahua we found ruins of houses, villages, and towns along the valleys, most numerous where the soil was richest, while there were terraces and irrigating-ditches along the hillsides, which plainly spoke of a peaceful mode of life; yet on the hilltops and crests of cliffs were undoubted signs of old fortifications, which showed the warrior element among them. I had expected to find many ruins in my travels through this part of the country, but I

confess that the great profusion of them surprised me. In one day I made a wide circuit back into the mountains, returning by another trail to my camp on the Piedras Verdes River, and in that thirty miles of almost continuous riding I believe I saw from 100 to 150 separate and distinct ruins.

Far back in the Sierra Madre range there are one or two curiously combined cave- and cliff-dwellings, long since abandoned, that are ingeniously supplied with water. At one place a deep cave has been divided into many small rooms, one of them containing a huge jar that takes up the whole interior of the compartment, and which, unless the cave was densely populated, must have furnished a water-supply for a week at least; and sieges by predatory tribes probably could not have been maintained longer than that. In the other cave the plan was more ingenious, and a greater supply was secured. Instead of one reservoir, there was a series of them, each just below its fellow, so as to receive its overflow, the top one fed by a sweet-water spring and the last emptying over the cliff into the stream below. The proximity of water coupled with the reservoirs clearly indicated defense in both cases, giving force to the conjecture that the stone piles and ridges seen elsewhere on the hilltops overlooking other ruins were for a similar purpose. Stone axes and hatchets were found in comparative profusion around these numerous ruins. The deserted dwellings suggested to my mind that there was probably some connection between the ancient cliff-dwellers of

Arizona and New Mexico and the living cave- and cliff-dwellers of southwestern Chihuahua, toward whom we were traveling.

The country of the Sierra Madre in the land of the living cliff-dwellers is most thoroughly alpine in character. We approached the crags and cliffs of that region from the east by an elevated plateau as high as the crests of the mountain-chains in the country, so that we looked down into this alpine section rather than up to it, as would have been the case had we approached from the Pacific side.

The native people found by us may be said to be of two kinds, the so-called civilized and the savage, but so gradually passing from one into the other that the distinction cannot be clearly made, though in the extreme of each this difference is so wide as to impress the beholder with the thought that there is no connecting-link. Our first encounter with the semi-civilized was on the Papigochoo River, in the heart of the Sierra Madre. They were working in a little field where the windings of the mountain river had left a level space. They were Tarahumaris, a tribe of great extent in this part of Mexico, and one to which I believe the cave- and cliff-dwellers belong, although this subdivision of the family has drifted so far away from the parent stock that at first glance one would not recognize them as relatives. Both the semi-civilized and the savage branches are singularly alike in their timidity, even the civilized ones usually trying to avoid strangers if possible, though never fleeing from them like so many wild beasts, as the uncivilized ones always do. The Mexican packers of mule-trains in the Sierra Madre range are very noisy in urging forward their plodding animals. They claim that this does some good in the way of notifying an approaching train of their presence, so that the two will not meet and attempt to pass on those dizzy cliffs and dangerously small trails on the steep mountain-sides so very common on the backbone ridge of the sierras. Certainly it tells the timid Tarahumari of their coming, and if not engaged in too important work on his little farm he will not be seen when the travelers pass by. Mr. Becerra told me that he had traveled the whole distance across the Sierra Madre through the Tarahumari country without seeing one of the natives when he was accompanied by a pack-train, and, again, had gone over the same route and had good views of them by the score when making his own way over the trail or with only a companion or two.

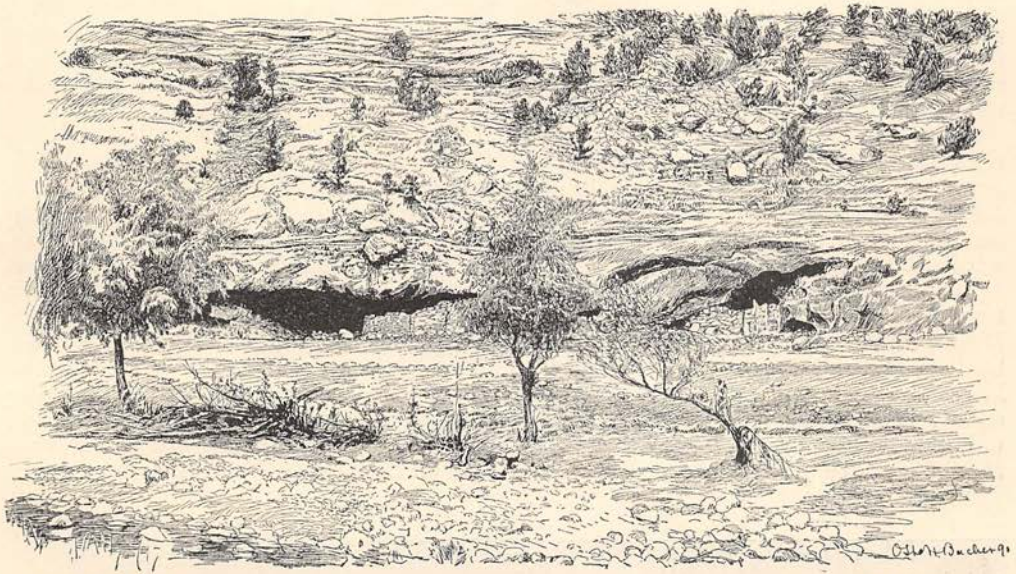
Some two or three hundred years ago the Spanish Jesuits came among these people and converted numbers of them to their faith; the descendants of those converts, I assume, are now the so-called civilized Tarahumaris, who live in rude houses and roughly cultivate the fields.

The savage race live mostly on the cliffs or in caves, are worshipers of the sun, and, while they plant a little corn without cultivation on the steep hillsides, they are not otherwise tillers of the soil, but sustain themselves by the chase.

The civilized Tarahumaris of the Papigochoo were plowing with rude wooden plows with hard-wood points. That night we camped on the Guajo chic, a much prettier stream than its Tarahumari name would indicate. I was told that the last syllable "chic," meant "the place of," the remainder of the word filling out the phrase, and that it was applied to all geographical names; another person said that a friend who spoke the language called it "water." I could not get definite information as to its signification. The most appalling part of this language, to a stranger, is the inordinate length of a great many of the words—Cusi-huiriac, a Mexican town of from 6000 to 7000 souls, being a fair example, but far from the longest.

It was early in May, about noon, when my party crossed the beautiful Baco chic. We were all mounted on mules, while pack-mules carried our effects. The sides of the mountains inclosing the stream at this point were precipitous, while a lot of broken shale on the narrow trail made it somewhat hazardous, and even dangerous, when near the steep cliffs. A deep ravine cutting in at right angles to the Baco chic closed our way to the north as we ascended the winding trail, and when we had worked our way up the steep bank some 200 or 300 feet, a favorable exit from the low, scrubby pines gave me an opportunity to look straight across this picturesque ravine, and I was surprised to see, on the other bank, which seemed even more precipitous than the one on which I stood, a deep cave walled up in front nearly to the top, and evidently indicating cave- or cliff-dwellers. My first thought was that the curious habitation in front of me belonged to the era of similar buildings in Arizona and New Mexico, which the best authority consigns to a very old period. With me, however, was a Mexican gentleman who said that the cave was inhabited, but as the occupants were extremely timid, probably we would not be able to see them without forcing an entrance into their strange home. He believed that most of them were inside peeping at us over the rude walls and around the very dilapidated animal's hide that served to close the door. The cave was not over two hundred yards away, and, with the aid of our field-glasses, we could plainly make out its details.

My impressions led me to the theory that these were vagabond individuals of the local Indian tribes who were occupying this old cave-dwelling in the cliffs, much as we see the



DRAWN BY OTTO BACHER.

CAVE-DWELLINGS.

FROM A PHOTOGRAPH.

corresponding class with us occasionally occupying dugouts, shanties built into the side-hills, and even caves around the suburbs of towns. But one of the Mexicans, who argued against forcible intrusion into the homes of these people, said that we would find a great number of them further on in the deep recesses of the Sierra Madre range, and that among so many we would have good opportunities of seeing them to better advantage than we possibly could here. My Mexican friend was born and reared in this part of Chihuahua; his father and uncle owned one of the largest and richest mining-districts in that portion of the Sierra Madre toward which our course was directed, and to reach which he attached himself to our party for a couple of days, when our paths separated. His business called for almost constant traveling in these parts. He placed the number of living cliff- and cave-dwellers in this part of Mexico at from 9000 to 12,000 persons. We afterward saw from 300 to 500 of them, which, considering their great timidity and the small part of their land traversed by us, would give an air of reasonableness to the estimate of Don Augustin Becerra, for such was my friend's name.

Even as we stood on the edge of the cliff opposite this singular home, we saw an Indian in the cañon far below. He appeared to be wearing only a breech-clout of animal skins; he carried a long bow and arrows. He looked almost as dark as a Guinea negro as he skirted the shadows of the cañon, and his hair was long. A rattling of the falling chips of shale drew his attention to us, when he at once

skulked behind a big boulder at the base of the cliff, and we saw him no more.

Everywhere in the mountains the semi-civilized Tarahumaris are used as couriers and mail-carriers, none of the domesticated animals being able to keep pace with them for long or for short distances. Halting to camp about three o'clock one afternoon, a Tarahumari mail-carrier passed my party, bound in the same direction that we were traveling and toward a point we expected to make in some two days' good marching. Replying to a question, he said that he would reach this point early that night, a feat which we afterward ascertained he had accomplished. Not very long ago, before the diligence, or Mexican stage line, was put on from the city of Chihuahua to the foot-hills of the Sierra Madre, the mail was carried from that city to the mining-camps on the western mountain-slopes by a Tarahumari, who made the round trip with his thirty or forty pounds of mail and provisions in just six days, resting Sundays in Chihuahua to see the bull-fight. This distance is over 500 miles, half of it being on as rough and hazardous a mountain-trail as any in the known world.

In the Barranca del Cobre a trail leads 5000 feet or more up the steep mountain-side to the crest of the range. It takes five or six hours to ascend it on muleback along the twisting trail. It takes four or five hours to descend. A Tarahumari courier carried a message from a person at the crest to another in the bottom of the cañon, and returned, in an hour and twenty minutes. In fact the word "Tarahumari" means "foot-runner."

The semi-civilized Indians are very fond of a sort of foot-ball game in which speed counts for more than the qualities we usually associate with this contest. A favorite trick is to catch the ball on the toes and run with it to the goal.

The mountain-trails are one of the most curious and interesting features of the central sierras. They go up grades that would be dangerous to ascend on foot if made directly up the face of the mountain, but by winding backward and forward on "switch-backs" of from 25 to 50 yards in length, increasing the distance tenfold, they make a trail that the ibex-like Mexican mule can travel. The loss of foothold is now and then about equivalent to loss of life; for the trails on these steep slopes seldom average over four or five inches in width, and are sometimes cut out of the solid rock. They often wind round dizzy spurs, cliffs,

river directly underneath. Some years ago a fine Mexican rider attempted this place on a dark night, and his mangled body and that of his mule, which were found next morning on the boulders in the shallow river beneath, showed too plainly how he had met his death. I weighed 267 pounds, and my mule was a correspondingly large animal, so I had a delightfully cool sensation as the great "pinto" beast took up a lumbering trot when he came to this part of the trail; for it should be borne in mind that the best riders give their animals wholly their own way in crossing dangerous or even debatable places. The depth and height these trails attain in the great barrancas and cañons of the mountainous sierras are wonderful, and furnish some of the most picturesque scenery in the world. At nine o'clock one forenoon we were on La Cumbra (The Crest) of the moun-



DRAWN BY GEORGE DE FOREST BRUSH.

THE BALL-GAME.

ENGRAVED BY C. A. POWELL.

and precipitous bluffs. Near Batopilas the maximum is reached in La Infinitad (The Infinity of the Mexicans), where from a trail cut in rock the rider looks over the side of his mule a vertical 2600 feet to the cañon-bottom below. At another point on the Urique trail we had a short stretch of a few yards where the trail was "stuck on" to the side of the hill like the top of a row of swallows' nests, and from which one looked vertically for about 500 feet into the

tains overlooking the Grand Barranca of the Urique, and where we could get a drink of ice-water from the rills, breathe cold air, and listen to the wind in the pines around us. In three hours we were among orange- and lemon-groves, eating their ripe fruit, or bathing in water of tepid temperature, and breathing air that was almost stifling. We had fallen a vertical mile in that time, but had twisted and wound round ten times as far to make it.



DRAWN BY OTTO BACHER.

FROM A PHOTOGRAPH.

ENGRAVED BY E. H. DE L'ORME.

CAVE-DWELLING ON THE BATOPILAS TRAIL.

The scenery of the Chihuahuan Sierra Madre is magnificent beyond conception. The Grand Barranca of the Urique surpasses the Grand Cañon of the Colorado in points of vastness and magnificence. It is not so continuously a cañon, with monotonous walls of perpendicular rock for miles and miles, as the latter, but here and there breaks into openings of many miles in width, which furnish the most stupendous alpine scenery that the eye ever rested on. Great, frowning buttresses of rock a mile in height soften backward into slopes of almost pastoral beauty, while, between, the curious cliff- and cave-dweller makes his home, forming in all a wonderland unsurpassed in the world's many marvels. The Arroyo de las Iglesias (the Valley of Churches) should be called the Valley of Church Spires and Cathedrals. For a number of miles the bewildered traveler wanders through a fairy-land of sculptured rock and water-carved walls that keep him comparing them here and there with birds and beasts, with busts and statues, with faces and figures, and with a thousand fanciful designs. Here are caves and caverns on a level where the ancient and present waters could carve the soft rock to the best advantage, while above come fluted columns, domes, minarets, flying-buttresses, and all the shapes and moldings that art or architecture ever conceived. Surmounting all are spires and even spears in slenderness, some of

them bearing aloft the most grotesque designs in hard rock that has defied the sculpturing of the elements, while their pedestals have been carved to a singularly slender and fragile appearance. On one column was the form of an eagle with outspread wings, which might have been taken for this emblematic bird in reality but for its enormous dimensions.

In many of these caves and caverns and curiously carved cliffs live the wild Tarahumaris. Some of their houses are simply the rudest of caves partly walled up in front; others are partitioned off into rooms; and a few, like the one shown above, have well-built bake-ovens with rude shelves for holding primitive cooking-utensils. In a few large-size caves, high up in the cliffs, were little stone houses of three sides, very similar to some deserted cliff-dwellings I have seen in the southwest of our country. The most curious houses were those on the steep cliffs where no caves existed. Probably a stratum of soft rock some six or eight feet thick had been washed out by the waters until a deep furrow had been made, and in this the living cliff-dweller constructed his home of three sides, the diminutive windows, when seen from the cañon-bottom far below, looking like port-holes in a block-house. These small windows were also found in the detached houses in the other caves, but, where the front of the cave was walled in, light was generally secured

by not continuing the wall to the top, there being an interval of a foot or two. The overhanging crest of the cave usually projected far enough over to prevent any rain from beating in.

So precipitous are some of the inclines leading to a few of these cliff-buildings that even these ape-like creatures cannot ascend them, and

Indians. Their faces are generally meek-looking, but with some signs that denote personal bravery. They are sun-worshippers, and expose new-born babes to the rays of that orb during the first day of their existence. They have a superstitious fear of the owl, to which they attribute many baleful influences. Their extreme timidity is the most salient feature of their char-



DRAWN BY J. A. FRASER

FROM A PHOTOGRAPH.

ENGRAVED BY J. W. EVANS.

LOOKING INTO THE GRAND BARRANCA.

they pass from one bench in the rock, where they can get a foothold, to another directly overhead or underneath by means of a notched stick or log, which they climb like so many monkeys. Sometimes three or four of these are needed to reach a very high cliff-dwelling on a precipitous incline; for I have seen them living in cliffs so steep that I believe a stone tossed from the hand with ordinary force would reach the bottom of the cañon, two or three hundred feet below, before striking the walls of the cliff.

These living cave- and cliff-dwellers of the Chihuahua sierras are tall, very muscular, though quite lean, and dark-colored even for

acter as viewed from our standpoint. In some of the more retired recesses of the great broken barrancas of the sierras these rude people are nearly or quite naked except for a pair of rough rawhide sandals. They never tattoo or wear masks, so far as I could learn; but very little of their inner life is known. The civilized branch of the Tarahumaris and the lowly Mexicans regard with contempt the cliff- and cave-dwelling Indians. Since one of the richest mining-districts of the world lies near the land I have briefly described, it will not be long before the age of steam and electricity will replace the age of stone.

Frederick Schwatka.