The report reprinted here was originally written by Samuel P. Heintzelman, the commanding officer of Fort Yuma, in 1853, although it was not published until 1857. It gives the reader a fascinating and relatively objective view of the state of interethnic relations, tribal life, and American military activities along the Colorado River during the early part of the 1850s; it also touches briefly on such disparate topics as Spanish attempts to establish a mission in the area, the Garra revolt, and the Oatman massacre, as well as on the effects of American emigration, floods, earthquakes, and geothermal events. Heintzelman’s untitled report originally appeared in Indian Affairs on the Pacific, pp. 34–58. [U.S. Congress. House. 34th Congress, 3rd session. House Exec. Doc. No. 76. (Serial No. 906.) Washington: U.S. Government Printing Office.] The interested reader can find further details in Samuel P. Heintzelman’s Journal, 1851–1853. Fort Yuma. [Creola Blackwell, transcriber. Yuma County Historical Society, 1989.] Several tables in Heintzelman’s original report dealing with climatological data and troop deployments have been deleted.

* * *

HEADQUARTERS, FORT YUMA, CALIFORNIA, July 15, 1853

MAJOR: I have the honor to make the following report on the subjects embraced in the circular of the commanding general of the date of February 7:

Fort Yuma was established by three small companies of the second infantry, under my command, in November, 1850. In June following, on account of the expense of supply by wagon train across the desert, the troops, with the exception of a small guard, were withdrawn to Santa Isabel. This guard was reinforced by a small party under Captain Davidson, 2d infantry, again in November, and the place abandoned by him a few days after, being threatened by Indians; he first destroying some of the stores and caching others. It was again occupied on the last day of February, 1852, by the original command, another company of infantry, and two of dismounted dragoons—the three latter only remaining a month. All the stores which had been cached were dug up by the Indians, and, with the boats carried off.

Since then, the navigation of the Colorado by steam has been assured, and it is now in a fair way of being a permanent station. It is the most important in southern California, as it protects the southern route of American emigration into California—the Sonora emigration—controls numerous tribes of warlike Indians, and commands the passage by land on the Pacific side into Sonora and the Mexican republic. It is also spoken of as a point on the great Pacific railroad.

The post is situated on the right bank of the Colorado river, opposite its junction with the Gila, on an irregular rocky hill, about eighty feet high. The part occupied by the camp is tolerably level, sloping to the east, 500 feet from east to west, and 400 from north to south. A branch ridge runs off to the south, through which is a cleft 180 yards wide, affording a passage to the combined waters of the Colorado and Gila.

This is the site of a presidio, established about seventy-seven years ago by the Spaniards. Padre Pedro Garces came out here with a San Gabriel Indian, and reported this a favorable position for a mission. The next year, he and Padre Kino came out with troops and established a mission in the junction, and José María Ortega, son of Don Francisco Ortega, captain and Commandante of the expedition of the discoverers of Alta California, the presidio. The position is described as being between the sierras of San Pedro and San Pablo. A little east of north from here, forty-five miles on the top of a ridge of barren mountains, is a detached rock, several hundred feet high, resembling a dome, which may have given the name of St. Peter, and in a direction west of north, about eighteen miles distant, on another range of similar mountains, rises a solitary rock, 500 feet high, which we here call Chimney Peak, must have borne the other name. The Colorado winds its way between these two ranges, runs south along the base of the hill we are on, then turns short to the west, through this cleft, for nearly seven miles, giving us both banks for that distance, and turns again more to the south, and finds its way to the Gulf.
There were thirty soldiers in the presidio and about eighty persons in the mission seven or eight years after its establishment, when the Indians attacked the place. It held out stoutly for three days, when the supply of bullets failing, they had only powder to fire. The Indians soon discovered the difference, and rushing in with clubs and knives, killed all the men but one, made prisoners of the women and children, and burned the place. Martinez Ortega, brother of Joaquim, both now living at Santa Maria, in this country, was a child of three years of age, and was made a prisoner. His father was relieved in the command eight days before. Full accounts of the establishments will probably be found in the convent of San Fernando, in the city of Mexico, and some accounts in Humboldt's travels.

When we occupied this point the rough stone foundations of the houses, with their earthen ruins, could be clearly traced. The buildings appear to have been of mud, between upright poles or forks, to support the roof. The charred ends we dug up, with the remains of a copper, urn-shaped vessel, of the capacity of about a quart. There were eight or ten buildings, fifteen or twenty feet, nearly square, irregularly placed, covering an area of about an acre, and including the site of the present commanding officer's quarters.

It was an excellent position for defense against Indians; the only point above it being beyond the range of arrows, and commanding a fine view of the surrounding country.

During the high water a broad slough, in the rear of the post, is filled, and cuts off all communication with the main land, except by means of boats.

On a detached sandy plateau, above the rise of the river, near Hut-ta-mi-né, are also the ruins of an old Spanish establishment.

My first efforts were directed towards obtaining some knowledge of the numbers of the Indians. Several captains of the Cu-cha-no and Yum, or New River Indians, with many of their people, were present. Their knowledge of numbers does not extend beyond counting the fingers of both hands, and the repetition of this. They are lost before they arrive at a hundred.

They attempted to give me their numbers by scratching, with a stick, marks on the dirt floor of my tent. On counting these I got the numbers of the accompanying table A. This gives 1,433 men, 595 women, and 682 children; or a total of 2,710. This is evidently incorrect. Vicente has 386 men, and no women or children; and Manuel no men.

I next tried to have each band represented by three sticks notched—men, women, and children separate. This took a long time, but at last the sticks came, with large escorts. Some of the sticks were covered with notches representing portions of different bands, with any number of queer divisions.

The table marked B gives a view of these, with the divisions reduced and arranged. This gives for the Cu-cha-nos 183 men, 137 women, and 178 children, or a total of but 498. Here Macedon has men and women

**Table A**

<table>
<thead>
<tr>
<th>Cuchanos</th>
<th>Men</th>
<th>Women</th>
<th>Children</th>
<th>Boys</th>
<th>Girls</th>
<th>Horses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicente</td>
<td>386</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Macedon</td>
<td>409</td>
<td>107</td>
<td>-</td>
<td>30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anastacio (Pasqual)</td>
<td>388</td>
<td>69</td>
<td>-</td>
<td>40</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>Manuel</td>
<td>-</td>
<td>87</td>
<td>-</td>
<td>36</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td>José Maria &amp; Sebastián</td>
<td>144</td>
<td>171</td>
<td>-</td>
<td>47</td>
<td>112</td>
<td>8</td>
</tr>
<tr>
<td>Antonia</td>
<td>106</td>
<td>161</td>
<td>310</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Cuchanos</strong></td>
<td>595</td>
<td>310</td>
<td>182</td>
<td>180</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Fernando of New River | 118 | 82    | 54       | -    | -     | -      |

*Small boys

**Table B**

<table>
<thead>
<tr>
<th>Cuchanos</th>
<th>Men</th>
<th>Women</th>
<th>Children</th>
<th>Boys</th>
<th>Girls</th>
<th>Horses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anastacio</td>
<td>30</td>
<td>12</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Macedon</td>
<td>11</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Manuel</td>
<td>30</td>
<td>30</td>
<td>-</td>
<td>40</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Vicente</td>
<td>44</td>
<td>45</td>
<td>-</td>
<td>11</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Anton (below on Colorado)</td>
<td>29</td>
<td>8</td>
<td>-</td>
<td>11</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Anton (above), or Hut-muchto</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hum-lo-quatch-pa (above)</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anton, or Mis-ca-né-me-sabe</td>
<td>26</td>
<td>12</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Cuchanos</strong></td>
<td>183</td>
<td>137</td>
<td>53</td>
<td>71</td>
<td>54</td>
<td>15</td>
</tr>
<tr>
<td>José Maria (New River)</td>
<td>32</td>
<td>11</td>
<td>-</td>
<td>10</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Fernando</td>
<td>15</td>
<td>10</td>
<td>-</td>
<td>11</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Yum Indians</strong></td>
<td>47</td>
<td>212</td>
<td>-</td>
<td>21</td>
<td>19</td>
<td>6</td>
</tr>
</tbody>
</table>
and no children. Two chiefs, then living above, with considerable bands, have one eighteen, and the other seventeen persons, all told. If I add the combined bands of José María and Sebastian, from table A, it gives 377 men, or a total of 972. This comes the nearest to my idea of the truth, though still below the true number. At the time a portion of the tribe was passing down the river to settle below us, they floated past on balsas with their household effects. I had these rafts counted as they passed through the cañon, and in four days, on forty-six rafts, there were 114 men, 122 women, and 128 children, or a total of 364. This does not include a great number of young men, women, and children, who landed above and came through our camp. There were in camp over 100 of these in one day. This, however, includes some New River Indians, who were on their way to settle below.

On table A, there are more than twice as many men as women or more men than women and children together. The proportion of children, as compared with whites, would be small, as at an early age the boys are warriors and the girls women.

As the result of considerable intercourse with them, and inquiry, I am of the opinion they cannot bring 400 warriors into the field. There are but twenty-three horses on table B, and of these fourteen were lost in the massacre by the Co-co-pas. I think the number of horses given in below the true number. The horses are evidently not so numerous as they were the first time we were stationed on the river. During the war, when they were distressed from the want of food or lost men, some must have been eaten.

Since the massacre, they have drawn nearer, to be under our protection; and when they get settled, and their crops begin to ripen, there will be a better opportunity to learn their numbers. They are now very shy about answering questions the exact object of which they do not fully understand.

The Cu-cha-no, or as they are usually called, the Yuma Indians, live on the Colorado commencing about sixty miles above its junction with the Gila, and extending below it forty or fifty miles. At present, the greater part of the tribe live on the Mexican side of the line. They never leave the river bottom or go into the mountains to live.

The river bottom is wide and fertile, covered with a heavy growth of arrow wood, grease wood, cotton wood, willow of three varieties, and mesquite of two, the flat pod and screw bean, and is intersected by a great number of sloughs and lagoons, former beds of the river. On these the Indians plant in the month of July, or so soon as the waters of the annual rise commence to subside. No vegetables will grow beyond the influence of the overflow.

They cultivate water melons, musk melons, pumpkins, corn and beans. The water melons are small and indifferent, musk melons large, and the pumpkins good. These latter they cut and dry for winter use.

Their agriculture is simple. With an old axe (if they are so fortunate as to possess one), knives and fire, a spot likely to overflow is cleared. After the waters subside, small holes are dug at proper intervals, a few inches deep, with a sharpened stick, having first removed the surface for an inch or two, as it is apt to cake. The ground is tasted, and if salt the place rejected; if not, the seeds are then planted. No further care is required but to remove the weeds, which grow most luxuriantly wherever the water has been.

Wheat is planted in the same manner, near the lagoons, in December or January, and ripens in May and June. It has a fine plump grain, and well filled ears. They also grow grass seed for food. It is prepared by pounding the seed in wooden mortars, made of mesquite, or in the ground. With water the meal is kneaded into a mass, and then dried in the sun. The mesquite bean is prepared in the same manner, and will keep till the next season. The pod mesquite begins to ripen the latter part of June; the screw bean a little later. Both contain a great deal of saccharine matter; but the latter is so full, it furnishes, by boiling, a palatable molasses, and from the former, by boiling and fermentation, a tolerable drink may be made. The great dependence of the Indian for food is upon the mesquite and his fields.

The summer of 1851 there was no overflow here, and but a partial one below. The last year our military operations prevented them from planting below, between us and the Co-co-pas, and above within fifty miles. This caused great suffering the past winter; for months our
camp was filled with men, women, and children, begging for something to eat.

The river bottom is bounded by deserts and barren rocky mountains, with scarce a vestige of vegetation. Between these the river has deposited clay and sand, and is continually changing its bed. From Auk-ul-k-se-que-pa-wa, sixty miles above here, descending fifteen miles to Hut-ta-mi-ne's village, is a fine wide bottom, in which, last year, were the cultivated fields of the Indians.

Last September, on the morning of the fifth day after we left the post, we were in the midst of their fields, covered with all they expected to live on till the mesquite season of the next year. The first intimation they had that we had left the post, the tramp of a hundred men roused them from their slumbers. The guides were mistaken in the distance, and it was still an hour to day-light. In a twinkling not even a child was left at the fires; they abandoned everything. We here got Cavallo en Pelos, papers, given him by the Mexican boundary commission. His village was south of the line, but close to the emigrant road, where it leaves the river to go on the desert.

Below this the river is hemmed in by barren rocky mountains till you get within twenty-five miles of the junction; fifteen miles further down the river passes through the Santa Isabel mountains. For a short distance, and from these to the salt marshes near the mouth of the Colorado, is a wide fertile bottom, more subject to overflow as you descend the stream, and more valuable for planting.

The water of the Colorado is always very muddy, generally of a yellowish brown approaching red, sometime with quite a reddish tinge, soon settles, and is not unpalatable drinking when cool; putrefies very soon during the summer; there is an immense deal of earthy matter carried to the gulf; there is no stability to its banks, and the channel ever shifting.

The Gila water is warm and brackish, unpleasant to drink, from the large quantities of earthy salts. It is usually tolerably clear, or with a blush grey tint.

The salts of potash, soda, magnesia, &c., are found in the soil and water. Where a whitish efflorescence appears on the surface of the ground, it is useless to plant, as nothing edible for man or beast will grow there.

There is excellent land in the junction of the Gila and Colorado rivers; and in Lower California, where watered by New River, and the numerous sloughs which branch off from the main river, wheat, cotton, corn, and the sugar-cane will grow, and lower down rice. The soil and climate are well adapted to the cultivation of the vine, fig, and tropical fruits.

On the expedition we made up the Colorado last September, when we brought the Cu-cha-nos and Yums to terms, we ascended the river to a place called Auk-ul-k-se-que-pa-wa, supposed to be about one hundred miles below the great cañon. As far as we went, and as far as we could see, the mountains had the same black, barren, rocky appearance, destitute of vegetation. To the northeast, beyond a range of mountains, blue in the distance, the country of the Yum-pis was pointed out. To the west, the Che-ma-wa-was live, and higher up the river, a little west of north, the Mohaves.

The Colorado has been navigated by a light draft steamboat as far as its junction with the Gila. Above, for eighteen or twenty miles, the river spreads over a broad surface; from there, as far as we went, some eighty miles by water, the river is narrower, and, I have no question, navigable to the great cañon, one hundred and fifty miles (at least) above its junction with the Gila, as it receives no tributaries except during the annual floods. I cannot learn that the Mojave discharges any water during the dry season. The Gila has been dry at its mouth in summer, and at no time does it furnish much water.

The length of the great cañon has been variously stated at from 200 to 500 miles, nearer the former, probably; but all agree it is of great length—a narrow gorge hemmed in by perpendicular walls of rock, many hundred feet in height, so that traveling along it for days, you cannot approach the right bank, and entirely impracticable for navigation. In the present rise of water, a fine log of tamarack was picked up from the river, opposite the post, which evidently grew in a dense forest, and from its rounded ends, must have come from or above this cañon. Nowhere this side does any timber grow, more valuable for building purposes, than an indifferent specimen of cottonwood of moderate size.

The earthquake of the 29th November last appears to have altered the relative levels of the surrounding country. The water of the river at the outlet of the cañon, below the junction, was not so high this year as it was the previous one by 16 inches. In the junction and low grounds in the rear of the post it was considerably higher. Sloughs, still further back from the river, which were then dry, are now filled with water.
The river banks overflowed this side of Pilot Knob, making it difficult for wagons to pass between the river and the rocks. The low ground was full of cracks—from many of which there gushed forth sulphurous water, mud, and sand. At the time, lower down, great changes were made in the river bed.

The earthquake appears to have been occasioned by an accumulation of gases and steam in the caverns of the earth. The elasticity of these forced an escape though a pond 45 miles below us, on the desert between the river and the coast mountains; the repeated escapes occasioning the rumblings and shakings.

It is an old orifice which had been closed several years, so that the first effort occasioned the most violent explosion. The steam rose in a beautiful snowy jet, more than a thousand feet into the air, and spread, appearing above the tops of the mountains like a white cloud, and gradually disappeared. This was repeated several times, but on a much smaller scale.

When I visited the place three months later, these jets took place at irregular intervals of 15 or 20 minutes, and had a beautiful effect as they rose, mingled with the black mud and water of the pond. The temperature in the principal pond was 118°, and in a smaller one 135°, and in one of the mud-holes from which gas escapes 170°. The air is filled with sulphuretted hydrogen, and in the crevices are beautiful yellow crystals of sulphur. The ground is covered with a white efflorescence, tinged with red and yellow. On the edge of a smaller pond were collected acicular crystals (of sal ammoniac?) an inch and a half long.

In winter the days are usually warm and the nights cold, the difference in temperature being great. Owing to the excessive clearness of the sky the radiation is very great, and on the low ground ice has been seen. Spring commences in February. Without rain, the willows and cotton-wood are seen to put forth fresh leaves; the heat rapidly increases until the latter part of May; and in June, July, August, and part of September, it is excessive. The mercury last month, on the hill, rose to 116°, and on the river bottom to 121° in the shade. Every thing around you is hot to the touch. In the month of June occasional blasts of wind are burning like the blasts from a furnace.

The winter and spring are rendered disagreeable by the frequent violent dust storms, usually from the northwest. They can be seen approaching for some hours, gradually obscuring the sun, when they burst upon you with sudden fury, filling the air and every thing around you with a fine dust. The high winds come up suddenly and are extremely violent, calming away as fast as they come. These dust storms sometimes last three days.

During the winter, the time of the coast rains, we have sometimes a few drops to fall here. In the months of July, August and September, the rainy season in Sonora, almost daily, heavy clouds are seen passing to the N. E., accompanied with rain, thunder and lightning, cooling the air. Occasionally these reach us, and are most refreshing. Last year there fell but a little over two inches of rain.

The climate is such during the greater part of the year that very temporary shelters suffice for the Indians. For the same reason, dress appears to them a superfluity, though they are always ready to beg cast-off clothing to deck themselves, more for ornament than use.

The home of the Yum or New River Indians is on New River. When the ponds and lagoons connected with it dry up, these Indians take shelter amongst their friends, who live outside the desert. Two small bands are now with the Cu-cha-nos, under José Maria, or Chi-mi-a-ke, and Fernando or Haltow. These two frequently visit our camps, and have given different accounts of their numbers. Fernando had at one time one hundred and eighteen men, and at another, both together, but forty-seven men. The large number must have included but a small part of the tribe, as when New River is full of water they are scattered in a straight line over seventy miles in length, from north to south, or taking the windings of the river on the flat desert, near one hundred. I saw more than the latter number in the month of October, 1850, at Heironimo’s rancheria, situated at the extreme northern limits of New River, near the mud volcano and Salt Lake. In the month of June of the next year, I met another considerable band (Antonio’s) on a fresh water lagoon, twenty miles south of the wagon road across the desert. When at the northern settlement, I was told Indians lived all along the course of New River, that they are frequently seen in numbers near the Big Lagoon, fifteen miles north of the Signal mountain. These latter, probably, live on the borders of Lake Bechico, a considerable body of water, a few miles in a northeast by east course from the Big Lagoon.
Luis or Sa-pan-na-co is the principal chief of these Indians, in place of Heironimo Cherow, or Burning Fire, uncle to Heironimo, who was a powerful chief, and had the control of all the Indians of the desert and neighboring sierras, after his victory over Huta-neal or Indigo Horse, a Mexican Indian chief of the Jacums, many years ago. His authority fell upon Heironimo, whose power gradually decayed, until now it is nearly lost from the hands of his successor, and they are mingled among their more powerful neighbors. The Cu-cha-nos and Yums speak dialects of the same language.

The chief, Pascual (a Cu-cha-no), who is now not less than fifty years of age, states that when he was a child the band to which he belongs lived at the Alamo Mocho, where water then ran in the arroyo, and that there were fine planting grounds, plenty of grass and mesquite. Then there was water in New River all the year, or, as he expressed it, the water ran all the time. It was called the Hu-ta-pil, because tulas grew there.

The whole extent of country through which it now flows is covered with fresh-water shells, and has the appearance of having been the bed of a shallow freshwater lake. This is particularly so twenty miles north of the wagon road. All the drains from both sides tend towards it. New River terminates thirty-five miles north of this road, or eight miles south of the mud volcano. When this lake was regularly fed, it must have been seventy miles long, and from twenty to thirty broad.

On the eastern side of the desert, commencing a little below Pilot Knob is a strip of drifting sands, several miles wide, convex towards the desert. From the action of the northwest winds they are continually progressing, and will soon reach the river. Some of the hills are from seventy to one hundred feet high. In the midst of these yellow sand hills are spots several miles in area, into which you descend on to a hard level surface, the original plane of the desert, on which are growing scattered mesquites and the creosote plant.

This mud volcano I visited in October, 1850. We started from the volcano, with Heironimo as guide, and Captain Thomas Chiry, and a pack mule to carry water. We went that afternoon as far as San Felipe. The next morning, at two o'clock, when the moon rose, we started, crossed the high ridge of mountains on the east, forming one side of the valley, by following up a rocky gorge, crossing a small ridge, and descending another gorge on the other side, into a broad valley. This valley we followed some twelve miles, and, turning short to the left, emerged through a cleft in the mountains on to the desert. By traveling steadily nearly east until four o'clock in the afternoon we struck a salt branch of Carisso creek, and following down it a few miles, encamped for the night where it joined the fresh-water branch.

Crossing the swells of the desert for hours we could see a long white line, the borders of the Salt Lake. The next morning we wished to go to the volcano, but the Indians told us tales of the bad spirits in the shape of large birds, making it dangerous to approach, until, finally, we were compelled to go to the village twelve miles off. After a considerable time spent in talking they consented to guide us, and eight Indians went along.

It is situated in a low mud plain, so soft that we had to dismount and leave our animals. It is similar to the one near the Colorado. It presented a busy scene, with its boiling cauldron of mud and water, and hundreds of mud cones, from all sizes to the height of eight feet, from which issued steam and gasses, some in a steady stream, others intermitting, like the escape-pipe of a small steam-engine in a manufactory. There was no eruption whilst we were there; but about the principal cauldron the mud lay scattered around, not yet dry. At the distance of a mile and a half is another collection of these mud cones, which, however, did not appear to be in operation. The plain is covered with pumice.

There is a small eminence of volcanic rocks rising out of this plain near by, from which the barren mountains to the northward and eastward can be seen, apparently not more than thirty-five miles distant, and bounding the desert in those directions. When at the Cayote village, east of Agua Caliente, in December, 1851, we sent messengers to a band of Indians called Rason's People, two days' journey off in this direction. They described the intermediate country destitute of water, except a little near the mountains. I do not know the extent of this lake, but it furnishes abundance of salt sufficiently pure in its crude state for salting beef. The Californians resort to it with pack mules in the winter season for salt to use on their ranches. They cross the mountains where we did, but then keep more to the north. Hieronimo, although he knew every foot of the way, would give no definite information, and only guided us when he found us determined to proceed without him. He had a wife
here, and another at a village back of San Felipe. As soon as we reached Carrizo creek, he made a great smoke, and the next day; when within half a dozen miles of his village, another, so as to give notice of our approach to his people. They have the art of making a slender column of black smoke rise to a great height into the air. We found in this village the remains of a fat horse on which they had been feasting. Carrizo creek, which comes from the mountains near Vallecitas, and in the bed of which for several miles is the wagon road, turns off to the north, and empties into this salt lake. The water is seen on the surface for but a short distance where this road passes. It then disappears till it is met with again on the desert, twenty miles off. Returning from Hieronimo's village, we kept further east, and struck the bed of the creek higher up, where it was dry, and followed its general direction till we reached the wagon road from there into Vallecitas. This is the best route to take on account of water.

There is a lake of brackish water lying south of Signal mountain, between the range to which it belongs and the next west towards the coast, or a continuation of the mountains at Vallecitas. Their general direction is northwest and southeast. The ridges are very broken. The lake is six or eight miles wide at its northern end, and extends further than the eye can reach, probably to near the Gulf of California, with which it may communicate during spring tides and the annual floods of the Colorado. The water is barely drinkable. We saw no Indians on it, but signs of their frequenting its shores.

The Co-co-pa Indians all live in Mexico, on the lower Colorado, from the lower limit of the Cu-cha-nos to the mouth of the river, on both sides, but principally on the right, and in the mountains of Lower California. They were formerly a most formidable tribe, and it is said could muster 5,000 warriors. I know but three bands, under Chi-pi-ti, Colorado, and José. Chi-pi-ti was found last year by one of our scouting parties, a short distance below the Algodones, with 125 warriors, and brought into camp. He professed to be on a war party against the Cu-cha-nos and Yums with whom they were then at war. The probability is the three bands together do not now number over 300 warriors.

I made the same arrangements with the Co-co-pas I had with the Cu-cha-nos to get at their numbers, but the recent massacre will prevent all intercourse for some time, and may make these Indians hostile towards us. Hitherto they have been very friendly and of much service in communicating with our supplies in the mouth of the river.

The banks of the Colorado at its mouth are very low and flat, and during spring-tides overflowed for miles. A heavy bore comes in them, dangerous for small boats. It is not necessary for the river to rise so high, as in the Cu-cha-no country, to overflow its banks, and there are more sloughs, and lagoons. The usual time for planting is the same as above. This year they planted in the spring, and lost by spring overflow some fine fields of corn already in the silk.

They plant corn, melons, pumpkins, and beans, and live on grass seeds, roots, and the mesquite. Those near the sea have in addition to fish, oysters, clams, and mussels. Like most Indians, nothing edible comes amiss.

Their arms are bows of an inferior quality, made of willow—arrows cane; the part of the shaft next the head of arrow-wood, and neatly tipped with stone or glass. They use clubs of mesquite, usually straight, sometimes with a knob, and from 2 1/2 to 3 feet long.

They own but few horses; make their war expeditions mostly on foot, relying more on stratagem and surprise than force, falling on their enemies in the night, and beating out their brains with clubs when caught asleep, or in surprising the villages when the warriors are absent, killing the old people, and carrying off the young women and children.

Two years ago there was amongst them a fine looking Indian, six feet four inches in his bare feet, well built, square shouldered, large head and massive forehead. On our return to the river I inquired for him from his people, and learned he was killed by the Cu-cha-nos.

In the fall of 1851, about the time of the outbreak of Antonio Garras, the Co-co-pas planned a feast, to invite all the Cu-cha-no captains and kill them. This was overheard, and told the latter. The same night they fell upon the Co-co-pas and killed this man, with a number of others, taking some women and children captive.

The Co-co-pas were upon a visit to the Cu-cha-nos, and got some of their captives back; when the invitation was given, which threw the latter off their guard, and resulted in the massacre of Macedon, their principal chief, a few other men, and a large number of women and children killed and prisoners. Macedon was an intelligent, excellent man, and had exerted himself in having a captive boy restored to his mother.
They are in alliance with the Jacum Indians and others south in Lower California, and usually at war with the Yum and Cu-cha-no tribes. I have twice brought about a peace, but never entire confidence between them. There are intermarriages; the languages they speak dialects of the same, and they resemble the Cu-cha-nos so much in arms, dress, manners, and customs, it is difficult to distinguish one from another.

The Jacum Indians live in a fine valley in the mountains near their eastern slope, between the desert and the coast. Part of this valley lies in Lower California, and there are jealousies between the persons on the opposite sides of the line. They do not number 200; increased from the neighboring tribes in summer, when the means of subsistence are plenty, and decreased during the scarce season of the winter months.

They are Diegueños, and were once formidable to the Spaniards and Mexicans, and still consider their mountain fastnesses impregnable. They are more warlike than their neighbors near the coast, and disposed to be troublesome, instigated by evil disposed persons near the line. The small force kept there as a stopping place for our express and proximity of troops on both sides, will no doubt curb their warlike propensities.

They plant in the spring and irrigate; raising corn, melons, pumpkins, chili, onions, beans, &c.; in summer, gather manzanitas and piñones; in the fall, acorns; in winter, live on hares, rabbits, rats, &c., and on their friends at the ranches.

Santiago, an old man, is the principal chief; Juan Pedro, or Masty, another chief, speaks Spanish, and was guide during the war to Commodore Stockton.

The Chi-mi-hua-hua, or Mat-jus tribe of Indians, live in the mountains on the right bank of the Colorado, two days' journey, or about sixty miles above the post. They have the Cu-cha-nos on the south, Mohaves on the north, Jum-pys on the east, and Cah-willas on the west. With the latter they claim relationship.

I was visited by a deputation of them a few months since. All the country from the Colorado to that of the Cah-willas is described by them as a mass of irregular, rocky, barren mountains, destitute of running streams or vegetation. They depend for drink on the waters collected from the rains of heaven in the holes of the rocks, and on the mountain sheep, deer, and smaller animals for food. Those I saw are not so good looking a race as the Cu-cha-nos; they dressed in buckskin, wore a kind of bucksin, and looked half starved.

They are divided into five bands. The principal chief is In-yil. Some of the others are Te-pa-no-ya, or, a bad fellow after the women, Qua-mi-i, or El Cielo, and Nan-a-has-pal, or El Sol. They have no horses or cattle, and have but one wife each. They say it is twenty days' journey to Los Angeles, where they sometimes go with their friends, the Cah-willas. They describe themselves as more numerous than the Cu-cha-nos, and as numerous as the Cah-willas or Mohaves. They are friendly with these three tribes. I do not believe the account they give as to their numbers. The country they describe as their home could not subsist them.

North of the Chi-mi-hua-huas live the Mohaves, on the Mohave River and along the Colorado towards the Great Cañon. Of the extent and nature of their country, or of their numbers, I have no reliable information. They are at peace with the Cu-cha-nos, and the latter tell me a deputation will be down on a visit this fall.

In the mountains on the east of the Colorado, and nearly opposite to the country of the Chi-mi-hua-huas, lives the Jum-py, or Ya-pa-pi tribe of Indians. They tried to make us believe it was thirty days' travel to their country. It is not more than three. They are similar to the Cu-cha-nos in arms, dress, and appearance. They live more upon game, and have more buckskins. In their country are found deer, mountain sheep, and antelope. They look rather suspiciously upon us, but are friendly. I know very little of their numbers, but do not think them near so numerous as the Cu-cha-nos. I have heard of but one running stream (Santa Maria) in their country, and water in that for only a part of the year. It heads near one of the branches of the San Francisco, and affords a route for communication from the Gila, near the Pimo villages, to the Colorado.

More towards the Gila and further up the Apache, Tontos are said to live; none of them have ever been to see us. Above them still, and on the Gila, are the Pimos and Maricopas. The latter are a branch from the Cu-cha-nos, separated on the occasion of an election, when two rival chieftains separated the tribe. They are now bitter enemies. Both of these are on the great emigrant route, and have been often described by persons who have spent some time in their country. They never come down so far as this.
In the month of February, 1851, an emigrant family was murdered on this emigrant route, about eighty miles from here. I got a letter from the man asking aid, and sent a small party to meet him; they reached the place after he was murdered. Some of his friends who had endeavored to detain him at the Pimos till they were ready, had been down and buried the bodies. They found all of the family, but a boy who had escaped back and two girls, one a child. The deed was most unjustly laid to the Cu-cha-nos. They never venture so far up the Gila.

I have made diligent enquiries of all the Indians I have seen, and can get no trace of the missing girls, or that they have any knowledge of the transaction. The man had made an incautious display of a quantity of Indian goods, and was followed by some Maricopas. I don't think it is necessary to go further to look for the murderers.

In Sonora, in the direction from here of Altar, the first Indians you meet with are the Papagos, about 600 souls, living at and around Sonorita, 130 miles from here. They are not troublesome, and have never visited us.

None of these tribes have fire arms; they use bows and arrows and clubs, and rely more on stratagem and surprise than force in their war expeditions. A small party of well armed Americans, if always on their guard, would not run much risk in passing through the country.

The Cu-cha-nos have the reputation of being the most treacherous tribe in all this region of country. There are several facts in their history which go far to support this reputation.

They were paid in their own coin in the recent massacre. At a time when they and the Co-co-pas were particularly friendly, the latter invited them to their territory; they went with so much confidence they kept no look out. The fourth night their camps were surrounded by about one hundred Co-co-pas, part mounted, and eight men, thirty-three women and children killed, and twenty-two women and children made prisoners, with twenty horses stolen, and a great many of their household effects. Very few persons escaped; the few men killed shows the confidence with which they went.

I enquired of the Cu-cha-nos for the cause of this unprovoked attack; they appeared not to think it anything unusual. They said the Indians were in the habit of doing such things when the opportunity offered. The temptation was too great for the recent friendship of the Co-co-pas. The reason they were not on their guard, they had confidence in our protection, as we were the friends to both parties, and would not permit any more war parties.

I endeavored, through Captain Thomas Chiry, a Santa Isabel Indian, who understands the language of these Indians, and has some knowledge of Spanish, to learn from the Cu-cha-nos their religious belief, superstitions, &c. I soon found very little reliance could be placed on what he said. He has been instructed by the padres, and has mingled the ideas obtained from them and those of the Santa Isabel Indians with those of the Cu-cha-nos.

To account for the different languages, he states that all people lived in a rich country to the north, Indians and whites. The latter being the better people, were the most favored, which is the reason for their being so much better off. The country was not big enough when they increased, and they had to separate and seek other countries. All that took one trail leading out understood each other. All the Indians that live from here to the coast passed out on the same trail. Time has changed the intonation and dialect.

The name of the Great Spirit is To-cho-pa, who placed all people here. We, all black and white, have the same God.

Another account he gave is, they adore the sun and moon, and believe in an invisible spirit. Their god lives in a chasm in the rocks between here and the Chimney Peak, or San Pablo mountains. He was a very good Cu-cha-no who lived here, and had a raccoon. He disappeared, and now the raccoon is still seen guarding the place. The deity is no longer seen but to show he is still there, they say there is a well-worn path in front of the chasm, and leading to a water-hole, on which his footprints are seen.

Santiago appears to have been the chief priest as well as the head civil chief. They believe that all animals were in the beginning human beings, but from eating grass were changed to animals, and that now, when they die, they are changed into animals.

There are two old women among them said to be acquainted with the hidden virtues of all earthly things, and who are consulted when they are sick. I have no information as to their mode of practice.

I have endeavored from other sources to arrive at their belief, but the tales they tell vary, and are withal
so vague I must leave the subject for a more favorable opportunity.

Of the government of the Cu-cha-nos I can learn but little. There appears to be two classes of chiefs; one appointed by themselves, the other by us, in the same manner as was done by the Spaniards. There is a chief to each band, and he acts in all important matters with the advice of the members of his band. Any matter affecting the whole tribe is determined on by the principal men of the different bands. I think the chieftainship is hereditary, but not followed rigidly. There is one principal chief, and the rest equal, each having the control of his own people.

I never could get from them the difference between Santiago and Cavallo en Pelo; they evidently looked up to them with great deference. My impression is the former was the civil and the latter the war chief. I deposed them for commencing the war, and directed the nation to choose a principal chief. They chose Macedon, to whom I gave a writing to that effect. He was an excellent man, and a good friend to the Americans. No one has been appointed in his place. They are now busy planting; when that is over, I will try again to get at their polity.

Wars are commenced by a party laying in wait to attack some defenceless rancheria, when they rush upon the occupants, kill all the men, old women and small children, making prisoners of the able-bodied women and larger children.

Peace is made through the women who have intermarried.

They can have more than one wife. There does not appear to be any particular ceremony. When the man is tired of his wife, she sends her away, and both parties are free. José Maria, one of the chiefs, who has lived in Sonora, and speaks tolerable Spanish, told me this a few days ago, on the occasion of his marrying his wife’s sister. He lost a wife when we were up the river last fall.

They burn their dead. Their property is said to be now bad, and is burned or destroyed. The horses are killed and eaten.

Wood is heaped around the body, dressed, surrounded with the effects, and set fire to. No care is taken of the ashes.

The bodies of some we killed down the river were burned by them, and on the evening of the fourth day the fire was still burning. Bones were seen in the embers.

When Macedon was killed, a mortar for pounding seeds, he had left in my tent, was called for by several Indians, saying it was now bad. I gave it to one to throw into the river. A fine horse he had was killed, and, I presume, eaten.

A sister of Macedon’s, who was made prisoner and escaped, when she met members of her tribe, seated herself on the ground and sang a monotonous sung.

I do not learn whether they have a feast or any ceremonies on the occasion of a birth.

Their houses are of the rudest description; some only a few bushes drawn together to break the wind, or in summer to keep off the sun. The better class, for winter, are made of a few upright poles, from three and a half to five and a half feet high, set in the ground, on which are laid poles and brush and then earth. The back part, or towards the prevailing wind, is a slope to the ground, and sometimes on the sides, but with a steeper slope. On this roof they deposit their effects and dry their seeds. The enclosure is ten or twelve feet, according to the size of the family. The favorite place for a rancheria is in the deep sand or dust, without any regard to shade. In the back of these places they build a small fire in cold weather. When they were with us in the field in cold weather they would select a sheltered sandy spot, scrape places to lie down, and two or three collect around one small fire. When they retired they stripped and covered with their clothes, with nothing below them.

The dress of the men consists of a piece of coarse cotton, the common width, a yard or a yard and a half long, passed between the legs, and the ends drawn over a cord or strap around the waist. This is an essential article, worn by all the men. To this are added any articles of dress, male or female, of which they can possess themselves, a shirt being the favorite article. You will see an Indian walking about camp in the gravest manner dressed in a cast-off uniform cap, blue jacket, and shoes or stockings. One chief appears on all state occasions dressed in a soldier’s uniform coat and corporal’s epaulettes. Before the white man supplied them with manta they went entirely naked.

The women wear the inner bark of the willow, drawn into strips an inch wide, and woven into a selvage sufficient to go about half way around the body. One of these pieces is placed behind and another in front, so as entirely to surround the body from above the hips, and
secured in place under a girdle of strips of bark. The front piece is woven plain, and the back into an angle, with a bump on each side, making a kind of bustle. In front this dress extends to the knees, and behind as low as the bottom of the calf of the leg.

When they can get the material the belles have the front of white worsted cord, about five-eighths of an inch in diameter, terminating in bits of red flannel, with a handsome worsted cord—red, white, and blue—wound around the waist half a dozen times. This is their usual dress; but, like the men, they are glad to decorate their persons with our cast off clothes—all except the breeches.

The hair of the men is usually cut square across the forehead, just above the eyes, and the sides and back long, usually in rolls as thick as a little finger, of two twisted into one. This they make useful in crossing the river, to tie their clothes, or bows and quivers, on their heads.

The young women wear their hair cut across the eyebrows, and long behind; but not so long as the men's. Some of the old women wear it cut square all around. They have a fashion of filling their hair with mud, and wearing it for a day or two tastefully gathered up into the form of a turban, to destroy the insects, I presume.

When dressed they paint with black, blue, and vermilion. A favorite form is a blue mark around the edges of the eyelids, and a straight line beyond to the hair, with straight lines on the arms and breast.

Some are tattooed—generally the women—mostly in lines radiating from the angles of the mouth, with intermediate ones covering the chin, or lines of large black specks. They are made by cutting with flint, and then dusting in charcoal. A few of the men have marks on the forehead, and the ears and nose bored. Ornaments of a pearl shell are worn by a few men. Some of the youngest children wear strings of beads in their ears. Both sexes, indifferently, wear beads or shells around their necks. As a general thing they wear but little ornament. I never met with Indians having so little taste for dress and finery.

Their manufactures are of the simplest kind. They make head-stalls and hair ropes for their horses; nets of the fiber of the fijole, for fishing or carrying things in; fish-hooks of hard wood, such as the screw mesquite.

The women make baskets of tula so tight as to be impervious to water, and earthen vessels for cooking and household purposes generally.

The earthen vessels are made by means of a small roll of clay about a quarter of an inch in diameter, and by the application of a continuous succession of these rolls; the woman moulds them into a mass by wetting her fingers and pressing them, until finally a handsomely shaped vessel is formed. This is generally slightly baked in the fire, and sometimes ornamented by angular figures. Those least baked suffer the water to ooze out slowly, and we find them very useful to cool our drinking water. They seal up the seeds they wish to keep for planting in such vessels, covered with a fragment, and the edges closed with the gum from the mesquite.

They make large baskets of small willows, woven together with the split roots. They have also a mortar made of arrow-wood, woven together in the same manner, placed in a hole in the ground. In this the mesquite bean is pounded with a cylindrical stone sixteen inches long, four or five inches in diameter, with round ends, or a long wooden pestle. The meal is then pressed into an earthen vessel and set aside to dry. In this state it keeps till the next season. The beaux make love on a flute made of cane.

They have no canoes. When they wish to descend the river, they make rafts of sticks of wood, or balsas of bundles of rushes, on which they place their household effects and themselves, with pole in hand, to keep in the channel, and trust to the current. Sometimes they use a log to cross the river, or float down stream, two or three in company. The women use large flat earthen vessels or baskets, into which they put their bark and their small children, to cross. They appear as much at home in the water as on the land.

They have nothing to trade with. They kill but few deer. The river banks are filled with beaver, as far as we have explored it, but its fur is of no use to them.

The captains beat delinquents with sticks. They are very affectionate towards each other. It is no uncommon sight to see two young men walking with their arms around each other's necks or waists, like two school girls.

They have no ball plays. They have dances with songs at night, but whether on any special occasion I am, as yet, unable to learn. They are, apparently, solely for amusement.

A favorite amusement is a play called mo-turp or, in Spanish, redendo. It is played with two poles fifteen feet long, an inch and a half in diameter, and a ring wrapped
with twine four inches in diameter. One rolls this ring along the ground, and both run after it, projecting their poles forward. He on whose pole the ring stops, counts one, and he has the privilege to roll the ring. Four counts game. They do not count when a pole enters the ring. Old and young, chiefs and the common people, all take great delight in this game. They follow it for hours in the hot sun, raising clouds of dust, the perspiration making their dusky skins glossy.

Another game is with short sticks or pebbles, which one hides in his hands, and another guesses. They play monté and other games of cards.

Their domestic animals are horses and dogs. The only mode of salutation I have seen among them is to shake hands—no doubt learned from the whites.

There are some among them who have lived in Sonora, or at some mission, and speak a little Spanish, through which language is our only medium of communication. A very few have learned to relish drink.

The first time we were on the river, the women had the reputation of being very chaste; now they have shown themselves like other Indians, and they will, in consequence, suffer from their intercourse with degraded whites.

The Cu-cha-nos are of several shades of light or dark brown color, bright where the skin is not exposed to the sun; of the medium height, well formed, but slender, not muscular; active and clean limbed, cheek-bones high, nose large and broad, and lips thick; hair coarse, long, straight, and black. Their chests are well developed, all figures handsome, indicating more activity than strength. Their hands small and pretty, and their feet would be so if they did not go barefooted.

The women are below the medium height, with fine, plump figures. At about the age of twenty, they become fleshy. Very pretty hands and fine limbs. Their deportment modest; the gait or carriage of both sexes very graceful. They are extremely good-natured, affectionate, laughing and joking, play and romping together, like a parcel of children, without reserve or care.

I never saw a more dignified exhibition of strong feeling than was shown by them on the occasion of the misfortune which befell the tribe when Macedon was murdered.

The Jacum Indians are too powerless to give us any uneasiness. The Co-co-pas live on Mexican soil, and too far from us to ever disturb our people. They might attempt to interrupt the navigation of the river, but as that will have to be by steamboat, they would soon find them too formidable to molest.

The Cu-cha-nos are entirely subdued, and are now planting close to us. The unprovoked massacre of so many of their people was a severe blow, and has brought them nearer to the post, to be more under our protection.

They will remain friendly so long as there is a sufficient garrison here to curb their robbing propensities. They will soon learn to respect our strength, if they have not already done so, and in time become accustomed to get from us things they now consider luxuries but which will become necessaries. The vices of contact with whites will cause them to dwindle rapidly away, and another race soon occupy their places.

They have a disposition to labor, and have made great preparations to supply us with vegetables, and will soon see the advantage of being more provident. There are some kinds of labor the men consider degrading, such as gathering and preparing the mesquite; but they work at clearing the ground and planting.

Between them and the Co-co-pas there is now a large tract of country neither party occupies. The same is the case between them and the Maricopas, on the Gila, a kind of neutral ground.

The withdrawal of the greater part of the troops from Camp Yuma in the summer of 1851, and subsequently from their next position in the mountains, gave occasion for the combination by Antonio Garra—admirably planned, and well calculated to overwhelm the whole of southern California. He and Heironimo came out to the river and induced the Cuchanos to join the combination; and the attack on some sheep drovers on the Colorado, attempt to surprise the small guard here, and murder of Americans at Agua Caliente, were nearly simultaneous. The attempt to surprise the guard failed, and his action in the mountains was paralyzed by a defection in his own ranks. The government acted promptly, and before he recovered the insurrection was crushed.

The outbreak would never have taken place had the troops been, as might have been the case, maintained on the river, or at least withdrawn no farther than Agua Caliente or Santa Isabel. But other influences prevailed.

With a steamboat on the river to send an expedition up the Colorado as far as the great cañon, and leave a
strong detachment there, or at some suitable point lower down, for a few months, would, no doubt, exercise a controlling influence on the Indians living near the river. By filling up these companies, the force might be spared from here for a few months in summer. It would involve little more expense, other than the transportation, as from the season only the most temporary kind of shelter would be required. The railroad explorations, with their escorts, will also have a beneficial influence. I doubt, however, whether a route for a railroad can be found along the river. The best route will probably be found along the Gila and south of it, part of the way on Mexican territory.

The Maricopas have recently evinced a disposition not entirely friendly towards the Americans, arising partly from the natural Indian character, and partly from the conduct of evil disposed persons in the emigration, and which can easily ripen into a war. A company sent up there for two or three months in the summer, the season of emigration, would control the bad of both parties.

By adding two companies to this garrison, these detachments could be made, and a company be available for a temporary station at Agua Caliente for the summer months, to keep the Cah-willas in check. But one company would be required at San Diego.

This would give the opportunity to detach the companies in succession, and avoid the debilitating stay of two or three summers in succession in this excessively hot climate. No quarters would be requisite only here. In a few years our advancing population would render most of these posts unnecessary.

From the difficulty of communicating with the Indians through a third, and sometimes a fourth language, much of the information about their manners and customs is so vague or contradictory, I have deemed it better to withhold it, and wait for prolonged intercourse and more favorable circumstances. They cannot comprehend the object of such inquiries, and their character, like that of all ignorant people, being suspicious, they give vague or contradictory answers.

Table D [deleted] will give some idea of the manner in which the troops were employed during the period of active operations.

It there appears that in seven months of 1852 the officers did 431 and the men 7,412 days’ scouting. This is taken from the morning reports, and does not include those scouts that commenced and ended the same day, or those commanded by non-commissioned officers. From our peculiar position, having an uninterrupted view 7 miles down the river to Pilot Knob and 18 up to the Chimney Peak range of mountains, there were many scouts terminated the same day. Two-thirds of the camp guard went out daily to guard the herders in charge of the animals whilst grazing; we had not a grain of forage. At night the animals were corralled close to camp and the number of sentinels increased. There was a picket of a non-commissioned officer and ten men daily with canteens filled and provisions in haversack ready, at a moment’s notice, to march. The post being on a hill, a sentinel was posted on its highest point, and whenever a dust was seen or any unusual appearance this picket marched. At night they were distributed on the approaches to the camp.

The paper marked C [deleted] will show the temperature for a part of this time. For the five months of May, June, July, August, and September, the average temperature at 3 p.m. was over 100°, and as high as 112° in two of the months. During this period the troops were the most actively employed.

Late in March the three small companies here, of 56 total, were reinforced by 129 raw recruits, many without shoes or blankets, and some who before had never loaded a musket. They asked what to do with the percussion caps. These men had to be put on guard and sent on scouts. Being totally undisciplined, they evinced an insubordinate, mutinous disposition, and nothing but the few staunch old soldiers who had remained true to their colors through all the temptations of the first years in California, prevented their attempting to desert in a body. All this was aggravated by a scarcity of provisions and no vegetables, many of the old soldiers suffering from scurvy. To correct these evils drills were kept up under every disadvantage, till now, with increased comforts and the certainty that no attempt to desert will succeed, they have become contented and cheerful.

During the time when not engaged in scouting, the men were kept employed erecting shelters of brush. When nearly completed, a fire in a moment swept off near one-half of our shelters, most of our provisions and quartermaster’s stores, leaving many men without a blanket or even a suit of clothes, when the cold nights were following the debilitating summer. These shelters
have been replaced by others, with adobe walls, and brush roofs—a little more secure, but still no better than tinder-boxes, which the careless act of one man may destroy in a few moments. Three times since fire has made its appearance suspiciously, but we were fortunate to discover it before it did any damage.

In January, 1851, I descended the Colorado in a small boat to meet the schooner Invincible sent around to try the mouth of the river with a small supply of provisions. From the notes I took, the sketch of the mouth of the river by Lieutenant Derby, topographical engineers, and the notes taken by me on our expedition against the Indians in September, 1852, the accompanying sketch of the river for near 250 miles has been made. It is merely a rude reconnaissance, but sufficiently accurate to give an idea of its course for that distance. No railroad can follow its banks.

Much of the country north and east of us we are in the habit of calling unexplored and unknown, was traversed many years ago, by those enterprising men, the Spanish Padres, and no doubt very interesting accounts of the country and Indians will still be found among the archives of some of the convents in the city of Mexico.

I have recently had a route explored for our express, leaving the wagon road near Signal mountain, and going in by Gacum. The distance on the boundary line is about 145 miles, and we have had our mail in two days and nine hours from San Diego, showing it must be very direct. With some labor it might be made a wagon road, and perhaps, if the great railroad comes by this point, it would afford a short route to the coast.

I have the honor to be, sir, very respectfully, your obedient servant,

S. P. HEINTZELMAN,
Captain Second Infantry, Brevet Major.

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