previous day, but were deceived; except some scattered bunch grass, there was nothing but rock and sand; and even the fertility of the mountain seemed withered by the air of the desert. Among the few trees was the nut-pine (*Pinus monophyllus*).

Our road the next day was still in an easterly direction along the ridge, over very bad travelling ground, broken and confounded with crippled trees and shrubs; and, after a difficult march of eighteen miles, a general shout announced that we had struck the great object of our search—THE SPANISH TRAIL—which here was running directly north. The road itself and its course were equally happy discoveries to us. Since the middle of December we had continually been forced south by mountains and by deserts, and now would have to make six degrees of *northing* to regain the latitude on which we wished to cross the Rocky Mountains. The course of the road, therefore, was what we wanted; and, once more, we felt like going homeward. A *road* to travel on and the *right* course to go were joyful consolations to us; and our animals enjoyed the beaten track like ourselves.

Relieved from the rocks and brush, our wild mules started off at a rapid rate, and in fifteen miles we reached a considerable river, timbered with cotton-wood and willow, where we found a bottom of tolerable grass. As the animals had suffered a great deal in the last few days, I remained here all next day to allow them the necessary repose; and it was now necessary, at every favorable place, to make a little halt. Between us and the Colorado River we were aware that the country was extremely poor in grass, and scarce for water, there being many *jornadas* (days' journey), or long stretches of forty to sixty miles, without water, where the road was marked by bones of animals.

Although in California we had met with people who had passed over this trail, we had been able to obtain no correct information about it; and the greater part of what we had heard was found to be only a tissue of falsehoods. The rivers that we found on it were never mentioned, and others, particularly described in name and locality, were subsequently seen in another part of the country. It was described as a tolerably good sandy road, with so little rock as scarcely to require the animals to be shod; and we found it the roughest and rockiest road we had ever seen in the country, and which nearly destroyed our band of fine mules and horses. Many animals are destroyed on it every year by a disease called the foot-evil; and a traveller should never venture on it without having his animals well shod, and also carrying extra shoes.

Latitude 34° 34′ 11″, and longitude 117° 13′ 00″.

The morning of the 22d was clear and bright, and a snowy peak to the southward shone out high and sharply defined. As has been usual since we crossed the mountains and descended into the hot plains, we had a gale

of wind. We travelled down the right bank of the stream, over sands which are somewhat loose and have no verdure, but are occupied by various shrubs.

A clear, bold stream, sixty feet wide and several feet deep, had a strange appearance, running between perfectly naked banks of sand. The eye, however, is somewhat relieved by willows, and the beautiful green of the sweet cotton-woods with which it is well wooded. As we followed along its course, the river, instead of growing constantly larger, gradually dwindled away, as it was absorbed by the sand.

We were now careful to take the old camping-places of the annual Santa Fé caravans, which, luckily for us, had not yet made their yearly passage. A drove of several thousand horses and mules would have entirely swept away the scanty grass at the watering places, and we should have been obliged to leave the road to obtain subsistence for our animals. After riding twenty miles in a northeasterly direction, we found an old encampment, where we halted.

By observation the elevation of this encampment is two thousand two hundred and fifty feet.

April 23d.—The trail followed still along the river, which, in the course of the morning, entirely disappeared. We continued along the dry bed, in which, after an interval of about sixteen miles, the water reappeared in some low places, well timbered with cotton-wood and willow, where was another of the customary camping-grounds.

Here a party of six Indians came into camp, poor and hungry, and quite in keeping with the character of the country. Their arms were bows of unusual length, and each had a large gourd, strengthened with meshes of cord, in which he carried water. They proved to be the Mohahve Indians mentioned by our recent guide; and from one of them, who spoke Spanish fluently, I obtained some interesting information which I would be glad to introduce here.

An account of the people inhabiting this region would undoubtedly possess interest for the civilized world. Our journey homeward was fruitful in incident; and the country through which we travelled, although a desert, offered much to excite the curiosity of the botanist; but limited time and the rapidly advancing season for active operations oblige me to omit all extended descriptions, and hurry briefly to the conclusion of this report.

The Indian who spoke Spanish had been educated for a number of years at one of the Spanish missions, and, at the breaking up of those establishments, had returned to the mountains, where he had been found by a party of *Mohahve* (sometimes called *Amuchava*) Indians, among whom he had ever since resided.

He spoke of the leader of the present party as "*mi amo*" (my master). He said they lived upon a large river in the southeast, which the "soldiers called the Rio Colorado;" but that, formerly, a portion of them lived upon this river and among the mountains which had bounded the river valley to the northward during the day, and that here along the river they had raised various kinds of melons. They sometimes came over to trade with the Indians of the Sierra, bringing with them blankets and goods manufactured by the Moquis and other Colorado Indians. They rarely carried home horses, on account of the difficulty of getting them across the desert and of guarding them afterward from the Pi-utah Indians, who inhabit the Sierra, at the head of the *Rio Virgen* (River of the Virgin).

He informed us that, a short distance below, this river finally disappeared. The two different portions in which water is found had received from the priests two different names; and subsequently I heard it called by the Spaniards the *Rio de las Animas*, but on the map we have called it the *Mohahve* River.

April 24th.—We continued down the stream (or rather its bed) for about eight miles, where there was water still in several holes, and encamped. The caravans sometimes continue below to the end of the river, from which there is a very long *jornada* of perhaps sixty miles without water.

Here a singular and new species of acacia, with spiral pods or seed-vessels, made its first appearance; becoming henceforward, for a considerable distance, a characteristic tree. It was here comparatively large, being about twenty feet in height, with a full and spreading top, the lower branches declining toward the ground. It afterward occurred of smaller size, frequently in groves, and is very fragrant. It has been called by Dr. Torrey *Spirolobium odoratum*. The zygophyllaceous shrub had been constantly characteristic of the plains along the river; and here, among many new plants, a new and very remarkable species of eriogonum (*Eriogonum inflatum* Torr. and Frem.) made its first appearance.

Our cattle had become so tired and poor by this fatiguing travelling that three of them were killed here, and the meat dried. The Indians had now an occasion for a great feast, and were occupied the remainder of the day and all the night in cooking and eating. There was no part of the animal for which they did not find some use, except the bones.

In the afternoon we were surprised by the sudden appearance in the camp of two Mexicans—a man and a boy. The name of the man was Andres Fuentes; and that of the boy (a handsome lad, eleven years old) Pablo Hernandez. They belonged to a party consisting of six persons, the remaining four being the wife of Fuentes, the father and mother of Pablo, and Santiago Giacome, a resident of New Mexico. With a cavalcade of about thirty horses they had come out from Pueblo de los Angeles, near the coast, under the guidance of Giacome, in advance of the great caravan, in order to travel more at leisure and obtain better grass. Having advanced as far into the desert as was considered consistent with their safety, they halted at the *Archilette*, one of the customary camping-grounds, about eighty miles from our encampment, where there is a spring of good water, with sufficient grass; and concluded to await there the arrival of the great caravan. Several Indians were soon discovered lurking about the camp, who, in a day or two after, came in, and, after behaving in a very friendly manner, took their leave without awakening any suspicions. Their deportment begat a security which proved fatal. In a few days afterward, suddenly a party of about one hundred Indians appeared in sight, advancing toward the camp. It was too late, or they seemed not to have presence of mind to take proper measures of safety; and the Indians charged down into their camp, shouting as they advanced and discharging flights of arrows. Pablo and Fuentes were on horse-guard at the time, and mounted, according to the custom of the country. One of the principal objects of the Indians was to get possession of the horses, and part of them immediately surrounded the band; but, in obedience to the shouts of Giacome, Fuentes drove the animals over and through the assailants, in spite of their arrows; and, abandoning the rest to their fate, carried them off at speed across the plain. Knowing that they would be pursued by the Indians, without making any halt except to shift their saddles to other horses, they drove them on for about sixty miles, and this morning left them at a watering place on the trail called Agua de Tomaso. Without giving themselves any time for rest they hurried on, hoping to meet the Spanish caravan, when they discovered my camp. I received them kindly, taking them into my own mess, and promised them such aid as circumstances might put it in my power to give.

April 25th.—We left the river abruptly and, turning to the north, regained in a few miles the main trail (which had left the river sooner than ourselves) and continued our way across a lower ridge of the mountain, through a miserable tract of sand and gravel. We crossed at intervals the broad beds of dry gullies, where in the season of rains and melting snows there would be brooks or rivulets; and at one of these, where there was no indication of water, were several freshly dug holes, in which there was water at the depth of two feet. These holes had been dug by the wolves, whose keen sense of smell had scented the water under the dry sand. They were nice little wells, narrow, and dug straight down, and we got pleasant water out of them.

The country had now assumed the character of an elevated and mountainous desert; its general features being black, rocky ridges, bald, and

destitute of timber, with sandy basins between. Where the sides of these ridges are washed by gullies, the plains below are strewed with beds of large pebbles or rolled stones, destructive to our soft-footed animals, accustomed to the grassy plains of the Sacramento Valley. Through these sandy basins sometimes struggled a scanty stream, or occurred a hole of water, which furnished camping-grounds for travellers. Frequently, in our journey across, snow was visible on the surrounding mountains; but their waters rarely reached the sandy plain below, where we toiled along, oppressed with thirst and a burning sun.

But throughout this nakedness of sand and gravel were many beautiful plants and flowering shrubs, which occurred in many new species, and with greater variety than we had been accustomed to see in the most luxuriant prairie countries; this was a peculiarity of this desert. Even where no grass would take root, the naked sand would bloom with some rich and rare flower, which found its appropriate home in the arid and barren spot.

Scattered over the plain, and tolerably abundant, was a handsome leguminous shrub, three or four feet high, with fine bright-purple flowers. It is a new *psoralea,* and occurred frequently henceforward along our road.

Beyond the first ridge our road bore a little to the east of north, toward a gap in a higher line of mountains; and, after travelling about twenty-five miles, we arrived at the *Agua de Tomaso*—the spring where the horses had been left; but, as we expected, they were gone. A brief examination of the ground convinced us that they had been driven off by the Indians. Carson and Godey volunteered with the Mexican to pursue them; and, well mounted, the three set off on the trail. At this stopping-place there were a few bushes and very little grass. Its water was a pool; but near by was a spring, which had been dug out by Indians or travellers. Its water was cool—a great refreshment to us under a burning sun.

In the evening Fuentes returned, his horse having failed; but Carson and Godey had continued the pursuit.

I observed to-night an occultation of α^2 *Cancri*, at the dark limb of the moon, which gives for the longitude of the place 116° 23′ 28″; the latitude, by observation, is 35° 13′ 08″. From Helvetia to this place the positions along the intervening line are laid down with the longitudes obtained from the chronometer, which appears to have retained its rate remarkably well; but henceforward, to the end of the journey, the few longitudes given are absolute, depending upon a subsequent occultation and eclipses of the satellites.

In the afternoon of the next day a war-whoop was heard, such as Indians make when returning from a victorious enterprise; and soon Carson and Godey appeared, driving before them a band of horses, recognized by

Fuentes to be part of those they had lost. Two bloody scalps, dangling from the end of Godey's gun, announced that they had overtaken the Indians as well as the horses.

They informed us that after Fuentes left them, from the failure of his horse, they continued the pursuit alone, and toward nightfall entered the mountains, into which the trail led. After sunset the moon gave light, and they followed the trail by moonshine until late in the night, when it entered a narrow defile and was difficult to follow. Afraid of losing it in the darkness of the defile, they tied up their horses, struck no fire, and lay down to sleep in silence and in darkness. Here they lay from midnight till morning. At daylight they resumed the pursuit, and about sunrise discovered the horses; and, immediately dismounting and tying up their own, they crept cautiously to a rising ground which intervened, from the crest of which they perceived the encampment of four lodges close by. They proceeded quietly, and had got within thirty or forty yards of their object, when a movement among the horses discovered them to the Indians: giving the war-shout, they instantly charged into the camp, regardless of the number which the *four* lodges would imply. The Indians received them with a flight of arrows shot from their long bows, one of which passed through Godey's shirt collar, barely missing the neck; our men fired their rifles upon a steady aim, and rushed in. Two Indians were stretched on the ground, fatally wounded; the rest fled, except a lad who was captured. The scalps of the fallen were instantly stripped off; but in the process one of them, who had two balls through his body, sprang to his feet, the blood streaming from his skinned head, and uttered a hideous howl. An old squaw, possibly his mother, stopped and looked back from the mountain side she was climbing, threatening and lamenting. The frightful spectacle appalled the stout hearts of our men; but they did what humanity required, and quickly terminated the agonies of the gory savage.

They were now masters of the camp, which was a pretty little recess in the mountain, with a fine spring, and apparently safe from all invasion. Great preparations had been made to feast a large party, for it was a very proper place for a rendezvous and for the celebration of such orgies as robbers of the desert would delight in. Several of the best horses had been killed, skinned, and cut up; for the Indians living in mountains, and only coming into the plains to rob and murder, make no other use of horses than to eat them. Large earthen vessels were on the fire, boiling and stewing the horse-beef; and several baskets, containing fifty or sixty pairs of moccasins, indicated the presence, or expectation, of a considerable party. They released the boy, who had given strong evidence of the stoicism, or something else, of the savage character, in commencing his breakfast upon

a horse's head as soon as he found he was not to be killed, but only tied as a prisoner.

Their object accomplished, our men gathered up all the surviving horses, fifteen in number, returned upon their trail, and rejoined us at our camp in the afternoon of the same day. They had ridden about one hundred miles in the pursuit and return, and all in thirty hours. The time, place, object, and numbers considered, this expedition of Carson and Godey may be considered among the boldest and most disinterested which the annals of Western adventure, so full of daring deeds, can present. Two men, in a savage desert, pursue day and night an unknown body of Indians into the defiles of an unknown mountain—attack them on sight, without counting numbers—and defeat them in an instant—and for what? To punish the robbers of the desert, and to avenge the wrongs of Mexicans whom they did not know. I repeat: it was Carson and Godey who did this—the former an American, born in the Boonslick country of Missouri; the latter a Frenchman, born in St. Louis—and both trained to Western enterprise from early life.

By the information of Fuentes, we had now to make a long stretch of forty or fifty miles across a plain which lay between us and the next possible camp; and we resumed our journey late in the afternoon, with the intention of travelling through the night, and avoiding the excessive heat of the day, which was oppressive to our animals. For several hours we travelled across a high plain, passing, at the opposite side, through a cañon by the bed of a creek running *northwardly* into a small lake beyond, and both of them being dry.

We had a warm, moonshiny night; and, travelling directly toward the north star, we journeyed now across an open plain between mountain ridges; that on the left being broken, rocky, and bald, according to the information of Carson and Godey, who had entered here in pursuit of the horses. The plain appeared covered principally with the *Zygophyllum Californicum* already mentioned; and the line of our road was marked by the skeletons of horses, which were strewed to a considerable breadth over the plain. We were afterward always warned on entering one of these long stretches, by the bones of these animals, which had perished before they could reach the water. About midnight we reached a considerable stream-bed, now dry, the discharge of the waters of this basin (when it collected any) down which we descended in a *northwesterly* direction. The creek-bed was overgrown with shrubbery, and several hours before day it brought us to the entrance of a cañon where we found water and encamped. This word *cañon* is used by the Spaniards to signify a defile or gorge in a creek or river, where high rocks press in close, and make a narrow way, usually difficult, and often impossible to be passed.

In the morning we found that we had a very poor camping-ground: a

CARSON AND GODEY RETURNING FROM INDIAN FIGHT.