

one is obliged to keep a sharp look out for it, as there is only one or two trees scattered along its bottom, and these almost hidden by perpendicular banks, in many places 15 feet high.

I should advise persons to encamp just before reaching the three conical buttes, a sketch of which was made last year; as they point out this camping place they form a very useful land mark.

The waters of the El Rio Timpa are generally very saline, but the late rain had so diluted them that we found them rather pleasant.

My little party reached this place at 4 o'clock, but the ox trains did not arrive until dark; many of the men, who wore moccasins, were complaining most bitterly of the spines of the cactus; their feet were full of them.

As there was no wood fit to burn, we were forced to use the grease brush; so the voyageurs call it on account of its burning with such a brilliant light. It is in truth the *obione canescens*. This, with the *artemisia tridentata* and *Fremontia vermicularis*, grows in great abundance along the valley of the Timpa.

Growing among the sage I found the "*linosyris dracunculoides*." It is here from three to four feet in height. We also found the "*artemisia cana*."

September 11.—This morning we again had a long chase after our mules; they appeared to be as wild as deer, but we at last caught them. Shortly after we had started, we passed the three conical buttes; their tops are covered with pieces of carbonate of lime, beautifully crystalized. The country now became more broken; on the ridges were scattered groves of cedar trees, and the bottom lands clad with the silvery looking foliage of the *artemisia*. After a march of 19 miles, we camped at a place called the Willows. Here the road crosses the Timpa; the rocks rise on your right hand to the height of 100 feet, their tops covered with cedar trees, and their sides clad with the currant (*ribes cereum*) and the tall cactus, "*cactus undulata*."

When we first arrived we had a long search before we could obtain any water. At last found some brackish pools, half hidden by the tall cane grass, (*arundo phragmites*), and bordered with the cattail (*typha latifolia*) and arrow weed, (*sagittaria sagittifolia*.)

During the night, my tent came very near being burnt up. A man belonging to the ox train entered my camp, and, throwing some fuel upon the fire, went to bed, leaving the fire burning. The grass caught; all were asleep except myself, and it was lucky for me that I had sat up. I heard the roaring of the fire, and, looking out, found the flames within a few feet of my tent. I shouted aloud, and all the men sprang up, caught their blankets as they rose, and with them soon whipt out the fire. The grass was short, or they could not so easily have extinguished the flames. As my health was not yet firm, I had since starting been very careful to tie the door of my tent, to make it as close as possible; and, when I endeavored to rush out, I found myself imprisoned. Had the tent caught, it would have been as much as I could have done to save myself; my note books and sketches that had

cost me some labor, and that I valued highly, would have been destroyed.

September 12.—When daylight appeared, I again congratulated myself on the escape of last night. The ground for a considerable space around the fire was one black patch, and this extended to within two feet of my tent. We quickly struck our camp and started for "hole in the rock," which is 7 miles from the Willows. As we crossed the Timpa, at the Willows, and were going south, we had that stream on our left hand side. Where we camped the banks were composed of high, rugged sandstone rocks, covered with a dense growth of cedar and pinyon, (*pinus monophyllus*.) We noticed along the road many sky-larks (*alauda alpestris*) and meadow larks, (*sturnella neglecta*), differing slightly from the common meadow lark in its note, and in its tail feathers, which, in this bird, are nearly equal; also the flicker, (*picus auratus*.)

While riding along the road, some distance in advance of the wagon, I noticed a number of prairie dogs seated near the entrance of their burrows, some squatted, half concealed in the mouth of their dwelling, and were barking most vehemently on my approach; but there was one that stood straight up upon his hind legs, presenting his white breast and belly to full view. Although I had never fired off my mule, I could not resist this opportunity of procuring a prairie dog. I drew up my gun and fired, with the quickness of thought; my mule turned directly about, and had made several springs in the direction of the wagon before I could check her. I now rode back, but could not identify the spot where the prairie dog had been sitting. After a little time spent in fruitless search, I continued my journey, resolved not to fire off from a mule again.

We had to search about "hole in the rock" for some time before we found water, and this was covered with a thick, green scum, fit only for the magpies and ravens that we started away from it; but, on hunting down the stream, we found some clear water in a very deep hole. On its margin, in the shade of some willows, there were many frogs sitting; now and then one would make a dart and gulph down a passing fly, so quick that we could scarce perceive the frog's motion. We killed a dozen of these frogs and had them cooked for supper.

This afternoon a young German, who accompanied the ox wagons, entered my camp. I had seen him several times at Bent's fort. On his approach, he greeted me with a salutation from Horace, "*quid agis, dulcissime rerum*." For some time I did not know in what language he had spoken, his pronunciation being so different from that of an American. He brought me a specimen of the horned lizzard (*agama cornuta*) and a species of centipede.

In the evening, Pilka caught me a gopher. I was obliged to kill it, as it struggled so hard to get away; fighting furiously with its sharp teeth, and cutting the cord with which I had tied it. I preserved the skin, also the skull; but the latter was fractured by the blow I had given, and the two upper incisors broken off.

We could now see the high, rocky peak that marks the entrance

to the Raton pass. It looks like a huge, rectangular block, whose longest sides are parallel with the horizon, and is situated on a high bluff.

September 13.—We started this morning with the intention of camping at some pools, at the head of an affluent of the "Rio Purgatorio," called "hole in the prairie;" but, on reaching the desired locality, we found not one drop of water; the bottoms of the dry pools were deeply indented with the tracks of oxen, so closely crowded together as to encroach upon each other; showing how eagerly the poor beasts had crowded here. The earth was baked hard; not one sign of moisture to be seen. We had already marched 15 miles, but must now proceed 12 miles further to the Rio Purgatorio, where we were certain of finding an abundance of water and plenty of wood. On the road we met an ox, walking leisurely in the direction of the United States. It had doubtless failed of its strength, on this long stretch, for want of water.

We searched the Purgatory for plums, currants, and grapes. Although we found bushes and vines in abundance, the fruit had all gone. We here saw several flickers, with red lined wings and tails, (*picus Mexicanus*.) Also the common flicker, and large flocks of the yellow headed black bird, or troopial.

As our animals showed great signs of weariness, I concluded to remain here to-morrow. It was evident that our mules could not support the fatigues of such marches as we made to-day, over a country so destitute of grass, and affording such meagre pasturage; for the grass was parched by the excessive drought that has prevailed this summer. The water at "holes in the prairie," is generally considered unfailing. While hunting for water in the neighborhood of these holes, we found in the bluffs, which were of slaty structure, fragments of large fossil shells, resembling the *inoceramus*; the fractures showing innumerable fibres perpendicular to the surfaces of the shells. Scattered around on the tops of little mounds, we found beautiful romboidal pieces of semi-transparent carbonate of lime.

From this place on, we noticed the abundance of the artemisias, the *obione canescens*, and "*Frémontia vermicularis*," and a beautiful yellow compositaceous plant, "*senecio filifolius*;" cacti of several species, covered the plains. As we approached the river, we began to feel quite disheartened at the number of hills that seemed to spring up in order to separate us from the wished for goal. Our mouths were parched with long endured thirst; no one had had a drop of water since morning, for we were disappointed at "holes in the prairie." At length, however, we reached a high ridge, and when the top was attained, a splendid scene suddenly burst upon us. On the right, rose the cloud-capped summits of the Spanish peaks; in front, the gates of the Raton pass, from which issued the much wished for "Rio Purgatorio." This stream, turning to the left, held its course onward, parallel with the front of a high rocky escarpment, its valley marked by dark groves of timber. A misty vapor seemed to proceed from both rock and river, increasing in softness, veiling both river and escarpment, and

itself blended with the sky; the intermediate space filled with variously shaded hills that are covered with yellow, parched grass; the foreground relieved by clustering thickets of silver leaved artemisia; while the whole is united by the road that passes along over swelling hill and sinking dale; so that the eye travels instantly to the farthest extreme, unimpeded by any abruptness. The whole scene was increased in effect by the appearance of an ox that came slowly towards us, whose loneliness perfected the repose of the landscape.

We now began to feel very anxious for news from Santa Fé. Mr. Ward, who had gone to Santa Fé, and who promised to be at the fort some time since, had not arrived, neither had we met any one on the road, and no news had been received, except the rumor that General Kearny had entered Santa Fé. Still, we knew not how he had been received, nor whether the line of communication was not guarded by guerrillas. Mr. St. Vrain spoke of going on as far as the Rio "Ensenada," to gain some information with regard to the state of the country that we would have to pass through. Daily, persons had passed the fort going to Santa Fé, but none had come back, "*nulla vestiga retrorsum*."

September 14.—Spent the day on the banks of the Purgatory; not inappropriately named, as one plunges into a perfect Erebus, amongst the rugged rocks of the Raton.

Our people killed five deer, and Mr. St. Vrain killed a very fat antelope; so the camp was a scene of festivity. At night we gathered around our social fires; the voyageurs grew talkative, and told marvellous tales, and we all devoured meat with the voracity of beasts of prey. It is not unusual for two men to eat a fore quarter of venison without the accompaniment of bread, or even of salt.

To-day I again saw the red shafted flickers, and endeavored to get a shot at them, but they were too shy to be approached. I, however, obtained a beautiful male specimen of the troopial, (*age-laius zanthocephalus*.)

I made a sketch of the Spanish peaks; there were light clouds hanging around them, but although they lent great beauty to the mountains by the ever varying contour of their shadows, that curved about in "mazes intricate, eccentric, interwoven, yet regular, when most irregular they seem," and the rays of light that pierced these clouds were ever changing; thus, the same scene presented an endless variety.

Along the banks of the stream we noticed great quantities of cotton wood, (*P. monolifera*), and locust trees, (*Robina pseudoacacia*;) also the box elder, (*acer negundo*), and dense thickets, composed of the plum and the cherry interwoven with grape vines, formed impenetrable thickets, where the deer, the hare, the rabbit, and wild turkey, found a secure shelter.

The plains are covered with a saline efflorescence, and the ground is quite bare in many places, where the animals had been licking the ground, and have trampled down the herbage. We still find the dwellings of the gopher and prairie dog around us; and the

cacti are so numerous that one is obliged to thread his path amongst them with infinite care.

September 15.—This morning we were surrounded by flocks of golden-headed troopials, who mingled most socially with the common cow bird, and all in great glee were catching grass-hoppers in the vicinity of our "mulada."

Soon after starting, I rode back a short distance to examine a volcanic dike that stretched nearly east and west across the valley on the north side of the stream; having collected as many specimens as I wanted I crossed the Purgatory.

We now saw on every side a beautiful plant covered with dark scarlet flowers, a species of (*nyctaginea oxybaphus*.) This plant is one of the most beautiful that we had seen.

As we moved up the valley we found the hills composed of rounded pebble stones, and huge pieces of dark purple rock, that from its vesicularity and general character we knew to be volcanic.

After a march of six miles, we encamped by the side of the Purgatory again, and at the foot of a stupendous mass of rocks, whose flat tops cut into giant steps are thus connected with the lower levels of the ridge. What a field for the geologist; what pleasure would he have with the rocks piled about and strewed around us. I could not but compare the legends these rocks unfold with the doubtful records of history. See with what detail they present everything to us, showing us specimens of birds, of plants, of animals and the like, telling us when and where they existed. See how they go back ages upon ages! behold with astonishment the mighty deeds in which they have been concerned, the grand convulsions they have undergone.

September 16.—When we got ready for our march, we found that the ox teams had started long before us, but we had not proceeded more than three miles through the forests of cedar and piñon, or nut pine, when we encountered the wagons. One of them had upset, and the traders' goods lay strewed along the bottom and sides of a deep ravine. As I did not wish to be detained, as our little party could not be of any service, I requested Mr. St. Vrain to have the second wagon turned a little to one side, so that I might pass. He drew his wagon out of the way, but as soon as the oxen were loosed, the wagon loaded with the immense bulk of fifty-seven hundred weight of goods, rushed backwards down the hill; luckily it turned off the road, when after crushing a few trees in its course, it brought up against a sturdy pine. I was at the time riding round the wagon and just escaped. The foolish driver had chocked the wheels with a piece of decayed wood.

A few miles beyond the scene of this accident we noticed a high bluff bank, where there were evident signs of coal. I rode over and collected some specimens of fine bituminous coal, and on searching for fossils, found two varieties of dicotyledonous plants; of one sort, the large and cordate resembling the leaves of the catalpa, of the other lanceolate, and not unlike the willow leaves; both sorts had the veins arranged in pairs, and edges entire.

Two miles beyond this pseudo coal formation we noticed a dike of volcanic rock that runs parallel with the stream, is six feet in thickness, and is composed of various colored rock—scoriaceous in appearance. Near this place we found some of the mossy cup oak, (*Q. olivæformis*.)

Turkeys are very abundant, also the red shafted flickers and steuer's jay.

The beautiful tunnel of dense foliage that we passed through last year, now looks sad indeed; our horses feet do not now splash in the cool water, and the once variegated pebbles are white with dryness. The former beautiful foliage of the willows that met over our heads, now appears yellow, and the leaves hang as if wilted by fire. Here and there some aquatic plants, hid in deep nooks, still retain something of their freshness. In one place we noticed a fine grove of spruce, (*abies alba*.) and passed several clusters of mossy cup oaks.

September 17.—We got over the rugged acclivities and declivities of the Raton so expeditiously, that we left our fellow travellers far behind. The road we travelled over yesterday was indeed terrible. I had wished to camp near the scene of the upset, but there was no water to be had until we reached the foot of the "divide" that separates the waters of the Purgatory, running north, from those of the "Rio Canadiano," running south. I was, therefore, obliged to march to this place, which is 16 miles from our last camping ground. The mountain sides and ravines were covered with grass that is called by the traders "grama," a Spanish term, which, although it means grass of any kind, is here restricted to a particular kind, (*athereopogon oligostachium*.) This grass seems to prefer a hilly country, is very hardy, and animals seem to thrive well upon it, although they do not like it at first.

I found to-day a species of cactus near "mamalaria," the fruit was pyriform, one inch long, and contained small round seeds of a light brown color, and was juicy and well flavored. In the waters of the stream we found specimens of the "*ranunculus aquitalis*," also the "*symphoricaspus glomeratis*," and close to the water's edge a species of "*angelica*."

In the afternoon Mr. Nourse and Pilka went out to hunt turkeys and deer; of the latter there are two varieties, the common deer, and the black tail, (*cervus macrotis*.) They did not get any, but brought some beautiful specimens of the scarlet gillia, (*cantua longiflora*.) and the blue larkspur, (*delphinium azureum*.)

The country around us bears strong evidences of volcanic action; the tops of the high bluffs are level, and present at their outcroppings a columnar structure. There are large masses and boulders of scoriaceous rock scattered about through the gorges of the mountains.

The song of the blue bird, (*sialia Wilsonii*.) from his airy flight in the clouds, tells the approaching cold weather, the robin now find the cedar berries ripe, and sits in the dense foliage calling to his companions to come and feast on the fruit that the frost has so delightfully sweetened for them.

September 18.—Last night we were much annoyed by the loud snorting of one of the mules that had been fastened near some brush; he awoke us all, and we were obliged to let him loose; there were either wolves or bears prowling around our camp. This morning the mule was not to be found; we had a long hunt after him; at length Pilka found him three or four miles off in a narrow gorge. It was now so late that we were obliged to give up all idea of marching. Soon Lieutenant Simpson's wagons arrived, and in the evening the ox teams of Mr. St. Vrain; the trading wagons have sustained another upset.

In the neighborhood of the camp I collected several species of compositaceous flowers; also a species of bull rush, (*Juncus tenuis*), and a variety of the yucca and "*Gilia pulchella*."

Great numbers of wolves, the large grey wolf, were prowling around our camp; (*Canis nubilus*;) it was, doubtless, one of them that had so terrified the mule last night.

Mr. St. Vrain gave me a prairie dog that he had shot; I preserved the skin, although the head of the animal was much injured by the rifle ball.

This evening, a couple of hours before sunset, I ascended a little slope that gave me a fine view of the mountain masses that were piled to the height of one thousand feet above our heads; all around me, and the valley below, were enveloped in the dark purple shadows of evening, whilst the high mountain to the east, and the plane sloping up from its base, were bathed in the golden light of the sun. Near me the landscape seemed quietly sleeping, except when one or two men gathered around the camp fires, while on the plain, at the mountain's base, the men were driving our mules down to water. What a beautiful contrast these broad masses of light and shade; this serenity of sleep with the liveliness of life.

September 19.—We had no sooner left camp than we commenced the ascent of a long hill, whose top forms the dividing ridge of the waters running north from those running south. From the top of this ridge one has a magnificent view. As the road is very tortuous, at one time one beholds the Spanish peaks directly in front; but it is only for a moment, as the road immediately bends its course to the south.

The bottom of the gorge was now comparatively level; we travelled along quite rapidly, until near the "embouchure" of the pass, when we again encountered difficult ground. Whilst riding along some distance in advance of the wagon, I discovered beyond a sudden rise that screened me, three large grizzly bears ("*Ursus ferox*") in the middle of the road, marching directly towards me. They were then not more than 100 yards distant; I lowered my head to prevent being seen, and rode back and told Pilka to get his rifle; he hurried forward, and stooping down behind a rock waited their approach; they came to within fifty yards of him, but his rifle snapped twice; the third time he put on a fresh cap and stood up to take aim. At the loud report of the cap the bears all rose erect, snuffing the air. At last they caught sight of the cause

of their alarm, when they scrambled up the perpendicular sides of the rocky gorge and ran off. We often afterwards congratulated ourselves that the rifle did not go off, for had the bears been wounded they would have created dire havoc amongst our mules; and they were all crowded in such a narrow pass, that it would have been very difficult to have saved any of them. There are few animals more to be dreaded than the grizzly bear.

Soon after this adventure, we commenced the passage of one of the most rocky roads I ever saw; no one who has crossed the Raton can ever forget it. A dense growth of pitch pine interferes with the guidance of the teams; in many places the axletrees were frayed against the huge fragments of rock that jutted up between the wheels as we passed; pieces of broken wagons lined the road, and at the foot of the hill we saw many axletrees, wagon tongues, sand-boards, and ox yokes, that had been broken and cast aside.

The pass was now full of the wild cherry, the black locust, the currant, and the plum. In the rocky portions we saw the pine, (*P. vigidus*), the spruce, and the piñon, (*P. monophyllous*), and near the dividing ridge the delicate hare bell, (*Campanula rotundifolia*), the flax, (*L. perenne*), and through the whole extent of the gorge, the bright scarlet *Gilia*, ("*G. pulchella*") blue larkspur, the geranium Frémontia, and the lupine.

The pine has been found useful in an economical point of view, as from it is procured tar for the wagons.

We now issued upon the plains, once more to see the beautiful galardias and helianthoid composita, and listen to the lively barking of the prairie dogs. At length, after a journey of 17 miles, we encamped three-fourths of a mile above the crossing of the "Rio Cañadiano," where we found a fine stream of cool water, clear, too, as crystal, and running over a clean pebbly bottom, shaded by large cotton wood trees and willow thickets, on which the hop vine clambered, covered with a luxuriant growth of its chaffy fruit.

September 20.—As the ox teams moved too slow for me, I determined to wait for company no longer, but with Mr. Nourse and Pilka to push on for Santa Fe. So we arose early this morning, intending to camp on the "Rio Verméjo," which is 20 miles distant.

We travelled over a fine prairie, covered with a luxuriant growth of grass; in many places it had been very marshy, and was overgrown with the cat-tail, "typha," and cane grass, "*Arundo phragmites*." These plains look much greener than those to the north of the Raton.

We saw a band of elk or warpiti, (*C. canadensis*.) We also saw many herds of antelope, in troops of 10 or 20, and the large grey hare were running about in all directions. Amongst the birds we discovered the turkey vulture, the raven, the meadow lark, (*S. neglecta*), and the sky lark, (*Alauda alpestris*.)

The prairie was, in many places, yellow with the senecio filifolius, and beautiful patches of the purple verbena, (*V. pinnatifida*), were constantly recurring. The Mexican poppy was abundant, and of the cacti we had the "*Opuntia*" and "*Cereus cespitosus*."

At 3 o'clock, we had reached the "Verméjo," but we found no water in the river, and were obliged to proceed six miles further, where we found some pools. Here the water had a saltish taste, but was quite pleasant; the ground around the pools was whitened with a saline efflorescence. Here we obtained many beautiful crystals of carbonate of lime. There were also many places where a dark variety of this rock appeared, bulging from the earth in convex masses of three or four feet in diameter.

Our mules seemed to relish the salt grass with infinite gusto, and the water was no less pleasing to them; but wood was scarce in the vicinity of the ponds, therefore we did not feel perfectly satisfied, and at last were fain to have recourse to the artemisias.

The "obione canescens" grows so abundant as to fill the creek bottoms, and, with the yellow willow, are two of the most characteristic plants.

On the banks of the "El Rio Cañadiano," I got a curious variety of "oxybaphus," delicate branching species, and a variety of asclepias, also "œnothera sinnata."

September 21.—After a march of four miles, we reached the Cimmaroncito. This stream is composed of two large branches, each of which the road crosses about sixty yards above their junction. Soon after leaving this river, we met Lieutenant Elliot, of the Missouri volunteers; he had a long train of wagons, and was on his way to Bent's to bring up the government stores that had been left there. I now procured, through the kindness of Lieutenant Elliot, a sketch of my route from this place to Santa Fé, with all the watering places and good pasture grounds marked thereon, and much verbal information that was of great value to me. I also learned that General Kearney intended leaving Santa Fé on the 25th proximo. I therefore determined to travel as expeditiously as possible, in time to go with the army, in case my services should be required. As it was too late to reach the "Ocate" this day, I was forced to camp on the Rayada, ten miles distant from the little Cimmaron; about midway we crossed the "Poñi," which was dry, and at last reached the Rayada, which was full of excellent water. On this stream we had the "populus monilifera," and thickets of willow, and I got a beautiful scarlet plant, "che-lone barbata," and a penstemon, with scarlet flowers.

In the afternoon, we tried to catch some prairie dogs by forcing them out of their holes with water. We poured bucket after bucket into their dwellings without flooding them. One dog showed itself near the mouth of its burrow, but, as soon as it saw us, again retreated.

September 22.—We started at sunrise, and, before we had gone far, passed two little rills of clear water. Continuing our journey, we reached a large shallow pool, the shores of which were covered with thick saline efflorescence; the whiteness was painful to the eye. After passing it, we entered a narrow gorge, the tops of the bluffs on each side were crowned with a stratum of amygdaloidal trap of a dark purple color and vesicular. Presently we reached the extremity of the gorge, and ascended to a "mesa" or horizon-

tal plain; and, when we looked to our right hand, we saw another horizontal plain yet higher than the one we were then travelling on, and covered also with a bed of volcanic rock about five feet in thickness. Keeping close to the foot of this highest "mesa," we reached the "Ocate;" as it is a cañoned, that is, is enclosed with high rocky walls, we were forced to go two miles up stream in order to reach the crossing. As it was only 3 o'clock, and I had hopes of reaching the next camping ground before dark, we continued our march, although we had already come 22 miles. We travelled until night fell upon us without finding any water. I had not yet sufficiently recovered to bear such a journey, and was obliged to get into the wagon. The night was very dark, and we travelled along with considerable difficulty, as the driver could scarcely see the road. At last we heard the joyful cry of water, and we found ourselves close by some fine pools, that were, fortunately, just in the road, or we could not have seen them. This was an old camping place, and in hunting around we stumbled on some charred sticks, that had helped to cook the dinner of those who had preceded us, and now cooked ours.

We had now reached "ponds in the prairie," 18 miles distant from the Ocate, and have made a day's journey of 40 miles, having come from the Rayada to the "ponds in the prairie."

September 23.—We had scarcely left our camp when the signs of civilization broke upon us; in moving along the valleys, we saw flocks of sheep, droves of horses, and large herds of cattle. These are guarded night and day by lads who, in the language of the country, are termed "pastores;" they were miserably clad in tattered blankets, and armed with bows and arrows; these and their big shepherd dogs constitute their sole defence, although they are subject to be attacked by the Indians, and their flocks and herds by Indians and wolves.

After a march of five miles, we reached the "Rio Moro," and passing several "corales," or enclosures, we at last came in sight of some adobe houses. The proprietor of one of those houses was an American, named Boney, who has since been murdered by his "peons." He invited us to alight and enter his house, where he treated us to milk, cool from the cellar. In his house there were a dozen fire-locks of different kinds, escopettes, fusils, rifles, and muskets. The residents of the other houses were New Mexicans. As we passed by, they proffered us some "aquadiente," or liquor. I told them that we did not wish any; at which they seemed much surprised, crying out "Vmd. no quiere aquardiente! Vmd. ciertamente no es Americano." Notwithstanding this risk of being denationalized, we refused the aquardiente. They then brought us some fresh mutton, that I consented to purchase, and it proved to be excellent.

There is very good pasture grounds along the Rio Moro. The valley is from 60 to 70 miles long, and increases in width to its junction with the valley of the Cañadiano.

Shortly after crossing the "Moro," we forded the "Rio Sepullo;" both of these streams contain an abundant supply of water. The

Moro is 15 feet wide, and averages one foot in depth at the ford. The Rio "Sepullo" is smaller, but worthy of the greatest share of notice, as it is the point at which we again meet the road that we left at the crossing of the Arkansas. Although that road avoids the terrible cañon of the Raton, yet the scarcity of water is so great that, in dry seasons, the teams get broke down, and one is obliged to send into New Mexico for fresh animals.

During the march, we saw several immense rattlesnakes; one happened to be crossing the road directly in my path. I heard it rattle, and my mule springing back several yards and getting entangled with the leading mules in the wagon, the trace chains became unhooked, and for a little time threw the whole team into confusion.

Towards the latter part of our route, the road was strewed with fragments of hard blue limestone, that made the wagon rattle away at a great rate. After a march in all of 27 miles, we reached "Las Vegas." As it was near sundown, we deferred visiting the village until the next morning.

We soon sat down to a supper of ducks, (*fulica Americana*;) they were very fat, and although a species of duck not very highly appreciated in the United States, still I think it must be merely owing to prejudice. They are generally known as the common coot.

*September 24.*—As soon as we arose a Mexican came over to pay us a visit; he was mounted on a fine horse, and appeared to be on duty, guarding the corn fields that lay around the town, for they have no fences to protect them against devastation from the cattle that are grazing near them.

Our "amigo" rendered us great assistance in harnessing a wild mule, for we were obliged to tie the fore feet, and blindfold it, before the harness could be arranged. We now entered the town of "Las Vegas." There was a large open space in the middle of the town; the streets run north and south, east and west; the houses are built of "adobes." The "azoteas," or roofs, have just enough inclination to turn the rain, and the walls of the houses, which are continued up one foot above the roof, are pierced for this purpose. Through the midst of the town there was a large "acequia," or canal, for the purpose of supplying the town with water, and of irrigating the fields.

As we passed through, I asked one of the inhabitants if he had any corn to sell, "Si, Señor Caballero; tengo maize, elote calabazas, melones, y Chili tambien," and he soon brought me some corn on the ear, some pumpkins, melons, and red pepper; and, after I had concluded my purchases, he pulled a bottle out of his pocket, saying, "No quiere vmd. whiske." This was the alcalde. Two miles south of "Las Vegas," we reached a curious gate between high escarpments of rugged granite rocks, that looked as if the surfaces had been formed by blasting with gunpowder; here, too, a little stream finds its exit from the mountains.

At 10 o'clock we reached the village of "Tacalote," after a march of 12 miles. I was obliged to camp here or else go to the