

inations were made below the ford, but no good crossing place could be found. About three miles below the camp the river is broken into several cascades, over which boats can safely pass only in floods. To-day a flying-bridge was put in operation by Captain Fraser, of the engineers, who had built pontoons in San Antonio for the purpose, which were transported to this place in wagons. For the purpose of protecting it, and to keep open the communication with San Antonio, where Colonel Churchill still was with the rear-guard and a portion of the supplies, the engineers were directed to construct defensive works on both banks, and two companies of volunteers were left behind as a guard. Lieutenant Franklin was occupied with the astronomical calculations.

October 12.—To-day the whole army, wagons, &c., crossed the river, the infantry passing over the flying-bridge, and marched through Presidio, encamping about four miles south of the town. The grazing here was good, but the water bad, being hard, saline, sulphurous, and unhealthy, in consequence of which we were compelled to dispense with the soldier's favorite dish, bean-soup.

October 13.—Went into Presidio by order of the commanding general, for the purpose of obtaining information in relation to the routes to Santa Rosa. Met General Shields on his way to camp from Camargo. He gave me the first authentic intelligence of the details of the battle of Monterey, and of the capitulation. Yesterday, as General Wool reached the right bank of the Rio Grande, a Mexican officer, with an escort of lancers, presented himself to him with a communication from the political chief of the State of Coahuila, enclosing a copy of the articles of capitulation, and complaining that General Wool's march was in direct contravention of its provisions.

This, however, was not the General's construction of that convention; and he returned for answer, that he should continue his forward movement. The information procured in the town was not very satisfactory. We learned that there was a direct road over the mountains to Monclova, but that it was probably not practical for artillery and wagons; that there was a direct road to Santa Rosa by the way of Peyoté, but the same objection existed to it as in the first case. The conclusion was, that, all things considered, it would be more certain to take the more circuitous way through San Fernando de Rosas.

October 14.—Yesterday and to-day, Lieutenant Bryan was occupied in surveying the roads in the vicinity of Presidio.

I received orders to proceed to-morrow morning, escorted by a squadron of dragoons, under the command of Lieutenant Colonel Roane, of the Arkansas mounted men, on the way to Santa Rosa; and on reaching that town, to wait for the advance of the army, or for further instructions. The object was to reconnoitre the country, especially in reference to supplies, water, and encampments, with directions to communicate the information thus obtained daily to the commanding general.

October 15.—Left the Presidio camp at 7½ o'clock in the morning, accompanied by Lieutenant Franklin, with Pike's and Preston's companies of mounted men. There was no water to be found until we arrived within two miles of the town of San Juan de Nava, although the whole country was obviously once irrigated and in a high state of cultivation, as we noticed everywhere dry ditches, once filled with water, and frequently passed houses in ruins. As far as the eye could reach on both sides, we saw nothing but a wide-spread champaign country, bearing

evidence of former prosperity. It is now nothing but a desert waste, abandoned to the dreaded Camanches, or the not less terrible Mescaleros and Apaches, who have driven the timid inhabitants from their rural dwellings, and cooped them up within the precincts of the villages, converting this once smiling garden into a howling wilderness.

As we approached Nava, it presented a most beautiful and attractive appearance. The fields were cultivated, with fresh pure water running in every direction; large trees surrounded it, and the white dome of the village church glittered in the sun through their foliage; but alas! "'twas distance lent enchantment to the view;" for, on entering it, we found it filthy, the houses in a most dilapidated condition, and the inhabitants dirty and miserable. Its numbers in population about 1,000 souls. The alcalde, a half-naked Indian, and the padre, called on us, and through their intervention we procured an abundance of supplies, and ascertained that a sufficiency of beef, corn, and fodder could be obtained for the army, at reasonable prices, as many of those articles had been brought from the neighboring settlements in anticipation of our visit.

We marched through the town; but not finding a convenient camping ground, as the whole country was intersected with irrigating ditches, we returned to the east side, and there pitched our tents. Wood was very scarce, and we could with difficulty find enough to cook our food. I directed the alcalde to have a large supply furnished the next day for the army; which was fortunate, as a severe norther set in the next night, soon after the arrival of the troops.

The length of march to-day was about twenty-five miles.

October 16.—Resumed our march at 7 o'clock a. m. For some two miles the country was cultivated; after which, all again was desolate, until we reached San Fernandez de Rosas, a distance of eleven miles. About four miles this side of the town, a road branches off to the villages of Morales and San Juan, and is in fact the direct route to Santa Rosa; and was afterwards followed by Colonel Churchill. It is some eight or ten miles shorter than the road by San Fernandez.

San Fernandez de Rosas (of the roses) is pleasantly situated on the left bank of the Escandido,* a beautiful and limpid stream of pure cool water, which, rising about fifteen miles to the southwest, winds gracefully around two sides of the town, and discharges into the Rio Grande, thirty miles above the Presidio ford. It is extensively used for purposes of irrigation; and the valley of San Fernandez is broad, rich, and productive. The town contains about 2,000 inhabitants, and two plazas, around which are built the better class of houses, which are large, neat, and comfortable. On the main plaza is the parochial church, a building of some architectural pretension. The whole town, surrounded as it is with a belt of large trees, wears a pleasing aspect, in striking contrast with Presidio and Nava; and the people are well dressed, presenting an agreeable appearance. A great deal of corn and numerous herds of cattle are produced in the vicinity, and near the neighboring villages of Morales and San Juan; the former containing about 900, and the latter about 700 souls.

The escort, after halting a short time for refreshments, passed through the town, re-crossed the stream, and encamped about six miles beyond, having changed our course considerably to the south after leaving the

* "Concealed brook."

town. There are several ranchos near the camp, from which we procured an abundant supply of corn, fodder, and other necessities. We found the water and grazing good, and fortunately plenty of fuel, as a violent norther set in about 12 o'clock at night, accompanied with a cold drifting rain. An encampment for the army was selected some four miles this side of San Fernandez, on a plain affording good grazing, with running water on both sides, and plenty of wood convenient.

October 17.—Broke up our camp at 8 o'clock, the most of the men being stiff and uncomfortable from the effects of last night's norther, and from the sudden change from excessive heat to cold. The wind was chilly, raw, and penetrating. A march of eleven miles over a barren and uncultivated country brought us to the celebrated *Santa Rita* springs, the sources of the water which supplies the villages of San Juan, Morales, and Nava, and which formerly was conducted as far as our Presidio camp, irrigating the whole intermediate country, a distance of forty miles, through which it was carried in artificial channels. The surplus water is now wasted after passing Nava, near which it has formed an extensive and pestilential marsh.

The numerous springs at this locality unite in several small, deep, and picturesque lakes, much frequented by several kinds of water fowl. We encamped near them in a fine grove of live oak. There is a considerable growth of wood and timber in the vicinity, but the grazing is not good. The ground is moist, and the grass, although luxuriant, is coarse and sedgy. This position was recommended to General Wool as his camping ground. Several Mexican carts had followed us to-day laden with corn, and after supplying our own horses, they were directed to wait the arrival of the main army; the last corn, as we were informed, that could be obtained this side of Santa Rosa. Our march to-day was short, in consequence of representations made to us that no water could be found for a distance of more than thirty miles ahead. It was also a convenient day's march for the army. Several Mexicans came in during the night for protection against the Indians, who were prowling about in small parties.

October 18.—Left camp at 7 o'clock in the morning. For about three miles our road passed over an undulating country, well wooded, with a luxuriant growth of sweet grasses. Another mile brought us to the intersection of the San Juan and Morales road. The ground soon afterwards became very broken, and we began gradually to ascend by a tortuous course the Sierra de San José, a range of hills which we observed to our left from the time of leaving the Presidio camp. They trend nearly northeast and southwest, and the Rio Grande bursts through them about ten miles below the town of Presidio. It is over these highlands that the Peyoté and Monclova roads pass. Our road was good, and reached the summit of the hills with easy grades. They are covered with a thin growth of grass; and many varieties of the cactus, the sotol, (from which the Mexican mescal is distilled,) and an occasional maguey, (*agave Americana*), the palmetto, and yucca abrifolia, make their appearance, the first that I have noticed on our march. The rocks are of fossiliferous limestone, and it is said that mines of copper and silver were formerly worked in these mountains. We passed the summit of this range about eight miles from yesterday's camp, and then commenced descending, by a road similar to that by which we had ascended, to the Llano de San José, a wide and extensive, but sterile plain. From the top of these hills we

caught the first sight of the Sierra Gordo, sometimes called the Sierra Santa Rosa, a spur of the great Sierra Madre, or Mother Mountain. As the mist which rested like a veil on its lofty peaks was gently lifted by the sun, the view was most grand and imposing. We overlooked the great plain before us, which was limited in that direction only by a wall of serrated mountains rising to the height of 4,000 feet, and stretching to the north and south as far as the eye could reach, and apparently presenting an impassable barrier to our further progress. We could also recognise the course of the two large rivers which flow through the plain, by the woods which fringe the banks. From the same point we looked back upon the lovely valley of San Fernandez.

At a distance of sixteen miles from Santa Rita, we found a pool of clear, fresh-looking water that the advance-guard had passed, under the assurance of the Mexicans, who were with us, that it was brackish, nauseous, and poisonous, not fit even for the horses. We had received uniformly the same accounts of it from all quarters, but it looked so cool and tempting, and our thirsty animals showed such a positive desire to drink it, that I determined to try it, and to my surprise found it as pleasant to the taste as it was inviting to the eye. What had given rise to the notion of its bad qualities I could never ascertain; but that it was unfit for use and poisonous to animals, was certainly entertained by the people of the country; and no Mexican could be induced to drink it or permit his horse to use it, but preferred to ride fourteen miles further to the Rio Alamas without water. The pasturage here was good, but fuel very scarce. Sent back a man to General Wool recommending this place as a suitable encampment for the army. The pool occupied the bed of a large creek with steep banks, discharging a large quantity of water in the rainy season, at which time it must be impassable. It drains into the Alamas. The sierra of San José divides the drainage of the valley of San Fernandez from that of Santa Rosa, both of which, however, discharge into the Rio Grande.

From the pool it was fourteen miles to the Rio Alamas (or cotton-wood river,) the first ten miles of which was over a level prairie of good grass; the next four was a pretty rapid descent to the river, where we encamped. The Peyoté road comes in at the ford about one mile back. We found the banks of the river covered with a thick growth of trees, principally cotton wood—a species of poplar. There is also in this valley a fine growth of nutritious grasses.

October 19.—The Alamas is about 100 feet wide, four feet deep, hard pebbly bottom, and the current a perfect torrent. Last night and this morning we examined the river for several miles above and below, but could find no other ford. It was generally deeper in other places, although the current was less and the bed of the stream soft. With great exertions we succeeded in getting over; the small wagon, containing the instruments, having been secured with ropes to prevent its being carried off. From all previous Mexican accounts we were induced to believe that we should not be able to cross at all. As it was, we narrowly escaped losing one mule, and two men who were forced from their horses by the current, and were rescued with great difficulty.

After crossing the river, the road turns suddenly to the left; and half a mile further on, the roads diverge, the left one leading to the ferry over the Sabinos river, just above its junction with the Alamos, being the most

direct route to Monclova; and the right hand one to the Sabinos ford, being the Santa Rosa road. At the ferry the river is not fordable. Four miles from the Alamos we came to the *Rio Sabinos*, or Cypress river, which takes its designation from the numerous and large cypress trees growing on its banks—a stream neither as wide, deep, nor as swift as the former, although from their confluence it gives its name to their united waters until they discharge into the Salado, which is an affluent to the Rio Grande at Guerrera. This river at times overflows its banks to a great distance, showing that in the rainy season it discharges an immense volume of water, when, from its depth and the velocity of the current, it must be utterly impassable even with boats. For this reason neither of the two rivers could be permanently bridged without incurring an enormous expense. When Santa Anna took this direction in his celebrated invasion of Texas in 1834, which terminated so disastrously at San Jacinto, he impressed all the people of the surrounding country, and compelled them to build temporary bridges (which were swept off by the next flood) over both rivers, for the passage of his troops. The army not being provided with a pontoon train, which had been left at Presidio for the use of the rear guard, experienced great difficulty in crossing these rivers; but, by making a bridge of the loaded wagons, which were sufficiently heavy to stem the torrents, the infantry were passed over without loss; several mules and horses, however, were drowned.

A short distance from the right bank we found an excellent camping ground, with plenty of fuel and grass. The water in both streams is excellent. A march of four miles brought us to the "three ranchos," a good camping ground on a cool and beautiful mountain brook; and four miles still further on is another good encampment on the same water-course; and one and a half mile further, about half a mile from the town of Santa Rosa, we encamped on the left bank of the above mentioned stream, in a broad and lovely plain, verdant with grass, and with waving fields of corn and the sugar cane, almost at the foot of a magnificent volcanic mountain range, whose jagged peaks rose to an elevation of some 4,000 feet above the level of the plain.

These mountains were visible from the banks of the Sabinos, and indeed we caught a glimpse of them from the summit of the Sierra San José; and as we approached them, all were exhilarated by the contrast between this beautiful spectacle and the dull monotony of the level prairies which we had traversed so long as to deem them almost interminable.

Soon after leaving the Sabinos we were met by a courier from the civil authorities of Santa Rosa, who announced to us that the municipality would meet us in the road and tender to us the formal rendition of the town. After encamping, the principal officers of the command and a small escort entered the town with the *alcáde*, and it was agreed that to-morrow we should take possession; accordingly, on the 20th of October, the squadron marched into town with flags flying and sabres drawn, and we accepted the surrender of Santa Rosa, which had been freely and officially tendered by the civil authorities. A few invalid soldiers under the command of a superannuated colonel, who had been left behind by Colonel Castaneira, were disarmed, and the guns placed in charge of the *alcáde*. The arms were of British manufacture, and bore the Tower proof-mark.

There is a difficult mule track from Santa Rosa to Santa Catarina

through the mountains, but nothing which can be called a road. Its general direction is south. Presidio de Bavia (an old military post) is N. 60 W., (about) 80 miles distant, on a pretty good road: from thence to Chihuahua there is a mule track. By the way of San Fernando and Bavia is the shortest route to Chihuahua; but whether practicable for an army, is a doubtful matter.

Resumé of distances from the Rio Grande to Santa Rosa.

To Presidio Rio Grande.....	5 miles.
Our camp.....	4 "
Nava.....	24 "
San Fernando.....	11 "
Camp.....	6 "
Santa Rita springs.....	11 "
Waterpool.....	16 "
Rio Alamos.....	14 "
Rio Sabinos.....	4 "
Santa Rosa.....	10 "
	105
	104
	209 miles.

from San Antonio to Santa Rosa.

Santa Rosa is agreeably situated, at the very foot of a lofty range of mountains called Monté Rosa, elevated by igneous action. The outlines are of volcanic origin, and are formed of basalt and lavas. The high peaks consist of limestone, overlaying a schistose slate, in which the silver ore is found. It is of a very dark blue color. The lodes of different metals, particularly lead and silver, are said to be numerous, and their yield extremely rich. There has been, since the expulsion of the Spaniards, no systematic or intelligent working of the mines in this district, and the veins are usually abandoned as soon as the water fills the shafts. The workings I have seen, it appeared to me, could be easily drained by adits for many years to come, without incurring the expense of pumping. The principal ores are silver and lead, and I am inclined to believe that this is one of the richest mining regions in Mexico. The usual process of separation of the metals consists in first pulverizing the ores and washing out the dust and light matter with water; the remaining portion is put into an elbow furnace, heat applied, the scoria raked out on one side, and the metallic silver left behind in a kind of retort. The amalgamation process has never been introduced here.

Santa Rosa is said to contain three thousand inhabitants, but I doubt if its population exceeds two thousand. It is well watered from mountain streams; its climate is agreeable and salubrious, and a good deal of corn and sugar are produced here; but still the town wears that appearance of decay so common in Mexico. Its former prosperity depended on its mining operations, which have been nearly entirely suspended for many years by the depredations of the Indians. The old laws of Spain, "the laws of the Indies," in relation to mining and mining interests, are still in existence, and are said to be very judiciously framed. The fee simple of the mines belongs to the government, and leases, with certain privi-

leges, are granted to individuals at very moderate rates. Any person discovering a new mine, or one that has been abandoned, may declare it; that is, may take a lease of it, on application to the proper authorities, and by complying with certain prerequisites, amongst which he is to work the mine a certain number of days each year on penalty of forfeiture. The inhabitants of Santa Rosa are generally federalists, and friendly to the United States. Our camp was continually crowded with men, women, and children, from early in the morning until retreat, and we were freely supplied "with all the delicacies of the season." Baskets of nice cakes, confectionary, and fruits were sent in as presents to the officers; and when our men visited the town, the people were watching at the doors to invite them into their houses to partake of their hospitality. It was quite amusing to see how soon they fraternized, and it was evident that the population hailed us as protectors and deliverers; and, in fact, more than one proposition was made to me to encourage a *pronunciamiento* against the Mexican government.

A very large and rich mine was formerly worked within two miles of the town by a company, at the head of which was the Spanish governor of the province, who held his court in Santa Rosa with much splendor. The mine was worked very skilfully, if we may judge by the large adits and mills, the ruins of which we saw. The mining was in successful operation (yielding vast quantities of silver, according to the popular account) when the revolution commenced, which soon drove the proprietors from the country, and with them all safety and enterprise. During the Spanish domination, despotic as it was, Mexico must have presented a prosperous and interesting appearance, for everywhere are seen the monuments of former greatness. At that time, too, the security of life and property (except for offences against the State) was perfect, and the revolution was the result rather of social than of political causes, in which, by-the-by, most revolutions of separation find their origin.

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CAMP NEAR MONCLOVA, MEXICO,
November 18, 1846.

SIR: In compliance with your instructions, I have the honor to submit the following journal of the route from Santa Rosa to this place.

The army marched from Santa Rosa to-day (Sunday, October 25.) The road runs along the foot of level plateaus of table land, extending from the base of the Santa Rosa mountains, in nearly an easterly direction, for eight and a half miles, when it turns southeasterly, through an opening in the plateaus, four miles to the "Arroyo Alamo," a shallow stream, with broad pebbly bed and low banks, upon which the army encamped. For the first eight miles the country is pretty well covered with the usual chaparral growth of musquette, Spanish bayonet, &c. We crossed also in this distance two small rivulets; one about three, and the other six miles from camp, and one or two dry beds of mountain streams—neither difficult for wagons. The rest of the road was across open rolling prairie.

Monday, October 26.—Our course to-day was S. 40° E. 7½ miles to the Carrecitos (little caves,) and one mile further to the Sans, both small beds, with the water standing in pools; the country open and rolling. From the Sans the road deflects gradually towards the mountains, to a

course about S. 5° W. 8½ miles to the Ahuza, (buzzard,) a fine running stream, two hundred and fifty feet across the bed, the stream being divided into several rivulets, by stony islands, the whole bed stony, and the banks low and firm.

Tuesday, 27th.—Three miles to the Guachapina, and four more to the Piletas—both small prairie streams. Five miles beyond crossed the Lampasos, a considerable stream, but the water is sulphurous, and is said to be poisonous for cattle. The country rolling and covered with small bushes, Spanish bayonets, and varieties of cacti. The maguey (agave Americana) begins here to make its appearance in considerable numbers. A short distance east of the Piletas a road turns off to the right towards a pass in the mountains. It had the appearance of having been recently travelled by wagons. Thirteen miles further on, we came to the "hacienda de Nuestra Senora de Guadalupe de los Hermanas," about a mile beyond which, upon a small stream, whose source is a hot spring with a temperature of 111° F., we encamped. This spring is walled in, and is a place of considerable resort by the fashionable of Monclova. This hacienda numbers one hundred and sixty peons, and has a large extent of ground, say one thousand acres, in cultivation. It is situated by three small knolls, called "Los Hermanas," (the sisters, from which it derives its name,) lying between the Guachapinas and the northern extremity of the Lampasos mountains—the two ranges being here not more than three miles apart. The latter range is said to extend to Monterrey. A cold, drizzling rain set in about four o'clock, as we commenced pitching our tents. The rear-guard and train did not arrive till after dark.

Wednesday, 28th.—Remained in camp.

Thursday, 29th.—Two miles to the Nadadores, or Arroyo de Carmil, which we crossed by a bridge. It contains brackish water, running between steep clay banks. Between the Nadadores and the Monclova river, half a mile further on, is an old hacienda (del Tapado) occupied only by peons, but with considerable cultivation in its vicinity. The road from here continues along the left bank of the Monclova, five and a half miles to the hacienda de los Ajuntas, a village of some five hundred souls, near which the army encamped.

Friday, 30th.—Marched fourteen miles, and encamped near Estancia de Arriba, a small hamlet of some twenty houses. Passed several ranchos, and a good deal of corn and cotton. The road continues near the Monclova to near Estancia, where it makes a bend to the east about a mile or two from the road, which it meets again at Monclova.

The vicinity of the road, where not in cultivation, is covered with bushes, cacti, &c. General course from "Los Hermanas" to Monclova S. 20° W.

Saturday, 31st, and November 1 and 2.—In camp.

Tuesday, November 3.—Marched to Monclova, four miles, all the way through cultivated fields, and encamped on the east side of the river, opposite to the Alameda.

Very respectfully, your obedient servant,

L. SITGREAVES,

1st Lieut. Topographical Engineers.

To Captain GEORGE W. HUGHES,

Chief Topographical Engineers,

Centre Division, Army of Mexico.