

over a plain, and is very smooth. The only vegetation along this part of the route is the muskeet and prickly pear. At intervals, some coarse dry grass appeared, but it was so covered with the dust, which was very thick, that it was almost useless as food for the horses.

The road runs along a valley, bounded on both sides by high mountains, the tops of which are about ten miles apart.

As far as Bajan the roads to Monterey and Parras from Monclova coincide. At that point they separate—that to Monterey striking to the east, and the Parras road keeping to the west.

The Monterey road for twenty miles is good, running over a soil that appeared to require only water to make it fertile. As it is, nothing but muskeet and cactus grow, solely owing, I imagine, to the absence of rain. The direction of the road varies a little north of east, bending gradually to the south. About twenty miles from Bajan is a miserable rancho, where we found a large flock of goats. These subsist on the scanty herbage in the vicinity, and water is obtained for them from a large well. The water was pretty good, but would not have been sufficient for General Wool's command without a large supply of vessels to contain it, for constant drawing for twenty-four hours would have been required for the large quantity of animals with the army.

From this point the road becomes more rough, and approaches nearer to the mountains to the east of it. The direction is still southeast. About seven miles from the rancho it crosses a small stream, on which was a fine growth of grass. The water of this was so bitter that we could not drink it. Eight miles farther is another rancho, the family at which appeared to be engaged in making muscal. Nothing but the maguey and muskeet grows in the vicinity, and the master of the place told me that he obtained his corn at a hacienda to the northeast, which was not in sight. Probably this rancho is a dependency of the hacienda spoken of. The only water was contained in a tanque, was nearly putrid, and there was very little of it. We arrived here at 4 p. m., and after feeding our horses, and resting for an hour, set out again. About 12 p. m. we encamped in a large growth of muskeet, with some good grass. The night was very dark, so that, from the last rancho to camp I know nothing of the road, except that it was very rough, and once we made a considerable ascent and descent, which, with the partial view of the mountains near us, led me to believe we were going through some mountain pass. The whole distance travelled to-day was fifty miles.

As there was no water at or near the camp, we started about 4 o'clock a. m., and, after travelling twenty miles over a road a good deal cut up by rain channels, arrived at a place named, according to the guide, Cañas.

This we found to be a hacienda, with a large extent of ground in a high state of cultivation. Sugar-cane was the principal crop. There was some corn growing, but not more than enough for food for the inhabitants of the place. We rested here during the heat of the day, and about 3 p. m. started again, and after travelling twelve miles, encamped two miles south of a place called by the guide Pueblito. The vicinity of the road during this day's march, until we arrived at Cañas, presented almost identically the same appearance that it had previously. It was entirely barren, producing nothing but muskeet and maguey, and was hemmed in by high mountains, apparently ten miles apart. At Cañas all this changed. The maguey disappeared, the Spanish bayonet taking its

place; the soil produced some grass, and we appeared to be getting into a country susceptible of some cultivation. Four miles south of Cañas we crossed a stream about thirty yards in width and two feet in depth, which flowed eastwardly through a gap in the mountains to the west, and which had worn for itself, in the soft soil, a deep and broad bed. The road was crossed at intervals of two or three miles by small streams flowing from the mountains, and the banks of these were well settled by small farmers, who produced an abundance of corn.

On the 18th, making an early start, we arrived at a village about five miles from Pueblito, called Abasolo. It contained about five hundred inhabitants, and is beautifully situated on both sides of the river above mentioned.\* Here we obtained corn for our horses. Two miles farther, is a small village called Chipinque; three miles from this, another of the same size named Topo Grande; and six miles farther, another called Topito. The river leaves the road at Chipinque, flowing off towards the east. At Topito another small stream crosses the road, flowing northeast. It is doubtless a branch of the first stream. Thirteen miles farther is Monterey.

Along the whole of this day's march (twenty-four miles) the country was well settled, well watered, and the soil was fertile—the whole face of the country presenting a more cheerful appearance than anything I had yet seen in Mexico.

The great scarcity of water on the part of the road midway between Monclova and Monterey presents an obstacle to the march of an army almost insuperable. In the whole distance from Castaña to Cañas there is but one running stream, and the water of that is so impregnated with salts that it is impossible to drink it. My guide told me that it affected horses so much that they never were allowed to taste it. The supplies of water at the two ranchos are so limited that they would not go far towards remedying the evil.

The road is but little travelled by Mexicans; for the Camanches, in making their marauding excursions into the west, cross the road in several places, so that a small party is in great danger along the whole route. I was informed Bajan had been deserted on account of the depredations of the Indians, and that now it is a favorite camping-ground for them on their way to and from the scenes of their depredations.

Respectfully submitted:

W. B. FRANKLIN,

*Brevet First Lieutenant United States Top. Engineers.*

To Major G. W. HUGHES,

*Corps Topographical Engineers, United States army.*

#### *From Monterey to Saltillo.*

Not finding General Taylor at Monterey, I left that place on the 20th of November for Saltillo, where he then was. As the road between these two places has been often described by reconnoitring officers who have gone over it, I shall merely state that it is a good wagon road, well watered,

\* This stream is doubtless a branch of the San Juan.



and with an abundant supply of forage throughout the whole distance, which is between fifty-five and sixty miles.

About half way between the two places is a hacienda called La Rinconada. This was the usual camping-ground for our mounted troops in their marches from one place to the other, as they generally made the trip in two days. Infantry made the march in three days—on the first day encamping at a village named Santa Catarina, about eight miles west of Monterey; on the second at a rancho, about twenty-one miles from Saltillo, named, from a warm spring near it, Ojo Caliente; and the third day marching into or near to Saltillo.

On the 21st of November I met General Taylor and his staff, on their return from Saltillo to Monterey. After delivering my despatches, I was ordered by him to proceed to Saltillo, and await further orders from him there. I arrived at Saltillo that evening, and two days afterwards received despatches from him, with orders to proceed from that place to Monclova by the shortest route.

*From Saltillo towards Monclova.*

On the 25th of November I left Saltillo for Monclova. By the kindness of Major General Worth, then in command at Saltillo, I had been furnished with a guide; and Lieutenants Armstead and Buckner, 6th infantry, started with me to join their regiment, part of which was with General Wool's column. These gentlemen, (the escort which came with me from Monclova,) the guide, and myself, formed the party.

For the first nine miles from Saltillo the road to Monclova is excellent, being perfectly straight and smooth, and nearly level. The direction for this distance is nearly north. The country in the vicinity is in a good state of cultivation, and the principal crops were corn and wheat.

Capillania is a small village on the road, nine miles from Saltillo. It contains about five hundred inhabitants, and is pleasantly situated on the stream that flows by Saltillo. Here the road begins to run along the stream and becomes rough. Seven miles farther is a rancho called San Diego, where we encamped for the night.

Next morning, after marching four miles in a direction north of west, we crossed the river; and about a mile farther the road enters the mountains, winding about in every direction. It is so very rough that it would be extremely difficult, indeed almost impossible, to bring a wagon-train through it. Where it is possible, it is kept along the banks of the river, which it crosses and recrosses several times. This rough road continues about ten miles, when it emerges from the mountains on to a smooth plain, on which it ran for the remainder of the day's march.

Twenty-five miles from San Diego is a large hacienda called Mesillas. There was a large number of cattle here, and a great extent of ground in cultivation, on which corn and wheat were the only crops. Where the road leaves the mountains were a few huts, in the vicinity of which a little corn was raised. Two miles in front of Mesillas we crossed the river, leaving it flowing to the east, and saw nothing more of it. Five miles north of Mesillas is another large hacienda, called Perros Bravos, where we spent the night.

Leaving Perros Bravos, after marching four miles we crossed a road which ran to Parras; and two miles farther, a stream called by the guide

the Salinos. Its course was nearly east and west. It was about twenty yards wide, and eighteen inches deep. It flowed to the east, and is probably the same stream I crossed before at Cañas. Nine miles from Perros Bravos is Anelo. This is a very large hacienda, beautifully situated on a small rivulet, near the Salinos. There was, in addition to the corn and wheat, some sugar-cane raised here. Fifteen miles northwest of Anelo is the Estanque of San Felipe. This, as its name implies, is an artificial reservoir of water, and was made, I imagine, for the use of the cattle of Anelo, which are allowed to wander in the vicinity. Between Anelo and this place the road is perfectly level, hemmed in on both sides by mountains, and the ground in the vicinity is covered with a growth of grass and muskeet.

When we were about five miles from the tanque, our attention was attracted by a long line of dust to our left and front. Not knowing what it could be, we consulted the guide, who informed us that it must be caused by Indians. We were obliged to rest satisfied with this information, but were undeceived when we arrived at the tanque. There we met some volunteers who were engaged in repairing a wagon. They informed us that General Wool's division had passed there that day on their march to Parras, and that they were encamped about fifteen miles farther on the road to our left. Following their directions, we reached the General's camp about 8 o'clock in the evening. Had it not been for the fortunate accident of the breaking down of this wagon, we would probably have gone on to Monclova, as the road was so dusty that every trace of the march of the army was effaced almost as soon as it was made.

It would be almost impossible to march an army from San Felipe to Saltillo by the route through Anelo and Mesillas, on account of the roughness of the road through the mountains north of San Diego. With this exception the road is very good, and the supplies both of forage and water are abundant. The whole distance from Saltillo to the estanque of San Felipe is seventy miles.

Respectfully submitted:

W. B. FRANKLIN,

*Brevet First Lieutenant Topographical Engineers.*

To Major G. W. HUGHES,

*Topographical Engineers, United States army.*

On the 17th of December, 1846, General Wool received intelligence from General Worth, which led him to believe that the presence of his division of the army would be highly necessary in the vicinity of Saltillo.

On the same day the whole division was put *en route*, though they had but two hours' notice. The force under the command of General Wool consisted of the following troops: one company of field artillery, four companies of dragoons, and three companies of infantry—all regulars. Of volunteers, there were one regiment of cavalry, two regiments of infantry, and one independent company of infantry incorporated in the battalion of the three companies of regular infantry. The whole amounted to about three thousand men.

There are two wagon roads from Parras to Saltillo. The more direct of these is good for fifteen miles from Parras, where it crosses a line of



mountains called Los Infernos. The road is so rough and dangerous in these mountains, that without very thorough repairs, made with the expenditure of much time and labor, it is impassable for a train. This consideration induced the general to take the more circuitous route, which passes through Cienega Grande, making the distance about fifteen miles longer. This route joins the other road near Castañuela, about thirty miles from Parras.

With the single exception of the passage through Los Infernos mentioned above, the route from Saltillo to Parras is excellent, and by the road that General Wool marched there is not a single obstruction. It runs through a valley from beginning to end, so that it is nearly level; is intersected by numerous small streams flowing towards the north, so that there is no scarcity of water, and the few haciendas scattered along afford plenty of forage—the only supply needed by General Wool's division.

One company of the regular infantry was left at Parras as a guard of the sick, and one squadron of the volunteer cavalry was absent with Captain Hughes, topographical engineers, on an expedition towards Durango. The remainder of the division, with the exception of three companies of volunteer infantry which had been left at Monclova, was put *en route* on the 17th of December, 1846. On the afternoon of that day the dragoons and artillery encamped about ten miles from Parras, in a gorge of the mountains, and the infantry and volunteer cavalry about three miles from Parras.

On the 18th the artillery and dragoons encamped at a rancho near Castañuela, and the infantry at a small rancho called Misteña, fifteen miles behind.

On the 19th both columns marched to Patos, a large hacienda, the residence of the Sanchez family.

On the 20th the division reached San Juan de la Vaqueria, and on the 21st encamped at Agua Nueva, a rancho about seventeen miles south of Saltillo.

The original intention of the general had been to encamp at La Encantada, seven or eight miles nearer Saltillo, but on arriving there he changed his mind, and marched back to Agua Nueva.

The distance from Parras to Agua Nueva, by the route marched by General Wool, was a little more than one hundred miles, so that in the space of four days the division had marched that distance, being on an average more than twenty-five miles a day.

This is probably the best march that was made during the war; and it is to be remembered, too, that the men were in excellent health and spirits after its completion.

W. B. FRANKLIN,  
*Brevet 1st Lieutenant U. S. Topographical Engineers.*

SAN ANTONIO DE BEXAR, September 9, 1846.

SIR: I have been assigned, by orders from the Topographical Bureau of the 6th August, 1846, as chief of the topographical staff of the army under the command of Brigadier General Wool, and, by the same orders, the following officers have been designated as my assistants, viz: 1st Lieu-

tenant L. Sitgreaves, 2d Lieutenant W. B. Franklin, 2d Lieutenant F. T. Bryan.

And I now have the honor to report that I am prepared to execute any duty to which I may be assigned by the commanding general.

Lieutenant Sitgreaves is present with me, Lieutenants Franklin and Bryan having been left at La Vaca to make astronomical observations for the determination of latitude and longitude. They have also been directed to reconnoitre the Gonzales road to this place. The road by the way of Goliad has been carefully examined by Lieutenant Sitgreaves on our way up.

I would respectfully suggest that, as soon as it suits the convenience of the general-in-chief, a strong body of mounted men should be thrown forward to the Rio Grande for the purpose of affording protection to the topographical parties. Such force would probably be better and more cheaply subsisted near San Fernando than here. I propose to accompany the advance guard of the army, with the view of reconnoitring the country between the Rio Grande and the city of Chihuahua, through the mountains, as I am persuaded of the existence of a road in that direction; but whether practicable for artillery and wagon trains, I have no means of ascertaining. According to Captain (afterwards General) Z. M. Pike, "M. St. Croix, afterwards viceroy of Peru, took this road (that is, over the mountains) in 1778 on his way from Chihuahua, Coquilla, Allases, and Texas." With a regiment at Presidio de Rio Grande, or at San Fernando, as a point d'appui, I will undertake, with two companies of mounted men, to penetrate through the mountains.

It has also been suggested that a route practicable for artillery may be found through the highlands on the east of the Rio Grande, intersecting the Puerco river about seventy-five miles above its mouth, and crossing the Rio Grande at the confluence of the Conchos. If it should meet with the approbation of the general, I also propose to examine the country in that direction; it will at least contribute to our geographical information of a portion of our territory but imperfectly known.\*

In the mean time I propose to examine the country in the vicinity of San Antonio, and to correct the map of Texas by information to be obtained from the various commands which have entered the State in different directions, concentrating on this point. Lieutenant Brent, of Captain Washington's company, has taken copious notes of their line of march, of which I shall, with his permission, avail myself.

It is also my desire, as soon as a corps of topographical rangers can be organized, (under the authority of a recent regulation of the War Department,) to at once enter upon a reconnaissance of the country between this place and the Nueces, with the object of being able to designate the most convenient positions for the encampments of the different corps on their march, (a duty devolved on the topographical staff by paragraph 880, general regulations of the army,) for which I propose leaving at least one officer of my command at headquarters with the main body of the army. Having referred to the extended and exposed nature of our duties, it seems to me that the topographical rangers should consist of at least

\* This is the route recently examined by Colonel Hays, and pronounced to be practicable for wagons. It will open a direct communication between our post in Texas and those in New Mexico.



two companies, who would constitute generally a portion of the advanced guard of the army en route, and would be occupied at other times in detachments for the protection of the reconnoitring parties.

Very respectfully, sir, your obedient servant,

GEORGE W. HUGHES,  
*Captain Topographical Engineers.*

Lieutenant J. McDOWELL,  
*A. A. Adj. General of the army of Chihuahua.*

The topographical party is provided with the necessary instruments for the determination of geographical positions by latitude and longitude.

SAN ANTONIO, December 13, 1848.

SIR: It may be of interest and importance to yourself, and the department you direct, to receive some additional information to that which you doubtless already possess of the country lying between this place and the State of Chihuahua, in Mexico. The citizens of San Antonio have for many years been anxious to establish a trade with that portion of Mexico by opening a direct communication with it; but numerous difficulties and obstacles prevented the accomplishment of this object. In August last the citizens of San Antonio fitted out an expedition to explore a route practicable for wagons to Presidio del Norte, and Paso del Norte, which I had the honor to conduct. We set out on the 27th August, and returned the 12th December, having succeeded in discovering a way perfectly practicable for wagons at all seasons of the year. The road will run from this place east of north to the head of either the San Saba or Conchos rivers, both tributaries of the Colorado, and which rise within a few miles of each other, distant about one hundred and fifty miles; from thence, in an almost southwest direction, to the Rio Pecos or Puercos, fifty miles; thence up the Puercos about fifty, and from thence, in a southwest course, to Presidio del Norte, one hundred and fifty or one hundred and sixty miles; making in all a distance of about four hundred miles, either by the way of Presidio del Norte, ascending the Rio Grande, or by going fifty miles higher on the Rio Pecos than the Presidio road will go, and then passing over to the Rio Grande and ascending it. We did not examine the whole distance to the Paso del Norte, but have learned from information upon which we fully rely, that there will be no difficulty whatever in going from one town to the other. The distance from Presidio del Norte to Paso del Norte is about one hundred and fifty miles. For seventy-five miles of the way from this place (San Antonio) to the head of the San Saba there is a good wagon road now in use, and from that point the country is generally level, with but few hills, and they are small. From the San Saba to the Pecos the country is almost perfectly level, covered with muskeet trees, and bearing an abundance of grass and but little water. I have little doubt, however, that at most seasons of the year water can be found at intervals of ten or twelve miles. We were four days in passing this plain, and found water at every encampment. A further examination of this country will no doubt show more water. At the point where the road will strike the Pecos the hills begin to recede from the river, and the valley, in a few miles, opens into a wide plain,

which continues nearly the whole length of the river. There is abundance of grass and fuel on this plain, but no trees; the wood used for burning, and almost the only growth, is the small muskeet. From the Pecos to the Rio Grande the country is for more than half the distance level; the remainder of it is down a valley, where the points of some hills are necessary to be crossed, but offering at no place any considerable obstruction. Fifteen miles above the Presidio del Norte, on the Rio Grande, there is large timber in abundance, and the distance to Paso del Norte is generally level. The average distance from the Rio Pecos to the Rio Grande is, from about forty miles above their junction, nearly one hundred and twenty-five miles. Ten or fifteen miles below Presidio del Norte, high broken hills, set in close to the river, so as to render approach to it difficult, or even almost impossible, except at a few points. These hills continue below the mouth of the Pecos about forty or fifty miles. From the mouth of the Pecos up to within a few miles of where the road will probably cross it, the same character of hills, rugged and broken, renders travelling very near the river next to impossible. About seventy-five miles southeast of Presidio del Norte, we passed through a country giving every indication of great mineral wealth; and we were informed by the residents of a rancho below Presidio, that a silver mine in that neighborhood had formerly been worked by the Mexicans, which was reported to have been very rich, but the working of it to any great extent was prevented by the Indians. Rich specimens of gold and silver were shown us from mines in the vicinity.

From Matagorda bay to Presidio del Norte will not much exceed five hundred and forty miles, or seven hundred miles to Paso del Norte; and nearly the whole distance is level, with an abundance of grass, fuel, and water. The Rio Pecos may not be found fordable at all times; but it is a narrow stream, and easy ordinarily to cross. If I might venture to suggest the most favorable time for the movement of troops from this part of the country to Paso del Norte, I would say the latter part of March, at which season of the year the grass is good and abundant, and the weather is mild and pleasant. In the winter months, soldiers would suffer considerably on the plains from the cold north winds.

Respectfully,

Hon. W. L. MARCY,  
*Secretary of War.*

JOHN C. HAYS.

*Recapitulation of latitudes observed in Texas and Mexico, 1846-'47.*

La Vaca, Texas.....	28°	37'	00"	north.
Victoria, ".....	28	46	57	"
One mile north of San Antonio, Texas.....	29	26	53.4	"
Left bank Medina river, near Castroville, Texas	29	20	15.3	"
Right bank Seco river, Texas.....	29	20	56.95	"
" Little Sabinos, Texas.....	29	15	52.7	"
" Rio Frio, Texas.....	29	17	32	"
" Leona, Texas.....	29	08	00	"
Left bank Nueces, Texas.....	28	59	13.8	"

Ex.—5



Reynoso creek, Texas.....	28° 39'	38.9'	north.
Las Cuevas, Texas.....	28 30	53.7	"
Left bank Rio Grande, Texas.....	28 22	43.4	"
Four miles from Presidio del Rio Grande, Mexico.....	28 20	48.5	"
Near Nava, Mexico.....	28 24	43	"
Five miles from San Fernando de Rosa, Mexico.....	28 24	39.5	"
At Santa Rita river, Mexico.....	28 16	52.3	"
Rio Alamos, Mexico.....	27 58	20.5	"
1½ mile ESE. of Santa Rosa, Mexico.....	27 52	02.7	"
Arroyo del Ahura, (right bank,) Mexico.....	27 33	20.0	"
4 miles north of Monclova, Mexico.....	26 57	46	"
½ mile NE. of Monclova, Mexico.....	26 54	44.26	"
Castaña, Mexico*.....	26 47	00	"
Bajan, Mexico*.....	26 34	30	"
La Joya, Mexico*.....	26 23	15	"
Near hacienda Venadito, Mexico.....	26 02	11	"
Three miles from hacienda Saucedo, Mexico.....	25 45	17.4	"
San Antonio, (de Jarral,) Mexico.....	25 33	55.7	"
Pastora, Mexico.....	25 38	46.3	"
Cienega Grande, Mexico.....	25 33	40.7	"
1¼ mile north of Parras, Mexico.....	25 26	48	"
Parras, Mexico.....	25 25	00	"
Hacienda Castañuela, Mexico, (probably).....	25 25	24	"
Hacienda Los Muchachos, Mexico.....	25 17	58.5	"
Saltillo, Mexico.....	25 26	22	"
Hacienda Patos, Mexico.....	25 22	31	"
Agua Nueva, Mexico.....	25 11	43.6	"
Monterey, Mexico.....	25 40	13	"

The above latitudes were determined by observations with the sextant upon the north star, (Polaris.)

Corpus Christi, (according to Captain Cram,)

Texas.....	27° 47'	17".87	north.
North end of Padre island, Texas.....	27 37	00	"
Brasos Santiago, Texas.....	26 06	00	"
Boca del Rio Grande, Texas.....	25 58	00	"

*Recapitulation of longitudes observed and calculated.*

	In arc.	Time.
San Antonio, Texas.....	98° 52' 30"	6h. 42m. 4.8s.
Presidio del Rio Grande.....	100 31 12	
Right bank Sabinos river.....	101 33 00	(Observed by J. Gregg.)
Monclova.....	101 39 18	6h. 46m. 37.2s.
Saltillo.....	101 01 45	6h. 44m. 7s.
Monterey.....	100 25 36	6h. 41m. 42s.
Corpus Christi, (according to Captain Cram,).....	97 27 02.5	west of Greenwich, according to Captain Cram.
Brasos Santiago.....	97 12 00	

\* Observed by Mr. J. Gregg.

These longitudes were all determined by observations on the eclipses of Jupiter's satellites, except that of Saltillo, which was determined by the method of lunar distances.

[The above determinations are the result of 350 observations, besides the independent ones by Mr. Gregg, of which he kindly permitted us to avail ourselves, and are filed in the Topographical Bureau for future use.—GEO. W. HUGHES.]

NOTE.—The river San Antonio flows into the Guadalupe not far from the debouche of the latter on the bay of Esperitu Santo, and both are represented as being navigable for steamboats, the San Antonio to Goliad, (and in the rainy season for a much greater distance,) and the Guadalupe some twenty miles above Victoria. A short railroad has been projected from Indian Point, at the mouth of La Vaca river, in Matagorda bay, to the mouth of the San Antonio. When this work is completed it will open an excellent communication through San Antonio de Bexar for the Chihuahua and Santa Fe trade, taking the route recently discovered by Colonel Hays to the mouth of the Conchos river, an affluent of the Rio Grande, from which point there are excellent roads to Chihuahua and to Paso del Norte. The trade to the upper and interior portion of Coahuila would also naturally take this direction to San Antonio, which would thus become an important commercial entrepot.