

Harry P. Hewitt

“‘El deseo de cubrir el honor nacional’: Francisco Jiménez and the Survey of the Mexico-United States Bounder, 1849-1862”

p. 709-719

*La ciudad y el campo en la historia de México. Memoria de la VII Reunión de Historiadores Mexicanos y Norteamericanos. Papers presented at the VII Conference of Mexican and the United States Historians*

Gisela von Wobeser y Ricardo Sánchez (editores)

México

Universidad Nacional Autónoma de México  
Instituto de Investigaciones Históricas

1999

956 p.

ISBN 968-36-2348-4 (tomo II)

ISBN 968-36-1865-0 (Obra completa)

Formato: PDF

Publicado en línea: 30 de noviembre de 2023

Disponible en:

<http://www.historicas.unam.mx/publicaciones/publicadigital/libros/276-02/ciudad-campo.html>



INSTITUTO  
DE INVESTIGACIONES  
HISTÓRICAS

D. R. © 2023, Universidad Nacional Autónoma de México-Instituto de Investigaciones Históricas. Se autoriza la reproducción sin fines lucrativos, siempre y cuando no se mutile o altere; se debe citar la fuente completa y su dirección electrónica. De otra forma, se requiere permiso previo por escrito de la institución. Dirección: Circuito Mtro. Mario de la Cueva s/n, Ciudad Universitaria, Coyoacán, 04510. Ciudad de México



Harry P. Hewitt\*

**"El deseo de cubrir el honor nacional":  
Francisco Jiménez and the Survey of the  
Mexico-United States Boundary, 1849-1857**

The available literature pertaining to the boundary survey of the Mexico-United States border following the Mexican War reflects little if any interest in the activities of the Mexican boundary commission engineers who were charged with surveying specific parts of the frontier. In particular Captain Francisco Jiménez, a Mexican scientist, played a significant role, but he has never been given proper recognition for his participation.

The reasons for this oversight are many, including a paucity of Mexican documents and sources, a lack of interest on the part of scholars to investigate and discuss the experiences of the Mexican engineers, and a singular reliance on the reports, journals, diaries, and other original documents produced by the United States boundary commission and those associated with it. There is also a natural inclination on the part of American scholars to key in on the activity of the United States commission. Conversely, there has been a lack of interest, or reluctance, on the part of Mexican scholars to deal in depth with the details that were necessary in carrying out the Guadalupe Hidalgo Treaty because of its painful and humiliating character. Regardless of what the reasons might be, the literature on the boundary survey either ignores the role of the Mexican engineers, mentions them only in passing, or, most unfortunately, pays lip service to the Mexican commission while at the same time suggesting that the meaningful surveying was accomplished by the United States engineers with the Mexican engineers viewed as cooperating in a limited role.<sup>1</sup>

This perception of the Mexican commission's field work does not seem to be justified even when using purely United States sources. Comments made by the United States astronomer Major William H. Emory and the Mexican surveyor José Salazar y Larregui during the California portion of the field work in 1849, are most frequently cited to suggest that the Mexican commission failed to carry out its own observations because it was not well supplied with astronomical instruments and it had

\*Midwestern State University

<sup>1</sup>Lenard E. Brown, *Survey of the United States-Mexico Boundary, 1849-1855* (Washington, D.C., 1969); Odie B. Faulk, *The Gila Trail and the Opening of the Southwest* (New York, 1973); Faulk, *Land of Many Frontiers* (New York, 1968); Faulk, *Too Far North, Too Far South* (Los Angeles, 1967); William H. Goetzmann, *Army Exploration in the American West, 1803-1863* (Lincoln, 1979); William H. Goetzmann, *Exploration and Empire* (New York, 1966); Robert Hine, *Bartlett's West: Drawing the Mexican Boundary* (New Haven, 1968); Thomas L. Scharf, "Amiel Weeks Whipple: Boundary and Railroad Surveys in the Southwest, 1849-1854" (M. A. thesis, University of San Diego, 1978); Edward S. Wallace, *The Great Reconnaissance* (Boston, 1955); Joseph Richard Werne, "Guadalupe Hidalgo and the Mesilla Controversy" (Ph. D. dissertation, Kent State University, 1972). Except for several articles these are the main secondary sources that deal with the boundary survey in any detail. Mexican secondary sources detailing the activities of the boundary survey are virtually non-existent, but a few do touch on some aspects of the work. See Francisco R. Almada, *Resúmen de historia del estado de Chihuahua* (Mexico City, 1955); Alberto Marín Carreño, *La diplomacia extraordinaria entre México y Estados Unidos, 1789-1947*, 2 vols. (Mexico City, 1961); Carreño, *México y los Estados Unidos de América* (Mexico City, 1922); Francisco Domínguez Díaz, *México y la historia jurídica de algunos de sus desmembramientos territoriales* (Mexico City, 1977); Horacio Herrera, "Estudio sobre el límite internacional terrestre de los Estados Unidos de Norte América con la República Mexicana", *Boletín de la Sociedad Mexicana de Geografía y Estadística*, 65 (1948), pp. 171-187; *Memoria documentada del juicio de arbitraje del Chamizal*, 3 vols. (Mexico City, 1911); Humberto Escoto Ochoa, *Integración y desintegración de nuestra frontera norte* (Mexico City, 1949); Luis G. Zorrilla, *Historia de las relaciones entre México y los Estados Unidos de América, 1800-1958*, 2 vols. (Mexico City, 1977).

some serious problems with its equipment.<sup>2</sup> However, a careful reading of both Emory's and Sálazar's reports does not justify this conclusion. Sálazar clearly shows that in spite of inferior and some defective equipment, the Mexican commission maintained an independent observatory, and its scientific sections recorded both astronomical and topographical data, results which were still in line with those of the United States surveyors. The Mexican commission achieved some of its geodetic measurements by borrowing instruments from Emory and the American surveyor Andrew B. Gray when necessary. Sálazar, in commenting on the results of the California survey, expressed satisfaction with the boundary, stating that Mexico achieved as favorable a line as possible given the circumstances. This outcome could not have been achieved without knowledgeable input and activity on the part of the Mexican engineers.<sup>3</sup>

The Mexican Commissioner, General Pedro García Conde, and Sálazar were both ardent nationalists and worked tirelessly to secure a satisfactory boundary as favorable to Mexico as possible. While Emory was occasionally critical of the inactivity of the Mexican commission, particularly while working on the upper Río Grande (Río Bravo) in 1852 and 1853, and the Gadsden Purchase (Mesilla Treaty) line west of El Paso, Chihuahua (Ciudad Juárez) in 1855, he did not generally indict the activities of the Mexicans. His most cited comment, which was made in California, was rather straightforward and simply stated that given the quality of the Mexican equipment, he did not expect to rely on their work or to get much help from them.<sup>4</sup> This construction is far different from what has been implied by some authorities who have suggested that the Mexican commission was inactive, and totally dependent upon the United States commission. To the contrary, Emory also mentioned a number of instances that showed Mexican engineering sections were working.<sup>5</sup> Probably the most significant of these was the section operating under the direction of Francisco Jiménez. Thus, it seems that not only was the Mexican commission actively employed much of the time, but also that Francisco Jiménez was the most active of all its engineers.

Despite the criticism to which the Mexican boundary commission has been subjected, all sources agree that most of its troubles were caused by a lack of support from the national government, not only in furnishing poor equipment but also in failing to provide adequate financial and escort support. In fact, both governments were frequently negligent in providing support for their respective operations. It is also important to note that the engineers of both commissions held each other in high esteem and were quick to point out their mutual respect for each other's competence.<sup>6</sup>

The role of Francisco Jiménez, acting in the capacity of first or primary engineer on the Mexican commission, provides the best example of the activity of at least one of the Mexican survey sections. His importance in the scientific work was attested by his own superiors García Conde and Sálazar, as well as by a number of Americans including Emory, Lt. Colonel James D. Graham, Lt. Amiel W. Whipple, and Lt.

<sup>2</sup>Brown, Faulk, and Goetzmann cite William H. Emory, *Report on the United States and Mexican Boundary Survey*, 3 vols. (Washington, 1857), vol. 1, p. 5; and José Sálazar y Larregui, *Datos de los trabajos astronómicos y topográficos, dispuestos en forma de diario* (Mexico City, 1850), p. 13, to substantiate their view of the inferiority of the Mexican commission's survey equipment. There is, however, nothing on page 13 of Salazar's work to suggest the conclusion reached by these scholars, although on pages 16 and 23 mention is made of defective instruments and Salazar does mention on pages 19, 33, and 64 that he borrowed instruments from Andrew B. Gray and William Emory.

<sup>3</sup>Salazar, *Datos de los trabajos*, p. 26.

<sup>4</sup>Emory, *Report*, vol. 1, p. 5.

<sup>5</sup>*Ibid.*, vol. 1, pp. 25-29, 84, 114, 118-119, 123-124, 139, 141, 166-167; and see also a significant number of references about Mexican activity during the dates July, 1849 to May, 1850 and November, 1851 to July, 1855, in William H. Emory, "Letterbook" (William H. Emory Papers, Beinecke Library, Yale University, New Haven, Connecticut).

<sup>6</sup>Sálazar, *Datos de los trabajos*, p. 38; Emory, *Report*, vol. 1, pp. 5, 124; Sálazar to Emory, 8 December 1851, Emory, "Letterbook", Emory Papers; Lt. Col. James D. Graham to Lt. Amiel Weeks Whipple, 7 September 1851, James D. Graham "Letterbook" (James D. Graham Papers, International Boundary and Water Commission Archive, El Paso, Texas); Francisco Jiménez, "Diario-Memoria de los trabajos científicos practicados bajo la dirección de Francisco Jiménez", p. 75, is an unpublished manuscript located in the Archivo General de la Secretaría de Relaciones Exteriores, México, D.F. (hereafter, AGSRE).

Nathaniel Michler. A proper appreciation and understanding of Jiménez' contributions to the survey work is not only important for its historical significance in increasing our understanding of the survey, but also for its restoration of credibility to the Mexican commission and its re-establishment of Jiménez' deserved reputation as one of Mexico's most prominent nineteenth-century scientists.

At the time of Jiménez' selection to serve on the boundary commission, he was "profesor interino de mecánica" at the Military College in Mexico City. The Mexican Commissioner García Conde expressed great confidence in Jiménez by recommending him as one of three acceptable candidates for the appointment of surveyor, a position which subsequently went to José Sálazar y Larregui.<sup>7</sup> Jiménez' duties between his arrival in California in July, 1849 and November, 1850 are not too clear. His own "Memoria" states that Sálazar assigned him various astronomical and topographical field tasks, and García Conde noted that he had divided surveying duties between Sálazar and Jiménez but gave no details.<sup>8</sup> In January, 1850, however, Jiménez was placed in charge of his own survey section and carried out geodetic observations between the Gila River's junction with the Colorado River and San Diego. Sálazar spoke highly of Jiménez' work in California, saying: "He is a young man with clear talent and solid instruction, and many of the best observations were made by him".<sup>9</sup>

Once the initial points had been established on the coast south of San Diego and at the junction of the Colorado and Gila Rivers, Jiménez was appointed to run and mark the boundary in between with Lt. Edmond Hardcastle. They agreed to meet in San Diego on January 1, 1851, but Jiménez was subsequently replaced by Ricardo Ramírez. This change was caused by the resignation of Salazar in the spring of 1850 and García Conde recommended Jiménez as Salazar's replacement. In promoting Jiménez as his choice for surveyor, García Conde pointed out that during the work in California he had divided the surveying responsibilities between the two men, and no doubt he wanted an experienced person with him when the two commissions met next in El Paso in December, 1850.<sup>10</sup> Even though Salazar eventually rejoined the Mexican team, Jiménez' role was becoming more important. Once the commission departed for El Paso, he continued in his original slot as primary engineer and also assumed the position of geographer and secretary of the Mexican commission.<sup>11</sup>

Jiménez performed an active role in El Paso, where he headed the survey section charged with determining the latitude and longitude of that town. He carried out his work between January and the middle of March, 1851, with three assistants --Juan B. Espejo, Agustín García Conde, and Manuel Alemán. The section set up their observatory near the church in El Paso; and, despite strong winds which made accurate observations difficult, Jiménez was pleased with the results. He was also pleased with the instruments made available to him which helped him to make accurate observations.<sup>12</sup> This indicates that the Mexican commissio was able to replace its poor California equipment with creditable instruments and that it was no longer as dependent upon the United States commissions for help as some have suggested.

While Jiménez carried out his duties in El Paso, García Conde and the new American Commissioner John Russel Bartlett, after considerable debate, were able to agree upon the location of the southern boundary of New Mexico. José Salazar and

<sup>7</sup>Pedro García Conde al Ministerio de Relaciones, 21 February 1849, AGSRE, Expediente X/221, Legajo 847/22, f. 95.

<sup>8</sup>Jiménez, "Diario-Memoria", p. 3.

<sup>9</sup>Salazar, *Datos sobre los trabajos*, p. 38.

<sup>10</sup>García Conde al Ministerio de Relaciones, 15 June and 1 August 1850, AGSRE, X/221, 847/22, ff. 168, 184. García Conde and Weller agreed to terminate the survey work in California and met in the more convenient town of El Paso rather than continue up the Gila River. This was a wise decision because both commissions had suffered from a number of problems, most of which were caused by the arrival of the gold rushers.

<sup>11</sup>*Ibid.*, ff. 109, 201, Ignacio Reyes al Ministerio de Relaciones, 6 August 1850.

<sup>12</sup>Jiménez, "Diario-Memoria", pp. 3-5.

Lt. Whipple were ordered to determine the location of the initial point where the southern boundary of New Mexico, commonly called the Bartlett-Conde line, struck the Río Grande. Both commissions moved to that point near Doña Ana, New Mexico, in April, 1851 and formally acknowledged the location of the new boundary. Afterwards they prepared to run and to mark that line. García Conde and Salazar had a disagreement over the employment of their survey sections. Salazar was to work west from the initial point and was to cooperate with Lt. Whipple in this phase. Sálazar wished to use Jiménez' section at some mid-point on the line which could then coordinate with his as he worked west. García Conde vetoed this request and thought it better to send Jiménez to the west end of the line. Later, when Salazar discovered that Jiménez had instead camped on the Mimbres River with García Conde the entire months of May and June, he was furious. Sálazar complained to the minister of Foreign Relations that in his opinion García Conde's change of orders for Jiménez accomplished "nothing useful for the survey nor for the republic".<sup>13</sup> Sálazar also suggested that García Conde's actions had destroyed the harmonious relationship that had existed between the two commissions, and he also reported that Indians had burned the area, making it difficult to perform the necessary observations.

Jiménez noted cryptically in his "Memoria" that García Conde ordered him to make observations along the Mimbres River and that these orders were not "contrary to Sr. Salazar's". Of these observations Jiménez stated:

...I put these figures and results in their proper location, for these points are purely (of interest) to travelers and now belong to the United States. One day they might inhabit the area and their location might be of interest. Above all it would show how we were employed during the time until our arrival at the colony of Santa Cruz.<sup>14</sup>

In July, 1851 the United States surveyor, Andrew Gray, and the new astronomer, Lt. Colonel James D. Graham, finally arrived at Santa Rita del Cobre, New Mexico, where commissioner Bartlett had headquartered the United States commission. Both men were responsible for actions which disrupted the work in New Mexico: Graham because he ordered Lt. Whipple to suspend his survey and come to Frontera, near El Paso, in order to discuss the work, and Gray because he refused to concur with the Bartlett-Conde agreement. In the chaos that followed, an impasse developed during which García Conde stood firm in his refusal to re-negotiate the now-disputed boundary and ordered Salazar to finish the survey and test the line.<sup>15</sup> Bartlett was powerless to resolve the dispute with Gray but assured García Conde that the work could be completed at a future date pending a resolution of the problem. In the meantime, both commissioners agreed that they could commence the surveys of the Gila and Río Grande Rivers.

The United States commission had already made several reconnaissances of the headwater area of the Gila, and the joint commission had agreed to assign the United States engineers responsibility for the topographical survey while the Mexican engineers would make the astronomical observations. This agreement was not well received by subordinates on either commission. Salazar confided to Lt. Whipple "that the commissioners were perpetually passing resolutions contradictory to each other; that many passed six months since were unsigned".<sup>16</sup> Salazar's frustration was such that he

<sup>13</sup>Salazar al Ministerio de Relaciones, 18 July 1851, AGSRE, X/221, 847/22, ff. 361-369.

<sup>14</sup>Jiménez, "Diario-Memoria", p. 5.

<sup>15</sup>Amiel Weeks Whipple, "Journal", 7 September 1851 (Amiel Weeks Whipple Papers, Oklahoma State Historical Society, Oklahoma City, Oklahoma); Minutes of the Joint Commission, 6 September 1851 (John Russell Bartlett Papers, John Carter Brown Library, Brown University, Providence, Rhode Island); *Memoria documentada*, vol. 2, pp. 132-133.

<sup>16</sup>Whipple, "Journal", 25 September 1851, Whipple Papers; Whipple to A.H. Stewart, 30 September 1851, Whipple, "Letterbook", Whipple Papers.

intimated to Whipple that he might resign. Whipple blamed Gray for this agreement suggesting that:

...he (Gray) desired to conduct the surveys himself and would not allow the topographical engineers even to take part in the astronomical work. The effect has been to relieve the Mexican commission of all responsibility with regard to the survey...<sup>17</sup>

Salazar disclaimed any responsibility for the decisions reached by the commissioners and ordered Jiménez to permit Manuel Alemán to make a topographical survey if circumstances permitted. However, he did not expect García Conde, who intended to accompany the Gila survey section, to allow the necessary time for such measurements.<sup>18</sup>

The joint commission, which met on September 6, 1851, instructed the surveyors to draw up plans for carrying out the survey of the Gila, after which Lt. Whipple and Francisco Jiménez were appointed leaders of their respective sections.<sup>19</sup> Jiménez and Whipple met at that time and agreed to a plan of action. However, because both commissions were short of food supplies, parties under the leadership of the two commissioners retired to Santa Cruz, Sonora, to re-supply, thus delaying the departure for the Gila.

Lt. Col. Graham expressed pleasure upon learning of Jiménez' appointment to work with Whipple on the survey of the Gila: "I am much gratified that an officer of the merit and scientific qualifications of Captain Jiménez should have been selected by General Conde as your colleague in this important work", he wrote to Whipple.<sup>20</sup> It is not clear if Graham had met Jiménez previously or how he had become aware of Jiménez' merits. However, Salazar and Graham had met previously in Mexico City; therefore, he knew personally at least one of the members of the Mexican commission.<sup>21</sup>

Initially, it was intended that Jiménez and Whipple work jointly on the Gila recording the astronomical observations while Gray conducted the topographical survey. However, the joint commission met again on September 25 in Santa Cruz without the participation of José Salazar, who had begun his return to El Paso. At that time, because of the lateness of the season and in order to expedite the survey, the commissioners decided to divide chores on the Gila. Jiménez would begin at the junction of the Gila and Colorado Rivers while Whipple would work down river from its approximate intersection with the western boundary of New Mexico. They expected to meet in the area of the Pima villages.<sup>22</sup> Even though they agreed that each section's observations would be examined for verification, it was a little surprising that García Conde would abandon the upper Gila work to the United States. He had previously been very careful to insure Mexican participation in work which might affect the territorial interests of Mexico. The work on the Gila, however, did not present an opportunity for Mexico to improve its boundary significantly.

Furthermore, a deteriorating financial condition was certainly a factor since García Conde was having difficulty getting support from the government, and splitting the survey certainly would alleviate his pecuniary problems. Moreover he succeeded in relieving his own survey section from the necessity of traveling down the Gila through the heart of some of the worst of the Apache territory. His party had been attacked a month earlier as they traveled toward Santa Cruz, and this could have been on his mind when he agreed to give the eager United States commission that honor. The Mexicans were also more familiar with the Gila river, particularly the lower portion,

<sup>17</sup>*Ibid.*, "Journal", 25 September 1851.

<sup>18</sup>Jiménez, "Diario-Memoria", p. 6

<sup>19</sup>Whipple, "Journal", 7 and 8 September 1851, Whipple Papers; Minutes of the Joint commission, 6 and 7 September 1851, Bartlett Papers; *Memoria documentada*, vol. 2, pp. 134-137.

<sup>20</sup>Graham to Whipple, 7 September 1851, Graham, "Letterbook", Graham Papers.

<sup>21</sup>*Ibid.*, Graham to Bartlett, 15 August 1851; Whipple to Graham, 29 June 1851, and Whipple to Salazar, 3 July 1851, Whipple, "Letterbook", Whipple Papers.

<sup>22</sup>Minutes of the Joint commission, 25 September 1851, Bartlett Papers; *Memoria documentada*, vol. 2, p. 138.



and when it came time to divide responsibility García Conde took the less difficult section for himself. Whatever the real reasons for splitting the survey, both Jiménez and Whipple suffered difficult experiences.

In the meantime García Conde, who was in bad health and was having difficulty securing supplies for his party, dispatched Jiménez to the Gila on October 27, 1851 without accompanying him. Jiménez carried with him several sacks of flour, some trade goods which belonged to the escort commander, Captain Hilarión García, and several hundred pesos. He hoped to barter trade goods for food along the way and was less than confident about the situation in which he now found himself. This led Jiménez to comment:

Even though I had not received even half of a real in salary since May, but desiring to protect the national honor I decided to march under gloomy prospects and vain hopes that I might find supplies in the middle of the desert. I began the journey on October 27 with a 21-man escort without proper clothes or shoes, vicious and insubordinate, and without arrieros. There were sixteen head of livestock and sixteen pack mules whose harnesses were practically useless. They carried four fanegas of flour, scant provisions for the engineers, and three bottles of oil for the lamps.<sup>23</sup>

During the course of the operation, Jiménez' endurance, courage, knowledge, health, and patience were tested to the utmost. Continuing, Jiménez described his ordeal, which was all too typical of the entire expedition:

I arrived in Tucson November 1 after making the most arduous journey imaginable without arrieros. One pack mule and three livestock were lost on the road. Three soldiers deserted, and the flour packed in very fragile sacks, was lost entirely.<sup>24</sup>

In the face of continued desertion, insubordination, shortage of supplies, and lack of forage, which weakened the mules, Jiménez continued on to the Pima villages near the junction of the Salt and Gila Rivers. When Captain García's agent returned from the villages without completing a single transaction in trade goods, Jiménez again despaired:

On the 22nd (of November) the person appointed by Captain García to sell the trade goods we carried returned to camp manifesting that he had not been able to sell any. Since this was our only resource, we lost hope that we might be able to find supplies ahead. I was faced with the dilemma of whether to return to Tucson to buy supplies or to continue on ahead and risk perishing. However, because there was little prospect of finding supplies in Tucson and having already begun the journey, I decided to take the second option and continue the trip.<sup>25</sup>

The party persevered and slowly worked their way down the Gila following Sálazar's instructions to make as many measurements as possible and to remain close to the river. In this manner, and by resting and securing forage for the animals, they reached the Gila's junction with the Colorado River. However, they were forced to leave some of their instruments behind, buried at one of their camps, because they lacked enough healthy mules to carry them. Thus, the expedition remained in difficult circumstances:

Today the few provisions left were gone; there remained a small number of livestock and two *tercios* of flour with which to continue on to the Colorado River. The escort had to continue in the rigorous winter weather without adequate clothing or tents during rainy days and without help. All was

<sup>23</sup>Jiménez, "Diario-Memoria", p. 7.

<sup>24</sup>*Ibid.*

<sup>25</sup>*Ibid.*, p. 8.



suffering...On the 17th (of December) we reached the confluence of the Gila and Colorado Rivers. Our only hope of replenishing our scarce provisions lay in the knowledge that the United States had established a fort at that point previously, but this was shattered when it was discovered abandoned. Nonetheless this circumstance was to my advantage because I did not have enough money to have influenced the spirits of the soldiers, who morale-wise were anxious to terminate such a dismal journey.<sup>26</sup>

The following day, December 18, Lt. Whipple and his party arrived at the junction having been forced to abandon the survey some sixty miles upstream because they, too, had run out of provisions.<sup>27</sup> After exchanging greetings and no doubt recounting their mutual plights, Jiménez began his return up the Gila while Whipple continued on to San Diego. Difficulties continued to plague the Mexican section:

We continued our retreat which was, as you might expect, worse than coming. Our departure was detained two or three hours each morning because the mules had strayed due to the lack of care provided for them. The soldiers were only interested in gambling, and while it should not have been permitted, it could not be stopped and it was necessary to tolerate their abuses. Because of this, the lack of pasture along the river, and the constant rains, we lost more mules on our return. In this fashion we continued our retreat on the 28th (of December) without supplies and in disorder, a consequence of our situation. We arrived at the pueblo of the Maricopas at midnight of the 29th.<sup>28</sup>

As if these many problems were not sufficient, Jiménez suffered a severe eye inflammation which made it impossible for him to perform any astronomical observations. He was forced to delegate this responsibility to Alemán and Agustín García Conde. The death of Commissioner García Conde in December, 1851, while he was still on the Gila, further complicated matters. Pecuniary problems which continued to plague Jiménez' section were carefully detailed in a report to José Salazar after he finally succeeded in reaching Arizpe, Sonora, in February, 1852.

Jiménez made a careful recording of astronomical observations of numerous points between Arizpe and El Paso when his party returned to El Paso in May or June, 1852. He also made a final distribution of his equipment and resources to Salazar and asked for permission to return to Mexico City because of his continuing eye problems. Salazar had nothing but high praise for Jiménez, mentioning on several occasions that he was capable, intelligent, and meritorious. Now that Salazar was the new commissioner, having replaced García Conde, he requested that Jiménez continue as a member of the Mexican commission in his original capacity as first engineer and secretary.<sup>29</sup>

In spite of all his troubles, the fact that Jiménez was able to complete his survey of the Gila River was a testimony to his dedication, perseverance, and determination to serve the interests of his country. However, both he and Whipple endured their troubles for naught, because all was nullified when the United States purchased the Mesilla Valley, thus solving the dispute over the southern boundary of New Mexico. From the perspective of personal accomplishment and scientific interest, though, Jiménez succeeded. He maintained the integrity of the Mexican commission and accumulated valuable scientific data which would be of future value in the mapping of the frontier states.

Initial plans for the survey of the Río Grande were developed by Salazar and Graham in November, 1851, and later revised and modified by Salazar with Graham's replacement, William Emory, in April, 1852. However, official confirmation did not

<sup>26</sup>*Ibid.*, pp. 8-9.

<sup>27</sup>Whipple, "Journal", 18 December 1851, Whipple Papers.

<sup>28</sup>Jiménez, "Diario-Memoria", p. 9.

<sup>29</sup>Salazar al Ministerio de Relaciones, 29 June and 2 October 1852, AGSRE, X/221, 847/22, ff. 240, 260-261.



occur until September 18, 1852, when Bartlett and Salazar met at Magoffinsville, Texas.<sup>30</sup> This agreement divided the Río Grande into six sections:

1. Running from the initial point where the southern boundary of New Mexico struck the Rio Grande to “la colonia civil de San Ignacio”.
2. From San Ignacio to Presidio del Norte.
3. From Presidio del Norte to “colonia militar de Agua Verde”.
4. From Agua Verde to Laredo.
5. From Laredo to Matamoros.
6. From Matamoros to the mouth of the river.

Both commissions were to survey the first and sixth sections and in order to conserve time, the United States would handle the second and fourth sections while Mexico would assume responsibility for the third and fifth. Once again Francisco Jiménez appears as the Mexican engineer who was successful in accomplishing his mission. In October of 1852, Salazar ordered Jiménez to return from El Paso to Mexico City to prepare to carry out the fifth and sixth portions of the survey agreement. After innumerable delays because of the failure of the government to provide him with the necessary funds and escort, Jiménez departed for Matamoros on February 10, 1853, via Veracruz and new Orleans, arriving there on March 29.<sup>31</sup>

The Mexican government intended that customs offices in border towns such as Matamoros assume the responsibility of funding the authorized expenses of the commission.<sup>32</sup> Jiménez carried letters of such authority from the government, which had assured him that appropriate military commanders and customs agents on the frontier had been advised to cooperate with him in his work. The customs agent at Matamoros, Manuel Cruzado, manifested great sympathy for Jiménez but reported that there was no money available because it all went to support the military expenses of the district, so that even expenses within the customs office remained unpaid.<sup>33</sup> Colonel Valentín Cruz, the military commandant of the district, proved equally solicitous but failed to produce the requested military escorts or to support Jiménez in his efforts to secure financial relief for his section. In desperation, Jiménez wrote to the Minister of Foreign Relations, Lucas Alamán, who promptly replied supporting his request.<sup>34</sup> Colonel Cruz, who was in essence a frontier caudillo and somewhat independent of any strong control by the central government, eventually gave Jiménez some cooperation. The customs agent, Manuel Cruzado, proved expendable and was replaced by Francisco Landero y Cos on June 27, 1853.<sup>35</sup> From this point on, Jiménez had fewer financial problems. However, he continued to have problems with Colonel Cruz although he succeeded in getting an escort for Agustín Díaz, who was charged with carrying out the topographical survey:

When Mr. Landero arrived (to direct) the aduana, the financial problems ceased but in its place began the poor escort service which consequently delayed the work.<sup>36</sup>

Jiménez remained in Matamoros to carry out astronomical observations, which he completed toward the end of June. He then moved his camp to the mouth of the river and remained there until the end of August establishing the latitude and longitude of

<sup>30</sup>Minutes of the Joint Commission, 18 September 1852, Bartlett Papers; *Memoria documentada*, vol. 2, pp. 148-149.

<sup>31</sup>Jiménez, “Diario-Memoria”, p. 23.

<sup>32</sup>*Instrucción que deja Guillermo Prieto sobre los negocios pendiente en la Secretaría que estuvo a su cargo a su sucesor* (Mexico City, 1852), p. 23.

<sup>33</sup>Jiménez, “Diario-Memoria”, pp. 29-33.

<sup>34</sup>*Ibid.*, pp. 36, 34.

<sup>35</sup>*Ibid.*, pp. 34.

<sup>36</sup>*Ibid.*, pp. 39.

that point on the border. It then remained for Jiménez to move his section up river to Nuevo Laredo, to make what observations might be necessary on the way, and to remain about one month in that city in order to complete a thorough determination of its geographic location. This activity coincided with Emory's arrival to complete the United States survey left unfinished the previous year. At that time the American commission had been forced to abandon the survey because the United States Congress refused to appropriate money pending a satisfactory resolution of the disputed New Mexico boundary. Emory's reaction when he discovered that Jiménez was carrying out the survey is not too clear, but he appears to have been somewhat exercised over the fact that Jiménez was working ahead of him. There was a significant amount of correspondence between the two relative to their work and to procedures to place monuments at the mouth of the river. Once Emory was satisfied with the situation, he appointed Lt. James Radziminski to complete the final work on the river in cooperation with Jiménez.<sup>37</sup>

Interestingly, Emory made no mention of Jiménez or the work of the Mexican commission in his final "Report", leaving the impression that there was no activity on their part. He did mention that Mexican and American filibusters were active in the area and that he had enlisted the support of Colonel Cruz to help control that problem. It would appear that Cruz was more cooperative with Emory than he was with Jiménez.<sup>38</sup>

Jiménez continued to have problems securing an escort. He again ordered such support on August 29 in preparation for his movement toward Nuevo Laredo, but when Colonel Cruz failed to supply it, Jiménez fired off another letter to the Ministry of Foreign Relations, now under the direction of Manuel Bonilla. Colonel Cruz, however, eventually agreed to provide him with six soldiers, assuring him that up river at Ciudad Camargo he would receive a full complement of twenty-five men. The commanding officer at Camargo expressed no knowledge of any such orders from Cruz, but he did condescend to provide Jiménez with twelve men to accompany him to Nuevo Laredo. Upon reaching Nuevo Laredo, however, they were to return to Camargo immediately.

The journey to Nuevo Laredo was difficult because the roads were bad and caused several wagons to break down along the way. Finally, the party arrived in Nuevo Laredo on September 25, when Jiménez made a very discouraging observation about the town:

Nuevo Laredo is a place whose population has been reduced to four or five families, and the troops that lived in the colony have left. It is attacked occasionally by wild Indians, which meant that it was not prudent to send the mules to pasture without an escort. I was obliged to keep them in a corral though it was difficult to find corn and grain for them. One of the (observation) posts built by Mr. Díaz was found destroyed.<sup>39</sup>

Then, on October 4, Captain Donaciano Frutos arrived with the promised escort and joined the survey section in Nuevo Laredo.

Returning to Matamoros from Nuevo Laredo was made worse because of rains which rendered the road almost impassable, and wagon breakdowns necessitated a stop at Guerrero. In commenting on Guerrero, Jiménez reported:

...it appears to have been an important town but now, like almost all our places on the frontier, it is in a state of decay.<sup>40</sup>

<sup>37</sup>*Ibid.*, pp. 80-85.

<sup>38</sup>Emory, *Report*, vol. 1, pp. 61-62.

<sup>39</sup>Jiménez, "Diario-Memoria", p. 41.

<sup>40</sup>*Ibid.*, p. 42

Although surrounded by frequent Indian hostility and filibuster activity, Jiménez was fortunate enough to escape any confrontations. He then returned to Mexico City in January of 1854. At that time, Mexico had completed the first, fifth, and sixth portions of the river survey and had probably done some work on the third section, primarily in the area of Presidio del Norte. Exactly how much was accomplished on this section is not clear, as it was the responsibility of engineers in Salazar's camp and there are few details of their activity.

While Francisco Jiménez has been forgotten as an important and active surveyor on the Mexican commission, he has received a little more credit for his operations in surveying part of the Gadsden Purchase boundary. He was appointed to head the survey section that was to meet with Lt. Nathaniel Michler in December, 1854, at the junction of the Gila and Colorado Rivers. From that point, they were to work down the Colorado River twenty miles and then east southeast toward the 111th meridian near present day Nogales.<sup>41</sup> As might be expected, escort and financial problems once again plagued Jiménez in this last effort to complete the boundary line. As a result of numerous delays, he did not reach the Colorado until March 13 and did not meet with Michler until March 26.<sup>42</sup> Michler reported that he had been in the area since December 9 and had completed much of the topographical and astronomical observations. Jiménez immediately went to work and carried out a series of independent observations of his own which conformed to those that Michler had made.<sup>43</sup>

Jiménez recounted that in his discussion with Michler, they had agreed on proposals as to how best to carry out the survey; but as the two teams tried to work east across the desert, heat and a lack of water forced them to turn back. They then decided to follow the Gila River trail to Tucson, to go south to the Nogales area, and to attempt to work northwest from the 111th meridian.<sup>44</sup> As a result of this decision, they met Emory who was working the line west from El Paso. Jiménez and Emory met and agreed to proceed with the latest plan, allowing both sections working in concert with Jiménez assuming overall command.<sup>45</sup> In this fashion the survey of the final section of the boundary was completed by August 23, 1855. Jiménez then proposed to Michler:

...that they march to the pueblo of Magdalena where the nice climate and good pasture would provide the necessities for rest and restore our men and animals who had had to work so hard for so many months. At the same time, our sections could be completing the remaining calculations and preparing the rough drafts of the topography of the boundary.<sup>46</sup>

Michler agreed to the suggestion and they reached Magdalena on September 4, finally concluding their work on September 25. At that time, Michler prepared to leave for El Paso and Jiménez for Ures, Sonora.

In concluding his account of the survey, which by this time had covered a period of seven years, Jiménez reflected on the good relations which had characterized the rapport between the American and Mexican engineers:

During all the time that we carried out the scientific work with Mr. Michler, the best harmony existed between all the individuals of the two sections and the officers of the two escorts. This harmony contributed to an efficient and happy conclusion, because we helped each other to overcome all the obstacles.<sup>47</sup>

<sup>41</sup>*Ibid.*, pp. 48.

<sup>42</sup>*Ibid.*, pp. 60.

<sup>43</sup>*Ibid.*, pp. 85.

<sup>44</sup>*Ibid.*, pp. 67, 70, 71, 90-91; Emory, *Report*, vol. 1, pp. 116-117.

<sup>45</sup>Jiménez, "Diario-Memoria", pp. 71, 93; Emory, *Report*, vol. 1, p. 29.

<sup>46</sup>Jiménez, "Diario-Memoria", p. 74.

<sup>47</sup>*Ibid.*, p. 75; Emory, *Report*, vol. 1, pp. 124.



From his first assignment in California to his conclusion of the boundary survey in 1855, Jiménez showed a clear determination to carry out his duties honorably and in precise scientific fashion. Salazar verified his importance, commenting with pride that the scientific work accomplished by the Mexican commission was the best achieved to date, and that no point of the country visited by the commission's engineers had ever been more accurately measured astronomically and topographically. He further stated that the engineers used the best known engineering methods of the day and accomplished the survey under the most dangerous and difficult circumstances. In addition, Jiménez prepared most of the maps of the survey produced by the Mexican commission. In concluding his report, Sálazar remarked that the quality of the work accomplished would not have been possible without the efforts of Francisco Jiménez and Manuel Alemán, who were responsible for most of the observations.<sup>48</sup>

All evidence indicates that Jiménez' calculations and observations were as completely reliable and of as high quality as those of the American engineers. Captain Francisco Jiménez should justly be remembered and recognized as a most responsible and significant engineer, carrying out the difficult task of surveying the new Mexico-United States boundary. He had accomplished his desire to "cubrir el honor nacional".

<sup>48</sup>Salazar al Ministerio de Relaciones, 26 February 1858, AGSRE, X/221, 847/22, ff. 41-43.

