

# Wireless Was Developed in Colorado

(1904-1907)

By E. N. PICKERELL\*

A chain of ten inter-city wireless telegraph stations, the first network of its kind in the world and the financial forerunner of the entire radio industry of today, was set up in Colorado in 1905. This was the real beginning of what later became the Radio Corporation of America.

During a period of two and one-half years, approximately two million dollars worth of wireless stock was sold in the Rocky Mountain area. Stations on the chain were erected in Colorado at Denver, Boulder, Fort Collins, Cripple Creek, Altman, Leadville, Trinidad, Pueblo and Colorado Springs; and in Wyoming, at Cheyenne.

The purpose of this chain of stations was principally for demonstration of wireless telegraphy and for the sale of stock in the American De Forest Wireless Telegraph Company, with headquarters at 42 Broadway, New York City. Abraham White of New York City was president of the company. A firm called The International Loan and Banking Company, of which Christopher C. Wilson was president, with offices in Room 202, Mining Exchange Building, corner of Fifteenth and Arapahoe Streets, Denver, Colorado, was appointed to handle all stock sales of the De Forest Company in the Colorado and Wyoming areas.

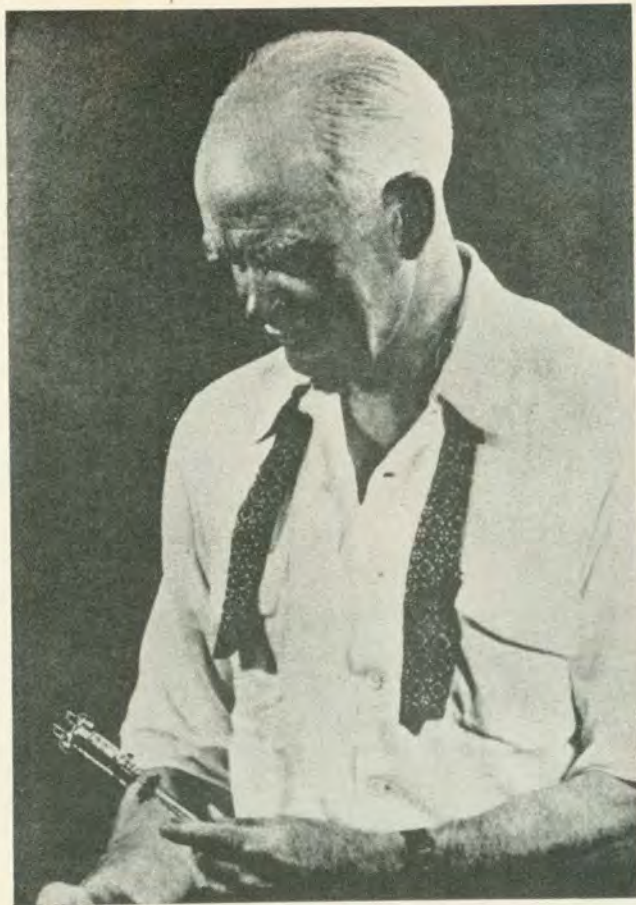
Like all American pioneering enterprises, this one found it necessary to raise capital to finance the wireless industry. Because there was much speculation in mining stocks throughout the Rocky Mountain region in those days, Colorado was selected as the site in which to promote the sale of wireless stock.

At the early stage of wireless development, most people doubted the merits of the invention, and these doubts had to be overcome by practical demonstrations, in order to sell stock. Therefore, it was necessary to build and operate stations. Hence, the ten stations came into being in the Rocky Mountain region.

Early in 1905 a radio engineer, Charles B. Cooper, and myself erected and installed one of the stations at Colorado Springs, and officially opened it for commercial traffic on July 5. The next morning the *Colorado Springs Gazette* carried a front page spread announcing the official opening of the wireless station by Governor

\* Through the courtesy of Ray Colwell and Kenneth E. Englert of the Historical Society of the Pikes Peak Region, this article by Mr. E. N. Pickerell, of Mineola, L. I., New York, has been made available for publication in *The Colorado Magazine*. Mr. Pickerell is a member of the Sons of the Revolution in New York and a member of the Museum Committee of that Society, at its headquarters in Fraunces Tavern. In 1906, he attended the Zebulon Montgomery Pike Centennial Celebration in Colorado Springs, at which time a large granite marker was erected to Pike's memory in Antlers Park.—*Editor*.





DR. LEE DE FOREST

His invention of the 3-Electrode Grid Vacuum Tube fifty years ago in 1906 was the birth of today's Electronics Industry.

Jesse F. McDonald. The *Evening Telegraph*, July 6, 1905, printed a copy of a congratulatory message which was transmitted over the newly inaugurated wireless circuit from Denver. It read as follows:

The Denver Chamber of Commerce sends greetings to the beautiful city at the foot of Pikes Peak. Every additional method of communication knits us the more closely to each other. We congratulate *The Telegraph* on its enterprise and wish it unbounded prosperity.

J. S. Temple, President  
Denver Chamber of Commerce.

A three-column story and picture of the Colorado Springs wireless station appeared in the *Evening Telegraph* of April 28, 1906. An illustrated and highly descriptive six-page article, written by me, about the Colorado Springs wireless station, appeared in the

May, 1906, issue of the *Railroad Telegrapher*, a magazine published by the Order of Railroad Telegraphers in St. Louis, Mo. This magazine had a nation-wide circulation of many thousands. As this was one of the first articles explaining the techniques and operation of the new wireless art, it caused many railway telegraphers to quit their jobs in order to seek employment in the wireless field. I also wrote a similar article for the *Commercial Telegraphers' Journal* published in Chicago.

The original wireless station at Denver was installed at the old, abandoned Grant smelter, in order to erect the antenna on the 350-foot brick smokestack, said to be the tallest smokestack in the world. Early in 1907 another station, using a 50-kilowatt transmitter, was built six miles west of the center of Denver, at a siding on the Denver, Lakewood & Golden Railroad, a small railway only fourteen miles long, which boasted ownership of two small locomotives, one passenger coach and a few freight cars of various types. The railway company named the siding De Forest, Colorado. There were no houses in the vicinity, except the buildings connected with the wireless station.

Prior to my wireless work in Colorado I had in 1903 and 1904 made some glider flights in the state. Near Roswell, Colorado, a small railway station near Colorado Springs, I used a Chanute type glider; and in the vicinity of the Garden of the Gods, also. Some of the flights were accomplished by having the glider towed by an automobile. Others were free soaring flights. Then came the final destruction of the glider in one of those summer wind-and-snow squalls on Pikes Peak, when parts of the glider landed in the Bottomless Pit, back of the mountain.

Having made several short glider flights from some of the hills back of the gateway to the Garden of the Gods, where many tricky air currents were encountered, I later succeeded in getting a man to tow the glider by means of a rope hooked onto his Winton automobile, out on the open mesa, where the air currents were more constant. I encountered great trouble while being towed, from the dust being kicked up by the automobile. If I failed to get off the ground quickly and to disconnect the tow rope, the dust in the air was almost blinding, and my landings were sometimes quite hazardous. Finally I decided to attempt soaring from the summit of Pikes Peak, where I could get off to a good start, and glide down to the open plains below. A sudden wind squall, however, hit the peak and wrecked the glider.

At the time I was interested in the glider flights in the Pikes Peak area, one of the world's most noted scientists and inventors, Mr. Nikola Tesla, who was suffering from tuberculosis, was living in Colorado Springs for his health. He was experimenting with



"transmission of electric power without wires," near the Garden of the Gods, where he built a tower and a small laboratory. For many months he conducted experiments with his famous "Tesla Coil," an invention now known to scientists the world over. During those experiments he succeeded in lighting electric lamps by wireless more than a mile away from the power transmitter. Nikola Tesla also was the inventor of the "Alternating Current," which revolutionized the electrical industry. He invented more than 900 devices, some of which, no doubt, were conceived by him at his little laboratory on the Colorado mesa.

In 1905, probably not more than half a dozen automobiles were owned by the residents of Colorado Springs; certainly not more than a dozen. Surreys with the fringe on top stood along Pikes Peak Avenue every day, waiting for tourists who wanted to ride out to the Garden of the Gods and the Balanced Rock. It was a very slow and dusty ride, indeed. Trolley cars ran out to Broadmoor and Stratton Park; also, to Colorado City and Manitou. There was no automobile road up Pikes Peak. The only method of getting up to the Summit House was to travel by Cog Road, by burro, or by walking.

After the misfortune with my glider on Pikes Peak, I went to St. Louis, Missouri, where I met Doctor Lee de Forest<sup>1</sup> at the Lewis & Clark Exposition. The next year I returned to Colorado to install and operate his stations.

Late in 1907, the American De Forest Wireless Telegraph Company was refinanced and renamed the United Wireless Telegraph Company. Mr. Christopher C. Wilson became its president. Four years later, Mr. Wilson was tried in Federal Court in New York, for having used the United States mails to defraud. He was found guilty and sentenced to three years in Atlanta prison, along with three other officers of the company. The charge made against Mr. Wilson was that he said he had sent statements through the trans-Atlantic wireless communication. This the jurors considered a mis-statement of fact. Today most any boy amateur radio operator can transmit messages to any part of the world by using only a single radio tube, no larger than his thumb. Many amateurs communicated daily with the Admiral Byrd Expedition in the polar

<sup>1</sup>Lee de Forest was born at Council Bluffs, Iowa, August 26, 1873, the son of Reverend Henry Swift de Forest, a missionary. Throughout his childhood he displayed inventive ability. Lee entered the Sheffield Science School at Yale University, on a missionary scholarship. In his autobiography published in 1950 he said that at college he was "a 'greasy grind,' a creature held in general contempt by all normal Yale undergrads, myself among them." His doctoral dissertation in 1889 was entitled "Reflection of Hertzian Waves from the Ends of Parallel Wires." After six years of experimentation, de Forest applied for a patent on his tube which he called an audion. Meantime he had been discharged "from the company that had been created around him," but he formed a new company and launched his new invention for which he received a patent on January 15, 1907. His audion opened the door to the field of electronics. A bronze bust of Doctor Lee de Forest, modeled by Frederic Allen Williams, is at Yale University to honor the man universally recognized as the "Father of Radio."—Leonard M. Fanning, "Lee de Forest." New York: The Mercer Publishing Co. 1956.

regions. Mr. Wilson died of a broken heart in Atlanta prison before serving all of his sentence.

On April 1, 1912, the United Wireless Telegraph Company was taken over by the American Marconi Wireless Telegraph Company. In October, 1919, the American Marconi Wireless Telegraph Company was reorganized and renamed Radio Corporation of America!

As a result of knowledge gained during the operation of the Colorado stations, Doctor Lee de Forest, in 1906, invented the radio tube, technically known as the grid three-element electron tube. The invention was made in October, 1906, and a patent was applied for in 1907. Hence, the year just closed—1956—was the Golden Jubilee 50th Anniversary of the invention of the radio electron tube which made the "Electronic Age" possible. Radio broadcasting, television, radar, talking motion-pictures and guided missiles are only a few of the things made possible by this invention.

In honor of the 50th Anniversary of Doctor de Forest's invention of the radio tube, the Veteran Wireless Operators' Association held a dinner on February 18, 1956, at the Sheraton Astor Hotel in New York. I attended this dinner and on that occasion I talked with Dr. de Forest at his home in Hollywood, using his great invention which made our two-way conversation possible.

On March 16, 1956, President Dwight D. Eisenhower sent a letter of congratulation to Dr. Lee de Forest which read:

Dear Mr. de Forest:

In this fiftieth anniversary year of a great invention, I congratulate you on your many contributions to scientific progress. Through your long and distinguished career you must have experienced many moments of pride that your imagination and talent furthered the development of modern radio, television and radar. You must also feel great satisfaction in remembering your past decades of service and in anticipating future achievements that your handiwork has made possible. May you enjoy many more years in which to witness the fruit of your labors.

Sincerely,

Dwight D. Eisenhower



# Nathaniel P. Hill Inspects Colorado

LETTERS WRITTEN IN 1864

(Continued from October issue)

Nathaniel P. Hill, a professor of chemistry at Brown University, Providence, Rhode Island, first visited Colorado Territory in 1864 to examine mining prospects and properties. Later he became one of Colorado's outstanding pioneers. In 1867, Professor Hill began the erection at Black Hawk, Colorado, of the first consistently successful smelter in Colorado.

According to *The Mining American*, July 8, 1916: "One of the important events of Colorado history was the opening of a smelter at Black Hawk in 1868. This was, in the full sense of the word, an epochal occurrence, and the date is one that should be remembered by every schoolboy and schoolgirl in the state. The establishment of the Boston and Colorado Company's smelter was the beginning of a new era in mining. The increased production of the precious metals saved Colorado in the lean years of the grasshopper raids, 1873-6. The promotion of this smelting enterprise put life into the languishing mineral industry, not only in Colorado, but in the neighboring commonwealths.

"So it may be said that Professor Hill exercised a controlling influence on the whole Rocky Mountain country; yes, he helped shape the destiny of the nation. Specifically, he mastered the problem of treating ores that are termed 'refractory.' This was the most valuable service that this distinguished man rendered his generation, and for this he is signally honored among the few persons whose lives and achievements have been intimately bound up in the advancement of civilization in Colorado.

"For many years, Nathaniel P. Hill was a prominent figure in the industrial and political life of Colorado. He was not lacking in business ability, and he was a giant in mentality, as his speeches on bimetallism abundantly demonstrate. He was a tower of strength to the cause that he espoused in the Senate and afterward when proprietor and editor of the *Denver Republican*. At the same time he was 'a man with a conscience,' a gentleman at all times and under all circumstances. Before everything, he was just a man.

"To tell the story of the life of N. P. Hill is to tell much of the history of mining in Colorado. The five years, 1859-1863, may be called the period of placer mining in Colorado. The amount of gold obtained by Colorado miners those years was probably upward of \$20,000,000. The production fell off as the surface deposits in creeks and river beds were exhausted. Meanwhile the Pike's Peakers sought other fields; they made tracks for mining camps in Utah, Idaho and other parts of the West. The pay-dirt in the gulches gave quick returns; it could be easily handled. But when they attempted to follow the veins into the hillsides and to sink shafts, they found hard ores with which they could do nothing. So mining was almost at a standstill in 1864. There was no silver mining to speak of in Colorado then.

"It is hard to estimate with any degree of accuracy the output of Colorado's gold mines in early days. Perhaps the production of the royal metal averaged \$3,500,000 annually during those five years; in 1864 it was a million or not much more, and this treasure was gained by hard labor. The output of the mines in 1865 and 1866 was still less. Lode mining was still in the future. The development of deep mining in Colorado awaited the coming of the 'Father of Smelting.'

"During the period of the Pike's Peak rush and the years following, Nathaniel P. Hill was professor of applied chemistry in Brown University, where he showed skill in 'working out intricate problems in the arts.' He united scientific knowledge and practical ideas. He was ingenious and resourceful, and he won a reputation among the manufacturers of Rhode Island. They had confidence in the man and asked him to go to Colorado

and report on the geological formations in an extended tract of land called the 'Gilpin Grant.'"

Professor Hill's letters written to his family from Colorado during the first part of his trip were published in the October, 1956, issue of *The Colorado Magazine*. The following communications were sent by Professor Hill during the hectic weeks of Colorado's history, preceding the well-known Sand Creek battle. The letters are reproduced just as Mr. Hill wrote them. —Editor.

Denver, Aug. 1, 1864.

My dear Sister (Bell)

You will perhaps be surprized to learn of my return to Denver so soon, for I think I informed you that it would require about 100 days to finish the work we have undertaken in the San Luis Valley. A week ago today, a good opportunity presented itself for me to get back. An officer at the fort was coming up in a buggy and invited me to join him. It took me about the tenth part of a second to accept his invitation. It seemed on arriving here almost like getting home. The mere fact that all the Valley is Mexican, and all here is "American" makes the contrast striking.

On the 14th of July, I wrote Mother from Costilla (pronounced Costeya). I gave her some brief accounts of the Mexicans and the mode in which I was living among them. Costilla is the name of a small river which empties into the Rio Grande del Norte, and also of a small Mexican town on the river. Owing to the bad food consisting of meat and poor bread, and goat's milk, being absolutely deprived of all fruits and vegetables, I was sick for two or three days at Costilla; but since that time my appetite has been better than before and I am feeling well and strong. I was just beginning to feel improved when the chance to start for Denver occurred.

The journey was beneficial and I arrived at Denver in better condition than when I left. My object in leaving the party is to gain time to accomplish some work I had engaged to do here and at Central City. I found that by remaining in the Valley, I should be idle nine-tenths of the time. My business there was only to examine the mines, which the party of "prospectors" might discover. I did not pretend to follow them in the mountains in their search for gold, but remained in the settlements at the base of the mountains until they made a discovery.

I intend to return to the party about the first of September. I have no doubt in one week I can examine all they will discover in my absence and get all the information which will be necessary to enable me to report. I shall before going south again finish my labors in this Central Mining Region, so that when we return from there again, I can set my face homeward. I think when that day arrives, I will exhibit some enthusiasm in an undertaking, if I never did before.



During the entire time I was in the Valley and on the way to and from, I had no communication from any source. I directed a friend of mine here, Mr. Fisher, formerly of Providence, to take my letters from the office, and retain them for me. I was afraid to have them sent to Ft. Garland. Consequently I found on my arrival ten letters in all, five from Alice.<sup>1</sup> In the package was your kind affectionate letter of July 1st. I appreciate deeply the sisterly interest you manifest for my success and welfare. I trust your anxiety about my safety will in due time be removed by my appearance at the old homestead. I cannot assert that there is no cause for solicitude. I feel it myself and while I am not excited, nor disturbed by fear, the source of security under which we live in the East is wanting.

The people here are in an excitable mood, and one cause of excitement scarcely dies away till another springs up. At present the Indians down on the Arkansas are committing depredations. They have also disturbed the stages of the overland mail. But it is well known that in Denver or Central City one is as safe from Indians as he would be in Providence. It is the poor unfortunates who live scattered in the country that are to be pitied. They live in hourly fear. The Indian mode of warfare you are aware, is never to fight unless all the advantage is on their side. It would be impossible to induce five of them to attack one white man if he was prepared. Their attacks are always made in ambush. As for their entering a town, where the inhabitants could fire on them from their houses, the idea is absurd.

The Denverites are only afraid of secessionists, guerrillas or bushwhackers. The population is full half secessionists of the worst kind. They have organizations, badges, signs &c, but they are closely watched. I shall remain in Denver or Central City and not go to San Luis again, until things look more settled. The stage which started out this morning for the Arkansas and which travels the road I just came over, had an escort of sixteen soldiers. This is on account of danger from Guerillas. They robbed a stage on that road one week ago and obtained over \$5000, but did not injure any of the passengers.<sup>2</sup> I mention these circumstances not to excite unpleasant appre-

<sup>1</sup> Alice Hale Hill, wife of N. P. Hill, was the daughter of Isaac and Harriet Hale of Providence, R. I. She was born January 19, 1840.

<sup>2</sup> "Guerilla Raid. In the latter part of July, 1864, a party of guerrillas organized themselves in the South Park and proceeded towards Denver, robbing the mails, stealing stock from the ranches, and waylaying transient travelers. They expressed a determination to come to Denver and pillage the city, saying that they were to be reinforced by a large party at the foot of the mountains. This band of robbers who claimed to be rebel soldiers, some of whom boasted of having taken part in the Lawrence, Kansas, massacre, by the notorious Quantrel [sic], were under the leadership of a noted desperado named Reynolds. They were surprised in camp in Platte Canon, on the evening of July 30th, by a party from Gold Run, under command of Jack Sparks, and retreated without firing a gun, leaving all their plunder and the dead body of one of their number, killed in the attack, in the hands of the victors.

"During the expected appearance of this band, the citizens of Denver labored under great excitement, owing to suspense and anxiety as to the where-

hensions, but to show you that I understand my position, know just what the dangers are, and shall be guided accordingly. I do not enjoy living in a country where every man you meet, thinks it safe to carry a loaded pistol. The practice is universal in all parts of Colorado. In the San Luis Valley, the priest who officiated on Sunday when I was there, wore his pistol in the church, and I did not see a man in the church who was not armed. I met Governor Evans today and seeing that he had his revolver in his belt asked him if he thought it necessary to be armed in open day? He replied that it was the duty of every man to be able to defend himself at all times. You may rest assured that I shall take the best care of myself. I shall not leave Denver and the other large settlements nearby until I know that the roads over which I travel are safe. The authorities will in a few days be getting a strong force of soldiers together, who will scout in all directions, and keep us informed where the danger lies.

I enjoyed the journey from San Luis Park. Capt. Van Vliet<sup>3</sup> is a very gentlemanly person and his driver, who came along but never drives, is so polite that every time he swore at the mules, he would turn around and apologize. Our vehicle was a buggy drawn by four mules. The captain was well supplied with whisky of which he is very fond. About every half hour he would take a drink, remarking that he had not drunk so much in a month. The driver was always thirsty at the same time. He would say that he had taken a little cold last night, or he had a little pain in the chest. If I had imbibed with them and not declined every time, I presume these little explanations would have been left out. Twice on the way, it devolved on me to drive. The Captain and his man were perfectly *sober* of course but became so sleepy they could not see the road. They are both much afraid of guerillas, and armed with two revolvers each. It amused me to see the effect of the whisky in quieting their nerves. We left Costilla on Monday morning and drove up to the fort, a distance of 45 miles. I was hospitably entertained at Fort Garland by the officers, several of whom I know. They are fine men, particularly the Colonel and Dr. McLean. On Tuesday morning we started from the fort for Denver. In taking long drives in this territory, the stopping places for the night have to be selected with reference to grass and water for the animals. The country is perfectly dry and arid. Grass is to be found only along the water

abouts and doings of the marauders."—Wharton, J. E. *History of the City of Denver*. (Denver: Byers & Dailey, 1866.)

A report from Central City, 2 P. M. July 26, to the *Rocky Mountain News*, said: "Dr. Harland, just in from the South Park, reports that a band of Guerillas attacked the Buckskin Joe coach yesterday, at Dan McLaughlin's ranch (about 2 miles beyond Hamilton), robbed the passengers of \$5,000 and took the stage stock. The mail coach from Montgomery was attacked and robbed yesterday near Tarryall in the South Park."

<sup>3</sup> Said the *Rocky Mountain News* (Denver), August 1, 1864: "Capt. Van Vliet, Quarter Master from Fort Garland, arrived here recently and is stopping at the Planter's."



courses. When your road does not lay along a water course, you sometimes will not see a house for 50 or even 70 miles.

Our first day's drive to get to the Huerfano river was to be 70 miles. But one of the mules became sick on the road ten miles the other side. The miles seemed very long to me and besides 15 miles of our road lay through the mountains. There was a Mexican house on a little muddy stream which empties into the Huerfano and we camped by the side of the house. The only food we could procure from him, was some Antelope meat. The roof of the house which is made of dirt was covered with the drying meat. The climate here is so dry, that in the hottest weather, fresh meat hung up in the air will dry and never spoil. We borrowed his frying pan, bought 2 lbs. of meat, built a fire outdoors, cooked our meat, and without seasoning or accompaniments, eat it. We slept on the ground near our buggy. In the morning the mule was well and we drove on to the Huerfano to breakfast.

The fact mentioned about the supply of provisions in the Mexican house will give you a good idea of their indolence and worthlessness. So long as they have nothing else not even salt, they are happy and feel rich. The second night by making a very long drive we reached Pueblo. There is a hotel there which seems to be kept for the accommodation of bugs.

Thursday, Friday and Saturday we had no incidents of importance on the way. Friday night we had to sleep out, and made our supper on a lunch which we brought from Pueblo. All the other meals we took at the houses of ranchmen. Thursday night, we stopt at a place known as "Dirty Woman's Ranch." We drove into Denver 9 o'clock Sunday morning, having driven that morning between daylight and 9, 20 miles. . . Life out here in the Wilderness is calculated to increase one's appreciation of home comforts in the East. If I am permitted to enjoy them again, my desires for a Western life, will be moderate for some time.

With the trust that in due time, in the providence of God, I shall be with you again to enjoy the company of cherished friends

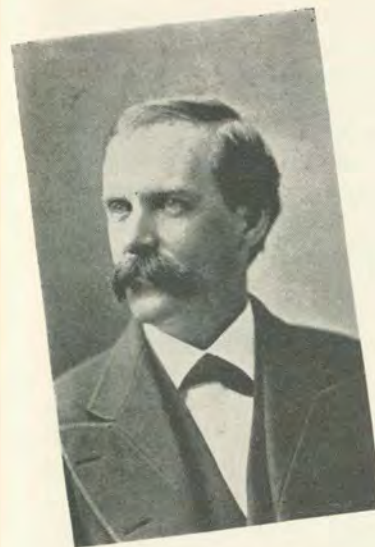
I remain as ever Your affectionate Brother—

N. P. Hill.

Denver Aug. 3, 1864—

My dear Wife.

Tomorrow I am going to Boulder, a place about fifty miles north of Denver. From that point I shall strike westward into the the mountains about ten miles. I shall have the company of the



N. P. HILL

MRS. N. P. HILL

MISS ALDRICH  
Governess

ISABEL (BELL)  
HILL

CRAWFORD  
HILL



Surveyor General John Peirce,<sup>4</sup> and two others, intelligent and agreeable gentlemen.

We go to Boulder in carriages and then take to the saddle for our mountain ride. There are no Indians nor guerrillas in that direction. It will be a pleasant trip unless the mountain ride proves difficult. While in the Park one day, three of us worked hard for half a day to get over about half a mile. I like the men who are going with me particularly. I shall find another letter from you on my return, if I do not get it before I go. Your last, which is received, was dated July 18th, two weeks and two days ago. We expect to accomplish our journey to Boulder and back in three days, and get back to Denver Saturday night. As it will require nearly one day to make the examinations, you see how we will have to travel. I never was in country which equalled this for fast driving on long journeys.

Mr. Potter<sup>5</sup> has just left my room. He made a long call and is very attentive. He is an earnest man, thoroughly devoted to his work of building up a church here. I think he will go East, about the same time I go, to raise money to build a "meeting house." I hope he will be successful, as I think highly of him. Since I returned from the San Luis Park three days ago, I have spent the time in getting my assay apparatus in order and in writing letters. I found a number of business letters to be answered. I sent to you No. 15 on the last day of July. I am quite fearful, that between the Indian troubles on the Platte, and the bushwhackers in Missouri, some of my letters may be lost. I also sent a letter to sister Bell yesterday, directed to Montgomery, although I am quite sure she is with you. I wrote Mr. Reynolds<sup>6</sup> a long letter yesterday.

My [*Providence*] *Journals* have not yet made their appearance. The reasons are well known. I wrote you that a law had passed Congress requiring that all printed matter should be prepared by letter rates, except newspapers to regular subscribers. At the office at St. Joseph, all printed matter, not prepaid by letter postage, is thrown out of the mails. I am told there are several tons of mail

<sup>4</sup> According to the Incorporation Paper of the Denver Pacific Railroad and Telegraph Company filed November 19, 1867, the name is spelled: "John Pierce."—*Book C*, p. 317, in Archives, State Historical Society, Denver.

According to O. L. Baskin in *History of the City of Denver* (Chicago, 1880), pp. 544-45: General John Pierce was born in Harwinton, Connecticut, May 10, 1829. He was educated at Western Reserve College, Hudson, Ohio, of which his father, Rev. George E. Pierce, was the president. After graduating from Western Reserve College in 1850, young Pierce entered the Engineering Department of Harvard College. In 1861, he was engaged to make the first public surveys in Colorado. In 1863, President Lincoln appointed him Surveyor General of the Territories of Colorado and Utah. Later he became Consulting Engineer for the Denver and Pacific Railroad. In 1873, he was elected president of the Boulder Valley Railroad. Six years later, Mr. Pierce was Chief Engineer of construction of the Denver Water Works.—*Editor*.

<sup>5</sup> Rev. Thomas T. Potter, a Baptist missionary minister, had previously met N. P. Hill soon after the latter's arrival in Denver in June. The young minister then was holding services in the People's Theatre, Denver.

<sup>6</sup> Mr. Reynolds was one of the men who advanced money to ex-Governor William Gilpin to buy the Gilpin Grant.

matter there now. They do not know what is for regular subscribers and what is transient, consequently they kick it all out. They are all served alike. People who have received newspapers as regular subscribers for years have not received a paper for the past six weeks. They have written to the Post Master at St. Joseph and done all they could, but the papers do not come. You may as well discontinue my semi-weekly at the office. It would be a great satisfaction to get it, but there is no hope for it now. I am sorry to send you such a barren empty letter, but I only intended to write a line to let you know of my intended trip to Boulder, and of my continued good health. I am uneasy all the time about your health. I don't know which has the worst of it, you, with plenty to eat and not able to eat it, or me with ample ability and nothing to display it on. It is a great satisfaction to know the children are so well. Take the best care of them and never lose patience with Crawford. If he is cross, it is always for one reason, that he is not well. I will write you next Sunday, again if I get back from Boulder. Kiss the dear little babies<sup>7</sup> for their papa, and keep up your spirits and courage until your loving Husband returns to his pleasant and longed for home

Your affectionate Husband

N. P. Hill

No. 17

Denver Aug. 8, 1864—

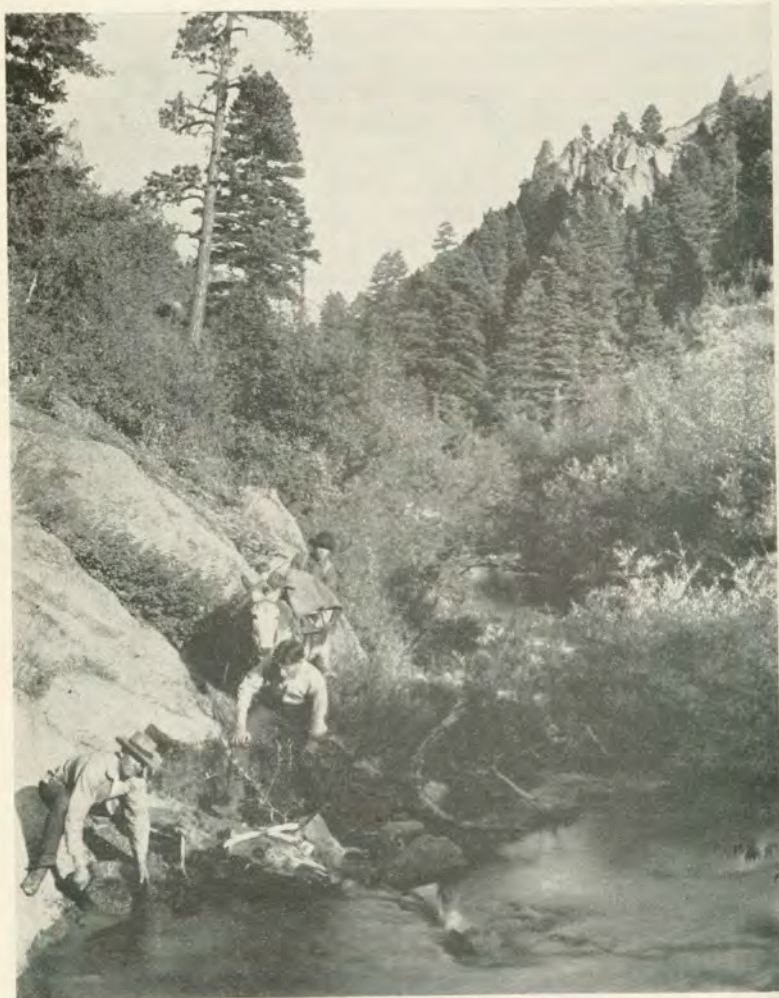
My dear Wife,

I have just returned from Boulder City to which place I was about to start when I last wrote you (Aug. 3. No. 16). I find your letter of July 23rd, also a letter from Wendell. Wendell gives an interesting account of his travels. I think they adopted a very sensible way of spending the vacation. I am sorry that a whole week should pass and you should not get a letter from me. I have written no less than twice a week except when I was at Costilla. As the mail left there but once a week, and is nearly two weeks in reaching Denver, I can easily account for some of the long intervals between my letters as you receive them. But I am powerless to help you. I would send you messages every day and receive them as often if it were possible. I hope your last trial at Carpenter's<sup>8</sup> was a success and that I shall soon have the results. It would be a great comfort to have a good vignette of you. I think it would give you much trouble to get a good likeness of Crawford. Yours and his both, would be more than I could stand. My homesickness would be beyond control.

<sup>7</sup> The "babies" were Isabel (Bell), N. P. Hill's daughter, and Crawford, his young son.

<sup>8</sup> Carpenter evidently was a photographer in Providence, R. I.





PIONEER PROSPECTORS IN COLORADO'S WILDS

You must have enjoyed the party at Dr. Caswell's. They seem very kind and attentive. I would wish that I had been there with you if it would do any good.

I will give you a brief account of the few days I was away from Denver on my last trip. We left (Gen. John Peirce and myself) Thursday noon. There were two other gentlemen in another buggy which accompanied us. One of them was a Mr. Blake.<sup>9</sup> Mr. Blake's cabin in the mountains was our ultimate destination. We had a ride of about 30 miles to Boulder City. I had been informed it was 50, and think I wrote so to you. It was a pleasant ride near the base of the mountains, and we reached B. at six o'clock. Boulder City is the most Yankee of any settlement I have seen in Colorado. I soon found that the family with whom we stayed were from R.I. Their name is Tourtelotte.<sup>10</sup> They keep store and hotel and carry on a farm. It was the most comfortable place I have found. Friday morning we started for a point in the mountains known as Sugarloaf. We rode a few miles in the buggies, and then on horse back. We carried saddles with us. The trail which we followed wound its way through a most wild and broken mountain country. We ascended hills not less than half a mile long and almost perpendicular. Up these steep and dangerous ascents we always had to walk, as it was just as much as the horses, well trained to the mountain roads, could do to carry themselves. Then we would wind our way down, down the steep and rugged sides of mountains steadily for half an hour, and as rapidly as was consistent with safety. We crossed a number of beautiful mountain streams as pure and clear as crystal. The water is supplied by melting snow on the Snowy Range and runs over a pure granite bed.

We would stop to rest by the side of these streams for a few minutes and more refreshing moments I never passed. Mr. Blake's cabin is situated on a little creek, in a deep gorge, between high mountains. When we first saw it, it was 2,000 feet below us, and seemed directly under our feet, so steep is the side of the mountain. It seemed impossible to descend such a hill, but it was done by the horses as well as men. I wish I could send you a photograph of our party taken from the Valley, when we were half way down. Our position looked frightful, either looking up or down and yet there was no danger. Think of placing ten monuments each as high as Bunker Hill, one on top of the other, and then try and go up one side and down the other. Well this hill is not quite so bad as that but differs only in the fact that there were some places not quite so steep. At noon, we were at the cabin. Mr. Blake is a graduate of an

<sup>9</sup> Mr. Blake's initials are not known. A number of men named Blake were among Colorado's first pioneers.

<sup>10</sup> Jonathan A. Tourtelotte was a native of Gloucester, Providence Co., R. I. In 1860, he came to Colorado with F. A. Squires and engaged in the hotel business until 1865.—*History of the Clear Creek and Boulder Valleys*. (Chicago: O. L. Baskin, 1880), 689.



Ohio college. He came to this territory in the spring of 1860. His family consisting of a wife and three children live in Iowa and cultivate a farm. One of the children was born just after he left home and has never been seen by him.

When he came to Denver for us, he received photographs of them all. I never saw a happier man. The wife and children I should judge are all fine looking. Mr. B. is an intelligent man of fine feelings. He is going home in October. Think of his life. For more than four years, he has lived nearly alone in the mountains. Sometimes for two months, he has not seen a human being. He became satisfied early that he was in a rich mineral district, and was determined not to leave it until he could make his fortune. One discouragement after another has met him. It seems quite probable now that his hopes will be realized. His cabin was constructed of logs roofed with shingles which he split with an axe. The beds, of which there were two, one above the other, were made by driving posts in the ground, fastening stretchers to them by willow withes, and then laying on cross pieces. Over these, hay was spread. A single blanket on the hay and the bed was made. Mr. Blake got dinner as soon as possible. The bill of fare was short cake, broiled grouse, three fine birds we shot on the way, and coffee. My appetite was sharpened by the labor of the morning and I eat a meal that would do for any backwoodsman. Dinner over, we started to see some gold veins. We had to leave the horses behind and travel on foot. The heat was intense. I never experienced warmer weather than we have here in the middle of the day. We travelled hour after hour, examining numerous veins and obtaining from them samples of ore. We were well exhausted when we started for the cabin, and could not have made the journey back, if we had not adopted the plan of throwing ourselves flat on our backs, once in ten minutes and resting thus a few minutes. Before dark, we reached the cabin. Then Gen. and I threw ourselves upon the beds, and poor Mr. B. got supper. Bill of fare, ham, coffee, short cake. After resting half an hour I felt refreshed and hungry and did full justice to the supper. The coffee without milk or sugar, tasted a good deal better than that beautiful rye coffee, we experimented on once, with all the fixings. Supper over, we went to bed.

It is the custom in the mountains to retire as soon as this meal is eaten. As there were five of us including Mr. Blake's partner, Gen. P. and I went to a cabin about one quarter of a mile up the creek to sleep. It was occupied a year ago and had been deserted. When Mr. Blake left us, it seemed lonely enough. With the exception of the people at Blake's cabin, there were no other human beings within five miles of us to our knowledge. The inside of the old cabin was dismal indeed. We spread our blankets on the old

hay. I did not allow my thoughts of the situation to enter my mind. I turned my thoughts to our pleasant, safe and happy home, prayed for the protection and welfare of my dear wife and children, and went to sleep. In the morning on attempting to rise, I found the muscles of my legs so sore, that I could hardly move. Two particular sets of muscles were affected, those used in going up and down hills.

We had an early breakfast. All the others of the party being too much overcome by the previous day's work to start out, Blake and I went alone on the rambles of the day. I took a horse with me and rode him where it was safe. You would be astonished could you see the trail over which we travelled. Now fording a stream, over which the horse would have to swim, now climbing an immense hill from the top of which we could see out on the plain on one hand, and miles of the Snowy Range on the other, and now scrambling down into deep gorges from the bottom of which the heavens are nearly shut out. At Blake's house, the sun rises at 8 and sets about 4. We returned to the cabin much fatigued at 3 P.M., and dined on rabbit pot pie. We shot two rabbits in the morning and Blake prides himself particularly on his pot pies. I never eat a more delicious dish. It would be well if one were not very hungry not to see the cooking done. The next morning we set out early for Denver, reached Boulder City at noon, and Denver at 8 P.M. Our object was to see some newly discovered veins in a new district and collect such samples as would enable me to determine their value. This we accomplished. I shall be very busy now for a few days in making assays here.

Rev. Mr. Potter informed me today that he would start for the East in a few days to raise money to build a church. He will call on you and you must entertain him as well as you can. I am so lost without the *Prov. Journal*, that I have adopted a plan for getting it. I want you to take the *Daily Journal*, tear off the first page which contains all the reading matter; trim this down to the smallest possible compass, cut off even the heading all except the date, trim off all the margins, and any part which contains only advertisements, then at least twice a week wrap them up, inclose a written line, seal it up as a letter, but make the wrapper light as possible, and prepay at letter postage rates. This is the only way at present, to get any paper from the East. It will be several months before the difficulty is corrected.<sup>11</sup> I am glad on one account, that I am not ready

<sup>11</sup> Colonel Chivington was then in command of the military district of Colorado, and, at the urgent request of the prominent business men of the city (Denver), proclaimed martial law, forbidding the opening of any houses of trade, except the dispensaries of medicines for the sick, and allowing only grocery and provision stores to be open three hours each day. All trains and wagons were prohibited from leaving the Territory. This strenuous measure was resorted to, in order to secure a sufficient enlistment of men for protection against the Indians, whose maraudings and devastation had already made the country almost uninhabitable, and who were expected in sight of the city almost every day. . . . The Third Regiment Colorado Cavalry was rapidly being filled up and made ready for the field. The regiment was enlisted to serve for a period of only one hundred days, in a campaign against the Indians.—*Idem.*, 153.



to go home. The Indians are molesting the stages on the Platte. If I were ready, my impatience would compel me to start, whereas my judgment assures me it is safer to wait. It will not take long when a suitable force is raised to clean the red d.....s out. Love to all our friends. Tell J.P. I wrote him from Costilla. Give him my kindest regards. God bless you and the dear little children and keep you safe.

Tuesday, Aug. 9. I was too late for the mail last evening. I am well and hearty, never enjoyed better health. Kiss Crawford for his little letter which he wrote me. Good-bye from

Your affectionate Husband, N.P. Hill.

No. 18

Denver, Aug. 11, 1864—

My dear Wife—

I send you at this time only a line, for it is extremely uncertain when it will reach you if it ever does. The Indians hold the road for about 200 miles along the Platte. In other words they were stealing the horses of the Stage Co. at such a rate, that it became necessary to remove the horses to a place of safety. This virtually stops the stages and suspends the mails. So our communication is cut off for the present. I write with the hope that the mail will be sent through in a few days with a military escort. Everything is quiet and safe at Denver and will doubtless remain so. If I could only be assured that you were not uneasy about me, I could stand the separation and even a cessation of correspondence. But I am constantly afraid that you do not get my letters and are troubled for that reason. I shall continue to write at least twice a week. I trust my letters will reach you. I have not had a letter from you for several days, but I do not allow that to disturb me for I know if you were not all well, I should hear it.

On the 8th inst. I wrote a long letter describing my visit to Boulder City and the adjacent mountains. That letter is probably detained on the road. I am well and strong. There are no Indians within 200 miles of here, or of any place where I am going. My love to all at 37 Bowen St., and kind regards to any of the faculty you may see. I have written to Prof. Harkness today. I wrote to Prof. Peiree from Costilla.

Fear no evil, dear wife, whatever reports you may hear. I am alone with no one to care for but myself. I can move on a minute's notice to any point. If I had a wife and little children here, as thousands have in the small and isolated settlements, I should feel insecure. After a sufficient force is organized, and the cry of extermination is once raised, they will make short work of the Indians. The work of organization is rapidly going on. With the hope that

you are well and safe and that God will watch over you and keep you from all harm I remain most affectionately

Your Husband N.P. Hill

On coming to the office to mail this letter, I found yours of the 26th of July. It contained the vignette which I prize highly. It is not perfectly natural, but will do in the absence of anything better. I think it the best you have had. The other little items of news, particularly the highly favorable accounts of the children, are highly acceptable. Gov. Gilpin is William, and is an old bachelor. I think any lady who takes stock in him, will get small dividends. He will be in Providence this fall.

God bless you and the children—

Your loving Husband N.P. Hill.

Denver, August 11th 1864.

My dear Wife—

I mailed a letter for you today, but for reasons which I give in it there is much uncertainty about when you will receive it. The Indians along the Platte have of late been very hostile and have stolen the horses of the Stage Co. at such a rate, that the company found it necessary to remove all their horses from 200 miles of road. Of course the stage stops running, and the mails are no longer carried. We think this will last but a few days, but it may continue a week or two. A force of 3,000 soldiers will be put on the road by the authorities at Washington, as soon as possible. There is no danger whatever here at Denver or in the mountains. Travelers on the Plains and the people who live in small and isolated settlements are exposed. I send this by Col. Samuel Tappan,<sup>12</sup> a friend of mine, who starts tomorrow morning and goes as far as he can, and as fast as possible. He may get through some time before the mail. I therefore avail myself of the opportunity to send a letter by him. Give yourself no uneasiness about my safety. If the trouble continues along the road you may not get my letters till long after they are written, but the trouble is nearly 200 miles from Denver.

Do not feel anxious therefore when you wait one, two or three weeks and do not hear from me. I will write twice a week and trust the road will soon be open and you will get my letters. I received your letter of the 26th today. I shall prize beyond measure the picture which it contained. I like it better, each time I look at it. Long before I am ready to start for home, the road will be cleared of Indians, and will probably be safer than ever before. I think thorough work will be made of them. There is no sentimentality here on the frontier respecting Indians. Cooper and Longfellow

<sup>12</sup> Samuel F. Tappan was a Lieutenant Colonel in the First Colorado Regiment of Volunteers.



are regarded with disgust. Indians are all the same, a treacherous, villainous set. I would rejoice as would every man in Colorado, to see them exterminated. I write in haste. God bless you and the children.

Your loving Husband N.P. Hill.

Central City, Aug. 14, 1864.

Dear Wife.

I shall continue to write regularly, but only a few lines each time until the mail route is again open. We think and hope that at least once a week mail will be sent through under a military escort. I am very busy now, but am well. I have formed many acquaintances among the best people here, and the time passes away more rapidly and pleasantly than it did when I first came. I shall be either at this place or Denver for the next two or three weeks. Preparations are making on a large scale to fight the Indians. It will take but a short time to bring them to terms of peace. Everything is quiet and safe in the mountains and for 200 miles east of the mountains. The difficulty on the mail road is mainly in Kansas. Keep up good spirits and take the best care of Crawford and Bell. My work is going on prosperously and the time will soon come when in the care of a kind Providence we will all be together again.

Your affectionate Husband— N.P. Hill.

P.S. Direct to Denver as usual.

Central City Aug. 20, 1864.

My dear Wife

I have an opportunity to send a letter by a private mail sent by the bankers of this City under a military escort. No mails have left Denver for more than a week and there is much doubt whether the mail will be sent again for several weeks to come. You must give yourself no uneasiness, if you do not hear from me often. I write as usual and suppose I have several letters now lying at Denver, waiting for the opening of the road on the Plains. We are safe here. I shall not take any risks traveling. The troubles on the plains are mostly several hundred miles from Denver, but you cannot tell a day ahead where the red devils will be. I shall therefore not venture on the plains to go south or anywhere else, until the roads are safe. I sent a telegraphic dispatch to you today, to let you know I am well. It cost only \$10.45. But I was afraid you would be uneasy on account of not receiving letters. I will give you long and full accounts of my travels in the mountains, as soon as the mail is opened again. Until then, there is too much uncertainty whether you will get my letters to make it an object to write in full. My travels for the last week have been very interesting. I have formed many acquaintances and among them are many highly intelligent and edu-

cated men. My health is so good, and the people are so kind and attentive, that I enjoy myself as much as I could enjoy any place, separated from wife and children. Kiss the babies for their papa. Love to all. Regards in particular to Prof. Peirce.

Your letter of July 31st is just received. I do not like the [*carte de*] *visite* as much as I did the first. I am well pleased with it. Your letter must have come over the plain by the last mail. The obstructions on the road were at first on the other end, so that the mail continued to come to Denver, a week after the road was impassable.

In haste from Your affectionate Husband N.P. Hill.

Denver, Sept. 4, 1864.

My dear Wife—

I write you a few lines to explain my business, as I think you ought to know how matters are left, if I should get caught by Indians or meet with any fatal accident. I make this simply a business letter on account of the great uncertainty as to when you will get it. It is quite probable that it will go via San Francisco, as there is no prospect that the Platte road will soon be cleared of Indians. I avail myself of every opportunity to send a letter by private messenger, but some of them you will probably never receive.

I start in a few days for the San Luis Valley again. I will have company and be safe from Indian attack. I suffer much from anxiety on your account, but am powerless to afford relief. My fear is that you worry yourself on account of the state of things which exists here. At Denver and Central I am as safe as I could be anywhere in the country. There is little risk in going to San Luis, but I will not go without company sufficient to make it safe. The Indians have not been seen within a hundred miles of the road I should have to travel. I drew on Mr. Reynolds at Warren Hussey's Bank in Central City \$2500 towards my salary. I did this for the purpose of investing it. Sept. 2nd, I bought a house and lot of L.C. Rockwell for \$1800 in Central. I drew from the fund in the bank this amount, and \$339 besides; the latter for current expenses. I leave therefore on deposit in the Bank \$361. Mr. Mallory, whom I used to know in Newburgh, is my agent and has for the present all the papers pertaining to the house and lot. I do not remember Mr. Mallory's Christian name, but H.D. Towne with whom I stayed on my last visit to Central can give any information. They are both honest men. The house is rented for 6 months at \$52.50 per month. After the expiration of the six months, it is to rent for at least \$65 per month. I have do doubt Mr. Mallory can rent it even higher than that.

I have also taken bonds of much valuable property. But they have cost me nothing and will, of course, be of no account unless I



sell the property. I received a check of Gov. [Elisha] Dyer for \$1,000 to invest. As I have not had occasion to use it yet, it has not been cashed, and is deposited in the safe of Geo. H. Tappan of Denver. I will leave it there until I return from San Luis.

You need not feel alarmed because I have written you so minutely about matters you ought to know. It occurred to me that it would be wise to let you know how the property or funds I own are situated. I shall run no risks of personal safety. My precious wife and two children are a sufficient incentive to induce me to take every possible precaution. I have not heard a word from the East for a long time. Your last letter was dated the last part of July. I do not worry for I know the reason. I shall prize the blessings of a peaceful and safe home all the more for my long separation from it. I believe you are well and that Crawford and Bell remain well, as when you wrote. I trust a kind Providence will protect your precious lives and restore me in safety to my loved home. Do not let Crawford forget his papa. Kiss him and Bell for me. I try to imagine how she looks. I have telegraphed you twice, this being the only mode of communication. I trust you wrote to Mother or Bell when you received the dispatches. I fear they may be uneasy on my account. Much love to you all at your father's.

From your loving Husband and the devoted father of our precious children.

N.P.Hill

(P.S.)

Sept. 6th. I start this morning for San Luis Valley. The opportunity is an excellent one. A provost marshal is going and takes with him a strong escort.

Telegram

Denver Sept. 5, 1864

Perfectly well. Business prosperous. No prospect of early resumption of mails. Reply by Telegraph.

N.P. Hill.

Pueblo Sept. 9, 1864.

My dear Wife—

We are in a most peculiar situation at the present time. All communication with our friends at the East is cut off except that the telegraph spasmodically gives us a little information. I have written you regularly, but as the mails have been sent by way of San Francisco, it is quite probable that I may get home before some of my letters. I telegraphed you on the 4th inst., and asked for a reply by telegraph, but a chance for me to leave for Ft. Garland occurred the next morning. I did not get your message. I am therefore without advises later than the last of July. The telegraph is

an expensive mode of communication, but I prefer to adopt it rather than to have you in suspense on account of the non receipt of letters.

I am on my way to Ft. Garland for the second time to visit the Gilpin grant in the San Luis Valley. I am travelling with a military company, and feel perfectly safe. I would not have ventured to travel alone in the present state of the country. I shall return with the same company to Denver in about three weeks. At Denver and in the Central Mining Regions there is no danger whatever. The war with the Indians is on the plains. The danger is to travelers and to the thousands of poor ranchmen who are scattered along the banks of all the rivers. A goodly number of them have been murdered, and thousands have left their ranches and fled to the larger towns for safety.

Regiments are rapidly forming and when they once get fairly ready, they will, it is believed, make destructive work with the red devils. I write this letter and mail it at this point with the hope that it will find its way through by the Arkansas route. A mail occasionally leaves here for the East, under strong escort. It is useless for me to write at length. You may never see my letter and if you do, it will be old and stale. I have enough of interest to tell you, to fill a dozen sheets, but I must reserve it to communicate orally, or by letter when the mails are open. I merely write now to assure you that I am well, and much pleased with the country, floods, Indians and grasshoppers excepted. I am told every day how much I have improved since I came here. I certainly never was so strong. I can ride on horseback fifty miles a day for five days in succession and not feel at all fatigued. I have improved every moment of time and accomplished a great amount of labor. It remains to be seen whether I have made a fortune. All day Wednesday, I thought of the scenes which were enacting at Brown [University]. I longed to be there. My occupation was somewhat different from what it would have been there. I rode that day from Denver to Coberles', a distance of about 50 miles, on horseback. I think hourly of you and those precious children and for your sakes will use every precaution for personal safety. I have an implicit trust that God will protect you until my return. I commit you daily to His hands. Give my love to all your father's family, and my kind regards to our numerous friends as you meet them. Tell Prof. Peirce that I would have written him often, but for the interruption of the mails. No one knows when the road to the Missouri River will be safe and open. It is thought in not less than two or three weeks. I wrote you just before I left Denver and gave you a full account of some business transactions on my own account. It is more than probable that you will receive this letter several weeks before you receive that.



Always write Mother or Bell when you hear from me. I do not write them now as I would under other circumstances. Send to them for me the affection of a devoted son and brother. Kiss the children for their papa. God bless you and them.

Your affectionate Husband N.P. Hill

No. 23

Pueblo, Sept. 16, 1864

My dear Wife—

I avail myself of the privilege again in passing this place to mail a line to you. On the 8th inst. on my way to the San Luis Valley, I mailed a letter for you and am informed today on my return to Pueblo, that it was forwarded by the Arkansas route. I am encouraged in the hope that you will receive it in due time. It is the only way open to us now except via San Francisco. By this route a letter will be 45 to 60 days en route. I am perfectly well as usual. The road from this place to Denver is free from Indians, and I am traveling with a strong escort. When I reach Denver, which will be next Monday night, I think I shall have accomplished all the labor which I allotted to myself which can be said to be attended with any danger. I shall press business with all possible energy with the journey to my longed for home constantly in my thoughts.

Two, three or perhaps four weeks may be required to finish my work. When ready to start, we have reason to expect that the stages will run. If not, I shall join some party and cross the plains in private conveyance. Parties are constantly leaving in that way. Instead of six days, it will require about fifteen. I feel well pleased with the results and prospective results of my journey. The experience derived is much more extensive than I anticipated and I have made a large number of agreeable and profitable acquaintances. I have received attention and kindnesses which almost astonish me. But everything turns on the pecuniary results of my business transactions. They look most promising, but may fail. This letter must be short. I have ridden today 48 miles, most of the distance on horseback. The day was hot and the roads exceedingly dusty. My poor horse was jaded, and I am much fatigued. Tonight's rest will make me as fresh as ever. Tomorrow we go to Colorado City, distant 45 miles. I have a request to make, viz., that you will pack my coat, *next to the best*, my best pants and vest, and two or three of my store plaited bosom shirts and half a doz. best collars, in a box or small trunk, and send them to St. Louis by express. Simply direct to me St. Louis, Mo. I will then get them at the office. I am getting shabby and as I shall have to stop at Cincinnati and Chicago on my way, for a day or two, and will be introduced to a number of

strangers &c., you will understand. If you cannot start the box by Oct. 10, do not send it and I will buy what I want. I look eagerly for a reply to my telegraphic dispatch when I get to Denver. Give my love to all at your Father's. I should have written to them some, had not the obstructions to the mail occurred. Kiss and hug the dear little children for their papa. God bless you and them. Write Mother or Bell and send my love.

Your afft. Husband. N.P. Hill

Central City Sept. 22, 1864

My dear Wife

A party starts in about an hour for the East. I am hastily making up a little parcel of letters which have a fair chance of going through. I received your telegram on my return from San Luis Valley, and shall feel easy now till my time for departure. I feel safe so long as Bell is with you. I hope she can remain until I return home. My object in asking for a reply, was not because I felt uneasy on your account but because I feared you were anxious about me, hearing reports of Indian depredations and not receiving letters from me. I had sent one dispatch before, but had no means of knowing whether you received it. I start tomorrow on a trip to the Buckskin Joe district, 150 miles south of Central, and a mountain road the whole way. The party with whom I was to go, started this morning before my return from the Valley. I leave on a good horse tomorrow morning and will overtake them by the second night. I shall ride 50 miles tomorrow if I meet with no anticipated cause of delay. I never enjoyed better health, and business looks just right. I am working hard and under the most favorable aspects. I will repeat a request which I made in a previous letter: viz, that you will pack in a small trunk or box, my second best coat, best pants and vest, two best shirts and ½ doz. collars and send them by express to St. Louis. The reason for this is obvious, when I tell you I will have business at Cincinnati and Chicago on my way. *Do not send them* unless you get them off before the *tenth of October*. I am happier every hour as the time draws near for me to leave for home. I have no fears about crossing the Plains. Either the roads will be free from Indians or I will go with a strong party. Kiss the babies for their papa. Give my love to Bell and thank her for her kindness in visiting you now. I sincerely hope I will enjoy part of her visit. Love to all at your father's.

In haste From your affectionate Husband— N.P. Hill.

Central City Oct. 3rd. 1864.

My dear Wife,

I found on my return from my last long journey, that the mails are again open, and that Mr. Thurber is to start tomorrow.



I shall send this letter by him. No letters have come this way yet, and consequently I have no word from home later than the last part of July, your telegram excepted. I shall give you a somewhat minute account of my travels for the past 12 days. When I last wrote I had just returned from the San Luis Valley. On reaching Central, I learned that a party of my friends here had started on the morning of the same day that I arrived here, for the Red Mountain. They made provision for me and left letters insisting strongly that I should take a fast horse, and follow them. The inducements they held out were such as to enable me to decide instantly to go. In making preparations to start early the next morning, I met Rev. Mr. Marsh, a young Congregational minister of this place, who wanted to take part of my journey, and he at once decided to accompany me. We left early Thursday morning, Sept. 22. We had two good, fast saddle horses. My outfit consisted of overcoat and rubber coat, and a package of clean collars.

Our road, the first day, lay through a most romantic and wild mountain country. We had many high mountain slopes to climb and frequently found ourselves in the bottom of deep ravines, with mountains of rocks projecting from five to eight hundred feet above our heads. We reached a ranch at 1 P.M., where we got some dinner, and corn for our horses. We rode 25 miles (each mile about twice as long as a mile in R.I.) before dinner. In the afternoon the scenery was less bold, but exceedingly picturesque. We rode through small mountain parks, so called. These parks are usually from one to three or four miles in diameter. They are depressed places in mountains covered with grass and scattered pine timber. Mixed with the pine is an occasional aspen which at this season presents almost every shade of bright yellow and red. The parks are surrounded by high mountains, some of them perpetually capped with snow. It was fully dark when we reached our destination for the day, and we were 45 miles from our starting place. Mr. Marsh is very enthusiastic and I thought it would be necessary to tie him in the saddle. He seemed almost wild at times when some new and novel scene would suddenly open upon us. A good supper and sound sleep fitted us for our journey of the following day. I may as well state at this point that our ultimate destination was a point about 30 miles west of the headwaters of the Arkansas.

If you examine a recent map you will observe near the headwaters of this river, two small lakes called "Twin Lakes." The principal snowy range of the Rocky Mountains lies about 15 to 25 miles west of these lakes. Red Mountain is in this range 15 miles west of Twin Lakes. Our second day's journey continuing in a southerly direction brought us early to the north border of the South Park, a beautiful plain dotted with hills covered with pine

and aspen. The Park is 50 miles long and about 40 wide. From the mountainside down which we approach it, the whole park with all the surrounding mountains can be viewed at one glance. A more perfect landscape cannot be conceived. On the east is the Pikes Peak Range capped with snow. On the south is Sierra Blanca. On the west, the snowy ranges of the main range. Several beautiful lakes appear in the view. This valley is nearly two miles above the sea. The climate in summer is delightful, but too cold at this season. There has not been a week this summer when solid ice has not formed.

Friday night brought us to Fair Play,<sup>13</sup> a small mining town, near Buckskin Joe, a place of some note as a mining district. Here I was obliged to part with Mr. Marsh. His course was to Montgomery, 12 miles north of Fair Play; mine was southwest.

We were two tired mortals when he dismounted about an hour after dark. We did not know how jaded we were until the interest and excitement attending the ride were over. I expected to overtake the party here, but found on arrival that they had gone on 12 miles beyond. My horse was exhausted. We rode 53 miles, and could get no grain for our horses during the day. We found good accommodations, a New England family and plenty of grain.

Early Saturday, I set out alone. About noon, although all was pleasant and bright down in the valley, I was caught in severe snow squalls on the summit of the divide between the waters of the Platte and of the Arkansas. It was the bluest day I ever passed. I did not see a human being all day and my road was half way in a wild mountain. I repeatedly saw the tracks of deer and elk and of the mountain lion (a species of panther) in the fresh snow. I reached the Arkansas about 5 miles south of California Creek at 3 P.M. Here I came to a ranch. The party were an hour ahead. There is no ranch beyond this point and our destination was 40 miles beyond. If I started and failed to overtake the party, you could imagine my position. Alone, with my horse in the woods, probably in a snow storm. Wolves and mountain lions barking and roaring about me.

I soon decided to wait till morning. Sunday, I started at daylight and by rapid riding overtook the party with the wagon at Twin Lakes, where they encamped the night before. Beyond this point there is only a trail. The party were delayed in packing their animals. Such a shouting and hurrahing as they gave when I rode up you never heard. They were very anxious that I should be with

<sup>13</sup>Fairplay, Park County, was founded in 1859. A party of gold seekers entering South Park were angered to find the best placers at the Tarryall diggings already taken up. They withdrew westward to the South Platte River, where they found rich placer deposits and established their own camp, called Fairplay as a jeer at their older rival, which they scornfully nicknamed "Graball." At one time the town was known as South Park City, although it retained its former name for the post office. Eventually the older name was restored.—"Place Names in Colorado (F)," *The Colorado Magazine*, Vol. 18, No. 1, January, 1941, p. 24.



them, and yet they hardly expected it, as I had not returned from San Luis when they left.

In about an hour each man was mounted on an animal with such parts of the equipment as he could carry. I carried on my horse, two buffalo robes, one frying pan, 7 tin plates and 7 tea spoons. The others took the tent and provisions consisting of 12 loaves of bread, 2 hams, 10 lbs. of coffee, 10 lbs. sugar. Each man had two robes and two blankets. We reached Red Mountain Sunday night. Our road lay along Lake Creek, which runs from the west and rises in the gorges of the main range. We camped in a deep ravine, and our campfire lighted up the woods and gave a most cheerful aspect to our tent and surroundings. We relished our plain supper and kept comfortable through the night by packing seven men in one small tent and covering up with a solid pile of robes and blankets six inches thick.

Monday, we worked hard all day examining property *said* to be the richest gold property in the world. Monday night we retired with a clear sky over us and our campfire burning brightly by the door of our tent. About midnight, the party were roused by the roaring of the wind and the drifting snow! We got up and threw dirt around our tent and secured it as well as possible. It was a wild night in the woods. We were 13,000 feet above sea level, just at the edge of the timberline. Above us the hills, bare rock below us, still lower down a well timbered valley. In the morning at daylight, we were up. One making a fire, another shoveling snow, another gone for water, still another cutting ham and so on. There was a foot of solid snow on the ground and some of the drifts were five feet deep. Our horses could get no food. The work of packing for departure, took two hours in the face of the storm. Our trail to Twin Lakes was exceedingly difficult when not covered with snow. We had serious apprehensions in respect to our passage over it. But with care and hard labor at 3 P.M. we were at the lakes where we had plenty of forage. At the ranch on the Arkansas, where we stayed Tuesday night, there was no snow. In crossing the range, east of the Arkansas on Wednesday, we were overtaken by the severest storm of all. It was so cold that it was difficult to drive. One of the party in the wagon had a saddle horse, and we rode ahead. The party in the wagon met snowbanks which they had to shovel their way through. I never have seen a more severe blinding snow storm, than we had for fifteen miles. The hat of one of the party was blown off and never seen after. You could not see fifty feet ahead.

After we got down into the valley, where there was no snow, and fine pasture for the animals, we could see it snowing and drifting furiously on the summit. We reached Fair Play, Wed. eve. Mr.

Byram of N.Y. and I decided to visit Montgomery<sup>14</sup> and Buckskin, and the wagon party went on. We spent Thurs. and Fri. in these towns, examining mines and Saturday and Sunday on our journey back to Central. We arrived here late last evening.

Yesterday it stormed all day. We rode 50 miles. Two more tired mortals and beasts never entered this city. What do you think of the country? Snow storms equal to our most severe Jan. storms in September.

I am now prepared to drive my business to a close. The season admonishes me that I have no time to lose. I will be prepared to leave in the third week of this month, unless I accept an offer to go back to Buckskin to examine a mine. In that case I will be five days later. I trust Bell is still with you. Give her my love and thanks for her visit which must be continued till after my arrival or repeated. I would have written her and mother often but for the interruption of the mails. I received Maria's letter a short time ago. Much love to all at your father's. Travel is renewed on the plains. Some think it not yet safe. I trust it will be perfectly so before I am ready. A day's delay after I am through with my business will hardly be bearable. Kiss the children for their papa. I think of them and you constantly with the ardent hope that I will soon be with you again.

Your affectionate Husband  
N.P. Hill.

Central City, Oct. 16, 1864.

My dear Wife.

The long anticipated pleasure of a departure from this land of gold and beauty, for home is near at hand. My seat in the stage which is to leave Denver on Tuesday the 25th is engaged. If the road is open and safe I will be in Atehison or Omaha Nov. 1st. On my arrival there I will inform you by telegraph. Unless the route on the plains is safer than now, I will not take the stage but go by a train. For several days, the stages have been fired into by Indians. Several have been wounded, but none killed. The trains rarely carry less than 100. A party of this size is easily able to defend itself against any small band of Indians which make the raids on the road.

The large bodies of Indians with their families are congregated at the head of the Republican river. From this point small war parties strike across to the Platte route. By the time I start, either the stages will be withdrawn again, or a sufficient number of soldiers will be on the road to insure safety. If I am compelled to

<sup>14</sup> The town of Montgomery was all alive in 1862-3, having from 1,000 to 2,000 inhabitants but it went down very soon after that . . . Buckskin Joe, so called from a Negro there of that name, and one of the discoverers, was five miles southeast from Montgomery.—"Early Days in Canon City and South Park," by Warren R. Fowler. *The Colorado Magazine*, Vol. 3, No. 2, May, 1926, p. 55.



go with a train, it may cause some delay in getting started, and we will be at least three weeks on the Plains. I will endeavor to keep you informed as I have opportunity. Tomorrow I am going to a section of country, 10 or 12 miles from here, to examine mining property. It is the last trip I will make from this section. The journey across the plains does not trouble me hard as it is. The only thing which is unpleasant is the apprehension of Indian attack. I have "roughed it" to use a Colorado expression, so much, that I am sufficiently toughened for anything. I shall be well provided with clothing, and take some important articles of diet such as coffee and cigars with me. I will have the company of Wm. Abbe of Boston all the way. I expect the company of Mr. McIntire, an old and respectable resident. Abbe will go with me certainly. He is now waiting for that purpose. He is a clever fellow with plenty of means. I am operating some with him and he will be at our house soon after our return. I suppose Mr. Thurber is well on his way and you will soon get the letter I sent by him. No item of news from Providence has reached me since I received your letter of the latter part of July. Your later letters have doubtless all gone by way of San Francisco and we will get them in Providence some time next Spring. I hope Bell is still at our house and that she will remain till after my return. I long to see little Bell. I fear she will have grown to be such a young lady, that I shall blush *as usual* when I meet her. Kiss the little lady for her papa. Crawford, I expect, is a *strapping* boy. Do you make him useful by going to markets etc.? I suppose the College fraternity have ruled me out. I imagine that certain gentlemen of the faculty show their appreciation of my neglect of the college for the base motive of money getting. I will try to make all right when I get back. Tell John Peirce that we will smoke a friendly cigar together in Room No. 1. Laboratory Building, some time before Thanksgiving. I am anxious to know how the..... is running, but have no doubt it is all right. Love to your Father, Mother sisters and brothers. Will write once more before leaving.

Your afft. Husband N.P. Hill

(Telegram)

Lewis Iowa Nov. 1st 1864—

I start for home this eve. One hundred and fifty miles yet to travel by stage N.P. Hill

(Telegram)

Chicago Nov. 3, 1864

You may expect me Saturday night by way of Groton.  
N.P. Hill

At the end of this series of letters there is a clipping pinned to the page which reads as follows:

Prof. Hill started on his return to the States, Saturday. He took with him a large quantity of specimens for a cabinet. Before leav-

ing here he expressed himself agreeably disappointed in the character of the country. He has been pretty much all over it, and considers it eminently worthy of another visit. Hence we may expect him back in the Spring. The Professor is a man of great attainments and of spotless reputation. The visits of such men to Colorado is all she need ask. She speaks for herself. Of all the Eastern men who have heard of our mines, those are the best satisfied who have been here and examined them, most thoroughly. They stand in need of no misrepresentation. The gold is here and when things are waked to life by the Continental railroad, the way it will be taken out will astonish even the natives.

(Letters written during a second visit to Colorado and on a trip to Swansea, Wales, will be published in future issues.—*Editor*)

#### PALMER LAKE HISTORICAL SOCIETY

The Palmer Lake Historical Society was incorporated on October 18, 1956 as a non-profit, educational institution. The society expects to undertake as its first major project, publication of a history of Palmer Lake written several years ago by Mrs. Marion Sabin. According to plans this will be an illustrated, paper-bound book about 100 pages, to sell for about \$1.50.

Officers and directors of the Palmer Lake Historical Society are: Mrs. Marian McDonough, president; Mrs. Newton E. Medlock, vice president; Lloyd McFarling, secretary; J. Kenneth McCall, treasurer; Mrs. Reba Bradley, Dr. M. Scott Carpenter, Charles A. Clark, Lt. Col. Rogers McDonough, Dr. Evalena Macy, Mrs. R. A. Story and James Dey.



## Colorado's Terrible Mine: A Study in British Investment

By CLARK C. SPENCE\*

In general, the history of the American mining frontier has been written in bold script. All too frequently in the past it has been presented primarily in terms of the colorful 'Fifty-niner, of lawless violence, or, at best, of the bold achievements of ruthless men exploiting both natural and human resources in their swift rise to the top. But the writing of the more important, if less picturesque, chapters remains to be completed. Too often it is forgotten that it was also corporate endeavor, not merely individual, that transformed western mining from a frontier enterprise to an industry. Beyond a certain point—when mining went into the deep level phases and when intricate, expensive milling processes became necessary—the individual tended to falter, and capital combinations thereupon took charge.

Much of the task of mineral development was undertaken by financial associations formed in the United States, but the Victorian capital market of England was by no means disinterested in trans-Mississippi America during the post-Sumter decades. Between 1860 and 1901, at least 232 joint-stock companies were registered in Great Britain to engage in mining or milling operations in Colorado alone. Of this number, probably as many as 70 were inoperative due to various reasons, 33 were reconstructions of earlier concerns, but 129 carried on mineral activities in the Rockies for at least brief periods of time.<sup>1</sup>

To select any one of these 129 limited liability corporations and label it as being "typical" of British endeavors in Colorado would be well nigh impossible. While many problems were common to such concerns, each one proved somehow unique. Difficulties stemming from over-capitalization, the purchase of poor property, management, and litigation plagued the majority; yet even these general misfortunes might vary greatly. Some companies carried on only token work; some blundered away year after year, pouring good money after bad; a few paid regular dividends, but most did not. Yet for all this, one of the first to operate in the Rocky Mountain region, the Colorado Terrible Lode Mining Company, Ltd., was probably as average a concern as the period produced.

\*Dr. Clark C. Spence, an Instructor in History in the College of Liberal Arts, Pennsylvania State University, holds a doctor's degree from the University of Minnesota, was a graduate student at the University of Colorado for a year, and spent 1953-54 doing research in England under a Fulbright Fellowship. His article entitled "The British and Colorado Mining Bureau," appeared in *The Colorado Magazine*, April, 1956. His doctoral dissertation at the University of Minnesota pertained to British investments in western mining.—*Editor*.

<sup>1</sup> These figures—very likely incomplete—have been compiled by the writer from the official Board of Trade files of the Registrar of Joint Stock Companies, Bush House, London, and Parliament Square, Edinburgh.

Located in Clear Creek County, some three miles above Georgetown, the Terrible was in 1869 owned on a partnership basis by two early pioneers, Frederick A. Clark and Henry Crow.<sup>2</sup> Both were actively co-operating with Robert O. Old and his promotional agency, the British and Colorado Mining Bureau,<sup>3</sup> to ship ores to Swansea and Liverpool for smelting, thus incidentally proving the richness of the mine abroad.<sup>4</sup>

This was preliminary to efforts to sell the property in England. Soon Old was negotiating with interested parties, and Clark journeyed to London early in 1870 to consummate the sale.<sup>5</sup> By the end of March, 1,100 feet of the Terrible had passed into the hands of a newly-formed British firm, the Colorado Terrible Lode Mining Company, Ltd., at a price variously reported at from £40,000<sup>6</sup> to "a sum of money sufficiently large, if used for that purpose, to liquidate the interest on the national debt—estimating it at two thousand five hundred millions—for one day!"<sup>7</sup> The actual sale price was £100,000, of which at least a minor part seems to have been paid in fully credited shares.<sup>8</sup>

This "first English Co. formed on Colorado mining property"<sup>9</sup> was nominally capitalized at £125,000 in 25,000 shares of £5 each,<sup>10</sup> of which only 21,000 were taken up.<sup>11</sup> Its prospectus anticipated

<sup>2</sup> Clark had arrived in Denver in 1860 and had operated a grocery business there until burned out three years later. Frank Hall, *History of the State of Colorado* (Chicago, 1891), IV, 398. Crow had migrated from Iowa to Central City in 1859 and had turned to the mines for a livelihood. After participating in the Indian campaigns of 1864, he went back to mining near Georgetown, eventually making his fortune and becoming president of the City National Bank of Denver. William B. Vickers, *History of the City of Denver, Arapahoe County, and Colorado* (Chicago, 1880), 391. According to press accounts, the Terrible had been discovered by Frank O'Brien and Will Brown, who attached the name facetiously. Later it was sold to Stephen Welland for \$40, then found its way into the hands of Clark and Crow at a reported price of \$500. *Daily Denver Times*, 23 September 1872. A Georgetown pioneer later stated that, according to Clark, he and Crow had paid \$4,000 to four prospectors for the mine when it was twenty-five feet deep. Mason Bradford Shelton, *Rocky Mountain Adventures* (Boston, 1920), 50.

<sup>3</sup> For a brief treatment of Old and the Bureau, see Clark Spence, "The British and Colorado Mining Bureau," *The Colorado Magazine*, Vol. XXXIII (April, 1956), 81-92.

<sup>4</sup> *Rocky Mountain News*, 8 November 1869; *Georgetown Weekly Miner*, 9 December 1869; *Central City Register*, 10 November 1869.

<sup>5</sup> *Rocky Mountain News*, 17 January 1870; *Georgetown Weekly Miner*, 20 January 1870.

<sup>6</sup> *Weekly Central City Register*, 6 April 1870.

<sup>7</sup> *Georgetown Weekly Miner*, 31 March 1870.

<sup>8</sup> Information is not complete on this point, but shortly after the company was formed, Frederick Clark held £21,540 worth of shares in the enterprise, and very likely these were issued fully paid-up, according to the common practice of the day. See: Summary of Capital and Shares to 7 July 1870. Colorado Terrible Lode Mining Company, Ltd., File No. 4804 in the Companies Registration Office, London. Such files are cited hereafter as C.R.O., with their number.

<sup>9</sup> *The Mining Review*, I (January, 1873), 5. Earlier efforts to organize British joint-stock companies to operate in Colorado mines appear never to have proceeded beyond the preliminary stages. The Empire Gold Mines Company, Ltd., was registered in 1865 to acquire property in Gilpin and Clear Creek counties, but no capital was subscribed, and undoubtedly it was never active. *Certificate of Incorporation*, 17 November 1865; *Memorandum and Articles of Association*, 1; Registrar of Companies to Empire Gold Mines Company, Ltd., (London, 24 July 1878). Empire Gold Mines Company, Ltd., C.R.O. 2601C. An abridged prospectus for the Colorado Gold and Silver Mining Company, Ltd. appeared in London mining periodicals in the summer of 1868, but no such concern was ever registered. *London Mining Journal*, 11 July 1868.

<sup>10</sup> *Memorandum and Articles of Association*, 2. Colorado Terrible Lode Mining Company, Ltd., C.R.O. 4804.

<sup>11</sup> Summary of Capital and Shares to 27 July 1877. *Ibid.* Apparently 4,000 shares were not issued, but were held in reserve to provide future working capital.



"considerable profit" even in the initial year of operation, and flatly predicted that £1,000 would be netted from every ten tons of ore extracted.<sup>12</sup> On its board of directors sat influential and respected public figures whose presence was designed to instill confidence and to influence the investing inclinations of the "lord-loving public," as one American promoter in England phrased it.<sup>13</sup> Prominent were the names of Sir Cecil Beadon, late Lieutenant Governor of the Province of Bengal,<sup>14</sup> Charles Francis Montresor, also of the Indian Civil Service,<sup>15</sup> and William Cope, the optimistic and energetic manager of the British and Colorado Mining Bureau.<sup>16</sup>

Robert Old, the king-pin in the transaction, now became superintendent in charge of the mine and scurried back to the Rockies amidst plaudits from the territorial press.<sup>17</sup> To be sure, the sale had been brought about officially through the Bureau. "But," confided the *Georgetown Miner*, "we strongly suspicion that much more is due in the matter of this 'Terrible' sale and transfer to the tact and persistent efforts of Mr. Old, rather than to any influence of the Bureau named."<sup>18</sup>

When the British concern assumed control, the Terrible was regarded as one of the show mines of Clear Creek County, ranking in importance with the Dives, the Pelican, or the Anglo-Saxon. While production was sustained, the company was frequently held aloft as a successful example of excellent corporate management, an accomplishment which was considered an exception and not the general rule with silver mining firms prior to 1872, at least.<sup>19</sup> Old was considered a competent superintendent. He reported regularly by weekly letter to London headquarters at Bartholomew House;<sup>20</sup> he cheerfully predicted lucrative dividends for the shareholders, a task which seemed to be the duty of Anglo-American mine managers of the period; and he impressed Colorado newsmen because he kept "a complete set of books,"<sup>21</sup> an accomplishment with which not every westerner was familiar during the early 'seventies.

Old relinquished his managerial position as of December 1,

<sup>12</sup> Colorado Terrible Lode Mining Company, Ltd., *Prospectus* (1870).

<sup>13</sup> *Mining Magazine and Review*, I (January, 1872), 40.

<sup>14</sup> Beadon (1816-1880) spent nearly thirty years in the India Service. A Knight Commander of the Star of India, he devoted most of his life after 1866 to travel and to various business investments. *DNB*, III, 459-460.

<sup>15</sup> J. A. Venn (compiler), *Alumni Cantabrigienses* (Cambridge, 1947), Part 2, IV, 446.

<sup>16</sup> Originally, the "Promoters of the Company," Cope, Old, and John Orchard—all backers of the Bureau—were to receive a certain percentage of profits returned by the company. *Memorandum and Articles of Association*, 25. By mid-1871, however, these claims had been surrendered. *Special Resolutions*: passed 15 June; ratified 7 July 1871. Colorado Terrible Lode Mining Company, Ltd., C.R.O., 4804.

<sup>17</sup> See, for example, *Central City Herald*, 13 April 1870; *Golden Transcript*, 13 April 1870.

<sup>18</sup> *Georgetown Miner*, 14 April 1870.

<sup>19</sup> *Georgetown Miner*, 24 July 1872.

<sup>20</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (22 June 1870), *London Mining Journal*, 25 June 1870, 531.

<sup>21</sup> *Georgetown Weekly Miner*, 28 July 1870.

1871, amid expressions of regret from British officials,<sup>22</sup> and was replaced by George Teal, another Englishman with considerable experience in the mining field.<sup>23</sup> The transfer of reins, however, was not without disturbances. The portly Teal insisted that ore supposedly left on hand by Old did not exist; Old contended that his own records were correct and that his successor was in error.<sup>24</sup> The mystery was never solved completely, and Old came to be regarded as something of "an adverse critic" of the company, even though he was never openly hostile.<sup>25</sup>

Under the guidance of Teal, the Terrible was one of the first silver mines in the West to demonstrate the practicality of treating low grade ores cheaply. After expanding and erecting its own concentration mill, the company installed new type works and refined even the tailings, which theretofore had been discarded as worthless.<sup>26</sup> Early operations were so successful that the company seriously considered the purchase of additional property in Clear Creek County until unfavorable inspection reports by both Teal and Clark stayed such a move.<sup>27</sup>

British engineers and miners were imported to staff the mine.<sup>28</sup> When Grace Greenwood, the popular traveler, lecturer, and authoress, attended a banquet at Georgetown in 1871, she was agreeably surprised that almost all the guests were very presentable young English miners from the Terrible.<sup>29</sup> The ten-piece "Terrible Silver Cornet Band," from nearby Brownville, was composed of Cornishmen employed by the British concern.<sup>30</sup> Sunday cricket clubs, manned largely by players from the Terrible, carried the old world athletic tradition high into the Rockies, much to the consternation of a few puritans who fought to keep the Sabbath holy.<sup>31</sup>

<sup>22</sup> *Georgetown Miner*, 30 November 1871.

<sup>23</sup> Teal had migrated to California in 1849 and had become head of a milling plant there. After a number of years he returned to England, but in 1869 he was back in Colorado on mining business for the Union Engineering Company of Manchester; in July, 1870, he returned to the Rockies permanently. *Portrait and Biographical Record of Denver and Vicinity, Colorado* (Chicago, 1898), 753; *Georgetown Miner*, 23 December 1869; *Rocky Mountain News*, 14 July 1870. Old later stated that he was succeeded at the Terrible by General Charles P. Baldwin, at his own suggestion. Robert Orchard Old, Bancroft Statement (Georgetown, 21 May 1886). Baldwin's testimony, however, indicates that he never assumed the position until January, 1884. Charles Pierce Baldwin, Bancroft Statement (Georgetown, 15 October 1885). Both statements are located in the Bancroft Library, University of California.

<sup>24</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (26 June 1872), *London Mining Journal*, 29 June 1872, 599.

<sup>25</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (25 June 1873), *London Mining Journal*, 28 June 1873, 691.

<sup>26</sup> *Georgetown Weekly Miner*, 8 August 1874.

<sup>27</sup> Plans were originally made to acquire mines from the Brown Mining Company for £60,000. Nominal capital was to be increased by £75,000, thus also proving working capital as well as purchase money. *London Mining Journal*, 4 November; 2 December 1871, 1011, 1078.

<sup>28</sup> For example, four English laborers bound for the Terrible arrived in Denver in the spring of 1871 and were directed on to the mine by Byers, editor of the *Rocky Mountain News* and agent for the National Land Company. William N. Byers to Robert Old (Denver, 27 May 1871). William N. Byers Letterbook (1868-1871). University of Colorado Libraries.

<sup>29</sup> Grace Greenwood, *New Life in New Lands: Notes of Travel* (New York, 1873), 105-106.

<sup>30</sup> *Georgetown Weekly Miner*, 5 October 1871.

<sup>31</sup> *Georgetown Miner*, 1 October 1873.



Three dividends were paid in 1871, but after that year came increasing difficulties. The general meeting of shareholders convened in June of 1872 "under circumstances of a somewhat disappointing and depressing character," according to Chairman Sir Cecil Beadon.<sup>32</sup> Only 111 tons of first-class ore had been taken out during the previous twelve months; high labor costs had eaten up £13,235 of the proceeds; freight charges and interest on the company's debt had accounted for additional sums. A severe winter had hampered operations in Colorado, and directors complained that firm control from London was impossible because of the distance factor which delayed communications and increased managerial independence.<sup>33</sup> Shares with a par value of £5 sold in January, 1872, at £4 15s.;<sup>34</sup> by the end of the year, they were down to £2 5s.<sup>35</sup>

In an effort to instill confidence, former owner Frederick Clark returned part of the vendors' shares to the concern. "As I have made so large a profit out of the mine, and may be thought by some people in England to have made an undue profit," he said, "I place 217 shares at your disposal . . . for the benefit of the company."<sup>36</sup> At the same time—June, 1872—shareholders approved the issue of debentures totalling not more than £10,000.<sup>37</sup>

Nor did 1873 bring any substantial improvement in the concern's financial position. Directors reported that insufficient local markets for ore greatly hampered activities. Additional labor-saving machinery was needed, they emphasized, and more ores must be shipped to England for reduction. At the same time, they aired another complaint common to Anglo-Colorado mining companies in general: account books were kept chiefly on the American side, and officials could have no very great check over them.<sup>38</sup>

As of March 31, 1873, the Colorado Terrible Lode Mining Company, Ltd. stood £12,482 3d. in the red, £5,727 6s. 8d. of this owed in Colorado and £6,754 13s. 7d. in England.<sup>39</sup> Meanwhile, the Colorado press staunchly defended the property. In June of the same year, the editor of the Georgetown *Miner* ventured the opinion "that the Terrible will at the end of the year show a higher yield per ton (of all classes) than any silver mine west of the Mississippi, and a greater product in coin than any in the Territory."<sup>40</sup>

But such optimistic predictions as these failed to anticipate the

<sup>32</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (26 June 1872), *London Mining Journal*, 29 June 1872, 599.

<sup>33</sup> *Ibid.*

<sup>34</sup> *London Mining Journal*, 27 January 1872, 84.

<sup>35</sup> *London Mining Journal*, 28 December 1872, 1260.

<sup>36</sup> Frederick Clark to Sir Cecil Beadon, quoted in report of the meeting of the Colorado Terrible Lode Mining Company, Ltd. (26 June 1872), *London Mining Journal*, 29 June 1872, 599.

<sup>37</sup> *Ibid.*

<sup>38</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (25 June 1873), *London Mining Journal*, 28 June 1873, 691; *London Mining World*, 21 June 1873, 1176.

<sup>39</sup> *Ibid.*

<sup>40</sup> *Georgetown Miner*, 3 June 1873.

depression which was to strike a few months later, scattering behind it the wreckage of many a mining company, British as well as American. As the market price of silver dropped alarmingly, the Terrible, like other hard-hit concerns, reduced miners' wages and substituted a new pay scale of its own. Workmen at the mine protested and, late in November, walked out, leaving the property idle.<sup>41</sup> But Superintendent Teal refused to retreat from the new wage level, and after several days, the miners returned to work and normal operations were resumed.<sup>42</sup> Although the company evidenced grave anxiety over the temporary closing of the Georgetown Bank,<sup>43</sup> it was extremely fortunate in coming through the depression unscathed. Even in the darkest days of financial adversity, the red streamer with the silver letters "Terrible" never failed to float over the mine buildings.<sup>44</sup>

Indeed, 1874 was a profitable year. A new concentrating plant went into operation in June, with a capacity of from twenty to twenty-five tons per day.<sup>45</sup> Profits for the twelve months totaled £17,686 8s., and a dividend of £1,575 was distributed among shareholders in August.<sup>46</sup> The year 1875 opened with brilliant prospects, also, and in February a dividend of four shillings was paid on all shares.<sup>47</sup> But litigation—the bane of the mining world—soon engulfed the Terrible just as it did numerous other companies when they displayed the slightest indication of success.

Early in 1875 the east level of William A. Hamill's Silver Ore broke into the fourth level of the Terrible. Hamill, already well on his way to becoming Georgetown's first citizen, obtained an injunction against the British firm in April, and after preliminary proceedings, the courts closed the Terrible and forbade either party to extract ore from the disputed area.<sup>48</sup> When work was halted, the ore body of the Terrible had been developed to the seventh level, but for the remainder of 1875, the company worked only the upper levels and the concentration mill. At the end of the year, the entire property lay idle.<sup>49</sup>

English commentators could not be expected to view with favor

<sup>41</sup> *Georgetown Miner*, 1 December 1873. According to Federal figures, the average number of men employed at the mine in 1873 was twenty-eight. Sixth Annual Report of the United States Commissioner of Mining Statistics, *H. Exec. Doc. No. 141*, 43 Cong., 1 Sess. (1873-1874), 296.

<sup>42</sup> *Georgetown Miner*, 5 December 1873.

<sup>43</sup> In October, the company advertised in London that the Georgetown Bank had reopened and that the Terrible had not suffered from the temporary closure. *London Mining Journal*, 25 October 1873, 1172.

<sup>44</sup> *Georgetown Miner*, 8 August 1874.

<sup>45</sup> *Georgetown Weekly Miner*, 20 June 1874.

<sup>46</sup> Seventh Annual Report of the United States Commissioner of Mining Statistics, *H. Exec. Doc. No. 177*, 43 Cong., 2 Sess. (1874-1875), 366. Of this £13,000 went to pay back debts and £1,150 for interest. *London Mining World*, 4 July 1874, 37-38.

<sup>47</sup> Thomas Skinner (ed.), *The Stock Exchange Year-Book and Diary for 1875* (London, n.d.), 160.

<sup>48</sup> Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains, *H. Exec. Doc. No. 159*, 44 Cong., 1 Sess. (1875-1876), 298.

<sup>49</sup> *Ibid.*



the course of events which resulted in the closing of the much-publicized Terrible. A major shareholder, William Fraser Rae, who was also a prolific writer of some stature,<sup>50</sup> saw the controversy between Hamill and the English concern as being definite proof of the property's richness. ". . . No mine which is of little value has anything to dread from these Rob Roys of the Far West," he contended, referring disdainfully to Hamill as representative of a class of "blackmailers" frequently encountered beyond the Mississippi.<sup>51</sup> Another itinerant Briton on the scene, Samuel Nugent Townshend, concluded that had not the manager allowed the mine to fill with water as soon as legal difficulties commenced, it would have been taken away from the company immediately. Townshend's denunciation was clear and emphatic:

Nothing can possibly be more disgraceful to a country than the systematic manner in which all titles, and especially English mining titles, are questioned in this district. Lawyers in high official positions actually buy claims adjacent to English ones to raise a disputed boundary question; and the only court in America in or for which Englishmen have the slightest confidence or respect—the Supreme Court of the United States—, has until this year, been practically closed to them, owing to Colorado being a Territory only.<sup>52</sup>

Under such circumstances, insisted Townshend in 1876, "any English capitalist is a downright fool to buy a mine in this district; for the moment he proves it a good one, all the swindling sharks for fifty miles round appear, and combine to oust him legally, or in a few instances even by force . . ."<sup>53</sup>

The effects of litigation upon the Colorado Terrible Lode Mining Company, Ltd., were adverse, to say the least. In the year prior to the end of March, 1875, profits of £7,807 10s. 5d. had been returned, exclusive of ore on hand at the end of that period.<sup>54</sup> Net profits for the next twelve-month span dwindled to only £1,940 16s. 6d., this primarily from work done by the firm's concentration mill. Mining operations were "practically suspended."<sup>55</sup> Even by 1877 the situation was little improved; the mine was full of water to the tunnel level, but operations in all parts of the mine had been discontinued. The immediate practical effect of the litigation was

<sup>50</sup> A correspondent on the *London Daily News*, Rae had been trained as a lawyer. He made several journeys to North America and wrote numerous travel accounts and novels. *Who Was Who* (1897-1916) (London, 1920), 583; John Foster, *Men At The Bar: A Biographical Hand-List of the Various Inns of Court, including Her Majesty's Judges, etc.* (London and Aylesbury, 1885), 383.

<sup>51</sup> W. Fraser Rae to editor (London, 1 September 1875), *London Mining Journal*, 4 September 1875, 983.

<sup>52</sup> Samuel Nugent Townshend, *Colorado: Its Agriculture, Stockfeeding, Scenery, and Shooting* (London, 1879), 63. These words were written in 1876, although not published until three years later.

<sup>53</sup> *Ibid.*, 64. See also his *Our Indian Summer in the Far West* (London, 1880), 40.

<sup>54</sup> Report of the meeting of the Colorado Terrible Lode Mining Company, Ltd. (12 July 1875), *London Mining Journal*, 17 July 1875, 790.

<sup>55</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (17 June 1876), *London Mining Journal*, 24 June 1876, 700.

to withdraw from active circulation a payroll of from \$8,000 to \$10,000 per month.<sup>56</sup> In the meantime, debts mounted on all sides.<sup>57</sup>

At least some evidence suggests that the legal ensnarment in this case harmed not only the Terrible company but that it also worked to deter the investment of English capital elsewhere in the Rockies. The *London Standard* regarded Hamill's injunction against the concern as unjust. "The episode may be expected to increase the disposition to avoid investments in American securities, especially mining shares," promised the editor.<sup>58</sup> The son of George Teal returned from England in May, 1875, and reported that the litigation had discouraged British shareholders and had already prevented the sale of several Colorado mines on the European market.<sup>59</sup>

There were many at this time—and the United States Commissioner of Mining Statistics, the able Rossiter W. Raymond, was among them—who believed that Hamill had deliberately pushed exploration and development in the east level of the Silver Ore in the hopes of creating a legal dispute and inducing the British company to buy him out.<sup>60</sup> Whether such charges were true or not, the outcome was precisely what Raymond and others had predicted—the Colorado Terrible Lode Mining Company, Ltd. was maneuvered into acquiring the Silver Ore and half a dozen other lodes owned by Hamill and Jerome Chaffee for £200,000 in shares.

Negotiations had commenced early. Chaffee had traveled to London in the spring of 1876 and had bluntly offered to sell his and Hamill's property adjoining the Terrible for £80,000, part in cash and part in debentures.<sup>61</sup> This proposal was rejected, but English directors were by now convinced that their case was lost in the courts. Sir Cecil Beadon explained that Hamill's power as a member of the Colorado Legislature made it fatal to challenge him in a lawsuit brought in that state. Amalgamation, he said, was the only alternative.<sup>62</sup>

Hamill and Chaffee suggested a consolidation of property under a new company to be formed in Colorado, but British investors refused to sanction the shifting of the seat of direction from London.<sup>63</sup> But a revised proposition was accepted, and in March, 1877, the concern voted to reorganize itself as the Colorado United Mining

<sup>56</sup> *Georgetown Weekly Miner*, 13 January 1877.

<sup>57</sup> By 1877, the concern owed \$11,983, including interest, to the Pennsylvania Lead Company. "It is a most infernal fraud on the Terrible Co.," said the man who had replaced Teal as superintendent, "but we must submit to accept with interest on their notes." George M. Henty to Willard Teller (n.p., 12 January 1877). Henry M. Teller mss. University of Colorado Libraries.

<sup>58</sup> *London Standard*, 29 April 1875.

<sup>59</sup> *Georgetown Weekly Miner*, 15 May 1875.

<sup>60</sup> Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains, *H. Exec. Doc. No. 159, 44 Cong., 1 Sess.* (1875-1876), 298.

<sup>61</sup> Report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (9 March 1877), *London Mining Journal*, 10 March 1877, 253.

<sup>62</sup> *Ibid.*

<sup>63</sup> Francis Andrews (Secretary to David H. Moffat, Jr., Attorney for Hamill and Chaffee) (London, 13 January 1877), Colorado Terrible Lode Mining Company, Ltd., C.R.O. 4804.



Company, Ltd.<sup>64</sup> Nominal capital was now raised to £325,000 by the issue of 40,000 new shares of £5 each, all of which went to Hamill and Chaffee in exchange for property on Brown and Sherman mountains.<sup>65</sup> Shareholders agreed to accept as many as three directors approved by the Americans, and Hamill, for his part, consented to withdraw the injunction against the Terrible.<sup>66</sup>

But there were new difficulties and delays in store for the re-constructed company. New state regulations pertaining to aliens and their right to hold property necessitated placing the mines in the names of trustees who were residents.<sup>67</sup> Litigation had left the physical plant in dilapidated condition; new machinery failed to arrive on schedule; expensive pumping operations consumed both time and money.<sup>68</sup> Thus by March, 1878, the company was burdened with mortgages of \$25,000.<sup>69</sup>

At the same time, a series of managerial upheavals wrought confusion and dissension on both sides of the Atlantic. Early in 1875, George Teal had asked for a salary increase and had not only been refused but had been replaced in favor of George M. Henty, also a British-born engineer.<sup>70</sup> Henty's supervision seemed satisfactory until April, 1877, when the London secretary arrived in Georgetown, discharged the regular clerk at the mine, and instituted a new system of bookkeeping which required all orders and checks to be countersigned by William A. Hamill.<sup>71</sup> Henty complained loudly at this curtailment of his powers and during the ensuing controversy was dismissed to make way for Cecil Morgan, another Englishman.<sup>72</sup> But Morgan so misled the directors with false production figures that he was soon released and full control in Colorado handed over to Hamill.<sup>73</sup>

<sup>64</sup> *Special Resolutions*: passed 9 March; confirmed 28 March 1877. This was not a new company; the name of the old was merely changed with the sanction of the Board of Trade. Registrar of Companies to Francis Andrews (London, 2 May 1877). *Ibid.*

<sup>65</sup> Notice of Capital Increase (4 April 1877). An additional 4,000 shares, presumably those not issued by the original company, were to be set aside for sale to provide working capital whenever they rose to par again. Meanwhile, operating funds were to be secured by the issuance of debenture bonds securing loans from shareholders. Memorandum of Agreement (17 May 1877) between Jerome Chaffee, William A. Hamill, and the Colorado United Mining Company, Ltd. *Ibid.*

<sup>66</sup> Memorandum of Agreement (17 May 1877) between Jerome Chaffee, William A. Hamill, and the Colorado Terrible Lode Mining Company, Ltd. *Ibid.*

<sup>67</sup> The new Colorado Constitution provided that "Aliens, who are or who may hereafter become *bona-fide* residents" could enjoy full property rights comparable to those of native-born citizens. Constitution of the State of Colorado (1876), Art. II, Sect. 27. David H. Moffat, a native-born citizen, and Secretary Andrews, who had declared his intent to become a citizen, acted as trustees for the company. Report of meeting of the Colorado United Mining Company, Ltd. (13 July 1877), *London Mining Journal*, 14 July 1877, 752.

<sup>68</sup> Report of meeting of the Colorado United Mining Company, Ltd. (1 August 1878), *London Mining Journal*, 3 August 1878, 859.

<sup>69</sup> Circular to shareholders (26 March 1878), *London Mining Journal*, 6 April 1878, 364.

<sup>70</sup> *London Mining Journal*, 3 July 1875, 415; report of meeting of the Colorado Terrible Lode Mining Company, Ltd. (12 July 1875), *London Mining Journal*, 17 July 1875, 890.

<sup>71</sup> George M. Henty to editor (Georgetown, 31 August 1878), *London Mining Journal*, 21 September 1878, 1053.

<sup>72</sup> *London Mining Journal*, 6 April 1878, 364; report of meeting of the Colorado United Mining Company, Ltd. (1 August 1878), *London Mining Journal*, 3 August 1878, 859.

<sup>73</sup> *London Mining Journal*, 12 July 1879, 711.

Hamill gave every indication that his was to be a firm hand. He promised to halt the ore thievery which had robbed the company of an estimated \$15,000 to \$20,000 in the two years prior to July, 1879. He advanced nearly \$30,000 from his own pockets for operating expenses, charging no interest whatever.<sup>74</sup> A profit of slightly more than £2,761 was returned for the fiscal year ending in March, 1881, but this result, "though very satisfactory" to the directors, was "yet less gratifying than anticipated."<sup>75</sup> The next years were more rewarding: litigation with the Colorado Territorial National Silver Mining Company was avoided, a new hoisting engine was erected, the debt was liquidated, and a dividend of one shilling per share was declared—all this between 1881 and the end of 1883.<sup>76</sup>

Yet all was not well. Open criticism of Hamill was developing in England. As early as 1880, sugar refiner John Coope Davis, acting as temporary chairman during the mortal illness of Beadon, complained that Hamill had written but three letters to the directorate in a period of nine months.<sup>77</sup> But personal investigation by William Fraser Rae wholly vindicated the superintendent;<sup>78</sup> a subsequent report tendered by General William H. A. Feilding, a director who visited Colorado two years later, was also of "a highly satisfactory nature."<sup>79</sup> Indeed, by August, 1882, Hamill had been elected to a seat on the board.<sup>80</sup>

Despite such endorsements, shareholders' meetings in this and the following two years were devoted largely to discussions of whether or not to remove Hamill and, if so, how.<sup>81</sup> By 1883 many were convinced that a change of local management was preferable, but there was no explanation of how this might be legally done. The fact that Hamill personally controlled 20,000 shares<sup>82</sup>—roughly one-third of the total capital—and enjoyed the support of a majority on the board of directors, made it virtually impossible to oust him at the time.

<sup>74</sup> Report of meeting of the Colorado United Mining Company, Ltd. (16 July 1879), *London Mining Journal*, 19 July 1879, 720.

<sup>75</sup> Colorado United Mining Company, Ltd., *Annual Report*, year ending 31 March 1881.

<sup>76</sup> *Ibid.*; report of meeting of the Colorado United Mining Company, Ltd. (1 August 1882), *London Mining Journal*, 5 August 1882, 956; Colorado United Mining Company, Ltd., *Directors' Report*, two years ending 31 March 1885.

<sup>77</sup> Report of meeting of the Colorado United Mining Company, Ltd. (7 July 1880), *London Mining Journal*, 10 July 1880, 794.

<sup>78</sup> Rae was in Georgetown by early November, 1880, and was back in London at least by late January of the following year. *Georgetown Courier*, 4 November 1880; *London Mining Journal*, 29 January 1881, 141.

<sup>79</sup> Colorado United Mining Company, Ltd., *Annual Report*, year ending 31 March 1882.

<sup>80</sup> Report of meeting of the Colorado United Mining Company, Ltd. (1 August 1882), *London Mining Journal*, 5 August 1882, 956.

<sup>81</sup> Report of meeting of the Colorado United Mining Company, Ltd. (2 December 1882), *London Mining Journal*, 9 December 1882, 1506; report of meeting of the Colorado United Mining Company, Ltd. (11 December 1883), *London Mining Journal*, 15 December 1883, 1430; report of meeting of the Colorado United Mining Company, Ltd. (17 July 1884), *London Mining Journal*, 19 July 1884, 831.

<sup>82</sup> Of these, 16,000 were in Hamill's name and the remainder in the name of D. H. Moffat, Jr. of Denver. Summary of Capital and Shares to 2 November 1884. Colorado United Mining Company, Ltd., C.R.O. 4804.



One large shareholder, Archbald Smyth, sought to purchase Hamill's interest early in 1883, and Hamill had signed the necessary transfers and certificates, giving them to his twenty-one year old son to carry to London and complete the transaction. Young Hamill, arriving in May, 1883, found Smyth unable or unwilling to uphold his end of the bargain as planned, and, instead of returning to Colorado, proceeded to lead a life of dissipation in London, borrowing on a portion of the transfers and certificates entrusted to him and being unable to redeem them. It was only by bringing suit in the British courts that the elder Hamill regained possession of all his shares.<sup>83</sup>

Sometime in 1885, one Major Reed appeared in England from Colorado, volunteering his aid in removing Hamill. He did succeed in bringing about an agreement under which Hamill stepped down as manager in exchange for which the company purchased seven lodes from him at a cost of £4,408 8s. 9d. or more than \$22,000.<sup>84</sup> It was a high price to pay for a change of management, but according to Chairman Feilding<sup>85</sup> it was well worth it "to be rid, once for all, of this 'old man of the sea,'" who had for so many years been riding the company's back. Feilding insisted that Hamill had not been bought off, but that the directors had acted in self-defense—the seven lodes were interspersed with those of the British concern, and might possibly provide the basis for future litigation.<sup>86</sup> This may have been a valid argument, but the prime factor was the ousting of Hamill and his replacement by Charles P. Baldwin of Colorado.<sup>87</sup>

But the firm had not seen the last of Hamill. In 1887, needing additional capital, shareholders voted to voluntarily liquidate the old company and transfer its undertaking to a new one, the

<sup>83</sup> *The Times* (London), 21 April 1886; 13 November 1888; Hamill v. Lilley, 19 *Queen's Bench Division* (1887), 83-84.

<sup>84</sup> Report of meeting of the Colorado United Mining Company, Ltd. (19 October 1885), London *Mining Journal*, 24 October 1885, 1197; Colorado United Mining Company, Ltd., *Directors' Report*, two years ending 31 March 1885; *Annual Report*, year ending 31 March 1886. It was charged by some that Reed was actually an agent for Hamill and that he engineered a "deal" in England. *Engineering and Mining Journal*, 21 March 1885, 185.

<sup>85</sup> This was General William Henry Adlebert Feilding, fifth son of the seventh Earl of Denbigh, a Knight of the Legion of Honor, and Inspector-General of Recruiting Headquarters, 1891-1894. *Burke's Peerage* (London, 99th edition, 1949), 570.

<sup>86</sup> Report of meeting of the Colorado United Mining Company, Ltd. (19 October 1885), London *Mining Journal*, 24 October 1885, 1197-1198.

<sup>87</sup> *Ibid.*, 1197. Charles Pierce Baldwin, originally of Maine, fought honorably and meritoriously for the Union Army during the Civil War and was discharged in 1866 a brigadier general of volunteers. Francis B. Heitman, *Historical Register and Dictionary of the United States Army, From its Organization, September 29, 1789, to March 2, 1903* (Washington, 1903), I, 185. According to his own statement, Baldwin assumed control of the Terrible in January 1884. Baldwin, *Bancroft Statement* (Georgetown, 15 October 1885). This appears to be prior to the ousting of Hamill and an explanation may be that Baldwin was actually in charge under Hamill and assumed full charge when the latter retired.

Colorado Silver Mining Company, Ltd.<sup>88</sup> Waste heaps of the reorganized concern grew so large that debris fell on the ground of the Rainbow claim, which was owned by Hamill. The latter resorted to the courts and enjoined the Englishmen from dumping any more waste rock in 1890. The company then found it expedient to purchase the Rainbow property for a total of £14,875 10s. in cash and shares.<sup>89</sup>

Date	DIVIDENDS PAID, 1870-1901 <sup>90</sup>	
	Amount per share	Total
Nov. 1870	2s. 6d.	£ 2,625
Mar. 1871	2 —	2,100
June 1871	1 6	1,575
Oct. 1871	2 —	2,100
Aug. 1874	1 6	1,575
Feb. 1875	4 —	4,200
May 1883	1 —	3,081
Total	14s. 6d.	£17,256

After 1883, the firm returned no dividends, instead it dug deeper and deeper into the shareholders' pockets. In the summer of 1884, a flash flood swept down Brown Gulch, washing away the plant of the Dunderberg Company and filling the Terrible with water to the eighth level, thus suspending all mining.<sup>91</sup> Although the concern recovered momentarily, the remainder of its existence was to be fraught with financial difficulties, one after another.

The reorganized Colorado Silver Mining Company, Ltd., pushed its own work and at the same time leased ground to tributaries for a percentage of the ore extracted.<sup>92</sup> But profits were negligible, and when silver prices plunged downward during 1891, losses began to mount. Capital was lacking, plans to raise funds by issuing debentures collapsed, and in November of the following year, another reorganization occurred, with the New Colorado Silver

<sup>88</sup> *Special Resolution*: passed 7 June; confirmed 28 June 1887. Colorado United Mining Company, Ltd., C.R.O. 4804. Nominal capital of the reconstructed company was £325,000 in £1 shares, five of which, each with 18s. credited paid were exchanged for each old £5 share. Thus, by mid-1892, £30,754 4s. had been paid in under this arrangement. Memorandum of Agreement (12 August 1887) between Charles J. Crickmer (liquidator of the Colorado United Mining Company, Ltd.) and the Colorado Silver Mining Company, Ltd.; Summary of Capital and Shares to 11 July 1892. Colorado Silver Mining Company, Ltd., C.R.O. 24832.

<sup>89</sup> Colorado Silver Mining Company, Ltd., *Annual Report*, year ending 31 December 1891. At least £10,000 was paid in fully credited shares. Memorandum of Agreement (27 June 1890) between the Colorado Silver Mining Company, Ltd. and William A. Hamill. Colorado Silver Mining Company, Ltd., C.R.O. 24832.

<sup>90</sup> Compiled from Skinner, *Stock Exchange Year-Book for 1875: The Financial News* (London), 17 July 1884; the files of the London *Mining Journal*; and from the *Annual Reports*, 1881-1901.

<sup>91</sup> Report of meeting of the Colorado United Mining Company, Ltd. (17 July 1884), London *Mining Journal*, 19 July 1884, 831.

<sup>92</sup> Twenty-five percent of the ore taken out went to the company. In June, 1892, seventeen lessees were at work on the property. Colorado Silver Mining Company, Ltd., *Circular to Shareholders* (17 June 1892).



Mining Company, Ltd., now taking charge of the property, which by this time included a mortgage debt of £6,000.<sup>93</sup>

But the dark days of 1893 were ahead. In July, silver fell to sixty cents an ounce. Smelters refused to buy at this low figure, and mines closed on all sides. On August 19, the manager of the British concern wrote:

... after being in a state of siege for ten days, we were able to pay off the most pressing creditors. My position here lately has been both unpleasant and dangerous . . . from the riotous state of miners whose work had become suddenly stopped by the heavy drop in value of Silver ores.<sup>94</sup>

Consequently the manager closed the mine without awaiting further instructions from London and for his pains was replaced by Arthur L. Collins. Directors admitted that their investment was in peril.

We started with what seemed to be excellent prospects, to clear out, repair and deepen the Terrible shaft, and incurred very heavy cost in so doing. We found good indications in the very bottom of the shaft, and we felt that we were close upon success when the heavy and unprecedented fall in Silver occurred, which disorganized the whole country, and mining operations in Georgetown collapsed, our Bank there, with many others, suspended payment; our staff became demoralized, and finally broke up; and we were left with debts that we had no immediate means of paying.<sup>95</sup>

But unlike many other Anglo-American mining companies operating in the West, the New Colorado Silver Mining Company, Ltd., did not seek greener international pastures elsewhere. Instead it hung on grimly, pushing work on a small scale, becoming embroiled in another lawsuit,<sup>96</sup> and, finally, in 1897, attempting one last, final reconstruction before vanishing into the limbo of defunct joint-stock corporations. This terminal effort—in the form of the Colorado Deep Level Mining Company, Ltd.<sup>97</sup>—failed to prosper and, two years later, its shareholders voted to wind up its affairs.<sup>98</sup> The Terrible itself went on the block in the summer of 1901 to satisfy a judgment of \$9,257 in favor of Robert G. Simonds, and was

<sup>93</sup> Nominal capital was £65,000 in £1 shares. One share of the new concern, 17s. credited, was to be given for every five in the old company. This ultimately brought in £6,179 16s. 6d. Walter R. Skinner (ed.), *The Mining Manual* (London, 1894), 248; Memorandum of Agreement (15 November 1892) between Ernest E. Probert (liquidator of the Colorado Silver Mining Company, Ltd.) and the New Colorado Silver Mining Company, Ltd.; Summary of Capital and Shares to 28 December 1896, New Colorado Silver Mining Company, Ltd., C.R.O. 37540.

<sup>94</sup> New Colorado Silver Mining Company, Ltd., *Directors' Report*, 15 November 1892 to 31 May 1894.

<sup>95</sup> *Ibid.*

<sup>96</sup> This was a suit brought by the company against the owner of the Seventy-Three mine, whose dump had damaged the British property despite repeated warnings. New Colorado Silver Mining Company, Ltd., *Directors' Report*, 1 June 1894 to 30 September 1895.

<sup>97</sup> Nominal capital was £50,000 in shares of 10s. each. Two new shares, 8s. paid, were to be exchanged for each old £1 share. Under this arrangement at least £2,491 7s. was paid in. Skinner, *Mining Manual* (1898), 895; Memorandum of Agreement (5 August 1897) between the New Colorado Silver Mining Company, Ltd. and the Colorado Deep Level Mining Company, Ltd.; Summary of Capital and Shares to 23 October 1899, Colorado Deep Level Mining Company, Ltd., C.R.O. 53567.

<sup>98</sup> *Special Resolution*: passed 18 October; confirmed 2 November 1899. Final wind up meeting was not held until 1905, however. Notice of final wind up meeting (23 September 1905). Colorado Deep Level Mining Company, Ltd., C.R.O. 53567.

purchased by Arthur Collins of Leadville and C. J. Nicholas of Georgetown.<sup>99</sup>

And so the cycle back into American hands was completed. The Terrible had paid £17,256 in dividends to its British owners—a return of under fourteen per cent on an outlay of at least £123,785 made over nearly thirty years. For the 135 to 290 British share-

CAPITALIZATION DATA, 1870-1899<sup>100</sup>

Year Formed	Name of Company	Par share Value (£)	Nominal Capital	Subscribed Capital
1870	Colorado Terrible L.M.Co.	5	£125,000	£ 85,000
1877	Colorado United M. Co.	5	325,000	4,360
1887	Colorado Silver M. Co.	1	325,000	30,754
1892	New Colorado Silver M. Co.	1	65,000	6,180
1897	Colorado Deep Level M. Co.	½	50,000	2,491
Total			£890,000	£128,785

holders who clung to their shares at various times between 1870 and 1899,<sup>101</sup> it was a costly experience and not one to encourage investment in Colorado mines by fellow Englishmen. Yet this particular enterprise was more fortunate than most: nine out of ten Anglo-American concerns operating in trans-Mississippi mines during the same period returned no dividends at all.

How much of the total investment in the Colorado Terrible Lode Mining Company, Ltd. and its subsequent reorganizations actually found its way to the Rockies is impossible to say. London expenses ranged from one-third to one-fifth of the Colorado expenses in ordinary years, and undoubtedly middlemen absorbed sizeable sums during the reconstruction process. But whatever capital did reach Colorado was more than welcome. Without it and without the capital contributed by hundreds of other companies, British and American alike, the mineral resources of the Centennial State would not have been developed with the rapidity and the thoroughness displayed during the half-century which followed Appomattox.

<sup>99</sup> Georgetown *Courier*, 20 July 1901.

<sup>100</sup> This table is compiled from information available in the respective files of each concern located in the Companies Registration Office, London. Subscribed capital figures have been rounded to the nearest whole number. Those pertaining to the Colorado Terrible Lode Mining Company, Ltd. have been approximated because of the incompleteness of information bearing on that point. However, evidence would indicate that at least £20,000 worth of paid-up shares went to the vendor and that another £20,000 worth were not issued by the original company.

<sup>101</sup> In the summer of 1870, there were 164 shareholders; by 1876 there were 290; and by 1899, only 135. Summary of Capital and Shares to 6 July 1870; Summary of Capital and Shares to 21 June 1876. Colorado Terrible Lode Mining Company, Ltd., C.R.O. 4804; Summary of Capital and Shares to 23 October 1899. Colorado Deep Level Mining Company, Ltd., C.R.O. 53567.



## George Hooper Taylor

By JOHN TAYLOR WILSON\*

George Hooper Taylor, first cousin of Augusta Tabor, known affectionately by his many friends as "Uncle George," was one of the substantial pioneer builders and financiers of Colorado. Mr. Taylor built bridges, re-graded roads, constructed an irrigation canal and a branch railway line. He was one of the organizers and officials of E. H. Rollins & Sons, one of the oldest bond houses in the country.

Mr. Taylor was born at Norridgewock, Maine, in 1847. His mother, Lydia M. Eaton, was a sister of Augusta Tabor's mother, who married William Pierce. Early in life, George Hooper Taylor became a railway construction contractor. He built the four-track elevation of the New York Central line from Buffalo to Batavia, and also a part of the Welland Canal.

In 1878, Augusta Tabor, wife of H. A. W. Tabor, then living in Colorado, went back to her old home in Maine for a visit. While there, she urged her cousin, George Hooper Taylor, to come out to Colorado. She told him that his two boys, George Jr. and Walter, could live with her. That summer, Uncle George took his boys to their grandfather's home in Norridgewock, and came out to Leadville.

There he went into the wholesale and retail grocery, hay and grain business with his cousin, Cyrus F. Taylor. The name of the firm, operating in a one-story building at 130 E. Fifth Street, was Taylor and Taylor. Their store handled almost everything. They did quite a big business, but did not make much money as they were both too lenient with their customers. They "grub-staked" a number of miners, but were not as fortunate in receiving returns as was H. A. W. Tabor.

In the autumn of 1879, or the spring of 1880, Mr. Laf Marsten went from Colorado to Maine for a visit, and agreed to bring Walter and George Taylor Jr. back with him.

When they reached Denver, Uncle George Taylor met the boys and took them to the home of Augusta Tabor on Broadway, between Seventeenth and Eighteenth Avenues. She and Mr. Tabor already had separated, and Tabor later married a divorcee, "Baby" Doe. Augusta's home, a fifteen-room mansion furnished in the latest style, was a very beautiful place, surrounded by landscaped grounds. There was a big barn, in which were kept several horses

\* John Taylor Wilson, nephew of George Hooper Taylor, now a resident of Chicago, Ill., recently presented to the State Historical Society several mementoes of his uncle, among them, the photograph and railway pass which are reproduced with this article. Upon request, Mr. Wilson, who made his home with his uncle from the time he was seven years old, has written some of his recollections of Mr. Taylor.—*Editor.*



GEORGE HOOPER TAYLOR  
Cousin of Augusta Tabor

and carriages. Mrs. Tabor had servants, including a coachman. At that time her brother, Ed Pierce, was living with her.

Uncle George built a house at 140 E. Fifth Street in Leadville in 1879, and after his sons had visited in Denver for several weeks, he took them to Leadville over the Denver, South Park and Pacific Railroad, a narrow gauge railway. Later, Uncle George moved his house up the street to the southeast corner of his property at 401 East Fifth Street (Hazel Street). In 1882, he built an eight-room house at this site. Cyrus P. Taylor, Uncle George's partner, lived at 301 East Fifth Street, at the corner of Hemlock Street.

While in Leadville, Uncle George began to acquire horses and heavy wagons. He built a large two-story barn on the back of the lot at 401 East Fifth Street. There he kept from ten to a dozen teams, all large horses, and the best wagons that he could buy. He made considerable money hauling ore from the mines down to Grant's Smelter on the southwest edge of town. He was City Scav-



enger for a term and City Alderman for two terms. I believe he also was temporarily Acting Mayor of Leadville, and held several minor city offices.

Frank Pierce, another brother of Augusta Tabor, was head of the Tabor-Pierce Lumber Company in Leadville, located at the corner of Fifth and Poplar Streets. The address given in 1881 was 120 E. Fifth Street, and the firm members were: Nathaniel M. Tabor, Frank Pierce and Charles L. Marston.

The heavy ore wagons cut the streets of the "Cloud City" to bits, and in order to keep away from the mud, the sidewalks, which were made of planks laid crosswise to traffic, were high above the street level.

COUNTERSIGNED: <i>H. E. Nelson</i>	<b>COLORADO MIDLAND RAILWAY CO.</b> EMPLOYEES TRIP PASS.		Expires December 31, 1887, unless otherwise ordered.
	Leadville, Colorado Springs, Colo. <i>Sept 6</i> 1887		
	Pass <i>Geo. H. Taylor</i>		
	From <i>Colorado Springs</i>		
	To <i>Leadville</i> and _____		
	Account <i>Contractor</i>		
Good for One Trip Only, until <i>Sept. 20</i> 1887.		NOT GOOD UNLESS COUNTERSIGNED BY	
256	<i>H. E. Nelson</i> GEN'L. MANAGER.		

RAILWAY PASS ISSUED TO GEORGE H. TAYLOR, CONTRACTOR

Uncle George graded East Third Street, West Chestnut Street, and on East Ninth Street he cut down a hill and did some grading near or around the Ninth Street school.

Leadville had no water system at that time. All of the water had to be hauled from springs, as the placer mining ruined the water for nearly every use. Uncle George built an expensive irrigation ditch south of Twin Lakes.

Once he told me of meeting the Denver and Rio Grande train, which brought President Grant and his party to Leadville in July, 1880, for the big celebration over the completion of the railway.

About 1885, Uncle George Hooper Taylor moved to Denver. As a contractor, he built three wooden bridges in Colorado: one across the Grand River (Colorado River), at Glenwood Springs; another, at Four Mile Creek, about four miles up the Roaring Fork toward Aspen; and another one, across the White River, about two miles downstream from Meeker. He built an irrigation canal on the east side of the Roaring Fork River. The long steel rods, bolts and

washers used in constructing this canal, had to be freighted into this section by mule teams. All of the timber used was hewn from logs by hand, carpenters being imported for the purpose.

As I recall it, my uncle re-graded the old road from Rifle to Meeker. He and his partner, Charles Chatfield, built a branch line for the Colorado Midland Railway Company from Cardiff up the Four Mile Creek into Jerome Park, a distance of about 40 miles. He also furnished money to Glenwood Springs for the planting of trees there.

In 1884, George Hooper Taylor became associated with E. H. Rollins & Sons, investment bankers. He opened their Colorado office in Denver. In May, 1903, he opened the Chicago office of the company, which later became his headquarters as Vice President. As the company expanded its business, many offices were established all over the world. I recall that he purchased the first issues of Garfield County, Colorado, bonds in the amount of \$36,000 sometime in the late 'eighties. This, I believe, was his initial business deal for the firm of E. H. Rollins & Sons. He at one time was chairman of the Bondholders' Protective Committee for the first mortgage bonds of the Denver Union Water Company. He also held membership certificate No. 111 in the Colorado Mining Stock Exchange, dated August 8, 1889.

As an investment banker, at the turn of the century, Uncle George financed the purchase of many hundreds of thousands of dollars worth of city, county and state obligations in Colorado. In 1901, he was engaged in the problem of funding all of Lake County's (Leadville) 7% and 8% bonds and 10% county warrants. He worked out a compromise between the county and the bond and warrant holders, and the new Lake County 4% funding bonds were issued and exchanges were made. Charles Cavender, a Lake County official, worked with my uncle to get these old defaulted bonds and warrants cleaned up, in order to put Lake County back on its feet again. This refinancing of Lake County indebtedness was completed in 1902.

At various times George Hooper Taylor was chairman of the finance committee of the Investment Bankers' Association of America and a member for years of its board of governors; a director of the Standard Trust & Savings Bank; and also president of the Spokane & Eastern Railway & Power Co., Spokane, Washington, and of the Inland Empire Railroad, with headquarters in Spokane.

Upon his death in June, 1922, he was survived by a wife, Lucille Aida Taylor, his sons, Walter Scott Taylor and George Hooper Taylor, Jr., a sister, Lizzie E. Matthews of Los Angeles, Calif., and myself, his nephew.



## Colorado-Big Thompson<sup>1</sup> Initiation, 1933-1938

The Story of a Gigantic Irrigation Project in Embryo

By WILLIAM R. KELLY\*

It takes men to match mountains and build dams, and this is the story of the men who were largely responsible for driving a thirteen-mile tunnel through the Continental Divide, in order to tap the waters of the Colorado river. The project, drouth compelled, was first named after Grand Lake at its upper end, but the tunnel really began at Greeley, 100 miles away.

On July 29, 1933, a self-appointed committee comprised of Fred Norcross, L. L. Stimson and myself, called upon Charles Hansen, publisher of *The Greeley Tribune*, and the Weld County Board of County Commissioners, to urge the building of the tunnel as a Public Works project. Charles Hansen was then head of the Weld County agencies for works to relieve unemployment.

A meeting of key men with County Commissioners W. A. Carlson, S. K. Clark and James Ogilvie was called for August 6, 1933. Ed Folbrecht, secretary of the Greeley Chamber of Commerce, and the writer helped to arrange the meeting. I assisted President O. G. Edwards of the chamber in appointing a committee of irrigation leaders to study and present the proposed project. *The Greeley Tribune*, Fort Collins and Longmont newspapers and radio station KFKA got behind the movement.

Soon a valley-wide meeting was called for August 17, with an expanded "Grand Lake Project" committee as follows: Fred Norcross, Chairman; C. G. Carlson, of Eaton Ditch interest; Charles Swink of Greeley and Loveland irrigation system; Charles Hansen, publisher of *The Greeley Tribune*; Claude Carney of the Great Western Sugar Company; Harry W. Farr, of wide farm interests; Frank B. Davis, of the Cache la Poudre irrigation companies; M. E. Smith of the Water Supply and Storage system and effective

<sup>1</sup> Colorado-Big Thompson Project—This is one of the larger irrigation projects constructed by the Bureau of Reclamation. Essentially it consists of (a) a collection works on the Western Slope whereby 310,000 acre-feet of water annually will be diverted through; (b) a 13-mile tunnel, then passed through; (c) power plants and reservoirs on the eastern slope, and (d) natural water courses with irrigation canals which spread the water on agricultural lands as a supplemental supply. Green Mountain Reservoir on the Blue River near its confluence with the Colorado River near Kremmling is a very important part of the project, although it is located some distance from the other West Slope units. Water stored here develops electrical current to help pay for the project.—*Colorado Year Book, 1951-1955*. (Denver: The Colorado State Planning Commission, 1955), 257.

\* William R. Kelly, author of this article, has long been known as an authority on irrigation law. Mr. Kelly, a graduate of the University of Colorado, is a member of the law firm of Kelly and Clayton of Greeley, Colo. He is the author of various articles including, "A River Is A Treasure," "Rationing the Rivers," and "Navigation and Irrigation in the Mountain States." He here presents some of the little-known history of the Colorado-Big Thompson Project.—*Editor*.

Democratic legislator; Thomas A. Nixon, County Attorney of Weld County; and the writer, active in other water development efforts, attorney for several irrigation companies, active in rehabilitating the Greeley Poudre system, and one of the attorneys for Colorado in the Wyoming vs. Colorado case then being tried in the United States Supreme Court.

Eager representatives from the Poudre, Thompson, St. Vrain and the whole South Platte lower valley filled the courtroom at this valley-wide meeting. In addition to the committee members speaking in favor of the project, other leaders in water development such as Dave Roach, Charles Evans, Charles A. Lory, Engineers L. L. Stimson, Burgis G. Coy, E. B. House, and State Engineer M. C. Hinderlider gave verbal encouragement. We urged a survey as a first step.

After two follow-up meetings held at Greeley on August 27 and September 6, a general committee of various community leaders was set up, comprised of: Charles Hansen of Greeley, Chairman; Fred Norcross, Greeley, secretary; Moses E. Smith, Ault; William A. Carlson, Greeley; D. R. Pulliam, Loveland; Burgis Coy and Charles A. Lory, Fort Collins; J. M. Dille, Fort Morgan; Robert J. Wright, Sterling; C. M. Rolfson, Julesburg; and W. E. Letford and T. M. Callahan, Longmont. These men became directors of the Northern Colorado Water Users Association, the mutual company formed to promote the "Grand Lake Project."

In order to arouse interest in the project we began giving talks. I spoke before the Eaton Rotary Club on August 13, and at the Fort Collins Rotary Club, September 23. Norcross, Carlson, Dr. Lory, Coy, Wright and Stimson talked at other places. *The Greeley Tribune*, through news articles and editorials, led in spreading the word. Newspapers in Ft. Collins, Loveland, Longmont, Ft. Morgan and Sterling caught the torch and kept the flame high. Later speakers in the campaign were N. R. McCrery of the Great Western Sugar Company, Engineer R. L. Tipton and Mills Bunger of the Reclamation Bureau.

It was important to start an initial survey before winter weather came to timberline, so the Weld County Commissioners quickly voted \$2,500.00 for that purpose. The Greeley Chamber of Commerce added \$500.00 in two allotments.

Upon our solicitation, the Larimer County Board of County Commissioners agreed to put in \$700.00, the legality of such action having been approved by T. J. Warren, then County Attorney.

From the start we had the cooperation of State Engineer M. C. Hinderlider, who, at our request, assigned to us an expert on stream supplies, his special deputy, R. L. Tipton. Mr. Tipton's prospectus and his encouraging engineering report were completed in Decem-



ber, 1933. Many said, after reading these, that the cost would be too great for us ever to get the proposed works built.

Early in 1934, the Northern Colorado Water Users Association employed J. M. Dille as half-time manager. The next year he was put on full-time salary.

The board members of the association became a central force to forward the project. They were seasoned community builders, held in high esteem in communities from the foothills of the Rockies to the Nebraska line. L. L. Stimson and his party began the survey at Granby reservoir on the Colorado river.

It was the attorneys' job to lay groundwork, to find ways to organize, to finance, to interest the right state and federal agencies, to see to the legislation. There had to be evolved a new kind of entity which could create and administer the project on a basis that would permit a large community legally to share its benefits and burdens.

As attorneys, Tom Nixon and I had plenty to do beginning in August, 1933. First, we started with an application to the Public Works Administration. We finished drafting our proposal on Labor Day. Then we tried the Reconstruction Finance Corporation. A new application to the Public Works Administration, with Charles D. Todd as counsel, was assembled in November, 1933.

Moses E. Smith was sent to Washington in February, 1934, to introduce the project to Reclamation Commissioner Elwood Mead. By the fall of 1934, it was plain to us that if we obtained financing it would have to come through the Bureau of Reclamation. Accordingly, we telephoned E. B. Debler, New Projects Engineer of the U. S. Bureau of Reclamation in Denver. He was encouraging and became a valuable guide from that day.

Early in 1935, a "revenue bond" act, designed to finance such projects as ours, passed in the Colorado General Assembly. It did not, however, receive Federal acceptance. The following May, Hansen, Nixon and I went to Washington where we discussed the proposed water project with Senator Alva B. Adams, Congressman Cummings, Elwood Mead and Secretary of the Interior Harold Ickes. Soon afterwards a survey fund of \$150,000 was granted by Secretary Ickes. This provided skilled Bureau of Reclamation engineering service for us that year.

In 1936, after much research as attorneys, we found a legal framework adaptable to our peculiar needs, in the California Golden Gate Bridge District multi-county legislation, which had been proven in several years of court tests. We built on that, plus a 1935 variation of it for municipalities in Utah. The California legislation combined a general tax and special rates. We had to evolve a rather

baffling variation to the law relative to acre feet allotment, in order to fit our irrigation and domestic water needs. We provided for a special benefit assessment lien. The District itself was a quasi-municipality, like a school district.

We got the Water Conservancy Act drafted in the winter of 1936. Sponsored by every Northern Colorado legislator, it was introduced in the Colorado legislature early in 1937. It took a lot of negotiating to get it through, but after some changes, it passed in April and was signed on May 12, 1937.

This act set up the seven-county district, with a basis similar to a city water system. It provided a general tax to be levied on all property for the benefit of making the added water supply available, and a contractual special assessment for actual water used. Its allotment liens were not involuntary, but were a matter of contract.

Next, the act had to be tested in the Supreme Court of Colorado to make it acceptable security in order to induce the government to authorize a multi-million dollar loan. The Supreme Court decision was handed down in May, 1938. Justice William Lee Knous wrote the favorable opinion, since adopted in Utah and Nebraska.

Our efforts in 1936 for congressional appropriation were defeated by Congressman Ed Taylor, one of the Western Slope leaders, who had opposed our project from its first announcement to 1937. In a meeting with men from the Western Slope in Greeley in January, 1934, we sought to allay their fears by offering to share the water. We asked that they join us in the project. Other meetings at Grand Junction and Denver followed with no result. The representatives wanted, without cost to Western Slope users, reservoirs built on a ratio of one acre foot to them for each acre foot for trans-mountain diversion. Construction costs made that load too much for our project to bear.

On December 16, 1936, Charles Hansen, Thomas A. Nixon and I addressed a letter to Frank Delaney of Glenwood Springs, spokesman for the West Slope interests, proposing a replacement which would concurrently substitute other water for any diversion being made by our project when the flow at Glenwood Springs Shoshoni Power Plant should fall below 1250 second feet. Delaney answered in ten days that West Slope leaders had been meeting and would like to work out some satisfactory compromise. He suggested a four-man committee from each slope. The meeting was arranged. Conferences began on January 1, 1937, in Denver, and extended over that week.

In addition to Delaney, the West Slope committee consisted of Silmon Smith of Grand Junction, Judge C. H. Stewart of Delta and Clifford Stone of Gunnison, legislator-elect. Hansen, Dille, Nixon and I constituted our committee. Preston and Bunger, Recla-



mation Bureau engineers, had completed a report with a West Slope land classification and the inclusion of a proposal for Green Mountain as a replacement reservoir. We were now getting to understand each other's viewpoint. A follow-up meeting was held on March 6, 1937.

On February 3, 1937, Preston's engineering report was made to the Secretary of the Interior, in which he detailed the proposed project and recommended its authorization. In early June the situation was getting acute in Congress, with hot weather coming on and chances of appropriation becoming precarious. The East Slope conceded a great deal more to get the stipulation for the 150,000-acre foot Green Mountain Reservoir at no cost to the West Slope beneficiaries, and agreed it must be completed before East Slope diversion. Committeemen who, at Washington, signed that stipulation were Silmon Smith, Clifford Stone and A. C. Sudan for the West Slope Protective Association, and Charles Hansen, Thomas A. Nixon and Moses E. Smith for Northern Colorado Water Users Association. Thereupon Ed Taylor, chairman of the powerful House Appropriations Committee, gave the \$900,000.00 first construction appropriation the "go ahead." Reclamation Commissioner John C. Page and engineers, Porter C. Preston and Frank Merriell, helped in breaking the log-jam which was holding up the Congressional authorization.

A special article should be written about the engineers of the Bureau of Reclamation, who have been our allies and builders—such men as Ray Walter, S. O. Harper, L. N. McClellan, W. E. Blomgren, Avery Batson and J. H. Knights. Tribute also should be paid to the devoted construction engineers—R. F. Walter, Jr., Cleves Howell and Porter Preston.

The contract with the United States, formulated in the late fall of 1937 and early months of 1938, was voted by the taxpayers on June 28, 1938, by a 19 to 1 ratio. Its many details were developed with Reclamation Counsel J. A. Alexander in a series of drafting meetings held in Denver from January to April.

Inclusion of a \$25,000,000.00 limitation as the maximum cost to be contributed from agriculture was obtained in May, 1938, at Washington. With World War II starting in Ethiopia then, however, our farmers refused to sign a blank check.

The contract negotiation committee comprised: Hansen, Dille, Nixon, Schey, W. E. Letford, W. A. Carlson, Robert Benson, Moses E. Smith, Charles M. Rolfson and myself. Charles Hansen, Ray Lanyon and Moses E. Smith were effective in the May, 1938, Washington limitation and construction contract acceptance.

Petitions, with taxpayer signatures obtained in the thousands, to create the district were filed in July, 1937, in Weld County

District Court. Judge Claude C. Coffin then, and for twenty years thenceforth, presided over its creation and the appointment of directors. On September 20, 1937, after a hearing in the Court House at Greeley, he adjudged the district created.

Judge Coffin appointed as the eleven members of the first Board of Directors of the Northern Colorado Water Users Association the men who were then serving on the board. They were as follows: Charles Hansen, William A. Carlson and Moses E. Smith, Weld County; Ray Lanyon and W. E. Letford, Boulder County; R. C. Benson, Ralph McMurray and Ed F. Munroe, Larimer County; Robert J. Wright, Logan County; J. M. Dille, Morgan County; and Charles M. Rolfson, Sedgwick County.

The Board elected Hansen as president and Dille as secretary-manager, and they so continued, reappointed year after year—Hansen until his death in 1953; Dille, to this day. These choices proved wise. Dille was the first paid employee, the expeditor. These two executives addressed themselves tenaciously to accomplishing the "Grand Lake Project" with energy and consecration to its achievement. They were everlastingly at it. Hansen never would accept any pay for his services.

Hansen was not a farmer nor was he connected with irrigation management, but he was a civic leader free from local entanglements of competing ditch systems. He was able to make allies of wary rival ditch companies in this gigantic effort. Hansen was the amalgamating force, a tenacious leader at home and in Washington, who never flagged in his effort for this project. To it he became consecrated. He received the Department of Interior Conservation Award in 1952. Dille received the same award in 1956.

Dille, by good work in the administration and development of two irrigation systems in Morgan County, attracted attention as one who got things done. Judge Claude C. Coffin, who himself had vision, was constructive and regarded the big project as sacred. He was the son of a pioneer in irrigation. He made integrity and fitness always the criterion of his appointments to the board. He died in September, 1954, after serving as a district judge for thirty years.

Jacob S. Schey of Longmont, experienced in water law, who had supplied important guidance in project matters for fifteen years, succeeded Hansen as president in 1952. He retired in 1955, and was succeeded by J. Ben Nix of Eaton. In addition to Nix the present [1956] Board of Directors of the Conservancy District are: Colonel William P. Blair, Sterling; Gordon Dyckman, Loveland; W. D. Farr, Greeley; J. C. Howell, Brush; Dudley Hutchinson, Sr., Boulder; Carl H. Metzger, Julesburg; Ed F. Munroe and John G.



Nesbitt of Fort Collins; J. D. Sivers, Ault; and Andrew D. Steele, Longmont.

Others who have served one or more terms as directors are: Victor B. Akin, Louis F. Bein, Walter Bush, Harry W. Clatworthy, Marvin J. Collins, A. L. Litel, Thomas J. McKee, Ray Reynolds, James A. Stewart, William Tormohlen, Olin Venable and Ray Welty. In 1947, J. R. Barkley was appointed as assistant secretary and engineer. In 1955 he became assistant manager of the district.

In Washington, D. C., we had early day effective "friends in Court" in United States Senators Eugene Millikin, Ed Johnson and Alva B. Adams, Congressmen Fred Cummings, Lawrence Lewis, William S. Hill and Edgar Chenoweth. Clifford Stone, Director of the State Water Resources Board, helped also to our great advantage. President Eisenhower has been of much help, as also have been Reclamation Commissioners Elwood Mead, John C. Page, H. W. Bashore, Michael Straus and Wilbur Dexheimer. Department of Interior Secretaries Oscar Chapman and Douglas McKay, as well as Harold Iekes, have assisted us.

Many men, whose names never got into print, were quietly effective voices with farmers, businessmen's organizations, legislature and Congress, in getting the project accepted and built. Individuals associated with processors of beets, grain and vegetables, the two railroads, Union Pacific and the Chicago, Burlington & Quincy, banks, other local industries, chambers of commerce, many mutual irrigation companies, all made important contributions to the movement to procure this supplemental water supply for the South Platte Valley.

To mention all locally who have helped from the start would require a roster of all constructive men of the South Platte Valley and its tributaries of the Cache la Poudre, Thompson, St. Vrain and Boulder Valleys. The late R. M. Haythorn, of Eaton, was one supporter so prominent that his name was used to represent the taxpayers as a class, in filing the suit which confirmed the United States contract. Cal Maier of Longmont, Senator Charles F. Wheeler, W. D. Farr, Harry Kelly, Charles Swink, Delph E. Carpenter, C. N. Jackson, J. M. B. Petrikin, of Greeley; H. H. Kelly of Loveland; Senator Nate Warren of Fort Collins; John D. Wilson and J. M. Collins of Eaton; and county agents, especially Lew Toyne of Weld County, were active advocates and petition circulators.

I trust I may be pardoned for saying that attorneys' tasks were important in this development. The project lawyers' role claimed first attention and in a multitude of ways, from the beginning when

we were challenged with, "Show us how so big a project can ever be put together and financed!"

Procurement of right-of-way in many counties, from Summit to Phillips, for this far-flung project began in 1938. Water adjudication proceedings also began in that year. Thence they had to be followed in seven state District Courts, Supreme Court and Federal Court cases. I was the first attorney in this work. Thomas A. Nixon was added, at my recommendation, as responsible Chief Counsel, from the fall of 1933 to his 1940 health break. He resigned in May, 1941. I was then reappointed. I served without pay for the first three years. During the period of 1939 and 1940, Tom Nixon, an able lawyer, handled the legal work alone, but it was becoming intense in right-of-way matters by 1941.

A chapter closed after many years of contest has been the conduct of water adjudication proceedings begun in 1942 in Summit County. Before various courts for years, the proceedings were carried to the Colorado Supreme Court and transferred ultimately to the United States District Court. The proceedings culminated in a decree of Federal Court on October 12, 1955, wherein, satisfactorily for the district, the project's priorities were related from August 1, 1935, the date the Bureau of Reclamation engineers' survey began. This was ahead of several contending large claims.

It may be remarked that Weld and Larimer County names have received much mention in this recital. That is natural because I saw men from these counties in action most. Constructive men from every one of the seven counties worked for the project. It began in Weld County. Its main office and direction were from Greeley from 1933 for 21 years, housed in *The Greeley Tribune* building. Weld County has the largest interest in the Conservancy District water allotments. More than 50% of the district's allottees are Weld County farmers, who will pay the greater fraction of its allotment assessments. Weld County has about 31% of the total district valuation on which to pay the one mill general tax. Larimer County is next with about 23%, and Boulder, since its latecomer annexation, brings that county up to about the equal of Larimer. The balance of general tax will be borne as follows: about 10% by Logan County, 11% by Morgan County, 3% by Sedgwick County and 3% by Washington County.

Actual construction by moving of earth and rock at Green Mountain Dam began in the fall of 1938.

The Reclamation Bureau was the constructing agency. The District now gets the agricultural and domestic water supply. The government gets the power, available since 1943.

The project, now known as the Colorado-Big Thompson, with additional works, has cost about \$160,000,000, three times what was



estimated in the Engineers' Report of 1935. About the same ratio of rise has occurred in the past twenty years in other building costs, depending on material and labor. Even the *Saturday Evening Post*, which published Wyoming's ex-Governor Leslie Miller's criticism of this cost rise, now charges 15c, thrice its price of 1935. The District is safeguarded by a contractual limitation of about \$26,000,000 of this cost, to be retired over a 40-year period of annual installments. The first one will likely be paid in 1958. The project may even pay out in less than the forty years contracted.

The project is no longer a vision. It is a reality. Only five years elapsed from the 1933 meetings until the start of dirt moving on Green Mountain Dam in 1938. The fire was never allowed to die down in the forge. This project has already proven a buffer against disaster in the drouth years of 1953 to 1955, in the 800,000 acres benefited by this supplemental water.

To strong men living, who put their shoulder to the wheel to accomplish great community benefits, a debt is owed. Such effort should be made cause for emulation. Many courageous workers there were who helped along the road, but who had to lay down their burdens before the goal was realized.

These men matched our mountains. We repeat a remembrance to Charlie Hansen, Fred Norcross, Alva B. Adams, Will Carlson, Sam Clark, James Ogilvie, Fred Cummings, Delph E. Carpenter, Ed Costigan, Judge Claude C. Coffin, Burgis G. Coy, Cleves Howell, Thomas A. Nixon, John C. Page, Porter J. Preston, Dave Roach, Roy McCrery, Moses E. Smith, L. L. Stimson, Charles D. Todd, Ray F. Walter, Nate C. Warren and Clifford Stone.

These all were stalwart workers who have passed on. They built for future generations.