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WORKING ON DESERT RAILS:
A SOCIAL AND
ENVIRONMENTAL HISTORY

by

Ann E. Vileisis

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF ARTS

in

History

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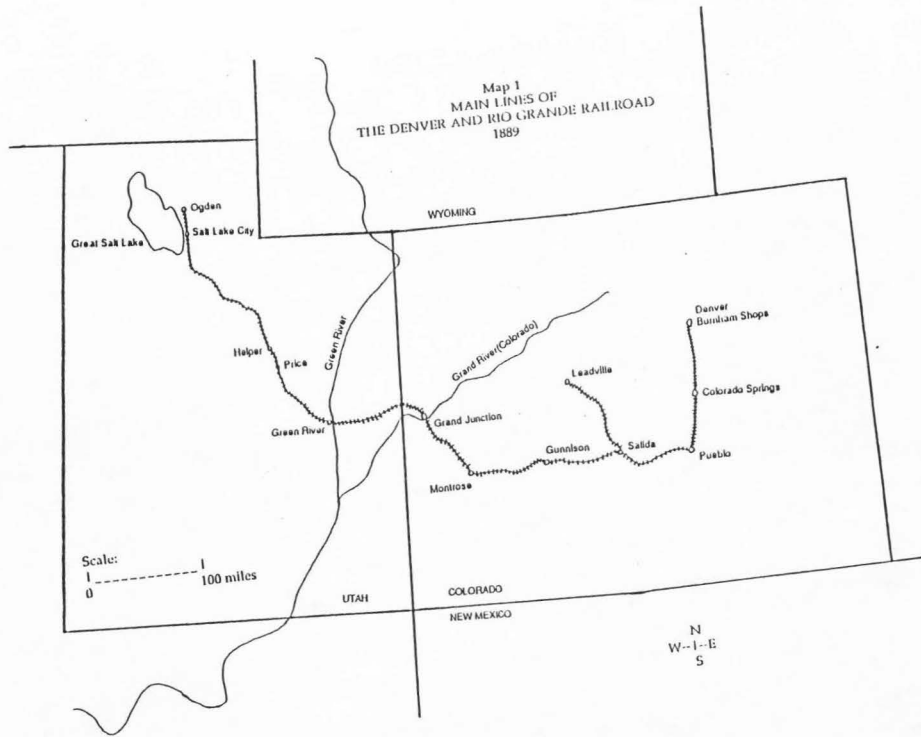
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Ann E. Vileisis

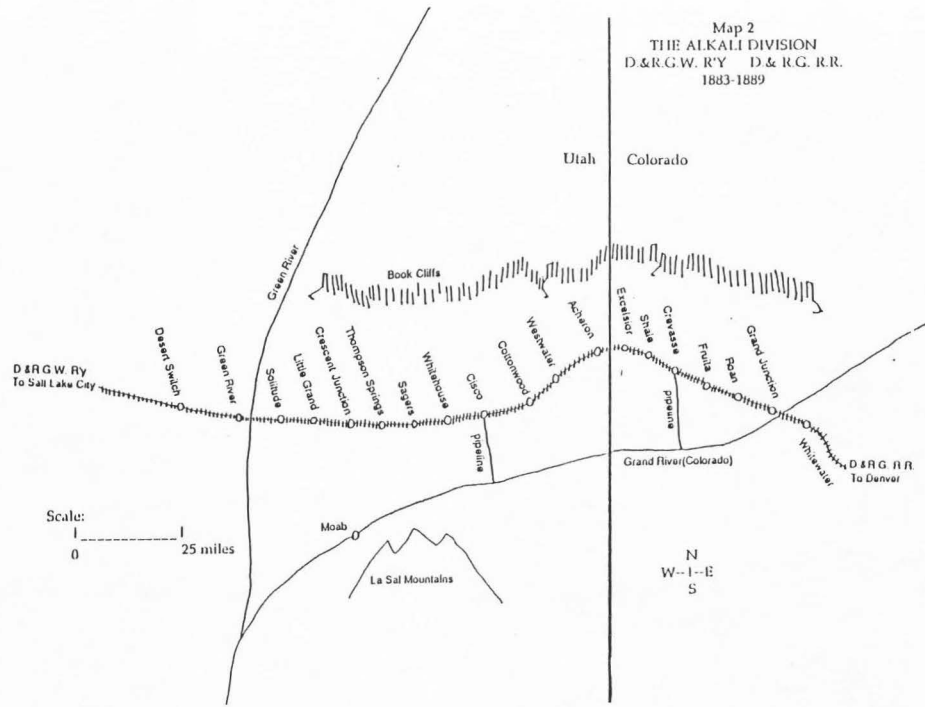
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ABSTRACT

Working on Desert Rails: A Social
and Environmental History

by

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Focusing on the Denver and Rio Grande Western Railway from Grand Junction, Colorado to Green River, Utah, this study examines the working circumstances of nineteenth-century railroad laborers, the ecological limitations of the isolating desert where they worked, and their relations with railroad management and local communities. It begins by investigating the experiences of the railroad surveyors and construction laborers. The study then examines the experiences of workers operating the railroad and factors affecting yard workers' responses to labor organization in the communities of Green River, Utah and Grand Junction, Colorado. The study identifies ecological changes spawned by the railroad and addresses issues of worker autonomy and labor organization in the American West in the late nineteenth century. (128 pages)

INTRODUCTION

LAYING THE GROUNDWORK

Accepting the routes nature has made, three railroads are already projected to Grand Junction and their surveys and stakes surround it in a triangle... a circumstance unprecedented in the history of any town of like age....

--Grand Junction News,
4 November 1882

All that remains is a snake-like mound of earth, stretching across the barren desert west of Grand Junction, Colorado. Yet a little over a century ago, this inconspicuous mound supported the region's lifeline: the narrow-gauge trackage of the Denver and Rio Grande Western Railway. Construction workers completed the line connecting the intermountain metropolises of Denver and Salt Lake City in late March of 1883. Denver and Rio Grande Western General Manager David C. Dodge ceremoniously drove a final symbolic silver spike, mimicking the completion of the first transcontinental line nearly fifteen years earlier.

Historians conventionally tout the expansion of railroads as the most significant source of economic and demographic growth in the American West.¹ Although railroads undeniably brought prosperity to many nascent frontier towns, the rails also brought seeds of social dissension and facilitated resource exploitation. The following study of the segment of the Denver and Rio Grande narrow-gauge railway bridging the arid lands

¹Walt W. Rostow, The Stages of Economic Growth (Cambridge: Cambridge University Press, 1967), 55.

between Grand Junction, Colorado and Green River, Utah, provides an alternative perspective for understanding railroad development in the West. This study focuses on the working conditions experienced by nineteenth-century railroad laborers, the ecological constraints of the remote, desert terrain in which they worked, and their relations with local communities and railroad management.

In line with the inordinately optimistic historiographic vision of western rails, most histories of railroads focus exclusively on their entrepreneurial proponents, eclipsing the roles of the numerous and diverse peoples both constructing the tracks and working on the trains. Robert Athearn's seminal work, Rebel of the Rockies: A History of the Denver and Rio Grande Western Railroad, for example, recounted the history of the railroad corporation, emphasizing the stormy political fortunes of Colorado's foremost railroad magnate, General William Palmer.² Historians J. H. Ducker and Walter Licht in their books, Men of the Steel Rails: Workers on the Atchison, Topeka and Santa Fe Railroad, 1869-1900 and Working for the Railroad: The Organization of Work in the Nineteenth Century, respectively, presented two impressive exceptions.³ Ducker's work, however, concentrated largely on labor organizations associated with the Atchison, Topeka and Santa Fe company in the middle-

²Robert C. Athearn, Rebel of the Rockies: A History of the Denver and Rio Grande Western Railroad (New Haven: Yale University Press, 1962). Grodinsky and McCague also focus on the biographies of leading railroad entrepreneurs. Julius Grodinsky, Transcontinental Railway Strategy, 1869-1893: A Study of Businessmen (Philadelphia: University of Pennsylvania Press, 1962); James McCague, Moguls and Iron Men: The Story of the First Transcontinental Railroad (New York: Harper and Row, 1964). Kolko focuses on the relationship between railroad companies and federal policies and regulations. Gabriel Kolko, Railroads and Regulation, 1877-1916 (Philadelphia: University of Princeton Press, 1965).

³James H. Ducker, Men of the Steel Rails: Workers on the Atchison, Topeka and Santa Fe Railroad, 1869-1900 (Lincoln: University of Nebraska Press, 1983); Walter Licht, Working for the Railroad: the Organization of Work in the Nineteenth Century (Princeton: Princeton University Press, 1983).

Plains region. Licht's book primarily examined the activities of organized labor on eastern railroads. Neither book investigated quotidian routines and conditions of western rail workers.

There is also an absence of information about local railroad workers in existing histories of western communities. In her book, Town Building on the Colorado Frontier, Kathleen Underwood described Grand Junction as a harmonious, homogeneous community, rooted in strong family relations and disagreeing only on periodic political issues, such as management of the public water supply.⁴ Underwood failed to take into account the presence of railroad workers. Newspapers, census data, and archaeological evidence suggest that Mormon as well as European and Asian immigrant laborers constructed the Denver and Rio Grande Western railway through Grand Junction. As a result of the diverse railroad community, more conflict existed than Underwood's consensus history suggests.

Surveying existing works in western labor history, one finds yet another gap. Scholars have only begun investigating western labor issues of the late nineteenth century, and their research has focused primarily on the mining industry. The few works investigating railroad labor issues emphasize eastern conditions. For example, in a landmark study of Pennsylvania industrial labor strikes in the 1870s, Herbert Gutman contended that small, semi-rural communities provided extensive economic and political backing for working-class strikers. Because the nature of small towns promoted face-to-face contact and membership in various fraternal organizations, he argued that support for local workers

⁴Kathleen Underwood, Town Building on the Colorado Frontier (Albuquerque: University of New Mexico Press, 1987).

grew from the matrix of close social ties woven in small communities.⁵ Although Gutman's theory may work in eastern towns that predated railroads, it fails in the case of Grand Junction. Like many western towns, Grand Junction's location and development depended on the railroad route. The small frontier town courted railroad interests not only to assure its economic growth but also to guarantee its very existence.

Finally, scholars have failed to explore the environmental dimensions of railroad construction and operation. The physical characteristics of the desert landscape shaped the experience of rail workers and the operation of the railroad in many unique ways. The region's harsh aridity and heat first confronted Denver and Rio Grande surveyors. People subsequently living and working along the remote line dealt daily with desert conditions. Furthermore, the desert isolated workers from centers of company authority, giving them greater autonomy than most workers in the emerging industrial economy. Finally, the desert rail workers' experiences exemplified the development of a peculiar new relationship with nature, afforded primarily by the "iron horse." People no longer depended on the land where they lived--but rather they depended, through railroads, on distant markets and ecosystems for their sustenance. Although other railroad workers built tracks through remote areas, in few places was the experience of isolation more pronounced than in the barren desert between the canyons of the Colorado and Green rivers.

As we hike along the railroad grade today, scattered black cinders show that narrow-gauge steam locomotives once thundered across the

⁵Herbert G. Gutman, "Trouble on the Railroads in 1873-1874: Prelude to the 1877 Crisis?" and "Two Lock-outs in Pennsylvania, 1873-74," chaps. in Work, Culture and Society in Industrializing America: Essays in American Working-Class and Social History (New York: Random House, 1966; reprint, New York: Vintage Books, 1977), 293-343.

desert. The shape of the land looks much like it did a century ago. To the northwest, a continuous escarpment of red, brown and gray shale and sandstone strata rises between 1,000-2,000 feet above the relatively flat desert lowlands. Because the vertical fracturing of the strata resembled books on a shelf, members of the Gunnison exploring party aptly named the formation the Book Cliffs. Looking in the opposite direction across the desert to the south, one can distinguish a red stone band, the rim of the canyon that plunges another 500 feet to the muddy Colorado River. Beyond the river canyon, the 13,000 foot La Sal mountains dome up, forming the dominant feature on the southern horizon. The abandoned railroad grade weaves back and forth over the plain, crossing ridges and numerous intermittent washes that drain the high plateau above the Book Cliffs and flow southeasterly toward the Colorado River. Although only six to ten inches of rain fall annually in the desert area, xerophytic vegetation persists in the highly erodible soils. Near washes, greasewood (Sarcobatus vermiculatus) and non-native tamarisk (Tamarix pentandra) comprise the dominant vegetation. In flat open areas, shadscale (Atriplex confertifolia), saltbrush (Atriplex canescens), and big sage (Artemesia tridentata) dominate. Piñon and juniper trees (Pinus edulis and Juniperus utahensis) grow in places of higher elevation, and various grasses, including galleta (Hilaria jamesii), blue grama (Bouteloua gracilis), and crested wheatgrass (Agropyron smithii) occur in moister pockets. The vegetation provides forage and shelter for mule deer, pronghorn antelope, sheep, and cattle in the dry country. Coyotes, desert cottontails, and other small mammals rarely stray far from the few springs.⁶

⁶Department of the Interior, Bureau of Land Management, Final Grand Junction Resource Area Grazing Management Environmental Statement (Washington, D.C. :

Along the roadbed where the grade crosses washes, massive stone culverts still bear the weight of mounded earth. The grade is sporadically littered with Chinese brass coins, broken glass purpled by the sun, and solder-top cans that reveal the presence of railroaders living and working along the line. These archaeological fragments represent the best remaining record of the people who built the tracks and worked along the railroad.

Although only a few archaeological studies have been conducted for railroad camps and stations along the Utah extension of the Denver and Rio Grande Western so far, future studies will yield new information.⁷ Historians need not shrink away from using the rich physical resources of archaeology. The findings of archaeologists readily complement historical research. For example, excavations of railroad camps in Curecanti National Recreation Area provide evidence of relationships between workers and their managers. By noting the size and contents of foremen's residences, their distance from workers' quarters, and their proximity to horse-related artifacts, archaeologists surmised a considerable difference in status of the two groups.⁸ This finding supports historical evidence indicating that improper exercise of authority by petty managers underlay many late nineteenth-century labor conflicts.

Evidence derived from archaeology will be significant because rail

Government Printing Office, n.d. [ca. 1980]), 2-1 - 2-74; John E. Bradley, et al., An Archaeological Survey and Predictive Model of Selected Areas of Utah's Cisco Desert, Cultural Resource Series No. 18 (Salt Lake City: Utah State Office of the Bureau of Land Management, 1986), 9-20.

⁷However, amateur collectors who improperly and illegally excavate artifacts presently threaten the limited physical evidence of the railroad workers along the Utah extension.

⁸Mary P. Rossillon, The Curecanti Archaeological Project: The Archaeology of Marion, an Historic Railroad Camp in Curecanti National Recreation Area, Colorado (Lincoln, NE: Midwest Archaeological Center, 1984), 72-73.

workers, like most common people of the late nineteenth century, left few written records. In the first place, many railroaders could not write. In addition, other record keepers, such as census takers, regarded railroad workers as transients and therefore did not always account for them. In 1885, census takers did not even make rounds to the rail communities west of Fruita, Colorado. Furthermore, the local newspaper recorded only scant and sensational stories about particularly popular workers. Nonetheless, the paucity of written records corroborates what the desert has guarded in her aridity for the past century: men and women labored in building and operating the railroad through the harsh desert south of the Book Cliffs.

While the relative dearth of workers' archaeological and historical records presents considerable difficulties for research, the confusion riddling the corporate history of the railroad presents still others. Because Utah territorial laws prevented the Denver and Rio Grande Railroad--most famous for its narrow-gauge "scenic line" tracks through the radical slopes of the beautiful Colorado Rockies--from entering Utah, a subsidiary company under the lease of the Denver and Rio Grande, the Denver and Rio Grande Western, incorporated in Utah and took over construction and operations at the Utah-Colorado state line. The leasing arrangement worked well when the companies worked in concert, but during times of animosity, the state line provided an arbitrary disjuncture in company policy and service. The curious relationship between the two railroads even confounded company officials. General manager of the Denver and Rio Grande Western, David C. Dodge, for example, reproached the superintendent of the Denver and Rio Grande about costs incorrectly charged to his line. "The charges I know are wrong," he wrote. "For

example, you have charged work at Crevasse to the Western R'y., while the Western R'y. does not extend East of the Utah line. You will have to watch this very closely...."⁹ It is no wonder that archivists, librarians, and historians have often confused the records of the two separate companies.

Despite the state and company boundary line, people who operated the trains must have regarded the segment between Grand Junction, Colorado and Green River, Utah as a unit bounded by places they would go to and return from rather than two distinct segments bisected by a corporate and political line. Because no other notable settlements existed, these two division point communities formed the most logical termini for this segment of desert rail, descriptively known as the "Alkali Division."¹⁰ Operations on the Alkali Division ended in 1889 when the Denver and Rio Grande companies re consolidated, switched from narrow-gauge to the wider, standard-gauge tracks in use throughout the rest of the nation, and moved their line south to the canyon of the Grand (Colorado) River. The new standard-gauge line followed the river canyon from near old Crevasse Station to the Cisco area, where it rejoined the widened narrow-gauge route, with minor changes, to Green River and beyond.

In an effort to combine both social and environmental history with the local history of western Colorado, this study examines the working circumstances of nineteenth-century railroad laborers, the ecological limitations of the isolating desert where they worked, and their relations with railroad management and local communities. A four-part chronological narrative weaves analytical themes together with details of

⁹David C. Dodge to W.H. Bancroft, 16 January 1884, Collection 513, Box 26, State Historical Society of Colorado, Denver (hereafter SHSC-D).

¹⁰Cy Warman, "A Ghost Train Illusion," chap. in The Express Messenger and Other Tales of the Rail (New York: Charles Scribner's Sons, 1897), 119.

workers' lives. In 1881, the Denver and Rio Grande commissioned 6,000 miles of explorations and 900 miles of preliminary surveys.¹¹ This study begins by investigating the experiences of the railroad surveyors and their responses to the unfamiliar desert landscape. Chapter Two explores the actual construction of the rail line, focusing on the various groups of laborers who contributed their muscle to building that desert stretch. Although the Denver and Rio Grande Western acquired 32.5 miles of previously built coal lines in Utah, the company needed to complete the segment of track between Green River and Grand Junction. By means of an imaginary train journey, Chapter Three explores the work and living conditions of engineers, brakemen, firemen, conductors, porters, and clerks operating the railroad through the decade of the 1880s. Chapter Four examines factors affecting yard workers' responses to labor organization in the communities of Green River and Grand Junction. The final chapter identifies ecological changes spawned by the railroad, addresses issues of worker autonomy and labor organization on the frontier, and then places the entire study into a larger historical framework.

This study demonstrates that railroads must be regarded not merely as sources of economic growth and prosperity, but also as work places and as vectors of social interaction and ecological change. The isolating conditions of the desert terrain informed the unique experiences of workers surveying, building tracks, and operating trains on the Alkali Division. In unearthing the lost history of these railroad workers, this study contributes to the better understanding of work conditions and environmental constraints

¹¹Meredith O. Wilson, The Denver and Rio Grande Project 1870-1901: A History of the First Thirty Years of the Denver and Rio Grande Railroad (Salt Lake City: Westwater Press, 1981), 74.

experienced by western railroad workers, and of relations between workers, railroad management, and communities along the rails.

CHAPTER I
SIZING UP THE DESERT TERRAIN

On one side stretch sterile plains that seem like a barrier to progress, and, on the other, Indians and the Mormons--types of brutality and barbarism--stand sullen and revengeful....

--Grand Junction News

27 October 1883

Because the sparse populations of eastern Utah and western Colorado could not support the operation of a rail line, General William Palmer, founder and president of the Denver and Rio Grande Railroad, conceived of a system of land, coal, mineral, and town development companies which would both support the railroad and also benefit from its very existence.¹ Initially, Palmer intended that his Colorado line would veer south toward El Paso to connect with his Mexican railroad and form a primary north-south trunk route in the West.² However, competition with the Atchison, Topeka, and Santa Fe, as well as financial difficulties, compelled the company to extend its rails westward. By laying Denver and Rio Grande tracks through Salt Lake City and linking with the existing transcontinental

¹Brit Allen Storey, "William Jackson Palmer: The Technique of a Pioneer Railroad Promoter in Colorado, 1871-1880," *Journal of the West* 5 (April 1966): 265. As a compliment, Thomas Clarke compared the D. &R.G. to an octopus: "It sucks nutriment from every place where nutriment is to be found." Thomas C. Clarke, "The Building of a Railway," chap. in *The American Railway: Its Construction, Development, Management, and Appliances* (New York: Charles Scribner's Sons, 1897), 17.

²Robert G. Athearn, "Utah and the Coming of the Denver and Rio Grande Railroad," *Utah Historical Quarterly* 27 (April 1959): 129.

line in Ogden, Palmer sought to connect the complementary economies of Utah and Colorado.

Because mining alone formed the economic base of Colorado at the time, remote mining areas experienced chronic food shortages. Palmer intended to take advantage of those open markets by connecting consumers in the "tributary mining districts" of Colorado with the relatively cheap agricultural produce of Utah. Utah farmers, previously subject to the high rates of the Union Pacific, looked forward to new markets and to the lower transportation prices that railroad competition would likely produce. In addition, Palmer expected that Utah would provide a market for Colorado ores and manufactures from the East. He explained to stockholders in the company's Annual Report for 1881 that the westbound traffic would "consist largely of Colorado Coke and Colorado Anthracite, machinery, and other articles made in Colorado, of iron, steel," as well as "eastern supplies of all kinds."³ Finally, Palmer saw the Utah extension and its connection to the transcontinental as a boon to the tourist appeal of his railroad. The new route would enable passengers to take the "scenic line" through the Rocky Mountains on their way to San Francisco.

Palmer confronted two problems in carrying out his plans. First, a state-territory boundary line bisected the land in between Grand Junction, Colorado and Ogden, Utah; and Utah's territorial laws prevented out-of-state companies from operating within its borders. Denver and Rio Grande officials resolved this problem legally by creating a separate subsidiary to construct and operate the portion of the track between the Colorado-Utah

³Palmer Report in Annual Report of the D&R.G., 1881, quoted in Robert Athearn, The Denver and Rio Grande Western Railroad (New Haven: Yale University Press, 1967; reprint, Lincoln: University of Nebraska Press, 1984), 115.

line and Ogden. The Denver and Rio Grande Western Railway (D&RGW) incorporated in Utah in December of 1880.

Second, a vast and little known desert stretched between Grand Junction and Green River. Because the Colorado portion of the route under consideration by railroad engineers crossed Ute Indian reservation lands, no federal surveyors had filed plats with the General Land Office.⁴ Although the Uncompahgre and White River Utes inhabited many river valleys of western Colorado, they rarely used the desert area between the Grand River and the Book Cliffs. In Utah, the Sheberetch Utes hunted antelope in the desert during the autumn and winter, but few if any Indians permanently inhabited the desolate land south of the Book Cliffs. They relied primarily on the river bottom areas surrounding the Green and Grand rivers for their subsistence. Although railroad surveyors entered the western Colorado Ute reservation before it was closed, many Colorado Utes were already removed to the Uintah-Ouray reservation in the Utah Territory. Most of Utah's Sheberetch Utes had died from an 1873 epidemic.⁵

While the existence of the Ute reserved lands in Colorado precluded filing General Land Office surveys, government reports from the Gunnison (1853) and Hayden (1875) expeditions provided railroad engineers with some general information about the nature of the land. Speculating about how geological processes formed the soil, Jacob Schiel of the Gunnison party described how "the disintegration of the mountain masses and jarred remnants of those strata," produced a "black, clayish," and "absolutely

⁴N.P. Hill to R.F. Weitbrech, 4 February 1882, Collection 513, Box 4, ff 4300, SHSC-D.

⁵Fred A. Conetah, A History of the Northern Ute People, edited by Kathryn MacKay and Floyd O'Neil (Salt Lake City: University of Utah Printing Service, for Uintah-Ouray Ute Tribe, 1982), 24, 89; "Presidential Proclamation of R.B. Hayes," 12 May 1880, pamphlet, Collection 513, Box 4, ff 1112, SHSC-D.

barren soil," which was "so poor and dry that even the artemesia [sagebrush] and cactus fields... disappear." According to Schiel, a light cover of gypsum gave the soil "the appearance of snow." In addition to documenting the infertility of the soil, Schiel described the unique landscape. He explained how from atop the Book Cliff formations one could look for a great distance over "the barren wasted land" to see a "series of open, parallel ravines and fantastically shaped sand stone ridges without a trace of vegetation."⁶ Schiel's description identified the most important constraints of the terrain. The lack of vegetation betrayed the land's aridity and alkalinity. The series of ravines he described identified the numerous washes subject to flash flooding and erosion. Few railroad engineers, however, were familiar with Schiel's and other existing government reports. Although several government expeditions had traversed the area, the Denver and Rio Grande surveyors and engineers were among the first to become intimately acquainted with the desert land south of the Book Cliffs.

Denver and Rio Grande surveyors passed through the Grand Valley on their way to Utah in October of 1881, literally on the heels of Uncompahgre Utes being removed by the army.⁷ Survey parties generally consisted of fourteen men: a supervisor, a front flag-man, and a transit-man, who with the aid of chain-men and other flag-men recorded the distances and angles of the proposed line. A leveller, with help from rod-men and axe-men, recorded levels, and a topographer often accompanied

⁶Jacob H. Schiel, Journey Through the Rocky Mountains and the Humboldt Mountains to the Pacific Ocean, edited and translated by Thomas N. Bonner (Norman: University of Oklahoma Press, 1959), 57-60.

⁷Charles H. Haskell, History and Description of Mesa County, Colorado (Grand Junction: Mesa County Democrat, 1886), 4.

the party to sketch the contours of the landscape and water courses.⁸ Two teamsters and a cook provided basic services to the crew.

The isolation and harsh conditions of the desert terrain made living and working in the field difficult. In fact, bad conditions contributed to a shortage of quality engineers in the West. Denver and Rio Grande Chief Engineer John A. McMurtrie explained in his report on construction activities for 1881:

...it was almost impossible to secure engineers competent to take charge of a party, although hardly a week passed that I did not receive orders to put from one to three parties in the field.... There being so few competent engineers, they are always employed, and the only way to secure their services is by paying them considerable more than they are getting in the East to compensate for the difference in comfort and price of everything. In the East engineers work six to eight hours a day and live in first class hotels; out here they work 10 to 18 hours a day, live in a tent, and on soldier fare.⁹

Furthermore, railroad engineers with eastern training--though familiar with a wider variety of construction experience--had less of the expertise necessary for locating tracks and for living and travelling in the West. Surveyor Francis Hodgeman recalled the first time he prepared to set out with a Denver and Rio Grande Western engineering party near Salina. The party had fifteen mules to pack, but no one knew how to pack mules correctly. One young man tried, but he ended up with "a round bundle on top of the mule's back, ready to overturn at the first opportunity." As the young man began to load the second mule, the first mule lay down "to divest himself of his load," which he did "most effectually." While the first

⁸C.H. Middleton, "Railway Surveys: Camp and Field Life on the Union Pacific," *Scientific American Supplement* 26 (7 July 1888): 10427; Clarke, 17.

⁹J. A. McMurtrie, *Report of Engineer Department for the Year Ending December 31st, 1881*, 35-36, quoted in Jackson Thode, "In the Mountains of Utah, by F. Hodgeman," *The Denver Westerners Roundup* 34 (July/August 1983): 3.

mule was "gotten up" and his pack readjusted, the second mule bucked a few times and then lay down and rolled "with like success." The surveyors wasted a great deal of time before they found an experienced packer to teach them the most effective technique of diamond hitching.¹⁰

Surveying parties lived in canvas tents year round. When temperatures dropped in the winter, they heated the tents with small stoves. Three fourteen by sixteen foot tents provided a survey crew the necessary amenities and work space. One served as a mess tent housing the cook, the commissary and all provisions. A second tent housed the supervising engineer, the transitman, levelman, topographer, and rodman, as well as all of the drafting equipment and supplies necessary to produce maps and profiles. The third tent housed the remaining "rank and file" and served as a "parlor, sitting room," and "gymnasium" as well as a dormitory. The men of this tent often represented diverse experiences, ages, and backgrounds. As such, on cold nights, one surveyor remembered that conversation encompassed all "vital questions of religion, science, politics, and business." The close living fostered camaraderie among the men. Engineer Hodgeman remarked of his crew, "A better lot of men were seldom got together."¹¹ Another group of railroad surveyors fixed their camaraderie in stone by inscribing their names together on a smooth desert rock in June of 1881.¹²

When the men surveyed fewer than four miles a day, they left their camp set up in one place for a week at a time. If they worked over four miles per day, they moved camp more often. On moving days, the men

¹⁰Thode, 16.

¹¹Middleton, 10427; Clarke, 17; Thode, 16.

¹²Thode, 11. E. Miller and J.T. Daly signed on 7 June 1881; Adolph Axelsen signed on 6 June 1881, and John H. Everett and H.A. Petty signed on 6 June 1881.

awoke at 4:30 am and packed up all the camp except the mess tent before breakfast. Then the surveyors began their work while the cook and the teamsters packed up the remaining gear and moved to the next campsite-- just in time to set up and begin preparing dinner. Dinner might consist of fried pork, potatoes, corn-bread, and gritty black coffee. Usually the men plotted a map and profile of the day's work before retiring so that they could check it again before moving on if necessary.¹³

Surveyors customarily worked in the high mountain country in the summer to avoid deep snows and cold temperatures. By working in the desert throughout the year, the Denver and Rio Grande Western surveyors experienced both the extreme summer temperatures, which regularly soared above one hundred degrees, as well as winter temperatures, which often dropped below twenty degrees.¹⁴

Desert conditions made it difficult to meet the men's basic needs. Although surveyor Edward Gillette saw many antelope near oases on the plains and numerous deer to hunt in the nearby highlands, he discovered few water sources. Furthermore, alkali poisoned much of the desert water he located. Anxious to drink heartily at one water source, Gillette found a painted sign near the spring: "Water here, death near." Water never quenched his "thirst quicker than this sign," he recalled.¹⁵

In addition to the constraints of the harsh terrain, surveyors felt threatened by Indians during their explorations. Because the arid land did not support any sizable Ute populations, Indians presented little danger to

¹³Middleton, 10427; Clarke, 17.

¹⁴Wayne L. Walquist, ed., Atlas of Utah (Provo: Brigham Young University Press, 1981), 54.

¹⁵Edward Gillette, Locating the Iron Trail (Boston: The Christopher Publishing House, 1925), 41.

the surveyors and rail workers. Stories of "Indian depredations" nonetheless haunted the imaginations of many. Rail workers of the Union Pacific had experienced incessant raids as Plains Indians attempted to protect their lands from the invasive railroad.¹⁶ Surveyor Gillette remembered one of his party's encounters with Indians. Near the Green River a band of Utes, mostly old men, women and children, camped near the survey party while the braves were away "on the war path." Gillette asked an old Indian if there was any danger, and he replied, "Mebbe so, mebbe so not, all the same white man better skin out."¹⁷ Whether or not the Utes presented actual danger to railroad workers, they did present a perceived threat, which added to the unknown and fearful aspects of the surveyors' remote surroundings. Denver and Rio Grande Western General Manager David C. Dodge even requested the assistance of "three or four or half a dozen companies of soldiers" on the Utah line for protection against the potential Ute threat.¹⁸

The lack of resources in the frontier desert environment which made living and travelling difficult for the surveyors also presented problems for the construction and operation of the future railroad. Few trees grew along the route, "except a scattering growth of scrub Cedar."¹⁹ As such, there was no timber available for ties, for building or for fuel. Furthermore, the paucity of quality water would create difficulties for supplying water to construction crews, livestock, and steam engines. Engineers needed to

¹⁶A. Roenigk, "Railroad Grading Among Indians," Transactions of the Kansas State Historical Society 8 (1904); Ripley Hitchcock, "At the Head of the Rails," The Chautauquan 9 (Oct. 1888-July 1889), 541.

¹⁷ Gillette, 39.

¹⁸David C. Dodge to H.A. Risley, 8 September 1881, Collection 513, Box 4, ff 4280, SHSC-D.

¹⁹Denver & Rio Grande Western Railway Company Annual Report of Chief Engineer for Year ending December 31st, 1881, Collection 513, Box 4, ff 871, SHSC-D, 18.

figure out how to transport water with pipelines and tank cars from the Colorado River and from scarce springs to locations along the planned route. By 1883, Chief Engineer J.A. McMurtrie, in his update on the condition of the construction reported that the Rio Grande Construction Company spent \$125.00 per mile on water service for the Utah extension compared to \$68.75 per mile for the "original D. and R. G. R'y" in Colorado. Moreover, at that time the company still needed to spend an additional \$68,300 to complete water stations at Cisco, Thompson, and at Green River.²⁰

In addition to determining the availability of timber, fuel, water and other necessary resources along the route, the engineers had to factor in operating expenses, cost per mile to build, and gradient as well as competitive travel time.²¹ Seeking to minimize expenses and time, Palmer acquired pre-existing mining railroads in Utah to incorporate under the aegis of the Denver and Rio Grande Western. The Bingham Canyon & Camp Floyd Railroad, the Wasatch & Jordan Valley Railroad, the Sevier Valley Railway Company and the Utah and Pleasant Valley Railroad added 32.5 miles to the Denver and Rio Grande Western system. Engineers had to figure out how to most effectively connect the existing patchwork of tracks.²²

Because surveyors worked under the premise that the Denver and Rio Grande line would connect with the Sevier Valley Railway Company

²⁰Report of J.A. McMurtrie Showing Condition of the Road when turned over by the Construction Co. to the Railway Co." in First Annual Report of the Denver and Rio Grande Western Railway, operations to December 31, 1883, Collection 513, Box 5, ff 1157, SHSC-D.

²¹Dodge wrote that the line would have to be ballasted before it would "be safe for us to make the time we will be obliged to make between our Eastern connections and the CPRR." D.C. Dodge to General Palmer, 20 July [1882?], Collection 513, SHSC-D.

²²Athearn, "Utah and the Coming of the Denver and Rio Grande Railroad," 133; Clarence Reeder Jr., "The History of Utah's Railroads, 1869-1883," (Ph.D. diss., University of Utah, 1970), 367-78.

west of Salina Pass and then eventually continue westward, the chief engineer in charge of Utah construction, Micajah T. Burgess, set up his base camp in Salina. From that point he directed 6,600 miles of explorations and 900 miles of preliminary surveys during 1881.²³

Before dragging out instruments, surveyors assessed the landscape with their eyes and their common sense. The first stage of the surveying, ascertaining the general location of the line, relied on engineers' experience and expertise. Only then did the survey party begin to make a preliminary survey with instruments. When they completed the preliminary surveys, the chief engineer examined all the maps and determined the exact location of the line. The survey crews then staked it out.²⁴

Determination of the final line was not always so simple. The isolation of the remote landscape made communication between survey parties difficult. Furthermore, communicating across the desert with supervisors took as long as it took the letter carriers to cross hundreds of miles of rough terrain. Sometimes decisions had to be made without time-consuming consultation. From his base in Salina, Burgess depended on the reports of thirty-six field parties to help him decide which route would work best.²⁵ One time, however, engineers Mathayas, Hurd, and Wilbor delivered conflicting reports about the same area. While Mathayas, sent from Denver by the railroad's chief engineer, presented Burgess with

²³Denver & Rio Grande Western Railway Company Annual Report of Chief Engineer for Year ending December 31st, 1881, Collection 513, Box 4, ff 871, SHSC-D, 58; Gordon Chappell, Scenic Line of the World (Golden: Colorado Railroad Museum, 1977), 62; Meredith O. Wilson, The Denver and Rio Grande Project, 1870-1901: A History of the First thirty years of the Denver and Rio Grande Railroad (Salt Lake City: Westwater Press, 1981), 74.

²⁴Middleton, 10427; Clarke, 17.

²⁵Wilson, 74.

optimistic reports about the grade of the route, the other surveyors reported differently. Burgess did not know which report to believe.

Relying on the variable assessments of the engineers, Burgess chose to stake out a southern rather than northern route in a particular area. The chief engineer of construction, Robert Weitbrec, then accused him of extravagance for choosing the longer southern route. Burgess defended himself by explaining the disparity of reports. Fearing that Burgess' surveyors had "not got to the true inwardness of that country," Weitbrec demanded that Burgess get to the bottom of the matter.²⁶ Burgess also had to diplomatically inform his supervisors that their favorite engineer's assessments of the land were incorrect. In his report for 1881, Burgess reported that Mathayas was "misled... in respect to the height of the ridges between drainages, and as to where certain of such drainages emptied. The country does not admit of the easy grade and cheap line promised by the exploring engineer's report."²⁷

Information generated from the surveys enabled Denver and Rio Grande engineers to prepare land plans and to apply for necessary rights of way from the General Land Office in December of 1882.²⁸ After engineers staked out the line, they prepared the construction work for "letting" or giving contracts to building crews.

Engineers carefully planned bridges and stone culverts under the track to withstand erosion. Most often workers constructed temporary timber trestles first so that the track laying could progress quickly. Later,

²⁶M.T. Burgess to D.C. Dodge, 30 January 1882; R.F. Weitbrec to M.T. Burgess, 26 March 1881, Collection 513, Box 4, ff 879, SHSC-D.

²⁷Denver and Rio Grande Western Railway Company Annual Report of Chief Engineer for year ending December 31st, 1881, Collection 513, Box 4, ff 871, SHSC-D, 21.

²⁸Historical Index of Land Use File, Township 10 South Range 104 West of the 6th Principal, Bureau of Land Management Office, Grand Junction, Colorado

locomotives transported the massive stones, many weighing as much as 10,000 pounds, from the railroad's quarry at Whitewater, southeast of Grand Junction.²⁹ Groups of masons moved from point to point performing the time-consuming but necessary task of building the culverts and bridge abutments. Engineer Hodgeman returned to a portion of the grade he assisted in building the summer before only to discover that the spaces he left open for culverts had been ordered filled in by the Principal Assistant Engineer. After only one season of rains, water tore through the grade in a half dozen places.³⁰

In the remote area that the Denver and Rio Grande Western traversed, surveyors not only sought suitable locations for track but also investigated opportunities for developing resources along the future track before filing any right-of-way claims with the General Land Office. In the winter of 1881 and the spring and early summer of 1882, Denver and Rio Grande Western surveyor Thomas Long explored the Book Cliffs region in search of viable coal seams that the railroad could purchase and develop. He began at Green River and then worked eastward going up "cañons at an average distance of every ten miles and making a thorough examination of the coal formation in every cañon." Upon completion of his explorations he advised the company against buying any coal lands in the Book Cliffs. In a letter to General Manager D.C. Dodge, he explained:

The coal formation all through these mountains is subject to a great many faults, chief of which is the irregularity of the different stratas. The coal in any vein you trace up runs but a short distance when it either entirely pinches out, or changes from two or three feet to a few inches, to pick up again a short

²⁹Grand Junction News, 28 April 1883; Grand Junction News, 7 July 1883; Grand Junction News, 26 May 1883; Grand Junction News, 2 June 1883.

³⁰Clarke, 22; Thode, 17.

distance on, then pinch out again and so on as far as the vein runs.³¹

Although surveyors located little accessible coal in the Book Cliffs, by the end of 1881 the Denver and Rio Grande Western occupied and claimed 4,463 acres of coal lands along the line west of Green River.³²

In addition to determining resource potentials for the railroad corporation, railroad surveyors also had the advantage of assessing lands before other homesteaders. Sometimes they took advantage of their knowledge. Knowing that railroad steam engines would pump water through a pipeline from the Colorado River to Cisco, Denver and Rio Grande Western surveyor John Martin, for example, helped establish that town along the narrow-gauge route. He eventually opened the Cisco post office in 1887.³³

In the course of their explorations, Denver and Rio Grande railroad surveyors learned about the geographic and topographic composition of the landscape in relation to extraction of potential resources and to construction of the rail line. They also, however, intimately experienced limits imposed by the landscape. The desert conditions of isolation and aridity not only shaped decisions regarding railroad construction but also defined the quality of the surveyors' lives.

³¹Thomas Long to David C. Dodge, 6 August 1882, Collection 513, Box 4, ff 1101, SHSC-D.

³²Wilson, 74.

³³Norman D. Weis, Helldorados, Ghosts, and Camps of the Old Southwest (Caldwell, ID: The Caxton Printers, 1977), 352.

CHAPTER II

BUILDING THE DESERT RAILS

A recklessness, born of freedom from restraint and the splendid exhilaration of the Western air, has soiled many pages of the record, but very many of the crimes have been due to the blood-suckers and parasites, the gamblers, thugs, thieves, and rum sellers who infest railroad camps.

-Ripley Hitchcock¹

The Denver and Rio Grande Western pursued many different construction strategies when it began building track in the highlands of Utah in the autumn of 1882. In some places the company built the line itself, or a subsidiary, the Denver and Rio Grande Construction Company, constructed the line. In other instances, the company contracted private firms for tasks such as grading. Railroad engineers, stationed along particular segments of the road, oversaw construction.

Working from both the east and west, graders first built a roadbed south of the Book Cliffs by throwing up earth with wheelbarrows and carts from either side of the grade. In instances where the shale was too close to the surface, workers left bedrock alone for the road bed. They graded the bed twelve feet wide in cuts and ten feet wide on banks.² Track layers followed closely behind the grading crews so that steam locomotives could

¹Ripley Hitchcock, "At the Head of the Rails," The Chautauquan 9 (October 1888-July 1889): 540.

²"Report of J.A. McMurtrie showing condition of the Road when turned over by the Construction Co. to the Railway Co.," in First Annual Report of the Denver and Rio Grande Western Railway, covering operations to Dec. 31, 1883, Collection 513, Box 5, ff 1157, SHSC-D.

transport necessary supplies and provisions to "the front"--the actual end of the line. For example, trains transported ties for the west side from highlands near Pleasant Valley.³ Trains also hauled potable water for the construction crews and for the operation of steam locomotives. Oftentimes the engines' boilers ran low, compelling crews to use poor water sources along the way. The Grand Junction News reported that construction engines returned to town in "badly used up condition," because water found in intermittent creeks along the road was "largely impregnated with alkali and soda," and formed "thick coats upon the boiler iron[s]."⁴

Gangs of men busily unloaded and placed ties. Groups of track layers, more colorfully known as "gandy-dancers," then hauled and placed the heavy steel rails atop the ties. Each ten foot segment of rail weighed roughly 300 pounds.⁵ The work crews laid an average of between one and two miles of track each day. By 19 December 1882, Grand Junction workers reached the state line. By the end of January, they laid nearly thirty miles of track--practically to Cisco. In February, the men laid twenty-three miles.

The track ran in a straight line from Grand Junction to Fruita to Crevasse but then wound across the desert to Excelsior. Some locals suggested that the track wound "about a great deal more than necessary, because the contractors were paid by the mile for its construction."⁶ Railroad engineers, however, designed winding track to maintain minimal grade.

³John Bartlett to Thomas Hughes, 10 December 1923, 14 January 1925, Archives of the Church of Jesus Christ of the Latter-day Saints, Salt Lake City (hereafter LDSA-SL).

⁴Grand Junction News, 3 March 1883.

⁵"Report of J.A. McMurtrie," SHSC-D, 37; John Stover, American Railroads (Chicago: University of Chicago Press, 1961), 68.

⁶Merton N. Bergner, "The Development of Fruita and the Lower Valley of the Colorado River from 1884 to 1937," (M. A. Thesis, University of Colorado, 1937), 71-72.

Most railroad construction crews were either locals attempting to profit from the rail line passing through their towns or single men, both American and foreign-born, making their livings by travelling around to large construction projects. The railroad company found it easier to secure local crews. In addition, local workers often contributed the labor of their families. In crews of local contractors, for example, wives and daughters performed the tasks of housekeeping and cooking for workers.⁷ Furthermore, getting large crews of transient men together proved difficult. One contractor in Northwestern Nebraska lamented the situation in the mid 1880s:

Had I closed down for the winter, my men, of necessity, would have scattered all over the West, and I would have been faced in the spring with the slow and difficult task of gathering another force together.⁸

Well-organized, local Mormon contractors often bid so low that Colorado contractors could not compete with them.⁹ Latter-day Saint Church leaders decided that if Mormons worked on the construction of the Denver and Rio Grande Western, they should work "together as much as possible," with some designated person properly securing the pay for their labor.¹⁰ Groups of Mormons worked together and then divided their earnings among all members of the group.

⁷Grand Junction News, 17 February, 1883.

⁸James H. Kyner, End of Track (Caldwell, ID: The Caxton Printers, 1937; reprint, Lincoln: University of Nebraska Press, 1960), 213, quoted in Mary P. Rossillon, The Curecanti Archaeological Project: The Archaeology of Marion, an Historic Railroad Camp in Curecanti National Recreation Area, Colorado (Lincoln, Nebraska: Midwest Archaeological Center, 1984), 52.

⁹Robert Weitbrec, notebook, Collection 662, notebook 6, ff 13, SHSC-D.

¹⁰Copies of Minutes of Daily Journal and of the Council of Apostles, 20 October 1881, LDSA-SL.

Mormon working arrangements appeared novel to the non-Mormon railroad engineers. Engineer Edward Gillette remembered his impressions of Mormon grading camps:

[I]t was a rare experience to visit one of their grading camps. The men were particular to wash and comb their hair before each meal, grace was asked, and their women did the cooking and waited on the table. The camp was kept in a neat condition, and the grading completed in a very satisfactory manner, all of which was an innovation in a railroad grading camp.¹¹

Another Denver and Rio Grande Western engineer, Francis Hodgeman, wrote a letter to his hometown newspaper about his experience with Mormon contractors. After he worked on a surveying crew, the Western assigned Hodgeman the task of overseeing grading contracts west of Green River. Given minimal equipment and no provisions, he boarded with the contractors. He explained the cooperative system by which the Mormons worked:

They were for the most part Danes, and all Mormons.... Jacobsen's party numbered about fifty young and middle aged men, who worked... on the cooperative plan, he being chosen by common consent as the leader and boss. Every man furnished his own teams and tools, bore his share of the expenses, and shared the profits or loss. The men were a lively set and soon had the dirt rapidly piling up on the grade. At night they made the air ring again with their songs and music....[The men] understood their business and, it is perhaps needless to add, earned more money per capita than any other outfit in the line.¹²

Arthur Taylor and O.W. Warner from the Mormon settlement of Moab, Utah each contracted to build a section of the western extension.

¹¹Edward Gillette, Locating the Iron Trail (Boston: The Christopher Publishing House, 1925), 40-41.

¹²Jackson Thode, "In the Mountains of Utah, by F. Hodgeman," The Denver Westerners Roundup 39 (July/August 1983):13.

They hired men and work animals from their town but largely relied upon family assets and labor. Several members of the Taylor family contributed teams of horses. James Luster and Ervin Wilson each brought a four-yoke team of oxen. Luster's wife, Irene, joined Sena Taylor in cooking for the grading crews. Still other family members hauled hay from Moab to the grade for the crew's animals--a four to six day trip.¹³

While Mormon groups dominated the construction force of Utah, more ethnically diverse crews of single men comprised the construction effort in Colorado. Reporter Ripley Hitchcock remembered the chaotic nature of camp life in a grading camp just south of Grand Junction, Colorado. When the six o'clock whistle blew, he recounted, workers immediately left their jobs at the end of the line and "scrambled" aboard flat cars that returned them to camp. Even before the car stopped, the men hustled, "like a flock of stampeded sheep in a wild race for supper." Few took time to wash up. The old freight cars, fitted with long planks for benches and tables, could accommodate only a limited number of workers at a time, and no one wanted to wait. Pots full of stew, coarse bread and tea "appeared and disappeared" as the workers sated their hunger. The supper tables brought together men of all sorts. "There were swarthy Italians, Irishmen with carrotty locks, men of a score of nationalities, begrimed, tattered, gnawed at by appetite given by labor in the bracing Colorado air."¹⁴

Railroad camp commissaries contained limited supplies, allowing for only minimal dietary variation. For one man, the monthly food allowance included 4 pounds of apples, 7 pounds of bacon, 4 pounds of beans, one-

¹³Grand Memories (Grand County, Utah: Daughters of the Utah Pioneers, 1972), 24-25.

¹⁴Hitchcock, 541.

sixth pound of baking powder, 25 pounds of beef, two and one-half pounds of coffee, 37.5 pounds of flour, nine and one-half pounds of ham, two and one-half pounds of lard, 30 pounds of potatoes, four cans of tomatoes, one pint of vinegar, and one-half package of yeast cakes. In addition, the commissary contained the various flavor-enhancing condiments: salt, pepper, spices, sugar, and syrup. Aside from food stuffs, a monthly allowance included 7 pounds of candles, two bars of soap, matches, and washing soda for each man. These provisions cost approximately \$12 per person, per month, excluding the costs of hiring a cook.¹⁵

Camp workers lived in box cars remade into bunks or in canvas tents which mail order companies distributed widely at the time. After dinner, the tired workers took care of personal tasks and socialized. Hitchcock recounted how they

lighted black pipes and drew together. Some rudely mended their garments, in company, and others produced dirty cards, or gathered to talk. A few clamored into the narrow board bunks in cars and drew their blankets up over aching limbs.¹⁶

Saloons also set up near the largest construction camps to provide divertissement and liquid comfort to workers.¹⁷

Although large camps like Ripley described often integrated single Euro-American male immigrants, some immigrant groups stuck to themselves in enclave work communities. In particular, Chinese and Italian laborers who worked on the grade west of Grand Junction brought with them cultural attitudes towards camp organization, work, and wealth

¹⁵"Allowance for one man for 30 days, 13 December 1884," Track Reports and Miscellaneous Statement for 1883, Denver and Rio Grande Archives, 159 (hereafter, DRGA-D).

¹⁶Hitchcock, 541.

¹⁷Grand Junction News, 13 January 1883; Charles H. Haskell, History and Description of Mesa County, Colorado (Grand Junction: Mesa County Democrat, 1886), 8-9.

different from those of Anglo-Americans and of Mormons.¹⁸ Both Chinese and Italians shared a history of horrendous poverty in their countries of origin, had little grasp of the English language, and depended on labor agents to set up their work contracts.

In the mid-nineteenth century, Chinese laborers fled population pressure, famine, and economic instability in the Kwangtung Province to find work opportunities as miners. Many also worked in the construction of the Central Pacific segment of the first transcontinental railroad. The linking of the transcontinental rails at Promontory, Utah, left thousands of Chinese laborers unemployed.¹⁹ By this time, however, the Chinese enjoyed a reputation of being hard workers. In the early 1870s The Rocky Mountain News reported that the Chinese "work steadily and faithfully, and are very obedient to... their overseers."²⁰ A joint resolution of the state legislature even encouraged immigration of Chinese laborers to Colorado to hasten the state's development.²¹

In addition to enjoying the reputation of being hard workers, the Chinese also had the reputation among white laborers of undercutting wages and lowering the standard of living for all. Most Chinese workers

¹⁸It is very likely that Chinese and Italian laborers built track west of Grand Junction because they constructed other proximal segments of the line and eventually worked as section laborers along the tracks of the Utah Extension. In addition, the letter list in the Grand Junction News posted a special listing for "Italians," and occasionally posted a letter for a Chinese person during the construction phase. Grand Junction News, 18 August 1883; Grand Junction News, 8 September 1883. Furthermore, the News reported a mishap involving a Chinese laborer: "A Chinaman who was driving one of Hammonds teams... tried to turn around and nearly had his neck broken instead." The Grand Junction firm of Hammond and Hendricks contracted the stretch of grade from Grand Junction to the state line. Grand Junction News, 19 May 1883.

¹⁹Don C. Conley, "The Pioneer Chinese of Utah," in The Peoples of Utah, edited by Helen Papanikolas (Salt Lake City: Utah State Historical Society, 1976; reprint, 1981), 251.

²⁰Rocky Mountain News, 23 July 1873, quoted in Rose Hum Lee, The Growth and Decline of Chinese Communities in the Rocky Mountain Region (New York: Arno Press, 1978), 66, 70.

²¹Patricia K. Ourada, "The Chinese in Colorado," Colorado Magazine 29 (October 1952), 276.

left their families and homeland with the hope of gaining wealth. Labor agents fronted money to transport them across the Pacific, but then, like indentured servants, workers needed to earn enough money to pay off the cost of their voyage. At the same time, workers needed to send money home to families dependent on their labor. Consequently, the Chinese had little money to spend in local marketplaces. Furthermore, they usually worked in small groups and hired their own cook who prepared foods unfamiliar to Americans.²² As a result, Americans regarded the Chinese with suspicion. In fact, the absence of women in many remote areas at the time prompted Chinese to open businesses offering services routinely performed by wives, such as laundering and cooking. Thus the Chinese filled an occupational gap enabling Caucasian men to ascend the occupation and economic ladder while remaining on the lower rungs themselves.

Although Italians did not confront the racial prejudice experienced by Chinese, they too experienced social prejudice and economic exploitation. Denver and Rio Grande conductor John O'Boyle, for example, belittled Italians with his joke: "the only difference between the steam shovel and an Italian is that the steam shovel can't vote."²³ Many contemporary Americans referred to the Italians derogatorily as "dagoes." One writer captured in literary description a scene of an Italian crew working on the track in sweltering heat:

The dagoes swarm on the embankment, their bodies bent double as they stoop to work. Patches of color flare in the sunlight--blue jeans, red bandannas, and shirts of vivid checks. The sun beats down upon the track, and the hot air quivers as it rises from the rails. You can hear the hissing intake of the breaths as the workmen swing their picks. Their shirts are

²²Rossillon, 51-52, 60.

²³Grand Junction News, 1 January 1887.

open at the throat, their dark skins are streaked with sweat, their black hair is matted on their temples. Some wear fluttering handkerchiefs beneath their hats. There is a glitter of earrings, and all over you hear the click of picks and jabbering of Italian.²⁴

Because most Italians left conditions of poverty in their own country, when they fled to the United States, they depended on Italian labor agents known as "padrones." The padrone assembled workers, usually in large Eastern cities, and then travelled with them to the work site where he provided food and housing in bunk cars. Italian workers most often cooked and ate their own food together in small groups--limiting their social contact with other workers. The padrone translated between the company, the contractors, and the workers. The railroad or contractors paid the padrone for housing, food, and transportation, as well as for labor. Because the Italian laborers were unfamiliar with American standards of living and work practices, the padrone easily took a cut of the workers' wages.²⁵ Italians, like the Chinese, also tried to save money to send home, so they ate low-cost, low quality foods. Recreating an Italian cultural practice, workers often baked bread loaves in stone ovens they built along the way.²⁶ They also ate a great deal of dried pasta. One traveller along the Utah extension remarked, "the macaroni boxes along the line of the Western are thicker than the leaves in the valley of Vallambrosa."²⁷

Xenophobic Grand Junction citizens resented the presence of Italian workers in their community. One News writer, for example, angrily

²⁴Harper's Monthly (June 1907), quoted in Railroad History Bulletin 139 (Autumn, 1978): 113.

²⁵J.R. Chapman to F. Killala, 30 July 1885, Collection 513, Box 26, SHSC-D; Rossillon, 54-55.

²⁶Rocky Mountain News, 11 April 1882; Rossillon, 54-55; Italians in the American West Project Collection, Fife Folklore Archive, Logan, UT.

²⁷Grand Junction Evening Sun, 17 August 1901; clipping in private collection of Jackson Thode, Denver.

informed the town that the Denver and Rio Grande hired "dagoes" at their nearby quarry at Whitewater. The writer characterized the practice as "an outrage upon the laboring class of citizens of the Grand Valley," and further explained that he knew of "a great many men who have been awaiting the opening of this work to earn bread for their families for winter."²⁸ Many citizens of Grand Junction generally considered railroad construction laborers--in their poverty and transience--as "lawless" and "reckless."²⁹

News of violence routinely reported from the isolated areas traversed by the railroad exacerbated the poor reputation of the construction laborers. The Grand Junction News, for example, reported several instances of violence and murders along the rail line west of town. In one instance, a saloon keeper at the Sulphur Springs grading camp--near Shale station--was shot through the head for no apparent reason.³⁰ Ethnic diversity contributed to the violence. One early Green River resident recalled that during construction through town there were many "other nationalities besides Americans," and that "as such there were drinking bouts and gambling."³¹ One time, Green River citizens called the railroad doctor "to attend a man whose hand was nearly cut off by a knife in the hand of a Chinaman."³² Few means for enforcing laws existed at the time so the largely male railroad construction community caroused with little control. Furthermore, the isolated settlements of Green River and Thompson Springs became notorious enclaves for outlaws. The nearby canyon landscape formed convolutions that outlaws easily lost themselves in.

²⁸Grand Junction News, 17 January 1884.

²⁹Rossillon, 53.

³⁰Haskell, 8-9.

³¹J.P. Simonson, "A Saga of Green River," unpublished manuscript, Collection B303, Utah State Historical Society, Salt Lake City, 19 (hereafter UHS-SL).

³²Grand Junction News, 13 October 1883.

There were just too few people and horses in the towns to form posses.³³ The editor of the Grand Junction News commented that Green River was "certainly in a bad predicament as it had no law to protect its citizens, and no officer within a hundred miles either way, with probably as hard a class of rougns as ever disgraced any community."³⁴

Although Grand Junction had more established means of enforcing laws, early residents remember that the numerous railroad laborers gave "tone and color" to their town as well. Local school teacher Nellie Blain recalled that a "group of Utah men" working nearby attended the town's first Fourth of July dance. Because "they were all strangers to the Grand Junction folk and there were plenty of Grand Junction men to dance with the few ladies, probably ten men to each woman," none of the women would dance with the "Mormon boys." They became angry and told some local men, "We came up here, and paid our money and expected to dance." Sensing that there might be trouble, Miss Blain broke the ice by bravely introducing one of the "well-behaved" Mormon boys to all the ladies. She then accompanied him through a quadrille. After that the Utah visitors had no difficulties securing dancing partners, and "the day was saved."³⁵

Pioneer Clayton Nichols recalled that "there were always some 'tough customers' who made trouble when they were under the influence of drink." According to Nichols, the rail workers accounted for the

³³Simonson, UHS-SL, 22.

³⁴Grand Junction News, 1 December 1883. Another instance of xenophobic violence occurred in Mesa County to the southeast of Grand Junction. Angry at his foreman for not being more imposing upon foreigners, one contractor "beat an Austrian over the head with a pick handle until his face was like a piece of raw meat. The fellow ran to his dugout, came back with his gun and killed [the contractor]." J.A.K. Crawford, interviewed by Frances Strook and collected by CWA workers during 1933-34, in Pamphlet 364 Mesa County Doc, 1-21 inc, SHSC-D, 253.

³⁵Nellie B. Underhill, Daily Sentinel (Grand Junction), 1 May 1930.

"unusual number of 'sporting ladies'" in town.³⁶ In early January of 1883, the News reported in disgust that yet another "very disgraceful shooting affray" occurred at an "infamous 'baglio'" on Colorado Avenue, the local red-light district. "Geo. Mosby, a railroad engineer, was paying his attentions to one of the girls who was stopping at the house," when another man, Al Turner, "who has made himself notorious by his desperate acts and deeds," claimed the girl as his mistress and objected. Mosby shot both Turner and an innocent waiter. Grand Junction boosters feared that the "moral effect of such affairs" upon the community was "terrible," and could "be a detriment" to the town's growth.³⁷

Despite the questionable "moral effect" of the numerous railroad laborers, they supplied the largest part of the money in circulation and supported the town's growing economy. Although no specific figures for the number of railroad workers exist, in November of 1882, the Grand Junction census showed 524 residents, not including approximately "250-300 railroad men."³⁸ Local businesses benefitted greatly from providing services for these railroad construction workers. Hotels and restaurants in town catered to the railroad men.³⁹ Local merchants and crafts people also

³⁶Edwin Price, Daily Sentinel, 2 March 1930; Clayton Nichols, Daily Sentinel, 8 June 1930; Daily Sentinel, 10 October 1926; Walker D. Wyman, "Grand Junction's First Year, 1882," Colorado Magazine 13 (July 1936), 133; Grand Junction News, 11 November 1882.

³⁷Wyman, 127-37, quoted in Athearn, The Denver and Rio Grande Western Railroad, 122; Grand Junction News, 13 January 1883.

³⁸Furthermore, in a controversial election, a full 1,800 votes were cast when the Democratic Party paid railroad contractors to let their workers take the day off to vote. The election figures reveal that there may have been as many as 1,300 railroad workers in or close to town--or that workers voted several times each, a common practice at the time. Grand Junction News, 2 December 1882; Grand Junction News, 3 November 1882; James H. Rankin, "The Founding and Early Years of Grand Junction," Colorado Magazine 6 (March 1929): 43.

³⁹Grand Junction News, 21 April 1883; Edwin Price, Daily Sentinel, 2 March 1930; Clayton Nichols, Daily Sentinel, 8 June 1930; Daily Sentinel, 10 October 1926; Wyman, 133; Grand Junction News, 11 November 1882.

flourished by supplying materials and provisions to contractors. J.L. Robinson, for example, supplied the special water wagons necessary for carting potable water to the end of the tracks. Local merchants, Payne and Shackleton, provided beef for the grading outfits west to the state line, and Dave Wood's heavy freight wagons hauled provisions to the graders.⁴⁰ Furthermore, building projects associated with the depot grounds in town employed many people.⁴¹ The Grand Junction Town Company manufactured pressed brick for construction of local machine shops, shops in Green River, and for other structures along the route as well.⁴²

The rail workers along the line also supported the economy of the budding town of Green River. Pioneer Al Farrer pulled up the first corn raised there "by the roots" and sold it to railroad contractors to feed their livestock. Early pioneers also sold produce from their small gardens to the workers.⁴³

As the distance between the track ends shrank in March 1882, the pace of construction picked up. Even though it was early spring, temperatures soared to nearly 80 degrees as the men worked.⁴⁴ They laid an average of 1.84 miles per day or nearly 45 miles that month alone. Locomotive engines hauled 130 car loads of materials from Grand Junction to the front on March 8th.⁴⁵ Inspired by the proximity of the connection, workers laid over five miles in one day with tremendous effort and long

⁴⁰Haskell, 7; Grand Junction News, 4 November 1882.

⁴¹Grand Junction News, 10 March 1883.

⁴²Haskell, 13; Gordon Chappell, Scenic Line of the World (Golden: Colorado Railroad Museum, 1977), 56; Grand Junction News, 27 January 1883.

⁴³J.P. Simonson, "The Pioneer Days of Green River," unpublished manuscript, Collection B303, UHS-SL.

⁴⁴Grand Junction News, 31 March 1883.

⁴⁵At the same time, the nights were cold—only 34 degrees. Grand Junction News, 10 March 1883.

hours.⁴⁶ At 1:30 pm on 31 March 1883, General Manager David C. Dodge of the Denver and Rio Grande Western drove a final silver spike at a place called Desert Switch, thirteen miles west of Green River.⁴⁷ Although the desert conditions that burdened railroad surveyors affected workers building the tracks as well, the rail connection that workers forged facilitated their living and working circumstances. By completing the tracks across the desert, the railroad construction workers linked the two distinct economies and cultures of Utah and Colorado and contributed to the settlement and development of a new region.

⁴⁶Track Reports and Miscellaneous Statement for 1883, 101. The Grand Junction News indicated that track building progressed more quickly, at the rate of 3 miles per day, but the engineers' records appear to be more accurate.

⁴⁷ Denver Tribune-Republican, 31 March 1883.

CHAPTER III
WORKING THE DESERT RAILS

Remotely located properties with hardships incident to desert or mountainous operation, with harsh living conditions were compelled not only to pay high rates in order to procure labor, but also to concede the principle of organization.

--Ripley Z. Ripley¹

I've heard of the call of the wild, the call of the law, the call of the church. There is also the call of the railroads.

--Reed C. Richardson²

While railroad construction offered reasonable wages to many unskilled laborers, jobs in railroad operation, particularly in the far West, offered romance, high wages, social mobility, and in many instances autonomy to more skilled workers. The remote, desert landscape which presented difficulties to surveyors and construction workers brought the same difficulties to those operating trains in the Alkali Division. While the isolation created by the desert shaped difficult working experiences, it also contributed to unique working circumstances which benefitted workers.

Although historians have documented the significance of railroad transportation, they have only begun to study the importance of the

¹Ripley Z. Ripley, "Railway Wage Schedules and Agreements," in Report of the Eight-Hour Commission (Washington, D.C.: Government Printing Office, 1918), 270-272.

²Reed C. Richardson, The Locomotive Engineer, 1863-1963: A Century of Railway Labor Relations and Work Rules (Ann Arbor: Bureau of Industrial Relations, Graduate School of Business Administration, University of Michigan, 1963), 102, quoted in Walter Licht, Working for the Railroad: The Organization of Work in the Nineteenth Century (Princeton: Princeton University Press, 1983), 163.

railroads as work places. The operation and management of railroads not only affected communities serviced by railroads but also affected the experiences of workers. By examining worker profiles and by taking an imaginary freight-train journey along the Alkali Division, from Grand Junction to Green River, we can best understand the jobs of running trade workers as well as how the circumstances of aridity and isolation effected their lives.

Young, single men in their twenties and thirties dominated the ranks of railroad workers. While many foreign-born laborers found employment on western railroads in the late nineteenth century, railroad work also captivated the imagination of many young American men. Many left family farms seeking work opportunities in urban industry and on the expanding railroads. Despite the difficulty and danger of the work--perhaps because of it--workers romanticized railroad life as adventurous and daring.³ By the 1880s, a generation of railroaders grew up reading stories of heroism and passion that dotted the American press. The most popular stories portrayed general managers and company officers rising from the lowliest ranks of the service. Railroad work offered status and opportunity to men from many backgrounds.⁴ In addition to opportunities for advancement, railroad work offered laborers a community--if only because crazy working and living circumstances pushed the workers together. Old timers relished their railroad days with passion. Locomotive Engineer J. Harvey Reed, for example, wrote:

The man who spends a lifetime on the rail has lived a romance and has experienced so much danger that when old

³Licht, 125, 163.

⁴Charles B. George, Forty Years on the Rail: Reminiscences of a Veteran Conductor (Chicago: R.R. Donnelley & Sons, 1887), 190-91.

age or physical disability demand his retirement, life pales with ennui, and the "old 'un" longs with a hungry yearning for the smell of the boiler head.⁵

Unlike other work opportunities associated with emerging industrialization, railroad work exemplified the American dream of rags-to-riches as well as the romance of frontier independence.

The well-established job hierarchy of railroad work translated pretty nearly into age and status hierarchy. Many men began their careers with the railroad at a very young age. For example, call boys, usually the sons of railroad workers, often began working before they turned ten.⁶

Telegraphers, like seventeen-year-old Frank Grant in Grand Junction, regularly started as teenagers.⁷ When the Denver and Rio Grande hired minors, the company required parents to sign a form which "forever release[d] and discharge[d] the Denver and Rio Grande Company from any and all claims and liability for damages resulting from injuries whether received through accident or carelessness," including claims for loss of service, disability, and pain or suffering.⁸ Because many families needed additional income, parents allowed their children to enter into the dangerous field of railroad work.

Progressively these young workers gained more experience and skill and rapidly advanced to more challenging jobs. Grand Junction blacksmith John Cotterell began work as an apprentice on the Central Railway in New Jersey as a teenager. By the time he turned nineteen, he was a blacksmith for Colorado Fuel & Iron Company in Pueblo, Colorado. When he was

⁵J. Harvey Reed, Forty Years a Locomotive Engineer (Prescott, Washington, 1915), 16-7.

⁶Licht, 216, 220.

⁷Grand Junction News, 5 January 1884.

⁸"Minor's Release Form 5008," Book of Personal Records, Collection 513, Box 8, SHSC-D.

twenty-one, he worked as blacksmith foreman at the Denver and Rio Grande division yards in Salida; and finally at age twenty-three, as working foreman, he took charge of the railroad's blacksmith shops in Grand Junction. Some workers did not ascend the ladder of opportunity so quickly. Various ethnic workers experienced prejudice which prevented them from readily gaining promotions. Italian-born Nick Faziano, for example, began railroad work as a section laborer when he was twenty-one. The following year he got a job shovelling coal into engines in the Grand Junction rail yard. He worked in that capacity for seven years before being promoted to foreman of the coal chute.⁹ Foreign-born workers remained longer in low-status jobs. Whether or not workers actually experienced greater opportunities for social advancement in the West than elsewhere, the perception of likely promotions contributed to workers' job satisfaction.

By the decade of the 1880s, railroad workers benefitted from strides made in safety and labor organization. Because as an industry, railroads dealt more directly with the general public through their passenger service, rail safety, reliability, and service became pressing national issues. In particular, the small leather-bound rule books, carried at all times by railroad workers, standardized service and safety practices by giving precise instructions for operating trains.¹⁰ The rule books also conveyed standards for personal behavior. Such rules, like the one prohibiting drinking, irked workers most of all. Most old-time railroaders disregarded the rule books as invasions of personal liberty. In fact, many violated and ignored rules they

⁹Denver and Rio Grande Western Magazine, January 1925, 13.

¹⁰Initially, each company had its own set of rules and practices, but by the late 1880s, rule books became uniform to contribute to safety and ease of transferring workers between companies. "Denver and Rio Grand Railway. Time Table No. 26," time table and joint abridged rule book for the D.&R.G. and the D.&R.G.W., 15 January 1884, DRGA-D.

deemed unimportant. Their failure to comply with rules established in the book, however, could be met with suspension or even dismissal. By 1888, the railroad company compiled a list of discharged employees who could not be re-employed without the written consent of the general manager. The Western, for example, permanently discharged two brakemen for drinking and carrying tramps.¹¹

While workers might have lost some personal freedoms through rule books, they gained an extremely significant improvement: railroad companies clearly established work expectations in writing.¹² Furthermore, the rule books clarified relationships between management and workers. Because of the large size of the companies, railroads ushered in the new wave of middle managers responsible for supervising workers over vast geographic districts. Before rule books, individual managers could exploit and mistreat workers who had no recourse. Because rule books explained exactly what a company expected of its workers, they actually enabled workers in the running trades and in isolated areas--like the Alkali division--to do their jobs with minimal supervision. As a result, railroaders in remote areas enjoyed considerable independence in their work.¹³

Despite the clarity and uniformity touted by the detailed rule books, however, many trainmen did not read well. An 1871 study conducted by the Chicago, Burlington and Quincy Railroad, for example, revealed that

¹¹ "Denver and Rio Grande Railroad Company, Record of Discharged Employees," 1 October 1888, Collection 513, Box 7, ff 1379, SHSC-D.

¹² Charles Clark, "The Railroad Safety Movement in the United States" (Ph.D. diss., University of Illinois, 1966), 10; O.H. Kirkpatrick, Working on the Railroad (Philadelphia: Dorrance & Co., 1949), 139, 148; Licht, 81, 89.

¹³ Stromquist argues that workers in running trades, such as engineers, firemen, conductors, and brakemen, experienced greater independence than other railroad workers. Shelton Stromquist, A Generation of Boomers: The Pattern of Railroad Labor Conflict in Nineteenth Century America (Urbana: University of Illinois Press, 1987), 106.

one-third of the line's engineers could not read their train orders.¹⁴ Although no specific information for the Denver and Rio Grande exists, Grand Junction census data reveals that at least a few railroaders admitted their illiteracy to the 1885 census taker.

Because increasing traffic made accuracy in time more important for the safe operation of trains, the Denver and Rio Grande used its Denver clock as standard time for the whole line. Each morning at 10 am, conductors set their watches by telegraph and then passed the correct time along to all other train men. Watch repairman Carl Gleeser serviced all watches of the railroad employees in Grand Junction to further assure accuracy in time.¹⁵

While passenger trains operated according to specific time schedules, freight trains ran irregularly in between the priority passenger trains. One hour before a freight train departed, the call boy located and awakened the various members of the train crew and notified them of their duties.¹⁶ Most workers lived near the depot in wood-frame boarding houses between the Grand River and the railroad tracks.¹⁷ If the call boy failed to find the workers in their places of residence, he had to know the habits and haunts of the workers in order to quickly locate them. Perhaps he could find them in a nearby eating house or saloon. Once notified, the trainmen signed a register acknowledging notification of duty. They then had fifteen minutes

¹⁴ Paul Black, "Robert Harris and the Problem of Railway Labor Management," unpublished paper cited in Licht, 225.

¹⁵"Denver and Rio Grand Railway. Time Table No. 26," rule 27.

¹⁶Clark, 12.

¹⁷ W.H. Jackson, Grand Junction, CO, photograph no. 1446, SHSC-D. The photograph shows dozens of little wooden shack houses to the south east of the depot, which also correspond to architectural drawings of workers' bunks.

to report to the train. According to the rule book, failure to show up constituted grounds for dismissal.

When the trainmen arrived at the yard, each began to prepare for the train's journey. Although the yard crew already tended to the locomotive's engine, the engineer and fireman further inspected the engine to be certain of its working condition. The fireman, under the supervision of the engineer, made sure that the engine joints were well oiled, that the boilers were filled, that the signal cord was free of obstruction, and that the fire could be properly kindled.¹⁸ In addition to the technical aspects of engine maintenance, the fireman and engineer carefully cleaned and polished the locomotive, taking "as much pride in the appearance of the engine as if it had been personal property."¹⁹ One Grand Junction fireman, George Montgomery, remembered the beauty of the Denver and Rio Grande engines. Every place the makers could think of, they covered with brass. While the company furnished the fancy engines, he recalled, the firemen provided "the muscle to keep the brass clean."²⁰

While engineers sat at the helm of the train, conductors supervised the train's entire operation. Freight conductors carefully scheduled their train's passage over the tracks, making sure that the train could get to a siding before it met another train coming from the opposite direction. Both freight and passenger conductors had to schedule time for stops along the way to stay on the planned time table. In addition to planning operation schedules, the freight conductor acted as the clerk for all shipments. He

¹⁸Licht, 82.

¹⁹J.D. Munyon, "Keeping Pace with Time: Some Reminiscences of a Veteran Employe [sic] of early days in the D.&R.G. Service," Denver and Rio Grande Western Magazine, August 1926, 4.

²⁰Denver and Rio Grande Western Magazine, March 1925, 16.

kept track of all way-bills and knew which cars had to be left or picked up at stations along the way. Before the train departed, he checked for any special orders. Furthermore, the conductors oversaw the work of the brakemen and flagmen. Before the train departed, the brakemen received their assignments of train position from the conductor and then prepared to depart by inspecting car doors and seals, checking on the connections of couplings between cars, and making sure journal boxes were properly lubricated and extra links and pins were stored in the caboose.²¹ If the crew had a signalman, he checked for an adequate supply of signaling equipment, such as torpedoes, flags and lanterns in the caboose. He also placed the proper signals at the rear of the caboose.

The Number 49, a second-class through freight train regularly departed from Grand Junction at 6 pm.²² When the time to leave came and the train crew was ready, the conductor signaled the engineer. The fireman stoked the fire, the engineer pulled back on the throttle, and the train slowly began its westward journey. The engineer was responsible for maintaining the speed of the train. Rule books firmly established speed limits for the trains at different sections of the track. Generally, the rule book prohibited freight trains from travelling faster than fifteen miles per hour and passenger trains from travelling more than thirty miles per hour.²³ To compensate for delays, engineers routinely exceeded limits to make up for lost time. On straightaways--like the track from Grand Junction to Crevasse--speeding presented few problems. On curves or hills,

²¹Clark, 14-15.

²²"Denver and Rio Grand Railway. Time Table No. 26."

²³Ibid., rule 48.

though, speeding could lead to derailment of a train or uncoupling of its cars.²⁴

When the run began, the three brakemen remained stationed at their posts. On freight trains, one stayed at the rear of the train and acted as a flagman.²⁵ The middle-brakeman, stationed one-quarter of the way back from the engine at a car with particularly good brakes, kept alert for any problems which might arise, such as overheated journal boxes which could cause wheels to freeze.²⁶ Finally, riding the engine, the head brakeman acted as front flagman, closed and opened switches, cut off and coupled cars to the tender, watched for the caboose on curves and hills, took water into the tender, shovelled coal down to the fireman, rang the bell at crossings, and oiled valves. According to veteran brakeman George Hamblen, the head brakeman even lit the engineer's cigar.²⁷ While the train cruised along on straightaways, the brakemen looked out over a sunset gracing the expansive lands to the south and the dramatic Book Cliffs ten miles to the north. Although, according to the rule book, brakemen were expected to remain stationed atop the freight cars, weather conditions often compelled them to retire to the comfort of the caboose. Aside from making standing atop cars unpleasant, weather conditions sometimes made the brakemen's job even more dangerous. During winter, the brakes could freeze open, and slippery ice might glaze the tops of the box cars. In the summer, powerful desert wind storms could make it difficult for brakemen to move safely from car to car.

²⁴Licht, 81.

²⁵Clark, 16-17.

²⁶*ibid.*, 27-28.

²⁷ Clark, 17; Herbert Hamblen, The General Manager's Story: Old-time Reminiscences of Railroading in the United States (New York: Macmillan, 1898; reprint, Upper Saddle River, NJ, 1970), 48.

The freight conductor remained in the caboose for most of the trip, keeping track of shipment manifests and calculating when to side-track the train to keep out of the way of passenger trains.²⁸ On long runs, the caboose functioned as the trainmen's home away from home. Herbert Hamblen described the interior of the caboose on one of his trains as having "six bunks,... a row of lockers... to sit on and keep supplies in, a stove and table, and a desk for the conductor." His crew even furnished the caboose with "lace curtains in front of the bunks, a strip of oil cloth on the floor" and a "canary in a cage."²⁹

Once the train left Grand Junction, it travelled 7.4 miles before passing the first station, Roan. After another 6.4 miles, the train arrived at the small town of Fruita shortly after 7 pm.³⁰ Fruita grew into a town quite early. By 1890, its population had reached 250 residents, including many ranchers who kept their cattle on the east Utah plateaus.³¹ The town also showed promise as orchard land. Despite Fruita's proximity to Grand Junction, settlers still found it difficult and expensive to obtain fresh milk and vegetables. Mrs. Emma Pabor's advertisement in the local paper reveals the relative values of land and milk at the time: "Fresh milk cow wanted. Will trade 50ft. residence lot in town of Fruita for a fresh cow with calf. No kicking beast or wild range animal wanted."³²

²⁸B.B. Adams Jr., "The Every-Day Life of Railroad Men," in The American Railway: Its Construction, Development, Management, and Appliances (New York: Charles Scribner's Sons, 1897), 398.

²⁹Hamblen, 39.

³⁰Although from the outset the town was named Fruita, the railroad station had several names including Fruita, Fruitvale, and Hereford. "Denver and Rio Grand Railway. Time Table No. 26."

³¹Merton N. Bergner, "The Development of Fruita and the Lower Valley of the Colorado River from 1884 to 1937," (M.A. thesis, University of Colorado, 1937), 20, 37; The 1890 census actually recorded a population of 456 for voting precinct number two, including all the rural territory west of Grand Junction.

³²Fruita Star, 27 November 1889, quoted in Bergner, 50.

After travelling another seven miles, the train pulled into Crevasse Station at 7:40 pm. Along the Alkali Division, freight trains stopped regularly to pick up and leave goods behind. To prepare the train for stopping, the engineer gave one blast signaling the need for brakes. All brakemen worked together to stop the train. On the top of each of their cars, they turned the brake wheel as tight as possible. A "dog"--or latch--held the wheel ratchet in place so that the brake remained applied, then the brakemen jumped to the top of the next car. The head brakeman worked back, and the middle and rear brakemen worked towards each other. Because braking was inexact, stopping precisely at a particular station or siding was difficult, especially in bad weather.³³

When the train ground to a halt, the train crew had limited time to perform all necessary duties as directed by the conductor. The rear brakemen kept the rear brake applied to prevent rolling. The conductor went to the station to leave waybills for cars dropped off and to pick up freight bills for any cars to be added to the train. He also checked to see if any special orders had been telegraphed to the train.

While the conductor attended to clerical duties, the brakemen dealt with the deliveries and pickups. They loaded and unloaded shipments, making sure that car doors were closed and that the freight was secure. In addition, brakemen kept their eyes open for tramps or hobos attempting to ride in between train cars without paying. Tramps were so common that the trainmen called them "tourists." Confronting tramps could be dangerous. The Grand Junction News reported at least one incident in which a tramp threw a rock at a brakeman "striking him on the arm and

³³Clark, 17; Kirkpatrick, 121-22.

disabling him to such an extent" that he could not work for several days.³⁴ Furthermore, tramps often carried weapons more dangerous than rocks. Because the area the trains traversed was so sparsely populated, problems with crime remained persistent. If a brakeman did encounter a dangerous "tourist," or if robbers held up the train, there were few law officers to apprehend the criminals. Although rule books directed brakemen and conductors to oust passengers who did not pay, oftentimes they overlooked the rule to protect themselves.

To assist the brakemen in loading livestock, the railroad company built a cattle chute to load animals onto freight trains at Crevasse Station. One early settler, J.P. Simonson, remembered that at the time, "there were thousands of cattle between Grand Junction and Green River."³⁵ Pioneer James Nicholls also recalled huge herds of cattle, totalling 40,000 head on Pinion Mesa on the south side of the valley.³⁶ The railroad, with its many stockyards and cattle chutes, enabled ranchers to make a living on the otherwise uncultivable desert. Variations in rainfall contributed to fluctuations in the quality of the range. Although early explorers characterized the area as "absolutely barren," ranchers enjoyed high quality range land in the 1880s. The Grand Junction News reported that in September of 1887, the rains "made the 'desert' between Grand River and Thompson's like a meadow with the growth of new grass."³⁷ Simonson also remembered that at that time, "the grass was just like a meadow, you could see it waving in the breeze."³⁸ Ranchers actually drove cattle from as

³⁴Grand Junction News, 16 June 1888.

³⁵John P. Simonson, "The Pioneer Days of Green River," unpublished manuscript, Collection B303, UHS-SL, 2.

³⁶Bergner, 37.

³⁷Grand Junction News, 24 September 1887.

³⁸Simonson, UHS-SL, 2.

far away as Idaho to stations along the Denver and Rio Grande for shipping.³⁹ Most of the cattle then headed to eastern markets.

Despite the tremendous livestock business which spread out from both sides of the rail line, cattle, sheep, and wool accounted for only a small proportion of the railroad companies' freight. Mining products, including coal, precious ores, coke and charcoal, by both volume and revenue actually represented the most important freight. By 1885, for example, the Denver and Rio Grande Western shipped 57 percent of all Utah coal eastward.⁴⁰ General merchandise also accounted for a substantial portion of company shipping revenues. Although Utahns expected to benefit from competition offered by a second railroad line, the Denver and Rio Grande system often discriminated against them, charging Utah shippers higher rates than Colorado shippers. The economic development which accompanied freight shipping cannot be underestimated. Resource development by the railroad opened up the entire eastern portion of Utah to habitation and contributed much needed cash to the local barter-oriented agrarian economy.⁴¹

From Crevasse Station, the train travelled 5.7 miles west to Shale Station and then proceeded another five miles and climbed over 300 feet before arriving in Excelsior at approximately 8:40 pm. As the train pulled into Excelsior Station, telegrapher Mrs. B. Moore likely greeted the

³⁹Grand Junction News, 2 October 1885; Grand Junction News, 29 May 1886. Furthermore, in June of 1885, the Denver and Rio Grande closed a contract in Salt Lake City for the shipment of 30,000 cattle--the largest stock shipment ever undertaken. Grand Junction News, 27 June 1885.

⁴⁰Nancy J. Taniguchi, "Perceptions and Realities: Progressive Reform and Utah Coal," (Ph.D. diss., University of Utah, 1985), 9.

⁴¹First Annual Report of the Railroad Commissioner of the State of Colorado for the year ending June 30, 1885 (Denver: State Printers, 1886). In 1885, Grand Junction shipped 32 tons of agricultural products, 1,510 tons of mine products, 64 tons of forest products, 120 tons of livestock, and 505 tons of merchandise. In return, the town received 784 tons of agricultural products, 660 tons of mine products, 66 tons of forest products, 268 tons of livestock and 700 tons of merchandise. Even the small station of Excelsior shipped 104 tons of livestock in 1885 and received 9 tons of merchandise in return.

conductor. Although men dominated railroad work, wives frequently secured employment along the line as well.⁴² Section bosses and station agents routinely brought their wives and families with them to stations along the railroad. The wives and daughters of railroad workers often supplemented family incomes by preparing and selling pies and other baked goods at the station.⁴³ Women also worked as telegraphers along the Denver and Rio Grande in the 1880s. In fact women comprised more than one-third of the entire Denver and Rio Grande telegrapher workforce in Colorado. Along the Alkali Division in 1887, Mrs. J. Stafford and then Mrs. Cooney worked as telegraphers in Fruitvale. Mrs. McCarthy operated the telegraph at Crevasse, and Mrs. B. Moore was telegrapher at Excelsior.⁴⁴ With minimal resources, women struggled to recreate homes and communities. In addition to contributing to the family income, they performed most housekeeping and even farming tasks. Like Mrs. Pabor in Fruita, Mrs. Moore kept a "little red cow" to supply fresh milk for cheese and butter. When she lost the cow in the spring of 1887, Mrs. Moore had to make do in other ways--perhaps by purchasing these products in Grand Junction.⁴⁵

When travelling along the desert stretch, the engineer and fireman had to make sure that there was enough coal and water to make it to the next stopover place. Trains stopped periodically to fill their boilers with water from tanks erected along the route. Most stations relied on water freighted in large wooden tubs mounted on flat cars from either Grand

⁴²Grand Junction News, 5 May 1883.

⁴³George, 79.

⁴⁴Denver and Rio Grande Rosters, 1886-91; Collection 513, Box 60, SHSC-D; "Personal Record," Collection 513, Box 8, SHSC-D, 9 1/2.

⁴⁵Grand Junction News, 2 April 1887.

Junction or, at the west end, from Helper, Utah.⁴⁶ Only Crevasse and Cisco stations enjoyed direct supplies of water, piped over six miles from the silty Grand River; Thompson Station used water piped from nearby springs. As the train travelled 6.5 miles west from Excelsior to Acheron Station, crews found their water situation even more desperate. At Acheron, the railroad sunk an artesian well over 900 feet deep. Even at that depth, the water quality was unfit for locomotive use.⁴⁷ Poor water quality presented great problems to trains heading across the desert. One fireman remembered the difficulty of the situation:

We used to leave Grand Junction with poor water as a starter, and before we had crossed the desert we had exhausted our entire supply of adjectives in attempting to describe it. It was something like this: poor, very poor, bad, more bad, worse, terrible, fierce.

Dead engines were common in almost all westbound trains, he remembered. "We certainly used to resort to all known schemes to stop the leaks and get our engines into town. We would feed her bran, and torn shreds of paper."⁴⁸

Almost another hour elapsed before the freight train travelled the ten miles between Acheron and Westwater stations. The train followed serpentine tracks down hill, crossed Westwater Wash, and then veered south as the brakemen scurried atop the cars to grind the train to a halt. Although informal railroad censuses listed the population of Westwater as zero through the 1880s, at Westwater, as along every other segment of track,

⁴⁶Sam A. Dougherty, Call the Big Hook (San Marino, CA: Golden West, 1984), 37-40.

⁴⁷Annual Report of the Board of Trustees to the Stockholders of the Denver and Rio Grande Railway Company for the Year 1883 (New York: William Mann & Son, 1884), Collection 513, Box 42, ff 3926, SHSC-D, 45.

⁴⁸Munyon, 4.

the company stationed a section crew charged with the maintenance and upkeep of the track.⁴⁹

Despite the low status of section maintenance workers, their jobs were essential for the safe and fast operation of the trains. The section gang performed the important job of walking track, which entailed hiking back and forth along a section of track each day--about a ten hour job. Track walkers usually carried some light tool to fix minor problems, such as loose bolts or spikes, but they mostly looked out for problems that would require the work of the entire crew, such as erosion of the rail bed.⁵⁰

Although many members of the railroad service regarded the section men as "blunt-headed" persons of "limited intelligence," the section boss had to know a great deal about the engineering of trackage. For example, the section bosses knew what elevation to give to a curve of a certain degree as well as how much steel expanded and contracted to allow for shortening of the rails in the winter and lengthening in the heat of summer.⁵¹ In addition to overseeing the physical aspects of the track, the section boss supervised his crew of eight to twelve workers.

Even more than other railroad workers, the nature of the section crew's work and their physical distance from settlements isolated them from other people.⁵² Usually, the wife of the section boss cooked for the

⁴⁹Official Local Time Tables, Denver and Rio Grande Railroad: Scenic Line of the World through Colorado, Utah, and New Mexico," November 1887, July 1887, DRGA-D.

⁵⁰"A Track-Walker's Day," *Railroad History Bulletin* 140 (Spring, 1979), 4, reprinted from Camp's *Notes On Track*, 1903. In many instances, track walking was a job performed by a particular individual; the status of the job ranked highest among the section crew. The Shuderson time book suggests that men took turns walking track. M.J. Shuderson, *Time Book of the Denver and Rio Grande Western Railway for Sec. #3 Westwater*, Roberts Family Papers, Museum of Western Colorado, Grand Junction (hereafter MWC-GJ).

⁵¹William John Pinkerton, *His Personal Record: Stories of Railroad Life* (Kansas City, MO: The Pinkerton Publishing Co., 1904), 215-17.

⁵²Licht, 232.

crew and served meals in her own house. The crew slept in a bunk house nearby. Mostly young single men who lived, worked, caroused, and drank together, section crews enjoyed the reputation for being particularly crude. Mrs. Adessa Kellogg, who operated a boarding house along the Denver and Rio Grande east of Grand Junction, remembered the rowdiness of the men. "Sometimes," she recalled, "section men from the railroad crews had to be threatened before they would behave." In several cases where the men acted rough during meals or in the boarding house, they later apologized to her.⁵³ Aside from raucous conduct at the dinner table, the remains of harmonicas, pipes, and bottles that still litter the railroad grade reveal other ways the men entertained themselves at the isolated stations.

The exceptions to the stereotypical rowdy section gangs were the small groups of Chinese and Italian section workers who imported their own cultural attitudes toward work and living. A rare payroll record kept by M.J. Shuderson indicates that both groups worked as laborers at Westwater Station in the late 1880s. The payroll suggests that in 1888 and in 1889 the men worked typical section jobs such as "fixing broken rail" and "walking track." Covering the period from September 1888 through August of 1891, the time book also reveals that workers either engaged in substantial repairs or were transferred to help with construction of the broad gauge. Jobs described for September of 1890 include "loading steel, loading and unloading ties," and "distributing ties."⁵⁴ The payroll further indicates that a Chinese gang also worked at Green River in 1890. Although no written evidence suggests that Chinese or Italians worked along other

⁵³ Mrs. Adessa Kellogg, CWA Interview by Francis Strock, Mesa County Colorado, Doc. 364/15, SHSC-D, 263-64.

⁵⁴ M.J. Shuderson, Time Book, MWC-GJ.

sections of track, archaeological evidence reveals that they worked all along the remote line. Archaeologists excavated masonry ovens, associated with contemporary Italian workers at Crescent station, twenty-four miles east of Green River.⁵⁵ Furthermore, the numerous Chinese artifacts dating from the railroad era found near stations along the line provide further evidence for the presence of Chinese workers, especially during the operation of the narrow gauge.⁵⁶

Many Americans found it difficult to spell and remember Chinese and Italian names. One frustrated paymaster instituted a numbering system to facilitate payment of wages. The paymaster assigned numbers and then gave numbered cards to each worker.⁵⁷ More commonly, Americans used nicknames. The Chinese gang at Westwater station had at least one "Fatty." While Anglo-Americans worked every day except Sunday, the Chinese had no compunctions about working Sundays. They worked approximately 27 days each month receiving \$32.00 for their monthly labors in 1889.

From Westwater, the train travelled 5.8 miles to Cottonwood Station, crossing along the way six washes subject to intense flash flooding during storms. If sturdy masonry culverts did not support the rail bed and tracks at

⁵⁵Mark C. Bond, Cultural Resource Inventory of the Proposed Utah Department of Transportation: Floy-Crescent Junction I-70 Weigh Station, Crescent Junction Utah-UDOT Project No. IR-70-4 [30]184. (Salt Lake City: Utah Department of Transportation, 1990), 11.

⁵⁶The presence of artifacts such as opium tins and pipes, coins and china does not in itself indicate the presence of Chinese. Caucasians, as well as Chinese, commonly used opium at the time. Artifacts could have been novelties among Caucasian workers. Furthermore, census reports indicate only three Chinese inhabitants in Mesa county at the time. However, census reports are notoriously unreliable in terms of documenting ethnic minorities—especially in remote places. Railroad workers of all sorts were considered transients and not counted in many cases. But quotidian items such as buttons suggest more readily that Chinese workers wearing their own clothes with Chinese buttons resided near the stations. Furthermore, local rail aficionados claim that Chinese artifacts most often are clustered in enclaves separate from other artifact collections. This further indicates that Chinese workers lived at the stations—but separate from others.

⁵⁷J.R. Chapman to J.W. Connor, 21 May 1885, Collection 513, Box 26, SHSC-D.

these crossings, they could easily be washed away. While shipping fluctuations occurred to some degree on most railroads, the erosive nature of the desert terrain traversed by the Denver and Rio Grande Western track regularly resulted in flash floods which created natural interruptions in shipping. The Territorial Enquirer of Provo, for example, reported in August of 1883 that the damage done to the Denver and Rio Grande railway "from cloudbursts" was greater in magnitude than expected. Three hundred men with plows, scrapers, and teams worked for over a week making necessary repairs.⁵⁸ Because the extensive washouts occurred during a busy time, the company lost a great deal of income from interrupted train traffic.⁵⁹ Although extensive track damage created a demand for laborers, section crews performed most routine repairs. Bridge or culvert wash-outs at places like Cottonwood Wash could interrupt rail service for weeks at a time, leaving railroad workers unemployed and workers stationed along the remote line without supplies.⁶⁰ The railroad company directly transferred losses incurred from lost business to the men out of work. During difficult economic times, railroad companies routinely failed to pay their workers for months at a time.⁶¹

In addition to frequent flash floods, seasonal and market changes also contributed to variations in rail workers' earnings. Although railroad companies could guarantee workers full employment during the busiest periods, at other times throughout the year, railroad work was unavailable. During harvest time, for example, a heavy demand for labor and

⁵⁸Territorial Enquirer (Provo, UT); reprinted in the Grand Junction News, 11 August 1883.

⁵⁹ Annual Report of the Board of Trustees to the Stockholders of the Denver and Rio Grande Railway Company for the year 1883, Collection 513, Box 42, ff 3926, SHSC-D, 43.

⁶⁰Grand Junction News, 31 May 1884.

⁶¹Licht, 135-6.

equipment existed. As the fruit industry in the Grand River Valley picked up, workers loaded over one hundred cars daily, compelling the Denver and Rio Grande to lease extra locomotives and refrigerator cars.⁶² In the winter, however, the demand for labor declined.⁶³ In the spring, the railroad company again hired laborers to repair winter damaged tracks. In the summer, yet another hiatus occurred. Changing market conditions could also affect seasonal variations in shipping demand. For example, in the winter of 1884, strikes in coal mines of eastern Colorado created increased demand for Utah-produced coal. The Denver and Rio Grande Western shipped one hundred cars of coal eastward each day.⁶⁴ Although railroaders earned good wages relative to other contemporary workers, many natural, seasonal, and economic variations contributed to tremendous fluctuations in earnings.⁶⁵

One corporate disagreement manifested itself in a manner similar to common natural disasters on the Utah extension. As the result of a dispute over conditions of leasing the Denver and Rio Grande Western, Frederick Lovejoy, president of Colorado's Denver and Rio Grande Railroad, furiously ordered the track cut at the Colorado-Utah state line on 3 July 1884. At the same time, the Robidoux Bridge east of Grand Junction washed out, isolating the town from all rail contact. The lines remained severed for weeks--essentially simulating the destruction section men usually worked hard to prevent. Lovejoy's whim had a tremendous effect on the workers

⁶²Steven F. Mehls, *The Valley of Opportunity: A History of West Central Colorado* (Denver: Bureau of Land Management, 1982), 141-42; Mary Rait, "Development of Grand Junction and the Colorado River Valley to Pallsade from 1881 to 1931," (M. A. thesis, University of Colorado, 1931), 45-46.

⁶³*Grand Junction News*, 24 December 1887.

⁶⁴*Grand Junction News*, 13 December 1884; *Grand Junction News*, 6 December 1884.

⁶⁵Licht, 164-65.

and the people who lived along the line. The company failed to pay the wages and salaries of many officers, agents, and employees of the Utah division for two months.⁶⁶ Not receiving their usual shipments of necessary foodstuffs, isolated Grand Junction residents grew irate. They even exhausted basic supplies such as flour.⁶⁷ Prices doubled. Food shortages compelled at least one resident to hunt out of season. Local entrepreneurs eventually seized upon the opportunity to carry goods by horse from the rail break to the stranded town.⁶⁸ Workers and townspeople suffered as the result of internal corporate struggles over which they had no control. The temporary cut-off reveals how much the community depended on the railroad.⁶⁹

From Cottonwood Station, the Number 49 second-class freight train travelled another 10.8 miles to Cisco Station arriving at nearly midnight in the sleeping town. Cisco became a relatively large settlement. In addition to the community of railroad workers, the presence of agate beds supported a small group of miners who cut and prepared the agates for shipping to markets.⁷⁰ While brakemen loaded and unloaded freight for Cisco residents, the train crew filled the boiler with water pumped by a steam engine through a pipe from the Grand River, nearly seven miles away.

⁶⁶Grand Junction News, 12 July 1884; Grand Junction News, 19 July 1884.

⁶⁷Grand Junction News, 5 July 1884.

⁶⁸Salt Lake Tribune, 8 July 1884; Salt Lake Tribune, 6 July, 1884.

⁶⁹Although most people were inconvenienced by interruption of rail service, some businesses in Grand Junction earned additional monies through delays. The local newspaper reported in September of 1886 that a washout on the Western line was "a picnic" for local hotels and restaurants. During another washout, the paper reported that "delayed passengers dropped about \$600 in Grand Junction." Grand Junction News, 4 September 1886; Grand Junction News, 24 April 1886.

⁷⁰Charles H. Haskell, History and Description of Mesa County, Colorado (Grand Junction: Mesa County Democrat, 1886), 92-93.

Today, surface remains--a women's shoe and a tiny porcelain doll leg--betray the presence of families at Cisco.⁷¹ Families living at railroad stations depended on freight train service to bring them necessary supplies. Rare freight bills from November of 1887 indicate that the railroad carried large quantities of food to the rail stations from the West. Mrs. J. Allread of Cisco received 100 pounds of apples shipped from Springville, Utah. A Westwater shipment contained 400 pounds of potatoes, 100 pounds of onions and 25 pounds of beef--all from Price, Utah. In addition, some shipments included manufactured goods from Zion's Cooperative Mercantile Incorporated in Salt Lake City.⁷²

Local trainmen often developed relationships with families living along the remote line. They supplied news and often carried on an informal business of bringing groceries from large towns to families living along the way in exchange for a cup of coffee or perhaps for a meal.⁷³ One locomotive engineer on the southern extension of the railroad even provided women along his route with steaming hot laundry water from his engine boilers if they left their wash tubs along the tracks.⁷⁴

From Cisco, the train climbed 153 feet in 8.6 miles to Whitehouse Station and then 311 feet in 7.9 miles to Sagers Station. Little has been written about these two stations. Recent archaeological excavations at Whitehouse, however, reveal the presence of a small wooden structure--likely a depot. In addition, the presence of two privies and a dump spot on

⁷¹Myron Lance lived with his family at Cisco. Grand Memories (Grand County, UT: Daughters of the Utah Pioneers, 1977), 119.

⁷²Denver and Rio Grande Western Freight Waybills, November 1887, Private Collections of L.D. Ellicott and of Ken Jeyes, Grand Junction.

⁷³George, 182-83; Roy W. Albee, "Memories--Three Feet Wide," New Mexico Magazine 53 (June 1975), 17.

⁷⁴Albee, 17.

top of the ridge behind the station suggests that a fair number of people lived on site. The trash scatter includes solder-dot tin cans, bone, wood, ammunition, metal, medicine bottles, ceramic fragments and alcoholic beverage bottles. Furthermore, the surface concentration of Chinese artifacts, including a soy container, fragments of rice bowls, as well as pieces of opium tins and pipes, suggest the probable presence of Chinese workers at Whitehouse station.⁷⁵

Veering closer to the Book Cliffs, the train travelled 8.3 miles and climbed 376 feet from Sagers Station to Thompson's Springs. If weak couplings held the cars together or if hot journal boxes caused wheels to freeze, a train could break in two as it hit a low point or as it crested a hill, such as the one near Thompson's.⁷⁶ Because the detached rear cars could then potentially roll away backwards or ram into the rest of the train, the rear brakemen worked to prevent such collisions by quickly stopping the detached section. Once the brakemen stopped the rear end, the engineer reversed the front part of the train, and the brakemen recoupled the cars with extra supplies. Any time a car stopped along the mainline, flagmen ran out in front of and behind the train to warn oncoming traffic. If possible, brakemen recoupled the cars at a siding. If entire cars of freight were to be dropped off at Thompson's station, the brakemen also uncoupled the cars and then recoupled the rest of the train.

Coupling presented one of the gravest dangers to brakemen, largely because each train and car could be equipped with different types of coupling devices. In addition, the links of the couplers often collapsed.

⁷⁵John E. Bradley, et al., An Archaeological Survey and Predictive Model of Selected Areas of Utah's Cisco Desert, Cultural Resource Series No. 18 (Salt Lake City: Bureau of Land Management, Utah State Office, 1986), 52.

⁷⁶Clark, 27-28.

Even the railroad's rule book warned that "the coupling apparatus of cars and engines" could not "be uniform in style, size, and strength," and were "liable to be broken and from various causes in such condition as to make it dangerous to expose the hands arms or person of those engaged in coupling them."⁷⁷ Brakemen often worked on different boxcars making it difficult for them to know the complex intricacies of fixtures. Deadwoods protected brakemen from getting crushed if coupling devices collapsed by acting as bumpers and by keeping space between the cars. Oftentimes, though, misaligned deadwoods actually crushed brakemen.

While crushing fatalities occurred regularly on railroads in the 1880s, the most common injuries resulted as brakemen quickly stepped in between cars, lifted up the link an inch or two to slip it into the opening of the drawbar on the other car, before dropping the pin in at exactly the right moment. The engineer helped with this process by separating cars and giving cars slight momentum for recoupling. Because everything happened so fast, fingers and hands often got crushed or lopped off. Worse still, brakeman sometimes fell beneath the wheels of the rolling train.⁷⁸

The coupler stick, a safety device designed to prevent coupling accidents, enabled brakemen to guide the link of the moving train into the drawhead of the stationary train without stepping in between the cars and without using their hands. Although rule books prescribed using the sticks, brakemen routinely disregarded the rule because they found it faster to couple by hand. Furthermore, carrying a coupling stick made scrambling about on the tops of the train cars more difficult. Finally, peer pressure among workers also compelled the brakemen to risk not using sticks.

⁷⁷"Denver and Rio Grand Railway. Time Table No. 26," rule 10.

⁷⁸Clark, 21; Kirkpatrick, 115.

Amputated fingers and limbs became badges of experience respected by all in the railroad service.⁷⁹ The tone of Denver and Rio Grande surgeon, Dr. W.E. Debeque's diary entry for 11 April 1883 reveals the commonplace nature of amputations: "Weather fine. Amputated finger of RR man--used chloroform--prefaced by Ether."⁸⁰

While unsafe equipment and working practices contributed to many railroad mishaps, unsafe working conditions also resulted in numerous accidents. Railroad workers, laboring for more than ten hours each day, routinely experienced fatigue.⁸¹ In the state of Colorado, the Denver and Rio Grande reported 65 people injured in the year ending 30 June 1885. Of those, 32 were employees, and 27 were passengers. While derailments and collisions caused the greatest number of passenger injuries, most employees were injured performing their regular jobs. Tramps riding the rails and people walking on the tracks accounted for the remaining six injured. For the same time period, the railroad reported 13 fatalities--only one a passenger.⁸² An Interstate Commerce Commission report later in the decade found that railroad work killed one out of every 357 and injured one out of every 35 railway workers nationally. According to this report, coupling caused 16 percent of all fatalities and 34 percent of all injuries experienced by workers. Falling from train engines accounted for 25 percent of worker fatalities and 10 percent of worker injuries. Finally, collisions and derailments caused 15 percent of all worker fatalities and seven percent of injuries. Although trainmen comprised only 20 percent of the work

⁷⁹Clark, 25; Kirkpatrick, 115-16.

⁸⁰Wallace A.E. Debeque, Diary, 11 April 1883, Microfilm Collection, MWC-GJ.

⁸¹Licht, 174-80.

⁸²First Annual Report of the Railroad Commissioner of the State of Colorado for the year ending June 30, 1885 (Denver: Collier & Cleveland Lith. Co., State Printers, 1886), Collection 804, Box 1, ff 1, SHSC-D.

force, they accounted for 60 percent of all railroad related deaths and 50 percent of all injuries.⁸³ Injuries commonly laid men up for months at a time, removing them from regular service.

When accidents occurred at a remote place like Thompson's Springs, the telegrapher summoned railroad doctors stationed in Grand Junction, nearly 90 miles away. In addition to treating railroad workers, the railroad doctors served as community doctors along the line. Depending on the nature of the accident, the doctor either took the train out to care for the injury or requested that the patient come in to town. Denver and Rio Grande doctor Heman Bull recalled riding the train to Thompson's Springs to treat a man with gangrene. A cowboy with an extra horse met him at the station, and they rode to a cattle camp in the nearby La Sal mountains. Dr. Bull sterilized his instruments in an old wash boiler and amputated the afflicted leg while the cowboy administered chloroform.⁸⁴ When Dr. Bull cared for nearby section crews on the Utah extension, he often rode out on his horse, carrying their wages in his saddlebags. He remembered carrying the large amounts of cash as gutsy, given the lawless reputation of the desert area west of Grand Junction.⁸⁵

From Thompson's Springs, the freight train travelled six miles to Crescent Station, 7.9 miles to Little Grande Station, and 7.6 miles to Solitude Station, stopping at each to drop off and pick up goods. The train then travelled another 8.4 miles before finally arriving at 4:35 am in Green River, the end of the line for local freight crews. Crews operating through

⁸³Licht, 190-91.

⁸⁴Dr. Heman Bull Jr., Interview by author, 5 September 1991, Grand Junction. In addition, Dr. Debeque recorded in his diary that he treated a woman brought in for a gunshot wound all the way from Green River. Although she had been shot in the abdomen at 10 pm on 23 March, the doctor did not see her until 2 pm on 25 March.

⁸⁵Ibid.

freight trains and passenger trains continued on toward Salt Lake City after a brief break to fill the engine with water and coal and to eat a meal.

Passenger trains, operating according to a strict schedules, stopped only at a few stations between Grand Junction and Green River, for water, coal, and telegraph messages. Furthermore, because passenger trains always benefitted from priority rights-of-way, they experienced far fewer delays. The Number 7, Pacific Express passenger train, for example, left Grand Junction at 4:45 pm and arrived at Green River by 9:00 pm, less than five hours later. Passenger train crews confronted operational problems similar to those freight crews encountered, but they had the additional difficulty of keeping passengers satisfied. Locomotive engineers might even try to make the ride a little smoother for the passengers by driving more slowly in places where the track was uneven. Even though the duties of the passenger train crew differed only slightly from those of their freight brothers, passenger trainmen enjoyed greater prestige than the freight men.

Between June and December of 1883, the Denver and Rio Grande Western carried 41, 928 paying passengers.⁸⁶ Passenger conductors oversaw the boarding of all those passengers and then collected and recorded fares. Responsible for the general safety and comfort of the numerous travellers, conductors also made sure that the coaches were clean and attractive, most often by delegating work to the brakemen.⁸⁷ Air brakes, which came into use during the decade of the 1880s, were first used on passenger trains, precluding the need for brakemen to perch precariously atop the moving cars. As such, passenger brakemen essentially became gentlemen porters--

⁸⁶ First Annual Report of the Board of Directors of the Denver and Rio Grande Western Railway Co. Covering Operations to Dec. 31st, 1883, DRGA-D, 11.

⁸⁷Licht, 81.

assisting with baggage handling, car cleaning, making sure passengers had drinking water, announcing the stops, and regulating the light and heat in the coaches. Conductors stationed them in between every two cars. In the winter, brakemen tended to the small stoves used to heat cars. Regulation of temperature proved more difficult in the summer when outside temperatures soared above 100 degrees. While open windows provided a comfortable breeze, cinders, grime, and smoke from the engine also found their way into the cars.⁸⁸

Depending on which guidebook to the attractions of the Denver and Rio Grande "scenic line" a passenger owned, they could choose to fall asleep as they crossed the desert, or stay awake to see the distant mountains, canyons, and the advertised Indians. The desert stretch of the Denver and Rio Grande presented promoters of the "scenic line" with an enigma. While the mountainous terrain of the Rockies--which most of the track traversed--conformed to the romantic ideals of beauty that appealed to the general public, the desert south of the Book Cliffs exhibited few contemporary aesthetic qualities. Promotional materials available to rail passengers treated the desert stretch in several ways. Even though Utes rarely used the region, some early brochures seized upon a national fascination with Native Americans and characterized the land as "mysterious " and "Indian-haunted."⁸⁹ Another brochure employed the same image and depicted a generic Indian in full headdress and bow and arrow regalia overlooking a river, presumably the Green. Several pamphlets omitted mention of the area entirely, skipping from the

⁸⁸Clark, 31-32.

⁸⁹Harper's Weekly, 4 February 1888, quoted in Lucius Beebe and Charles Glegg, Rio Grande: Mainline of the Rockies (Berkeley: Howell-North, 1962), 199.

splendors of the Black Canyon of the Gunnison River to the notable "Castle Gate" feature at the mouth of the Price Canyon northwest of Green River.

Still other writers attempted to make the peculiar aspects of the Alkali Division's landscape intriguing to passengers. For example, the Official Railway Guide to Colorado for 1883 described how,

after Grand Junction, the railroad enters upon a veritable desert. Low treeless, dry, and neglected wastes extend before one for nearly a hundred and fifty miles. The traveler is on an inland sea, where the winds have formed billows of sand, and the earth is caked by the heat of summer. And yet the ride is not devoid of interest. There is a constant fascination in studying the unfamiliar scenes, and later the Sierra La Salle mountains rise before one in all their beauty of outline.

The guide further described "rude hieroglyphics" drawn by Indians on the side of a small canyon near Thompson's Springs. Another guide book, Rocky Mountain Scenery, offered contradictory descriptions of the landscape. In one place, the guide characterized the area as "the most uninteresting section of the route." Another identical paragraph in the same book substituted that description with the following words: "especially interesting for its wild and peculiar characteristics."⁹⁰ The railroad also solved the dilemma of the unusual landscape by scheduling passenger trains to run through the area in the evening or at night.

During the days of the narrow gauge, the Denver and Rio Grande and the Denver and Rio Grande Western operated Pullman Palace cars.

⁹⁰Official Railway Guide to Colorado: the East and West, Vol. 1 No. 2 (Denver: Lyford & Gleim, 1883), MWC-GJ; Tourist's Handbook: Colorado, Utah and New Mexico (Denver and Rio Grande Railroad, 1895), UHS-SL; Donan Patrick, Utah: A Peep into a Mountain Walled Treasury of the Gods (New York: Cassins C. Smith, 1891; reprint, George B. Dodge, 1895; reprint, S.K. Hooper, Denver and Rio Grande Western, 1903), UHS-SL; George Crofutt, Crofutt's Grip-Sack Guide of Colorado (Omaha: Overland Publishing Company, 1885; reprint, Boulder, CO: Johnson Publishing Co., 1981); Valleys of the Great Salt Lake Describing the Garden of Utah and the Two Great Cities of Salt Lake City and Ogden, Denver and Rio Grande and Denver and Rio Grande Western Railway (Chicago: R.R. Donnelley & Son Co., 1890), UHS-SL; Denver and Rio Grande Railroad Company, Rocky Mountain Scenery (New York: American Banknote Press, n.d.), UHS-SL.

Passengers enjoyed the luxurious and "highly artistic" interiors of the palace cars and the services offered by Pullman porters.⁹¹ The Pullman company hired almost exclusively African-American men to work as porters. The black porter, commonly known as "George," became a well known figure of American train service. Many black men took jobs as Pullman porters to gain opportunities to travel and to earn regular wages in the post-Civil War period. The Pullman porters graciously greeted passengers and collected fares. In addition, they maintained the carpets, curtains, and bedding "in good and cleanly condition," and generally provided for the comfort of all passengers.⁹² Although black men worked in the rail service on Pullman cars, there was little interaction between black and white workers. Black men rarely worked in other capacities on trains in the West until much later. Furthermore, black workers experienced inhospitable conditions in communities such as Grand Junction, where they were not even permitted to remain within the town limits after dark.⁹³

Few Pullman dining cars operated on the narrow gauge line, so trains stopped in Green River to allow passengers to eat at the railroad hotel and eating establishment, Palmer House--named after Denver and Rio

⁹¹Salt Lake Daily Tribune, 31 October 1883; Salt Lake Daily Tribune, 21 December 1883; Salt Lake Daily Tribune, 16 January 1884.

⁹²Denver and Rio Grande Railroad Co., Agreement with Pullman's Palace Car Co. for Furnishing, Maintenance, and Operation of Sleeping Cars, 1879 and 1890, Collection 513, SHSC-D; Cy Warman, "A Ghost Train Illusion," chap. in The Express Messenger and Other Tales of the Rail (New York: Charles Scribner's Sons, 1897), 126.

⁹³Mrs. Josephine Dickey, Interview by author, 6 September 1991, Grand Junction; By the first decade of the twentieth century, Mrs. Dickey reported that black Americans worked at cleaning cars in Grand Junction. Scholarly literature indicates that the experience of African-Americans working on railroads in the South was quite different. Howard W. Risher, Jr., The Negro in the Railroad Industry, The Racial Policies of American Industry, report no. 16 (Philadelphia: Industrial Research Unit, Department of Industry, Wharton School of Finance and Commerce, University of Pennsylvania, 1971); Bernard Mergen, "The Pullman Porter: from 'George' to Brotherhood," South Atlantic Quarterly 73 (1974): 224-35.

Grande magnate General W. Palmer. Workers completed building the hotel south of the tracks in 1885, but shortly thereafter it burned down. Rebuilt again the following year, the three-story Palmer House boasted an elaborate Victorian style. On the second and third floors, visitors found comfortable sleeping rooms and parlors. On the first floor, frescoes adorned the ceiling of the main dining room, which contained nine large tables, seating over one-hundred visitors. In addition to accommodating railroad visitors, the dining hall was used for local dances and festivities. Most notably, 116 electric candle lamps illuminated the hotel. The electric light machinery also lit up the railroad yard. Palmer House enjoyed a reputation for elegance, as did all Denver and Rio Grande facilities. Even in the middle of the desert, lushly landscaped grounds skirted the hotel. Railroad tanks supplied water to a sprinkler system for irrigating the lawn and trees. Two bubbling fountains graced both sides of the walk leading to the hotel's main entrance. Wide sashes of whitewash decorated the trunks of the well-pruned trees giving the hotel an urbane and well-manicured air.⁹⁴

When the train arrived at the division point town of Green River, the conductor signed the register, turned over freight weigh bills or fare and ticket accounts to the yard master or to the next conductor. He made out reports for broken equipment, injuries, any accidents or track problems, and filed routine operating records before his job was complete.⁹⁵

The station agent oversaw all transactions that occurred at his depot. Station agent C.J. Millis, unlike most agents, stayed at his job in Green

⁹⁴Grand Junction News, 11 December 1986.

⁹⁵Clark, 20, 28, 33; "Denver and Rio Grand Railway. Time Table No. 26," rule 52.

River for over six years.⁹⁶ Station agents sold tickets, maintained the depot, kept books, and at smaller stations, acted as switchmen, baggage checkers, and telegraph operators too.⁹⁷ In Green River, Millis worked as the express and freight agent, so he handled way bills as well as the counting and closing of freight packages with small molten lead seals. He also prepared cattle cars for shipping. Oftentimes, when the train pulled into Green River station, all duties needed performing at once. Telegraph messages came clicking over the line; passengers demanded tickets, and cattlemen demanded receipts for their freight, making Millis' job very difficult.⁹⁸

After the train departed, he could return to his own schedule, performing necessary tasks at his own pace. At his station, Millis was essentially his own boss. Isolated from the supervision of company management, Millis, like most other employees working on Alkali Division trains or at the remote stations along the line, enjoyed considerable autonomy.

⁹⁶Denver and Rio Grande Western Railway Rosters, Western Americana Collection, Denver Public Library (hereafter WAC-D); Collection 513, SHSC-D; Private collection of L.D. Ellicott, Grand Junction.

⁹⁷ "Denver and Rio Grand Railway. Time Table No. 26," rule 116.

⁹⁸Adams, 415.

CHAPTER IV
RESPONSES TO LABOR ORGANIZATION
ON DIFFERENT ENDS OF THE TRACK

From the very nature of their employment, railwaymen and their families are usually compelled to live isolated from the general community, near the roundhouses, shops and yards where they are employed.

--Herbert Hamblen¹

'Tis labor that sustains the nation,
And 'tis just and fair
That all should help whate'er their station
To produce their share.

--from "Storm the Fort, Ye Knights of
Labor," sung by strikers against the Denver
and Rio Grande²

Strikes and boycotts have no place in America.

--from editorial in the Grand Junction News³

The experience of yard workers at the division point towns of Grand Junction, Colorado and Green River, Utah differed markedly from that of workers in the running trades and of section workers living along the line. Unlike the workers in the running trades, yard workers constantly traveled under the eyes of their foremen and the yard master who had direct authority over pace, the distribution of work, and the length of the work day.⁴ The divisions' master mechanics oversaw recruitment, assignment,

¹Herbert Hamblen, The General Manager's Story: Old-Time Reminiscences of Railroading in the United States (New York: Macmillan, 1898; reprint, Upper Saddle River, NJ, 1970), 220-221.

²Denver Tribune-Republican, 11 May 1885.

³Grand Junction News, 10 April 1886.

⁴*Ibid.*, 110.

and dismissal of all employees.⁵ More proximate to central management, workers in Grand Junction experienced less autonomy than those working in remote Green River. In addition to differing degrees of worker independence, the demographic, economic, social and ideological circumstances which characterized each town informed different--though not simply dichotomous--community responses to labor organization.⁶

Centrally located, division point towns generally housed car and track repair shops for the one-hundred miles of track stretching out in each direction.⁷ These facilities employed relatively large work forces. The Mesa County manuscript census reveals that the Denver and Rio Grande Railroad Company directly employed over 50 men in its Grand Junction roundhouse, yards, and shops in 1885--a sizable proportion of the small town's population. Most yard workers were young single men. Over 50 percent were under age 30, and 63 percent were single. Of all departments, the railroad track maintenance and yard service departments generally employed the highest percentage of foreign-born workers.⁸ Nearly 60 percent of the Grand Junction yard workers were foreign born. Eleven percent were Canadian; 19 percent were Irish; and 26 percent represented a variety of northern European ethnic heritages. Fifty-nine percent of these men worked as unskilled laborers. While many young Irishmen and other Europeans filled these jobs, American-born workers generally found jobs

⁵Ibid., 231.

⁶Sheelwant Pawar wrote that factors of economy, political habits, traditions of people, opportunities for social mobility, values, and attitudes fostered by culture determine the development of labor movements. Sheelwant Pawar, "The Structure of Labor Unions in Utah: An Historical Perspective, 1890-1920," Utah Historical Quarterly 35 (Summer 1967), 238.

⁷Shelton Stromquist, A Generation of Boomers: The Pattern of Railroad Labor Conflict in Nineteenth Century America (Urbana: University of Illinois Press, 1987), 104.

⁸Stromquist, 189.

requiring more skill.⁹ As division headquarters, towns benefitted directly from railroad company expenditures and from providing services for all aspects of railroad operations--including the accommodation of travellers and of workers.

Grand Junction yard workers routinely lived in small wooden frame houses at the edge of the rail yard near the Grand River, separated from the rest of the community by the tracks.¹⁰ Their physical separation from the community metaphorically emphasized workers' dependence on the company. Workers' lives entwined intimately with the operation of the railroad. The young men walked through the yard to take meals together in boarding houses.¹¹ They filled buckets with water for personal use from the train yard tanks.¹² They customarily rode trains from their houses near the bridge through the yard to the depot.¹³ Many purchased goods through the company and relied on the railroad for their incomes as well as for their social community. Despite the ethnic diversity of the workers, close living circumstances fostered a certain camaraderie among the single men. When local agent S.L.G. Atkinson married, for example, the "railroad boys" pitched in to give him the wedding gift of a parlor set. On New Year's Day

⁹Manuscript Census, Mesa County, Colorado, 1885," microfilm, Mesa County Library, Grand Junction.

¹⁰Grand Junction News, 1 December 1883; William H. Jackson, Grand Junction, CO photo no. 1446, SHSC-D; N.J. Chandler, "Measurements of Side Tracks form Grand Junc to Ogen, measured about January 1st 1884," notebook, DRGA-D.

¹¹John McGlaughlin, John T. Drummy, Henry Chandler, and Edward Stein, "Answers to Interrogation," in 1746 The U.S. vs Edward Steine et al., Records of the District Courts of the United States, District of Colorado Circuit Court, Civil Case Files, 1884, Record Group 21, Box 213, National Archives Center, Denver (hereafter NAC-D).

¹²John Cotterell, "Answers to Interrogation," in 1746 The U.S. vs Edward Steine et al., Records of the District Courts of the United States, District of Colorado Circuit Court, Civil Case Files, 1884, Record Group 21, Box 213, NAC-D.

¹³John T. Drummy, John McGlaughlin, and Morris Haggerty, "Answers to Interrogation," in 1746 The U.S. vs Edward Steine et al., NAC-D.

in 1884, railroaders also gave young telegrapher, Frank Grant, a new suit.¹⁴ One group of Grand Junction railroaders spent several days bear hunting together up Douglas Creek, northwest of town.¹⁵ The camaraderie extended only to Americans and northern European immigrants, apparently excluding Italians and Chinese. Furthermore, differences in status precluded cohesion among workers with dissimilar job status. Transient unskilled laborers, for example, were unlikely to form relationships with resident locomotive engineers.

Workers with families often lived in the same area between the tracks and the river. Many supplied their families' sole monetary income. Single blacksmith John Cotterell provided for "the sole support of a widowed mother 74 yrs of age entirely dependent" on his "exertions and labors."¹⁶ Some men fulfilled other family roles such as picking up groceries at the station. Night watchman Morris Haggerty changed jobs at one point to spend more time with his family.¹⁷

In addition to the yardmen who lived near the Grand Junction train yards, 27 Denver and Rio Grande engineers, firemen, brakemen, and conductors resided in the same area. With the exception of the locomotive engineers, most were single young men as well. More American-born than foreign-born men, however, worked in these prestigious running trades.¹⁸

Yardworkers represented a variety of craftsmen, well-versed in metals and wood, and capable of all sorts of repairs. Generally, workers advanced from the position of apprentice to journeyman, but as the

¹⁴"Manuscript Census, Mesa County Colorado, 1885"; *Grand Junction News*, 27 February 1886; *Grand Junction News*, 5 January 1884.

¹⁵*Grand Junction News*, 4 September 1889.

¹⁶John Cotterell, "Answers to Interrogation," NAC-D.

¹⁷Morris Haggerty, "Answers to Interrogation," NAC-D.

¹⁸"Manuscript Census, Mesa County Colorado, 1885."

number of apprentices and unskilled laborers in relation to skilled machinists increased, promotion was less likely. More skilled yard workers continued to earn low wages.¹⁹

Yard crews took charge of each train as it entered the yard and then prepared the trains for departure. While shop mechanics maintained the locomotive engines, engine wipers cleaned grime from the engines, shovelled ashes from the tender, and washed out boilers and tanks. The wipers also helped with all heavy tasks such as lugging, lifting heavy parts, and operating the roundhouse turntables to help assemble the freight cars properly.²⁰ Consisting of a fireman, a switching engineer, a foreman and two helpers, the yard crew also had primary charge of switching and assembling trains. When throwing switches in the yard, as on the mainline, the workers had to be alert for cars moving unexpectedly. The continual coupling and uncoupling of cars presented grave dangers, especially at night, and resulted in numerous injuries--injuries so common that freight yards were commonly known as "slaughteryards."²¹ Yardmen, in fact, accounted for 12 percent of railroad-related deaths and 11 percent of rail-related injuries. ²²

Denver and Rio Grande doctors routinely treated common yard injuries as they treated injuries along the line, but the services of railroad doctors were not entirely free to workers. All employees contributed 50 cents each month, deducted from their paychecks, to the company hospital fund. When employees worked less than half of a month, they contributed

¹⁹Stromquist, 112.

²⁰Hamblen, 79-80.

²¹Charles Clark, "The Railroad Safety Movement in the United States," (Ph.D. diss., University of Illinois, 1966), 33-3.

²²Walter Licht, Working for the Railroad: The Organization of Work in the Nineteenth Century (Princeton: Princeton University Press, 1983), 190-91.

25 cents--regardless of their earnings. The Denver and Rio Grande and the Denver and Rio Grande Western set up their hospital funds by 1883. The funds provided for medical care and hospitalization for injuries sustained in the line of duty. In addition to treating emergencies, railroad doctors also provided regular health care to workers, including small pox vaccinations.²³ The railroad doctors treated a wide variety of ills, from poison oak, chapped hands, hemorrhoids, constipation, and carbuncles to cholera and pneumonia. In 1887, Denver and Rio Grande Western doctors treated 732 cases in all. Denver and Rio Grande doctors treated 7,685 employees for disease and 1,039 employees for injury in Colorado in 1888.²⁴ Hospital funds restricted benefits to injuries incurred in the line of duty. For example, venereal diseases and other problems resulting from "intemperance" rendered workers ineligible. Furthermore, chronic cases could be dropped so as not to unjustly burden other employees supporting the fund.²⁵ Although hospital funds and relief programs emerged as the first railroad employee advocacy programs, they limited workers' choices in how to spend individual earnings as well as their choices in medical care. In small, isolated communities like Grand Junction and Green River, however, the company doctors represented the only medical care option for miles.

In addition to hospital funds, independent railroad worker advocacy groups developed through the 1880s. By 1887, the First Biennial Report of the Colorado Bureau of Labor Statistics recorded 11,395 Colorado

²³Grand Junction News, 26 January 1889.

²⁴Denver and Rio Grande Railroad Co. Employees' Relief Association: Chief Surgeon's Report for 1889, Collection 513, SHSC-D, 14.

²⁵Rules and Regulations Governing the Collection and Distribution of the Invalid Fund of the Denver and Rio Grande R'y. Co. (Denver: Republican Publishing Co., 1883), Collection 513, Box 5, ff 1134, SHSC-D.

inhabitants enrolled in labor organizations--not including 600 coal miners. These figures represented "more workmen in labor organizations, in proportion to its population, than any other state in the Union."²⁶ Many national railroad labor organizations had chapters in the Denver and Rio Grande division point towns of Denver, Pueblo, and Salida (Table 1). Railroad labor organizations--the Brotherhoods in particular--primarily sponsored social events. They also provided types of insurance or disability compensation for members.

Table 1. Railroad Labor Organizations in Colorado, date of establishment and membership in 1888 ²⁷

Brotherhood of Locomotive Engineers	
Denver-1875, Pueblo-1881, Salida-1881, Alamosa, Leadville-1883, La Junta-1885, Colorado City-1888	-434 members
Yardmasters	
Denver, Pueblo	-67 members
Order of Railroad Conductors	
Denver-1887, Pueblo-1882, Salida-1884	-24 members
Brotherhood of Railroad Brakemen of America	
Denver-1884, Pueblo, Salida, Leadville	-286 members
Brotherhood of Locomotive Firemen of North America	
Denver-1877 (2 lodges), Pueblo, Salida, Leadville, La Junta, Como, Canon City	-423 members
Order of Railway Telegraphers of North America	
Denver-1888, Pueblo-1887	-320 members
Switchmen's Mutual Aid Association of the USA	
Denver-1886, Pueblo	-75 members

²⁶First Biennial Report of the Bureau of Labor Statistics 1887-88, State Archives of Colorado, Denver, 108 (hereafter cited SAC-D); Harold V. Knight, Working in Colorado: A Brief History of the Colorado Labor Movement (Boulder, CO: University Center for Labor Education and Research, 1971), 3.

²⁷First Biennial Report of the Bureau of Labor Statistics 1887-88, SAC-D, 71, 78, 88-89, 104-5.

Some labor groups even negotiated contracts with the railroad. The Brotherhood of Locomotive Engineers (BLE) made the first written agreement with the Denver and Rio Grande railroad in 1875, clarifying the employment and pay relationship between the workers and the company.²⁸ Generally, when organized by trades, railroad workers held greater power. Although negotiation of written agreements pointed to the gradual company acceptance of employee rights to union representation, such negotiations represented exceptions rather than norms.²⁹

Unlike other Colorado cities, Grand Junction housed no chapters of national railroad labor organizations. The Knights of Labor was the only labor organization with any standing in Grand Junction. Established in 1884, the local assembly, no. 3524, had 14 charter members. A year later, 90 members met every Saturday night at the International Order of Oddfellows Hall.³⁰ The Knights became very popular in the West in the decade of the 1880s. Many workers who participated in the Brotherhoods joined the Knights of Labor as well. The Knights' decentralized structure accommodated the conditions of workers in new railroad towns like Grand Junction.³¹

Assemblies existed in two primary organizational forms--trade assemblies and mixed assemblies representing a wide variety of workers in different crafts and industries. Criteria for membership depended on a

²⁸Reed C. Richardson, The Locomotive Engineer, 1863-1963: A Century of Railway Labor Relations and Work Rules (Ann Arbor: Bureau of Industrial Relations, Graduate School of Business Administration, University of Michigan, 1963), 195.

²⁹Richardson, 197.

³⁰Jonathan Garlock, Guide to the Local Assemblies of the Knights of Labor (Westport, CT: Greenwood Press, 1982), 32; Charles H. Haskell, History and Description of Mesa County, Colorado (Grand Junction: Mesa County Democrat, 1886), 63; Grand Junction News, 20 February 1886.

³¹Leon Fink, Workingman's Democracy: The Knights of Labor and American Politics (Urbana: University of Illinois Press, 1983), 9.

broad concept of "producing classes." Those who showed respect for the dignity of laborers were welcome to join, but "idlers, social parasites and corrupt folks" were not.³² The Knights of Labor did not represent all workers. In particular, they lobbied for Chinese immigration exclusion and then further attempted to oust existing Chinese workers from their divisions.³³ Although railroad workers dominated the Knights' membership early on, ranchers and small business owners also participated. For example, the editor of the local Democratic paper, C.W. Haskell, acted as the master workman of the local assembly; grocer W.J. Quinn acted as financial secretary, and watch repairer Carl Gleeser performed the duties of recorder secretary.³⁴

Rather than appeal to the new radical socialism sweeping through industrial America, the Knights of Labor appealed to a more conservative faith in republicanism in which the new industrial worker displaced the farmer at the heart of American democracy. Under the leadership of Terrence Powderly, the organization sought primarily to dignify the condition of labor by improving the social and moral fabric of the workingmen. According to Knight ideology, the intellectual and moral development of individuals represented the fundamental precondition for the continued advancement of democratic civilization. The organization took seriously civic responsibility, education, wholesome family life, temperance, and self-improvement. Rather than angrily pressuring management for benefits through strikes, Knights intended to demonstrate

³²Stromquist, 63; Fink, 9.

³³David Montgomery, The Fall of the House of Labor: The Workplace, The State, and American Labor Activism, 1865-1925 (Cambridge: Cambridge University Press, 1987), 85.

³⁴Haskell, 63.

their worth by improving themselves. Formally, the Knights worked through a network of reading rooms, traveling lecturers, and a growing labor press.³⁵ The Grand Junction assembly set up a library in the spring of 1886 and then subscribed to a "large number of prominent newspapers and publications of interest to the laboring classes." They then left their lodge room open to the public on Sunday afternoons for all who "desire[d] the privilege of reading."³⁶

The leaders of the Knights sought to educate working people to their rights and to their responsibilities. Ironically, despite their attention to the empowerment of workers, the Knights of Labor were generally disinclined to coordinate local assembly activities with political movements or strike strategies. Because they rarely regarded politics as a means to solve labor problems, the Knights remained a weak institution.³⁷

The local Knights of Labor enjoyed the support of their community in both social and theoretical matters, but workers found little backing when conflicts arose. Community members regularly attended social functions hosted by the local Knights. When the Knights held their first annual ball in March of 1886, the paper characterized it as "the largest and in many ways the most successful entertainment of the kind ever given in Grand Junction." In all, 200 guests attended--144 dancing at once in the Mesa Rink.³⁸ In addition, the Grand Junction News routinely published complimentary personal information about railroad workers. Furthermore, the News provided considerable coverage of labor issues.

³⁵Fink, 8-11.

³⁶Grand Junction News, 18 February 1888; Grand Junction News, 10 April 1886.

³⁷Furthermore, Fink perceptively noted that the Knights ended up in the anomalous position of "advocating workers' political rights without offering a way to take advantage of those rights." Fink, 8, 10-11, 19-20, 24.

³⁸Grand Junction News, 6 March 1886.

The paper frequently printed entire lectures given by Knights of Labor leader Terrence Powderly and publicized local lectures by town leaders on labor issues. The News aptly reported that "the public mind" of Grand Junction was "awake on questions affecting labor."³⁹

However, the News rarely published specific information about local labor conflict. Occasionally a brief piece flagged the masked occurrence of a disruptive incident. For example, the paper reported that,

forty bridge carpenters and rock men were discharged by the D.&R.G. Co. on Saturday last, the same number arrived on Tuesday night to fill the places of the discharged men.⁴⁰

Most likely, a more complex story underlay the incident reported. Workers needed jobs and thus were compelled to accept the railroad company's terms of employment. When one job ended, they had little choice but to move to another.

No records indicate the presence of any labor organizations in the division point town of Green River. Although the remote town was the largest settlement in eastern Utah, the territorial census counted only 50 residents there in 1887, after four years of rail service.⁴¹ 190 miles of track through difficult terrain still separated Green River from Salt Lake City to the north. Before the railroad came through, only the water of the Green River enabled a few hearty settlers to make their livings in the otherwise barren expanse. Initially settlers ferried people across the Green and trapped beaver along the verdant riverbanks. Ranching and farming also contributed to the growth of the community. With the arrival of the

³⁹Grand Junction News, 20 February 1886.

⁴⁰Grand Junction News, 14 April 1883.

⁴¹Official Local Time Tables Denver and Rio Grande Railroad Scenic Line of the World, July 1887, MWC-GJ; Green River was initially known as Blake, but unfortunately, no manuscript census exists for the era of narrow gauge rail operation, so a detailed profile of the town is not possible. "Manuscript Census, Emery County, Utah, 1880."

railroad in 1883 came the force of rail workers which grew to dominate the town's population. As a division point, Green River had a roundhouse, a depot, a water tank, the fancy Palmer House, and various other frame buildings where workers resided. Chinese laborers built their own dug-out houses in a hillside on the south side of the railroad tracks.⁴² Although most Green River inhabitants worked directly for the railroad, a population accommodating rail workers and travellers grew as well. Miss J.C. Miller first taught school in town, using the depot as a schoolhouse. The Crescent Saloon and Hatt's Saloon also provided services to workers and travellers.⁴³ Most inhabitants of the town relied upon the railroad in some manner for their livelihoods.

The remote location of Grand Junction and especially of the settlements along the line to the west--particularly Green River--made these communities eerily dependent on the railroad not only for their livelihoods but also for the most basic resources necessary for their survival. Workers living in remote areas relied on their jobs; few alternatives existed but to move great distances to find other employment. Furthermore, the common washouts which cut towns off for weeks at a time contributed to a consciousness of being perched vulnerably at the edge of settlement and acutely dependent on the railroad for necessary foodstuffs and supplies. Green River pioneer J.P. Simonson characterized the circumstance of his town as "isolation from the rest of the world."⁴⁴

⁴²John P. Simonson, "The Pioneer Days of Green River," unpublished manuscript, Collection B303, UHS-SL, 5.

⁴³Record of Deed of Crescent Saloon in Green River to W.L. McCormick, 1887, Emery County Recorders Office, Castledale, Utah; Map of Green River, DRGA-D.

⁴⁴J.P. Simonson, "A Saga of Green River," unpublished manuscript, Collection B303, UHS-SL, 24

Stationary yard workers in both Grand Junction and Green River shared the experience of working under the hierarchical structure of company management, yet the experiences of workers in the division point towns differed significantly. Isolated from the central management, Green River yard workers did their jobs without the sense of authority arbitrarily threatening and limiting their personal freedoms. Despite its role as a division point town, yard workers in Green River exercised greater control over their time than workers more proximal to management centers. While a hierarchy of authority existed in the Green River shops, workers and managers were also neighbors and members of the same small community. Because officials with greater authority only rarely checked up on the workers in Green River, rulebook prescriptions could be easily overlooked if jobs were adequately performed. One early Green River railroader remembered that during scorching summers the roundhouse employees would climb aboard one of the switch engines and run it a mile east to the Green River bridge. They then left the train standing on the main track--without the protection of any signal flags--while they swam and cooled off in the silty river.⁴⁵ Furthermore, because interruptions in train service resulting from washouts were so common, workers routinely gained leisure time. The Grand Junction News reported that during one break, the workers on the "Western" spent their free time writing poetry.⁴⁶ The remote conditions of the Alkali Division gave workers greater control over their leisure and work time, fundamentally precluding the immediate need for labor union activities.

⁴⁵J.P. Simonson, "A Saga of Green River," UHS-SL, 14; Joe Ross, who recalled the story, worked in the Green River roundhouse from age 14. His father was a narrow gauge locomotive engineer.

⁴⁶Grand Junction News, 26 July 1884.

While varying degrees of autonomy informed different responses to the labor movement in Green River and Grand Junction, social and ideological differences in the two towns also contributed to different responses to labor radicalism. Traversing a state-territory boundary and a vast desert, the segment of railroad between the two towns essentially formed a cultural interface between Mormon and non-Mormon settlers. Despite its proximity to Mormon settlements, the first Latter-day Saints branch in Green River did not organize until 1904.⁴⁷ Managers of the "Western," nonetheless, supervised a largely Mormon work force from Salt Lake City, the center of the Latter-day Saints' religious empire, while Denver and Rio Grande officials managed non-Mormon workers from Denver, Colorado's largest commercial center. In general, the Mormon Church opposed labor organization, fearing that unions would create a conflict of loyalties for church members and that unionization would raise prices.⁴⁸ Knights of Labor leadership was overtly anti-Mormon. Furthermore, many church leaders espoused pro-business values. In addition, Utah's agriculturally based economy informed strong community values. Because most railroad workers in Utah were Mormon, few transgressed the religious imperatives which dissuaded them from joining unions.⁴⁹ Main directives in Utah came from religious rather than strictly economic incentives. Because religious and agrarian ideology guided

⁴⁷Wayne L. Walquist, ed., Atlas of Utah (Provo: Brigham Young University Press, 1981), 90-91.

⁴⁸Allan Kent Powell, The Next Time We Strike: Labor in Utah's Coal Fields, 1900-1933 (Logan: Utah State University Press, 1985), 209.

⁴⁹Dean L. May, "Towards a Dependent Commonwealth," and Thomas G. Alexander, "Integration into the National Economy, 1896-1920," in Utah's History, edited by Richard D. Poll (Logan: Utah State University Press, 1989), 236, 442.

Utah's sparse population, social and economic forces minimized labor activism in Utah.⁵⁰

Because a sizable non-Mormon population entered Utah Territory after the completion of the transcontinental railroad, some labor organization did exist in Utah in the 1880s. National chapters of railroad unions hosted social events in Salt Lake City.⁵¹ As many as one thousand Utahns may have been members of the Knights of Labor. Most members, however, were either non-Mormons or jack-Mormons involved in the emerging mining industries.⁵² Although in the 1880s Utah workers were already well organized by religion in their communities, church organization rarely exerted power against external monopolistic business forces. Even though Provo's Territorial Enquirer accused the Denver and Rio Grande of unjust rate discrimination against Utah farmers and the "capricious firing" of Mormon workers, Utah workers in general offered little protest.⁵³

Although emerging labor radicalism marked the decade of the 1880s, sparsely populated frontier communities--like Grand Junction, and especially settlements west along the line--experienced little labor movement activity. Desert conditions geographically sequestered workers from urban centers where labor movements originated and gained power. In addition, the desert conditions isolated workers from direct contact with general management. Although the yard workers in both Grand Junction

⁵⁰Pawar, 239-240.

⁵¹Grand Junction News, 25 February 1887; Grand Junction News, 11 December 1886; Grand Junction News, 6 February 1886.

⁵²May, 236; Alexander, 442.

⁵³Territorial Enquirer, 25 May 1883, in Journal History, LDSA-SL, cited in Robert Athearn, "Utah and the Coming of the Denver and Rio Grande Railroad," Utah Historical Quarterly 27 (April 1959), 140-41.

and Green River worked under supervision, varying degrees of isolation resulted in differing degrees of worker autonomy and varying needs for labor activism.⁵⁴ Furthermore, the remoteness of these frontier division point towns made workers reliant on their railroad employers not only for their livelihoods but in many cases for their most basic needs. Finally, different attitudes towards union activity in Colorado and Utah contributed to different responses to labor activism.

While strikes emerged as a powerful means for labor to gain power in the rest of the nation during the 1880s, in the West, the occurrence of strikes remained remarkably low. In the densely populated northeastern states, between 80 and 90 percent of all counties experienced strikes within their borders--many occurring in counties containing cities with populations exceeding 20,000. Less than 30 percent of counties in western states experienced strikes.⁵⁵

Knights of Labor members in the West did occasionally organize strikes and boycotts. Although labor radicalism only slowly spread to frontier areas, an apex of activity occurred in the middle of the decade. A successful three day shopmen's strike on the Union Pacific in 1884 encouraged the subsequent organization of Knights of Labor assemblies in railroad towns throughout the West. When the Union Pacific railroad announced an immediate wage cut of 10 to 25 percent, the shopmen in all Union Pacific rail yards between Omaha and Ogden went on strike within 36 hours. Three months later when the Union Pacific cut wages at a single

⁵⁴That 83 percent of all railroad strikes between 1881 and 1894 were of stationary shop workers, freight handlers and general laborers indicates that close supervision and proximity to management often resulted in labor conflict. Stromquist, 112, 26-27.

⁵⁵S. Bennett and Carville Earle, "The Geography of Strikes in the U.S., 1881-1894," *Journal of Interdisciplinary History* 13 (Summer 1981), 67.

shop in Ellis, Kansas and fired 20 men in Denver, the whole line joined again in a successful strike to protest the wage cuts. These two successful strikes, though not arranged per se by Knights of Labor assemblies, encouraged workers to organize. The Knights of Labor slogan, "an injury to one is the concern of all," became a banner under which all could rally.⁵⁶ The Denver Tribune-Republican reported that while there were only 150 Knights of Labor in Denver in 1884, there were 6,000 members in 1885.⁵⁷ Many members were employees of the Denver and Rio Grande.

Shortly after the successful Union Pacific strikes, the excitement of labor power spread through the intersecting trackage at Denver to the main Denver and Rio Grande repair yard complex, Burnham shops. Generally in the mid-1880s, concern for fair working conditions overwhelmed concern for high wages. Most labor conflicts, in fact, involved the arbitrary hiring and firing practices of low ranking officials and of middle-managers.⁵⁸ Such was the case at Burnham where workers complained about petty bossism. Two foremen in particular repeatedly treated the men with harsh and abusive insults. Their offhand comments suggested that workers active in labor groups would be discharged to reduce expenses and cut the working force. Disregarding the honored rule of seniority, the foremen then dismissed several veteran employees.

⁵⁶Knight, 26; Stromquist, 61-62; Rocky Mountain News, 18 May 1885.

⁵⁷Denver Tribune-Republican, 18 May 1885; By the late 1880s, membership declined to 3,865 Knights of Labor members in the state of Colorado as a result of the banning of membership by employers--including the Denver and Rio Grande--and in response to incidents of violence attributed to Knights of Labor members nationwide. First Biennial Report of the Bureau of Labor Statistics 1887-88, SAC-D, 100.

⁵⁸David Montgomery, "Work Rules and Manliness in the World of the Nineteenth Century Craftsman," in Major Problems in the History of American Workers, edited by Eileen Boris and Nelson Lichtenstein (Livingston, MA: D.C. Heath and Co., 1991), 294; Licht, 255.

In response to the dismissals, the workers organized and sought a hearing with the railroad administrators. They wanted to propose the reduction of all men's hours to keep their fellow workers from unemployment. Their inability to gain even a hearing with the company officials enraged the workers. In response, they issued a statement of their complaints declaring that the men felt, "it would be better to resent the insults and wrongs that are daily heaped upon them by some of their foremen than to be employed by a corporation whose officers from almost the highest to the lowest treat them as serfs."⁵⁹ Rumored threats that management would crush labor groups permeated the workforce and inflamed yard men with suspicion and distrust. Workers thought they could win their non-wage related dispute by striking for a short period.⁶⁰

Despite the conservative counsel of Knights of Labor leaders and fellow employees, yard workers went on strike in 1885. Conservative workers counseled against striking for several reasons. Because the railroad company was in receivership and operated under an agent of the United States Court, powerful sanctions threatened strikers. In addition, the workers suffered from poor organization and had no money to support a potentially prolonged strike. Finally, other Denver and Rio Grande workers--most importantly the powerful Brotherhood of Locomotive Engineers--refused to support the strike.⁶¹ Despite the many obstacles, workers at Burnham voted by a two-to-one majority to strike. On Monday, 4 May 1885, 90 percent of the shopmen--between 400 and 500 workers--

⁵⁹Denver Tribune-Republican, 5 May 1885.

⁶⁰First Biennial Report of the Bureau of Labor Statistics 1887-88, SAC-D, 141.

⁶¹Because the Brotherhood of Locomotive Engineers refused to offer their critical support to the Knights of Labor strikers, the Knights issued a statement declaring their "supreme contempt" for the action of the Brotherhood and disavowed themselves of any future support for that group. Denver Tribune-Republican, 14 May 1885.

walked out.⁶² Although the Burnham strikers failed to win the support of the workers in the running trades, other shopmen at division points throughout Colorado joined the strike to support workers at Burnham. Across Colorado, through the thin thread of the telegraph wire came word of the strike. Hundreds of shopmen in Pueblo, Alamosa, Salida, and Gunnison struck in support of Denver's Burnham yard workers. In addition, workers on the Union Pacific threatened to strike if the UP helped the Denver and Rio Grande by hauling freight, thereby enabling the company to maintain its contracts. Nearly all strikers were members of the Knights of Labor.⁶³

In Grand Junction, telegrapher George Schmidt quietly informed local yard men of the imminent strike in the Burnham shops.⁶⁴ Shortly after 9:00 am on the same morning, yard workers in Grand Junction--most all members of the Knights of Labor--peacefully switched all trains off the main line into the yard and walked off their jobs.

Although some Denver newspapers reported that the sympathy strike would spread across the Utah border to Ogden, the Salt Lake Herald retorted that Utahns generally regarded the workers' grievances "as puerile" and that "little sympathy" would be "accorded the strikers by the public."⁶⁵ The following day a Herald reporter further assured Salt Lakers that there was "no probability of the trouble extending to Salt Lake." In addition to the lack of powerful Knights of Labor leadership in Salt Lake City, the reporter claimed that because "a majority of the Denver and Rio

⁶²Knight, 27-28.

⁶³Denver Tribune-Republican, 5 May 1885.

⁶⁴Henry Hobson, "Motion to Interrogate," in 1746 The U.S. vs Edward Steine et al., Records of the District Courts of the United States, District of Colorado Circuit Court, Civil Case Files, 1884, Record Group 21, Box 213, NAC-D.

⁶⁵Salt Lake Herald, 5 May 1885.

Grande: train hands are Mormon workmen.

there would be no trouble in Utah.⁶⁶⁶ An incident occurred in the morning across the Utah border, not even to mention Grand Junction.

In Grand Junction, workers continued to strike. In the morning, a few designated men remained to guard the company's property from vandalism. The strike presented no occasion for carrying out acts of free time. In line with Knights of Labor philosophy, the strike was peaceful and temperate. The Grand Junction News reported that the Knights of Labor on strike "behaved themselves in a most orderly manner, ...and all kept sober."⁶⁶⁷

The local strikers apparently had little communication with Grand Junction management. William Binning took charge as master mechanic of the machine shops and depot when they opened in 1887. Local Knights of Labor leader, Charles W. Haskell, reported in his biography that Binning was "very popular among the employees of the shop, and the strikers acted completely in the support of their fellow workers at the shop."

No freight trains operated in Grand Junction for four days until the United States marshal arrived. Master Mechanic Binning filed an affidavit charging eight yard men with interfering in the operation of the railroad. Binning complained that a large number of men were in a "preconcerted arrangement" and then ordered employees to work.

666Salt Lake Herald, 6 May 1885.

677Denver Tribune-Republican, 8 May 1885.

688Grand Junction News, 9 May 1885.

659Haskell, 61.

Grande train hands are Mormon workmen," the local company officials felt there would be no trouble in Utah.⁶⁶ As predicted, the strike did not extend across the Utah border, not even to nearby Green River.

In Grand Junction, workers continued to close up the machine shops, the pumphouse, and the round house on the morning of 4 May.⁶⁷ Only a few designated men remained to guard the company's property against vandalism. The strike presented no occasion for carousing or a celebration of free time. In line with Knights of Labor philosophy, the men remained peaceful and temperate. The Grand Junction News reported that the local Knights of Labor on strike "behaved themselves in a very gentlemanly manner, ...and all kept sober."⁶⁸

The local strikers apparently had little complaint with Grand Junction management. William Binning took charge as master mechanic of the machine shops and depot when they opened in 1883. Local Knights of Labor leader, Charles W. Haskell, reported in his boosterish town history that Binning was "very popular among the [employees] of the shop."⁶⁹ The strikers acted completely in the support of their fellow workers in Denver.

No freight trains operated in Grand Junction for four days until the United States marshal arrived. Master Mechanic Binning then issued an affidavit charging eight yard men with interfering in the operation of the railroad. Binning complained that a large number of men quit work by "preconcerted arrangement" and then ordered engineers to leave their

⁶⁶Salt Lake Herald, 6 May 1885.

⁶⁷Denver Tribune-Republican, 5 May 1885.

⁶⁸Grand Junction News, 9 May 1885.

⁶⁹Haskell, 61.

trains preventing traffic from travelling westward.⁷⁰ The marshal arrested the men and after a local hearing, took them to Denver to be tried in the United States District Court. The men taken to Denver represented a wide variety of yard occupations: George Schmidt operated the telegraph; John T. Drummy and John McLaughlin worked as machinist helpers; Henry Chandler worked as a boilermaker; Edward Stein repaired cars; Morris Haggerty watched the yard at night; and John Cotterell worked as the yard blacksmith. The marshal even arrested R.W. Swigart, the yard master.⁷¹

The final hearing of the eight Grand Junction strikers did not take place until the following week. At the hearing, in response to questions posed by U.S. Attorney Henry W. Hobson in his Motion Interrogation, all of the strikers denied their complicity in the strike. Morris Haggerty admitted, "I stopped work but I can hardly be said to have joined the strikers." Henry Chandler wrote, "I quit work May 4th. I did not join said strike."⁷² John Cotterell explained his interaction with an engineer:

I had been to my home and was returning to the shop to get a pail of water and to put away my personal tools when I passed by Thomas Welsh's engine.... I said "Good Morning Mr. Welsh--are you going to Gunnison?" I made the remark while walking and did not stop for nor hear his reply....I did not ask Mr. Welsh no[r] any othe[r] engineer to step down off his engine nor to quit work nor did I interfere with him or any other engineer at any time. I neither threatened nor intimidated, induced nor hindered nor attempted to do any of these things. I asked a civil question and passed on.⁷³

⁷⁰Complaint of William Binning against Steine et al. 1746 filed 12 May, 1885" in 1746 The U.S. vs Edward Steine et al., Records of the District Courts of the United States, District of Colorado Circuit Court, Civil Case Files, 1884, Record Group 21, Box 213, NAC-D.

⁷¹1746 The U.S. vs Edward Steine et al., Records of the District Courts of the United States, NAC-D.

⁷²Morris Haggerty and Henry Chandler,"Answers to Interrogation," NAC-D.

⁷³John Cotterell, "Answers to Interrogation," NAC-D.

Yard Master Swigart explained his role in the strike. He told the agent "that there was a strike and that everybody had stopped." Then he returned to the yard and "as the trains were constantly coming in," he continued "to put away and side track them as they arrived," in "exactly the same manner" he had been doing in for the 16 months he had worked at the yard.⁷⁴ Two weeks after the Denver and Rio Grande strike began, Judge Brewer finally decided against all strikers holding their grievances "to be trivial" and admonishing their course of action.⁷⁵

Because Grand Junction workers struck only in sympathy, they had little reason to admit to their participation in the strike. By stopping work, Grand Junction workers attempted to make a statement of labor solidarity. The strikers' attempts were unsuccessful. Because workers from the running trades failed to support the Burnham yard strikers, Denver and Rio Grande trains kept running; the strike dragged on all summer without official ending. Scabs eventually replaced workers who persisted in striking. The overall operations of the railroad company experienced little effect.⁷⁶

Although the final hearing of the eight Grand Junction strikers did not take place until the following week, nearly all remaining Grand Junction rail workers returned to their jobs the morning after the strike. In its scant coverage of the strike, the Grand Junction News neither castigated nor supported the sympathy strikers; a brief editorial only denied that strikers were guilty of "wrong acts" or of using "force to prevent the trains

⁷⁴R.W. Swigart, "Answers to Interrogation," in 1746 The U.S. vs Edward Steine et al., Records of the District Courts of the United States, District of Colorado Circuit Court, Civil Case Files, 1884, Record Group 21, Box 213, NAC-D.

⁷⁵Denver Tribune-Republican, 24 May 1885.

⁷⁶Knight, 28.

from running."⁷⁷ Although Knights of Labor spokesman J.B. Lennon remained in town, no Knights of Labor rallies occurred. All continued "moving along as usual" in Grand Junction.⁷⁸ In stark contrast, throughout the rest of Colorado--in Pueblo, Salida and Denver--the Knights of Labor held mass meetings in support of the strikers. A week after the strike began, 3,000 people, including the wives and children of the strikers, assembled in the Denver ice rink and sang "Storm the Fort, Ye Knights of Labor."⁷⁹ On May 23rd at the height of escalation, an attempt was made near Denver to blow up an eastbound Denver and Rio Grande mail and passenger train with dynamite. The Knights hired a detective who cleared labor of responsibility for the violence, but the explosion nonetheless colored the reputation of organized labor in Colorado.⁸⁰

The Grand Junction strikers did return from Denver to a "carousing reception" hosted by the local Knights of Labor lodge, but apparently thereafter railroad workers were prohibited from membership in the local Knights of Labor assembly.⁸¹ One Mesa County resident reported his opinion of workers' conditions to the state Bureau of Labor:

Railroad employes here are denied the right of organization. I think a law is necessary to punish corporations for extending an unwarranted authority over their employes. I believe that thorough organization of the producing classes is the first requisite to make a co-operative system of all men a possibility. Education on industrial economics is sorely needed--reduction of hours of labor to a minimum. Every individual worker should receive the full value of his production and the

⁷⁷Grand Junction News, 9 May 1885

⁷⁸Grand Junction News, 9 May 1885; Grand Junction News, 16 May 1885; Denver Tribune-Republican, 10 May 1885; Denver Tribune-Republican, 13 May 1885.

⁷⁹Rocky Mountain News, 18 May 1885; Denver Tribune-Republican, 11 May 1885.

⁸⁰Denver Tribune-Republican, 24 May 1885; Knight, 28.

⁸¹Grand Junction News, 23 May 1885; Haskell, 63; Stromquist contends that this was a common occurrence after strikes. Stromquist, 190.

assumption of all public functions by the State. In many states the fees of physicians and rates of royalty to millers are fixed by law. If this is a right and just power of organized society, I see no reason why this authority might not be beneficially exerted to all forms of service. But, first of all, I am in favor of education and organization.⁸²

Although the writer expressed anger at the limitation on his personal freedom, the conservative attitude of the Knights of Labor permeates his characterization of work conditions. His primary concern remained the dignity of workers and workers' abilities to improve and contribute to the community. Wages and work hours only entered the picture in so far as they contributed to self-improvement of individual workers.

As long as Grand Junction workers did not threaten the local economy with boycotts or strikes, they were free to improve and educate themselves through membership in the Knights of Labor. One local writer, for example, regarded the failure of a strikes as progress for workers. He commented:

The Knights of Labor have unquestionably failed in their late strikes and in failing have won a great victory. Mr. Powderly is now in command and the true objects of Knighthood will be kept in view.⁸³

Although community members supported working men in theory, they discouraged radical activities, and labor unrest remained hidden.

While Grand Junction citizens supported and mingled with their railroad workers in social manners, the local workers' organization failed to garner substantive community backing. Because railroads exercised omnipotence in determining the fate of new towns--especially those in isolated areas, boosters and business people with expectations of growth

⁸²First Biennial Report of the Bureau of Labor Statistics 1887-88, SAC-D, 263.

⁸³Grand Junction News, 10 April 1886.

depended on the smooth operation of trains for the growth and progress of their remote communities. Wanting Grand Junction to be "the apple of the Denver and Rio Grande's eye," some boosters even shipped baskets of strawberries to railroad officials in Denver hoping to attract and cement additional interest in the town. Labor unrest, even a sympathy strike, potentially threatened Grand Junction's relationship with the company administration. At root, long term growth meant courting the interests of railroad corporations, usually at the expense of supporting local workingmen.⁸⁴

The division point towns forming the termini for the Alkali Division represent two distinct working circumstances each informing different responses to labor organization. Both towns had small populations highly dependent on the railroad companies. In both towns, limited cohesion existed between workers of different ethnicities and between workers of different job statuses. Workers in both communities shared the experience of working and living in close conditions under a management hierarchy. However, workers in the two towns encountered varying degrees of isolation from urban centers and from centers of railroad management and therefore experienced varying degrees of autonomy. Furthermore, many Mormon railroad workers in Utah espoused an anti-union ideology, preventing widespread support for strikes. Although some Grand Junction workers were open to unionization, there was too little community support to foster the development of labor power.

⁸⁴Grand Junction News, 23 June 1883; Grand Junction News, 16 June 1888.

CHAPTER V
OF LAND, RAILROADERS, AND HISTORY

There have been 75 miles of new [standard-gauge] road laid, shortening the line considerably, straightening many curves and placing all the tracks above the high water mark. We have one of the finest and most substantial roadbeds in the west.

--David C. Dodge¹

Our natural location on a great auto highway, our unexcelled climate, our agricultural... and stock possibilities are enough to arouse the greatest enthusiasm

--James W. Bucklin²

After all the route searching, the muscle-intensive grading and track laying, the shovelling of coal into fire boxes, and the loading of thousands of cattle, the Denver and Rio Grande Western's narrow-gauge trains bridged the Alkali Division for only seven years. However, the ecological legacy of the narrow-gauge railroad and its standard-gauge successor continued much longer. The building of the railroad grade resulted in direct changes in the desert landscape but more significantly contributed to changes in the region's environment by facilitating the development and use of resources along the line.

Although a century of wind storms has covered the remains of most settlements with sand, and sage and saltbush grow where section crews once ate their meals, evidence of the workers endures. While the desert

¹David C. Dodge, *Grand Junction News*, 13 July 1889.

²James W. Bucklin, "Founding of City of Grand Junction," *The Trail* 7 (July 1914):

has slowly reclaimed most physical evidence of the railroad, the isolation and aridity of the area have also preserved some century-old scars and litter--now recognized as historically significant artifacts. Some cuts in the landscape reveal sites where workers removed earth to use as fill. In other places, laborers cut into the ground to make corridors for the sinuous grade, which remains the most prominent feature of the obsolete railroad. In addition to the grade, the foundations of buildings and rail workers' midden heaps also remain amidst encroaching vegetation. Stone culverts erected by Italian laborers to protect the rail grade from erosion continue to withstand flash flooding. Cinders spewed from the steam engines still litter the areas surrounding the grade. Because the company imported building supplies, such as rails and ties, from elsewhere, the building of the Alkali Division line scarred distant landscapes as well as the desert it traversed.

Beyond the direct effects of the railroad grade, the operation of the railroad facilitated resource extraction and use, which resulted in the most significant transformations in the region's landscape. Although agate mining near Cisco and occasional attempts at gold mining near Green River were largely unprofitable, coal mining along the Denver and Rio Grande proved far more lucrative. While the Denver and Rio Grande Western initially decided against developing coal mines in the Book Cliffs, other companies did just that. In the early twentieth century, the American Fuel Company and Utah Grand Coal Company operated coal mines in Sego, five miles north of Thompson Springs. A spur line connected the mines to the mainline standard-gauge Rio Grande until the mine closed in 1947.³ More recently, the Loma Mining Project and the Farmers Mine, both

³Grand Memories (Grand County, UT: Daughters of the Utah Pioneers, 1972), 154.

northwest of Grand Junction, extracted coal from the Book Cliffs.⁴ Beyond Green River on the Western line, large coal mines in Carbon County, Utah, depended on narrow-gauge trains to haul their product to markets in the 1880s. By allowing extensive outside trade, the railroad first supplied cash to the traditionally barter-oriented communities of eastern Utah. The cash earned from selling coal enabled the small communities to develop.⁵ Since then, coal mining has continued to fuel local, state, and regional economies for over a century. In fact, Rio Grande coal cars still haul Carbon County coal.

In addition to economic effects, coal mining also had profound social and ecological consequences in the region. In the Price River Valley, mines attracted non-Mormon, immigrant settlers--including Italians, Slovenians, Finns and Greeks--who contributed growth and diversity to the communities of Helper and Price, Utah. Carbon County remains an enclave of ethnic diversity and political difference in Utah to this day. Mining operations made possible by the railroad also had environmental effects. Because most Carbon County coal mining occurred underground, surface damage to the land was minimal--far less than damage caused by open pit mines. However, the development of towns and spur lines that accompanied mining operations tore up areas surrounding the mine portals. In addition, leaching and run off from river-side mines, such as Castlegate, contaminated the Price River. Air pollution generated by coal

⁴Duane Smith, "My Profit, Your Land: Colorado Mining and the Environment, 1858-1900," chap. in A Taste of the West: Essays in Honor of Robert G. Athearn (Boulder, CO: Pruett Publishing Co., 1983), 132.

⁵Supplies shipped by railroad to Price were then carted by wagon to Fort Duchesne, to posts on the Uintah and Ouray Indian Reservation, and to Vernal. Edward A. Geary, "The Carbon County Freight Road to the Uintah Basin," in Carbon County: Eastern Utah's Industrial Island, edited by Philip F. Notarianni (Salt Lake City: Utah State Historical Society, 1981), 136-7; Thursey Jessen Reynolds, Centennial Echoes from Carbon County (Carbon County: Daughters of the Utah Pioneers, 1948), 45.

burning represented the most significant ecological effect of local mines. Homes in the area depended on coal for heating, and locomotives depended on coal to fuel their engines. Perhaps worse were the coal-fired smelters in the Utah and Salt Lake valleys which fouled the air of northern Utah with their offensive black plumes.⁶

Although a host of problems resulted from the coal mining that the Denver and Rio Grande supported, the most significant effects on lands between Green River and Grand Junction resulted from the extensive cattle grazing that the railroad facilitated. Ranchers apparently enjoyed the benefits of lush grasses which resulted from unusually abundant precipitation at different times during the 1880s. "Owing to the rainy weather," one traveller wrote, there was "probably more feed in this section than ever before witnessed by man."⁷ In good years, cattle devoured the rich grasses, and in dry years they browsed what sparse vegetation remained. The railroad made it easy for ranchers to graze thousands of cattle in the remote rangeland and still transport the animals to market. Cattle could be boarded on freight cars headed east at any narrow-gauge station. At several stations, railroad-constructed cattle chutes facilitated the process. Because the region seemed so vast and few regulations governed the privileges of grazing on public lands, ranchers had no incentive to conserve forage for later use. They sought only to produce as many head of cattle as possible for market. As a result, too many animals grazed on the desert range.

In conjunction with the extensive grazing of the late 1880s and early 1890s, a series of climatic conditions coalesced, contributing to the

⁶ Smith, 135.

⁷ Grand Junction News, 14 June 1884.

transformation of the rangeland. Generally higher temperatures dried and warmed the soils. Less rain fell in the form of fewer but more violent storms. Falling hard and fast, the rain failed to percolate into the ground, and storm runoff scoured the surface, eroding topsoil and widening arroyos. During subsequent drought years, heavily-grazed grasses had difficulty putting out new foliage, especially after erosion from runoff and winds left the plants' roots exposed and vulnerable to the hooves of cattle. Furthermore, exotic plant species first disseminated by trains transporting agricultural produce and livestock from the East grew well in the altered landscape along the rails. Exotics, such as cheatgrass, and hearty shrubs, such as saltbush, sage, and juniper, out-competed dying native grasses, leaving the land perhaps less productive and hospitable now than it was a century ago.⁸

Aside from environmental effects, the Denver and Rio Grande Western narrow-gauge railroad had considerable sociocultural effects as well. Workers operating the trains and maintaining track and stations along the way enjoyed considerable independence in their work during the years the narrow-gauge trains thundered across the desert because the isolated nature of the arid land precluded direct management. Rule books enabled workers to do their jobs without immediate supervision by clearly specifying the railroad company's expectations. For workers on the Alkali Division, romantic Western independence was a partial reality.

⁸ Kenneth D. Frederick and Roger A Sedjo , eds., America's Renewable Resources: Historical Trends and Current Challenges (Washington, D.C.: Resources for the Future, 1991), 130-131.

The finding that many frontier railroad workers experienced considerable autonomy suggests a geographical dimension to historian Walter Licht's theory about rule books. In his studies of eastern railroads, Licht suggested that by successfully lobbying to standardize work practices with rule books in the 1870s and early 1880s, workers essentially routinized the independence and individuality out of their jobs.⁹ Rule books standardized work only on paper. In remote areas, workers continued to enjoy relative autonomy, following work rules as they saw fit. Because section and running-trade workers in the West experienced less supervision than their eastern counterparts, they managed to maintain more independence in their working circumstances.

Unlike operators of trains and the people who worked on remote tracks, yard laborers in the division point towns of Green River and Grand Junction worked under the eyes of foremen and managers, and as a result had less autonomy. In the close working and living conditions of these railyards, either close-knit communities emerged in which workers and managers resolved problems in an informal manner, or conflict between management and labor erupted.

Although workers in small frontier towns like Grand Junction did organize, they lacked substantive community support and could not withstand company pressure. Like individual railroad workers, the towns depended on the railroad corporations for their well-being. For example, if railroad officials favored Grand Junction, they might upgrade the local hotel, add repair shops, or run more passenger trains through during the day. If Grand Junction fell into disfavor, the company could move their

⁹Licht, 269-70.

repair shops elsewhere. Citizens feared that changes in railroad operation could ruin the quality of their lives and businesses. Although educated members of the community supported Knights of Labor rhetoric, they shunned labor activism. In some towns, rail workers even embraced a conservative anti-strike ideology. This ideology was most pronounced in Utah where a church disposition directed Mormon workers to shun labor organization. Remote frontier communities' appreciable dependence on railroads contributed to workers' reluctance to organize.

The finding that Grand Junction workers received scant community support in their sympathy strike adds complexity to the discourse on American labor history because it contrasts with the findings of historian Herbert Gutman in his studies of late nineteenth-century Pennsylvania industrial towns. Gutman contended that members of small communities provided substantial backing to their striking workers. Townspeople of Blossburg, Pennsylvania even took displaced workers and families into their homes and fed them. Unlike Grand Junction, Gutman's towns predated industrialization. Although the railroad, mines and mills he studied offered the possibility of tremendous growth to the towns--in much the same way the Denver and Rio Grande offered growth to Grand Junction--they also affronted established relationships already solidified through fraternal organizations and face-to-face contact between community members. In the West, railroad companies exerted such influence in small frontier towns like Grand Junction that organizations of workingmen often failed to garner community support. Townspeople depended on the railroad for their livelihoods and their food--too much to risk supporting rail workers' activism. Labor unrest seemed to threaten the position of the town in the eyes of railroad administrators.

The presence of a sizable railroad worker enclave and of labor organization in early Grand Junction, when properly considered, enlarge our understanding of western community history. Although historian Kathleen Underwood characterized Grand Junction as a homogeneous community operating out of relative consensus, the local railroad community included workers of many ethnicities who did organize to some degree. In its broad demographic methodology, Underwood's study flattened the significance of railroad workers in Grand Junction. Comprising nearly twenty percent of the town's population, railroad workers did exert influence in the community. Local newspaper articles debating the "moral effect" of workers during railroad construction reveal that the workers spurred Grand Junctionites to define their values and the town identity clearly. Local news coverage of labor issues throughout the decade of the 1880s reveals that railworkers also incited the town to remain aware of labor-related matters.¹⁰

The early Denver and Rio Grande sympathy strike in Grand Junction also offers insight to factors affecting the spread of labor activism in the West. Although historical geographers Bennett and Earle contended that nineteenth-century strikes in the eastern United States spread by "contagion," the experience of remote Grand Junction suggests something quite different.¹¹ Bennett and Earle argued that strikes occurred most in counties adjacent to counties where strikes had already occurred; their study suggests workers calling strike news over backyard fences to neighbors in the next county. This makes sense in places where settlement was

¹⁰Kathleen Underwood, Town Building on the Colorado Frontier (Albuquerque: University of New Mexico Press, 1987); Grand Junction News, 20 February 1886.

¹¹S. Bennett and Carville Earle, "The Geography of Strikes in the U.S., 1881-1894," Journal of Interdisciplinary History 13 (Summer 1981): 63-84.

continuous throughout counties --such as in the Midwest and the East. In the West, however, their disease metaphor loses force. People settled in towns distant from other population centers. Successful communication between the isolated towns depended on telegraph lines rather than geographical proximity. By the time the railroad passed through the Grand Valley, telegraph wires were strung along the railroad route, and messages concerning labor organization could pass from Denver to Grand Junction either by telegraph or with workers operating trains between the division points. Although isolation made labor activism difficult and largely unsuccessful for Grand Junction workers, it did not preclude communication by telegraph. While the incorporation of geographic considerations enriches the study of labor history, the complexities of ideology, culture, and economics--rather than just demography--must be included too. On the Alkali Division, the beliefs and economic needs of individual workers as well as the isolating conditions they faced contributed to worker responses to labor organization.

Although the isolating nature of the desert terrain contributed to independence in work circumstances, it also resulted in workers' economic and ecological dependence on the railroad. The experiences of workers along the Alkali Division, acutely affected by aridity, heat, wind, and isolation, offer insights to the historic relationship between people and their environments. Workers depended on their railroad employers for jobs in a remote area where work was scarce. Furthermore, because the land where the workers lived was so dry and infertile, they relied on freight trains delivering potable water and food to their stations from other more temperate ecosystems. By enabling people to live in an area where food could not be easily grown, the railroad ushered in a new relationship

between humans and the land where they lived. The railroad also influenced local ecology by encouraging extensive mining and grazing development along the line, which transformed the landscape significantly.

Despite transformations of the landscape surrounding the old narrow-gauge grade, archaeological evidence of workers remains that can readily complement historical findings. The presence of doll parts at Cisco, for example, corroborates the scant historic documentation of children and families at that station. The substantial midden excavated at Whitehouse Station suggests that a sizable group of workers lived near the station.¹² Using sources made available by both disciplines, troves of lost histories can be at least partially restored.

At the time, construction of the Rio Grande Western's Alkali Division seemed vital to workers, local townspeople, and railroad administrators, but less than a century later, the old grade lies as barely noticeable evidence of the efforts made by hundreds of railroad workers. The epic project of linking markets, resources, and communities by rail has been completed and replaced by other projects and modes of transportation. Interstate 70, which now parallels the old narrow-gauge and the current broad-gauge track, accommodates more truck freight than the Rio Grande line and more automobile-tourists than the glass-topped Amtrak trains. Although the seemingly unacknowledged and insignificant product of their labors turns to dust, the workers' history gives us insight into the realities of living and working in remote, arid environments. Their little-known

¹²John E. Bradley, et al., *An Archaeological Survey and Predictive Model of Selected Areas of Utah's Cisco Desert*, Cultural Resource Series No.18 (Salt Lake City: Bureau of Land Management, Utah State Office, 1986), 52.

history forms an essential chapter in the heritage of the communities the railroaders first linked.

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