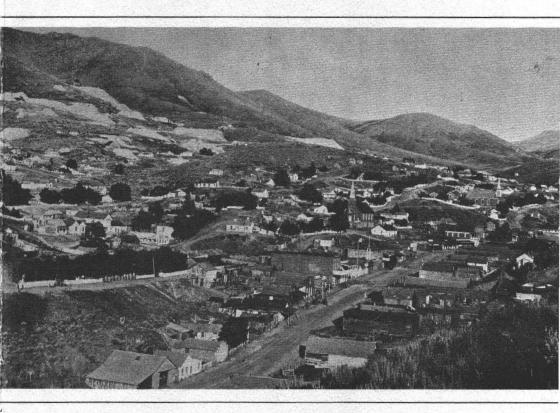
NEVADA Historical Society Quarterly



Spring . 1971



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Francis G. Newlands

The First Nationally Sponsored Arid Land Reclamation Project:

The Newlands Act in Churchill County, Nevada

by Mary Ellen Glass

"ARID AMERICA! We have watered it with our tears!"¹ In perhaps no other spot in the West could Joaquin Miller's words express as much as they do for the Truckee-Carson (Newlands) Irrigation Project. The story is one of euphoric optimism, fervid planning, feverish construction, despairing disillusionment, and finally, late assessment of the realities of desert land reclamation. The history of the project in Nevada's Lahontan Valley falls into four overlapping phases: an extravaganza of planning and legislative action; the "innocent years" of belief in miracles of concrete and steel in the desert; the turbulent advance of the project to its ultimate configuration in 1915; and the era of retrospection following the completion.

When Francis G. Newlands arrived in Nevada in 1889, he had probably already decided that he would try to remake the desert commonwealth into a fitting residence for his posterity. No small schemer, he soon developed what he called a "comprehensive" plan to make the whole of western Nevada into an agricultural utopia. The mining booms were over; Nevada needed a stable agriculture. Newlands presented his program to the people of his adopted state in 1890 in the form of a pamphlet, called an "address."

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In the background of the address were several years of work by Nevadans to bring order to their irrigation and agricultural systems, public and private. This effort had been largely unsuccessful until Newlands's time, consisting mainly of abortive legislation.² By the time he issued his manifesto, Newlands had purchased a fair amount of land—riparian acreages and reservoir sites—throughout the area.

The declaration outlined some of the designs Newlands wished brought to fruition. He envisioned a great program, particularly for what was then called the Carson Sink Valley. He had studied the Carson and Truckee river basins, he wrote, and concluded that a comprehensive system was possible. Churchill County, the site of the future Newlands Project, had "nearly 100,000 acres" of irrigable land, he said, proposing reservoir sites along the Carson. Trying to bring the system about, Newlands had purchased several thousands of acres in what would be the Truckee-Carson Project. He offered the locations to Nevada at his own cost and suggested that the state use eminent domain to acquire adjoining lands.

Newlands referred to Lake Lahontan, the area that would later provide storage for the project, as the "cheapest and best reservoir on the Carson River," and added, "I have secured almost all the land constituting the site . . . and hold it subject to any public enterprise the State may inaugurate." He presented plans for the Truckee drainage area in the same way. suggesting Tahoe and Donner lakes in the Sierra Nevada as storage basins. Continuing, he wrote, "Other good lands could be found along the Truckee, and especially on the Pyramid Lake Indian Reservation . . . where ... land is now cultivated by members of the Piute [sic] tribe ... in their crude and primitive way." He outlined other ambitious designs for other streams in northwestern Nevada. Newlands wrote that he had given up hope for national government action on systems of reclamation; state or district efforts could accomplish the ends he had in mind. He believed the whole of works he proposed would cost only about one million dollars, bringing untold benefits to his chosen state. A few years later, he became an ardent worker for national action, basing his election campaigns on arid lands proposals and accomplishments.

Concluding the address, Newlands wrote, "The purchases which I have made . . . have simply been made to aid this work, . . . but if the State should not take charge of the matter at the coming session of the Legislature, I shall then hold myself free to pursue such a course . . . as I may deem proper, either to secure the reimbursement of my expenditures [\$60,000] or the development of my purchases."³

The 1891 legislature did not act. A little more than a decade later, Newlands still wanted a project in the Truckee-Carson drainage area, but the situation had changed to include monetary and political considerations.

By 1902, Francis G. Newlands had served four terms as congressman

from Nevada and was ready to embark on a new career in the Senate. The passage of the Reclamation Act had virtually assured his national reputation as a leading progressive, but it did not necessarily ensure his much desired—and previously attempted—election to the Senate. Before passage of the Seventeenth Amendment, prospective senators sought election from the state legislature; here Newlands needed support. The complex story does not necessarily suggest a corrupt bargain; it involves a series of political favors between Newlands and the former speaker of the state assembly, Lieutenant Governor Lem Allen of Churchill County. When Newlands was elected senator by the 1903 legislature, the project in Lem Allen's Churchill County was authorized as the first under the new Reclamation Act. Allen was later named by at least one reporter as the progenitor of the Truckee-Carson Project.⁴ Certainly, as author of the Reclamation Act, Newlands was entitled to choose the location for the first federal program.

The area selected in concert with the two politicians for the Truckee-Carson (later Newlands) Project did not resemble a future agricultural utopia. The land lies in a region of sinks, alkali flats, salt beds, and sagebrush at the western edge of the Great Basin. Rainfall averages less than eight inches per year. Natural water included only rainfall and the little Carson River, which, like other streams in the Basin, ran from the Sierra Nevada out onto a sink to seep or evaporate. Larger bodies of water included two briny terminal remnants of prehistoric Lake Lahontan, Pyramid and Winnemucca lakes. These, Newlands had complained, existed "only to satisfy the thirst of the sun."5 Nearer the headquarters of the Project at Fallon were two small ponds where soda had been successfully extracted, and which were appropriately called Soda Lakes.⁶ There was some farming along the Carson River from the earliest days of white settlement, with truck produce raised for use in the Comstock cities a few miles away. Water shortages, uncertain soil and weather conditions, and a hard pioneering environment had precluded large-scale production.

With the Carson Sink Valley chosen for the nation's first federal reclamation project, Senator Newlands and the state of Nevada through its legislature moved quickly to enact the necessary statutes.⁷ Presumably, Lieutenant Governor Allen's presiding over the state senate helped to speed passage of the law. Enthusiastic pronouncements about the plan were to the effect that Nevada's economy and society would grow immediately to new vigor and stability.

Work began early in 1903. The plan involved diverting a portion of the waters of the Truckee River from a dam at Derby through a canal some thirty-one miles long to the Carson River, for irrigation use on the Project. The Truckee began in the Sierras (mainly Lake Tahoe), and until building of the diversion, the river's full flow ended in Pyramid Lake. The irrigation system itself soon encompassed a marvelous array of iron and concrete structures, intended in time to provide water for up to 350,000 acres.⁸

Any possible damage to the desert lakes or to the interests of property owners around them was discounted by the full expected value of the reclamation project. If evidence to the contrary exists, it has been concealed. Typical of the Progressive Era was a belief in the possibility of planned "engineering" of physical *and* social entities for the greatest attainable good of humanity. Quite likely, the civil *cum* social engineers of the Reclamation Service and their associates felt little concern for briny pools where only desert fauna, including a few Paiutes, existed. Nor was such concern awakened until recreation became an important business in the region.⁹

The work continued through 1905, when the Derby Dam was dedicated on the anniversary of the Reclamation Act. This was the first structure to be finished under the federal statute; its completion was the occasion for a celebration featuring visits from local and national figures, the pouring of a baptismal bottle of champagne into the channel, and oratorical claims that the desert had passed from existence.¹⁰ Optimism, enthusiasm, and engineering skills thus carried the project through its first phases.

There had been a few individual difficulties, generally assumed to be small, and not diminishing the enthusiasm for construction. A windstorm in February, 1904, had caused substantial damage to buildings and freshly-plowed topsoil,¹¹ but better building practices and actual planting of fields would surely preclude recurrence of such inconsiderable problems. The hundreds of animals hauling heavy machinery attracted swarms of insects, but a crew built some fly-proof food storage boxes which were quite satisfactory, thus solving another minor annoyance.¹² The salt and alkali impregnation of the soil was also believed fairly simple and inexpensive to eliminate in a somewhat primitive process of leaching through flooding.¹³ An excess of enthusiasm on the part of prospective settlers was perhaps the most bothersome of the trifling problems, for these kept engineers and others busy answering questions when they might have been pouring or supervising the finishing of concrete.¹⁴

Some larger problems did not find easy solutions. The project planners had assumed that they would be able to use Lake Tahoe as a storage reservoir at least until after the Lahontan Dam on project land was completed. Involved was a proposal to raise the lake's level ten feet.¹⁵ Lake-side property owners—timber, ranching, and resort interests—twice obtained injunctions, halting the construction of a new dam at Tahoe's outlet almost before it began.¹⁶ The argument over Tahoe and Truckee River waters was a constant theme between project residents and others for the next several decades. The building of Lahontan Dam in 1915 ended some, but not all, of the controversy; another partial solution came in 1944 with the federal adjudication of the river's waters.¹⁷

A second knotty problem destined to nag planners and residents was the amicable adjustment of Indian lands ownership in the project area. A band of Paiutes had attempted to farm a little more than 26,000 acres of land in the district. The Indians were encouraged to surrender their earlier allotments in return for ten-acre irrigable farms within the project. New allotments were given free of the charges paid by white entrymen under the Reclamation Act.¹⁸ In the beginning, at least, this was a fair adjustment of the Indian settlement problems, intended for their benefit. Certainly the chief engineer of the project, Thomas H. Means, tried to press the Reclamation Service to settle the claims quickly.¹⁹ However, other representatives of the Reclamation Service aided white entrymen to file on Indian lands even before relinquishments were executed.²⁰ By 1929, indifference to Indian needs had resulted in only one farm's being held by an Indian settler on the project, a substantial reduction from the more than sixty in 1915; this, while the Indian population remained static.²¹ The Indians thus moved from the land owning class to the status of tenants and laborers.

White residents also suffered. Until the coming of the Reclamation Service, Churchill County had been the slowest-growing of Nevada's (then) fourteen counties. With a population of fewer than 900 people in 1902, Churchill had only 235 registered voters, an assessed valuation of under one million dollars, no public debt, and a tax rate of only eighty-five cents per \$100 *ad valorem*.²² By the time the project was open for settlement, with a new county seat at Fallon, there were about a thousand registered voters, an assessed valuation of nearly two million dollars, a public debt nearing \$45,000, and a tax rate of \$1.57 per \$100.²³ All the figures were destined to increase or fall over the next few decades with the fortunes of the project. A housing shortage inflated building prices,²⁴ headlong response to promises of an oasis on the desert burdened county indigent rolls and caused deficit spending from tax funds,²⁵ and innumerable misunderstandings between entrymen and the Reclamation Service made life unpleasant for new residents and old alike.

Conflict between entrymen and the Reclamation Service arose largely from an excess of bureaucratic optimism. Nearly without exception, workers for the Service or their surrogates bragged about their ability to make a garden grow where none had been before, purely through application of science. Even with coworkers this euphoria persisted, so it can hardly be suggested that the settlers were duped by cynical government lackeys. Thomas H. Means, chief engineer of the project, wrote in 1906 envisioning a valley blooming with orchards and truck gardens. Reporting to the Bureau of Plant Industry sincerely, if a trifle arrogantly, he said, "The agriculture heretofore practiced in this valley has been largely growing alfalfa for feeding stock. . . . Also a limited amount of produce is raised for use locally. . . . Old settlers tell us that it will be impossible to grow fruits, certain vegetables, etc. . . . It seems to me that the old settlers don't know anything about the matter."²⁶ Means also tried but failed early to establish some demonstration farms on the project.²⁷

The following year, it was clear that perhaps the old settlers did know something about the matter. They outproduced the newcomers nearly three tons to one of hay, and five tons to three of potatoes; they grew ten varieties of crops to eight for the homesteaders.²⁸

The optimism of the Reclamation workers reached in other directions. The soils of the project area had never been adequately analyzed; like many others of their time, the engineers assumed that water was a magic elixir, and that to bring it to dry land was to ensure fertility. Furthermore, it was claimed that between 100,000 and 350,000 acres would be brought under irrigation. Only after completion of the Derby Dam did anyone suggest that the soils be subjected to experiment.²⁹ F. H. Newell, head of the Service, considered the matter quite controversial. Newell wrote in 1906 that he "could hardly defend" the testing of the project's ground.³⁰ The University of Nevada began work then that continued for generations in trying to develop ways of clearing the soil of salts or of growing crops in the alkali-impregnated dirt.³¹

Meanwhile, land-hungry farmers, promoters, or seekers for Utopia from all parts of the nation rushed into the Carson Sink Valley. All expected to find the garden as advertised in newspapers and pamphlets; they found conditions quite different. No information was available about what crops might be grown in a short season.32 Prospective settlers found, too, that reclamation homesteading was not a poor man's occupation. Minimum funds, estimated from three to eight thousand dollars, were required for clearing lands, building a home, buying farm equipment, paying Reclamation Service water charges, and day-to-day living expenses. The farmer could expect no return on his investment for at least two seasons.³³ Ready made housing was not available. Prospective residents were cheerfully told that except for a few nights at midwinter, a tent home would be comfortable enough and that local fauna would usually stay outside.34 And water, soil, and weather conditions continued to be either unknown or unfavorable, with wind, drought, and flooding as constant natural problems.

Many newcomers bravely began to work on desert reclamation homesteads. A number of the hardy and well-financed stayed the required years to repay water charges and irrigate land, and thus to receive patents and to become established members of the community. The weak or poor, if they stopped long enough to try to wrest a farm from the alkali flats, soon abandoned the land, leaving a shack and fence posts to encrustations of salt or alkali.³⁵

With water for irrigation short through dry years, work on the Lahontan Dam became important. Begun in 1911 and finished in 1915, the dam impounded the combined waters of the two rivers. Thus a more or less stable water supply for local ranchers became a reality. The lake and dam were not fully beneficial, however. Ranches in the area, previously productive, were spoiled by a rising water table. Drainage ditches only partially solved the difficulty; rising water meant increased salt and alkali, which in turn required expensive applications of chemicals to change the condition.³⁶ The little Soda Lakes, which had been recreation and business resources for decades, changed with rising water, spoiling both activities.³⁷ Winnemucca Lake's water disappeared completely after the 1920s and the place became a mud and alkali flat. Pyramid Lake, deprived of a part—sometimes all—of the Truckee River's flow, dropped dramatically. The decrease was due in part to the reduction in the river flow, in part to evaporation and other natural conditions.³⁸

In the 1920s, an engineer, a farmer, and a newspaper editor, residents of the project area, explained their difficulties and resentments about the program. Thomas Williamson, engineer, wrote in 1921 that "The expected transformation of the desert into a thickly settled and prosperous community has not kept pace with the engineering and construction." He rebuked the Reclamation Service for neglecting to coordinate physical with human resources. This, he wrote, had resulted in "financial failure to the government, a bitter disappointment to patriotic Nevadans, and a tragical [sic] disillusionment" to homesteaders. Williamson complained that the original plan had incorporated both social and civil engineering, but that the social engineering phase as he understood it had failed to materialize. Williamson blamed the bureaucrats for ineffective planning and for missing the fact that arid land farming was different from other varieties. Furthermore, he claimed (despite the lack of cynicism in representatives of the Service in Nevada), Director F. H. Newell's "heartless dictum" was that "only the third crop of settlers could be expected to succeed, that the first two unfortunates would try and fail but the accumulated results would enable the third to hang on." He laid the causes of the failures to excessive fees and other expenses connected with proving up on farmsteads.39

C. G. Swingle, a farmer and president of the Truckee-Carson Irrigation District, gave his critique in 1924. He also blamed the frustrations borne by residents largely on excessive costs and poor planning. Early estimates of \$14.56 or less for cultivating an acre of sagebrush land were too low; actual cost was as high as \$94.75. Too much of the project was built before works were needed. Swingle said that structures extended over "a territory which has never been brought into cultivation and probably never will be, but the charges . . . still stand against the project." The aborted dam at Tahoe had cost perhaps as much as one million dollars, he claimed. Swingle further charged that the Reclamation Service sold water rights it could not deliver. And the drainage system, failing to work, had to be built twice. Swingle concluded that: "To whatever extent the Newlands project is a failure, such failure is not necessarily due either to the lands themselves or to the settler but to the inexperience and inefficiency of those in charge."40

The editor of the *Fallon Standard* located still another source of difficulty, writing in 1924: "Practically every inch of real farm land with riparian water was taken up a generation ago. It was selected in many instances *before* Nevada became a state, and . . . naturally the best was taken . . . leaving the unwatered spots for a later generation to struggle and pioneer." Thus the politicians had had their profits, either in money or in power.⁴¹ Lem Allen and Francis G. Newlands had made their arrangements for the pioneers of a later generation, surely without prescience to know how many tears would water the Truckee-Carson Irrigation Project.

Epilogue

The Newlands Project was not necessarily a complete failure. It helped western Nevada and particularly Churchill County to establish a relatively stable agricultural industry. Lahontan Dam and reservoir provided water storage, electric power, and recreation to local residents. The problems connected with the project remain, however. The soils of the area are still inadequate to sustain the diversified agricultural economy of Francis G. Newlands's dream. Thomas Means's words of 1906 could almost describe modern conditions: "The agriculture . . . practiced in this valley has been largely growing alfalfa for feeding stock. . . . Also a limited amount of produce is raised for use locally."

The population of Fallon, the county seat, has remained low (under 3,000); Churchill County's population is probably still under 9,000. Only the building of a Naval auxiliary air station during World War II brought a new infusion of population and government money. The amount of irrigated land in the project has seldom reached 70,000 acres. Complaints in private conversation and public forums remain about as they were in the 1920s when the Bureau of Reclamation gave up its operation of the Newlands Project to a local board: waste of water, damage to lands, inadequate assistance from the government, and an economy restricted by conditions beyond the influence of local citizens. The stock and dairy businesses are good, however, and many people find an adequate income from them. Few tears water the Newlands Project today; residents have learned to live within the limitations imposed by conditions they once thought to engineer out of existence.

Notes

1. William E. Smythe, *The Conquest of Arid America* (New and revised edition) (New York: Macmillan Company, 1907), p. xii.

2. Mary Ellen Glass, *Water for Nevada: The Reclamation Controversy, 1885–1902,* "Nevada Studies in History and Political Science," No. 7 (Reno: University of Nevada Press, 1964).

3. Reno Evening Gazette, October 6, 1890, to October 13, 1890. The paper reprinted the "address" serially for a week.

4. Cecyl A. Johnson, "Pioneer History of Life in Churchill County, Nevada," typed transcript of an oral history interview conducted by Mary Ellen Glass for the Western Studies Center, University of Nevada, Reno, 1966, p. 117. University of Nevada, Reno, Library.

5. Report of the Proceedings of the Nevada State Irrigation Convention Held in the Opera House, Carson City, Nevada, October 9, 1891 (State Printing Office, 1891), p. 11.

6. Johnson, p. 96.

7. Statutes of Nevada, 1903; Nevada State Journal, June 19, 1904, p. 3. The law entwined water rights with land rights to preclude lawsuits over water. Francis G. Newlands reportedly wrote the statute.

8. Samuel Post Davis, ed., *The History of Nevada* (Reno: The Elms Publishing Company, 1913), II, 746-750.

9. See for example, *Nevada State Journal*, March 6, 1955, p. 8. The writer noted that the fishing at Pyramid Lake was good "for the first time in a quarter century." The lakeshore, he remarked, was populated by a small Indian colony and a dude ranch.

10. Reno Evening Gazette, Nevada State Journal, June 17, 1905. Special editions for the dedication of Derby Dam.

11. Churchill Standard (Fallon, Nevada), February 6, 1904, p. 1.

12. Stanley Marean, "The Life of Stanley Marean, Reclamationist," typed transcript of an oral history interview conducted by Mary Ellen Glass for the Western Studies Center, University of Nevada, Reno, 1966, p. 8. University of Nevada, Reno, Library.

13. "Instructions for reclamation work on Farm Unit C, Sec. 6 T18N R29E," ms. by W. H. Heileman, acting engineer of soils, Truckee-Carson Irrigation Project, May 26, 1905. Truckee-Carson Irrigation District papers, University of Nevada, Reno, Library (to be cited hereafter as "TCID papers").

14. W. S. Russell to Leon H. Taylor, May 24, 1905. TCID papers.

- 15. Nevada State Journal, May 21, 1903, p. 1.
- 16. Churchill Standard, November 20, 1912, p. 1.

17. Churchill Standard, July 16, 1913, p. 1; Fallon Eagle, September 9, 1944, p. 1.

18. U.S. House of Representatives, 60th Cong., 1st sess., Doc. 46, "Relief of the Paiute Indians Owning Allotments Within Truckee-Carson Irrigation Project." (1907).

19. Thomas H. Means to F. H. Newell, August 12, 1907. TCID papers.

20. Unsigned memorandum in TCID files [1907].

21. F. B. Headley and Cruz Venstrom, "Economic History of the Newlands Irrigation Project, 1912–1929," University of Nevada Agricultural Experiment Station Bulletin No. 120 (October, 1930), pp. 23–24.

22. Nevada State Controller, Report, 1903.

23. Ibid., 1907. The first county seat was at Stillwater, northeast of Fallon.

24. Churchill Standard, January 30, 1904, p. 1.

25. Ibid., March 18, 1905, p. 1.

26. Thomas H. Means to B. T. Galloway, Washington, D.C., March 8, 1906. TCID papers.

27. Thomas H. Means to Francis G. Newlands, March 29, 1906; Newlands to Means, May 25, 1906. TCID papers.

28. Thomas H. Means, ms. report of crops and agricultural census, November 9, 1907. TCID papers.

29. Churchill Standard, June 24, 1905, p. 1.

30. F. H. Newell to G. K. Gilbert, University of California, March 29, 1906. TCID papers.

31. Carl S. Scofield, C. Lloyd Moon, and Elmer W. Knight, Subsoil Waters of Newlands (Nev.) Field Station, "U.S. Department of Agriculture Technical Bulletin No. 533" (October, 1936). See also many other similar bulletins, especially, Charles S. Knight, The Sugar Beet Industry in Nevada, "University of Nevada Agricultural Experiment Station Bulletin No. 75" (1911); F. B. Headley and Vincent Fulkerson, Agricultural Observations on the Truckee-Carson Irrigation Project, "U.S. Department of Agriculture, Bureau of Plant Industry Circular No. 78" (1911).

32. Churchill Standard, September 23, 1905, p. 2. For an account of utopian developments, see Wilbur S. Shepperson, Retreat to Nevada: A Socialist Colony of World War I (Reno: University of Nevada Press, 1966). See also promotional materials (other than newspapers): Reclaimed Nevada: The Truckee-Carson Project (Reno: A. F. Price, 1911); Churchill County, Nevada, and the Newlands Irrigation Project (Fallon: Churchill County Chamber of Commerce [1927]); George Wharton James, Reclaiming the Arid West: The Story of the United States Reclamation Service (New York: Dodd, Mead & Co., 1917), pp. 217–233; Smythe, The Conquest of Arid America.

33. Churchill Standard, September 22, 1906, p. 2; Reno Evening Gazette, December 31, 1921, p. 1.

34. Thomas H. Means to F. C. Farwell, July 23, 1907. Folder, "Information Requests," TCID papers.

35. To receive his patent, the entryman was to repay charges for water and irrigate at least one-half of his homestead; this took about ten years. A drive through the project area, especially in the Soda Lakes district (west of Fallon) reveals many abandoned homesteads. See also transcripts of hearings on defaults. TCID papers.

36. Johnson, p. 159.

37. Ibid., pp. 96-99.

38. Sessions S. Wheeler, *The Desert Lake: The Story of Nevada's Pyramid Lake* (Caldwell, Idaho: Caxton Printers, 1967), p. 122.

39. Thomas Williamson, "The Newlands Reclamation Project," Reno Evening Gazette, December 17, 24, and 31, 1921, and January 7, 1922.

40. Fallon Standard, January 9, 1924, p. 1.

41. Ibid., p. 2 (editorial).

A Place of Refuge

by Juanita Brooks

Editor's Note: Historians of Nevada have long surmised that a party of Mormons entered Meadow Valley near the present site of Panaca, Nevada, in the 1850s, at least a half-dozen years before the first permanent settlement was established there in 1864. Mrs. Juanita Brooks of St. George, Utah, who has worked for many years in the records of the Latter-day Saints in southern Utah and Nevada, has now offered the *Quarterly* substantial verification for that assumption.

In 1858, the year after the "Mormon War" in Utah and the Mountain Meadow Massacre not far from St. George, the leadership of the L.D.S. Church was deeply concerned about the possibility of persecution by the United States government. In the spring of that year the Church sent out a mission from southern Utah to seek "A Place of Refuge" in case its leaders might have to flee once more—this time from Salt Lake City. The "Place of Refuge" was never needed, but the search for it led to the first cultivation of land in the region that later became known as Meadow Valley. The Nevada Historical Society is grateful to Mrs. Brooks for providing the documentation for this event.

Backgrounds for This Expedition

BEGINNING soon after their arrival in the valley of the Great Salt Lake, Mormon leaders sent out exploring expeditions to locate sites for future settlements. These men were to assess the natural resources of water, arable land, timber, and mineral deposits, and estimate the number of

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families each could maintain. As a result, small colonies were planted all along the Wasatch Range, extending south to include Parowan, Cedar City, Harmony, Washington, and Santa Clara. From these places, occasional exploring groups were sent out east and west.

Most of these expeditions followed a set pattern: six to eight horsemen with pack animals or a wagon for camping gear and supplies would leave in the late summer or fall, when work on the farms was slack. But the whole tone of this one was different, due to the pressures attending the short-lived "Mormon War."¹

In 1857, Brigham Young was celebrating the tenth anniversary of his arrival in the valley when messengers came to say that an army was on its way to put down a rebellion in Utah. His response was instant: "With God's help, they shall NOT come here!"² A virtual declaration of war followed.

Word of the hostile force about to invade their country went out by express riders on horseback. Members at Fort Bridger and Fort Supply were to burn their homes, hay, and grain stacks, and come in to the city. Carson Valley saints were to sell their property if possible, or leave it if they must. Their leaders should secure powder and ammunition from the coast and bring it in all haste.³ The colony at San Bernardino should come at once; missionaries in all areas should do likewise.

With communication limited to travel by horse, it was mid-August before word reached the outlying areas. Meanwhile, within the Territory, every man old enough to carry a gun was mustered into service, armed, and drilled. George A. Smith, counsellor to Brigham Young, visited the southern settlements preaching war and urging the people not to sell food to passing emigrants, for there might be a long seige. All were determined to fight to the last man in defense of Zion, and to muster all their available resources.⁴ This included the Indians.

For three years Mormon missionaries had been laboring with the Indians of the south, giving them gifts of tools and clothing, and persuading them that the Mormons were their friends while the "Mericats" were their enemies. Now the military was organized, with William H. Dame, Colonel Commanding; Isaac C. Haight, Lieut. Colonel; John M. Higbee and John D. Lee, Majors. Every group was duly organized, and every man active.

A company of emigrants, most of them from Arkansas, passed through the country while the fever of war was at its height. The Indians had been gathered to harass them and came in such numbers as to endanger Mormons as well as emigrants. Messages were carried from Col. Dame, after consulting with Lieut. Col. Haight, and in the end Mormons and Indians cooperated to wipe out the entire company, with the exception of eighteen young children.⁵ This massacre at Mountain Meadows was a blot not to be erased.

In the meantime, Mormon horsemen harassed the army, burning three supply trains with 300,000 pounds of food on board. Porter Rockwell

drove off 800 head of cattle, and a band of horses. Emigration Canyon swarmed with Mormon infantrymen building bastions and barricades.

On September 8, Stewart Van Vliet, an emissary from the army, met with Brigham Young. He was impressed with the spirit of the Mormon leader and also with the preparations for war that he saw everywhere, so he carried word back that the Mormons would resist with all their power.⁶

Brigham Young had said that God would fight their battles for them, so he may have considered the winter storm which trapped the U.S. Army on October 17 as God's direct intervention in their behalf. Before the storm subsided, more than 3,000 head of horses and mules had perished. The army was stopped in its tracks until a full quota of horses and mules could be brought in from Santa Fe.⁷

With the army effectively stopped for at least six months, the Mormon leaders relaxed and called the young men in from the mountains, leaving only a few guards. Horsemen and footmen alike were back home by mid-November, all of them ready to join in a social life which included balls, parties, and theaters. High spirits and good cheer were everywhere. They had been spared so far; surely God would come to their rescue again.

But word of the massacre at Mountain Meadows had spread abroad. Mailmen and travelers carried the dreadful news to California, and it was quickly scattered throughout the nation.

This word changed everything; it put the Mormons on the defensive. John D. Lee, in Salt Lake City to attend the Legislature, returned with instructions to locate a place in which Brigham Young and his family could be safe. This was in January, for as soon as Lee arrived in the south, he wrote:

Monday, Feb. 8, 1858

I started south acrding to my appointment to locate or Point out the location intendd to be made by Pres. Young for a resting place for his famely & that of the 1st Presidency. Encamped at the grapevine springs. dis. 18 mi.⁸

For the week following, Lee's entries show that he was scouting the area for a suitable haven. Jacob Hamblin went with him for a day or two, and others were evidently consulted on the problem. All knew of the desert ahead; but none had yet explored the area to the east, where Pipe Springs would be the most promising spot.

In Salt Lake City, Hosea Stout made a record of the discussion in the Council Meeting attended by the First Presidency, Twelve Apostles, and Legion officers, on March 18. President Young now suggested that:

If we whip out and use up the few troops at Bridger will not the \ldots sympathy which is now raising in our favor in the states, be turned against us. Whereas if we only anoy and impede their progress while we "Burn up" and flee, the folly and meanness of the President will be the more apparent and he and his measures more unpopular &c.⁹

The new plan was announced in the meeting at the Tabernacle on Sunday, March 21, and a circular advising the military of the change in policy was sent to John D. Lee. He then had to muster all the teams and outfits that he could and bring them in to headquarters to assist in the mass move. He spent a busy week getting the train on the road, and accompanied them as far as Parowan, where he

spent the night at Pres. W. H. Dame, who had Just returned from G.S.L.c. with instructions from Pres. B. Young to raise a co. of from 60 to 70 men, 20 Horsemen, with seed, grain, tools, &c., to Penetrate the Desert in search of a resting place for the Saints. Said he hoped the co. would find a Desert that would take them 8 days to cross, but was affraid that it would take them only 3 days to cross it. Co[u]nting this is the 4th attempt & if you can't find the Place, I will go myself when I get to Parowan.¹⁰

Such a message brought immediate results. By April 23 the wagons were gathering at Iron Springs, thirty miles from Parowan. The expedition historian, James H. Martineau, was an excellent record keeper. He had been adjutant to Col. Dame in the army, and his secretary in the ward. He listed the names of all who were present on April 25, dividing them according to their home towns, beginning with Beaver, Parowan, Cedar City, and other scattered ranches. He says that he does not have them all—the reason probably being that the group from Fillmore had been delayed by a snow storm in the mountains between that town and Beaver.

Fortunately, Volney King was keeping a diary, and it gives the details —perhaps not so accurate in spelling and punctuation as that of Martineau, but still an excellent record:

About this time [May, 1858], it was thought best to explore the country on the west of us & what was called the White Mountain Mission was inaugerated. & the one to lead it from Millard County was Orange Warner & young son M W Warner who was so eager to go that he ran away and overhauled the train in which Wm E Bridges, Thos Evans & Thos Evans Jr the latter being Tailor for the company, Joseph Stewart from Utah Co, John Cavannah, John Neil & others Ransford Colby, John King, Henry Robison, Wessley Dame were in the vanguard with their Indian guide Mashoquab. In the main Co was Mr. Edwin Twitchel of Indian Creek & others from Beaver & Parowan, Mr S. P. Hoyte making a quick trip out their & back.¹¹

Martineau kept a careful summary of the miles traveled each day, the condition for feed and water, and the general direction. It was supplemented by a detailed map which, while small and dim, was accurate. They made eleven camps after they left Iron Springs, staying at some places where there was feed and water, while in other places they almost perished of thirst. This Guide for the Desert Camp was prepared partly for Dame's report to headquarters and partly for the use of others who might want to travel in the area.

Some thirty-two years later, writing under the pseudonym Santiago, he published his memories of this trip. While colored somewhat by time and re-telling, they make thrilling reading.

Guide for the Desert Camp

- From Meadow Valley to Bennett Springs...... 12 miles sufficient water for 10 acres of land, feed, grass and wood plenty—cedar for fuel

- From Desert swamp to Desert Swamp springs...... 17 miles some farm lands here, tho' very high & cold heavy alkali beds all round—
- The End of the Wagon Trail.

Pack Train Explorations

Johnson's Lake Country, accessable for wagons good water & farm lands, sufficient to support 2000 people—18th May, occupied by a large number of Indians, farming, wheat—Leaving out at that date—they have squash, corn & water melons—they invited us to come & settle on a free land—this place within 2 days ride of the crossing of Muddy, California road—

Golden Gate Country.

Water entirely in the Kanyons, sufficient to water 40 acres—the Kanyon & low hills on each side covered with rich bunch grass sufficient for several thousand head of cattle [page 3] in the summer.

Eureka Creek Country.

High and cold, tho richly covered with grass for stock—abundance of water—extent from Willow Springs to Ruby Valley 72 miles

Pack Trail

Willow springs by Pockage Cave, Pockage Pass spring cricket spring, richly covered with bunch grass—small springs, simply for herding purposes, no farming—Cave spring, a rich herd ground, & water for 5 acres of farming land.

Searching for the "Place of Refuge," As Told From Memory by the Expedition's Historian

". . . But while thus holding the invaders in check, President Young determined to provide a place of refuge in which might securely rest the

aged and infirm, the women and children, while their husbands and sons might oppose to the last, if necessary, the army of invasion. With this in view he called to his side Colonel W. H. Dame of the Iron Military District, and instructed him to take a strong party into the deserts of what is now Southern Nevada, and there find a place of refuge; some valley which should be surrounded by a desert requiring a five day's march to cross. He reasoned that while small parties might be able to cross such a thirsty waste with comparative safety, an army would find it impassable, and the larger the force the more impracticable it would be; that while a few men might find enough water in a small seep or water-hole to allay their thirst, a thousand men and animals would find it totally inadequate; . . .

"Colonel Dame returned to Parowan and immediately collected a party of sixty men from Paragoonah, Parowan, Cedar City, and Harmony, with the wagons, horses and mules, provisions and camp outfit sufficient for a six months' exploration. . . . Those who composed Colonel Dame's party fully expected that when they should leave their homes they would never see them again; that their homes would be destroyed during their absence, and their families be brought to them in the desert. Hence they took with them all kinds of seeds and needful agricultural and other tools and implements. The writer, who was one of Colonel Dame's party, was county and probate clerk, the Church recorder for Parowan ward, and previous to his departure, placed the records in his charge in safety thuswise:

"Taking his wife's stoneware churn, he placed the records in it, sealing the lid on with melted pine gum to exclude all moisture, and at night buried it in his corral, his wife being his only witness. He departed, feeling that the contents of the churn would be safe for many years to come.

"During the last forty years the writer has participated in many scouting and exploring parties, but does not remember any company better organized, in all respects, than this of which we speak. . . . There were sixty men, twenty wagons each drawn by two horses or mules, and each wagon had an extra horse, saddle and bridle. Two of each mess rode in the wagon, the third riding the odd horse. Thus each driver always had a man to assist in case of need, while the horsemen, twenty in number, served as front or rear guard, explored the passes ahead, hunted water or grass, and performed all kinds of detached service. Each wagon carried a water barrel, pick, shovel, axe, implements and tools necessary for the three men of that mess. . . .

"The company was organized, electing Col. Dame, president, J. H. Martineau, topographer and historian, Samuel Sheppard, chaplain, Nephi Johnson, chief interpreter, Ross Rogers, captain of the guard, and Anson Twitchell, sergeant of the guard, besides captains of tens, and Thomas Durham, chief of music. The camp was called together night and morning

for prayer, and Sunday was observed as a day of rest and for religious services.

"Traveling westward the party entered a desert land unknown to all of the party except one—a Mr Bennett late of San Bernardino, and a new member of the Church. He was one of a large party of emigrants from the "States" who went to California in 1849, most of whom perished of thirst and starvation—except seven in number, who survived to tell the fearful tale....¹²

"As we found many traces of the lost company, during our explorations in those deserts, it seems proper to refer to its sad fate in this article. . . . While crossing a low ridge, thickly clothed with cedars, we came upon an old wagon trail, with places here and there where the cedars had been cut away to make passage for the wagons; in that dry climate . . . these signs seemed not more than a year old instead of nine, as they really were. Mr. Bennett¹³ gave us the story around the evening camp fires, and as we followed the trail of the lost company for more than a hundred miles, and found pieces of wagons, rusted tools, wagontires, and bits of rotten clothing, it gave his story interest to our minds that time cannot efface, and keeps it still fresh in our memory. . . .¹⁴

"One night we camped without water, having had none since the previous day, nor did we know how far we might be away from any. Our situation was gloomy indeed. The next morning eight men, each armed with a gun and a shovel, started out to hunt for a spring, going towards a solitary mountain standing in the plain. Then they suddenly came upon a lone Indian, but no signs of water. His little wickiup of brush was there, and as he could not live without water, they knew there must be some not far away. At first he tried to escape by flight, seemingly terrified by the shovels, which he supposed to be weapons of war; but they headed him off at every turn and finally captured him. They made signs of friendship and gave him food, asking by signs for water. Reassured, he indicated that water could be had by digging holes in a dry, sandy gulch near by.

"A hole two feet deep was quickly dug as a test, and little by little the water trickled in. Overjoyed, the men quickly returned and guided the camp to the spot. What a priceless blessing is water! No one who has not had a similar experience can understand it! Twenty holes were quickly dug, and the tedious process of getting a drink began. Tedious process? Yes, indeed. A man sat beside each water hole, spoon and tin cup in hand and a pail by his side. When enough water was collected to fill the spoon, it was emptied into the cup, and when at last the cup was filled, it was poured into the pail; but it took a long, long time to fill the pail. So all that day, all the livelong night, and until the noon of the next day, men sat unceasingly collecting the precious fluid before each man and horse had a drink, and even then the horses had not half enough. . . .

"One day we saw an Indian at a little distance with an antelope upon

his shoulders, which he had snared. Having been without water for thirty-six hours, and none being in sight, we were naturally somewhat anxious to interview him, but he fled as soon as he saw us, still carrying his antelope. Three horsemen gave chase and pursued him a mile before he dropped his burden, and still another mile before he was surrounded. Much terrified and doubtless expecting death, he was pacified by a gift of food, and made to understand that water was wanted. He turned, beckoning our men to follow him down into a plain apparently devoid of water; but after going about a mile they suddenly came to a little brook about two feet wide and six inches deep, flowing in a channel five or six feet deep, and so narrow that its presence would be unsuspected a little distance away. This incident shows the great speed and endurance of these Indians on foot. It has been said they can run down and tire out a deer or antelope when once upon its trail, and from what the writer has himself seen, he would not say it is impossible.¹⁵

"... Our party was suffering for water, when we had the good fortune to find an Indian, who promised for a supply of food, to show us some, pointing, as he spoke, to the top of a mountain a few miles distant. A party of horsemen, supplied with canteens, as many as they could carry, went with him to find the spring. Upward we toiled for miles finding no rivulet or spring and we began to think he was deceiving us as he still pointed to the very top of the mountain, and we felt sure there could be no spring there. Arrived at the summit, the Indian lifted a large flat stone and disclosed a natural tank or hole in the rock containing about two barrels of pure, cold water. Lifting other flat stones we found several other tanks partly filled with water, cool and inexpressibly delicious to the thirsty, tongue-swollen soul. These tanks are filled during the season of rains and are then carefully covered for preservation. And to get a drink one must spend nearly a day in a toilsome trip up and down a high, rugged mountain.

"And here let me say a word about water. Our company had in abundance tea and coffee, and some California brandy, but in a desert land they cannot take the place of water to the thirsty—nothing can. . . . The beverage provided by the Creator cannot be supplanted by anything substituted by man. . . .

"While the main camp remained at Desert Springs, a party of eighteen horsemen was detached for a two weeks' reconnaissance of the surrounding country. . . While upon this trip, we learned of a large cave, and the Indian tradition concerning it. Camping not far from it, we visited and explored its interior about three-quarters of a mile without seeing any sign of an end. . . . To this day, no Indian will venture to enter its gloomy recesses. . . .^{"16}

Martineau's concluding paragraph is most interesting, in that it shows so clearly the coloration of events as remembered after more than thirty years. "After some months spent in exploration it was decided to open a farm in what we named Meadow Valley, in the north end of which a large spring of warm water issues from a rocky cliff. A dam was made in a canal cut about two miles long which conveyed the water to our field. Each company of three cleared and planted a plat of three acres, and were busy tending luxuriant crops, when word arrived that the war was over, and that President Buchanan had pardoned the Mormons for their alleged rebellion. Joyfully the company returned to their homes and families, and thus ended the White Mountain Mission. Santiago."

The Parowan Elders Record Book A¹⁷ says that a part of their members left on April 25, 1858, and remained until August 1. This included William H. Dame, James H. Martineau, and others of the exploring group. They remained until August 1, which made the entire trip three months and a week long. Other members filled their assignment and were home by June 29, 1858, so their time out was just over two months. What with making dams and canals and ditches, with clearing and plowing virgin soil, and planting the seed, there would be little time for "luxuriant crops." The fact was that as soon as the seed was in the ground and irrigated once, the men all turned their faces homeward, traveling now in smaller groups. Nor did a single person return to care for or harvest what matured, if indeed any did.

The sequel is found in the Archives of the L.D.S. Church under the History of the Panaca Ward in the Uvada Stake:

"In 1864 when the first permanent settlers came onto this ground, they found ditches and remnants of o her improvements made by the missionaries. Even some of the stubble and remnants of canals at the head of Warm Springs were found....

"William Hamblin, a frontiersman, was induced by the Indians to prospect around the mines in the spring of 1864. He located temporarily at the mouth of the canyon $2\frac{1}{2}$ miles above Panaca.

"Urban Van Stewart recorded that he plowed the first land that was broken in Meadow Valley, where they put in a small patch of wheat. No one ever returned to it. Six years later he led the first permanent settlers to the area.

"Early settlers included Francis Lee and family, his son Samuel and family, and a nephew, Samuel F. Lee, and four or five of his unmarried sons, George W., Francis C., Milton, Lafayette, and Arthur Lee, and a daughter and an Indian girl, who arrived on the sight [*sic*] of Panaca on May 6, 1864. There were 17 souls in all, with five wagons, stock, sheep, swine, and other domestic animals.

"After stopping at the Spring for two days, these first settlers of Panaca made a temporary location about one mile below the present townsite, and sowed wire grass on the corn stubble in the fields left by the Old White Mountain missionaries, and used the same ditches."¹⁸

In summary: This search for "A Place of Refuge" remains a classic

A Place of Refuge

example of the willingness of the Mormon laity to accept and carry out orders of their leaders literally, promptly, and without question. Therein lay the strength of the Mormon society, but also a great weakness.

Notes

1. For a good over-all account see Norman F. Furniss, *The Mormon Conflict* 1850–1859 (New Haven: Yale University Press, 1960). Also H. H. Bancroft, *History of Utah*, 1540–1886. Vol. XXVI (San Francisco: the History Company, 1889). Chap. XIX "The Utah War." pp. 512–542.

2. Some Mormon writers make this seem prophetic, since Brigham Young is quoted as having said, upon the day of their arrival, July 24, 1847, "If our enemies will give us ten years unmolested, we will ask no odds of them." This was ten years to the day, almost the hour.

3. Some of these express companies came near death in carrying out their orders. Most dramatic were the experiences of the group headed by Oliver B. Huntington and Peter Wilson Conover. Both men kept diaries, transcripts of which are at the Brigham Young University Library.

4. For a definitive study see Juanita Brooks, *The Mountain Meadows Massacre*, Stanford University Press, 1950, or Oklahoma University Press, 1963, Chap. 3.

5. Ibid. Chap. 5.

6. Bancroft, op. cit. pp. 505-509

7. Furniss, op. cit. pp. 116, 154.

8. A Mormon Chronicle, the Diaries of John D. Lee, ed. by Robert Glass Cleland and Juanita Brooks (The Huntington Library: San Marino, Calif., 1955). Vol. 1, p. 149, entry Feb. 8, 1858.

9. Hosea Stout, On the Mormon Frontier, Diaries of Hosea Stout, ed. by Juanita Brooks (University of Utah Press, 1964). Vol. 2, p. 654, March 18, 1858.

10. Mormon Chronicle, op. cit. Vol. 1, p. 159, Tues. April 13, 1858.

11. "Millard County, 1851–1875, The Diary of Volney King," Part 11. Utah Humanities Review. (Vol. 11, 1947) p. 265.

12. Santiago [pseud.] "Pioneer Sketches," The Contributor, XI, No. 7 (May, 1890) pp. 249-250.

13. William Lewis Manley, *The Jay Hawkers' Oath and Other Sketches*, ed. by Arthur Woodward (Los Angeles, California: Warren F. Lewis, Publisher, 1949), a brief biography pp. 28–29. "Bennett's Account of the Mountain Meadows Massacre," pp. 33–42.

14. The Contributor, XI, No. 8, pp. 296-297.

15. Ibid. pp. 250-251.

16. Ibid. pp. 298-299.

17. The Parowan Elders Record Book A was a part of the collection of handwritten records in the home of William R. Palmer, Cedar City, Utah. These have since been taken into the Library at 47 East South Temple, Salt Lake City, Utah. 18. Uvada Stake Records are in the office of the Stake Presidency at Enterprise, Utah.

Acknowledgment

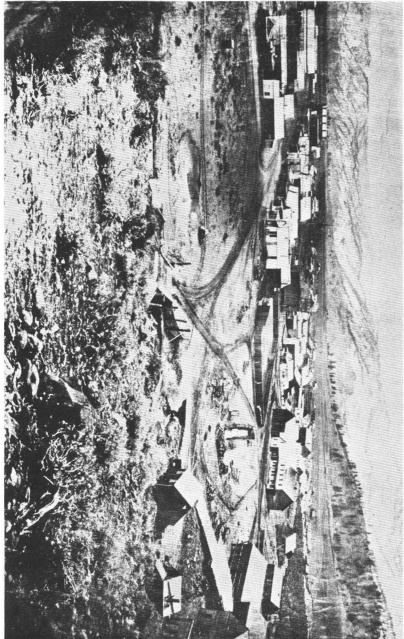
I acknowledge with gratitude the assistance of Mr. Todd I. Berens in this study. Mr. Berens teaches history at the Walker Junior High School at La Palma, California. Each year he takes a group of students out during vacation to follow some historic trails. With the "Guide to the Desert Camp" in his hands, and equipped with a jeep and camping gear, he followed the map to the end, and noted the points en route.

He also secured a more complete list of the participants from the L.D.S. Church records.

In addition, he sent me a copy of the early Frémont map which the Mormon leaders had studied in Nauvoo as they planned their trek west. This map shows an east-west range of mountains across the southern part of the Great Basin. Had Brigham Young still relied on this map when he ordered the expedition out? In view of the experience of the Death Valley group, it does not seem logical, yet he must have visualized a large oasis somewhere in the area.

Whatever the motives or the beliefs, it remains as historian Andrew Jensen said, "Never a greater outlay, with less returns."





The Yager Journals: Diary of a Journey Across the Plains

Part Five

Moon Light On the Great American Desert, Mid-Night Sunday 30.130 It is now after two oclock and our stock are resting on the sumit of the hill at the begining of the long pull through deep sand. We have just given our mules a little oats & they are now eating some green grass which we cut for them at our camp at Humbolt Slough. We have come about sixteen miles since dark, & from our rest at Boiling Springs. One mile brought us to the main body of the boiling springs. One of them I consider a great curiosity. It could be heard over one hundred yards. It boiled up through the crevisises of the rocks in a perfect foam, throwing part of the water four feet high & spattering it for several feet around. A column of steam rises from it equal to that from the escape pipe of a steam boat. There are quite a number of others close by of various sizes & depths. One surounded by large rock, about thirty feet long, twelve feet wide & six feet deep, & very clear; it looked more like a resivoir of hot water than a spring. Most of the springs are very hot, though they vary in temperature & a little sulphurous One of them was cool but brackish though thirsty stock drank some of it. Our train halted at this last named spring & watered all the stock that would drink.¹³¹ The hot springs here at least one of them is hoter than the first springs where we suped & rested if it is posable to be so. We made coffe & boiled potatoes for our mess at the first springs & the coffe & potatoes tasted well notwithstanding the sulphur in the water; so did other messes. The train that camped at the last named springs rather beat our train a little; they boiled a ham in one of the

springs. Though this is nothing strange for a whole hog or a cow might be boiled in some of them. There must be as many as thirty or forty hot springs at this point.¹³² The earth sounded, when the wagons run over it, like it was hollow. After our stock were watered our train passed on leaving the train before mentioned camped there. From that point on for a good part of the way to this hill I slept. The roads was good mostly level. Most of the time we were in a bottom apparently varying in width. Before we had reached this point the road almost touched the foot of the western rang of mountains. Our course, then, nearly south. A kind of dead or dry thorny bush, that 1 first took for greesewood,¹³³ dotted the desert. The desert differs from what I expected to see, at least the part I have seen thus far. I supposed it to be a level plain, but instead it has its hills and mountains as well as level plain.

Trucke River Sunday 30. We are at last on the Trucke. Leaving our moon light¹³⁴ rest after one hours halt we truged it on ever & anon stoping to let our stock get their breath. All along the road side was the bleaching bones of many a faithful ox, who made their last pull in that dreary desert. Rusty iron hoops the remains of many a keg or barrel that pilgrims that have gone before, threw "overboard" to save the "foundering ship", & the iron hub bands & other iron parts of a wagon,135 marked the spot where the hopeless pilgrim, in days gone by, abandoned their "unlucky ship" to the desert wilds & the proweling wolves. All along our rout from where we touched the South Platt, thus far, are the bleaching bones & the rusting wagon irons that mark the spot where many an ox pulled his last, where many a "ship" "went down" & where the prospects of many a longing & weary forty niner & of latter days, was blasted. The greatest quantity of bones that I have seen any where is on the South Platt. The hides of many of them, "Fallen heroes" of "49", are still in a state of preservation, around their bones. There are also the heads & other bones of a great many buffalo along the same river. Pilgrims take advantage of these bleaching bones, writing their names, where from, & where bound, on them, droping notices to friends behind, so that those friends might know when they were at certain points & how far they are ahead; & others write their names for amusement & past time Reading these many names & notices is of some interest to the pilgrim as he trugs along. We got over the sand¹³⁶ at least, after six miles of heavy sand, making the Trucke¹³⁷ by between seven & eight oclock this morning, when we halted for breakfast The Trucke is a beautiful mountain stream with clear cool & pure mountain water, which is made by the melting snows. It is about the same size of Green River, runs rapidly over a rocky bed like Green River. Larger and taller timber on this river, than any I have notced from the Missouri River thus far; they are cottenwood. There is also an undergrowth of willow and other kinds along its banks. Part of Louis' train was camped at this point. After breakfast & plenty of rest we forded the river & going up the river we recrossed & found our selves camped at this point. Our camp is in the midst of bushes & the grass which is tolerable good, is in scattering patches among the bushes. About all the grass along this river is taken up by ranchmen. There is one ranch opposite where we breakfasted on the river this morning, which is partly cultivated I noticed corne & some small grain. We passed several ranches between that one & this camp that was some cultivated. The Trucke runs about twenty miles below here spreads out in a basin, called Pyramid Lake, & sinks. A lot of Piutes men & squaws viseted our breakfast camp.

Camp Up Trucke Monday 31. We remained all yesterday evening at Camp Trucke River & last night. Seven wagons of us left this morning seven remaining. Crossing the river.¹³⁸ We we traveled up the river three & a half miles & then turned off to the right up in to the mountains & winding around & between peaks over sidling places, then a long rocky decent at first steep but afterwards gently slopeing found us on the banks of the river & at camp seven miles from our late camp. The first three miles was mostly heavy sand, & most of the remainder was short ups & downs. The latter part was rocky. At camp Trucke River we had rosting ears & new irish potatoes. The rosting cars was too hard to be good. We paid four bits per doz for the corne.

Camp Brown Bluffs, Evening. Leaving noon camp, we left the river, ascending into the mountains again. One mile found us on the bench next to the river again, then riseing up on the side of the mountain & down on the bench again, one half mile, then one & a half miles to a ranch & small field of grass. One mile more to Brown Bluffs on the right hand side of the river. Brown Bluffs is a massive raged cliff of shivered rock, melted & run together & then burnt to porus cinder. It can be easily broken apart & is crumbling away yearly. Part of it is as red as brick by the main body is a redish brown. It rises almost from the waters edge, making the most dificult place our wagons have had to pass over on the whole rout. The first dificulty is passing a point of rocks, that makes it necessary to run partly in the river. The river being deep next to the rock makes it quite dificult to pass the rock, without capsiseing the wagon in to the deep river. The next dificulty is in ascending a short but very steep place & pass over some large rock without turning over or breaking down a wagon. By spending a little time in improving the bad places, & very slow & careful driving, with the aid of hands at the wheels in pushing & holding back, we succeeded in geting all the wagons over safely. One mile farther & riseing a hill to the mouth of a narrow kanyon, we camped. The road this evening has been rocky nearly all the way. By driving our stock across the river, we succeeded in geting a little grass for them on a willow & grease wood point above camp. I have seen but little else but sand & grease wood & some other thorny growth on the Trucke; there is not much bottom. There is much more bench than bottom, but it is rocky, uneven with sand mounds and ridges. There is

scarcely any grass and what there is, is taken up. The mountains on either side & the rock in the valley are of a variety of collors, some white as snow, some red, some brown & some black & shades of these and other collors; some granate, some quartz & some of other kinds, all shivered & mostly burnt to cinder. The various shades of the lofty peaks some red like massive brick kilns, all shivered in fragments yet held together, yet crumbling away furnishing a subject for the chemist, geologist & philosipher. I noticed glass ore something similar in the crevices of a bluff of brownstone on the river above our noon camp. I suppose it melted & run from the rocks when they were hot, & cooled in the crivices. It had a green appearance like if there was coper in the rock. We had a shooting match with pistols down on the river; some boys also shot across the river at a kiota¹³⁰ but missed it.

Little Meadows, Tuesday, Noon, Sep 1st. We are now at what is called little meadows.¹⁴⁰ We left our late camp not as early as we wished, on account of the dificulty of crossing the river to our stock. Many tried it but failed owing to the strong curent. Entering the kanyon one mile & a half of ascending found us on the sumit of a lim bluff or divide. This bluff looks like lime mixed with pebles & is soft & can be broken with the fingers. The ascent over this ledge is short but very steep, steeper I think than any place I have attempted to pull our mules over. The bluff is worne by travel over it untill, in addition to its steepness, its sides are covered with a thick coat of ground up rock. This ledge can be seen croping out on both sides of the road. Three quarters of a mile of decending, found us at the foot of another hill. One mile of very rocky road over the hill found us in the valley again at Little Meadows One mile & a half of sandy road, but not heavy up the river, found us at noon camp on the bank of the river, at the uper end of an enclosed meadow We have some good grass for our stock by driving in to willows across the river. Snow in sight on a distant range of mountains141 in the west.

Camp On A Sand Bar Evening. Leaving noon camp we continued up the river one mile to a ranch, three more to another ranch, then turning up the hill to the right, leaving the river, we entered a kanyon; two miles more, and decending a graded road down a hill, found us on the river again, & camped for night. Our camp is on a bed of sand and gravel amongst the cottenwood trees. We found grass enough for our stock about a mile below camp on the river. At all these ranches is enclosed grass that can be pastured by paying so much per head. At the last ranch we passed we were asked twenty cents per head. The train we left at Boiling Spring caught up & passed us at Camp Up Trucke & we passed them camped at the ranch where we left the river last. Some of our boys made a raid on a patch of rutabages just after leaving noon camp. This evening our mess had some fine rutabago supe. Our mess & Mr. Daniel Duncans have been consolidated from Camp Humbolt Slough to the present. It is now night and the emigrants that have not retired to their humble bunks & palets, are gathered aroun a camp fire discusing the prospects & rejoicing that their journey is nearly at an end. The rock on the mountains was mostly brown I noticed timber in places on the mountains.

Verginia City Friday Morning 4. Leaving Camp On a Sand Bar Wednesday morning 2d. A mile & a half brought us to the ford and ferry.¹⁴² As the ford was quite rocky & we was offered the ferry free, we crossed our train on the ferry. About one mile & a half more brought us to the lower end of Big Meadows Traveling up the left hand side of the meadows then leaving Big Meadows & Trucke River to our right & riseing over a dry sage brush ridge we decended into the lower end of Steam Boat Valley where we camped on Manns Ranch close to his house. Big Meadows is the largest & finest piece of grass land on the Trucke. Steam Boat Valley is also a fine piece of bottom land. There is some alkli in both Steam Boat Valley & Big Meadows. Steam Boat Valley takes it name from a spring¹⁴³ in the uper end of the valley. Next morning Thursday 3d about a dozen of us with a couple of mule teams ours and another started for Verginia City About a mile brought us to the mouth of a kanyon,¹⁴⁴ where we commensed to ascend the mountains having the valley on our right. From this point the remainder of the way the road is graded & is a tole road. About four miles more, of winding through the mountains & we reached the sumit; decending about three miles and we found our selves in a kanyon at the first watering place & at a ranch.¹⁴⁵ At this ranch there are two springs the one above the ranch or house is fine water On our way down from the sumit I saw several ledges of rock different from any that I have ever seen. They were stems of rock closely fited together standing nearly on end & where they are broken they resemble a brick killn partly fallen down. Nearer the sumit I noticed a ledge on the same order but larger. We halted at this ranch and fed. This seams to be a kind of wood ranch or depot. We bought hay for our mules. About seven miles more ascending most of the way, passing a number of ranches houses or hotells. We also passed some mexicans packing wood out of the mountains on mules. We found our selves at a well at the foot of a hill. After watering our stock here we ascended the hill to the tole house,¹⁴⁶ the house being a little down on the other side. We paid one dollar tole for two mules & wagon. Here we came in sight of the out skirts of Verginia City. Decending a grade, ascending another & turning obliquely to the right around a point the great city of gold & silver came in full view.147 It is situated unlike any other city I ever saw. It is situated on the steep eastern slope of Davidson Mountain, the main streets runing around the mountain northerly & southerly, extending casterly down into a gulch or kanyon. The side of the mountains is taped with numerous tunnels, especialy on the cast slope of Davidson Mountain in & over the city. The noise of quartz mills¹⁴⁸ never cease day nor night on sunday as well as other days The streets & side walks are crowded all day long,

the streets with teams from a two horse wagon to a ten mule or horse team or an ox team of five or six yoke loaded with wood hay barley flour merchandise lumber fruit quartz rock &c all crowding & cursing; on the side walks a mixture of men & wimin but very few wimin, Spaniards, Mexicans, Chinamen, Americans, Dutch, Irish, French, Chillians, Castilians, Swis Canachers, Negroes & Indians; in fact of almost every race & people on the face of the earth, teamsters, merchants butchers, ranch men, brokers, bankers, miners, stock holders, emigrants with their raged hom spun & alklied visage, all mixed up crowding along. On the side walks were fruit stands covered with fine fruits from California, aples grapes peaches pears plums cherries mellons &c. Most all kinds of fruit for a bit¹⁴⁹ a pound or over And the butcher shops hung veal muton beef pork &x, often guted but not skined, a whole beef hanging up with the hide on, numerous whisky shops & gambling houses, billiard saloons &c It appeared as if half of the town was places of amusement of revelry & drunkenness. Every thing was in a complet stir. Stages thundering along, great ponderous freight & quartz wagons with from ten to twenty thousand pounds upon them drawn by fine large mules with bows of bells extended over the hames¹⁵⁰ which keep up a continuel jingling The finest teams & the largest & finest wagons I ever saw exceeding any I ever saw in the government service. The town is improving rapidly, the carpenters hatchet is heard in every direction in fact I never saw as many houses in course of construction in one town at the same time The houses are mostly frame but there some very large brick houses & many building Resurants & hotels are thick. Fifty cents per meal is the common price. Last night we were on the streets; they were crowded with men, in fact there seamed to be more on the streets than in the day All the different places of amusment & revelry were open & lighted up & made as attractive as posable, all kinds of gambling houses bar rooms billiard saloons "hurdy gurdy" or dance houses, in fact from the most respectable place of amusement which would hardly be considered a good place to frequent in the states, down to the lowest sinks of hell, were all in a perfect blaze. Music, string & brass bands, fife & drum, fidleing & dancing resounded in every direction; drunken men yelling & curseing through the streets. it appeared as if the whole city was on a bender & a general festival I rambled about the city to a late hour & then returned to our wagons & when I laid down to sleep the city was still in a blaze of revelry. To day I spent strolling about town looking at the curiositys, listening at the thunder of quartz mills & the confused noise of business. quartz mills in the city. & including Gold Hill & Silver City There are mills. Gold Hill & Silver City might be considered a part there are of Verginia City especialy Gold Hill. They are all along in a row, beging with Verginia City, going in a southerly direction, next Gold Hill & then Silver City. From the center of Verginia to Gold hill is miles¹⁵¹ & to Silver City miles One traveling from Verginia to Silver City, the houses being scattered along, would hardly know he was out of one town before he was in to another. The population of Verginia City Gold Hill & Silver City included is about fifteen thousand; years ago it was only a bout . The Comstock Ledge is the main ledge. Gould & Curry Mineing Stock is worth about five thousand dollars per foot,¹⁵² the Ophir about two thousand & the Savage about three thousand; they are the richest at least the highest priced per foot in the Washoe Mineing Region.

Galena¹⁵³ Washoe Co. Nevada Teritory Tuesday 8. We left Verginia City on the morning of the fifth, returning to our camp in Steam Boat Valley. On the morning of the sixth we left Camp Steam Boat to camp no more as a train but every one to shift for him self. Our train had already dwindled to but few wagons we ceased to keep camp & stock guard while in the Humbolt Mineing country. There was no camp or stock guard stood from Camp Humbolt City on The last I saw of Petersons train was near Lancaster the last time that we camped near them was at Camp Hay Meadows on the evening of August 20th. Cap Peterson preached in our camp that night. The last we saw of Louis or any of his train was at our first breakfast on Trucke River. Going through Steamboat Valley miles¹⁵⁴ found us at Steamboat Springs. Steamboat Springs are hot springs. boiling up from long cracks¹⁵⁵ in the rock on a high bench. Before reaching the springs we could plainly see the steam riseing from them like from a steam mill or salt works. The cracks in the rock run the same direction & appear to have been bursted open by an earth quake A kind of crust like cement or melted lava is thrown up from these springs & covers the whole bench; some of it is very hard, dificult to break. We nooned at these springs. The water was runing from but few of them at the time but a scalding steam rose from many & we could hear the water boiling like an imence cauldren beneath us, & by looking down in to some of the gaps in the rock we could see the water foaming & dashing about furiously. Others boiled over & run off. Some boil very erregular by fits & spells; some of them sometimes throw the water from forty to sixty feet high. Some of them boil over at one season & some another. The springs ar a half mile long. The water from these springs is as hot as water can be made After the uper end of the springs there is a hospital batheing establishment & hotel The water is conducted from some boiling springs close by to the establishment These two springs near the hospital are very remarkable ones throwing the water about furiously. The proprieter E. P Ellis charges twenty five dollars per week board medicl attention &c. Leaving the springs we entered Pleasant Valley a small narrow valley with some pretty ranches following up Steamboat Creek & crossing it we ascended the hill (miles)¹⁵⁶ between Pleasant & washoe Valleys. Here the train seperated again our wagon a man & wife & two children & four other men my self included turned to the right, the rest of the train went over the hill in to Washoe Valley to Washoe City.¹⁵⁷ There was many a

shake of the hand when we seperated. We decended in to Allans Kanvon¹⁵⁸ to the new quartz mill now being built by Avery & Co known as the Manhaten Mills¹⁵⁹ Here there was another seperation Mike Mr. Bronough & family stoped. We crossed the kanyon & Steamboat Creek. This kanyon connects Pleasant & Washoe Valleys. Ascending the west hill four miles more found us at the little lumber town of Galena¹⁶⁰ in the pine timber. Here was three of us Wade Bogges. Mordica Frazier or "Dock" as he is called, besides my self. The whole vilage came out to look at us. We felt like we were in the wrong place & I expect we looked like it. We drove our wagon under some trees near a shanty belonging to Walton & Co Charcoal burners & unhitched our mules & fed them hav. We cooked our suppers of midling¹⁶¹ meat & ate it & some scraps of coald flour bread which was our first super at the end of our pilgrimage. Next morning Monday 7th we commensed in partnership to cut fifty cord of wood for Walton & Co. for one dollar and a guarter per cord. We had to make a few purchases to make out a cooking "kit" We borrowed a frving pan from Walton bought an oven for four dollars, three tin plates & three tin cups for twenty five cents apiece & we had an old coffe pot which made our table & cooking utensils complete Galena is on the side of the Siere Nevada Mountains. Steamboat Creek runs through runs through the town. There is one saw mill which runs by water belonging to Mr. Alfered & one saw mill that runs by steam at the uper end of the town on the creek & there is a lath & shingle mill at or near the last named mill that runs by water Above this about a mile is another steam saw mill on Steamboat Creek, A quartz mill that belonged to Alfered, that was situated a short distance below his saw mill was burnt down this year. It run by water also. There is one store here, several drinking houses & billiard saloons A couple of hotels. The store was kept by Straus a Jew. Wade went down to Manns ranch with the mules & Dock & I commensed cuting wood. This morning all three of us made a full day We cut the limbs from the trees we do not split any thing. It made us very sore & tired besides blistered our hands. We made a bedsted of the wagon.

Manhaten Mills Allans Kanyon Sunday 13 We cut twenty two & a half cords of wood last week & worked six days. Received twenty dollars in gold yesterday on the wood. I went to Washoe City to day. I am now at the new mills building by Mr Avery & Co what is called the New York & Nevada Mineing Company. This mill is to have sixteen stamps or four bateries¹⁶² & when completed will cost about one hundred thousand dollars. Washoe City is quite a town, situated in the lower end of Washoe Valley at the uper end of Allans Kanyon & one mile from these mills. To go from here to Washoe a foot or horse back up the kanyon is the rout. The population of Washoe City is about seven hundred. It has many business houses, two quartz mills, Atchisons & Norths, livery stables & a big proportion of gambling saloons & drinking houses. It has one weekly paper the Washoe Times. The Atchison Mill is in the lower edge of the town & at the uper end of Allans Kanyon. It has sixteen stamps & four bateries. It runs partly by water & steam. The water is conducted from Steam boat Creek in a race high up on the west side of Allans Kanyon to the mill. Norths mill is on the west edge of town near the road to Galena. It runs by water brought through the same ditch with Atchisons, & uses steam, like Atchisons, for heating the pans.¹⁶³ It has sixteen stamps.

Galena Monday 14. I attended to some business in the morning in Washoe City & went to work after dinner cuting cord wood. All on the side of the mountain around Galena is a thick growth of pine timber. Some of the trees are six feet in diameter. The most of them are a kind of pitch pine. There is some yellow pine, Some they call "bull Pine" or black pine which makes very heavy lumber on acount of the pitch in it. The greatest objection to such of the timber that I saw, it is covered with limbs almost from the ground up. I have seen no other kind of timber here but pine.

Saturday 19. Finished our job of wood cuting fifty one cord Settled up receiving pay in gold. I went down late in the evening to the Manhaten Mill.

Sunday 20. I went up to Washoe City & returned to the Manhaten Mills in the evening late. There is one theater & no church in Washoe City There is one saw mill in the west edg of town Above town, on the main road to Carson City, one mile from town is the "Washoe Race Course"¹⁶⁴ On the same road about four miles from Washoe City is Ophir¹⁶⁵ a small town. The valley is twelve miles long Washoe Lake is in the uper end of the valley West of Washoe City between the sumits of the Siere Nevada's is Lake Bigler.¹⁰⁶ The valley is filled up with ranches engaged in raising hay & vegetables

Monday 21. I walked up to Galena hunting work. I hired to Proctor & Co's saw mill at the uper end of Galena as a night hand.

Tuesday 22 Worked all last night in the saw mill runing off slabs & lumber. Sick all day to day. In the evening I went down to the Manhaten Mills.

Saturday 26. On the 23d, 24th & 25th I was unable to work. This morning I walked down to Manns ranch in Steamboat Valley after our mules. I followed down Allans Kanyon & Steamboat Creek in to Pleasant Valley, then through Pleasant Valley in to Steamboat Valley to Steamboat Springs After halting a little among the springs I continued my way to Manns ranch, in the lower end of the valley. I had some trouble in catching the mules. About three oclock in the evening I started for Galena riding one of the mules bare back & leading the other. Crossing the creek to the west side, I followed down the creek between it and a mountain near the foot of the mountain, two miles to the lower end of the Werginia

City & Marysville or the Hennis Pass road.¹⁶⁷ Traveling this road in the direction of Verginia City about a mile, passing a ranch. & hotel I left the road turning off on a branch to the right going over a ridge of mountains. This hotel is a great stoping place for teamsters. Many were stoped here. Night had come on by this time & I made the rest of the way over to Galena in the night. Puting the mules in a correl & giving them hay. I went up to my old head quarters Mrs. Duncans.

I hitched up the mules to the wagon & hauled it down to the Sunday 27. Manhaten Mills I then sent the mules to Greeses ranch about a mile above Washoe City. Then Mike Bob Bronagh and my self went up to Ophir four miles above Washoe City. Ophir is not as large as Washoe containing a variety hotels stores hay yards gambling saloons drinking houses &c. A very long bridge¹⁶⁸ extends from Ophir a mile or more easterly, across a swamp & part of Washoe Lake. Ophir is situated at the foot of the Siere Nevada's The greatest curiosity about the is the Ophir Mills. It runs seventy two stamps or eighteen batereis The Ophir Mills including all the works around the mill cost about a million & a half of dollars It takes a great many hands to run it. It runs night & day, sunday as well as any other day. The Gould & Curry Mill in Verginia City has eighty four stamps. I next went to Sandy Bowers¹⁶⁹ residence about a mile above the Ophir Mill. It is built of granate & is nearly completed. It has cost thus far one hundred & forty five thousand dollars. We went through the house from bottom to top. We next returned to the Manhaten Mills.

Monday 28. I made two trips to Washoe City & washed off the wagon

Tuesday 29. I commensed work at Procktor & Co's mill at Galena, pileing lumber for sixty dollars p month & board.

Saturday October 3. I have worked five days this week.

Sunday 4. I walked down to Washoe City, staid all night at the Manhaten Mills.

Monday 5. Returned to Galena early & recommensed work at the mill

Wednesday 7. Commensed runing off slabs & lumber

Saturday 10. I worked six days this week, the last four runing off slabs & lumber

Sunday 11. I walked down to the Manhaten Mills & from there after washing & puting on some clean cloths, to Washoe City; returning to the Manhaten Mills in the evening.

Monday 12. Makeing preparation to start to California

Tuesday 13. I went up to Greeses ranch after our mules in the evening.

Genoa Carson Valley Thursday 15. R. Bronough & family & my self left Manhaten Mills Allans Kanyon, about nine oclock yesterday Wednesday morning the 14th for California. One mile over a mountain found us

at Washoe City. We halted here about an hour. Four miles more found us in Ophir. Passing around in front of the Ophir Mills, one mile more found us at Bowers ranch The Ophir Mills has a very high picket fence around it. One mile more to Franktown¹⁷⁰ & a large quartz mill close to the foot of the Siere Nevada's. Following around at the foot of the Siere Nevada's six miles found us at the head of Washoe Valley, on the dividing ridge¹⁷¹ between Washoe & Carson Valleys. At this point there is two hotels & stables also correls. The hotels are known as the "Lake View House" & "Nevada House" We fed our mules & took dinner at Ophir We paid three & half cents per pound for hay; barley was worth eight & a half cents per pound. At the Lake View House we got the last view of Washoe Lake & Valley. Entering & decending a kanyon one mile found us in Carson Valley.¹⁷² It was now nearly night. Such of the valley as could be seen was sand & sage brush. Three miles more found us in Carson City.173 A fair had been going off during the day & the streets were crowded with people. A brass band was geting off some music. We camped near a correl but out side so as to have the privilage of cooking. We made a haisty supper & retired to bed. My bed was on some hay underneath the wagon. This morning we rose early and prepared breakfast. Carson City is next in size to Verginia City of the towns that I have seen in Nevada Teritory; it is well located & has as many brick & stone houses as Verginia At this point flour is worth seven dollars p hundred pounds, hay two & a half cents per pound, barley seven & a half cents per pound. Carson City is not improving near so fast as Verginia City. Carson City is located on the west side of the valley at the foot of the mountains twelve miles from Silver City & sixteen from Verginia City. We left the city early passing through the main street and out the road runing south, to Genoa.¹⁷⁴ We took the mountain road leaving the valley road to the left. After about ten miles of travel on a high sandy bench. the latter part rocky, we decended in to the low lands amediatly on Carson River. A beautiful valley with the crooked Carson River runing through it, spread out before us; the largest & finest valley I have seen since I left the Humbolt. About three miles from Carson City a road turned off to the right in to the Siere Nevada's. About three & a half miles farther we stoped for dinner at a hotel, (Ohio House) making therteen & a half miles since morning. Here we bought hay for our mules at two cents per pound. We are in full view of Genoa situated at the foot of the Siere Nevada's about one mile distant. Up to this time we have been traveling on the west side of Washoe & Carson Valleys & at the foot of the Siere Nevada's¹⁷⁵ Many hotels, watering places of good water, stables correls &c where food can be got for both man scattered along the road. The valley from this point is wide & much of it is covered with grass. All the grass land is located & inclosed. The houses are mostly on the road & are generaly good, some brick.

Carson Kanyon Friday 16. We are now camped in the mouth of Carson Kanyon,¹⁷⁶ on Carson River, one mile above Woodfords. After two hours noon yesterday, we started. One half mile to Genoa. Genoa appears to be a town of about five hundred inhabitants. Following on around the foot of the mountains, passing some mineral springs¹⁷⁷ & a mineral bath house. Two miles brought us to the forks of the road the right going over the Siere Nevada's to Placerville a tole road & stage rout.¹⁷⁸ We continued on at the foot of the mountains eight miles & camped at a store Here we paid two cents per pound for hay. This morning we left early, continueing up the valley, keeping close to the foot of the Siere Nevada's & getting nearer the Carson River, that is the West Fork; the East Fork I could see branching off towards the east mountains. The grass & ranches gave entirely out, & instead the valley, besides narrow became rocky & sandy. We nexed commensed ascending a sandy slope from which we had a fine view of the valley. Across the river from us we could see a small valley which appeared to be all taken up; we could see some houses. Beyond seamed to be another valley. The timber became larger here; in fact up to this point it was a kind of low brushy growth. Off in the distance eastward I could see the course of the East Fork of Carson River from the timber and bushes on its banks. Riseing over this ridge or high bench, we decended to the little vilage of Markleville¹⁷⁹ at the mouth of Carson Kanyon (ten miles) Below the vilage is a little grass, which is enclosed. On the river below the vilage the pine timber is tolerable large & thick. The roads fork here again, the right prong going up through the kanyon & the left crossing the river & continueing on the east side of the Siere Nevada's There is one saw mill, two hotels & stables & some other houses here. We paid three cents per pound for hay here & twelve & a half cents for beef. Passing through the town & up the kanyon to where the road runs along side of the river (one mile) & camped for noon. Along amediatly on the river are thickets of quaking asp with yellow leaves, with that exception the kanyon is covered with pine.180

Hope Valley. Night After two hours noon we resumed our journey, crossing to the south side of the river over a tole bridge, paying fifty cents tole Soon after the road became quite rocky, the rock large, some of the road steep. We began to see many balsome fir as well as pine; they cover the sides of the kanyon almost to the tops of the bluffs on either side. The scenery is fine mountains of granate on other side with fir & pine growing in the crivises & where ever they can find holt. There is some of other kinds of rock but mostly granate; and shivered like most of the rock in this country. The river bed is full of large granate boulders, and the water goes whirling & foaming amongst them. The water is very coald & pure. We crossed & recrossed the river again on wooden bridges After geting several miles up the kanyon, we came to where the road was fresh graded & the rest of the way was tolerable

good road being all fresh graded. After six miles of travel we found our selves in the lower end of Hope Valley¹⁸¹ & at evening camp. A hotel is near by. We paid three & a half cents for hay here. The sun did not shine on us much in the kanyon; after two oclock I did not see it any more.

Silver Lake Saturday 17. Last night was quite a coald night; ice froze a half inch thick in a few inches of my head, as I slept under the wagon or rather lay under the wagon, for I did not sleep much, it was so very coald. In consequence of the coald we did not get up very early and made a late start, as late as nine oclock. Going up Hope Valley, crossing the river, we made a left turn traveling south. Hope Valley is narrow, gravely & mostly covered with short head grass At this point we was nearly up to the snow;182 great banks of it lay on the sides of mountains on the west side of the valley. All though we are high in the mountains, two rows of peaks rise above us on each side. On the east side are three sharp peaks near each other the first one being the tallest. The sides of the mountains on each side almost their sumits & extending in to the valley, are covered with a thick growth of timber. The timber is not large it is mostly tamerack. It has a smooth bark. After traveling up the valley two & a half miles we came to where the roads fork at a ranch. The left hand or streight forward prong of the road, & the longest traveled is called the "Big Tree Rout" & the other the right hand prong, the "Amador Rout" The Amador Rout is a new graded road & is a tole road. The Big Tree Rout is not a tole road. The Big Tree Rout continues up this valley through Faith Valley & then through Charity Valley, all three being short narrow valleys, & to the Mocalumne (Macalama) River twenty miles, & on to Stockton being one hundred & ten miles from this point. To Stockton by the Amador Rout the sign board says ninty two miles & to Sacrimento ninty eight. We took the right hand road,¹⁸³ ascending from one bench to another. On these benches are spots of grass all located & being enclosed roughly, by logs brush & poles. At the second grass spot there is a house. We passed a third and smaller spot of grass, after which the whole was timbered rocky valley. Most of the rock was granate. We next came to the mouth of Red Lake Valley, & to Red Lake.¹⁸⁴ Here we came to the foot of a steep grade on the left had side of the valley & tole gate. The tole for a loaded wagon is one dollar and for every horse hitched to it twenty five cents Red Lake is a narrow sheat of water, surrounded by a narrow rim of grass, upon which cattle were grazing. The valley is also short, not much longer than the lake. We commensed the ascent of the grade, resting our team from time to time. The grade was good considering the steep side of the mountain on which it was made. The side of the mountain was covered with pine & fir. I notice two kinds of fir. As we got higher it became cooler; we had to draw on our coats though we were walking & it was noon day. Icicles where the water run over the rock & when near the sumit the road

was froze hard & the little streams that run across the road was almost completly locked up with ice. The road in places was nearly covered with a sheat of ice. After two miles of ascending we found our selves on the sumit:¹⁸⁵ to the highth of eternal snow. On our left the snow lay in banks, on the north side of peaks. We next commensed decending in to a narrow rocky valley passing a pond or small lake on the left. Here we came in full view of snow in great quantities on the side of the peaks on our left. Four miles of decending on a crooked grade on the side of the mountain on the right of the narroy valley or kanyon, found us at Sumit Lake¹⁸⁶ & ranch. Hay at this ranch was worth three cents per pound We did not buy any. This lake is a pretty sheat of water, in the shape of a wedge & probably as much as three quarters of a mile long.¹⁸⁷ There is about two hundred acres of meadow or grass above the lake. Continueing on, on the right hand side of the lake, on by the point of the lake, and across the valley, through a thick growth of fir timber & pine, to the foot of the mountains on the left hand side of the valley. At the end of two miles we decended a short hill to a ranch or hotel. Here we nooned We bought hay for four cents per pound. They asked eight cents per pound for irish potatoes & ten cents for beef. After a short noon, we left this point passing a small grassy flat on our left, to the foot of mountains on the left hand side of the valley. Following along through a dense forest of pine & fir, between huge piles of granate rock and beneath towering bluffs of semented or melted sand & rock, one & one half miles, found us at the foot of another long steep grade, which led to the second sumit¹⁸⁸ of the Siere Nevadas. The huge piles of white granate amongst the thick pine & fir looked beautiful. This grade was smoother & more solid than the first one. As we ascended the scene in the valley below, to our right became more beautiful and sublime. Every now & then I would stop & go to the edges of the road & look over in the deep valley, with its waves of white granate, intersperced between with ever green, The opposite mountain was almost solid white granate. As we ascended the precipice beneath us became steeper, untill one miss-step over the margin of the road, would have been a step into eternity. We came to two rows of columns of melted sand & rock partly arched & carved by nature, resembling the gate way to some palace. At last we reached the crowning sumit, a full mile. And when I found the road was about to leave & go down on the other side I had to go back to the brink & take one more look & the scene paid me for going. Turning the sumit, the second & lower sumit¹⁸⁹ of the Siere Nevadas we commensed decending again passing a small lake near the sumit & a house built of boards or "shakes" as they are called in this country. These shakes are made of sugar pine. Continueing on down this grade passing some large ever greens, among them a low cedar five foot in diameter, three & a half miles to the foot of the grade. And crossing a small bridge we camped for night at Camp Silver Lake in one mile of Silver Lake.¹⁹⁰ We were in

the night getting here. We found a teamster camped here. The wind raised & blew very hard blowing our fire about considerably.

Camp Antelope Springs Amador County California Monday 19. Yesterday morning 18th we left our camp near Silver Lake. One mile found us at Silver Lake and ranch. The lake is about a mile in length & width with almost a granate margin. The road runs to the right¹⁹¹ of the lake. From here we commensed ascending graduely, passing through a dense forest of small tall pine & fir, & winding among pine & fir & white granate; one mile, we had made a half circle around the lake & found our selves far above the lake & valley, & far up on the side of the west mountains that formed a part of the boundry of the valley.¹⁹² There is a small strip of grass land below the lake. Two miles more of ascending over deep dusty roads found our selves on the sumit. After reaching the sumit we met a train of twenty eight pack mules, packed with a variety of articles. Several men were with the train, one going before & the others behind.¹⁹³ One quarter of a mile more of decending & we were at another tole gate & house We passed through this gate as we did the first without paying any tole. The road continued on this mountain or ridge of mountains between Bear River on the left & the Cosumnes (Ma-cos-ma) on the right¹⁹⁴ ascending & decending. The timber got larger and taller as we advanced. The fir & sometimes other kinds, in many instances was covered with beautiful yellow moss sometimes the limbs was covered with it. Most every fir has some on one side of it. We soon got in to a locality where there was many low cedar yet large bodied some four & six foot across the stump. They tapered rapidly to the top they being low. There was several kinds of pine; a kind I first noticed in Hope Valley, with a smooth bark short leaf & small bur. This kind is called tamerack. It has a fine grain & solid wood. Sugar pine has a rough bark rougher than pitch pine & is of a darker collor but no so dark as the bark of the fir. It has a large long bur some of them over six inches long. The pitch pine has a large nearly round bur sometimes over four inches in diameter, with pitch or gum on them. Fir, the kind I have mostly scen; has rough dark looking bark, something like walnut or blak oak. On the opposite side of Bear River, a granate mountain very white loomed up. On our right was a small valley runing down to the Cosumnes (Ma-cosma) paved with granate from sumit to sumit. This granate is much whiter than the granate that I saw in Nevada Teritory, sound & solid not burnt & decomposed as the granate in Nevada. The valley of the Consumnes (Ma-cos-ma) was becoming more dense with timber & less of rock: the same of the valley of Bear River as we advanced. We next saw a curiosity in the way of a cedar that stood on the road side. It was about forty feet high & seven feet across the stump.¹⁹⁵ We still continued on the sumit of the mountain frequently able to look down in to either valley by only turning the head. The forst becoming nearly all fir with dark rough bark & mostly large. After four miles travel we commensed

decending. Two & a half miles found us at "Correl Flats"196 & hotel or ranch. I have generaly called every country house since leaving the Missouri River a ranch. Here we nooned. Hay & barley was worth five cents per pound at this point. We fed our mules barley for the first time. Below the house at the foot of the mountain is the flats from which the house took its name. After noon we found our selves riseing again then decending then ascending; most all the time on the sumit of the ridge. A huge mountain of granate on our left. As we advanced the scenery changed the timber & the forest in the valleys on either side becoming more dense, the trees becoming still larger, & the rock becoming less. At last the whole face of the country became a dense forest, mountains and valleys but not a cliff of rock to be seen. We passed a bear pen close on the right hand side of the road to day. It was built of logs with one end open. The top was covered with logs pined down.¹⁹⁷ Plenty of grizely bear in this region, also cinimon bear & deer. Four miles more of magnificent timber brought us to another hotel where we camped for night. The timber here & before reaching this point was of much attraction. Large sugar pine & fir, six & seven feet across the stump. We had gotten in to a sprinkle of tall flat leaf cedar by this time. They were almost as high as the pine & fir. It had a leaft like arperviter.¹⁹⁸ In side the body of the tree is said to be generly doted. It something similar to the red wood. The earth was becoming to be covered with small green herbage like is seen in the forsests of many of the Antlantic states. Manseneeter¹⁹⁹ & a kind of bush that some call greese wood but unlike any greesewood that I saw on the plains. I have seen more or less small manseneter since crossing the sumit. The last sagebrush I saw in Carson Valley. We camped here with a couple of teamsters who were returning from Washoe Mines. We fell in with them early after noon. The ranchmen here allowed us to put our mules in their stables as they were going to leave the next morning to be absent untill the winter passed by. They said the snow fell ten & twelve feet deep here some winters, sometimes more. This morning we got an early start. We found our selves decending rapidly we decended some vesterday. Two & a half miles brought us to a tole gate & ranch. A few scruby oak²⁰⁰ to be seen. One and a half miles more and we found our selves on the head of Tiger Creek;201 after which our road run between this creek & the Cosummes (Ma-cos-ma). The country seamed to be graduely changing as we traveled, besides fine timber, large sugar pine &c in every direction. The ground was becoming free of rock some little grass & small herbs instead. A great many flat leaf cedar. Seven & a half miles more to a ranch on the top of a hill & four & a half more to this point. Antelope Springs.²⁰² At this point is a woods pasture enclosed with a worm rail fence. We eat dinner at the hotel. We have just finished dinner. A number of wagons are standing around the ranch loaded with fruit and barley bound for the mineing region. The dust is very deep here & has been deep all the morning on our rout. We are now much lower than

where we camped last night. I am told the snow sometimes falls three feet deep here. More of the flat-leafed cedar or red wood here than I have noticed any where else. The soil here is different from what it is higher on the mountain; it is of a redish cast. A drove of cattle have just gone by stiring up the deep dust considerably besides drinking the water trough dry which is to be refilled by a very small stream conveyed from the spring in troughs or gutters, any our mules are dry & we are in a hurry to start.

Camp Amador Tuesday 20. We left our camp at Antelope Springs about two oclock in the evening, continueing on the same ridge, sometimes ascending but generaly decending, yet keeping the sumit of the ridge, which we entered on, or riseing from Silver Lake. The mountains & valleys in every direction covered with fine timber. More scruby oak and larger. They resemble old apple trees. The pines & firs are very fine: long bodies with limbs high from the ground, though most of them are that way since I have gotten among large timber. Four miles brought us to a ranch. The timber becomeing not so good; more scruby oak, less fir. Dust very deep. Passed several houses & enclosed deadenings The mountains becoming much lower. Still decending. The change of climate is very destinct. Three miles to Foster, quite a small vilage. The sign board here said thirty five miles to Placerville & sixty to Sacrimento. Beyond this point we come to the first cultivated land. One mile more found us at a saw mill on the left of the road. On the right of the road opposite the mill was a tar kiln. A pile of tin cans of tar lay near the road. The timber continued to get smaller. At the end of a rapid decent, making two & a half miles more, we camped at Robersons ranch for evening. Robersons farm or ranch is broken. His house is situated in the low ground on the right of the road. Mr Roberson is from Tennessee. This morning we made an early start, riseing to the sumit of a hill, Then passing a flume on high turssel work made to convey water to some gold digings for washing gold & next comeing in sight of Volcano²⁰³ a small town to our left down in kid of basin on Sutter Creek, nearly surrounded by mountains. Passing two left hand roads we took the third one & one mile decending, part steep & rocky found us on a small creek. On our way down I noticed a great many buckey bushes full of buckeys similar to those that grow on large trees in Kentucky. Yesterday I noticed along the road a kid of soap weed. It resembled an onion, having a hull or bur covered with coars lint. Remove this out side coat or hull & then rub it between the hands and it will lather like soap. Timber geting more inferior and scattering, Though it has been thined some by the ax. We passed several more ranches. On this creek was the remains of old surface digings. All along down the creek the bed of the creek had been dug out & piles of sand and gravel²⁰⁴ lay on both sides of the creek. The remains of old miners cabins &c were to be seen. Some parts have been lately reworked. Old sluce boxes lay scattered around. Along

the gulches and the holes in the side of the hills showed where many a miner toiled. All the way down the creek these signs were to be seen. We next came to a dam built to raise the water & some old ditches on the sides of the hills. A great many low scruby oak down this creek; no fir to be seen; a great deal of manseneter & much larger than any seen vesterday. It puts it limbs out near the ground; its bark is slick and red. Pipes are made of this wood. One mile & three quarters farther and we crossed the creek and commensed ascending a hill on the left crossing an old miners ditch near the top of the hill. Mountains dwindled down to hills, manseneter and buckey bushes plentiful but no fir & pine & cedar getting more scarce. Two miles more and we had decended to another little creek which we crossed and followed down one & a half miles. We passed two parties of men, three in a place mineing in this creek. They used a pick & shovel & "long tom."205 They were working over old digings & making from three to four dollars per day to the hand. We recrossed the little creek & ascended to the top of the hills. We found ourselves in the mids of what is called the Foot Hills. They quite numerous, many of them round. The hills on the right were bare of timber it being all cleared off, by the miners mostly. Winding a while among the ball hills we decended to & crossed another little creek. The bed of this creek had been worked & piles of gravel lay on either side. Riseing to the tops of the hills again passing a water tunel on the left through which water was runing Then winding among the hills ascending & decending we came to the other end of the water tunel where it came out of the hill. We next decended in to a narrow valley. In this valley there had been rich digins, for extending on each side of the little creek that runs through the valley, the earth is washed away leaving the sand and gravel in piles & nearly every gulch leading to it has been worked. The whole valley seams to have been torne up. Acres & acres was nothing but gravel & sand in piles and as far down as we traveled it continued. Some parts had the appearance of being lately worked. All on the right hand side of the valley the hill side was toped with tunnels or shafts runing for quartz ledges & deep digings. I saw quartz rock on the surface. The timber is all cut off the hills in this vacinity. Gardens scattered down the valley. We followed down the valley to Sutter²⁰⁶ a town of about four hundred inhabitants. It has one large steam quartz mill situated on Sutter Creek. Sutter Creek runs through the town. Crossing the creek we left the town ascending the hill to the right passing a couple of mills tunneling. On the sumit of the hill just beyond a hotel we took dinner. Here the roads fork here, the right hand going to Ione²⁰⁷ City and Valley, the midle one going to Jackson²⁰⁸ three & a half miles and the left to Volcano eleven miles. After dinner we took the Ione road which run on a high grassy bushy rocky ridge, passing a few ranches but the land was mostly uninclosed. We passed some old digings on the right hand side of the road. Five miles and a half more found us at Mountain Springs

Hotel. Here we got on to a graded & tole road, comeing down from the right. One half mile brought us to a tole gate. Going about a quarter of a mile farther we camped for night on the left of the road, at Camp Amador,²⁰⁹ named for the county. We entered California in Carson Valley just before entering Carson Kanyon. The roads this side of Sutter are not as dusty as on the other side.

Camp Mokelumne Wednesday 21. This morning we made an early start. Two miles and we passed some rich copper mines on the left hand side of the road, which were working & to the forks of the road beyond. The sign board read three miles to Ione City. We took the left hand prong leading in to Jackson Valley. All timber but low scruby oak about "played out." Plenty of bushes, manseneter buckey bushes &c. The oak are scattering. We passed a miners flume just after leaving the Ione Road. Crossed the Ione & Jackson graded road and decended in to the head of a small valley. Here a great deal of fresh mineing had been done. In the bed of the little creek which was now dry. & in every gulch comeing down to it and on the sides of the hills on either side and in some places high up on the hills, the ground had been washed leaving the gravel & rock in piles yet there seamed to be plenty of ground unworked. No work was going on for the want of water. The hills on the left are covered with grass & scattering trees. The grass in all this country is now dead but gets green after the fall & winter rains commense. The hills on the right are green with bushes. At the end of three miles we found ourselves in Jackson Valley, a very pretty valley, two or more miles wide. The ranches are divided off with plank fence & improved with neat cottages & barns, orchards and vinyards. Over the whole valley are scattering low toped oak trees, looking like large apple trees. One mile down the valley next to the right hand hills led us to Buanavista²¹⁰ a small vilage. The right hand hill side had been worked all the way to this town. After leaving the town we worked our way out in to the valley a little, then turned to the left crossing the valley, crossing the dry bed of a creek. On this creek was a great many wild grapes. We gathered as many as we wanted to eat; they were good. At the left hand or southside of the valley, the roads forked, the right hand continueing down the valley & the left leaving the valley going south over the hills. We took the left hand road which proved the wrong one & the fartherest. At the end of eight miles a good part over grassy unenclosed hills with scattering bushes and very few trees we found ourselves on the Mokelumne (Ma-kal-a-ma) River. Here there was some fine bottom land on both sides of the river. The river bed for as far as you could see up and down was torne up by miners. Considerable mineing was going on. Dams were built across the river & the water turned in to races which run machinery that washed gold. The bed of the river is gravel mostly. Two & a half miles down the river & we forded it. The river was mudy from gold washing. After crossing we followed down the river a short distance & camped for noon. Opposite our camp mineing was going on briskly. Three machines were runing by water washing gold, & two by foot, a kind of tread wheel. Quite a number of hands were at work diging wheeling dirt &c. Just below was a new machine not yet working & just below it was two more machines at work & more hands. The hands were all chinees²¹¹ with their brand umbarella looking sharp crowned hats & short blue shirts and all of them chattering away. The roads forked here one prong going across the bottom and up the hill & the right going down the river farther. After refreshing our mules on a little barley & ourselves on a little coald grub & thoroughly inspecting a frost bitten water mellon patch close by we hitched up our mules & continued our journey taking the right hand road down the river. Going three quarters of a mile we left the river bank going across the bottom to the bluffs. Following down about a half mile farther to a ranch we ascended the hill. About four miles over high grass land, not much rolling, with low bushy toped oak trees thick enough to make a pretty woods pasture, and over good roads found us in the main Stockton road. Most of this land uninclosed. Three miles more of fine roads, passing several ranches we found our selves at our present camp. Most of the land amediatly on the road for the last three miles was enclosed. Our camp²¹² is situated about a quarter of a mile from the Mokelumne (Ma-kal-a-ma) on the bluff just out of the river bottom. The bottom land is very rich. We are near a hotel. We bought barley here for two cents per pound & hay one cent. At Sutter we paid three cents per pound for barley. At Antelope Springs three cents for hay. At Robersons our bill for hay for night & morning was fifty cents.

Notes

130. This is Sunday, August 30, 1863. Yager's party is traversing the dreaded Forty Mile Desert, leading to the Truckee River near present Wadsworth, Nevada. His entry on this date indicates that he is sixteen miles southwest of the famed Boiling Springs, which were located about twenty miles, or half way, across the desert. Hence his location would place him about four miles from the river. Boiling Springs was described in the preceding installment of the Yager Journal—Winter, 1970, of the *Quarterly*.

131. As previously noted the water was salty, bitter, and sulfurous, but not poisonous. It did, however, produce disagreeable side effects on the human system. 132. Edwin Bryant (1846) noted a hundred or more boiling springs. The emigrants discarded many articles of value to lighten their loads, and many of these articles were thrown into the boiling springs. Harriet Ward (1853) noted a human skeleton in one spring. A man crazed by the desert ordeal had jumped into the water. Dead and dying animals added to the disorderly scene, and an overpowering stench poisoned the air. Helen M. Carpenter (1856) quipped that all manner of discarded articles had been thrown "en mess" into the springs.

133. According to one authority the usual desert flora in the region are small greasewood, dalia or smokebush, shadscale, and greya. Shadscale turns a pinkish or rusty hue in the fall of the year.

134. It was common practice to travel by night over the Forty Mile Desert to avoid some of the terrible desert heat, and it was easier on the stock. Usually a forced march was made with rest periods at frequent intervals. An examination of individual journals, or the "Chart of Travel via South Pass in 1849" by Dale L. Morgan, indicates that successful desert crossings were usually made in twentyfour to forty-eight hours. Many emigrants lost their livestock, abandoned their wagons, and walked out to save their lives. The evidence of destruction on both routes was tremendous, as noted here by Yager. By 1863, when Yager crossed, the hazards were lessened by some water stations and by the presence of ranches along the Humboldt Trail. This enabled the emigrants to arrive at the desert in much better condition than was possible in the early years of the emigration.

135. The debris discarded by the emigrants lay thick on the Forty Mile Desert. Some thirty-five years ago, when the writer first explored this area, iron wagon parts, water-barrel hoops, broken water jugs, ox bones, broken bottles, and so on, lined the trails. Today only traces remain due to the activities of relic hunters.

136. The sand was heavy over the last several miles on both the Truckee and the Carson River routes across the Forty Mile Desert, and on these last stretches destruction and death were greatest. The old trail is still faintly discernible through the greasewood bushes from a promontory of the Truckee Range to the Truckee River at Wadsworth, about five miles to the west.

137. Yager has now reached the Truckee River near present Wadsworth, Nevada. The Truckee River is a clear, swift-running mountain river whose source is Lake Tahoe in the high Sierra Nevada Mountains. It flows northeasterly some hundred miles, passing through Reno, Nevada, and emptying into Pyramid Lake.

The Truckee River Route of the emigrants followed the river through the Truckee River Canyon to the Truckee Meadows, the site of present Reno. Continuing west to the site of present Verdi, Nevada, the trail left the river to avoid its narrow confines and southerly direction and climbed a mountainside to Dog Valley, California. Thence the trail continued westward, passing Donner Lake and ascending the Sierra Nevada Mountains, going over Donner Pass or the more commonly used Coldstream Pass via Coldstream. From here the main trail descended via the Yuba River, Emigrant Gap, Bear Valley, and Johnsons Ranch to Sutter's Fort and Sacramento, at trail's end.

138. Yager's party is now traveling west up the Truckee River Canyon. The emigrants crossed and recrossed the Truckee River many times before leaving it at Verdi. The difficult terrain (including marshes) in the canyon and the desire to secure good feed for the livestock made these crossings necessary. Short detours away from the river bottom to avoid natural obstacles were sometimes necessary.

139. Coyote.

140. Little Meadows was a level bench, adjacent to the river, where the emigrants rested. Its location is near present Clark Station about midway up the canyon between Wadsworth and Sparks, Nevada.

141. This range of mountains is the lofty Sierra Nevada, just west of present day Reno. Yager's party is still in the Truckee River Canyon but is approaching the Truckee Meadows (Reno).

142. Evidently, on or before 1863 there was a ferry across the river at this point. The party is about to enter the spacious Truckee Meadows. The main trail to California turned south near here instead of following the river west, to avoid the extensive swamps and marshes that bordered the river in the early days.

Since Yager and about a dozen companions had decided to go to Virginia City, they left the main California Trail where it turned west in the Truckee Meadows and continued due south several miles to Steamboat Valley. 143. Steamboat Springs is a series of boiling mineral springs which lie along a geological fault line. Health and bathing facilities have been here ever since early pioneer days.

144. According to Walter W. Mulcahy, trail and pioneer road authority of Western Nevada, the route travelled by Yager and companions was over a graded toll road called the Virginia Toll Road, built in 1860. It entered a canyon mouth about one mile east of Huffaker Hills in east Truckee Meadows (originally known as the north end of Steamboat Valley). It proceeded southeasterly over and through the rugged desert mountain terrain to Lousetown Creek and Lousetown. Thence south via Lousetown Canyon to Virginia City. By map scaling, the total distance is fifteen or more miles. This is close to Yager's mileage.

145. Mr. Mulcahy states that the ranches along this route were mainly wood ranches. Wood for fuel was harvested and hauled to Virginia City. The hills and mountains yielded juniper and piñon pine, principally. The Chinese harvested the sagebrush in the same area and it too was used for fuel in Virginia City.

146. Collins Toll House was located about two miles north of Virginia City. It was a collection point for toll for several toll companies.

147. The story of Virginia City and the fabled Comstock Lode of gold and silver has been written by such able authors as Dan DeQuille (William Wright), Grant Smith, Eliot Lord, Wells Drury, Mark Twain, and many, many others, both contemporary and recent. The output of the Comstock Lode is said to have exceeded one billion dollars. As early as 1849, prospectors found gold traces in this area but it was not until 1859 that the richness of the Lode was determined and broadcast to the world. The outpouring of wealth that followed built a string of cities, namely, Virginia City, Gold Hill, and Silver City, which are all located along the Lode. It helped the Union forces to win the Civil War and aided materially in obtaining statehood for Nevada. The era of the Comstock Lode and Virginia City is the most colorful and exciting one in Nevada history.

148. The ore was crushed by the stamp mills and treated with quicksilver, salt, soda, and copper sulphate. The quicksilver combined with the gold and silver forming amalgam. This was placed in retorts and the quicksilver driven off, leaving a mixture of gold and silver called bullion. The bullion was then shipped in bars to the mint for further refining and coinage.

149. In western parlance a bit is $12\frac{1}{2}$ cents. Two bits and four bits are a quarter and a half of a dollar, respectively. Years ago while living in New York the writer observed that the term "bit" in this sense was not used or understood by Easterners.

150. To those unfamiliar with the horse-and-buggy era, a hame, according to Winston's Dictionary, is "one of the two curved pieces of harness adapted for heavy draft to which the traces are fastened."

151. About 1¹/₂ miles from Virginia City to Gold Hill and about 3¹/₂ miles from Virginia City to Silver City via Gold Canyon.

152. Cost per foot is the estimated value of the mine taken lengthwise along the claim or ledge.

153. Galena, in Washoe County, Nevada, was, in the early days of the Comstock mining activity, a thriving little community. It was located on Galena Creek roughly two miles west of Pleasant Valley.

154. One or two miles.

155. A fault in the earth's crust occurs here.

156. Only about one mile separates Washoe and Pleasant valleys.

157. Washoe City was the largest community in Washoe County and became the county seat in 1861. Its location is about halfway between present Reno and Carson City. Only a small modern settlement remains today.

158. Allan's Canyon separates Pleasant and Washoe valleys. The Virginia & Truckee Railroad ran through this canyon in later days when the railroad was extended from Carson City to Reno. Steamboat Creek runs through this canyon. Travel through this canyon avoided climbing up Washoe Hill where modern highway U.S. 395 runs.

159. The Manhatten Mill was between Pleasant and Washoe valleys in or near Allan's Canyon.

160. During the Comstock Lode era the pine forests of the nearby Sierra Nevada Mountains were mostly denuded of their prime timber to supply lumber for the Comstock mines, for fuel and building material. In particular, the square-set method of shoring up the mines, invented by Phillip Deidesheimer, required a vast amount of timber. Hence extensive logging operations were carried on along the eastern slopes of the mountains and even in the heavily timbered areas around Lake Tahoe. Sawmills, flumes, and a railroad at Lake Tahoe were built to process and transport the timber.

Note a little further along in the diary that Yager refers to Steamboat Creek in his location of Galena City and in reference to the sawmill a mile west of town. This is Galena Creek in these locations and does not become Steamboat Creek until it reaches Pleasant Valley.

161. Midling refers to medium size grain particles obtained in the sifting of ground grain to make fine flour.

162. A battery was a group of stamps used in crushing the ore for further processing. In this installation a battery consisted of four stamps.

Dan DeQuille in *The Big Bonanza* describes an installation of six batteries of ten stamps each, or sixty stamps total. Each battery was an independent unit and could be stopped or started as desired.

163. The pans refer to the amalgamating pans in which the finely powdered ore was further ground by rotating "mullers." The pans were heated by steam for over two hours, and quicksilver, salt, copper sulphate, and occasionally soda added to the mix. Further grinding for over two hours completed the amalgamation process, the combining of quicksilver with gold and silver.

164. Theodore Winters, owner of a 6,000-acre ranch in Washoe Valley, raised thoroughbred race horses, many of which became stake winners. Today the old Winters' family home and a huge barn may be seen on the east side of the highway in Washoe Valley, between Reno and Carson City.

165. At the town of Ophir in Washoe Valley, a large quartz mill was built by the Ophir Gold and Silver Mining and Milling Company of Virginia City. It was used to process Comstock ores. The ore from Virginia City was hauled in large freight wagons down the Ophir Grade and thence over a causeway built over a portion of Washoe Lake.

166. This is an earlier name given to Lake Tahoe.

167. From the Truckee Meadows (Reno) the Henness Pass Road referred to here led to Verdi, Dog Valley, Sardine Valley, Little Truckee River, Weber Lake, and over the crest of the Sierra Nevada Mountains at Henness Pass, at an elevation of 6,900 feet. Thence down to Nevada City and Downieville in the California gold-fields.

168. This was commonly called the Ophir Causeway, a double wooden trestle, running east and west across the two channels separating Big and Little Washoe lakes.

169. Bowers Mansion lies about twenty miles south of Reno on U.S. Highway 395. It was built by "Sandy" Bowers and his wife Eilley Orum in 1864 from the wealth of their mine on the Comstock Lode, in Gold Hill. Restored and refurnished, it is owned and operated by the Washoe County Parks and Recreation Department.

It is an outstanding monument and recreation center for bathing and picnicking. Sandy, his wife, and his daughter Persia are buried on a nearby hillside.

170. In 1855 Elder Orson Hyde and members of the Latter-day Saints settled in Washoe Valley and built Franktown. It is located about one mile south of Bowers Mansion on U.S. Highway 395. The quartz mill mentioned was the Dall Mill, built on the former location of Orson Hyde's sawmill by Dall, who was the former superintendent of the Ophir Mill. Dall made a small fortune running the tailings of the old Ophir Mill through his own mill at Franktown.

171. The dividing ridge separates Washoe and Eagle Valleys. The point is known as Lakeview Summit, for it overlooks Washoe Lake lying to the north. Carson City lies three miles to the South in Eagle Valley.

172. This is Eagle Valley. Present Carson Valley lies to the south of Eagle Valley.

173. Carson City is of course the capital of Nevada. It was named after Kit Carson, famous Indian scout and explorer. Here are located the chief administrative offices and buildings, including the state library and museum. Carson City was founded by Abraham Curry in 1858. In 1861 it became the territorial capital and in 1864 the state capital.

174. Genoa lies about twelve miles south of Carson City, at the foot of the Carson range of mountains, in Carson Valley. Originally called Mormon Station, the first permanent settlement in Nevada was made here by Mormons John Reese, Stephen Kinsey, and their followers in 1851. The Ohio House mentioned below this note was on the east side of Jack's Valley. Just to the north of the hotel was the popular Pony Saloon. Considerable controversy resulted when the Jack's Valley school was located directly across the road from the two liquor dispenseries.

175. Yager and companions are now traveling on the Carson River route to California. The complete Carson River route to Hangtown (Placerville) started at the Humboldt Dike at the beginning of the Forty Mile Desert, crossed the desert to Ragtown on the Carson River, thence followed the Carson River more or less to its headwaters in the Sierra Nevada Mountains via Dayton, Empire, Carson City, Genoa, Woodfords, Hope Valley, and Carson Pass. Thence to Emigrant Pass south of Caples Lake, and down to Hangtown via Silver Lake, Tragedy Springs, Corral Flat, and Sly Park. Since leaving Carson their route along the trail lay close to the mountains on their right to avoid the extensive sloughs in Carson Valley adjacent to the Carson River.

176. Directly west of Woodfords, California, the emigrant trail entered the canyon of the West Carson River. Hauling wagons up this narrow high-walled canyon, crossing over granite boulders, and fording the swiftly running river was a severe ordeal to the early pioneers who came this way. Some emigrants actually abandoned their wagons here and took to packing. After six miles of this struggle the trail emerged into beautiful and spacious Hope Valley within a few miles of Kit Carson Pass.

177. These springs, with mineral bath facilities, are now known as Walleys Hot Springs and are located about ten miles south of Genoa on the Foothill Road.

178. This is the Kingsbury Grade over Dagget Pass leading west to Lake Tahoe near the Nevada-California state line. Yager and companions chose the left fork over the regular Carson River Route keeping close to the mountains and reaching the Carson River again at or near Woodfords, California. The store at which they camped was at Fairview Station, a long-forgotten location on the old original road.

179. Woodfords, not Markleeville, is at the mouth of the West Carson Canyon. Markleeville is about seven miles south of Woodfords and not on the Carson River Route which led to Hope Valley via the West Carson Canyon.

180. Yager is definitely ascending the canyon of the West Carson River to Hope

Valley. This terrible road was greatly improved by Mott and Reese when they constructed their toll road from Genoa to Hope Valley. The state of California refused to recognize their Nevada charter so they ended their project in Hope Valley.

181. Hope Valley lies about eight miles below the crest of the Sierras at Kit Carson Pass. It is a lovely valley surrounded by rugged mountains and fringed with pines through which the sparkling West Carson River flows. Here the pioneers rested and camped after their struggle up the six miles of West Carson Canyon. By 1863, Yager noted the presence of a hotel in Hope Valley.

182. The elevation of Hope Valley is about 7,100 feet and the date is October 17. The presence of snow is to be expected at this time of the year at these altitudes.

183. The right hand road which Yager and companions took is the Carson River Route leading to Red Lake at the foot of Kit Carson Pass. The left hand route to the Big Trees and then to Stockton met the slightly later Scandinavian Toll Road at a point on the west side of Ebbett's Pass on the head-waters of the Mokelumne River.

184. In the early days of the emigration the climb up the mountain side from Red Lake to Carson Pass was a Herculean task. The old trail passed around the southeast corner of the Lake, continued on the south side, and after passing the west end made an abrupt frontal assault in the pass to an elevation of 8,650 feet. The climb from the lake to the pass was about 700 feet in less than one mile distance. The old trail is still distinctly defined here today. It twists and turns, dodging trees and rocks, and passes over slippery bare rock in spots.

The emigrants attained the summit by using block and tackle snubbed to the trees, and using multiple yokes of oxen or spans of mules. Sometimes wagons were unloaded and the contents packed up. On or before 1863 when Yager passed this way, a toll road was cut in the side of the mountain south of Red Lake leading to the top of the pass, and Yager took this toll road. The paved successor to this road is still in place today though now blocked off. Very recently a wide new highway has been cut into the south side of Red Lake Mountain immediately north of Red Lake, permitting a fast, easy ascent to the pass.

185. At the top of the pass was a bench or saddle where the emigrants could pause and regroup for the descent down the other side. A grand high Sierra panorama spread out before them. Here, on August 24, 1849, a group of emigrants belonging to the Odd Fellows Lodge paused to paint their names and date on the huge granite boulder at the top of the pass, and some of the names are still visible today. A bronze plaque and cairn of rocks marks the grave of an unknown pioneer who laid down the working tools of life at this point.

186. The old trail descended to a lake known until very recently as Twin Lakes Reservoir and now as Caples Lake (after a pioneer named Caples who established a station at this point in the early days). This lake was known to the emigrants, including Yager, as Summit Lake.

187. Due to a dam built in modern times, the lake is now larger and about two miles long.

188. By 1863, when Yager passed over the route, the new toll road over the Carson Spur was completed. This new road ran a distance of seven miles between Caples and Silver lakes and is the improved route of today. The early emigrants turned directly south at Caples Lake and passed over the meadows which are now under the waters of the lake.

High above and south of Caples Lake lay the second dividing ridge of the Sierra Nevada Mountains. It was a formidable sight to the early pioneers; the craggy, naked granite ridge with a notch or gap was like a gunsight pointing the way up and over. And below the naked ridge lay long banks of snow, for the pass and ridge are above the timber line and snow lies deep, even in July and August, after a winter of heavy snow. The old trail climbed a mountainside to gain about 1,600 feet in a distance of slightly more than two miles and was a tremendous final challenge to the pioneers. Franklin Langworthy wrote in his Journal on October 14, 1850: "The last two miles of the ascent is terrific, being excessively steep, and a part of the way so sideling, that it was necessary for several men to brace themselves against a wagon to prevent its upsetting and rolling down the side of the mountain. By doubling teams and assisting with manual strength we suceeded in gaining the top of this dreaded eminence."

The view from the pass is truly magnificent. Here at the top of the pass the Nevada Trail Marker Committee Inc., assisted by the Churchill County C.B. Radio Assn., the Churchill County Search and Rescue Assn., the El Dorado National Forest, and many other historically dedicated groups and individuals, placed a permanent steel marker on September 20, 1970. The brass inscription plate notes the elevation as over 9,400 feet, making this spot the highest point in the United States ever crossed by a covered wagon.

189. Descending from the Spur to Silver Lake we note that the small lake, house remnants, and scenic beauty, as described by Yager, are almost unchanged to this day.

190. In the vicinity of the present El Dorado Forest Service Station and campground.

191. The original road was under the waters of present Silver Lake.

192. On this rising grade from Silver Lake to the summit, about a mile from the top, is located the historically important Tragedy Springs, which Yager failed to note. It was here, on June 27, 1848, that three members of a Mormon Batallion returning to Salt Lake City after serving in the California Bear Flag Revolt, formed an advance guard and rode ahead of their companions. The main company arrived here later to find their three companions slain and buried. Their grave was marked by carvings on an adjacent tree. Today this site is a pleasant picnic site developed by the state of California.

193. It is interesting to remember that this pack train and the other east-bound traffic which passed by Yager were en route to the silver mines of Nevada.

194. Note that Yager is now on Bear River Ridge which was used by the early emigration as well as the later traffic between California and Nevada. This route is mentioned in numerous journals. Yager used this route to the northern end of Corral Flat where he turned to the southwest on a new toll road leading to Volcano, Amador City, Sutter Creek, Ione, and Jackson, all in the Mother Lode country. California State Route 88 closely parallels the toll road followed by Yager.

195. Yager was a keen observer and an excellent descriptive writer, as shown here by his description of the terrain and the many varieties of trees noted in this section.

196. Corral Flat is adjacent to California State Route 88 roughly six miles west of Tragedy Springs (see U.S.G.S. map "Silver Lake—California Quadrangle"). The emigrant road to Placerville turned off near this point and proceeded westerly via Leek Springs, Alder Hill, Stonebreaker Creek, and Sly Park.

197. The early Californians and the later 49ers engaged in the sport of fighting grizzly bears against wild range bulls. This fact may possibly explain the presence of the bear pen here noted by Yager.

198. Yager probably means arborvitae, defined in Winston's Dictionary as "Any of certain evergreen trees (esp. of genus Thuja) of the pine family, usually with scalelike, closely overlapping, or compressed leaves, often grown for ornament and hedges as the common American species T. occidentalis. See Cedar."

199. Manzanita shrub grows profusely in the Sierra Nevada regions. It has gnarled wood-like stems and green, smooth, rounded leaves. Thickets of manzanita form an almost impenetrable brush.

200. The presence of oak indicates that Yager is entering the lower altitude foothill country of California.

201. The map showing Yager's location between Tiger Creek and the south fork of the Cosumnes River indicates that he is approaching the gold diggings at Volcano in the Mother Lode country, about ten miles north of Jackson, California. The term (ma-cos-ma) appears to be an Indian name for the Cosumnes River.

202. Antelope Springs is near the South fork of the Cosumnes River roughly thirty-five or more miles southwest of Silver Lake.

203. Volcano has been described as being as rich as the "Gem of the Southern Mines"—Columbia. Placer and hydraulic mining washed out over \$90 million in gold from this locality. Today Volcano is an interesting and historic ghost town. The old St. George Hotel is still in operation. It is credited with many "firsts" in California culture, such as first public library, first literary society, first astronomical society, first little theatre. Many old buildings still stand including the old jail, a brewery, the Odd Fellows—Masonic Hall, Adams Express Building, and others.

204. In placer mining the sand and gravel were dug from the creek and river beds, mixed with water, and panned with a rotary hand motion to separate the free gold from the sand and gravel. More sophisticated methods used cradles or rockers, long toms, and sluices with running water. To provide water for these operations, dams, diversion ditches, flumes, and pipelines were sometimes built at great expense to bring the water long distances to the gold diggings.

205. The "long tom" was an oblong box or trough about twelve feet long, open at the top and usually at both ends, but always at the lower end. The box was about eight inches in depth. Three to six feet of the lower end of the box was sheathed with perforated sheet iron turned upward on a ramp. A riffle box was placed beneath the perforated sheet iron. A stream of water was then directed into the box to flush the gold bearing sand and gravel down the Tom. Free gold and sand would sink through the perforated sheet iron to the riffle box below. Riffle bars placed crosswise in the riffle box allowed the lighter sand particles to be flushed out while the heavier gold particles were caught and held.

206. The town of Sutter Creek is located about three miles north of Jackson. It takes its name from John Augustus Sutter, feudal baron of Sutters Fort (Sacramento), owner of an inland empire with 49,000 acres of land, vassals, thousands of cattle and sheep, acres of grain and vineyards, a grist mill, tannery, and distillery. His empire was called New Helvetia (Switzerland). The influx of the gold rush emigrants despoiled his empire and he died in poverty. Sutter mined in this area after he lost his agricultural empire, but met with failure. Today Sutter Creek is a small town in the Mother Lode Country, and many old structures of interest remain.

207. Ione is located about twelve miles west of Jackson. This little town was an agricultural center rather than a mining camp. It was originally called "Bedbug," then "Freezeout," and finally Ione.

208. Jackson, on California Route 49, is a busy little business and entertainment center for the surrounding area today. Many old buildings on the main streets have new facades. For many decades, the Kennedy and Argonaut hard-rock mines were active and important in this area. Huge tailing wheels at the Kennedy mine are still standing.

209. Amador City lies about five miles north of Jackson. It is about half way between Drytown and Sutter Creek on present California State Route 49. It was

named after Jose Maria Amador, a miner from San Jose. The placer deposits in Amador City and Sutter Creek were not particularly rich, but there were several rich quartz mines in this area.

210. Buenavista lies about twelve miles west of Jackson.

211. There were many Chinese coolies working as miners in the California gold fields during this era.

212. Yager and companions are camped near the Mokelumne River on the main road to Stockton, about twenty miles northwest of Stockton. The date of the last entry in this installment of his Journal is Wednesday, October 21, 1863. He left Nebraska City on Friday, May 14, 1863, on his overland journey. At this point, his total time out is 161 days, but much of this time has been spent in Virginia City, Washoe Valley, and the surrounding countryside.

Annotations by Everett W. Harris and Walter W. Mulcahy

Notes and Documents

Notes on the Life of the First President Of the Nevada Historical Society

The Nevada Historical Society Quarterly staff is aware that a number of people are working on historical topics of potential interest to our readers, and even though their projects may be incomplete, some writers may be willing to share their findings and ideas with our readers. In this issue, we are pleased to offer some insights into the life of one of the Society's founders—the late Robert L. Fulton of Reno. The information for this article was provided primarily by Mrs. Helen Peterson of Minden and Mrs. W. W. Mason of Bloomington, California, to James W. Hulse, a member of the Quarterly's advisory board. Mrs. Mason is preparing a biography of Mr. Fulton, and her information has been supplemented by interviews with her sister, Mrs. Helen Peterson of Gardnerville. Mr. Fulton was the father of Mrs. Mason and Mrs. Peterson.

"The climate is so healthful here, they had to shoot a man to start a graveyard."

ROBERT L. FULTON, who occasionally made this remark to newcomers in Reno, was one of the most enthusiastic "boosters" that Nevada had during the four decades after the end of the Comstock's bonanza period. Few men in the entire state were better known than he was a halfcentury ago, and few were his peers in promoting the state's resources.

Fulton was a native of Ashland, Ohio, born in 1847. As a youth he worked as a telegrapher in a home-town drugstore; he lost one of his first jobs for disassembling a Morse machine to see how it worked. But his talent for telegraphy led him into railroad work, and he became a train dispatcher in the Middle West, and it was railroad enterprises that brought him to the Far West. He worked in Duluth for the Great Northern and in Wyoming for the Union Pacific when those companies were still constructing their main lines, and he arrived in Reno as land agent for the Central Pacific Railroad in 1875. From that time until his death in 1920, he had an active hand in Nevada's development.

As a young train dispatcher, Fulton had developed the habit of reading intensively and he supplemented a scanty formal education with hours of study. He developed a better-than-average command of written English and left a good collection of letters and papers—the raw material for the biography that his daughter is presently writing.

Since his duties as land agent did not absorb all his energies, Fulton made use of his writing skills. He purchased the *Reno Evening Gazette* in December, 1877, and served as proprietor and editor for nine years.

Among Fulton's close associates after he sold the *Gazette* was Francis G. Newlands, Nevada's Congressman in the 1893–1903 period and U.S. Senator for fifteen years thereafter. The two men cooperated in establishing a Nevada State Board of Trade, with Fulton serving as manager. This Board, organized in 1889 before Newlands had achieved political prominence, worked on the necessary arrangements to acquire the land and water rights to establish a reclamation project on the Carson and Truckee rivers. The Newlands-Fulton correspondence is likely to yield a number of new insights into Newlands's interests prior to the time when he pushed the first federal reclamation program through Congress in 1902.

Fulton's energies carried him into controversies over Nevada gambling. He worked against lottery bills that were proposed at least twice in the Nevada legislature; his moral scruples made him a consistent critic of Nevada's permissive policy toward gambling. He worked for the outlawing of gambling before and during 1909—the year when the Nevada legislature passed a law to prohibit games of chance. He cooperated closely in the enterprise with Dr. Joseph E. Stubbs of the University of Nevada, who was a leader of the movement to close the gambling rooms.

Even the fact that Stubbs was president of the University can be traced in part to Fulton's influence. Fulton and Stubbs had been companions in Ohio when both were young. Fulton had submitted his name to the Board of Regents in 1894, and when he was appointed president, Stubbs and his wife stayed at the Fulton home at 146 West First Street upon arriving in Reno. For the twenty years that Stubbs served as president, he and Fulton remained close friends.

Another association that put Fulton close to the University involved the Nevada State Historical Society. He, along with Dr. Jeanne E. Wier and others, helped to establish the organization in 1904. Fulton was the first president of the society, and Miss Wier was the first secretary and curator, a post that she combined with her duties as a University history professor. He served in this position for about three years and saw the society through its first efforts to get public and governmental recognition. Thereafter he remained a supporter of the Society and a contributor to its publications. In 1914 he delivered an ambitious address entitled "Nevada—Historic and Prehistoric" on the occasion of the state's fiftieth anniversary celebration. On one occasion the Society published his reminiscences in tribute to James H. Kinkead, a pioneer sheriff; at another time, after his death, Miss Wier published some sentimental passages from his notebooks descriptive of the Truckee River. When the city of Reno extended an invitation to Mark Twain in 1905 to return to Nevada and renew old acquaintances, it was Fulton who composed and dispatched the letter, and it was he who received Twain's reply dated May 24, 1905. It was an old man's sentimental refusal; it has since become a rather notable document to Twain enthusiasts. Fulton cherished it until the end of his life.

Most of Fulton's published writings appeared as articles, but one of his works eventually became a small book. In 1924 friends arranged for the publication of a manuscript that he had completed near the end of his life; it dealt with the building of the transcontinental railroad and bore the title *Epic of the Overland*. It was based partly on his own experience and partly on the accumulated lore of the railroad. He apparently prepared the manuscript at about the time of the fiftieth anniversary of the driving of the golden spike.

Fulton's influence has been felt in numerous ways since his death. Not only was his book issued posthumously by a private publisher, but his wife of more than forty years—Mary Bragg Fulton—and his children established a lecture foundation in his honor at the University. Nearly every year since 1925 the income from this foundation has been made available to bring a prominent lecturer to the Reno campus. One of his sons, John A. Fulton, became director of the Mackay School of Mines and served in that position until his death in 1939.

Thus the range of Fulton's interests was wide. He travelled to Alaska, Japan, Europe, and Egypt. He attended the St. Louis World's Fair and visited the East Coast. He was an active Republican and knew some of the party's prominent men in the late 1800s. His papers, when Mrs. Mason has sifted them for the most revealing material, might well yield new insights for historians.

GRIDLEY SACK OF FLOUR 1864



REVEL C. GRIDLEY

On the day following elections in IB64, Russil C. Gridley, on Austin graces, helfed the fifty pound aack of flour tohis shoulder. Followe by a brass bond, he marched up the major street of Austin. Mr. Gridley, a secessionist, was paying off his election bet with Dr. H. S. Herrich.

After the portide, he aucliance of the tags of floor. Each time if any anoth, the solutive returned to the aucliance block for new bols, both the solution of the solution block for the bols, chardly which helped to relieve softwing centred by the wadicitizing bacema to earthward that he board block and, then tention, auctioning the floar will more them \$275,000 were researed for the round. By the lines has anded, ortidely hod bacema or shared for the point.



5500 DOLLARS A POUND



The original Gridley Sack of Flour, which raised \$5,500 for every pound of its contents, now on display in the Nevada Historical Society's museum.

From Our Museum Collection

The Gridley Sack of Flour

THE HISTORY of the Gridley Sack of Flour began with a simple municipal election in Austin in 1864. As in previous Civil War elections, one of the candidates was a Unionist Republican and the other a Copperhead Democrat. The contest grew so hot that Reuel C. Gridley bet Dr. H. S. Herrick that if the Copperhead candidate lost he, Gridley, would carry a fifty pound sack of flour from his store at one end of town down the main street to Clifton, at the other end of Austin. The wager was accepted with Herrick agreeing to carry the sack the other way if the Union candidate lost.

The excitement over the election grew to such proportions that additional clauses were added to the wager. Herrick proposed that the winner give the flour to the Sanitary Fund (a forerunner of the American Red Cross) to be used in Civil War operations, and then suggested that a marching band accompany the loser through town. If Gridley's man lost the election, Gridley would carry the flour to the tune of "John Brown's Body," while if Herrick's man lost, he would march to the tune of "Dixie."

The election was held on April 20, and the Republican won. The following day Gridley shouldered the sack, now decorated with small U.S. flags, and marched through town with the Austin Brass Band playing "John Brown's Body." At the end of the march the flour was appropriately donated to the Sanitary Fund, but with the new stipulation that it be sold at auction and the proceeds given to the fund. The auction commenced with Gridley offering \$200 for the sack and as the bidders began to realize that this was for charity the bids rose in volume. The sale realized \$350, but the flour was immediately redonated to be sold again. This occurred all day long and by the end of the sale the sack had realized \$4,549 in gold coin.

Gridley then decided to carry the flour from town to town to raise money for the fund. He started in Virginia City on May 15, and raised \$25,042 between there and Gold Hill, Silver City, and Dayton. He then went on to California and proceeded to raise some \$175,000. As this continual auctioning of the sack progressed, Gridley even visited the major cities of the East to raise money, and all in all acquired more than \$275,000 for the use of the Sanitary Fund.

However, the travelling from city to city broke his health and ruined his business. Gridley left Austin to settle in Stockton, California, where he died in 1871. He had raised a fortune for charity, and yet had sacrificed so much that he died practically penniless. The Stockton *Evening Mail* wrote the finish to his life when it stated, "He now rests in the Rural Cemetery in this city, without even a stick or stone to mark the resting place of a hero."

DOUGLAS MCDONALD

What's Being Written

Nevada Ghost Towns and Mining Camps, by Stanley W. Paher (Berkeley: Howell-North Books, 1970; 492 pages; bibliography, index, \$15).

"THE WONDERS of Nevada and the mining excitements there have been written about in a general way before. Here we have a detailed and accurately-researched history of the sometimes fleeting, sometimes permanent towns and camps—nearly 600 of them." This, the dust jacket blurb for *Nevada Ghost Towns and Mining Camps*, introduces the latest and most extensive attempt at bringing together the histories of Nevada's forgotten towns.

The book seems to be aimed at the Nevada visitor rather than the serious researcher. The first sentence of the description of each town gives exact directions on how to get there, while the last sentence usually lists what a visitor may expect to find remaining. The intervening data, usually one to three paragraphs, provides a brief vignette of the history of the community. However, contrary to the advertised claims that "here is fresh, newly-unearthed material," Nevada historians will probably get the impression that the book is simply a huge compilation of previously published information.

For example, at the very beginning of the book, in the section on Virginia City, Paher states: "Discovery of the Comstock Lode cannot be attributed to any individuals nor assigned an exact date, for it was the culmination of activity of many individuals over a period of at least nine years." Lincoln's *Mining Districts and Mineral Resources of Nevada*, published in 1923, gives the following: "The discovery of the Comstock Lode cannot be attributed to any one individual nor given an exact date, for it was the outcome of the activities of a large number of people extending over a large period of time." This sort of comparison leaves the impression that the book is largely made up of selections from earlier historical works. And the information on some of the smaller communities sometimes appears to be inadequately researched, but this may be attributable to the grave space limitations inherent in a book of this nature.

The rest of the book, especially the wonderful collection of photographs, is definitely a credit to the author. A large number of these photos have never been published before and the others that have been are still of undying interest to scholars and laymen alike. Nearly every page brings a new photo of the towns, the mines, the people, and the way of life in the colorful history of Nevada. Paher's extensive search for these pictures has been the major factor in making this book popular with tourists and amateur historians.

The format of the book leaves a bit to be desired. Communities are grouped by counties, and these in turn are arranged in a haphazard manner: Storey County is first, followed by Washoe, Ormsby, Douglas, and so on. The towns within each county are listed according to planned "tours" for a visitor to take, rather than being in alphabetical order. All this contributes to a lack of continuity, and while it may be handy for a tour book, it is a definite disadvantage in a reference work.

All in all, the author has accomplished what he set out to do. Paher states in the preface, "In recent years chasing down ghost towns and dead mining camps has become a week-end diversion for city dwellers," and this book was obviously designed for them. It may fall somewhat short as a major reference work for scholars, but as a guide book for tourists and armchair historians it is a complete success.

> MRS. ANDY WELLIVER DOUGLAS MCDONALD

What's Going On

Museum of Government

THIS SPRING the state Assembly and Senate are holding their sessions in the recently completed legislative building. In the meantime, their former quarters in the capitol building are being put to good use. As a result of the efforts of Frederick C. Gale, Director of the Nevada State Archives, the old Senate chamber now houses a "museum of government," containing numerous documents and objects illustrative of the political history of Nevada. A photographic reproduction of the manuscript of the 1864 state constitution encircles the walls of the Senate cloakroom. A similar project, to portray the history of the state's judiciary, is underway in the old Supreme Court room. The former Assembly hall is now being used as a center for cultural affairs: paintings of Nevada artists have been displayed, and works of the Las Vegas Art League have been exhibited.

The Carson City Historical Commission

IN MARCH of 1968 an ordinance of the City Council of Carson City created the Carson City Historical Commission. The purpose of the new agency was to guide and encourage historical activity within the community. At the same time, a county ordinance established the Ormsby County Historical Commission. The same five members served on both commissions. With the subsequent merger of the city and county governments, the commissions were unified in name as well as in fact and became known as the Carson City Historical Commission. The present commissioners are: William Dunfield, chairman; Mrs. Edward Block, secretary; Victor O. Goodwin; Mrs. Adrian Atwater; and Frederick Gale. Dunfield and Goodwin have recently contributed articles on the community's history to the Nevada *Appeal*.

The group not only acts as the official historical advisory agency for the city government but also guides historical efforts pertaining to Carson City undertaken by state agencies, private organizations, and individuals. Among the several noteworthy achievements of the commission has been its aid in the creation of the Ormsby Historical Society in 1969. Another important responsibility is to insure the accurate wording of historical markers placed within the city. The commission has under advisement a proposal to request the Post Office department to issue a stamp commemorating the short line railroads of America.

The Ormsby Historical Society

THE FIRST project undertaken by the Ormsby Historical Society, after its founding in the fall of 1969, was a spike-driving ceremony at Mills Park commemorating the centennial of the Virginia & Truckee Railway. Since that time, the Society has concerned itself with a membership drive, the founding and publishing of a monthly newsletter, and the holding of monthly meetings. The meetings, scheduled for the second Monday of each month, are held in the Nevada State Museum or in the home of a member. The Silver Spike keeps the community informed about the Society's activities. In the Autumn of 1970 the Society joined with the Nevada Landmark Society in an endeavor to create a lower tax levy on sites of significant historical value in Nevada. This would necessitate a legislative act to create a tax structure that would make it possible for federal financing and tax abatement for those historical sites which qualify under a proposed zoning ordinance. The annual membership dues are five dollars for individual members and six dollars for families. Persons wishing further information should contact Mr. Bernard Allen, 1315 Continental Drive, Carson City.

Junior Historian News

THE NEVADA HISTORICAL SOCIETY in conjunction with the Reno branch of the National League of American Pen Women is sponsoring a writer's contest for members of Nevada Junior Historian Societies. The three categories of the contest are:

1. A historical essay of 1,000 to 1,500 words, utilizing at least one original source, one newspaper reference, and one book reference.

2. A short story of 1,000 to 1,500 words, utilizing one original source.

3. A poem of no longer than two double-spaced typewritten pages, not shorter than ten lines.

All three categories are to be based upon some incident in Nevada's history. Deadline for submission of entries was March 1, 1971. Winning entries will be published in this *Quarterly* and certificates and memberships in the Nevada Historical Society will be awarded to their authors.

New officers of the Swope Junior High School (Reno) Tommyknockers are: Tori Brown, president; Janet Elcano, vice-president; Marti Culp, secretary; Mark Elston, reporter. The Tommyknockers' first field trip was to the Nevada Historical Society Museum and Library.

New officers of the Sparks Junior High School Conestogas are: Sally Stiffler, president; Susan Imswiller, vice-president; Mona Uren, secretary. The Conestogas' first field trip was to Olinghouse where they viewed and photographed an old mill.

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