John Muir on horseback, probably during a Sierra Club outing in 1909. Muir rode often in the wilderness, particularly in his later years. (Photo from Muir Family Collection, Holt-Atherton Library, University of the Pacific, copyright Muir-Hanna Trust).

John Muir and the Mining Industry

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Mining has always been associated with development, and for most of human history development was considered a sign of progress. Europe and America, in particular, have measured progress by material gain over the last 500 years. The "wealth of nations" that Adam Smith envisioned in 1776 first had to be discovered and extracted. Any scars left behind on the landscape were inconsequential compared to the human benefits.

In the last thirty years a "third wave" generation, in Alan Toffler's words, has arisen to challenge many of these progressive ideas and values. Environmental awareness is a major component of this emerging counter-culture, and the result has been an increasingly adverse view of industrial modernization and its environmental consequences. As Duane Smith wrote in *Mining America*, since the 1960s miners have come under fire for decades of "indifference, insensitivity, expediency, and gross exploitation."[1] What once was

regarded as signs of progress, such as the strip mines of Appalachia or the man-made hydraulic canyons at Malakoff Diggings State Park, now are more likely to be cited as examples of anthropocentric arrogance. Even the term "development" itself has provocative cultural connotations that are now called into question by post-structural critics of modernism.[2]

In the American West, the name of John Muir is frequently associated with the policies of environmental activists opposed to traditional mining practices. Standing tall for preservation and responsible land use, he challenged the conventional assumptions of his own generation. His ringing condemnation of the "money changers" who wanted to dam the Hetch Hetchy valley in Yosemite National Park, for example, resemble sentiments recently voiced by Vawter "Buck" Parker, Executive Director of the Sierra Club's Legal Defense Fund. He assailed the "greedy, powerful corporations with well-lined pockets" that are fighting proposed changes in the 1872 American mining law.[3] But even though Muir objected to short-sighted developers, did he place miners in the same category? Was the mining industry, in his opinion, an unmitigated evil, a positive good, or something in between? My objective in this paper is to clarify Muir's attitude toward miners and mining, using his own thoughts as reflected in both published and unpublished writings. The results may surprise those who have assumed Muir was philosophically opposed to mining and other forms of material progress. Certainly it is incorrect to assert, as one young scholar recently did, that Muir "argued for total restriction of the nation's scenic resources."[4]

Muir's first extensive contact with the mining industry was in California in the late 1860s. When he first crossed the foothills of the Mother Lode in 1868, the flush times of the gold rush were over. The Chinese had taken over most of the river placers, and hardrock mining was still in its infancy. Signs of environmental decay appeared in the denuded and eroded hills adjacent to the mining camps, and in the silted streambeds and scarred gulches, but all this made little initial impression. For the first ten years in the American West Muir was more interested in glacier studies in the high Sierra than in conservation and erosion issues in the mineralized zones. This is shown by one of his earliest recorded thoughts on miners,where he described a quaint parallel between mining and glaciation:

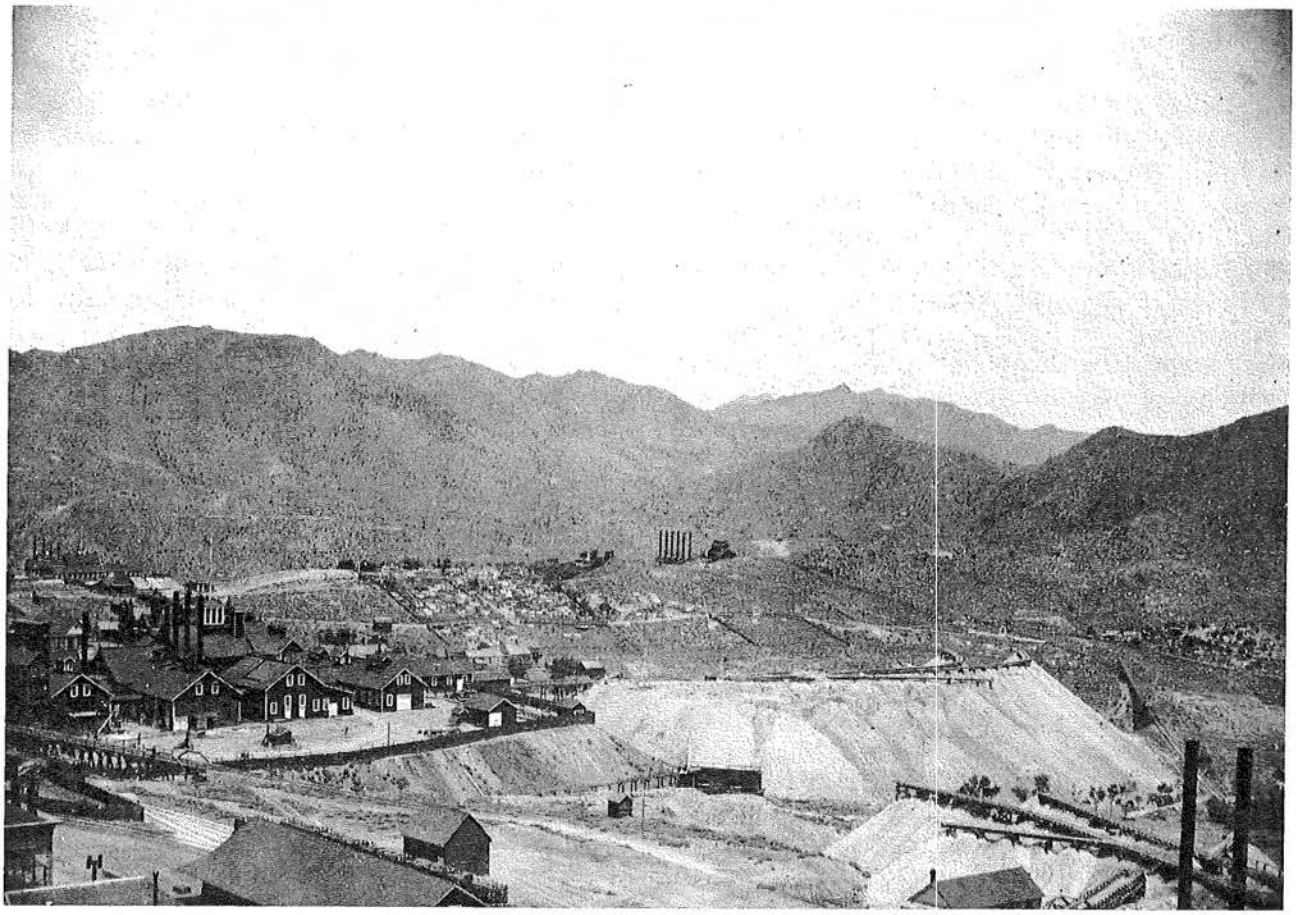
> As the heavy grinding of the glaciers brought out the features of the Sierra, so the intense experiences of the gold period have brought out the mental features of these old miners, forming a richness and variety of character of which little is as yet known.[5]

As this quote suggests, most of Muir's writings on the mining industry had a human focus. He was more interested in the character of the miners than in the mines themselves. The same humanistic emphasis is found in a journal entry he recorded while passing through Placerville on his way to the Great Basin. He said the local residents of this old gold rush town were "Tranquil orderly people. No noise in streets though surrounded with goldbanks [gold] the most [perturbed?] of all minerals. Once wild (in 49)[,] people get used to anything."[6]

Late in 1877 he began an excursion which inadvertently brought him into contact with the residue of 19th century mining's most environmentally destructive technology. In a home-made boat he floated and rowed down the Sacramento River from Chico to San Francisco Bay. Along the way he passed the confluence of the Feather River, one of the Sacramento's main tributaries. For two decades it had been a virtual sewer, an outlet for thousands of tons of clay and sand and organic debris from upstream hydraulic mines. They were still operating full bore when Muir passed the Feather's mouth, following the separate currents "which kept themselves pretty distinct" for several miles. But his journal entries make no mention of environmental damage, and express no sense of indignation or concern. His mood is merely that of a casual observer, noting in passing that "Nearly all the mud that discolors the river is derived from the mines on the Feather."[7]

This is one of the few references in all of Muir's writings that refers, directly or indirectly, to the hydraulic debris controversy. It is clear that hydraulic mining was a matter not very important to his environmental agenda. The reasons for this low priority are also clear: first, significant hydraulic mining ended by court order in 1884, while Muir was still in the process of developing a conservation conscience. Second, his main focus as a conservationist was on tall timber, not mining debris. In the last quarter of the 19th century the forests were the most seriously depleted of America's natural resources. Trees, not soils or riparian habitats, were Muir's first candidates for protection and preservation.

Depletion of high Sierra forests led to Muir's first critical, if incidental, comments on the mining industry. Two years after publishing his first essay on "how shall we preserve our forests?"[8] he visited the Lake Tahoe Basin and was shocked by what he saw:



Overview of Virgina City, Nevada, ca. 1880. Muir rode through the Washoe district at its height in the late 1870s on his way across Nevada with the Coast and Geodetic Survey. (Photo courtesy Holt-Atherton Library, Univ. Of the Pacific)

> The forests of the Truckee & its tributaries are being rapidly destroyed. The Eastern slopes of the Washoe range are already very nearly denuded. The railroad consumes immense quantities for fuel--so do the mines. Every pine & fir within reach of the locomotives . . . will eventually be called on to literally 'help push the car of progress' or house those who are engaged in railroad work.[9]

The railroad in question, of course, was the Central Pacific, the Big Four's transcontinental link to the nation's industrial heartland. It had nearly unlimited access to Tahoe forests because of federal government largess in the form of land grants. Railroad criticism reached epidemic proportions by the late 1870s, and Muir's remarks reflected the nadir of Big Four popularity in California and the West.

The oblique reference to mining in this journal entry suggests that Muir knew only incidentally of the Comstock mines and their great demand for timber, both for fuel and for square-sets underground. But in the late 1870s, during two trips through the Great Basin with the geodetic survey, Muir found opportunity to learn much more about Nevada mining. What he saw was depressing, for Nevada by then was in decline. Most of the older mines had closed, and even the mighty Comstock was nearly moribund. The price of silver had plummeted, and the government's hard money policy made it unlikely that the industry would soon rebound, even if new discoveries could be found. Quite naturally, therefore, Muir's observations were colored by these harsh economic realities.

Arriving in the Big Smokey Valley south of Austin in 1879, Muir took a dim view of the scene before him. From a distance he spotted "a remarkably tall and imposing column" that up close "proved to be a smokestack of solid masonry, seeming strangely out of place in the desert. . . ." He later found that it "had been built by a New York company to smelt ore that was never found. The tools of the workmen are still lying in place beside the furnaces, as if dropped in some sudden Indian or earthquake panic and never afterwards handled." The whole scene, said Muir, represented "a most vivid picture of wasted effort."

Later he came across the "dead town of Schellburn" and inquired of "one of the few lingering inhabitants why the town was built." The man explained that the town had boomed because of the mines discovered nearby, but when Muir asked if the mines had been exhausted, the man said not at all; they shut down because a new rush to Cherry Creek depopulated the town before the mines could be worked. He was hanging on "hoping that somebody with money and speculation will come and revive us yet."[10]

Reflecting on these experiences, Muir concluded that miners needed a lesson in reality. Nevada's merciless climate and topography offered harsh lessons for the miner. Nevada prospectors, in contrast to their California predecessors, had a much harsher environment to endure and much more elusive paydirt to find. They wore out their bodies and their pocket books "in years of weary search without gaining a dollar, traveling hundreds of miles from mountain to mountain, burdened with wasting hopes of discovering some hidden vein worth millions, enduring hardships of the most destructive kind, driving innumerable tunnels into the hillsides, while his assayed specimens again and again prove worthless." The odds were great, said Muir, that 99 out of 100 Nevada goldseekers "died alone in the mountains or sank out of sight in the corners of saloons."[11]

Once again Muir's commentary emphasizes the impact of mining on the miners, rather than on the environment. The same theme underlies almost all of his writings on the goldfields of Alaska and British Columbia, where he had much better opportunity to assess the industry. In seven separate trips over a 20-year period beginning in 1879, he saw southeast Alaska both before and after the Klondike excitement.

His early comments on the Alaskan goldfields were descriptive and generally promotional. Early in 1880, while Muir was in Oregon en route home after his first northern expedition, he was persuaded to lecture on Alaska. A reporter who attended said that Muir talked widely on North American mining and mineralogy, drawing comparisons between the gold and silver fields throughout the West, and concluding, with a stretch of geologic imagination, that the mineral belt in southeast Alaska was "doubtless . . . on the same great lead as those in Nevada."[12] A year later, after his second Alaskan expedition, he sounded less encouraging but still had his eye on future growth. He wrote that he had seen "nothing to change the conclusion arrived at last year . . . that this country will be found moderately rich in the precious metals, but owning to obstacles in the way of their development, all the other resources--fish, furs, timber, etc.--will be brought into the markets of the world long before any considerable quantity of mineral wealth has been uncovered."[13]

The Klondike rush 17 years later proved Muir wrong on how long it would take to uncover the northland's mineral riches, but not on the developmental obstacles. When he revisited Southeast Alaska for the sixth time in 1897, he came as a traveling correspondent to the San Francisco *Examiner* with an assignment to describe the routes to the new goldfields. Readers got a mixture of practical advice and unrestrained moralizing. The effects of gold fever astonished him. Though winter approached, he said, "the tide of travel to the Yukon goes widely on like a hot stream that refuses to be frozen over laden with picks, shovels and provisions. The eager throng is pushing blindly northward in mad excitement. Everyone is anxious to get ahead, jumping and grinding against one another like bowlders in flood time swirling in a pothole." What was the human cost of this insanity? The rational minded should stop and think. After all, he said, "Gold digging is only a dull chore, and no sane man will allow it to blind him and draw him away from the real blessings of existence."[14]

In vain he tried to reason with the frenzied argonauts he saw clamoring over the passes toward the Yukon River. He cautioned the inexperienced to be patient and wait until spring, for "Nothing is to be gained in a controversy with climate." He advised these amateurs to "Spend the winter in California" or along the Southern coast of Alaska, where the winters were mild and where placer diggings were abundant to gain experience. "Skill and experience are required in mining, as in every other business, and nowhere, as far as I know, may you get a gold education cheaper than in California and Southeastern Alaska. . . ." The wait would not harm miners' chances in the Klondike, he believed, for "Nearly all the gold of Alaska is still in the ground, and centuries upon centuries of mining will not exhaust it."[15]

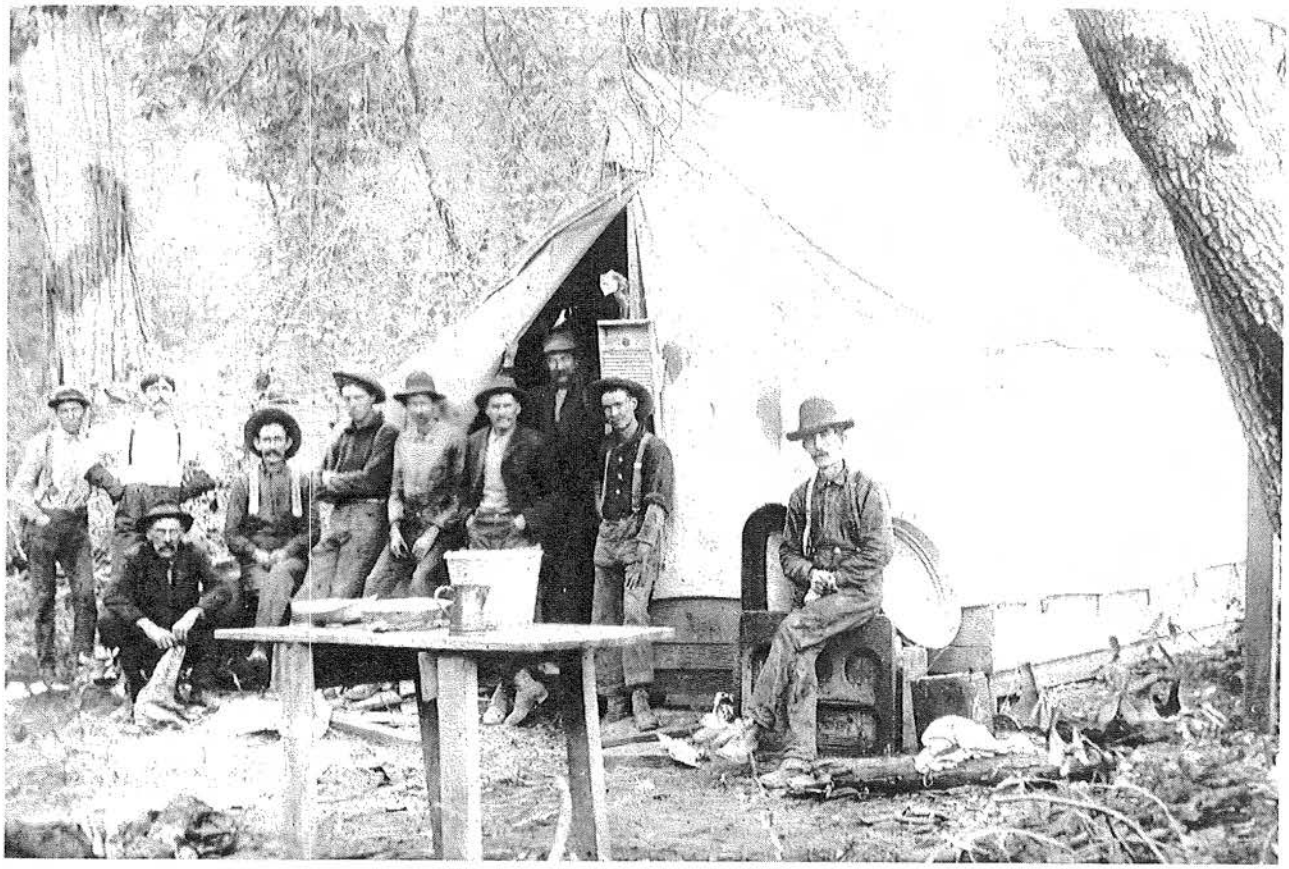
The Klondike rush forced Muir to re-examine his thinking about gold rush psychology and its effects on the human spirit. He remained convinced that money grubbing was irrational, a human sickness that wasted effort and ruined lives. Yet it was still better than the baleful effects of civilization. Even though the Klondike rush was "a wild half-mad ongoing," it was still better than "the mildewed inaction of crowds of purposeless people in big towns." While he did not think much of argonaut ambitions, which were

"seldom of the highest," still his work was not altogether without merit: "In spite of dismal suffering and failure the weary mortgage will be lifted from many a home, the hungry fed, and out of many a shiftless dawdler the rough mines and rough trails will make a man." [16]

Thus mining influenced individuals in both positive and negative ways. This was the voice of reason and restraint, not extremism. Muir had found a purchase in the middle ground of progressive conservation. Could the same be said for mining as an industry? In an 1897 article in the *Mining and Scientific Press*, he attacked ruthless exploiters but thought reason would prevail. Observing the increased demand for lumber by "miners, farmers, lumbermen and the people in general," he noted that the resource had been dangerously depleted and would soon vanish without government regulation and control. Even former exploiters, he argued, were beginning to realize the folly of unregulated development. "Thus settlers, lumbermen and miners alike call out for reform," he said.[17]

His article had a promotional purpose: he wanted to stir public support for the work of the national Forestry Commission, which in 1896 had been charged with the responsibility of assessing the status of western forest resources and of coming up with recommendations for federal protection. Earlier, temporary withdrawals by both the Harrison and Cleveland Administrations had angered westerners, who raised an outcry with wildly exaggerated claims that included such rumors as "all settlers were to be ejected from the reservations; that no search for minerals would be allowed, etc." Muir scoffed at these protests: "If this were the voice of the people, the fair expression of public opinion, then good-bye forests." He blamed the agitation on the "great corporation and the free grabbers in general" who "are kept out of sight in the background." He predicted that a rational policy would be forthcoming, once the people rather than the interests had their say.[18]

Conservation did not mean locking up the nation's resources; instead, to Muir and his fellow progressives in the 1890s, it meant a policy of rational



An unidentified men's group camping out near Placerville, California, ca. 1890. [Note: photo information identified the group as miners, but visual evidence lacking. Don't see any signs of mining equipment. But might have been a late-blooming group of summer miners reworking a local stream.] Muir visited Placerville in the late 1870s on his way to Nevada; see the text for his impressions of the people in this Mother Lode mining community. (Photo courtesy Holt-Atherton Library, Univ. Of the Pacific)

development. In the mining industry it meant responsible mining, not chaotic rushes to the Klondike or other exotic places. Muir had observed responsible mining firsthand in Nevada when he had visited "a truly valuable mine" at Eureka back in 1879. There, he noted, muckers were systematically breaking and loading ore "like navies wearing away the day in a railroad cutting." At the smelter he saw "bars of bullion . . . handled with less eager haste than the farmer shows in gathering his sheaves." After 30 years of madcap gold rushes, Muir was pleased to find an example of rational development. "The fever period is fortunately passing away," he asserted. "The prospector is no longer the raving, wandering ghoul of ten years ago, rushing in random lawlessness among the hills, hungry and footsore, but cool and skillful, well supplied with every necessary, and clad in his right mind. Capitalists too, and the public in general, have become wiser, and do not take fire so readily from mining sparks; while at the same time a vast amount of real work is being done, and the ratio between growth and decay is constantly becoming better."[19]

This was an unduly optimistic view, and more than a little naive, as the Klondike rush proved some years later. But the madness of 1897 did not change his mind on the subject of rational development. Although he minced few words in blasting what he considered reckless land use, his views would not be regarded as extreme today. Certainly they are not consistent with the "shrill" voices of the "zanies" on the extreme left or right, as they have been characterized.[20] Muir remained a moderate throughout his career, recognizing the need for material progress, praising responsible land use, and encouraging sound development. Only where wilderness values had higher priority would he draw the line. This was not ambivalence, but political realism in a progressive age. It helps explain the seeming contradictions in Muir's career, such as why he deplored Hetch Hetchy development in Yosemite National Park but at the same time remained friends with progressive developers like William H. Harriman and Andrew Carnegie. Perhaps he was also influenced by family voices. In 1906, at the apex of his career, his elder daughter Wanda married Thomas Hanna, a mining engineer. To modern environmentalists it may seem supremely ironic, but after Muir died his ghost probably did not stir much when his daughter and son-in-law plunged much of their inheritance into a gold mine on the eastern slope of the Sierra Nevadas, then lost it during the Great Depression. Ironically, their mine-gone-bust was just outside the boundary of Muir's beloved Yosemite

NOTES

1. Duane A. Smith, *Mining America: The Industry and the Environment, 1800-1980*. Lawrence: Univ. Press of Kansas, 1987, 140.
2. Donald Worster, "Two Faces West: Environment and Development in Western North America," public address, Pacific Northwest History Conference, Richland, Washington, March 24, 1995.
3. Undated solicitation letter, Vawter "Buck" Parker, Executive Director Sierra Club Legal Defense Fund, [ca. 1994], in John Muir Center files, University of the Pacific.
4. Arthur R. Gómez, *Quest for the Golden Circle: the Four Corners and the Metropolitan West, 1945-1970*. Albuquerque: Univ. of New Mexico Press, 1994, 123.
5. San Francisco *Daily Evening Bulletin*, 26 July 1876, p. 1, c. 4.
6. John Muir, Geodetic Survey from Sacramento to Wahsatch Mtns (Ms. journal), 28 June 1878, John Muir Papers, University of the Pacific, Microfilm reel 25/01456, hereafter JMP UOPWA (microform).
7. John Muir, Trip with Hooker and Gray and Bidwells (Ms. journal), 2-9 October 1877, JMP UOPWA (microform) 25/01415.
8. Sacramento *Daily Union* 5 February 1876, p. 8, cs. 6-7.
9. John Muir, Notes of Travel on the E Side of Sierra (Ms. journal), September-October, 1878, JMP UOPWA (microform), Reel 25/1504.
10. John Muir, "Nevada's Dead Towns," *Daily Evening Bulletin*, 15 January 1879, p. 1, c. 1.
11. *Ibid.*
12. John Muir, "Alaska. Its Mines and other Resources," *The [Portland] Daily Oregonian*, 24 January 1880, p. 3. c. 3.
13. John Muir, "Alaska Land. A Canoe Voyage...," *Daily Evening Bulletin*, 7 October 1888, p. 1, c. 1.
14. "John Muir on the Sea," *The [San Francisco] Examiner*, 23 August 1897, p. 1, cs. 1-2.
15. *Ibid.*
16. "Trails of the Gold Hunters in Northern Seas and on Mountain Passes," *The [San Francisco] Examiner*, 1 October 1897, p. 3, cs. 3-7.
17. John Muir, "The New Forest Reservation," *Mining and Scientific Press* 74 (3 April 1897), p. 283, cs. 2-3.
18. *Ibid.*
19. "Nevada's Dead Towns," *Daily Evening Bulletin*, 15 January 1879, p. 1, c. 1.
20. Smith, *Mining America*, 169.