

The Death Cart: Its Place among the Santos of New Mexico

BY THOMAS J. STEELE

The *carreta de la muerte* is a small cart built in the style of the old oxcart in which rides an allegorical figure of death, such as a skeleton. Made in New Mexico and southern Colorado during the last part of the nineteenth century and the first part of the twentieth, it was a constant feature of the Penitente morada and, loaded with rocks and pulled by one of the brotherhood, an instrument of penance.

In recent years two authors have presented accounts of the historical sources of the *carreta*. In a 1971 article in the *Journal of American Folklore*, Louisa R. Stark rejects the development of the New Mexican *carreta* either from the literary or artistic presentations of *El Triunfo de la muerta* or from presentations in old religious plays, since no New Mexican evidence of any such sources survives. Her thesis is that the *carretas* originated from the death floats (*pasos*) pulled or carried in Good Friday processions in Spain and Mexico; and it is plausible that there was such a model known to the first maker of a death cart. Stark's thesis continues with the assumption that the New Mexican cart originated during a decline in the clerical population of New Mexico—"after the first quarter of the nineteenth century and the departure of the clergy from New Mexico."¹ The oldest New Mexican *carreta* known, however, was made somewhat later than that, around 1860 during a period of rising clerical population. During the 1860s Bishop Lamy was introducing more priests into the area, although most of the smaller mountain villages would have seen priests just about as infrequently as before.

In the monumental work *Popular Arts of Spanish New Mexico*, E. Boyd names Nazario Lopez of Córdoba as the maker of the first *carreta de la muerte* "about the middle of the 19th century when

¹ Louisa R. Stark, "The Origin of the Penitente 'Death Cart,'" *Journal of American Folklore* 84 (Fall 1971):310.

Penitente secession was most active and ecclesiastical supervision in hill villages very scanty.² The Lopez family memory is the only source designating Nazario, the father and grandfather of santeros José Dolores and George. In the absence of any evidence to the contrary of any *carretas* that are older or any other candidates for the honor, it can be accepted. Boyd also notes the symbolic relationship of the *carreta* to the actual human skulls that it was a substitute for. She continues with the assumption that the source of the New Mexican *muerte* is in the literary and artistic "triumphs of death," as mediated into the colony by the death card in the tarot pack. In view of Stark's research and in the absence of any evidence that the tarot deck ever found its way into the colony, this explanation is unacceptable. Indeed, there is no need for such a cause to be posited, granting the other iconographic items that were present in the area, which were more nearly allied to what the death cart is.

The most apparent and significant fact is that from the time that Nazario Lopez of Córdoba made the first New Mexican *carreta de la*

Reputed to be the first New Mexican death cart and the inspiration for later models, this cart by Lopez was formerly in the bapistry of the Las Trampas Church. It is now housed in the morada of the Cofradía de Nuestro Padre Jesús Nazareno.



muerte in about 1860, the death cart spread very rapidly, considering the slow communications of the time, throughout northern New Mexico and southern Colorado. It was accepted in every *morada* except those that retained possession of an actual skull. In doing so, the death cart joined an established system of artistic representations, the *santos*, and took its place alongside a set of subjects that formed a functionally complete system of motivational correlatives: there was a *santo* and a saint for each of the significant hopes and fears within the New Mexican-Spanish universe.³ No explanation of the source and the model, which relies on items in existence outside of the territory or that were introduced into the territory from the outside, can contribute much toward the explanation of this deeper question: what can account for the immediate acceptance and the rapid spread of the *carreta de la muerte*?

The *carreta* was in its foremost meaningful feature the allegorical image of death, not a sudden innovation but only a statement more striking than the familiar skull. It was representative of the abiding concern with human death. If, as Stark hypothesizes, the first local death cart was modeled on a Mexican or a Spanish prototype, the New Mexicans would, nonetheless, have needed no explanation of it but would have understood it immediately, for it was only a fuller and more mobile presentation of the human skull, an item familiar in art and reality.

Nineteenth-century New Mexicans might have seen skulls in various ways. Real skulls were kept in the *moradas* and in some of the churches. Molleno painted them on an altar frontal, and he and other santeros frequently employed them as attributes of various saints and of the Crucifixion. The appearance of skulls in the *moradas* is treated by E. Boyd as a residue of their presence in the churches, which was objected to by the Mexican secular clergy of the early nineteenth century.⁴ These skulls would have become available whenever new graves were dug in the small *camposantos*, for new burials typically occupied spaces where persons had been buried earlier.

² E. Boyd, *Popular Arts of Spanish New Mexico* (Santa Fe: Museum of New Mexico Press, 1974), pp. 462, 471; Robert L. Shalkop, *Wooden Saints* (Colorado Springs, Colo.: Taylor Museum, 1967), p. 46; Mitchell A. Wilder and Edgar Breitenbach, *Santos* (Colorado Springs, Colo.: Taylor Museum, 1943), plate 32, caption; and Margaret Miller, "Religious Folk Art of the Southwest," *Bulletin of the Museum of Modern Art* 10 (May-June 1943):5, names the grandfather rather than the father of José Dolores Lopez as the death cart creator, and Shalkop names "the third quarter of the 19th century" as the date of his innovation. Based on all available evidence, 1860 appears to be the earliest likely date. No report exists before 1881 of any *carreta*, and no *carreta* survives older than about 1860—none by Fresquís, Molleno, José Aragón, Rafael Aragón, or any other of the identifiable santeros of the pre-1850 period.

³ Thomas J. Steele, *Santos and Saints* (Albuquerque, N. Mex.: Calvin Horn Publisher, 1974), pp. 73-96 and "Appendix D," pp. 207-9. It should be noted that unlike the true *santos*, the figure of Death is not prayed to (Steele, *Santos and Saints*, pp. 89-90, 197; Marta Weigle, *Brothers of Light, Brothers of Blood* [Albuquerque: University of New Mexico Press, 1976], p. 170).

⁴ Boyd, *Popular Arts of Spanish New Mexico*, p. 446.

The skull at the base of many crucifixes stems from a tradition of Eastern Christianity that the cross of Christ stood where the tree of Eden and the grave of Adam previously had been located. Some of Fresquí's retablos of the crucifix have a skull at the base of the cross, and although the motif seems not to have endured in later paintings or carvings, the surviving retablos are evidence that the skull might be seen in association with the portrayal of the death of Christ.⁵

In New Mexico, infrequently but at least occasionally, skulls appear as an independent santero subject.⁶ They were probably connected with the Penitente concern for the dead that was manifested especially in their conduct of *velorios*, which were impressive all-night funeral services performed for a member of the brotherhood or anyone else for whom the Penitentes felt responsible. Furthermore, the skull was a part of the iconography of various saints—San Francisco de Asís, San Luís Rey, San Vicente Ferrer, Santa Rita de Casia, and Santa Rosalía de Palermo.⁷ Since Francisco, Vicente, Rita, and Rosalia were closely associated with the penitential practices of the brotherhood, an abiding consciousness of the skull as a factor in the Penitente and in the wider New Mexican perception of the religious art can be posited.

The death cart probably has three surface meanings. First, there is the symbolism of involuntary death, death that comes unwilling. Second, there is the implied warning against letting this death come unprepared—against dying a “bad death” that will lead to eternal punishment. And third, there is the encouragement to live in such a way as to come to a *buena muerte*, a good death in the state of grace that will eventuate in an eternity of happiness in heaven. Therefore, the death cart cannot be said to have any direct, explicit, logical connection with the death either of Christ or of the Penitente Cristo. For, in the care of Christ the death is chosen willingly, and with a certainty of its being not just a good death but the archetype of all good deaths—with no fear of eternal punishment. And, in the case of the Penitente Cristo, there is a thoroughgoing ritualization of Christ's

death in its voluntariness and its assurance of success, rather than a literal death at all. Moreover, the *carreta* has an obvious function to serve as an instrument of penance to atone, on behalf of the one who pulls it or any person or persons for whom he offers his endeavors. And, guilt renders a *buena muerte* less likely. Beyond this evident function and the three evident meanings, what range of implications and connotations may the death cart have had within the New Mexican-Spanish cultural canon of the mid-nineteenth century?

Fray Angélico Chavez in *My Penitente Land* speaks of the death carts as proclaiming “not so much Christ's death as the certain uneasy fate of Everyman.”⁸ This statement hints at the key to a full and accurate understanding of the place of the *carreta* in the mid-nineteenth-century New Mexican religious and artistic consciousness. Just as certain large bultos of Christ that are hinged at the shoulders add an element of dynamism within a system of santos, most of which are particularly characterized by an iconic, static quality, so the figure of Death, seated in her mobile *carreta*, translates into action the static skull, whether a real one or a carved or painted one.

Since the *carreta* arose about 1860, it may also be viewed as another example of the energy released into the making of three-dimensional santos—bultos—due to the preemption of the market in two-dimensional santos—retablos—by the lithographed and engraved pictures imported in huge quantities across the Santa Fe Trail after the acquisition of the area in 1848. A relative shift occurred away from painting, which had absorbed the bulk of the santeros' attention and talent in the earlier period, toward the creation of statuary, often of a fairly large size.⁹ The bultos of Christ—the standing Jesús Nazareno for the capture, stripping, scourgings, crowning with thorns, and trial; the Santo Entierro for the Crucifixion, deposition, and burial—were put to a dramatic use, as was the figure of Death in her *carreta*. The death cart was not merely looked at but was pulled from morada to Calvario and back again, for the *carreta* is consistently interpreted in the folklore as being in action. The arrow is released from Doña Sebastiana's bow and either strikes someone and kills him, marks him out for death in the coming year, or designates him as the Cristo—the one who will “die” ritually for the sins of the village—in next year's Penitente enactment of the passion of Christ. Or, the cart brushes

⁵ John Chrysostom, “On St. John, Homily 85,” 1; Fray Angélico Chavez, *My Penitente Land* (Albuquerque: University of New Mexico Press, 1974), p. 99. The Fresquí retablos (Museum of New Mexico [MNM] L.5.75-41) is reproduced in E. Boyd, “The Source of Certain Elements in the Santero Paintings of the Crucifixion,” *El Palacio* 58 (August 1951):cover, 225; and in Roland Dickey and E. Boyd, “Early New Mexican Art: Santos,” *New Mexico Quarterly* 23 (January 1953):68-72, illustration 1; another (MNM A.9.54-21-R) appears in E. Boyd, “The Crucifix in Santero Art,” *El Palacio* 60 (March 1953):113; there are four other such Fresquí retablos in the MNM-International Folk Art collections. For further analysis of the identification of Calvary with the site of Adam's grave, see Mircea Eliade, *The Myth of the Eternal Return* (Princeton, N.J.: Princeton University Press, 1971), p. 14.

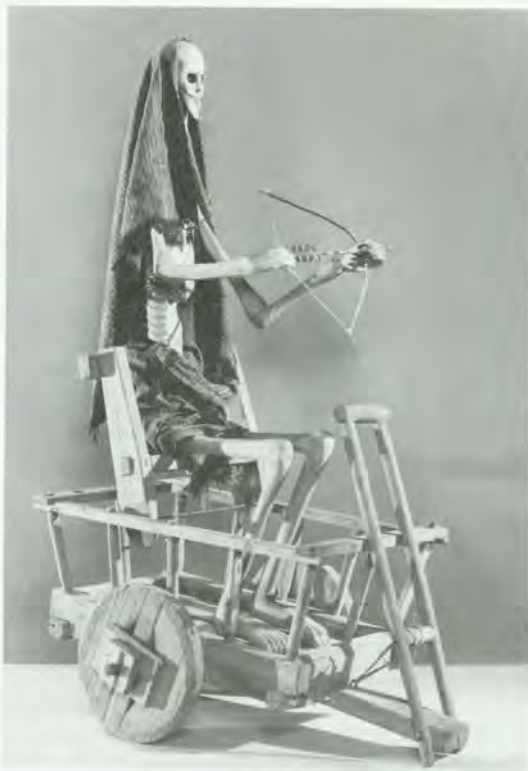
⁶ Steele, *Santos and Saints*, p. 197.

⁷ Boyd, *Popular Arts of Spanish New Mexico*, p. 447; Steele, *Santos and Saints*, “Appendices A and B.” Among the datable examples, the santos representing a skull make up four percent of the pre-1815 (mainly pre-Penitente) santos, six percent of the 1815-1850 group, and only three percent of the 1850-1900 group, suggesting that in this last period the *conceito* for the skull may well have drained off into the production of the *carreta de la muerte*.

⁸ Chavez, *My Penitente Land*, p. 95.

⁹ Steele, *Santos and Saints*, pp. 16-18, and for a further discussion of the difference between the static santos and the dynamic Jesús Nazareno and Santo Entierro bultos, see pp. 45-70, and Thomas J. Steele, *Holy Week in Tome: A New Mexico Passion Play* (Santa Fe, N.Mex.: Sunstone Press, 1976), pp. 6, 17-18. Using the term dynamic does not preclude that these statues are usually very frontal and more stylized than earlier bultos; they are, however, hinged and hence manipulated into different bodily attitudes corresponding to different phases of the passion narrative.

This large and powerful *Dona Sebastiana* is the work of José Iñez Herrera, who was active at the end of the last century in *El Rito*, New Mexico.



against someone and confers upon him good luck, especially longer life.¹⁰ Any tales that involve Doña Sebastiana's arrow are folklore, for the death angel has neither the rigidity nor the articulation to put the tension necessary on the bowstring, and the bow and arrow are never more than toys. Surely no fatal shot could possibly be fired.

As such, the *carreta* with its figure of Death makes a fascinating inverted, mirror image of the bultos of Christ in His passion. As the suffering Savior is known to the Penitentes by the title *Nuestro Padre Jesús*, the cause of the life of the Christian freed from sin, so Doña Sebastiana is representative of the destroying mother. As the *Cristo*,

¹⁰ For the arrow killing someone, see Laurance F. Lee, "Los Hermanos Penitentes," *El Palacio* 8 (January 1920):10; George Wharton James, *New Mexico: Land of the Delight Makers* (Boston, Mass.: Page, 1920), p. 293; Mary Austin, "The Trail of the Blood," *Century Magazine* 108 (May 1924): 42; Harvey Fergusson, *Rio Grande* (New York: Alfred A. Knopf, 1933), p. 123; Alice Corbin Henderson, *Brothers of Light* (1937; reprint ed., New York: Arno Press, 1974), p. 32; Juan Hernandez, "Cactus Whips and Wooden Crosses," *Journal of American Folklore* 76 (Summer 1963):219.

For the arrow designating someone to die within the year, see Boyd, *Popular Arts of Spanish New Mexico*, p. 464.

For the arrow designating next year's *Cristo*, see Miller, "Religious Folk Art of the Southwest," p. 7; Boyd, *Popular Arts of Spanish New Mexico*, p. 464; Weigle, *Brothers of Light, Brothers of Blood*, p. 170.

For pulling or touching the cart conferring good luck, see Ely Leyba, "The Church of the Twelve Apostles," *New Mexico Magazine* 11 (June 1933):52; Wilder and Breitenbach, *Santos*, p. 40; Robert Stroessner, *Santos of the Southwest* (Denver: Denver Art Museum, 1971), p. 52; Weigle, *Brothers of Light, Brothers of Blood*, pp. 169-70.

chosen from among the Penitente brotherhood, goes in procession to the Calvario to enact a ritual—not a real—death, so the man in the same procession who draws the death cart is engaged in his very different but parallel way of ritual death, for he is practicing mortification, the "putting to death" of his lower, baser nature by a penitential ritual. This should, however, not be thought of as a Pelagian activity, for the Penitente pulling the cart is doing a penance the effectiveness of which is vouched for by the common faith of the community. He functions not as an isolated individual but as an agent within a social framework, on behalf of others. They expect the cart to appear as part of the communal ceremony of the *morada* and village.¹¹

Placing the origin of the death cart about 1860 encourages speculation about the social context of its appearance. Rather than emerging in a time when the New Mexico Spanish may have had reason to feel themselves ecclesiastically abandoned, the *carreta* first appeared in a time when the people would have felt a new presence moving among them and could have perceived it as threatening. Though it is evident that "ecclesiastical supervision in hill villages [was] very scanty," the presence of the Anglo-American establishment had doubtless made itself felt. Richard Ahlborn describes the situation in *The Penitente Moradas of Abiquiu*:

By 1850, . . . conditions in New Mexico endangered the status quo of the Spanish-speaking residents. With the growing dominance of Anglo-Americans in the commercial, military, political, and social matters of Santa Fe, *Hispanos* recognized the threat of Anglo culture to their own traditional way of life. This cultural challenge turned many *Hispanos* back in upon themselves for physical and social security and for spiritual comfort.¹¹

In an article discussing the human repercussions of land use and land displacement, Tomás Attencio agrees that

the traditional Spanish-American social system unquestionably came in contact with the American system during the Mexican-American war which was officially terminated by the Treaty of Guadalupe-Hidalgo in 1848. The treaty brought to an end the military phase of a war—by far the first step in the conquest of a geographical area and its inhabitants. The economic phase of this conquest followed immediately.¹²

Such statements may indicate the real point of the contrast that Chavez suggests when he describes the *carreta* as "a small, crudely

¹¹ Richard E. Ahlborn, *The Penitente Moradas of Abiquiu* (Washington, D.C.: Smithsonian Institution Press, 1968), p. 126.

¹² Tomás C. Attencio, "The Human Dimensions in Land Use and Land Displacement in Northern New Mexico Villages," Clark S. Knowlton, ed., *Indian and Spanish Adjustments to Arid and Semiarid Environments* (Lubbock: Texas Tech College, 1964), p. 47.

fashioned cart with two solid wooden wheels, modeled after the big clumsy ones which were the only vehicles in New Mexico since Oñate's times until the first dray wagons and carriages arrived from the eastern states."¹³ The old familiar Spanish way of life that stemmed from the original settlement was being threatened by a new way brought in from an alien land.

If the world around is changing, for a culture to fail to change is for it to die—to become only a dry husk within which its people will be trapped. Whatever the conservative intentions and pretensions of a folk culture, whatever its unwillingness to change, it will have to change to remain viable—will have to adjust, to turn itself by some internal mechanism on its own center of gravity to meet an external threat and thus conserve, by the agency of change and at the cost of change, its own core of integrity. This combination of continuity with change is exemplified in the death cart, for in the *carreta* can be discerned both a continuity with the real and painted skulls of the first one-half of the nineteenth century and a change into the full anthropomorphic figure in its cart, the addition of a new penitential form.

A general theory of such cultural development as this has been formulated by Erich Neumann. Discussing "psychic structures which become visible in art," Neumann notes that "with the development and systematization of consciousness and the reinforcement of the individual ego there arises a collective consciousness, a cultural canon characteristic for each culture and cultural epoch." Eventually, at a critical moment of the development of a culture, a typical crisis occurs.

In the group as in the individual, two psychic systems are at work, which can function smoothly only when they are attuned to each other. The one is the collective consciousness, the cultural canon, the system of the culture's supreme values toward which its education is oriented and which set their decisive stamp on the development of the individual consciousness. But side by side with this is the living substratum, the collective unconscious, in which new developments, transformations, revolutions, and renewals are at all times foreshadowed and prepared, and whose perpetual eruptions prevent the stagnation and death of a culture. But even if we see the group as an integral psychic field, the men in whom reside the compensatory unconscious forces necessary to the cultural canon and the culture of the particular time are also essential elements of this constellation.¹⁴

In New Mexico about 1860, Nazario Lopez was the spokesman of the collective unconscious, and the death cart was its message, a

¹³ Chavez, *My Penitente Land*, p. 94.

¹⁴ Erich Neumann, "Art and Time," *Man and Time: Papers from the Eranos Yearbooks 3* (New York: Pantheon, 1957), pp. 3, 6, 8.



This death cart, standing more than four feet high, is attributed to Nazario Guadalupe Lopez of Córdoba.

message that was received with startling rapidity by the Penitente brotherhoods and the wider Spanish population in northern New Mexico. It seems apparent that the death cart was a factor in the psychic readjustment of the Spanish culture to the new Anglo pressure, a pivot upon which the folk consciousness turned to defend itself, to affirm the continuing validity of its basic values, and to lament its loss of primacy in the territory. If some of these functions seem logically to be contradictory to others, recall that a symbol like the death cart cannot be expected to operate logically; it cannot be expected to have an unequivocal meaning. Instead, it will most likely have a multiple intelligibility composed of varied, contrary, and even at times contradictory threads.

Within the context of the whole canon of the santos, the question remains, what is the meaning of this new development in the cultural canon? What does the *carreta* do to "prevent the stagnation and death" of the New Mexican-Spanish Catholicism? One response to this question might consist of a series of hypotheses filling in a continuum and gradated in such a way that by the end the series will have run around in a circle to the starting point. Together the hypotheses will constitute a conjectural interpretation of the place of the death cart in the cultural, religious, and socioeconomic history of mid-nineteenth-century New Mexico.

It is perhaps impossible to retrieve so elusive an item as the attitude of a comparatively nonliterate, subjugated people toward the conqueror of one and one-quarter century past. If this attitude is at least partially revealed by the origination and the rapid spread of the death cart, then the interpretation appears valid that the New Mexico Spanish sought, first of all, an intensification of their proper cultural and religious life over that of the Anglo-American invader. "American civilization was aggressive; it had changed the government, dominated civil life, and dictated religious reform, but under the shield of the *cofradía* the Spanish-American could continue the familiar *mores* that he had for generations. He clung to his religious brotherhood for, in it, he preserved his integrity as Spaniard, amidst the bewildering pressure of an alien culture." The Penitente confraternity served and still serves "as an unconscious protection against the civilization of both Indian and American. While the Penitente performs his penances and dramatizes the Biblical events of the Passion, he unconsciously asserts his resistance to the cultures that surround him."¹⁵

In this light, the origin of the death cart and the intensification of the Penitente activity—during the early years of the United States conquest and the early years of Bishop Lamy's episcopacy—may be viewed as the religious sublimation of the psychic force that was behind the aborted Santa Fe conspiracy of late 1846 and the frustrated Taos uprising early in 1847, when Governor Charles Bent was assassinated. Conjecturing a connection between these events and the Penitentes necessitates the introduction of Padre Antonio José Martínez. Although there is simply no evidence linking Martínez with the Taos plot, some historians assume that he was a necessary power behind the scenes. Whether or not he was a center of opposition to the introduction of the new American civil government, he was certainly a staunch and lifelong opponent of the new ecclesiastical establishment that arrived from Auvergne and Ohio. Martínez's position as chaplain and custodian of the Penitentes of New Mexico suggests a definite and perhaps even conscious and deliberate attempt to maintain and revitalize the Spanish ways of the religious life of the area. This thrust was compatible with the manifestation of the energies released in the death cart and into the making of the *bultos* in the latter one-half of the nineteenth century.¹⁶

¹⁵ Dorothy Woodward, *The Penitentes of New Mexico* (1935; reprint ed., New York: Arno Press, 1974), pp. 309-10.

¹⁶ Paul Horgan, *Lamy of Santa Fe: His Life and Times* (New York: Farrar, Straus, and Giroux, 1975), pp. 231, 241; see Fray Angélico Chávez, *Archives of the Archdiocese of Santa Fe* (Washington, D.C.: Academy of American Franciscan History, 1957), p. 123, entries 30, 34. Regarding Father Martínez and the Taos uprising of 1847, see the following: among the authors who accuse him of involvement in the conspiracy are: W. W. H. Davis (1857), W. J. Howlett (1908), Ralph E. Twitchell (1909 and 1911), George W. James (1920), Willa S. Cather (1927), Harvey Fergusson (1933), Louis H. Warner (1936), Carey



In an effort to resist the cultures that surrounded them, the Brotherhood of the Penitente, a flagellant religious organization of New Mexico and Colorado, dramatized and personalized the biblical events of the Crucifixion. In 1896 during a penance ceremony, Penitentes near Wagon Mound, New Mexico, practiced various forms of self-torture.



Secondly, the death cart appears as a straightforward confrontation with personal death. As in literature, the most significant thing about the use of a source may well be the change that the user makes. "Whereas the Spanish figure is interpreted as representing the 'Triumph of Christ over Death,' the New Mexican skeleton, in the heavy cart, pulled up a steep hill by a Penitente, is usually literally interpreted as the struggle of Man against Death."¹⁷

This ritualized meeting with death spans the possibilities between contraries. As George Mills conjectured in 1953 in *Kachinas and Saints*, the death cart reminds the viewer of the possibility of "unprepared-for death with its everlasting consequences": the threat of eternal punishment. In a later work, *People of the Saints*, Mills discussed the duplicity of death in New Mexico—of its issuance either in triumph into heaven or in despair into hell—and its evenhandedness, because death treats all the same.¹⁸

A third meaning of the death cart may be stated as mortification, as the putting to death of human sinfulness. The pulling of the *carreta* in the penitential procession is an acting out and a ratification of the sacramental action of dying to the human self, to the blood and carnal desire and human will as well as to the birth from these forces, which was undergone by baptism in infancy. It, therefore, seeks a renewal of life from another source, of life lived according to otherworldly norms; it is a ratification of the acceptance of the death of human flesh in baptism through a rejection of the norms of the flesh—and how effectively a man did this who pulled behind himself the image of fleshless bones that was Doña Sebastiana!

As the death cart expressed for the individual the death of his body and the rebirth of his soul, it also symbolized for the community of a Spanish village in the middle of the nineteenth century the impending death of their very culture, the death of their civil way of life at the hands of the American army and the military and civil governments it imposed, and the death of their indigenous way of religion with the appearance of Bishop Lamy. For the lines of power that they had known since the Spanish settlement of New Mexico were gone, and a new set of rules were in their place. In the ecclesiastical order, the



This jaunty Muerte, with her crooked smile and startling eyes, holds her bow ready to threaten the unwary visitor. She is forty-two inches high, holding a bow that is twenty-three inches long.

lines of power did not run from Rome by way of Mexico City and Durango but instead by way of Baltimore and Saint Louis, and the new authorities spoke their Spanish with a French accent. In the realm of politics the power emanated not from Madrid or the City of Mexico but from Washington, D.C., and there was an Anglo tone and a Yankee energy uncanny to the New Mexico Spanish, who had been described as "in the grip of a system essentially feudal, politically and economically, and their customary modes of thought and behavior were those arising from such conditions."¹⁹

But ironically, the wholehearted facing and acceptance of death brings about its opposite: to make an image of something terrifying and even fatal is to gain a power over it—to gain, indeed, its power. And so the final meaning of the death cart returns again to the first of its meanings, though the return is by the way of weakness rather than by the way of strength. The way to this victory was to be found in defeat, and not merely in spite of defeat but precisely because of it; it is a recapitulation of the Christian paradox itself, that it was not through the attributes normally thought of as properly divine—

McWilliams (1949). Paul Horgan (1956 and 1975); among the authors who exculpate him, at least by implication are: General Sterling Price (letter of 15 February 1847); Jose E. Sanchez (1903); L. Bradford Prince (1912); Benjamin M. Read (1912 and 1914); Richard F. Burton (1913); Blanche C. Grant (1934); William A. Keleher (1952); E.K. Francis (1956); Myra Ellen Jenkins (1966); Dora O. Vasquez (1975); Julian Vigil (1975); Ray J. De Aragon (1978); among the authors who confess that they do not know are Erna Fergusson (1940) and Oliver LaFarge (1959).

¹⁷ Stark, "The Origin of the Penitente 'Death Cart,'" p. 310; Marta Weigle, *The Penitentes of the Southwest* (Santa Fe, N.Mex.: Ancient City Press, 1970), p. 42; Weigle, *Brothers of Light, Brothers of Blood*, p. 170.

¹⁸ George Mills, *Kachinas and Saints* (Colorado Springs, Colo.: Colorado Springs Fine Arts Center, 1953), plate 39; George Mills, *People of the Saints* (Colorado Springs, Colo.: Taylor Museum, 1967), pp. 55-56, 68.

¹⁹ Carolyn Zeleny, *The Relations between the Spanish-Americans and the Anglo-Americans in New Mexico*

holiness, power and wisdom, the giving of the Law—that God effected the salvation of mankind, but by their opposites—by becoming sin (2 Cor. 5:21), by weakness and foolishness (1 Cor. 1:18-25), by being born under the Law (Gal. 4:4), and by becoming obedient even unto death (Phil. 2:6-8). The Christian New Mexican “embraces death because he loves life, because death is a part of life and until death has been accepted life is but a subterfuge.” The Spanish philosophy of life “faces the realism of existence and accents the inevitable end of living. . . . The Spanish New Mexican . . . demonstrates this realistic individualism that accepts existence without cynicism and meditates upon death.”²⁰

And so, in this total context, the folklore surrounding the death cart can best be appreciated, that touching the cart conferred good luck and especially longer life or that being harmlessly struck by Doña Sebastiana’s arrow designated one to the coveted position of being the Cristo in next year’s Penitente enactment of the Crucifixion. Here especially, the dynamism of the death cart itself impinged upon the dynamism of the Penitente ritualism, and the death cart, the obverted image of the divine source of life who dies, touched upon that divine death itself. The New Mexico Spanish, the Penitentes, faced and came to terms with death, and ritually they were masters of it, expert in it from baptism through mortifications to the ritual death of the annual village Cristo on the very cross of Christ. So for them the death of the body, something that they had undergone again and again within their culture according to every possible ritual mode, was something they did not fear. Indeed, the death of their culture at the hands of the Anglo was, therefore, something that could not touch them, for the new culture could only kill the old and deathbound body of the Spanish culture and could never kill its spirit.

An associate professor of English at Regis College in Denver, the Reverend Father THOMAS J. STEELE, a Jesuit priest, received A.B. and M.A. degrees from Saint Louis University and the Ph.D. degree from the University of New Mexico. A member of several professional organizations, he is the author of SANTOS AND SAINTS: ESSAYS AND HANDBOOK, published by Calvin Horn in 1974, and HOLY WEEK IN TOME: A NEW MEXICAN PASSION PLAY, published by Sunstone in 1976.

(New York: Arno Press, 1974), p. 50.

²⁰ Fergusson, *Rio Grande*, p. 123; Woodward, *The Penitentes of New Mexico*, p. 144.

The Colorado Sugar Manufacturing Company: Grand Junction Plant

BY WILLIAM J. MAY, JR.

During the 1890s Colorado lost nearly one-fifth of its population in out-migration, which resulted from the decline in the mining industry and the drought that affected agriculture.¹ The beet sugar industry was inaugurated when mining entrepreneurs, seeking lucrative investment opportunities other than mineral extraction, joined with agriculturalists who needed a cash crop suitable for arid climates and alkaline soils. A pioneer beet sugar factory was established by the Colorado Sugar Manufacturing Company at Grand Junction in 1899, financed by wealthy Denver mining entrepreneurs, such as John F. Campion, Charles Boettcher, Eben Smith, James McKinnie, and J.J. Brown. These men were to found the Great Western Sugar Company a few years later, which was destined to become the largest producer of beet sugar in the United States.

The Colorado Sugar Manufacturing Company was the first to build a sugar factory in the state, the first to contract for sugar beets with growers, and the first to produce sugar from beets and market the product. The whole enterprise epitomized the pioneering traits of successful adaptation and experimentation as applied to Great Plains agriculture. Prior to 1890 the Colorado economy was characterized by individualism, exploitation, and preemption, but after 1900 the emphasis began to shift to business and agricultural cooperation, a growing awareness of resource management, and the application of scientific technology to agriculture.

The first recorded efforts to grow sugar beets in the region occurred in 1841 when Guadalupe Miranda and Carlos Beaubien petitioned their Mexican governor for permission to grow beets, which they thought would "grow well and abundantly." No doubt Beaubien

¹ Jerome C. Smiley, *Semi-Centennial History of the State of Colorado* (Chicago: Lewis Publishing Co., 1913), p. 749.



Peter Magnes



Jacob F.L. Schirmer

had brought the sugar beet idea from his French homeland, where Napoleon had fathered the beet sugar industry, introducing Europe to the benefits of scientific rotation of cereals with hoed root crops.²

Fifty-niners Peter Magnes and L.K. Perrin were the first serious experimenters in beet culture along the South Platte River Valley in 1866. Professor Jacob F.L. Schirmer analyzed their beets in his lab at the Denver Mint. He was a chemist and metallurgist trained at the University of Freiberg, and having failed to obtain a fortune in the Colorado gold fields, turned to uncovering the nonmineral resources of the state. He was an early link between the mining and the agricultural interests.³ At one time Schirmer declared that Colorado could "furnish all the sugar to supply the whole nation" and predicted that the state would become the "greatest sugar producing state in the world."⁴ Some suspected that his more fantastic forecasts—such as fifty tons of sugar beets per acre—were "probably colored by the gold he was accustomed to handle."⁵ One sympathetic observer offered the thought that "men of science, once they have become accustomed to weighing

'dust' or roasting high values out of gold-bearing rock, may be pardoned for errors in figuring extraction values in the lowly beet."⁶

William N. Byers, editor of the *Denver Rocky Mountain News*, supported Magnes and Schirmer in their efforts to set up a beet sugar factory, but the shortage of capital proved to be a major impediment for another three decades. As early as 1872 a bounty bill was introduced into the territorial legislature that would have provided \$10,000 to support experimental beet growers, but the proposal was defeated by skeptical legislators holding the purse strings to an empty treasury. Despite the setback, Magnes and Schirmer incorporated the promotional Colorado Beet Sugar Manufacturing Company later that year with a stock subscription of \$30,000.⁷ Additional capital was not attracted to the enterprise, so Magnes went on plowing and Schirmer kept on analyzing. In an editorial Magnes wrote that "if we had beet sugar factories in Colorado similar to the flour mills scattered around" farmers could "produce more gold than all the mines in the mountains."⁸

Events on the Western Slope, rather than east of the Continental Divide, proved to be more salubrious for the culture of sugar beets. In 1881 the Ute Indian reservation was opened to white settlement, and men on foot, on horseback, on tall bicycles, in buggies, or in covered wagons—all raced frantically to claim choice farming tracts. The stubborn alkaline soil, however, resisted the farmers' plows. The farmers who settled in the Grand Valley, as elsewhere in the West, believed that the land was the only place where natural opportunities for individual material progress were free so that any man could secure, without capital, "a foothold upon which to work out the highest destiny."⁹

The first sugar crop grown in the Grand Valley was sorghum cane, planted in 1883 by farmers Aldrich and Henry. Their plans for sorghum cane subsided after the experimental processing plants at Fort Scott (Kansas) and Spanish Fork (Utah) closed.¹⁰ The first sugar beet crops grown in the valley were those of Henry R. Rhone and M.L. Allison. Allison got the Oxnard Sugar Works at Grand Island, Nebraska, to ship him some German (*Kleinwanzleben*) beet seed. Rhone obtained his seed directly from the Department of Agriculture. According to Rhone, "it was while the peach trees were growing that I

² Steinel, *History of Agriculture in Colorado*, p. 287.

³ *Ibid.*, pp. 291, 287.

⁴ Peter Magnes, "Beet Culture and Beet Sugar," *Denver Rocky Mountain News*, 13 July 1876.

⁵ *Grand Junction News*, Annual Edition 1896, p. 10.

¹⁰ *Ibid.*, 19 January 1884. For a more detailed account of the beet sugar industry in the Grand Valley and the Colorado Sugar Manufacturing Company, refer to an unpublished manuscript by the author located in the Documentary Resources Department, Colorado Historical Society, Denver, or the Western History Collection, University of Colorado Libraries, Boulder.

² U.S., Congress, House of Representatives, 36th Cong., 2d sess., House Report 1341, p. 245, cited in LeRoy R. Hafen, "The Maxwell Grant," *The Colorado Magazine* 4 (May 1927):89.

³ Alvin T. Steinel, *History of Agriculture in Colorado, 1858-1926* (Fort Collins, Colo.: State Agricultural College, 1926), p. 283.

⁴ *Denver Rocky Mountain News*, 8 December 1869.

⁵ Wilbur Charles Yeager, "A Study of the Sugar Beet," (M.A. thesis, University of Colorado, 1929), p. 8.

thought of planting something between the rows and I put in vegetables and among them sugar beets." He was a friend of Senator Henry Teller of Colorado, and "while talking with him he thought that the valley might grow sugar beets, and he said he would have Uncle Jerry Rush [Secretary of Agriculture] send me some seed. He did and I planted them."¹¹

Rhone had samples of his crop analyzed at the Grand Island factory. Its manager wrote back that "we certainly think that it would pay to manufacture those beets into sugar." Rhone's sugar beets contained three percent more sugar than beets grown in other parts of the state. A local newspaper wrote that "there is better than a gold mine here for the parties who erect a plant" to process sugar.¹²

Beet proponents in the Grand Valley saw a beet sugar industry as a panacea for the economic problems of the region. The industry could provide a lucrative cash crop for farmers who incurred heavy irrigation expenses; it could provide horticulturists with a crop to grow between fruit trees; it could employ local labor in the processing operation; and it could build Grand Junction into the commercial and shipping center of the Western Slope.¹³ The resulting commercial activity could force the railroad corporations and the city of Denver to "recognize our rights and give us what naturally belongs to us." Eastern Colorado revolved around the hub of Denver "so western Colorado must have a nucleus around which her great and diversified interests can center" before its nascent resources can or would be developed with energy or skill.¹⁴

In addition, it was explained that a beet sugar factory could add one-half million dollars directly to the wealth of Mesa County and another one-half million dollars in farm land appreciation—double its present value. Local nonprecious mineral resources could be developed, since the factory would consume 80 tons of coal and limestone and 60 tons of coke for every 100 tons of sugar produced. It was estimated that thirteen thousand people could be directly or indirectly employed by the industry. The sugar product could have a \$30,000 local market in the valley, since it was estimated that each resident consumed 60 pounds annually. But in 1890 the calls for a beet sugar factory were not heeded.¹⁵

Fears abounded in Mesa County that the beet sugar industry would continue to develop in Utah and elsewhere unchallenged. Utah pro-

fessed to have the first beet sugar factory in the Rocky Mountain region at Lehi and also provided a bounty of one cent per pound on its locally grown beet sugar as an incentive. Grand Valley farmers wondered how they could reasonably expect capitalists to invest their money in Mesa County if they could invest in the sugar industry in Utah and receive a bounty.¹⁶

A beet sugar bounty bill was introduced into the Colorado legislature in 1891. The State Agricultural Board concurred with the sponsors of the bill that a bounty would be an "inducement to the manufacturer to invest his money in our midst." But the Colorado Constitution prohibited state aid to private enterprise, and the bill was defeated. Another bill to exempt sugar factories from taxation ran afoul of a provision in the state constitution that prohibited exemption of any property from taxation.¹⁷

A sugar beet convention was held in Denver in 1892 that featured Peter Magnes and T.R. Cutler, manager of the Lehi plant in Utah.¹⁸ Shortly afterward the director of the federal agricultural experiment station at Fort Scott wrote "Governor" George A. Crawford of Grand Junction that Colorado beets were the "richest of any that I have ever examined, and if you can raise this kind of beets [*sic*], sugar making with you would be exceedingly profitable."¹⁹

The Oxnard Beet Sugar Company of Grand Island considered establishing two factories in Colorado in 1892, one in Brighton on the eastern plains and one in Grand Junction on the Western Slope. Colonel A.C. Fish forwarded the proposal from the Oxnard people in which the firm promised to set up a \$500,000 factory by November of 1893, provided that the Grand Valley farmers would contract to raise 5,000 acres of sugar beets. The sliding price scale for sugar beets would be from four to seven dollars per ton, based on the percentage of sugar in the beets. A local newspaper reported that the proposition sold "like hot cakes" and "ranchmen jump at the chance." Other headlines read: "That's better than anything that has been offered us yet!" and "We can't afford to let that chance pass" to "All realize that it will be a great enterprise for the entire reservation."²⁰

But the Oxnard proposal was withdrawn. Henry T. Oxnard explained that his company would build additional factories only when it was convinced that the "legislation given by the [federal] government will be permanent and lasting," but due to the present uncer-

¹¹ Henry R. Rhone to D.W. Working, 5 February 1925, quoted in Steinel, *History of Agriculture in Colorado*, p. 300.

¹² E.C. Howe to M.L. Allison, *Grand Junction Grand Valley Star*, 21 January 1891.

¹³ A.W. Walburn to M.L. Allison, 15 May 1890, quoted in *Grand Junction Grand Valley Star*, 31 May 1890.

¹⁴ *Grand Junction News*, 6 July 1895.

¹⁵ *Ibid.*, 31 December 1892.

¹⁶ *Grand Junction Grand Valley Star*, 21 November 1891.

¹⁷ Steinel, *History of Agriculture in Colorado*, pp. 297, 291.

¹⁸ *Ibid.*, p. 297.

¹⁹ M. Swenson to George A. Crawford, quoted in *Grand Junction News*, 12 March 1892. Crawford was elected governor of Kansas but because of a legal imbroglio, he actually never served in that position.

²⁰ *Grand Junction News*, 3, 10 December 1892.



The pioneer beet factory (above) at Lehi, Utah, erected in 1891 by E.H. Dyer, had a significant influence on beet culture in the Grand Valley. The Grand Island, Nebraska, beet factory (below) was built by the Oxnards. The Oxnard Beet Sugar Company considered building factories at Grand Junction and Brighton in the early 1890s; however, in 1899 Dyer won the contract for building the Grand Junction factory.



tainty, "we are not in a position to make any offer."²¹ The uncertainty that he alluded to was the congressional proposal to eliminate a federal bounty of two cents per pound on domestically produced sugar under the McKinley Tariff, that also added one-half cent per pound to imported sugar.²²

Early in 1893 Grand Junction pharmacist Charles E. Mitchell went before the Mesa County Board of Commissioners to request a local bounty of two dollars per ton for sugar beet growers—up to 250 tons; the bounty proposal was rejected. The Denver and Rio Grande Western railroad offered beet experimenters a special rate to transport their crops to Lehi, Utah. The Utah Sugar Company agreed to pay the Grand Valley growers the regular scale for beets. The Lehi field superintendent, George Austin, even drew up instructions for the 1894 spring planting in the valley. After the planting, the county commissioners offered a bounty of one dollar per ton up to 1,000 tons. This raised the sliding scale for beets at Lehi from five to eight dollars per ton.²³ The railroad lowered its freight rates from three to two dollars per ton, and business and professional men of Grand Junction donated \$2,000 to insure growers against losses in their experiment.²⁴

During the summer of 1893 the manager of the Lehi factory, T.R. Cutler, visited the valley and reported that it had all the facilities and resources necessary, including proper soil, climate, and attitude, to guarantee the success of the industry. He noted that the residents had the "true Western spirit of enterprise" and predicted that in a "few years from the present, quite a number of sugar factories will be erected there."²⁵

In 1893 seventy-five acres of Grand Valley land produced enough sugar beets to fill three railroad cars to Lehi. Cutler wrote back to the growers that his chemist was impressed with the analysis and that "I only wish we had about 100 cars like them." He added that they had "demonstrated that the Grand Valley can raise sugar beets second to none and a beet sugar factory located there would pay largely." Valley growers thought that they had "crossed the Rubicon" and urged "every man to take hold in earnest, and success is sure to follow."²⁶

In 1894 there were additional sugar beet experiments. George Austin toured the valley dispensing advice and remarked that efforts at sugar beet raising resembled the first efforts of the Utah farmers.

²¹ Henry T. Oxnard to C.W. Steele, 23 December 1892, quoted in *Grand Valley Star*, 31 December 1892.

²² *Grand Junction News*, 31 December 1892.

²³ *Ibid.*, 7 January 1892, 25 February, 8 April 1893.

²⁴ *Grand Junction Daily Sentinel*, 1 November 1925.

²⁵ *Grand Junction News*, 1 April 1893, wherein T.R. Cutler's report to the board of directors of the Utah Sugar Company is cited.

²⁶ *Ibid.*, 30 December, 8 April 1893.

Irregular results had been obtained there because of late planting, inadequate thinning, poor cultivation, and scanty irrigation. The superintendent of the Western Beet Sugar Company at Watsonville, California, was impressed and wrote that the valley had "all the necessary conditions to make beet sugar successfully."²⁷

By 1894 Utah growers had debunked the myth that irrigating the crop would inhibit the beet taproot system, producing a carrot-like plant relatively low in sugar content. The managers at the Lehi factory had demonstrated that high quality beets could be grown on irrigated land in an arid climate.²⁸ And the Utah results were confirmed by the systematic experimental work in the Grand Valley.²⁹

Department of Agriculture sugar beet expert Harvey W. Wiley visited Colorado in 1893 and predicted that in the near future "farmers would no doubt take hold of the matter with the vim characteristic of the Centennial state."³⁰ In Grand Junction beet growers pressed their case that sugar beets had "as much value produced and taken from the ground as truly as if it was so much gold or silver."³¹

C.L. Richards introduced another bounty bill into the Colorado State Legislature in 1895 to provide support for growers and to establish a state board of beet culture, but the bill was vetoed by Governor A.V. McIntyre on constitutional grounds. The domestic beet industry received another setback that year when a Republican Congress eliminated the Wilson bounty that had encouraged domestic experimentation.³² In 1897 Congress, however, passed the Dingley Tariff, a strong protective measure that encouraged, if not insured, the success of a domestic sugar beet industry.³³

That year would be fortuitous for Grand Valley sugar beet growers as well, for the secretary of agriculture stopped for a visit. Secretary James Wilson had been invited to the city by Charles F. Caswell and Horace T. Delong, two local beet growers. Wilson was accompanied by F.A. Saylor, the department's special agent in charge of sugar beet investigations in the United States. After his arrival, the secretary remarked about the excellent quality of the local soil. Wilson and

²⁷ *Ibid.*, 19 January 1895.

²⁸ Leonard J. Arrington, "Utah's Pioneer Beet Sugar Plant: The Lehi Factory of the Utah Sugar Company," *Utah Historical Quarterly*, 24 (Spring 1966):95, 108.

²⁹ *Grand Junction News*, 19 January 1895.

³⁰ *Ibid.*, 6 May 1893.

³¹ C.E. Mitchell, circular of the Western Colorado Beet Sugar Association, 20 February 1895, quoted in *Grand Valley Star-Times*, 23 February 1895.

³² *Grand Valley Star-Times*, 16 February 1895.

³³ Roy G. Blakey, *The United States Beet-Sugar Industry and the Tariff*, Columbia University Studies in History, Economics, and Public Law, No. 119 (New York: Longmans, Green & Co., 1912), p. 207. For a recent discussion of the impact of state and federal protective measures on the beet sugar industry of the United States, see Leonard J. Arrington, "Science, Government, and Enterprise in Economic Development: The Western Beet Sugar Industry," *Quarterly for the Agricultural History Society*, 41 (January 1967):10.

Saylor dined at the home of a grower, where the local beet experiments were discussed, and the secretary was handed a report of beet culture progress in the valley. Wilson and Saylor announced that the report was the "most complete report of its kind which had come under their observation" and promised to discuss it with the experts in Washington, D.C. They were impressed by the quality of the local beets and the ready availability of coal and lime in the area, which should be "inducement enough for capital to locate a factory in this valley."³⁴

Local growers thought that they had done enough experimentation and demanded "a chance to make sugar." To coordinate the search for investors, the Grand Valley Beet Sugar Company was established in February 1898. Treasurer H.J. Holmes journeyed to Denver and received "much encouragement from President Campion of the Denver Chamber of Commerce."³⁵ John F. Campion headed the committee for promoting sugar beet culture, which gave Colorado growers \$2,000 for experiments, supplemented by \$4,000 from Denver railroads.³⁶

In 1898 more than twelve hundred acres of beets were planted on the Western Slope, tours of Utah sugar lands were encouraged, and reports on beet culture from the Colorado State Agricultural Experiment Station at Fort Collins were distributed. The experiment station was founded in 1888 as part of the State Agricultural College and dispensed a wealth of information on beet culture. Its reports were given broader distribution through the weekly *Field and Farm Journal*.³⁷

Some fifty other localities in Colorado were competing with Grand Junction to get a sugar factory. Loveland, Fort Collins, and Greeley growers had shipped out train carloads of beets to the Grand Island plant for analysis.³⁸ Valley growers were warned to hustle, or other communities would get the chance to make sugar. The Mesa Board of County Commissioners offered to pay one percent of the cost of a

³⁴ *Grand Junction News*, 31 August 1897. James Wilson (1836-1920), was secretary of agriculture 1897-1913.

³⁵ *Grand Junction News*, 18 December 1897, 26 February 1898.

³⁶ Wilbur Fisk Stone, *History of Colorado*, 4 vols. (Chicago, Ill.: S.J. Clarke Publishing Co., 1918), 539.

³⁷ Campion was born in 1846, a native of Prince Edward Island (Canada), one of nine children in a prominent ship-building family. In 1862 he ran away from Prince of Wales College at Charlottetown to join the Union Navy as assistant quartermaster aboard the brigate *Dolphin* and delivered the first dispatches to General William T. Sherman at Savannah after his march to the sea. After the war Campion made and lost several fortunes in California and Nevada silver mines. He came to Leadville in 1879 at the height of the mining boom, but not until the 1890s did he strike a bonanza in the Little Johnny gold mine, a 150-acre property that he developed against the advice of local mining experts. Later it became known as the "greatest ore body in the world" (*National Cyclopaedia of American Biography* [New York: James T. White & Co., n.d.]:21:416; Rene L. Coqziz, *The Early Years of Colorado* [New York: Carlton Press, n.d.], p. 44).

³⁸ *Grand Junction News*, 12 March 1898.

³⁹ Stone, *History of Colorado*, 4:539.

factory worth over \$350,000 to the individual "who shall induce the erection of such a factory and not belonging to the company erecting the same."³⁹

That was sufficient incentive to set Charles N. Cox in motion. He went to Denver and interested capitalists John Campion, Charles Boettcher, and Eben Smith in the factory proposition. In return, the group demanded contracts for 3,500 acres of beets, a donation of 1,500 acres of land, and tax exemption for the factory for three years. Cox's Denver connection was his sister, Mrs. John R. Hanna, a member of the Denver Country Club and the purported "leader in Denver's best social circles" with access to the Campions, Boettchers, and Smiths. Cox was the son of a governor of Ohio, who later was secretary of the interior. He moved to the Grand Valley for health reasons in 1883, leaving an executive position with the Wisconsin Central Railroad to devote his time to the mining, cattle, and fruit business.⁴⁰

The press in Grand Junction lauded Cox for his indomitable energy, unflinching enthusiasm, superabundant pluck, and keen judgment, "a real benefactor to the Grand Valley." It was written that "no other man in western Colorado could have brought this undertaking to a triumphant conclusion." Cox gave credit to the "intensely practical work done by our growers five years ago under Charles E. Mitchell" because "without those cars sent to Lehi" by Mitchell, no factory could have been contemplated.⁴¹ Over a period of several years Cox would involve himself in other beet promotional schemes in Loveland, Eaton, Greeley, and Windsor. He later became a director of the Eaton Sugar Company.

The news that the pioneering beet sugar factory would be located in Grand Junction was greeted with enthusiasm in the local press. One newspaper noted that "there are usually some kickers but we have heard none against a beet sugar plant." The plant would serve as an impetus for other local industries, a financial lodestone for outside capital.⁴² When one Denver newspaper protested that the sugar factory should be located closer to the Queen City, a Grand Junction editor warned that "Denver has her fangs out to stab the beet sugar proposition," but the "haggishness of Denver in attempting to restrain her wealthy capitalists from investing in a beet sugar factory is not at all surprising," for that was in line with the "action she always takes."⁴³

³⁹ *Grand Junction News*, 2 July, 21 May 1898.

⁴⁰ *Ibid.*, 1 October 1898, 3 June 1899.

⁴¹ *Ibid.*, 3 June 1899, 10 December 1898.

⁴² *Ibid.*, 24 December 1898.

⁴³ *Grand Junction Daily Sentinel*, 30 December 1898.



The main street in Grand Junction changed rapidly in appearance from before incorporation in 1882 to 1884 and on to 1895, when the street appears to be a busy thoroughfare.





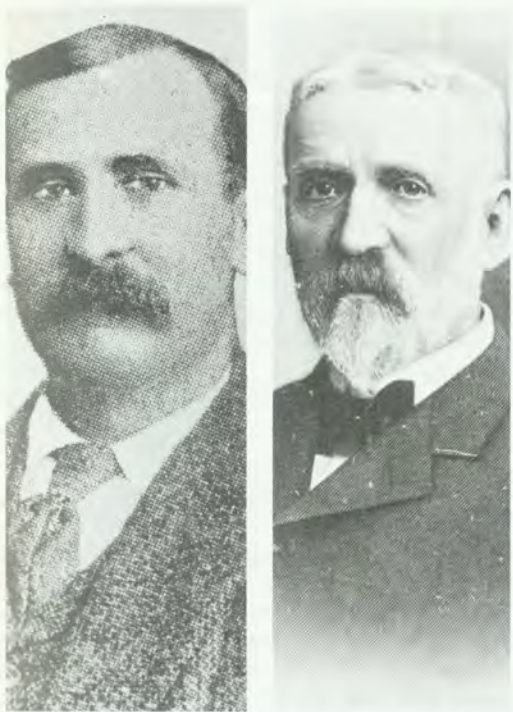
In January 1899 the Colorado Sugar Manufacturing Company was incorporated with an initial stock subscription of \$750,000. The directors were John F. Campion, Charles Boettcher, Eben Smith, James Renwich McKinnie, William Byrd Page, and James Joseph Brown.⁴⁴ A local editor noted that the “commercial integrity, business

⁴⁴ Colorado, Office of the Secretary of State, *Certificates of Incorporation* (5 January 1899), B70, p. 573.

Charles Boettcher was associated with the others in the Carbonate, Denver National, and National Bank of Commerce banks. He was born in Prussia in 1852, and moved to the United States in 1869 after visiting his brother in Cheyenne. He set up hardware stores in Fort Collins, Greeley, Evans, Loveland, Boulder, and Leadville. From his inauspicious commercial beginnings he ventured into many new industries, including cattle, land, utilities, cement, and others, “or, perhaps, as the farmers out over the beet fields explain his covering so much ground, he ‘just keeps on plowing.’” Boettcher would later tell everyone “I started it out here”—meaning the sugar beet industry. Boettcher’s biographer concedes that Boettcher did not conceive of the incorporation of the Colorado Sugar Manufacturing Company; that was Campion’s idea (LeRoy R. Hafen, ed., *Colorado and Its People*, 4 vols. [New York: Lewis Historical Publishing Co., 1948], 2:449; Edith Eduora Kohl, *Denver’s Historic Mansions* [Denver: Sage Books, 1957], p. 258; *Denver Post*, 8 April 1934; Charles Boettcher Collection, BFFP135, Documentary Resources Department, Colorado Historical Society, Denver; Geraldine Bowles Bean, *Charles Boettcher: A Study in Pioneer Western Enterprise* [Boulder, Colo.: Westview Press, 1976]).

A third Campion partner was Eben Smith, born in 1831. He came from Erie County, Pennsylvania, and headed west with California argonauts in 1852. He settled in Colorado in 1860. He was one of the first directors of the First National Bank of Denver in 1865. He took over the Caribou mine in Boulder in 1876; then the Louisville mine at Leadville in 1883. In 1887 he became manager of the Maid of Erin consolidated. He made his real fortune in the Little Johnny (Jay F. Manning, *Leadville, Lake County and the Gold Belt* [Leadville, Colo.: Manning, O’Keefe, and DeLashmurt, 1895], pp. 98; Eben Smith to John F. Campion, 7 December 1898, Eben Smith Collection, Western History Collection, Denver Public Library [DPLW]).

James Renwick McKinnie, born in 1846, was a major financial backer of the Mesa County land developer, the Grand Junction Town Company. He served in the Iowa infantry during the Civil War and afterward came to Colorado to prospect in the San Juan and Cripple Creek mining districts. Throughout his life he held far-ranging financial interests in gold, copper, and lead mines in Colorado, New Mexico,



Left to right, John F. Campion, Charles Boettcher, James R. McKinnie, James J. Brown, Eben Smith, and William Byrd Page (not shown) were the directors of the Colorado Sugar Manufacturing Company when it was incorporated in January 1899.

capacity and ability to promote great enterprises which rests with these men is so great that the success of the enterprise is assured at once.”⁴⁵

John F. Campion was president of the new company, and can probably be credited the father of the sugar beet industry in Colorado. A fellow member of the Denver Chamber of Commerce and a long-time Great Western board member wrote that “to John F. Campion is due the starting of the sugar beet industry in Colorado.” During the chamber meetings in 1898, “President Campion brought up the question of the possible value of increasing our agricultural output by the addition of sugar beets” and urged members to subscribe to an importation of beet seed from Germany.⁴⁶ Campion said his involvement in the beet business began when

Wyoming, Arizona, California, Nevada, and Missouri. He was best known as a Colorado Springs Exchange National Bank executive (*Who’s Who in America* [Chicago, Ill.: Marquis & Co., 1916-17], p. 1,655).

A partner of “Leadville Johnny” Campion in the Ibez Mining Company was James Joseph Brown, husband of the “unsinkable” Margaret Tobin (Molly Brown). Brown was born in 1855 in Wayne County, Pennsylvania. He tried farming in Nebraska, worked the placer and quartz mines of Deadwood Gulch in the Black Hills, and in 1880 he succumbed to the Leadville excitement and headed west for the Cloud City. He worked for a time for Eben Smith in the Tam O’Shanter mine near Aspen, and prospected at Alma, Fairplay, and Red Cliff. He returned to Leadville to work for David H. Moffat and Smith in the Henriette and Maid of Erin mines and became their superintendent. He married Maggie in 1886, and they became millionaires in the 1890s with their three-sixteenths interest in the Little Johnny (Manning, *Leadville, Lake County, and the Gold Belt*, pp. 95-96).

⁴⁵ *Grand Junction Daily Sentinel*, 7 January 1899.

⁴⁶ “Interesting Bits of History,” *The Colorado Magazine*, 23 (March 1945):93-94.

I kept getting something from the government at Washington that preached about beet sugar. I would glance at the pamphlet and then throw it away. But they still kept coming. I got mad one day and read it over. Found what I had been missing and from that start the beet sugar industry of Colorado was put under way. I have been in Colorado twenty-six years and I guess I know some of the ins and outs. Been mixed up in many things. Take more pride in the beet sugar business than anything I know.⁴⁷

Campion had "studied the subject thru government reports and knew the hidden potentialities." But the matter required courage to "attack the problem by a bombardment of hard dollars," and Campion was instrumental in getting men and capital together to build a factory, which made the beet sugar industry possible.⁴⁸ In spite of all the efforts by beet experimenters, who led the agitation for sugar manufacturing, the industry did not get under way until men with capital saw the sugar beet as a source of profit.

The incorporation of the first active sugar company in the state was greeted with unguarded optimism. The *Denver Rocky Mountain News* wrote that it would "mark a new era on the Western slope." The Denver German newspaper *Fidibus-Herold* hailed it as a "great, grand industry, far beyond the comprehension of the average citizen and one that will bring to the Grand valley peace and prosperity." The Colorado state engineer predicted a boom for irrigation agriculture: "it would not surprise me if 100,000 acres of land, now practically useless, were put under the ditch within a short time as a result of the coming to vogue of the sugarbeet enterprise."⁴⁹

Grand Junction newspapers stated that "no more important event of a character affecting the whole people of a commercial nature" had taken place in the valley before and "we would be veritable chumps indeed if we did not give the significance to the event which its importance justifies." The factory was an omen of "better times, better than the valley has ever experienced." It would be the "opening wedge for an influx of capital . . . such an era of prosperity will never have been witnessed, as will come with its erection." Though the industry is "not like finding money—it means hard work and small margins of profit," it would provide a permanent, certain market for Grand Valley farmers. Some were predicting that the valley would become the "future sugar bowl of the Centennial state."⁵⁰

E.H. Dyer of Cleveland won the bid to build the factory, which



E.H. Dyer, builder of the first successful sugar factory in the United States in 1879, also built the sugar plants in Lehi, Grand Junction, and Loveland.

was designated "House 13" to signify its place in the chronology of Dyer sugar plants. Oxnard Sugar lost the bid because it could not build a plant larger than 350 tons-per-day slicing capacity, while the Dyer firm offered a plan to expand the plant to 550 tons-per-day, should the industry prove a success in the valley.⁵¹ The Dyer company had built factories in Utah, Ohio, Oregon, and California.

The factory site was donated by the Grand Junction Town Company and the administrators of the estate of the founder. The site was within a mile of a terminal that served the five railroads that passed through the Grand Valley.⁵² A Dyer representative remarked that "we are going to put up a factory at Grand Junction which I can call, without exaggeration, a cracker jack." Both the Lehi and the Grand Junction factories were built on a part of their 1,500 acres of donated land, had perpetual water rights sufficient to run the plant during the slicing campaign, used processing equipment made by the Kilby Manufacturing Company of Cleveland, and borrowed the same "sugar tramps," a group of traveling skilled and semi-skilled sugar refining technicians who made the early factories operate smoothly.⁵³

The factory plan was similar to the Ogden plant of Utah Sugar, but twice as large as the Lehi factory that Dyer had erected in 1891. The plant building at Grand Junction was more than three stories high, supported with thirty rail cars of structural steel. The only wood in the structure was in the roof. The foundation was larger than a football field. A million bricks were used for the sides of the building.⁵⁴ The

⁴⁷ *Denver Post*, 5 October 1916, wherein an interview with Josiah M. Ward in 1904 is cited.

⁴⁸ *Ibid.*

⁴⁹ *Denver Rocky Mountain News*, 7 January 1899; *Denver Fidibus-Herold*, 16 March 1899; State Engineer McCune, "Irrigation vs. Beet Culture," in the *Denver Republican* quoted in *Grand Junction Daily Sentinel*, 6 October 1899.

⁵⁰ *Grand Junction Daily Sentinel*, 18 September 1899; *Grand Junction News*, 18 February 1899.

⁵¹ Dan Gutleben, *The Sugar Tramp* (Walnut Creek, Calif.: Mimeo-Type Corp., 1947, [1963]); *Denver Rocky Mountain News*, 14 January 1899.

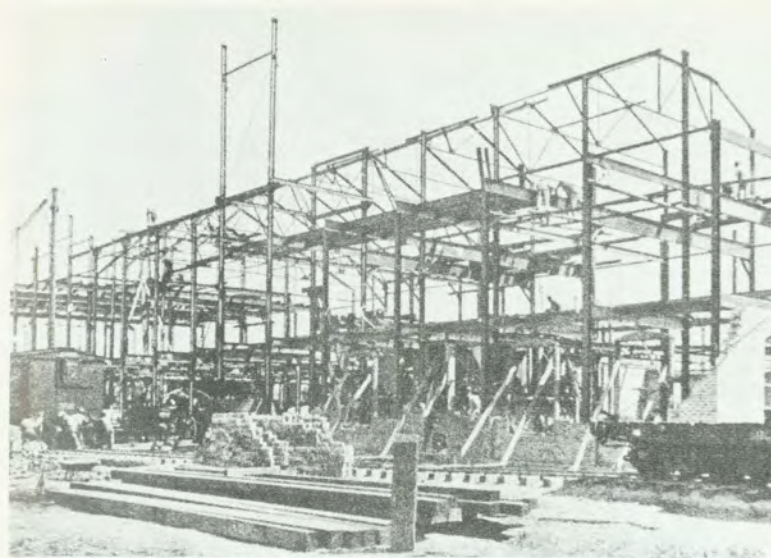
⁵² Letter from Charles N. Cox, *Grand Junction News*, 4 February 1899; *Mesa County Industrial and Statistical Survey* (Grand Junction: Chamber of Commerce, 1 July 1947), p. 1.

⁵³ *Grand Junction Daily Sentinel*, 10 March, 7 January, 21 April 1899.

⁵⁴ *Ibid.*, 7 January, 21 April 1899.

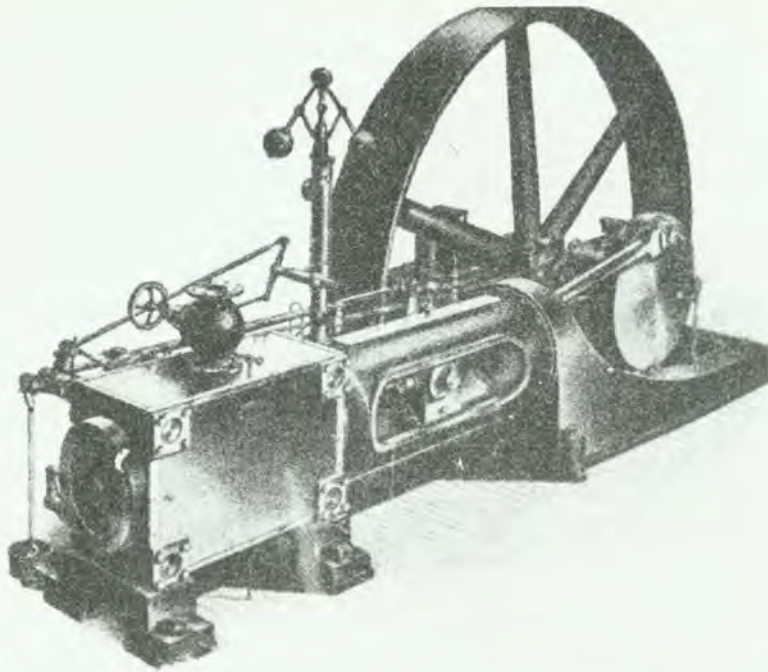


The artist's depiction of the Grand Junction factory became a reality as construction began in 1899. Thirty rail cars of structural steel supported the three-story high building. Note the beet storage sheds in the background (below).



The factory plan was similar to the Ogden factory and twice as large as the Lehi factory—with a foundation larger than a football field.





The power source for the factory was a giant Corliss engine, the most powerful steam engine of its time.

first floor of the plant building was suspended four feet over the foundation to protect the sugar product in the event of flooding. At the heart of the plant was a giant Corliss power engine, a 150 horsepower double dynamo, the most powerful steam engine of its time, which provided mechanical and electrical power to the pumps, washing machines, evaporators, vacuum machines, centrifugal machines, and lights. The ground floor held twenty pumps and a 14-cell diffusion battery. The second level contained four evaporators, which weighed twenty tons each. And the third floor held vacuum machines that weighed thirty-two tons each, mixers, and eight centrifugal machines.⁵⁵

Surrounding the main plant were a warehouse, boiler house, seed house, lime house, and beet storage sheds. The warehouse was one-half the size of the main plant and held thousands of sacks of sugar. The boiler house had twelve large boilers. Each beet shed could hold 700 tons of topless sugar beets. The lime house was east of the plant. The seed house held four rail cars of seed, enough for one

season's planting. The beet pulp silo was large enough to hold 130,000 cubic feet of cattle feed. Railroad spurs connected every building in the plant complex. The factory was to have been completed by 15 October, but delays prevented the opening until the middle of November.⁵⁶

Guy and Hubert Dyer came from Lehi to impart their knowledge to the new factory operation. Guy Dyer worked as the factory superintendent, while Hubert became the chemist. The chemist was probably the most important man at the factory, since he supervised all of the "control" work, such as the size of the sugar crystals, the impurities in the limestone that could interfere with the crystallization process, and the degree of acidity in the process "juice" to prevent excessive loss of sugar.⁵⁷

The Grand Junction factory was one of the most efficient sugar processing plants of its time. It could extract about eleven percent sugar from each ton of beets, about 250 pounds, for a total of 90,000 pounds of granulated sugar each day. Within two decades the average extraction rate would rise to sixteen percent, but even the most efficient technology could not extract all of the sugar—one reason for the emphasis on field work to produce high quality beets.⁵⁸

After the factory commenced operations, two shifts of fifty men each were employed. The first shift arrived at seven in the morning and worked until the second shift arrived at seven that evening. Ordinary laborers in the plant were paid fifteen cents per hour, skilled pipefitters and machinists got thirty to forty cents per hour, and the chemist got \$125 per month.⁵⁹

The first commercial sugar crop in Colorado was grown with 75,000 pounds of beet seed that Charles Boettcher imported from the Kleinwanzleben sugar plant in Germany. The growers were able to buy their seed at Forry's Implement Store in Grand Junction on credit charged against their crop. The Campbell and McCary hardware store supplied the growers with other necessary implements such as the Moline sugar beet seeder, sugar beet sub-soiler, and sugar beet cultivator.⁶⁰

The growers were advised to follow the instructions of George Austin, the field superintendent for Utah Sugar. He urged the growers to use twenty pounds of seed per acre. A drill was pulled by two horses, and the seed was sowed simultaneously in four rows eighteen

⁵⁵ Ibid.

⁵⁷ Ibid., 28 January 1899; Arrington, "Utah's Pioneer Beet Sugar Plant," p. 104.

⁵⁸ *Grand Junction News*, 18 November 1899; "Chronology of Beet-Sugar Manufacturing Enterprises in the United States" (Denver: Great Western Sugar Company, n.d.), p. 5.

⁵⁹ *Grand Junction News*, 18 November 1899.

⁶⁰ Ibid., 18 February 1899.

inches apart. Some growers placed their rows further apart, hoping to run the irrigation water for greater distances. The crop, however, suffered, since one end of the field was underwatered while the other end was flooded.⁶¹

In the early 1890s it was believed that irrigation would encourage the sugar beet plants to develop a long taproot, resembling a carrot but containing little sugar. By 1899 this notion had been dispelled by the secretary of agriculture who assured valley growers that "there is an appreciable increase in yield per acre of the irrigated plants without any appreciable decrease in the contents of sugar." Irrigation increased the yield of beets by one-half a ton per acre. There were thirty thousand acres of irrigated farmland in the Grand Valley from Palisade to Fruita, and more than ten percent of the acreage was in beets.⁶²

Austin's instructions for growing sugar beets specified that the plants should be blocked or bunched in early June, when weeds became a problem. The grower had to use a six-inch garden hoe to remove four inches of beet plant half an inch beneath the ground, leaving a small "bunch" one or two inches wide. Thinning followed the blocking; its purpose was to remove surplus plants that were maturing improperly. The thinner would crawl along on his hands and knees straddling the beet row to select the largest and healthiest plant in the bunch, which he held between thumb and forefinger and removed the surplus with a quick but firm thrust. Boys and girls between eleven and fifteen years old were thought to be the best thinners, "being more active than a grown person." It took more labor to thin than to block. A blocker could clear three-fourths of an acre per day, while a thinner could clear only one-fourth of an acre.⁶³ The high cost of hiring outside help to thin beets threatened the growers' narrow profit margin, and large families, typical of the Mormons in Utah, contributed, no doubt, to the success of the industry there.

The German government beet expert G.W. Bender visited the Colorado beet lands and said that the "Colorado beet is the superior of the German product," but expansion of the industry in the state would be restricted until the problem of reducing labor costs could be effected; thereafter the "inter-mountain west would monopolize the beet sugar business in the United States."⁶⁴ Mechanization rather than cheap labor ultimately alleviated the intensive labor requirements of this crop, but not before successive waves of immigrants would toil in

⁶¹ *Ibid.*, 20 April 1901; under-irrigation produced a wilted plant, while over-irrigation produced a low sugar-bearing beet. The recommended row separation distance came from beet experiments in Minnesota and the French *Comte des Fabricants de Sucre le l'Osise*.

⁶² *Grand Junction News*, 18 March 1899; *Second Annual Report of the Reclamation Service*, 58th Cong., 2d sess., H. Doc. 4688 (Washington, D.C.: Government Printing Office, 1904), p. 210.

⁶³ *Grand Junction News*, 31 August 1901.

⁶⁴ *Grand Junction Daily Sentinel*, 12 November 1901.



In the 1900s, prior to the mechanization of agriculture, sugar beets were thinned and piled by immigrant workers, including their children.



the sugar beet fields of Colorado—first the Germans from Russia, then the Japanese, and finally the Mexican-Americans and the Mexicans.

Colorado Sugar first sought to improve the labor situation by importing more permanent settlers into the Grand Valley rather than depending upon a floating force of casual and migratory laborers. The sugar company had 1,500 acres of land worth \$100,000 that it wanted to lease or to sell to beet growers. Early in 1899 Campion wrote to the German Society of New York requesting some two hundred immigrant families, especially those familiar with beet culture. However, Campion and the sugar company had to settle for “Russians” from nearby Missouri, Nebraska, and Utah.⁶⁵

The prospective colonists were offered low-rent land—all that they could cultivate, free water for five years, free tents, and a thousand feet of timber. The colonist could buy the land outright for fifty dollars per acre on easy credit terms. The sugar company offered to seed an acre of land for labor costs of fifty cents per acre and seed costs of three dollars per acre. Grand Junction businessmen offered free land and water “to all who desire to settle in the Grand Valley” and who would grow sugar beets. It was further suggested that “every man in the city should make an effort to bring hundreds of industrious families into the country.” It was stated that beet growers could gross ninety dollars per acre, with a net profit of thirty dollars under favorable conditions if the labor was confined to the grower family. The Denver and Rio Grande railroad even offered special low-cost passenger and freight rates for prospective colonists and their household goods.⁶⁶

In 1901 the sugar company offered low-rent land and free water near Loma, about sixteen miles from Grand Junction. The colonists were able to buy the land outright for seventy-five cents per acre, the cost of the water assessment. For colonists willing to raise at least fifteen acres of beets, the company would build them a twelve- by twenty-four-foot house and would give them another rent-free five

acres for truck crops and a “good cistern with a filter” to produce suitable drinking water. In 1902 the new management of the sugar company renewed the effort to attract beet growers. It raised the price schedule for beets, about two dollars per ton over the 1900 rates, which were among the highest in the country.⁶⁷

Nearly 300 new families settled on company land in 1899-1900, far short of expectations. It had long been recognized by Grand Valley sugar beet proponents that “the one great obstacle in the way of having a sugar factory in our midst is lack of population.” Supplemental labor for the thinning and harvesting operations continued to be in short supply and had to be imported from Utah. A suggestion was offered to “close the saloons and let them till the soil?”⁶⁸ Efforts to increase the sugar beet acreage in the Grand Valley were unsuccessful.

The reasons for the acreage not increasing were basically the result of the policies of the sugar company. The new growers were too scattered and were tempted by the offer of free land and water and, as a result, did not undertake more beet acreage than they could properly handle. The sugar company had encouraged the individual growers to undertake a large acreage in order to keep the factory solvent, but each successive year fewer farmers planted beets. Farmers who had lost a minimum of forty dollars per acre on beets the year before could not afford to make the attempt again the following year. Generally growers grew a satisfactory stand of beets when they planted twenty acres or less, sometimes with profits as high as fifty dollars per acre, but they would fail completely when they attempted thirty or more acres.⁶⁹

Mechanization was early seen as a solution to the labor problem that drained grower profits. In 1899 it was thought that “simple and practical machinery ought to prove a bonanza for its discoverer.” The factory manager introduced an automatic seeder in 1900 that could deposit four seeds eight inches apart simultaneously. Nebraska-grower Gus Heldt developed a two-row walking cultivator that reportedly “retired a lot of hoes from the beet fields.” And, in 1902 John Deere produced a four-row drill and cultivator with a seat that was drawn by two horses. Major developments in equipment had to wait two decades

⁶⁵ John F. Campion to E.H. Dyer, 24 February 1900, Campion to G.B. Elbing, 2 January 1900, John F. Campion Collection, Western History Collection, University of Colorado Libraries, Boulder (hereinafter cited as Campion Collection); *Grand Valley Evening Sun*, 28 March 1900 (the *Sun* was a continuation of the *Star-Times*).

⁶⁶ John F. Campion to G. B. Elbing, 2 January 1900, Campion Collection; *Grand Junction News*, 4 February 1899, 3 November, 3 March 1900.

⁶⁷ *Grand Junction News*, 6 April 1901; *Denver Republican*, 4 December 1900.

⁶⁸ *Grand Valley Evening Sun*, 28 March 1900; *Grand Junction News*, 30 December 1893, 4 March 1899.

⁶⁹ *Grand Junction News*, 1 December, 23 November 1901.



for such devices as the mechanical cross-blockers and the automatic harvesters and thinners.⁷⁰

During the first sugar beet campaign in Colorado, the pest control methods were primitive. State entomologist C.P. Gillette instructed growers to place a mixture of Paris Green or London Purple and one to twenty parts of flour into a cheesecloth sack to be shaken over the beet plants just before sunrise—when the plants had enough moisture to retain the flour and poison mixture. But most applications were too late to prevent a webworm and a cutworm blight, which consumed 500 out of 3,000 acres of beets that first season.⁷¹

A host of obstacles blunted the success of the 1899 season. After unusually heavy May rains, a heat wave baked the soil into a hard crust. The insect blight of caterpillars came in July. Then cold weather moved into the valley earlier than expected. In October harvesting and factory delays frustrated the growers and the sugar company. It was reported that the beet fields throughout western Colorado were “filled with men, women and boys, busy digging, topping, and preparing the first crop” before the beets became frozen in the ground by the winter cold. The roads were in poor shape, and the wagons, with their double sideboard load of topless beets, often sank into the mud on their way to the factory.⁷²

The equipment installation at the factory was beset by delays, which in turn delayed the beet processing. In order to extract the most sugar, beets had to be processed immediately, or else the grower and the company would suffer diminished profits. One grower complained that “we were curtly told to wait until we had orders to harvest; we did so and half our beets are in the ground yet frozen.” The local supply of labor to harvest the beets was insufficient, and growers could not get the beets out of the ground in the two weeks in November that the sugar company had given them. After the factory began receiving the beets late in November, the sewage pipes became clogged and blocked the dams below the intake filters of the water company—rendering them useless. When the big whistle atop the factory blew for one-quarter of an hour on 21 December, announcing the termination of the 1899 campaign, only 6,600 100-pound sacks of sugar from 8,200 tons of beets had been processed. Growers produced an average of five tons per acre, far short of the fifteen to twenty tons

⁷⁰ *American Farmer Magazine* (January 1899), quoted in the *Grand Junction News*, 18 February 1899; *Grand Junction News*, 3 March 1900; Elvon L. Howe, *Great Western: A Chapter in the Building of Today's Greater West* (Denver: Great Western Sugar Co., 1955), p. 14.

A mechanical cross-blocker was available in 1914, which was developed by Hans Mendelsson of Great Western. The harvesting of beets was given a boost in 1923 when Model T trucks with Warford gears were introduced. Automatic pilers were introduced in 1929. Since 1958 John Deere and Eversman machine thinners thin up to 400 acres per day, eliminating the need for 200 laborers.

⁷¹ *Grand Valley Evening Sun*, 22 May 1900.

⁷² *Grand Junction News*, 25, 18 November 1899.

that Utah growers had been harvesting. The Grand Valley growers had produced about 1,100 pounds of sugar per acre, while the Utah growers produced an average of 2,500 to 3,000 pounds of sugar per acre. Improvements in the technology of growing sugar beets improved so much by 1923 that growers could produce 6,000 pounds of sugar per acre, and sugar by-products for cattle consumption from a single acre could produce 600 pounds of meat and 6,000 pounds of milk.⁷³

Factory superintendent Hubert Dyer blamed the initial lackluster beet season on the inadequate attention by growers to the special needs of sugar beet culture. A local newspaper added that “it takes work to grow beets.” The “old theory that a man can make money by sitting on his back porch and see the fruit grow into money has been the hardest proposition to overcome.” But 1899 was not altogether a failure, since the beet industry had “brought fresh courage and new life into every branch of our horticultural and agricultural industries.”⁷⁴ Elsewhere in the nation, too, 1899 was not a banner year for beets. The Michigan and the California crop suffered from severe droughts while Nebraska beets were drowned in torrential rains. The *Sugar Beet Gazette* noted the “exceptional character of the year just passed,” and perhaps with Grand Valley growers in mind, reflected that “to those who were just embarking in this new venture the failure of the first crop comes as a serious disappointment,” although “failure is quite in the natural order of things at first.” Years later C.E. Mitchell recalled the impact of failure on the local enthusiasm. At the beginning of the 1899 season “every citizen of Grand Junction was united for success,” but at the close of the campaign the people “renewed their old quarrels and were as hopelessly apart with their local quarrels as they ever had been in years past.”⁷⁵

Sugar company president Campion was disturbed by the abrasive friction within the factory management. So he dismissed the factory and the field superintendent, Hubert Dyer and Charles Mitchell, respectively. Mitchell had been better at dispensing drugs and tonics than advising skeptical beet growers. The growers felt that the “fields he supervised fared no better than the others and tasted just as good to the worms.” Campion tried to get T.R. Cutler, manager of the Lehi factory, to take over Cox’s position as manager, but the Utah Sugar manager would not accept. Campion wrote Cox that “I feel we made a serious mistake in locating the factory at Grand Junction, and had we

⁷³ *Ibid.*, 9, 16, 30 December 1899; *Grand Junction Daily Sentinel*, 21 December 1899; *The Beet Sugar Story* (Washington, D.C.: U.S. Beet Sugar Association, 1959), p. 30.

⁷⁴ *Grand Junction News*, 18 November, 30 December 1899; *Grand Junction Daily Sentinel*, 21 December 1899.

⁷⁵ *Sugar Beet Gazette*, 15 January 1899; *Grand Junction Daily Sentinel*, 1 November 1925.

known as much about the details of raising sugar beets a year ago as we know now, we should have gone about the business in a different way."⁷⁶

The growers who were displeased with the sugar company management practices set up the Grand Valley Beet Growers Association, which had 150 charter members in February 1900. The association agitated for a higher pay scale for sugar beets, competent weigh bosses at the factory unloading docks, a grower-appointed chemist, inexpensive freight rates, and company-subsidized rates for outlying districts. Even today these issues are sources of friction between the sugar company and the grower.⁷⁷

The sugar company conceded a few points, such as a grower-selected weighmaster at each station, a higher pay scale for beets, and company loans to growers of five dollars per acre for labor. But the company chemist would stay. He had become unpopular over his policy on tare and on the rejection of over- and undersized beets. The company agreed to modify the tare process. Taremen would take a sample of the grower's beets and compute the average amount of tare by deducting the weight of the foreign materials commonly found in beet wagons, such as dirt, weeds, rocks, farm furniture, and even false teeth. Cox reminded the growers that the factory was not "buying Grand Valley soil for the purpose of running it through the mill so the practice of rejecting dirt seems to be a necessary one." The company freight policy would also remain the same.⁷⁸

The 1900 season became another financial disaster for the sugar company. By July only 1,000 out of a promised 3,000 acres of beets had been planted and Campion wrote Cox that "we will probably land in the soup to a greater extent than we did a year ago." Though 50,000 tons of beets were delivered to the factory after the harvest, five times the amount of the prior season, the management was still disappointed, and Campion wrote to Cox that "I have never gone into a scheme in my life that has been more disappointing and annoying" so that "every time I think about it I feel like hiring a truckman to boot me around the town." Stockholders in Colorado Sugar lost \$80,000 in venture capital in the 1899-1900 seasons, after having anticipated an annual return of twenty percent, similar to the factories at Lehi and Rocky Ford that produced annual profits of \$200,000 and more. The Denver group had sunk \$200,000 in cash into the Grand



⁷⁶ John F. Campion to Hubert Dyer, 3 January 1900; Campion to E.H. Dyer and Company, 13 January 1900; Campion to Charles N. Cox, 19 January 1900. Campion Collection; *Grand Junction News*, 3 December 1899.

⁷⁷ *Grand Junction News*, 3 February 1900 (association officers included G.J. Carpenter, president; L.H. Maynard, vice-president; Robert Wier, secretary; Jerry Nolan, treasurer).

⁷⁸ *Grand Junction News*, 3 February 1900, 18 November, 2 December 1899.



Railroad cars were also used to transport the yearly harvest of sugar beets to the factory.

Junction enterprise and owed trust companies bonds worth another \$400,000. For them the sugar beet business had turned sour.⁷⁹

Many valley growers found their disappointment transcribed into bankrupt homesteads. Quin Castner, his wife, and two sons had worked beets eighteen hours a day from March until October and had nothing to show for their effort. They told a sugar company inspector that it was impossible to raise a satisfactory crop on Grand Valley soil and planned to leave the reservation "even if they had to get out in a balloon."⁸⁰

By November 1901 the owners of Colorado Sugar had decided to sell, pool their financial resources, and make another try at the beet business in northeastern Colorado at Loveland. The new company would be called the Great Western Sugar Company of Colorado. The board of directors was nearly identical to Colorado Sugar, but they made the Loveland growers deposit \$50,000 in the bank to back up their promises to grow enough beets.⁸¹

Campion retained his faith that "Colorado is pre-eminently the great sugar beet raising state of the Union." He said of the Grand Junction enterprise that "experimental schemes, so far as my experience with them goes, are extremely expensive." The key to a

Large piles of sugar beets at the Grand Junction factory are being readied for processing into sugar.



successful sugar factory was close management and the intrusion of the company into every aspect of grower operations to ensure proper planting, thinning, irrigating, and harvesting of beets. Campion wrote to a friend that "next to a good mine, I regard a sugar beet factory as the best investment in the United States that I have any knowledge of."⁸²

Charles Boettcher complained that "all he had at Grand Junction was empty sacks, alibis, excuses and losses." The factory was a "rat hole" into which he had supposedly "sunk \$100,000 a year" although he "accepted regular annual deficits as the price of the development" of the pioneer beet sugar industry. Years later he remarked that the Grand Junction debacle was due to insufficient grower interest and poor land. The growers had wanted to "raise beets on horseback." Fannie Boettcher was more direct and said the "cowboys wouldn't grow sugar beets."⁸³

When the Denver group decided to abandon the Grand Junction factory, House 13, local residents rallied to "jump right into the harness" to save the plant from permanent closure, which would trim the future industrial prospects of the valley—"our goose would be cooked for years to come." Other Western Slope communities warned that the "people of that locality can ill-afford to lose so great an enterprise." A group of Cheyenne capitalists, headed by George F. Nagle and H.M. Barnett, reorganized the company. Nagle became the new president, Barnett, the vice-president, and McKinnie continued as treasurer and J.F. McFarland, a cashier of the local Colorado State Bank, became the secretary and manager. The new leadership, however, failed to inspire the local beet growers, and less beets were harvested and shipped to the factory than the year before. About 35,000 tons were processed, a drop of 15,000 tons from 1900.⁸⁴

The demise of Colorado Sugar began shortly after the 1901 campaign had ended. In January 1902 a receiver suspended the Colorado State Bank, which had loaned the sugar company \$63,000, secured by its assets, water rights, and land. The bank was forced to borrow \$30,000 from the Hanover National Bank of New York to

⁷⁹ Campion to Charles N. Cox, 2 May 1900; Campion to E.H. Dyer and Company, 24 February 1900; Campion to E.C. Simmons, 17 December 1900; Campion Collection.

⁸⁰ A.R. Officer to Campion, 17 October 1900; Campion Collection.

⁸¹ Colorado, Office of the Secretary of State, Certificates of Incorporation, 6 February 1901 (the incorporators were: John F. Campion, William Byrd Page, Charles Boettcher, and James R. McKinnie).

⁸² Campion to E.C. Simmons, 17 December 1900; Campion to W.F. Botsford, 3 September 1904; Campion to E.C. Simmons, 17 December 1900; Campion Collection.

⁸³ Gutleben, *The Sugar Tramp*, p. 109; "Memorandum from Chris Dobbins to Claude K. Boettcher," Dobbins interview, p. 32, Charles Boettcher Collection, Documentary Resources Department, Colorado Historical Society, Denver; *Denver Post*, 25 November 1945.

⁸⁴ *Grand Junction Daily Sentinel*, 3 December, 3 November 1900; *Gunnison Tribune*, 1 December 1900; *Denver Republican*, 4 December 1900; *Grand Junction News*, 1 December 1901.

keep the sugar company solvent in 1901. When the notes matured and the sugar company could not pay them, the bank demanded the assets of the company. Then, when the Hanover Bank attempted to collect its debt from the Grand Junction bank, which could not pay, the Hanover Bank had itself suspended to prevent the assets of the sugar company from being transferred to New York.⁸⁵

Another reorganization of the sugar company took place in April 1902. It was rescued this time by James McKinnie, the only original Colorado Sugar stockholder holding a director's position. But when no beet contracts were signed in 1902, the International Trust Company of Denver, which held the mortgage, initiated receivership proceedings against Colorado Sugar. The trust company threatened to move the factory to Idaho if the sugar company failed to settle with the Colorado State Bank, to sign contracts with valley growers, and to plow under the alfalfa rotation crop to rot in preparation for the 1903 season. George Austin, the Lehi field superintendent who had helped instruct the valley growers, warned that "those who said the factory could not and would not be removed would be surprised some day to wake up and miss the buildings south of the city."⁸⁶

A compromise between the bank and the sugar company was effected in May 1903, which assured retention of the Grand Junction factory. The bank released the title to 3,800 acres of sugar company land, plant property, and all other claims in return for \$30,000 in cash and \$75,000 in company stock, which the bank could buy back within a year for fifty cents on the dollar. This would give assignee William McCurdy \$67,000 to pay dollar for dollar on deposits against the bank. The crux of the compromise was McCurdy's willingness to accept sugar company stock in lieu of cash. The 3,800 acres of land held by the sugar company were not especially valuable as assets except when the land was planted in beets.⁸⁷

The Colorado Sugar Manufacturing Company came to an end in the courtroom of Judge Stevens of Telluride on 23 May 1903. The Western Sugar and Land Company bought the company for \$589,000, some \$89,000 more than Nagle had paid the Denver group. In 1916 Holly Sugar purchased the company, installed new machinery in the factory, and introduced the valley growers to profit-sharing. Between 1918 and 1929 the factory processed 50,000 tons of beets per year. The factory was permanently closed in 1931, and Grand Valley

growers had to ship their beets to the Holly Sugar plant at Delta.⁸⁸ In 1950 the Climax mining company converted the factory into an uranium mill—to process "yellow cake" instead of "white gold."

When the pioneer beet sugar factory of Colorado opened in 1899, it processed less than three percent of the national sugar crop from 3,500 acres of land. By 1978 Colorado was producing over twelve percent of the national sugar beet crop on 113,000 acres of land and ranked second in the production of sugar beets.⁸⁹ The Denver group that first experimented with the beet industry at Grand Junction used their accrued knowledge and experience to make Great Western Sugar a world leader in sugar beet production and technology. The early beet sugar industry bridged the transitional period in Colorado between the decline of mining and the rise of agriculture and manufacturing.

The beet sugar industry has made a positive impact on the state through increased land values, diversified agriculture, and improved irrigation systems. It has attracted outside capital, aided the evolution of scientific and mechanized agriculture, and promoted subsidiary industries. On the negative side, the sugar beet industry has led to the increased financial management by the sugar companies over farm life, to the exploitation of farm labor, and to the transfer of local initiative to eastern financial centers. The present-day beet sugar industry has, however, more than justified the far-sighted plans of John F. Campion, and it has fulfilled the grandiose dreams of the perservering sugar beet growers who had faith in its future.



WILLIAM JOHN MAY, JR., received his B.A. (1969), M.A. (1970), M.B.A. (1979), and Ph.D. (1979) from the University of Colorado. He has published articles in the COLORADO WEST MAGAZINE and in the GRAND JUNCTION DAILY SENTINEL.

⁸⁵ *Grand Junction Daily Sentinel*, 6, 8, 18 January 1902.

⁸⁶ *Grand Junction News*, 26 April 1902; *Grand Junction Daily Sentinel*, 10 January 1903; *Grand Junction News*, 28 February 1903.

⁸⁷ *Grand Junction Daily Sentinel*, 17 April 1903.

⁸⁸ *Grand Junction News*, 23 May 1903; *Grand Junction Daily Sentinel*, 23 May 1903, 1 December 1923, 19 November 1929 (Western Sugar and Land Company officials included: R. P. Davis, president; Alfred Hand [Seranton], vice-president; J. R. McKinnie, treasurer).

⁸⁹ *Denver Rocky Mountain News*, 15 April 1976.

COLORADO Curtis Mineral Water.

NATURES CURE



FOR ALL
KIDNEY, BLADDER AND STOMACH DISEASES

The Drug Habit in Nineteenth-century Colorado

BY HENRY O. WHITESIDE

As the Territory of Colorado approached the transition to statehood, the first fruits of the new pharmacology, preeminently abundant and inexpensive opiates, had already found an unobtrusive place in American life. In their pursuit of empire, Europeans had encountered psychotropic (mood or consciousness-altering) substances long employed in other cultures. In the nineteenth century the pioneers of modern pharmacology were learning to isolate the active principles of these substances and to create still others in the laboratory. Psychotropic drugs—narcotics, analgesics, stimulants, exhilarants, sedatives, hypnotics, and anaesthetics—appeared upon the pharmacists' shelves in unprecedented array. Coloradoans, too, knew these drugs, and some attempted to control what they believed to be their abuse. Rather than an investigation of the actual extent of drug use in early Colorado, this study will discuss the evolving perception by Coloradoans of a social menace in the nonmedical use of drugs—in the use of "dope."

Coloradoans of the 1870s knew the medical use of perhaps a dozen psychotropic drugs, of which the bromides, chloroform, chloral hydrate, and above all, the opiates were the most common drugs of habit.¹ The poverty of effective medications, in conjunction with the nearly complete lack of understanding of the physiological bases of disease, largely confined the practice of internal medicine to the relief of symptoms. Among the agents of symptomatic relief the opiates were preeminent. Opium banished pain, induced sleep, reduced muscle spasm, checked diarrhea, and indeed was turned to as a virtual panacea. The esteem in which it was held was reflected in the traditional Latin name for a tincture of opium, laudanum, "to be praised." The isolation of morphine from opium in 1803 presaged the

¹ For an explanation of the effects of these drugs, their relationships, and brief histories, see Louis S. Goodman and Alfred Gilman, *The Pharmacological Basis of Therapeutics*, 5th ed. rev. (New York: Macmillan, 1975), ch. 2, "History and Theories of General Anaesthesia"; ch. 10, "Hypnotics and Sedatives, Miscellaneous Agents"; ch. 15, "Narcotic Analgesics and Antagonists."



Drugs and medicines were sold in the same stores that carried items that, today, would be stocked in hardware stores. A good example of this is depicted on the sign of the Mechling & Shallcross store, which was located on Fourteenth and Larimer streets in Denver. In the A.G. Clark Drug Store (below) clerks stand ready to help the day's customers.



displacement of the galenic preparations of the traditional *materia medica* by more potent, pure drugs.

In the early years of settlement in Colorado, the practice of medicine was itself in the midst of a difficult evolution into a unified profession. Practitioners of radically differing schools assailed each other as quacks as readily as they employed the often self-awarded title of doctor. As towns flourished and died overnight, doctors were few and, as a state health officer reported regretfully in 1879, "as roving as their patients."² In these circumstances, treatment was often self-prescribed, drawing upon home medical guides, the ubiquitous advertisements for patent medicines, or the advice of the local pharmacist or merchant whose wares included medicines. The residents of remote mining camps and isolated farmsteads were subject to ailments ranging from toothaches to typhoid fever, in addition to the ever-present risk of maiming injury.³ They would hardly have chosen to be without at least a few of the cure-all patent medicines, many of which depended upon opium.

The resources describing the addiction produced by the opiates were available to the physicians in Colorado. John Smith's *The Mysteries of Opium Revealed*, published in 1700, warned against frivolous use and accurately described the agonies of withdrawal. Early American practitioners warned of similar dangers, and by the 1880s satisfactory descriptions of addiction were standard in medical texts and reference books.⁴ Hope persisted, however, that a new means of administering opium, such as hypodermic injection introduced in the 1850s, or a chemical modification of the drug would avert addiction. These hopes did not obscure the general understanding among medical men of the potential for addiction. The eager reception of successive reports of a new means to evade addiction demonstrated that opiates were relied upon out of necessity and their potential for addiction was viewed as an unfortunate but a secondary consideration. Opium was employed despite the general knowledge of a far more serious defect—its potential as a lethal poison.

Indeed it was not as agents of addiction but as potential poisons that the opiates and the other psychotropic substances first became subject to the law. Home medical guides listed opiates as both likely poisons and as antidotes suitable for the layman's use against other

² Colorado, State Board of Health, *Annual Report*, 1879, p. 11.

³ *Georgetown Colorado Miner*, 28 April, 26 May 1870.

⁴ John Smith, *The Mysteries of Opium Revealed* (London, 1700), cited by David F. Musto, *The American Disease: Origins of Narcotics Control* (New Haven and London: Yale University Press, 1973), p. 69; H. von Ziemssen, ed., *A Cyclopaedia of the Practice of Medicine*, American ed. Albert H. Buck (New York: W. Wood and Co., 1878), 18:856-75; E. Harris Ruddock, *Text Book of Modern Medicine and Surgery on Homeopathic Principles* (London: Homeopathic Publishing Co., 1881), pp. 928-29; Albert H. Buck, ed., *A Reference Book of the Medical Sciences* (New York: W. Wood and Co., 1887), 5:326-33.

poisons. Addiction was frequently dealt with as "chronic opium poisoning."⁵ Laymen were surely aware in a general sense of the danger of addiction, for they had sufficient immediate experience of the opiates to know them as lethal poisons. Newspapers frequently carried accounts of suicides and occasionally even murders employing opiates. Inadvertant fatal overdoses of patent medicines whose contents were unknown or misjudged were common. Physicians repeatedly warned that thousands of children had died from the opium in patent medicines, like Mrs. Winslow's Soothing Syrup. An act of the territorial legislature in 1872 and the Denver Charter and Ordinances of 1875 made sale of unmarked poisons a misdemeanor. Both included opium in simple preparations, but neither controlled opium in patent medicines.⁶ Legislation regulating alcohol was, by comparison, much more frequent and complex. An ordinance in the Code of 1884, for example, carefully exempted sales by pharmacies of alcohol for "purposes purely medicinal, mechanical, or sacramental."⁷

The smoking of opium never received the familiar acceptance that Coloradoans accorded to the medicinal preparations of opium. Indeed opium smoking was the object of the first "dope" scare in the state. Opium smoking, encountered in the course of the China trade, came to be viewed as a vice, the more so as Great Britain was considered to be encouraging the practice in China. Chinese laborers, initially imported for railroad construction, were by the 1870s increasingly common in Colorado mining camps. Early accounts of the Chinese in Colorado are often characterized by a mixture of contempt and bemused curiosity at the peculiar ways of the "Celestials," including their smoking of opium. The editor of the *Weekly Central City Register* described them as "a quiet, inoffensive class," but an article bannered "The Opium Pipe: The Heathen Chinese and the Narcotic of Death: How John Smokes His Pipe" was more characteristic of press treatment in the late 1870s.⁸ The exposé by a reporter sent to reconnoiter the opium dens or "hop joints" of Chinatown on lower Wazee Street became a periodic feature of the Denver press. The association of opium smoking with the Chinese was worked to the mutual discredit of both.

Eventually the discovery, which had earlier led to the first ordinances banning opium dens in San Francisco, California, and Virginia



The man (above) uses his opium pipe to escape the rigors of everyday life. From San Francisco, California, to Deadwood, South Dakota, and beyond, opium dens flourished wherever the Chinese settled.



⁵ Ray V. Pierce, *The People's Common Sense Medical Adviser* (Buffalo: World's Dispensary Printing, 1879), pp. 829-31; J.H. Pulte, *The Homeopathic Domestic Physician*, 13th ed. (Cincinnati: Smith and Worthington, 1879), p. 79.

⁶ *Fairplay Flume*, 7 July 1879; Richard Quain, ed., *A Dictionary of Medicine* (New York: D. Appleton and Co., 1883), p. 1,068; *A Cyclopaedia of the Practice of Medicine*, 17:844; Territory of Colorado, *Session Laws*, 9th sess., 1872, pp. 157-59; Denver, *Charter and Ordinances*, 1875, ch. 6, art. 2, sec. 2, p. 78.

⁷ Denver, *Charter and Ordinances*, 1884, ch. 7, art. 2, secs. 37, 38, pp. 182-83.

⁸ *Denver Rocky Mountain News*, 14 September 1873, 17 October 1875; *Weekly Central City Register*, 14 January 1874.

City, Nevada, was made in Denver. Whites had begun "hitting the Pipe," and by some accounts, women were a majority. Some of the participants were believed to be young men and girls not previously abandoned to vice. The *Denver Rocky Mountain News* applauded the action of the city fathers of Leadville who had eliminated the opium threat by the simple device of driving out the Chinese.⁹ In the summer of 1880 as the national elections approached, Colorado experienced the agitation of the Chinese question that later brought about the Chinese Exclusion Act of 1882. Attacks upon the unfair competition of the "cheap-labor" Chinese and their repellent vices increased in frequency and virulence.

As the agitation against the Chinese mounted, the first general raid upon the dens in Denver was prompted by the death of an eighteen-year-old boy. The boy's death on 8 October 1880 was determined by the city coroner to have been caused by typhoid and a perforated intestine, the symptoms masked by opium. The coroner's jury, however, reported the death as having been caused immediately by a perforated intestine and remotely by an "excessive use of opium." The *Denver Tribune*, Republican and somewhat soft on the Chinese question, nevertheless captioned its account "The Deadly Drug: A Young Man of Denver Falls Victim to the Prevailing Chinese Vice." The *Denver Rocky Mountain News*, adamantly Democratic and violently anti-Chinese, headlined the story "Deadly Opium: Kills a Lad Eighteen Years of Age." The article proceeded to rage against the dens "in the very heart of the city" and concluded that it was "high time some measures were taken to wipe out one of the foulest blots on modern civilization."¹⁰

The *News* readily took credit for having roused the community to press the authorities for the subsequent raid upon the dens. The trial, described as "an unusual spectacle," resulted in fines for four Chinese and two whites. Others escaped punishment, "as the law requires that they should be detected in the act of selling or smoking opium to sustain an offence." It is not clear whether the judge proceeded upon the ordinance prohibiting disorderly houses or upon an ordinance specifically directed against opium joints. An officer was reported to have declared that smoking opium was illegal, but no such ordinance has been discovered.¹¹

The proprietors of the dens quickly recovered from the setback of the raid, viewing the fines as a kind of occupational tax, but the *News*

⁹ Charles E. Terry and Mildred Pelleas, *The Opium Problem* (New York: Committee on Drug Addictions in Collaboration with the Bureau of Social Hygiene, 1928), pp. 73, 807-8; *Leadville Chronicle*, 16 June 1879; *Denver Rocky Mountain News*, 30 October 1879.

¹⁰ *Denver Tribune*, 12 October 1880; *Denver Rocky Mountain News*, 9, 12 October 1880.

¹¹ *Denver Rocky Mountain News*, 12, 13 October 1880.

continued its campaign against the Chinese. It was, a headline warned, a case of "Caucasian against Mongolian—the Survival of the Fittest." The next day the editors had glorious news: "Chinese Gone! Chinatown Now a Mass of Ruins. The Opium Dens Razed to the Ground by an Enraged and Infuriated Populace." A mob had descended upon Chinatown—Wazee Street between Fifteenth and Seventeenth streets—ransacked it, put its two hundred some residents to flight, and killed one elderly Chinese. Denver political factions abused each other as "Democratic demagogues" and "radical Republicans" and traded accusations of having incited the riot for partisan advantage. Nevertheless, the *News* stuck to its commendation of the destruction of the dens of opium and prostitution.¹²

Thus, the riot and the national election in 1880 drew much of the heat from the issue of Chinese immigration and opium. The first known ordinance in Denver against the maintenance by proprietors or patrons of "Opium Joints" appears to have been passed in this period of comparative calm. The ironic sequel was the arrest of a white man, one W.H. Todd, for allowing Chinese to smoke in his room since the October riot. "This is the first case of this character," commented the *News*, "and the sticking qualities of the ordinance will be tested." But so little urgency had attended the passage of the ordinance that a clerk behind in his work had not yet "proved" the ordinance by properly recording and certifying its publication, and the case was dismissed.¹³

The prospect of penalties of \$50 to \$300, provided by the new ordinance had not deterred the reopening of many of the dens, although the fines were extremely stiff, compared to the \$5 to \$100 for maintaining a bawdy house or the \$25 to \$100 for assisting a jail break. Significantly, the Chinese were reported to believe that they had been fined for selling to "Melicans" (Americans), and the *News* seemed reassured that "no opium is now being sold to Americans." This particular illusion lasted until 6 January 1881 when three white women were arrested for smoking opium. The discovery that "pulling" a joint once did not insure its disappearance led to renewed professions by the city authorities of their intention of closing the opium dens for good and even to a determination that "in the future, all white persons caught in the opium pits will be prosecuted just as rigorously as the Chinese." The press maintained a desultory interest in raids in Denver or in mining towns such as Georgetown and

¹² *Denver Tribune*, 12 October 1880; *Denver Rocky Mountain News*, 31 October, 1, 2 November 1880; *Denver Daily Times*, 1 November 1880; and generally, Roy T. Wortman, "Denver's Anti-Chinese Riot, 1880," *The Colorado Magazine* 42 (Fall 1965): 275-91.

¹³ *Denver, Charter and Ordinances*, 1881, ord. 15, ch. 6, art. 4, pp. 113-14; *Denver Daily Times*, 30 December 1880; *Denver Rocky Mountain News*, 30, 31 December 1880.

Fairplay. Penalties assessed remained far below the maximum and the sense of urgency had sufficiently subsided to allow the *News* to publish a lengthy piece deflating the opium menace as greatly overstated and "considerably lied about."¹⁴

This first "dope" scare prefigured several features of subsequent periods of intense public concern with the menace of drugs. The press brought to public attention the private, even secret, behavior of drug users. The menace of drugs proved to be susceptible to manipulation for narrow advantage, particularly when plied in conjunction with racial fears. Quickly aroused, the fear of a drug was easily placated by the passage of a law providing stiff penalties, although subsequent enforcement was rather lax and public interest readily returned to more present and immediate concerns.

While interest in opium smoking waned in Denver, national concern with the problem of drug habits was rising. In the 1870s the dangers of the opiates had been dealt with primarily in medical literature.¹⁵ By the 1880s drug use had become a subject of wider concern and more general treatment, often directed to the layman. Dr. George Beard's *American Nervousness: Its Causes and Consequences*, for example, laid the cause of heavy drug use to the rapid pace of modern life, which required "soothing." This was a more specific development of the contemporary argument that Americans were particularly prone to rely on drugs of every kind.¹⁶ The revelation of the surprising extent of the opium habit in rural areas as well as cities fueled the growing concern.¹⁷

In Colorado the habitual use of drugs was believed to involve persons from every element of society and to range from the unknowing to the willfully addicted. While the opiates were the primary drugs of habit, habituation to chloral hydrate, chloroform, ether, the bromides, and other sedatives and hypnotics was also known. Certainly those addicted through the use of patent medicines, particularly children habituated to soothing syrups and teething remedies, were considered the most helpless victims. A Colorado physician sketched the common sequence: "The many nostrums on the market such as

cough syrups, throat ease, and bowel mixtures have started a craving for some narcotic which the patient learns sooner or later that morphine alone satisfies."¹⁸ The most common route to involuntary addiction seems to have been self-administration following the conventional wisdom of friends or a doctor's remembered prescription.

The drugs, most often opiates, might be obtained upon request in pure form, in standard preparations such as laudanum and paregoric, or in "catch-penny products, put upon the market by persons of business enterprise and without an excess of scrupulousness and wafted into a certain vogue—temporary and inglorious . . . as a remedy that, in the hands of some physician in a distant country, has, according to the early published reports that reach us, produced wonderful results in the cure or mitigation of some disease."¹⁹ Many of these concoctions were styled tonics, cordials, or elixirs and were intended not so much to cure a particular disease or diseases as simply to promote a feeling of general well-being and health. Most, like Godfrey's Cordial, relied upon a fruit syrup, herbs, alcohol, and a liberal lacing of opium. By the late 1880s cocaine, a new drug marvelously suited to the tonic trade, had made its appearance in such products as Vin Mariani or the more descriptively labeled Wyeth's Wine of Coca.²⁰

In the fall of 1884 an American physician had returned from an Austrian medical convention to report that the first satisfactory topical anaesthetic had been found in cocaine. The following spring a Denver newspaper noted the local use of "cocaine, the new and valuable anaesthetic."²¹ The exhilarating properties of the drug were quickly recognized. Cocaine was soon available, not only in a variety of medical preparations but also as a simple powder under such suggestive names as Bright Eye, served in bars by the pinch in a shot of whiskey, and in popular beverages such as Koka-Nola, Celery Kola, and the candidly named Coca-Cola. A poster of the 1890s promoting Coca-Cola as the smart after-the-theatre drink promised that "it relieves fatigue and excitement, and induces a spirit of thorough, restful satisfaction as delightful to the senses as Coca Cola is to the sense of taste."²²

The demand for tonics and cordials was indicative of a category of drug users that may be considered intermediate between the simple medical addict and the habitué addicted in the unabashed pursuit of

¹⁴ "Morphinism," *Denver Medical Times* 22 (1903): 392.

¹⁵ Frank P. Foster, ed., *Reference Book of Practical Therapeutics*, 3d ed. (New York: D. Appleton and Co., 1897), 1:iv.

¹⁶ *Pueblo Chieftain*, 31 October 1880, advertisement for "Tolu Rock and Rye."

¹⁷ *Denver Rocky Mountain News*, 16 March 1885.

¹⁸ Poster in author's personal collection.

¹⁴ *Denver Rocky Mountain News*, 12 December 1880, 6 January, 29 March, 20 July 1881, 10 May 1884, 10 January 1885.

¹⁵ Alonzo Calkins, *Opium and the Opium Habit* (Philadelphia: J.B. Lippincott and Co., 1871); S.F. McFarlin, *Opium Intoxication and the Hypodermic Syringe*, *Transactions of the New York State Medical Society* (n.p., 1877); C. Allbutt, "On the Abuse of the Hypodermic Injections of Morphia," *The Practitioner* 5 (1870): 327; H.H. Kane, *The Hypodermic Injection of Morphine* (New York: C.L. Birmingham and Co., 1880), cited by Terry and Pellens, *The Opium Problem*, pp. 69-73.

¹⁶ George Miller Beard, *American Nervousness: Its Causes and Consequences* (New York: G.P. Putnam's Sons, 1881); "Quackery and the Quacked," *National Quarterly Review* 2 (1861): 354, cited by Masto, *The American Disease*, p. 276.

¹⁷ O. Marshall, "The Opium Habit in Michigan in 1877," *Sixth Annual Report of the State Board of Health for the Fiscal Year ended September 30, 1878* (Lansing, Mich.: State Board of Health, 1878).

Remedies on Approval to Any Responsible Man

LUDAN MEDICAL INSTITUTE

NO CURE, NO PAY

Suite 5, Evans Block, Cor. 15th and Lawrence Streets,
One-Half Block from Former Location in Times Block.



NO CURE==NO PAY

YOUNG MAN

[Small text describing a medical case]

Gonorrhoea

[Small text describing a medical case]

Variocoele

[Small text describing a medical case]



FREE COUPON.

The proprietor of this coupon, either by letter or personally, within ten days from date, entitles the holder to ten days' free treatment for any venereal disorder.

Name.....
Address.....
LUDAN MED. CO., Aug. 18, 1901.

STRICTURE

[Small text describing a medical condition]

BLOOD POISON

[Small text describing a medical condition]

MIDDLE-AGED AND OLD MEN

[Small text]

LADIES

[Small text]

Write for Home Cure

[Small text]

PREMATURITY

[Small text]

DEVELOPMENT

[Small text]

OFFICE HOURS 10 TO 5 DAILY; SUNDAY 10 TO 12; WEDNESDAY AND SATURDAY EVENINGS, 7 TO 8

Advertisements of cures for sex-related diseases were common, as this example in the 18 August 1901 Denver Times illustrates.

pleasure. Hardworking men, laborers and professionals alike, resorted to drugs to animate themselves to further efforts when fatigued and then to bring sleep. But among "opium eaters" or, more accurately, drinkers, women were believed to outnumber men by a margin of greater than ten to one. "Opium eating," observed a Colorado physician, "is the growing and fashionable vice among the rich—especially the fashionable women, who, in the giddy round of evanescent pleasure, must have stimulants. Whiskey and champagne are painful in their aftereffects rather than pleasant. Beer is vulgar and besides it fattens, and no fashionable lady wants to be fat. Hence opium is resorted to. It can be taken without exciting the gossip that a free use of Heidsick [champagne] might bring about. You can get it in the drugstore in the shape of Munn's Elixir." He concluded that "between the opium den of the Chinese and its quiet consumption by Caucasians, Denver is getting up a reputation as quite a good market for the drug."²³ The strength of the temperance sentiment in Colorado is perversely reflected in the suggestion that women, mindful of their reputations, turned to opiates rather than to alcohol.

Among the more affluent with their readier access to medical treatment, addiction was believed to begin with injecting morphine rather than to follow the more usual progression from consuming opium in some palatable preparation, to eating the raw drug, and finally to injecting morphine. Few doubted that opium was widely used at the lower end of the social scale. Opium smoking among the Chinese was accorded a contemptuous tolerance and recognized with regret among white gamblers, criminals, and prostitutes. Press reports of raids on opium joints carefully enumerated Chinese and whites, males and females, and rarely failed to include several white women, usually identified as "sporting women."

In assessing the stigma attached to the opium habit, it should be considered that the medical opinion of the period did not sharply differentiate the opiates from other drugs. A home medical manual characteristically warned against "the evils of habitually exciting the nerves by the use of tobacco, opium, narcotic and other drugs"; it devoted a page to tobacco and added that the "opium habit . . . is open to the same objections."²⁴ Indeed, "narcotic" could be used to describe any substance capable of producing a stupor or a semi-comatose state and was regularly applied to alcohol, chloral, the bromides, and even illuminating gas. A standard reference work of the period in the libraries of Colorado physicians remarked that "every race and tribe is possessed of some stimulant in its armamentarium of

²³ "Morphinism," *Denver Medical Times* 22 (1903): 391; *Denver Rocky Mountain News*, 30 March 1880.

²⁴ Pierce, *The Common Sense Medical Adviser*, p. 385.

life" and went on to mention alcohol, tea, coffee, and coca leaves and to refer casually to "a man addicted to the use of coffee." In discussing alcohol another authority referred to "a natural desire for stimulants and narcotics which seems to be common to all mankind but which, fortunately, the vast majority of men, at least, are able to control."²⁵

This qualified, philosophical acceptance of the use of stimulants, exhilarants, alcohol, and opiates was reflected in the popular press as well. "The unnatural vices of any kind," observed a reporter, "are quite apt to be overcome in some way or another or outgrown, and the world at large is probably less likely to go to the devil in this year of grace 1885 than it was a couple of centuries ago." He concluded that

knowledge, however widespread, never seems likely to deprive the fool killer of his vocation. As long as the world is as it is and people work for small salaries, a certain percentage of humanity will drink more cheap whiskey than is good for them, and a certain percentage of them will get beguiled by opium, chloral, and other deadly drugs. Physicians are pretty generally of the opinion that in this world of pain and suffering, disappointment and sorrow, a world where disease is more likely to baffle the physician than otherwise, opiates, narcotics, and anaesthetics, wine, laudanum, morphine and chloral are among the most valued agents in certain cases.

For all that, he observed, few would advocate a steady diet of narcotics or go so far as to class alcohol and tobacco among them.²⁶

The Woman's Christian Temperance Union, however, shared neither the philosophical tolerance, the slender faith in education, nor the reluctance to class alcohol and tobacco with the narcotics. A Vermont law of 1882 requiring the schools to teach the effects of alcohol and narcotics had become the model promoted by the WCTU in a nationwide campaign that eventually spanned more than thirty years. Ten states had adopted comparable laws before 1887 when the Colorado legislature passed a bill "To Provide for the Study of the Nature of Alcoholic Drinks and Narcotics and of their effects upon the Human System." Governor Alva Adams's signature effected the first law in Colorado directed against drug habits. Three bills had been introduced to the same end and a surprising amount of parliamentary maneuvering had ensued, outlined but not explained by the House and Senate Journals.²⁷

The hand of the WCTU also seems apparent in an ordinance appearing in the Denver Code of 1898 that required cigarette dealers to present an affidavit of good character, a \$500 bond, and an annual license fee of \$1,000. A liquor license, by comparison, could be obtained for a fee of \$600. The Denver cigarette ordinance carefully denied any intent to authorize the "sale of cigarettes containing opium, chloral, morphine, jimson weed, belladonna, glycerine or sugar."²⁸ The mildness and the convenience of cigarettes seemed likely to facilitate the spread of the use of tobacco by women and the young. As a consequence, reported a New York physician, attempts were often made to crush the use of cigarettes by asserting that they were commonly doctored with opium, cannabis indica, and other narcotics. The *New York Times* had earlier warned that "the decadence of Spain began when the Spaniards adopted cigarettes and if the pernicious habit obtains among adult Americans the ruin of the Republic is close at hand." Nevertheless, Colorado did not join the fourteen states, which at one time or another between 1895 and 1921, banned the sale of cigarettes.²⁹

The most telling gauge of addiction in Colorado was the proliferation of efforts devoted to its cure. Patent remedies for the cure of addiction were heavily promoted, Colorado physicians experimented with cures in their own practices, private "institutes" flourished, and in 1893 Colorado became one of the first states to provide for cures at public expense. These cures were directed primarily against alcohol but were touted for addiction to other drugs and for "nervous disorders" as well.³⁰ The volume of advertisements for proprietary cures is a sad commentary on the extent of unwanted addiction to alcohol, drugs, and even tobacco. Available by mail or from local pharmacists, the remedies were often suggested for involuntary cure of "loved ones" to whom they might be given unawares in coffee or tea.

Incredibly, these nostrums almost invariably relied upon opium, morphine, or codeine to effect their "cures." One Dr. S.B. Collins was brazen enough to appropriate the name of a preparation of opium traditional since the Middle Ages for his "Theriaki Painless Cure—Discovered in 1868—the only painless Cure ever discovered."³¹ An

Colorado, 6th sess., 1887, entries for SB 173, SB 133; *Colorado, House Journal of the General Assembly of the State of Colorado*, 6th sess., 1887, entries for HB 82.

²⁵ Denver, *Charter and Ordinances*, 1898, ord. 101, ch. 8, art. 7, sec. 606, pp. 344-46.

²⁶ J.C. Mulhall, *New York Medical Journal*, 30 November 1895, cited in Foster, *Practical Therapeutics*, 2:307; *New York Times*, editorial, 1885, cited by M.B. Neuberger, *Smoke Screen: Tobacco and the Public Welfare* (Englewood Cliff, N.J.: Prentice-Hall, 1963), p. 52; Jerome E. Brooks, *The Mighty Leaf: Tobacco through the Centuries* (Boston: Little Brown, 1952), p. 253.

²⁷ *Pueblo Chieftain*, 13 November 1880, advertisement for "D.I.C." cure.

²⁸ Advertisement in the *American Medical Journal*, 1873, cited in Robert A. Buerki, "Medical Views on Narcotics and Their Effects in the Mid-1890's," *Pharmacy in History* 17 (January 1975): 37.

²⁵ Foster, *Practical Therapeutics*, 2:223, 1:34.

²⁶ *Denver Rocky Mountain News*, 10 January 1885.

²⁷ U.S., Department of the Treasury, Public Health Service, *State Laws Relating to the Control of Narcotic Drugs and the Treatment of Drug Addiction*, supplement to *Public Health Reports*, No. 91 (Washington, D.C.: Government Printing Office, 1931), p. 2; Woman's Christian Temperance Union (Colorado), *Messenger*, February 1930, p. 4; *Colorado, Laws Passed at the Sixth Session of General Assembly of the State of Colorado*, 1887, pp. 278-79; *Colorado, Senate Journal of the General Assembly of the State of*



The only known specific remedy for Epileptic Fits.

SAMARITAN NERVINE

Cures Epileptic Fits, Spasms, Convulsions, St. Vitu Dance, Vertigo, Hysteria, Insanity, Apoplexy, Paralysis, Rheumatism, Neuralgia, and all Nervous Diseases. This infallible remedy will positively eradicate every species of Nervous Derangement, and drive them away from whence they came, never to return again. It utterly destroys the germs of disease by neutralizing the hereditary taint or poison in the system, and thoroughly eradicates the disease, and utterly destroys the cause.

SAMARITAN NERVINE

Cures Female Weakness, General Debility, Leucorrhoea or Whites, Painful Menstruation, Ulceration of the Uterus, Internal Heat, Gravel, Inflammation of the Bladder, Irritability of the Bladder. For Wakefulness at night, there is no better remedy. During the change of life no Female should be without it. It quiets the Nervous System, and gives rest, comfort, and nature's sweet sleep.

SAMARITAN NERVINE

Cures Alcoholism, Drunkenness and the habit of Opium Eating. These degrading habits are by far the worst evils that have ever befallen suffering humanity. Thousands die annually from these noxious drugs. The drunkard drinks liquor not because he likes it, but for the pleasure of drinking and treating his friends, (Opium Eater, he first sees the drug in small quantities as a harmless antidote. The soothing influence of the drug takes strong hold upon its victim, leading him on to his own destruction. The habits of Opium Eating and Liquor Drinking are precisely what eating is to such, which relieves its cravings until it paralyzes both the stomach and appetite. So every drink of liquor or dose of opium, instead of satisfying, only adds to its fierce fire, until it consumes the vital force and then itself. Like the gluttonous tape-worm, it cries "Give, give, give!" but never enough until its own capacity devours itself. Samaritan Nerveine gives instant relief in all such cases. It produces sleep, quiets the nerves, builds up the nervous system, and restores body and mind to a healthy condition.

"To you, young, middle-aged, and old men, who are covering your sufferings as with a mantle by silence, look up, you can be saved by timely efforts, and make ornaments to society, and jewels in the crown of your Maker, if you will" - Samaritan Nerveine was sold by druggists and further information could be obtained by sending a three-cent postage stamp to the company.

These two advertisements are examples of products and institutions that attempted to cure drug addiction in the 1890s.

analysis by the state analyst of Massachusetts of twenty of the cures most widely advertised across the nation found that "all but one contained morphine. The one was called a 'double chloride of gold,' and, while it did not contain morphine, it did not contain even the minutest trace of gold, and would have been quite as worthless if it had." Ineffective as they were, the "gold cures" were preferable to the standard cures, in all of which a Colorado physician found opiates.³²

Early in the nineteenth century gold had enjoyed a revival in the hands of the "auralists" who preferred it to mercury in the treatment



M. H. INSLEY, BUSINESS MANAGER,
H. W. HYDE, M. D., MEDICAL DIRECTOR,
DENVER, COLORADO,

H. E. INSLEY, MANAGER,
B. L. EUANS, M. D., MEDICAL DIRECTOR,
COLORADO SPRINGS.

THE KEELEY INSTITUTE

FOR THE CURE OF THE

LIQUOR AND OPIUM HABITS, NERVOUS DISEASES and TOBACCO HABIT,

By DR. LESLIE E. KEELEY'S

DOUBLE CHLORIDE OF GOLD REMEDIES

of syphilis. The prevalent opinion, however, was that gold was "well enough in its proper place and for its proper purposes for which it is better suited than as a medicine. Plenty of it would doubtless cure many diseases of mind and body."³³ In the 1880s gold returned to popular favor as a medicinal agent. Compounded with chlorine, bromine, iodine, arsenic, and mercury in such concoctions as Dr. Haines Golden Specific, gold was briefly in vogue in cures for addiction.³⁴

A host of private institutes sprang up across the nation to accommodate those desperate for cures and able to afford a course of treatment as inpatients. Some of these appear to have been enterprises of physicians who believed they had developed an effective plan of treatment. The institutes all found it expedient to advertise their association with a "doctor" or with a famous cure such as the "German Cure" or the "Bellevue Hospital Cure." The climate in Colorado exerted so great an attraction that by the 1880s as many as one-third of the residents in the state might have been characterized as "health seekers."³⁵ Consequently, many purveyors of cures chose to locate in Colorado, primarily in Denver, but also in Pueblo, Colorado Springs, and Glenwood Springs.

Foremost among these were the local establishments in the national chain of Keeley Institutes that appear to have been among the earliest commercial cures in Denver and to have survived the longest. Provi-

³² Foster, *Practical Therapeutics*, 1:451.

³³ *Denver Rocky Mountain News*, 4 April 1887.

³⁴ *Denver Medical Times* 6 (August 1887): 342; 4 (February 1885): 243-44; 25 (October 1905): 216; Carl Ubbelohde, Maxine Benson, and Duane A. Smith, *A Colorado History*, 3d ed. (Boulder, Colo.: Pruett Publishing Co., 1972), p. 149.



WOODGROFT

Dr. Work's Private Hospital for Mental and Nervous Disorders, Drug Habits and Alcoholism

A Suburban Retreat designed and constructed for the Hospital care of the Nervous Invalid. Location retired. Twenty acres of shaded lawns, orchards and gardens, walks and drives. New modern buildings, electric lights and call bells, steam heat and fire protection. Seventy-two patients discharged during the year ending Oct. 1, 1900. Constant medical supervision and trained nurses. Detached kitchen and dining rooms. Liberal and varied dietary. Abundance of home-grown fruits and vegetables. Milk supplied from our private dairy. Sanitary inspection of premises. Cows tested for Tuberculosis and Certificates issued by the Colorado State Board of Health. Electric cars from any part of city. Woodgroft station, D. & R. G. Ry. at entrance to grounds. Address, **HUBERT WORK, M.D., Pueblo, Colorado.**

sion for cures at public expense in 1893 led to a temporary increase in the number of institutes, including one sponsored by Pastor Tom Uzzell to provide real care, as he said, rather than simply shuffling clients in and out for the administration of medication.³⁶ Keeley was followed by other national enterprises such as Dr. Pettey's Retreats and independent ventures as Woodcroft in Pueblo and Forest Retreat in Denver.³⁷ The regimens offered by these institutes did not differ greatly in principle from the courses of treatment offered by Colorado physicians in their private practices. The doctors in Colorado, intent perhaps on defending themselves against the lingering taint of frontier improvisation, were surprisingly active in their professional associations.³⁸ Accordingly, their treatments were usually variations upon the treatments described in contemporary professional literature.

The treatments for alcoholism, morphinism, and cocaineism—in that order the most frequently encountered sources of addiction or chronic poisoning—were essentially similar. Withdrawal from the

DR. PETTEY'S RETREATS

Devoted Exclusively to the Treatment of

ALCOHOL AND DRUG ADDICTIONS

958 DAVIE AVE., MEMPHIS, TENN. 1939 EAST EVANS AVE., DENVER, COLO.
1849 DWINELL STREET, OAKLAND, CALIFORNIA.

These Institutes are owned and controlled by reputable physicians, and are conducted upon strictly ethical lines. They were opened and are maintained solely for the purpose of treating the Alcohol and Narcotic Drug Addictions by methods based upon the original investigations of Dr. Geo. E. Pettey of Memphis, Tenn., and first published to the profession by him in 1901. (See Therapeutic Gazette, Oct. 1901.)

The method of treatment introduced by Dr. Pettey removes these addictions from the list of almost incurable diseases and renders them the most certainly and readily curable of all the chronic ailments. For Terms, Address Retreat Most Convenient to You.

drug, usually rapid rather than abrupt or gradual, supportive therapy on general principles, sedation, and the easing of distress with hyoscine or atropine were expected to accomplish a detoxification within two to four weeks. Mild or violent purging at the outset came to be added as a standard feature of cures for opiate addiction as did the necessity for confinement to preclude the patient's access to the drug. Some believed that the drugs themselves destroyed will power that could only be rebuilt over many months—if at all, and others laid the acquisition of the habit to an innately weak or self-indulgent nature. All agreed that a permanent cure depended ultimately upon the patient's moral strength and will. Many considered permanent cures extremely unlikely.³⁹

Although Colorado followed national trends in therapy, the state was among the first to provide for treatment at public expense for those sunken in habits beyond their control. The act of 1893 allowed friends or kin to petition the boards of county commissioners to send "habitual drunkards" to "any reputable gold cure institute" at the expense of the county. The petitioners were required to state that the drunkard had agreed to accept his treatment and that neither he nor his family was able to pay for a cure. They were further required to include the names of three reputable taxpayers who would attest to the appropriateness of county assistance. A final section extended the definition of drunkard to include "a person who has acquired the habit of using morphine, opium, or other narcotics to such a degree as to deprive himself of reasonable self-control."⁴⁰

The preferment by the Colorado legislature of gold cure institutes in the early years of the great Cripple Creek gold boom is understandable but was nevertheless unfortunate. A medical inquiry into the gold cure found that gold played an inconsequential part in a course of treatments dependent upon injections consisting of strychnine and atropine. These injections, "administered several times daily for weeks, have been followed in a large number of cases by insanity and other serious psychoses." In view of the complaint of the director of the Colorado Insane Asylum that the counties regularly dumped upon the asylum "epileptics, imbeciles, and idiots, likewise drunkards or cases of alcoholism, morphine and cocaine habitués . . . paupers and

³⁶ *Denver Rocky Mountain News*, 28 October 1892; *Denver Directory*, 1891-1921, entries under Gold Cure Treatment.

³⁷ *Denver Medical Times* 21 (July 1901): 11; 25 (October 1905): 216; *Denver Evening Post*, 13 February 1895; *Denver City Directory*, 1891-1921, esp. 1893, p. 1,253.

³⁸ *Colorado Medicine* 1 (December 1904): 369.

³⁹ Horatio C. Wood and Reginald H. Fitz, *The Practice of Medicine* (Philadelphia: J.B. Lippincott, 1897), 368; *Denver Medical Times* 23 (January 1903): 3.

⁴⁰ *Colorado, Session Laws*, 9th sess., 1893, ch. 100, pp. 283-85.

other helpless subjects that might otherwise be cared for," it would seem that the counties were unwilling to accept the costs of a cure.⁴¹

A significant number of petitions must have been presented, for two years later a new statute repealed the relatively liberal act of 1893. The preferment of gold cure institutes was dropped, and institutions wishing to qualify were required to show that at least seventy-five percent of their patients remained cured for at least one year. Ten, rather than three, freeholders of the county were required to approve the petition. A further revision in 1911 suggests that the institutes employed drummers to recruit unfortunates and to manage their petitions. The act disallowed payment if an agent of the institute had in any way been involved in the procuring of treatment and imposed a maximum total payment upon the fee schedule previously adopted. Because these three acts provided for the treatment of alcoholism as well as drug addiction, they are uncertain indicators of public concern about drug habits. It is worth noting, however, that treatment at public expense could be extended only to a person addicted "to such a degree as to deprive himself of reasonable self-control." Social irresponsibility rather than the fact of addiction was the determining factor, as it was in the commitment of the insane.⁴²

The legislation passed restricting the sale of particular drugs is not a reliable reflection of the degree of public concern. Colorado acted in 1897 to restrict the sale of cocaine, following the example of Oregon in 1887 and Montana in 1889, but it is unclear whether the unopposed passage of the ban on sales of cocaine without a doctor's prescription should be viewed as a product of active concern or simply of preoccupation. Social tensions ran high in Colorado in the 1890s. The collapse of silver prices protracted the effect of the national economic crisis of 1893. Problems of industrial growth, regulation of mining, and the railroads preoccupied the Colorado legislature. Labor violence approaching industrial warfare was common throughout the decade. The ambitious and socially prominent might employ cocaine to "brighten up," but laborers used it to fight off fatigue. Initially, cocaine was sold in the commissaries of many Colorado mining camps, but the white crystals quickly acquired a reputation for inciting violence and insanity. The origin of the bill, introduced by request in isolated La Plata County, a center of mining activity, may reflect the tensions of labor unrest. Certainly the fine of \$300 was a stiff penalty for the time.⁴³

The Denver Ordinance Number 75 of 1898 banning the "selling, exchanging, bartering, dispensing, and giving away of morphine, opium, and cocaine" without a prescription from "a reputable physician," provided for a penalty of between \$25 and \$100.⁴⁴ Introduced late in May, the bill was passed shortly after the *Denver Times* captioned a story "Denver Makes No Effort to Check the Disease of Morphine and Opium Eating."⁴⁵ Cocaine appears to have been added as an afterthought, the word having been written in on the printed copy of the bill preserved in the city vaults. The addition may reflect a last minute judgment against reliance upon the enforcement of the state cocaine law passed the previous year.

Neither the state law nor the city ordinance seems to have been the product of urgent public concern or to have had any immediate consequences in practice. Strict laws were passed but apparently enforced only sporadically. Six years after the Denver anti-Chinese riot and the passage of an ordinance carrying stiff fines, the writer of an opium exposé had observed: "There are stringent municipal laws against them [opium joints] but the laws are never enforced, and the majority of the people go on in blissful ignorance of their existence unless one happens to be raided. Then there is some talk about it which soon ceases. The fiends get over their fear and go on 'hitting the pipe' with their old-time recklessness."⁴⁶

Indeed so careless does the city appear to have been in its dealings with the opium joints, that in the city code of 1886 a second ordinance appears in section 28, separate from the ordinance of 1880 in section 11 and essentially duplicating it, but with penalties ranging from \$5 to \$50 instead of from \$50 to \$300. In the code of 1898 the ordinances have been printed consecutively and marshaled under headings intended to indicate that the heavier penalties apply to maintaining and the lighter to patronizing an opium den. But the unchanged texts in effect provide for penalties ranging from \$5 to \$300 for either offense.⁴⁷

Despite the legislation of the 1890s and the occasional "outrage" stories in the press, there is ample evidence of relative public and official indifference to drugs. The press might report the increase of opium smoking in Denver and its spread to society women, but the "hop fiends," fined after occasional raids on the dens, typically paid fines of only \$10 for patrons and \$50 for proprietors. It is incongruous

⁴¹ Foster, *Practical Therapeutics*, 1:454; Colorado, *Biennial Report of the Colorado Insane Asylum*, 1903-1904, p. 10.

⁴² Colorado, *Session Laws*, 10th sess., 1895, ch. 74, pp. 172-75; 18th sess., 1911, ch. 146, pp. 447-50.

⁴³ *Ibid.*, 11th sess., 1897, ch. 38, p. 138.

⁴⁴ Denver, Ordinance No. 75, published in *Denver Republican*, 22 July 1898, in "Denver City Ordinances," (April 1891-December 1927), scrapbooks compiled by F.A. Williams, volume for 8 January-12 August 1898, in Sociology and Documents Division, Denver Public Library, Denver.

⁴⁵ *Denver Times*, 7 July 1898, p. 9.

⁴⁶ *Denver Rocky Mountain News*, 10 October 1886.

⁴⁷ Denver, *Charter and Ordinances*, 1886, ch. 7, art. 1, secs. 11, 28, pp. 348-49, 387.

that opium for smoking was still imported legally upon payment of a modest duty and that the Chinese in Denver provided a dependable market for smuggled opium confiscated by federal authorities and sold at public auction. Even less comprehensible was an article that suggested that some of the Chinese in the city planned to open a Chinese-style hotel to provide "a sort of club where they can go and smoke opium in peace," "A New Chinese Hotel for Lovers of the Dope."⁴⁸

Despite the laws prohibiting the maintaining of a "den" or sale of opium without a prescription, denying opium to whites seemed to present a peculiar difficulty. Doctor A.L. Bennett was appointed "Chinese Inspector for the State of Colorado" in 1901. Bennett believed that of the 1,100 Chinese in the state, the colony of 400 in Denver was much more given to the opium vice than the colonies in Colorado Springs and Colorado City.⁴⁹ He besieged the State Board of Health with requests that "some strict state law be enacted which can be enforced prohibiting the sale of opium to whites." He argued to no effect that the spread of opium smoking among whites in Denver, particularly young men and women, made imperative a law making it a misdemeanor "for a Chinese to permit whites to smoke opium in his den, or for white persons to be caught in the act of smoking opium."⁵⁰

The comparative unconcern with drugs was also evident in the indifferent response to the efforts by the Board of Health to enforce the control of poisons. The board had achieved modest successes in dissuading a Denver druggist from subscribing his name to an advertisement for an abortive and enlisting the aid of the Denver Pharmaceutical Association in condemning the sale of "B. _____'s _____ Powder" after its use had addicted customers to cocaine. Aware of the limits to voluntary compliance, the board had then asked the state attorney general to clarify its powers to require the listing of the contents on the label of proprietaries. The board considered the problem covered "with fair thoroughness" by the new law of 1893, but the attorney general's unsatisfactory reply is reflected in the acid summary of the board—"it unfortunately appears to the technical mind that the law is not definite enough to answer the demands made upon it."⁵¹

In 1902 with the state law of 1897 restricting cocaine and the city ordinance of 1898 restricting opium, morphine, and cocaine several years on the books, the situation was unchanged. A Denver druggist,

testifying before a coroner's jury investigating a woman's morphine suicide, explained the usual practice. "We usually enter sales of poisons on the record, but not always in the case of confirmed morphine fiends. There are a great many people in the lower section of the city whom we know as regular fiends and we sell to them without making a record." Asked if that were not illegal, he replied "I suppose it is, but it would make a large record if we entered each sale, as many of them are small amounts." A dime bought from one to five grains depending upon whether or not the purchaser was a regular customer; there was no fixed price. The coroner concluded that "the negligence in this respect is due, I think, to the fact that no prosecutions have ever been made for this offense."⁵² Nor were Denver and Colorado unique in the laxness of their control of the sale of narcotics. The contemporary report of the American Pharmaceutical Association on the drug habit insisted upon the need "to stop this sale of five and ten cents worth at a time—this running into a drug store and getting a few cents worth of a narcotic."⁵³

An attempt to characterize the perception of drugs in Colorado prior to the twentieth century confronts the anomaly of the enactment of strict laws and their subsequent disuse and the perception of habitual drug use as an evil and the apparent indifference to efforts to check it. The explanation would seem to lie not in the ignorance of the lethal and addicting effects of the drugs, but rather in the absence of a perception of a singular social menace from their expanding use and in the absence of the conviction that law was the proper response to any social ill. Although the unlabeled inclusion of addicting drugs in patent medicines was widely denounced, the perception of addiction as a regrettable development incident to the necessary use of opiates in the treatment of greater ills persisted. Habitual use of drugs, if involuntarily contracted, might be viewed as a misfortune or a vice, but it was only one among many that afflicted or lay in wait for citizens of Colorado.

Impoverishment, insanity, and death can hardly have been seen as the distinctive fruits of drug addiction. In the unregulated financial cycles of the nineteenth century, economic hardship, scarcely relieved by charitable assistance, was commonplace. Of 1,908 cases admitted to the State Insane Asylum at Pueblo between 1887 and 1900, the "supposed cause" of insanity recorded was 207 from alcohol, 119 from syphilis, 48 from "sexual self-abuse," and 33 from "religious excitement"—all ahead of drug use, the "supposed cause" of 27

⁴⁸ *Denver Times*, 1 February, 18 May 1899, 17 July, 1 October 1901.

⁴⁹ Colorado, Board of Health, *Sixth Report*, 1900-1902. "Report of A.L. Bennett, Medical Inspector to Chinese," p. 206.

⁵⁰ *Ibid.*, *Seventh Report*, 1902-1904. "Report of A.L. Bennett, Medical Inspector to Chinese," p. 62.

⁵¹ *Ibid.*, *Fourth Report*, 1892-1893, pp. 188-92.

⁵² *Denver Times*, 11 May 1902; *Denver Post*, 22 October 1905.

⁵³ J.H. Beal, "An Anti-Narcotic Law," *Proceedings of the American Pharmaceutical Association* 51 (1903): 478, and "Draft of an Anti-Narcotic Law," p. 486.

admissions.⁵⁴ Even if all deaths reported as suicides by poison are attributed to addicting drugs, the number would be but a fraction of the deaths reported as caused by alcohol. Typhoid, tuberculosis, influenza, and endemic enteric fevers maintained the mortality rates of Coloradoans at levels that are only partially explained by the immigration of the chronically ill seeking cures.⁵⁵

Among lapses in personal morality, drug use could hardly have loomed large in the shadow of alcoholism, with which it was generally associated by reformers and legislators alike. If there was anything sadder than the demands for opiate-laden "cures" for addiction, it must have been "the host of advertisements of the remedies for venereal diseases," and "drugs or methods well understood to be intended to produce abortion," with which the Board of Health found the law permitted the newspapers to "teem."⁵⁶

Finally, the presence of addiction in all classes and the abundant opportunities for "innocent" addiction insured that habitual use of drugs was not seen as the preserve of a group alien to the main body of society. Much of the addiction of this period was, in fact, unobserved, secret addiction. Despite the early currency of the image of the debilitated "opium wretch," Colorado physicians were increasingly aware of the difficulty of diagnosing addiction. Even in the course of a physical examination, diagnosis often depended upon the discovery of needle scars and abscesses.⁵⁷ Earlier, physicians had even experimented with switching alcoholics to opiates because of the lower incidence of debilitating effects. One Colorado doctor published a regimen to minimize even these effects in addicts unable or unwilling to be cured.⁵⁸ Indeed, it was considered that many drug users in Colorado had contracted a shameful disease, difficult to cure but manageable by regular use of "dope," readily and cheaply available.

HENRY O. WHITESIDE received the Ph.D. degree from Stanford University. A Woodrow Wilson fellow in 1966, he was associate professor at Colorado Women's College and is currently associated with the Utah State Historical Society.

⁵⁴ Compiled from Colorado, Department of Health, *Biennial Report of Colorado Insane Asylum, 1887-1888, 1889-1890, 1891-1892, 1893-1894, 1895-1896, 1897-1898, 1899-1900*, "Tables of Supposed Cause of Insanity."

⁵⁵ John Elsner, "Reminiscences at Annual Dinner of the Staff of the National Jewish Hospital for Consumptives," *Denver Medical Times* 28 (July 1908): 7.

⁵⁶ Colorado, Board of Health, *Fourth Report, 1892-1893*, pp. 188-89; "Cyphilene—A Magic Cure," *Denver Times*, 16 June 1901; the Ludan Medical Institute for "nervous, sexual, and private diseases," *Denver Times*, 18 August 1901.

⁵⁷ J.E. Courtney, "Report of Cases of Morphimism," *Colorado Medicine* 3 (January 1906): 19-27; J.N. Hall, "Significance of Epigastric Pain and Tenderness," *Colorado Medicine* 1 (March 1904): 177.

⁵⁸ Edwin K. Knowles, "Narcotic Addiction and Its Treatment," *Colorado Medicine* 8 (August 1911): 290.



The Sugar Industry in the Arkansas River Valley: National Beet Sugar Company

BY DENA S. MARKOFF

On 27 November 1900 immense clouds of smoke belched from the stacks of the factory of the National Beet Sugar Company as its initial beet campaign began.¹ The flourishing Colorado town in close proximity, Sugar City, took its name from this industry, which had brought the community into existence. The town of nearly two thousand inhabitants bustled with activity and had an air of excitement reminiscent of mining boom camps. In less than one year, the desolate prairie near Peterson Lake had been transformed into a community with more than forty business establishments of all descriptions and several hundred houses. Building continued at a furious pace but was unable to meet the demand. The majority of families had to live in tents with new arrivals daily swelling their numbers. Optimism for the future of the town and for the entire infant beet sugar industry knew no bounds.

This blossoming at Sugar City and elsewhere in the West had important roots in developments before the turn of the century. The

¹ The term as used in the beet industry combines two standard uses, that of the military reference to operations for one season and the more general reference to any systematic course of aggressive achievement. The beet campaign usually starts in October, at which time the factory begins processing beets continuously—twenty-four hours a day, seven days a week. Depending upon the size of the crop, processing usually continues until January or February. Careful preparations are made in advance, inspecting machinery and checking supplies, since the nature of the process makes shutting down the factory very costly.

initial phase of adapting the beet culture to the unique conditions in the West occurred while irrigation projects were being constructed. The goal was to accelerate the settlement of the lower Arkansas River valley and other plains areas. Private enterprise and government worked hand-in-hand to nurture advances in beet technology. Individual companies along with the United States Department of Agriculture (USDA) experimented to adapt the European beet and its culture to the arid climate of the West. Machinery for processing beets had to be adjusted to the larger scale of American operations. The USDA sponsored experiments by farmers all over the West to determine whether the beet could be a profitable crop when raised on irrigated land.

Meanwhile, the construction of canal projects provided water for irrigation and a spreading network of railroad lines furnished transportation—both necessarily preceding the establishment of beet factories. Prosperity returned in the late 1890s and businessmen were convinced that promised returns from beet plants warranted the risk of capital. Promoting an American industry that could supplant foreign imports of cane sugar was an added incentive. These various developments converged around 1900, producing such tremendous growth that beet factories seemed to be “springing up like wildcatting oil derricks.”²

The infant American beet sugar industry underwent an initial phase of experimentation between 1888 and 1897. The year 1888 marked the building of the small plant at Watsonville, California, by Claus Spreckles, and the real boom in beet plant construction began after 1897. The USDA along with state agricultural colleges, including the one at Fort Collins, Colorado, spent the entire decade investigating all aspects of beet culture. The first beets grown in the Arkansas valley for a USDA test were harvested with good results in 1890. This demonstrated potential for irrigated beet crops was made known, and by 1892 there was considerable agitation for the establishment of factories to process sugar beets in Colorado and other western states. The impetus for expansion was there. The growth of the industry was limited not only by the need for adaptations within its technology but also by events on the national scene. Election of a Democrat as president with an accompanying uncertainty over continued tariff protection and the panic of 1893 made potential investors reluctant to finance beet plants at that time.³

Technical aspects of both beet culture and processing had to be

adapted to circumstances in the United States that differed markedly from those in Europe. Continental factories were small by American standards, irrigation was unnecessary, and labor supplies were abundant. Before American farmers could grow beets profitably, farm implements had to be adapted to various stages in the beet culture to decrease the labor requirements. Machinery had to be converted to assembly line techniques to enable the processing of large quantities of beets. Growers and processors had to be trained. Despite mechanization, seasonal needs for large work forces had to be filled. Most importantly, the adaptability of sugar beets to irrigation had to be proven. Primarily through trial and error, the bulk of these difficulties had been overcome by 1897.⁴

The decade from 1897 to 1906 witnessed rapid expansion in the numbers of beet sugar factories in the United States. Seventy-one were erected during these years. Three large syndicates, headed by the Oxnard Brothers, Claus Spreckels, and the Church of Jesus Christ of Latter-day Saints were responsible for the majority. Lesser syndicates erected plants in Michigan and two in the West later became the Amalgamated Sugar Company and the Great Western Sugar Company. The other source of huge amounts of capital in the beet industry was the American Sugar Refining Company, called the Sugar Trust, which purchased large blocks of stock in nearly every small sugar company. The plant at Sugar City differed markedly in the sources of its capital.⁵

The National Beet Sugar Company was financed by a small group of businessmen who had no connections with the sugar syndicates or the Sugar Trust. These men never missed an opportunity to point out the independent origins of the company or to deny any association with outside interests. A further source of pride for Sugar City residents was the building of not only a factory but a town as well, totally unaided by local or state subsidies. Many local communities were desirous of having sugar factories built in their midst and donated the land, while states sometimes offered special bounties on beet sugar produced within their borders.⁶

E.H. Dyer, the father of the sugar beet industry in the United States, traveled widely in the 1890s promoting the establishment of

Colorado . . . 1858 to 1926 (Fort Collins, Colo.: State Agricultural College, 1926), p. 206. Grover Cleveland had been defeated in the election of 1888 partially as a result of his strong stand on tariff reduction. Fear of loss of protection from tariff laws made some businessmen reluctant to invest in the beet industry, though this was only one factor.

² Arrington, “Science, Government, and Enterprise in Economic Development,” p. 9.

³ *Ibid.*, p. 13; Roy G. Blakey, *The United States Beet-Sugar Industry and the Tariff* (New York: Longmans, Green and Co., 1912), p. 297.

⁴ “Notes on the Early History of the National Sugar Manufacturing Company,” 29 May 1897, personal files of Margareta B. Carey, Denver, Colorado (hereinafter cited as “Notes”); *Sugar City (Colo.) Herald*, quoted in “Notes,” 22 December 1900.

⁵ Leonard J. Arrington, *Beet Sugar in the West: A History of the Utah-Idaho Sugar Company, 1891-1906* (Seattle: University of Washington Press, 1966), p. 83.

⁶ Leonard J. Arrington, “Science, Government, and Enterprise in Economic Development: The Western Beet Sugar Industry,” *Agricultural History* 41 (January 1967):9; Alvin T. Steinel, *History of Agriculture in*

beet plants. He used the typical booster's rhetoric in a speech delivered to the Pueblo Board of Trade, explaining the economics of sugar investment. The average 300-ton daily capacity beet plant cost \$300,000 to construct. It could process 3,000 acres of beets during a 150-day campaign, producing 9,000,000 pounds of refined sugar, based on a low estimate of 10 percent saccharine content. At the modest price of 6 cents per pound, less the production cost of 3.5 cents per pound, the profit would be \$225,000 or *nearly the cost of the plant in the first year*. Average yields per acre of 20 tons would make a profit of \$32.75 per acre for the farmer. Both the investor and the farmer could make money, and with Colorado experiments producing beets of 15 percent and higher, expectations for the future of the industry were high.⁷

Dyer and others liked to compare the sugar industry with the Colorado mining enterprises, pointing out that beets were a much safer investment. The Pueblo Board of Trade was told that "mines can be worked out, but in the manufacture of sugar from beets you have a 'lead' that cannot be exhausted."⁸ The sale of beets based upon saccharine content was often compared to the assaying of ore from the mines. Since beets grown in the Arkansas valley had the highest sugar content of any in the world, it was enthusiastically predicted that just as Cripple Creek had been noted the world over for its gold production, the valley would become celebrated for its unexcelled adaptability to sugar beets. The comparison favored sugar beets since profit from this "white gold" was not influenced by the uncertainties of prospecting for the glittering metal. A money-making crop was insured with irrigation and proper attention to the cultivation of the beet. As the boosterism for beets continued through the 1890s, enthusiasm spread.⁹

Promoters of beet sugar at this time anticipated the completion of sufficient numbers of plants in the United States to eliminate the need for importing cane sugar. This economic jingoism gave an added dimension to the arguments favoring growth of the industry. Not only would local communities of beet growers and investors in sugar factories realize a profit, but countless American dollars would be kept at home. Boosters argued that Colorado spent more than \$1,250,000 per year for sugar: "Why not keep the money at home by producing our own sugar?"¹⁰ Purchasing cane sugar from foreign companies was seen as undesirable because the profit went to the foreign



The eastern plains was largely uninhabited before the development of railroad and irrigation projects.

companies who also exploited their labor force. The large numbers of beet plants built around the turn of the century were a mere fraction of the total that were projected to bring American self-sufficiency in sugar production. The enormity of this goal is evident, for over three-quarters of a century later, the sugar production in the United States still falls short of consumption. Sugar remains the third, largest food import—exceeded only by coffee and meat. Sixty-one percent of the sugar consumed by Americans is produced by the United States, Puerto Rico, and the Virgin Islands, with the remaining six million tons imported. Americans use about one-third of all the sugar moving in world trade.¹¹

The Dingley Tariff of 1897 often is credited as the single most important factor leading to the surge of growth in the sugar industry at that time. The 1.65 cents per pound duty was only slightly higher than the rate of 1894, and neither was as high as the 1890 rate of 2.2 cents. While fear of drastic changes in the tariff rate may have slowed investment in the industry, the large spurt of expansion in sugar production occurred in the context of less favorable rates. Frank Taussig's classic study of the tariff shows that the effect of this kind of legislation is commonly exaggerated. "An eagle eye in divining possibilities, boldness and resource in developing them, skill and invention in designing the most effective mechanical appliances—these forces of character and of brains, developed by the pressure of competition in a strenuous community, and applied under highly favoring natural conditions, explain the prodigious advance."¹² While the tariff was a factor, many other elements had been responsible for bringing the beet sugar industry to the threshold of rapid expansion in 1897.

In the early 1880s, much of the eastern plains of Colorado was uninhabited. The settlement and the development of a portion of the

⁷ *Pueblo Chieftain*, 27 May 1890, 1 May 1891

⁸ *Ibid.*, 27 May 1890.

⁹ *Denver Times*, 14 October 1900; *Pueblo Chieftain*, 20 December 1891, 28 June 1903.

¹⁰ *Pueblo Chieftain*, 10 January 1897.

¹¹ Arrington, *Agricultural History*, p. 11; James Trager, *The Foodbook* (New York: Grossman Publishers, 1970), p. 380; George O.G. LBR and Allen V. Kneese, *The Economics of Water Utilization in the Sugar Beet Industry* (Baltimore, Md.: Johns Hopkins University Press, 1968), pp. 9-10.

¹² F.W. Taussig, *The Tariff History of the United States*, 8th rev. ed. (New York: Capricorn Books, 1964), pp. 345, 347-49.

lower Arkansas valley depended upon constructing large irrigation systems and penetrating the area by railroads. Both required huge capital investments and the optimism of businessmen willing to gamble on their success.

The area was first opened by the railroad. The Pueblo and State Line Railway was chartered on 30 April 1887 for the purpose of building a line to connect Pueblo with the Missouri Pacific at Horace, Kansas. Officials of the Missouri Pacific had originally intended to extend their route westward from Kansas in a path that would have by-passed the Arkansas valley. The pledge of Pueblo businessmen to use their capital to build the line from Kansas and the concessions offered by the Denver and Rio Grande Railroad induced the change in plans. Working with great haste, the 152 miles of track were completed in seven months, with the first train rolling into Pueblo on 2 December 1887.¹³

From the beginning, the owners of the line sought to promote settlement along their route through a subsidiary, the Pueblo and State Line Town and Land Company. Chartered two months before the completion of the line, the company attempted to encourage land purchases with an advertising campaign stressing fertile soils with nutritious grasses, waiting only to be made productive by irrigation. This area was also suited to dry land ranching. The company, however, was unable to sell an appreciable amount of land. Small farmers lacked the capital to build their own irrigation projects and they viewed dry land farming as entirely too risky.

A flurry of large-scale irrigation projects backed by private capital began in Colorado in the 1880s. It was believed that with enough canals, all the barren prairies could be turned into luxuriant garden spots. Of the various projects, those of Theodore C. Henry were the most ambitious. His great dream was of a canal reaching all the way from Boone, about twenty miles below Pueblo, to the Kansas border. Henry was instrumental in starting twelve different irrigation systems, although the great canal was never completed. Three of the canal projects—Fort Lyon, Bob Creek, and Otero—played a vital part in turning the Arkansas River valley into a productive agricultural area.¹⁴

The craze for canal building and the desire of the railroad to sell its land—to ensure customers along its route—intersected in the Arkansas valley and resulted in the construction of the Colorado Canal. The

¹³ "Articles of Incorporation of the Pueblo State Line Railway," Colorado Division of State Archives and Public Records, Denver (hereinafter cited as CSA); Ralph Taylor, "Colorful Colorado," *Pueblo Chieftain*, 27 November 1949; Tivis E. Wilkins, *Colorado Railroads: Chronological Development* (Boulder, Colo.: Pruett Publishing Co., 1974), p. 65.

¹⁴ *Pueblo Star Journal*, 3 October 1954; A.J. Hamman, "Theodore C. Henry—Champion Irrigation Project Promoter," *A Hundred Years of Irrigation in Colorado, 1852-1952* (Denver and Fort Collins: Colorado Water Conservation Board and Colorado Agricultural and Mechanical College, 1952), pp. 79, 82.



Theodore C. Henry, 1841-1914, was called the "apostle of irrigation in Colorado." He predicted that the eastern plains could be an oasis as depicted in this idyllic scene painted by canal project promoters to win support for the introduction of irrigation.



Pueblo and State Line Railway owned a canal charter for the area, but control of the railway changed by 1888, before any construction of a canal began. By that time, Jay Gould either owned or had the controlling interest in the line then known as the Pueblo and State Line Division of the Missouri Pacific Railroad. Gould did not want to tie up his capital in an irrigation project and actively sought others to underwrite the investment.¹⁵

T.C. Henry was also searching for investors to participate in his canal projects in the Arkansas valley. Henry was a great believer in water control as a valuable source of wealth, and he possessed an infectious confidence in his ability to bring about completion of gigantic irrigation projects. He assured his potential backers of the tremendous profits to be made in land sales once a canal was completed.¹⁶

By 1890 a group of capitalists in Buffalo, New York, had been induced by the persuasive powers of both Gould and Henry to purchase land in eastern Colorado and to undertake its improvement with the building of the Colorado Canal. They incorporated under the name of the Colorado Land and Water Company and planned to sell eighty-acre tracts along with the water rights upon the completion of the canal. Approximately 35,556 acres of land were purchased. With Henry at its head, the Colorado Land and Water Company spent \$350,000 to dig a canal that stretched seventy-four miles eastward from Boone. This was adequate to open up the area around the future site of Sugar City, but was far short of Henry's goal.¹⁷

This canal project suffered from the same maladies as had canals begun elsewhere in the state. Less than one-half of the proposed Colorado Canal had been completed when all of the original capital had been spent. Inflated prices accompanying the building of large projects, underestimation of the immensity of the task, and some questionable practices by Henry and other promoters contributed to the miscalculation. Canal projects undertaken at this time were not built in proportion to the actual acre-feet of water available, which resulted in water supplies that were far less than the projections and frequent water shortages once settlement appreciably increased the population. Henry had heralded the Colorado Canal as the source of water for

more than a million acres of land in the lower Arkansas River valley. Present-day water supply available from this canal is inadequate to furnish the lands under it as far east as Sugar City, an indication of the exaggerated nature of Henry's projections.¹⁸

The building of the Colorado Canal, popularly called Bob Creek Canal, provides an excellent illustration of the basis for Henry's controversial reputation. Incorporated in January of 1890, the Colorado Land and Water Company worked with great speed, completing the major portion of the canal, fifty miles, on 29 August 1890. Fifteen months later, in October of 1891, Henry's Colorado Land and Water Company officially secured from the Colorado Land and Canal Company a deed conveying its prior rights to the canal line upon which he had *already* built. In December of 1889, Henry had signed an agreement with the latter company to purchase its rights to the canal line beginning at Boone, but he defaulted on the payment of the \$10,000 required for the conveyance and established the company backed by the Buffalo investors. Henry was typical of promoters at this time whose techniques of business often bordered on outright criminality. Although he did give impetus to the construction of important canal projects, his method of operation was highly questionable and none of his original investors realized a profit.¹⁹

Backers of the Colorado Land and Water Company were dissatisfied by Henry's failure to deliver even part of the lavish results he had promised. James A. Roberts and Henry Koons, the two largest investors, saw a solution to the lack of profit. They proposed a reorganization and expansion through the formation of two new firms, Twin Lakes Land and Water Company and Twin Lakes Reservoir Company. In 1896 the former company succeeded to all the rights of the Colorado Land and Water Company. The reservoir company was a separate mutual nonprofit corporation owned by landholders under the Colorado Canal. Construction of the reservoir made it possible for the private carrier ditch and land sales firm to become a profit-making venture. Increased water capacity provided by the storage facility was to be the basis of Roberts's plan for the formation of a gigantic syndicate aimed at further acquisition of land in the Arkansas valley and the promotion of the beet sugar industry.²⁰

The Twin Lakes Reservoir was regarded as a guarantee of adequate water for irrigation so that beets would be a "no risk" crop. It was

¹⁵ Henry V. Poor, *Manual of the Railroads of the United States for 1889*, 22d Annual Number (New York: American Bank Note Co., 1889), p. 531; *Nell's Topographical Map of Colorado* (Denver: E. Besly & Co., 1889).

¹⁶ T.C. Henry, "The Reclamation Service versus the State of Colorado," p. 1, pamphlet of address delivered at Denver, 18 August 1909, before the Trans-Mississippi Irrigation Congress, clipping files, Western History Department, Denver Public Library.

¹⁷ Holland and Hart, "Memorandum Prepared for the Twin Lakes Reservoir and Canal Company, Part 1," 1 January 1956, p. 3; Abstract of Title to the E ½ of the SW ¼ of Section 7, Township 21 South, Range 56 West of the 6th P.M., entry no. 1; records of David J. Clarke, attorney at law, Denver, Colorado (hereinafter cited as Abstract of Title, entry no. 1); LeRoy R. Hafen, *Colorado and Its People*, 4 vols. (New York: Lewis Historical Publishing Co., 1948), 4-129.

¹⁸ James G. Batterson, *T.C. Henry: His Advent in Colorado* (Hartford, Conn.: Press of the Case, Lockwood and Brainard Co., 1891); Steinel, *History of Agriculture in Colorado*, p. 206; Joseph O. Van Hook, "Development of Irrigation in the Arkansas Valley," *The Colorado Magazine* 10 (January 1933):3.

¹⁹ Abstract of Title, entry no. 1; and Holland and Hart, "Memorandum . . . Twin Lakes Reservoir and Canal Company," pp. 3, 5.

²⁰ "Notes," 29 May 1897; Holland and Hart, "Memorandum . . . Twin Lakes Reservoir and Canal Company," pp. 5-6.



Before the first automatic seeder was introduced in 1900, workers planted seed beet by hand.

constructed on Lake Creek, a high mountain tributary of the Arkansas River near Leadville. Water was to be stored in the reservoir until needed and then released down river to the headgate of Bob Creek Canal at Boone. There it was to be used to supplement the direct flow rights to the Arkansas River, owned by stockholders of the Twin Lakes Reservoir Company. Uneven precipitation and overzealous sale of direct flow rights later proved a source of problems with future water shortages, but in 1896, the reservoir supply was viewed as virtually inexhaustible. Its waters were not only for irrigation but also to supply the huge quantity of water needed for beet processing at the factory.²¹

There was little prospect in 1896 for the owners of the Twin Lakes companies to make a sufficient return on their investment simply by continuing land sales and raising alfalfa. Over \$400,000 had been invested in the Arkansas valley by the Buffalo capitalists and a more profitable crop was needed. Test beets grown in the valley had proven remarkably successful and expectations resulting from persuasive statistics of beet sugar promoters made that crop a highly attractive option.²²

The decision to grow beets necessitated constructing a processing plant nearby since transporting beets over long distances was costly as well as damaging to their sugar content. When Roberts, as president of both of the Twin Lakes companies, spoke of plans to promote the beet sugar industry in the valley, he anticipated no direct involvement. He believed that ensuring necessary water supplies would induce other

²¹ Liff and Kneese, *Economics of Water Utilization in the Sugar Beet Industry*, estimate water use in processing beets at 5,000 gallons per ton of beets or 38,500 gallons per ton of refined sugar or 19 gallons per pound of sugar.

²² "The National Sugar Manufacturing Company," p. 1, personal files of Margaretta B. Carey, Denver, Colorado (hereinafter cited as "NSMC").

interests to undertake the construction and the operation of a processing plant. Outside investors did not, however, materialize and three years later, in April of 1899, Roberts was announced as the head of a new sugar company to be located in the valley.²³

Roberts and his associates could profit immensely if the sugar factory proved successful. They owned more than 35,000 acres of land in the area and planned to sell a third of it to the sugar company in return for stock. Profits from sugar production would be augmented by selling land that would have appreciated in value with the development of the area. Raising alfalfa and leasing other portions of company land to cattle raisers would yield additional income. Beet pulp residue was a valuable supplement to the cattle diet and would also add to the returns. This increased diversity for their investment, with substantial profits promised, and experts to assist in its implementation, convinced the Buffalo capitalists to proceed with the venture. Peter L. Van Alstyne, a nationally known sugar beet expert, agreed to be the vice-president and general manager for the firm, and the construction contractors Bartlett and Hayward were available at the time.

On 27 July 1899 the National Beet Sugar Company filed its articles of incorporation with the State of Colorado. The incorporators and first board of directors were James A. Roberts, Henry Koons, George Urban, Jr., Charles E. Clark, and William S. Hartman. The capitalization was \$1,500,000—\$500,000 preferred stock and \$1,000,000 common stock. Their stated purpose was the construction and the operation of a sugar factory and any related activities in Pueblo and Otero counties. Ten men initially purchased bonds in the total amount of \$270,000. This group consisted of the board of directors, a subcontractor on the factory, and several relatives of members on the board. The large amounts individually subscribed indicated the continued confidence in the venture, although developing the eastern plains of Colorado had turned out to be more expensive and complex than originally envisioned in 1890.²⁴

The first major transaction of the National Beet Sugar Company was typical of the financial manipulations characterizing its entire history. It provides a clue to the financial difficulties the company experienced less than two years after its formation. A tract of land between Lake Erie and Lake Peterson—12,406.71 acres—and the

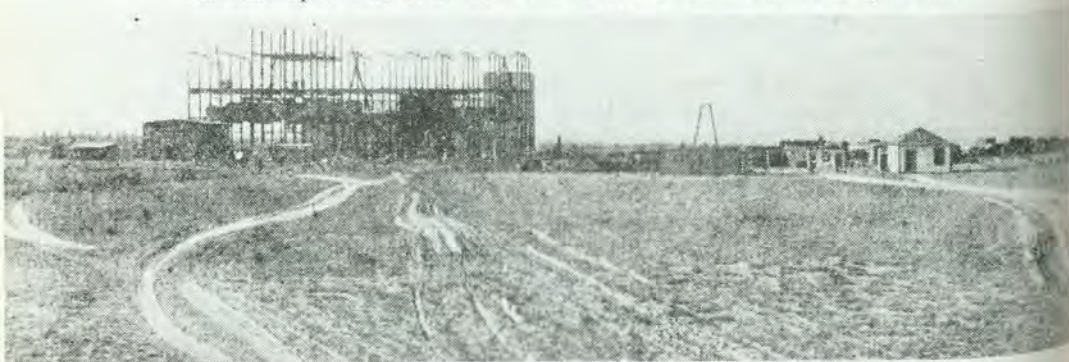
²³ "Notes," 29 May 1897, 1, 5 October 1899.

²⁴ George Urban, president of the U.S. Flour Milling Co., Buffalo, \$50,000; James A. Roberts, Buffalo, \$40,000; Henry Koons, capitalist, Buffalo, \$40,000; Charles E. Clark, secretary, Buffalo Loan, Trust and Safe Deposit Co., \$25,000; George Feick, builder, Sandusky, Ohio, \$25,000; T.A. McIntire, McIntire and Wardwell, New York, \$20,000; J.W. Tillinghast, manager, Western Union Telegraph Co., Buffalo, \$20,000; T.L. Van Alstyne, hardware, Sandusky, Ohio, \$15,000; Edward L. Koons, real estate and treasurer, Searching Co., Buffalo, \$15,000 ("Articles of Incorporation, National Sugar Beet Company," CSA); "Notes," 5 October 1899.

water rights were purchased from the Twin Lakes Land and Water Company.²⁵ Payment for the land was in the form of \$1,000,000 in National common stock and \$499,300 in preferred stock. The water rights conveyed to the sugar company included 154 shares in the Colorado Canal, 6,160 shares of capital stock in Twin Lakes Reservoir Company, and first and prior rights to the use of Lake Henry and Lake Meredith. With the investment of the Twin Lakes companies totaling \$900,000, the sale of one-third of their land at a profit of over \$600,000 was substantial. It was, however, only a paper profit, since the National Beet Sugar Company stock was valueless until the factory was built and operating at a profit. Despite the large sums involved in the transactions, the firm lacked large amounts of actual operating capital and unquestionably, many values and costs were highly inflated. Financially, the National Beet Sugar Company was a precariously balanced house of cards, unable to survive future gales of economic stringency.²⁶

In 1900 these enterprising capitalists saw beyond the myriad of obstacles to a larger picture of the vast opportunities for the beet industry and the profits to be made in the Arkansas valley. Concerns of the first year included obtaining factory machinery and beet seed, primarily from Europe; attending to the many aspects of erecting a plant and related facilities for processing beets; platting and constructing a town; extending irrigation laterals; starting cultivation of previously unworked ground; and obtaining workers for the factory and fields. A contemporary newspaper lauded these investors as men with money who knew how to spend it and in the process built not only a factory but also a town.²⁷

Work on the factory began in the spring of 1900. Company engineers decided upon the exact location primarily on the basis of proximity to the water supply from Lake Meredith and Lake Henry. A railroad spur was built from the Meredith station at Ordway to the



factory site, machinery was unloaded, and the flurry of activity began.²⁸

Construction of the factory, work on irrigation laterals, and planting the first beet crop all went on at the same time. Feick and Company of Sandusky, Ohio, subcontractors for Bartlett and Hayward, moved in a crew of more than two hundred men to begin excavation for the foundation and the footings of the factory. Another crew busied itself repairing the canal and constructing new irrigation ditches. Meanwhile, hundreds of teams of horses and numerous pieces of farm machinery were brought in to work the land in preparation for the first planting of the beets. Only 3,000 acres were seeded for the first campaign, and this was not completed until June. The 500-ton capacity factory at Sugar City could have processed beets from over 5,000 acres, but the difficulty of previously unworked ground, the shortages of experienced beet growers, and the many other activities required to establish the plant and the town limited the size of the first crop. In future years National hoped to involve a sufficient number of farmers to supply the major portion of the beets.²⁹

The officials of National were unwilling to depend upon chance to provide experienced labor. They sent a promoter to Kansas and Nebraska to encourage German-Russians living there to move to Sugar City. Two hundred families were sought on the first trip with promises to build cottages especially for the workers, a guarantee of \$4.00 per ton for beets, and the prospect of becoming landowners through liberal company credit policies.³⁰

These immigrants were sought by National because they were industrious and they possessed the special agricultural skills needed to raise beets. Volga Germans in Kansas and Nebraska were part of a migration that began in the eighteenth century. Germans dislocated by the Seven Years' War had moved to Russia at the invitation of Catherine the Great, settling in the Volga River region. They remained there until persecution of minorities began in the 1870s, when many of them began the migration to the United States, Canada, and South America.³¹

Building the factory met with many problems. Spring rains poured

²⁵ The names were respectively changed to Lake Henry, in honor of T.C. Henry, and Lake Meredith, to correspond with the name of the nearby railroad station, giving geographic recognition to the two important growth factors, irrigation and rail transportation.

²⁶ H. Lee Scamehorn, "Appraisal File on the National Sugar Manufacturing Company Manuscript Collection," Boulder, Colorado.

²⁷ *Pueblo Chieftain*, 27 November 1900.

²⁸ Ray Farr, "Early Day Sugar City," *Ordway (Colo.) New Era*, 14 October 1971; *Sugar City (Colo.) Saccharine Gazette*, 29 December 1905.

²⁹ "Notes," 23 April 1899; *Denver Times*, 12 December 1900; *Pueblo Chieftain*, 27 November 1900.

³⁰ *Denver Times*, 18 October 1899.

³¹ *Ordway New Era*, 28 August 1975.

down in late March, flooding the excavation. The foundation had reached a depth of thirty feet and as the rain water filled the large hole, the sides collapsed. The excavation had to begin all over again. The delay caused by digging the foundation twice later proved to be a significant factor. A more positive aspect was the location of a bed of clay on the shore of Lake Meredith so that the costly transportation of bricks could be avoided by manufacturing them a few hundred feet from the construction site.³²

By mid-summer building was not proceeding rapidly enough to satisfy the sense of urgency over its completion in time to be able to process beets for the first campaign. A matter of local pride was at stake too, for another beet plant was under construction by the American Beet Sugar Company at Rocky Ford. National intended to have its plant completed first.³³ To quicken the pace, the work force was doubled. By August, the immense steel skeleton of girders and beams strung from huge posts had been erected. Enormous metal tanks and vats needed to process sugar were in place. Real progress was at last being made, but the contractors wanted an even faster pace. The crew of almost five hundred men worked extended shifts of as many as eighteen to twenty hours in an effort to complete the factory by mid-October.³⁴

While work on the plant continued, attention was also given to building a town to house the company workers. The board of directors of National had formed the Sugar City Townsite Company on 20 December 1899 to conduct the development of the 320-acre tract set aside for the town. In addition to selling lots, the townsite company was responsible for municipal improvements including a water works, sewerage system, an electric light plant, a school, and a freight depot. A large, uncovered ditch that ran down main street supplied water until the artesian well was drilled to supply the drinking water.³⁵

Sugar City began as a tent town and had more tents than houses its first few years. The first two residents of the area, Thomas Blackwell and E.P. Rogers, had pitched their tents in November of 1899 on the future site of the factory. Hundreds of other tents were soon pitched to house construction and field workers. National operated a special tent camp for its field workers, supplying their every need, so that all their energies would be devoted to beet culture.³⁶

Few businesses or houses were built until the summer months. Thomas Blackwell was the first to construct a house in the town, completing it early in 1900. By August, a school and a church as well as the National Hotel had been erected. Several two-story buildings were under construction and the *Sugar City Herald* had already been in operation for two months. In expectation of future growth, other business establishments were being constructed—stores, hotels, restaurants, and saloons. The 1900 census, taken in mid-year, reported that the population of Sugar City was 689, with the precinct including the town totaling 1,357 persons. With over five hundred men working on the factory alone, and others laboring in the fields, few were left to build the town.³⁷

The number of tents increased as new arrivals poured in at a rate far exceeding the construction of houses. By October, between three and four hundred families were living in tents. That month the Sugar City Improvement Company was organized to try to meet the great demand for housing. Van Alstyne and Hartman, involved in the management of the Sugar City Townsite Company and the National Beet Sugar Company, were directors of this enterprise as well. The National Company promised to begin construction of twenty-five single dwellings as soon as carpenters could be spared from work on the factory. The improvement company pledged its \$10,000 in capital to be used for erecting tenement houses. The families living in tents and needing protection from chilling winter weather could not have taken too much comfort from promises alone. It was little wonder that three-quarters of these German-Russians left Sugar City for the winter, some returning to their homes in Nebraska and others staying at Globeville, an immigrant section of Denver. The next year a more developed community saw one-half of the immigrants stay to make Sugar City their home.³⁸

By October of 1900, the population of Sugar City was close to two thousand. National had between twelve hundred and fifteen hundred people on its payroll and others came who were not directly employed by the sugar company or who were family members. These early inhabitants were a curious mixture of boomers, conmen, Midwest farmers, German-Russian immigrants, engineers, construction workers, and cowboys. Yet, the verdant stretches of beets in the surrounding fields had brought the young and eager to this town in hopes of turning their dreams into reality. The boom town atmosphere of Sugar

³² Farr, "Early Day Sugar City"; *Pueblo Chieftain*, 27 November 1900.

³³ The first day of operation for the Rocky Ford plant was 11 October 1900, while that of the plant at Sugar City was almost seven weeks later; boosters of Sugar City later overlooked this technicality and in references to their plant as the second sugar company in the state were indicating that it was the second to be started in Colorado.

³⁴ "Notes," 1 July, 13 September 1900; *Pueblo Chieftain*, 3 August 1900.

³⁵ "Articles of Incorporation, National Beet Sugar Company," CSA; *Denver Republican*, 21 December 1899; *Denver Times*, 12 August 1900.

³⁶ *Sugar City Herald* quoted in *Pueblo Chieftain*, 13 July 1900.

³⁷ *Pueblo Chieftain*, 27 November 1900, 7 March 1957; and Farr, "Early Day Sugar City"; U.S., Department of Commerce, Bureau of the Census, *Twelfth Census of the United States, 1900: Population*, 1:440.

³⁸ *Denver Times*, 30 October, 1 November 1900; "Articles of Incorporation," CSA; *Sugar City Saccharine Gazette*, 27 June 1902; Richard Sallet, *Russian-German Settlements in the United States*, trans. by LaVern J. Ripple and Armand Bauer (Fargo: North Dakota Institute for Regional Studies, 1974), p. 49.

City was reflected in a business district unsurpassed by those during gold rush times: two hotels, a newspaper, five general stores, two undertakers, five saloons, two houses of prostitution, a gambling casino, a billiard parlor, and a race track. Ping pong parties were popular and the athletically inclined participated on the baseball team. Sugar City prided itself in having no idlers—everyone was engaged in some line of work.³⁹

Growing pains were hard to cope with in the early years. When plans were drawn up, the school-aged population of Sugar City was about 350. By the time the first school building was completed, the population of schoolchildren for the county had grown to 3,444 and the Sugar City school was supposed to accommodate a large part of that number. In 1901 the school census indicated an increase of 802 to a total of 4,246 students.⁴⁰

Town government went forward in temporary facilities in different locations, such as Judge Brown's police court held in the rear of the newspaper office. Other aspects of the new town were less than satisfactory. Sidewalks were termed as first class, provided hip boots were worn! Residents complained about the open ditch running down main street until it was covered. Thereafter, critics charged that the monopoly on the water supply held by the townsite company had made water "almost as expensive as Zang's beer." The outbreak of smallpox, however, indicated that public health measures needed improvement, and covering the ditch was a positive action. Another safety measure was the formation of a volunteer fire department.⁴¹

The completed factory struck the Sugar City inhabitants as a wonder of modern mechanization. The contract cost for the 500-ton capacity factory was \$548,000, including buildings and machinery. Plant facilities consisted of the main building, boiler house, machine shop, lime house, office building, beet laboratory, lime and coke house, warehouse, and four beet sheds. The main building was three stories high with a superstructure of two stories and a lime house that towered six stories high. Particularly impressive parts of the equipment included 10,000 feet of pipe, carbonating battery tanks with a 50,000 gallon capacity, and boilers of more than 2,000 horsepower. The entire plant was lighted electrically so that it could be operated continuously.⁴²

The first beets were harvested before the factory was completed. Starting on 22 October a steady stream of teams poured into town

³⁹ *Pueblo Chieftain*, 3 August, 27 November 1900; *Denver Times*, 20 October 1900; Farr, "Early Day Sugar City"; "NSMC," pp. 2-3; *Sugar City Saccharine Gazette*, 23 February, 11 October 1901, 30 May 1902.

⁴⁰ *Sugar City Saccharine Gazette*, 13 July 1901.

⁴¹ *Ibid.*, 11 October, 20 April 1901, 29 December 1905.

⁴² Scamhorn, "Appraisal File on the National Sugar Manufacturing Company"; *Pueblo Chieftain*, 27 November 1900.



Sugar City, as seen from the factory grounds in August 1900, shows a town that was in need of municipal improvements, particularly regarding the five-foot open canal on Main Street. The growth of the town was due mainly to the factory, shown here in the midst of a sugar beet campaign.



pulling large wagon loads of beets. Over fifty horse teams arrived with loads while traction engines, each with a capacity of fifteen wagon loads, supplemented the effort. The beet sheds were quickly filled to capacity with the remainder stored in gigantic piles, waiting for the processing to begin. The first test run of the factory was successfully completed on 26 November, over a month later than anticipated. The campaign was immediately launched the following day—the culmination of one year's efforts had finally occurred.⁴³

The officers of National as well as the farmers viewed the first campaign as a success. A total of three million pounds of sugar was produced from beets averaging 86 percent purity and 18 percent saccharine content. Minimum levels for making a profit from beets were 76 percent and 12 percent, respectively. Farmers harvested an average of fifteen tons of beets per acre, less than the twenty tons expected, but the higher saccharine content compensated for the difference. Acreage was increased each of the following three years, reflected in the net tons of beets harvested: eleven thousand in 1901; twenty-eight thousand in 1902; and fifty thousand in 1903.⁴⁴

The first campaign was clearly only a beginning, but an encouraging one, particularly for those around the state who were interested in promoting beet plants in their areas. Of the three beet plants in Colorado in 1900, the two in the Arkansas River valley showed the most promise. The plant at Grand Junction had suffered disastrously from a shortage of water, while the National Beet Sugar Company and the American Beet Sugar Company could point to their first year as holding forth great promise for future campaigns. Sugar City, not even in existence the year before, presented the most dramatic accomplishment for the year.

While the Sugar City factory processed its first campaign in December, Thomas J. Hayward hosted a group of visitors. His private railroad car had transported the party, including financiers from Buffalo as well as John H. Windfelder and Francis K. Carey of Baltimore. They remained for two days, touring the plant and surrounding area. Carey was very enthusiastic about what he saw during the visit, giving a glowing account to a reporter upon his return. These Buffalo capitalists were stockholders in National, quoting \$3,000,000 as the total investment in acquiring land, developing irrigation canals, and constructing the factory. The major change in company ownership within the next three months evidenced that the reality of the financial

⁴³ *Denver Times*, 28 October 1900; "Notes," 27 October, 26 November 1900.

⁴⁴ *Sugar City Republican* quoted in *Denver Times*, 28 November 1900; *Grand Junction Sentinel* quoted in *Denver Times*, 2 January 1901; *Sugar City Saccharine Gazette*, 23 February 1901; *Denver Rocky Mountain News*, 12 April 1903; *Denver Times*, 14 October 1900; *Rocky Ford (Colo.) Enterprise*, 5 October 1900.



After the beets were delivered to the factory, they were washed and sliced. In a diffusion battery of fourteen tanks, water was added to the beets and the saccharine matter was taken up in the solution. This substance went through a series of mechanical filters and was treated in a quadruple evaporator to remove excess water. The juice was saturated with sulphur fumes to remove the earthy color, after which the fluid passed through more filters. After the sugar was boiled in a vacuum at 160 degrees Fahrenheit, it crystallized. It was then washed, dried, and packaged.



10 LBS.-NET

**COLORADO
NATIONAL**

EXTRA

FINE



SUGAR

**THE NATIONAL SUGAR MFG. CO.
SUGAR CITY, COLO.**

The sugar sack used by the National Sugar Manufacturing Company.



Francis King Carey, president of the National Sugar Manufacturing Company from 1901 to 1943, originated the first transmountain water diversion project over Independence Pass to provide an adequate water supply for the sugar beet industry.

situation of the company was not as rosy as that painted for these visitors.⁴⁵

On 1 March 1901 John Windfelder replaced Peter Van Alstyne as general manager of the National Beet Sugar Company. Windfelder described the change as a "new deal, new blood, new money, new men" for this sugar company. The actions of the residents of the town reflected the spirit of the change when a month later, they expressed their affection for the departing Van Alstyne with a "Sugar City send off." The farewell was complete with cheering, guns discharging, and dynamite exploding as the train pulled out of the station.⁴⁶

Francis K. Carey, the new president, began referring to the company as the National Sugar Manufacturing Company, even though the name was not officially registered as changed until 1902. Carey and Windfelder were extremely positive in their predictions for the future of both the company and the town. No detailed accounting exists of the reasons for the change in ownership, but scattered details blend into a plausible explanation.

Roberts had not originally intended to become involved directly in the sugar business, and he may have planned from the beginning to find new investors to take over the firm once it was started. He remained president of the Twin Lakes Land and Water Company and the Twin Lakes Reservoir Company and continued to advise the new owners of the sugar company as a member of its board of directors for 1901. In this respect, the transaction lessened his role, but by no

⁴⁵ "Notes," 22 December 1900; *Pueblo Star Journal*, 3 October 1954.

⁴⁶ *Sugar City Saccharine Gazette*, 2 March, 6 April 1901.

means ended his involvement in Sugar City. There were additional motivations likely for the transfer of ownership, including avoiding complicated litigation and solving financial difficulties.

On 7 February 1901 the *Denver Times* reported that the foundation of the National Beet Sugar plant had settled and that the company officials intended to refuse to accept the building from Bartlett and Hayward, the contracting engineers. The twenty-two foot excavation for the foundation had apparently not reached a solid surface, and as the building settled, large cracks appeared in the walls. This settling had disarranged the machinery and had resulted in the necessity of machinists making daily repairs and alterations in order to keep the factory operating. The problem with spring rains a year earlier, making it necessary to excavate the foundation twice under the pressure of trying to meet the early fall deadline for completion, was responsible for the appearance of the cracks. The first excavation had been eight feet deeper than the one finally built upon.

Vague references to financial difficulties in the early years are sharply focused into concrete figures by the sums Carey quoted as the total investment of the National Sugar Manufacturing Company. Speaking with the press in 1902 concerning his views on the tariff question, he pointed out that his firm had \$1,200,000 invested in land, factory facilities, and the water supply from the reservoirs, and that this investment never would have been made without "relying on permanency for some years of the tariff law."⁴⁷ The National Beet Sugar Company was either in a very weak financial condition or highly overcapitalized or both if what it claimed as a three million dollar investment was transferred for the sum of slightly over one million dollars. Carey's firm certainly had invested some additional money in the year since it gained control, so part of the figure he quoted could have included an amount exceeding the purchase price.

One story charged that Carey, as a prominent Baltimore lawyer, received some sugar beet machinery as payment for his legal services for a German client. Since Bartlett and Hayward's firm was based in Baltimore, it is a logical assumption that Carey knew them and would seek their purchase of the machinery for the new factory that they were to build in Colorado. It is known that machinery installed in the Sugar City plant came both from Germany and the United States. The engineers probably agreed to Carey's request, stipulating that payment would, of course, be made after they had completed the job and had themselves been paid. As a senior partner of the largest law firm in Maryland at that time, Carey acquired stock in the sugar company in lieu of a legal fee owed him by the builders, Bartlett and Hayward.

What began as a passing interest in the beet sugar industry as a result of his clients ended by launching Carey on a forty-two-year career as the president of a sugar company.⁴⁸

When National Beet Sugar Company officials refused to accept the factory from Bartlett and Hayward, the choices were a long legal battle or an arrangement to grant the contracting engineers an interest in the company in lieu of paying the \$548,000 due for the factory. Choosing the latter option indicated that the cracks in the factory foundation were only used as an excuse to find an alternative to producing this substantial sum. In retrospect, the operation of the factory for a total of sixty-eight years indicated that damage to the foundation was not that great.

Carey's personality traits may have also influenced the decision. He possessed both tremendous energy and a great determination that would not allow him to accept failure. As a lawyer, he knew that going to court would result in years of litigation with uncertain results. The alternative of gaining an interest in the company had the attraction of providing a training and testing ground for his sons, who could take over the business after his retirement. And certainly, making a success of a weak company was far more challenging than instituting legal action that would destroy it.⁴⁹

The transfer of ownership in 1901 can be seen as the desire of Roberts to find new investors for the sugar company and as the result of difficulties over payment for the factory—due in part to the general financial weakness of the National Beet Sugar Company. These things made a transfer of ownership desirable for the Buffalo investors who had been involved in the Arkansas valley venture since 1890 and had not realized substantial profits to that date. Yet, at the same time, the company seemed both a bargain and a challenge for the new investors. Carey became involved through his beet machinery, his services rendered to clients, and a resulting general interest in and enthusiasm for the sugar beet industry.

In 1901 officials of the National Beet Sugar Company (NBSC) leased their plant to the National Sugar Manufacturing Company (NSMC), incorporated in Delaware. Through this lease, NSMC gained control of NBSC, though the lessor continued to operate the plant for one more year. NBSC changed its name to the Central Sugar Manufacturing Company to avoid confusion. In October of 1901 the Baltimore syndicate, headed by Carey, exercised its option on the capital stock of

⁴⁷ Interview with J.C. Buell, president of the First National Bank of Ordway, Ordway, Colorado, 17 October 1975; William P. Carey, grandnephew of Francis King Carey to Dena Markoff, 26 February 1976.

⁴⁸ Interview with Margareta B. Carey, wife of Reginald S. Carey and resident of Sugar City for over thirty years, Denver, Colorado, 10 November 1975; interview with Janet O'Connell, secretary for National Sugar Manufacturing Company, Denver, Colorado, 31 October 1975.

NBSC and took permanent charge of both the factory and the beet farm at Sugar City. On 20 January 1902 the name of the company was officially changed on the corporation papers filed in Colorado and was thereafter known as the National Sugar Manufacturing Company. This change came so early in the history of the firm that many sources credit the Maryland investors with starting the sugar company.⁵⁰

The new owners of the fledgling sugar company would have many trials ahead of them, including a desperate battle with the cane Sugar Trust, drought, beet rot, blight, labor problems, numerous financial difficulties, and differences with other corporations involved in the building of Sugar City.⁵¹ The new president was not a man easily discouraged. He was determined to make the company a success and remained a strong leader for more than four decades. National had come into existence by the bold action of businessmen, and Carey would vigorously continue its fight for survival as the smallest, independent, sugar company in the United States.

DENA S. MARKOFF holds the B.A. degree, the M.A. degree in history, and is currently a Ph.D. candidate in history. She has been awarded a John E. Rovensky Fellowship in Business and Economic History for 1979-80 to help in the completion of her dissertation on the history of the National Sugar Manufacturing Company. She has published in GERMANS FROM RUSSIA IN COLORADO and in THE PROCEEDINGS OF THE ECONOMIC AND BUSINESS HISTORY SOCIETY, 1976-1978.

⁵⁰ Scamehorn, "Appraisal file on the National Sugar Manufacturing Company"; *Sugar City Saccharine Gazette*, 18 October 1901.

⁵¹ NSMC first board of directors: Francis K. Carey, Henry P. Scott, W. Kelsey Schoepf, Nelson Perin, Nicholas P. Bond, Thomas J. Hayward. Others connected with the organization were: William A. Marburg, Michael Jenkins, and Edward L. Bartlett.