

THE CALIFORNIA GOLD RUSH:  
APPROACHES TO PRODUCING DAGUERREOTYPE VIEWS  
AN EXAMINATION OF VIEWS IN THE  
MATTHEW R. ISENBURG COLLECTION AT AMC TORONTO

by

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## ABSTRACT

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*The California Gold Rush: Approaches to Producing Daguerreotype Views.  
An Examination of Views in the Matthew R. Isenburg Collection at AMC Toronto*

Thesis (M.A.) Fall 2013 – Photographic Preservation and Collections Management, Ryerson University

This thesis examines daguerreotypes of outdoor views made during the California Gold Rush from 1848 to 1856, now in the Matthew R. Isenburg Collection at AMC Toronto. The views were made for private commissions, public viewings, and as models for engraving. Daguerreotypists encountered a number of challenging working conditions in the field, different from those in galleries where portraits were taken. In analyzing 18 daguerreotypes from the Isenburg Collection, this thesis investigates how working conditions during the Gold Rush such as light, climate, and terrain, influenced daguerreotypists's decisions when making views; these include the choice of camera apparatus, optics and aperture, variations in exposure times, and composition and vantage points. By considering the purposes of such views, and the photographer's approaches to making them, the thesis explains the appearance of these early visual documents of the western American frontier.

## **ACKNOWLEDGEMENTS**

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## **DEDICATION**

This thesis is dedicated to my partner, Jesse for all of his support, encouragement and love. Also, much gratitude to my parents, Brian and Mary Carmen, for fostering in me a curiosity about the world, and for putting up with all of my questions.

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## INTRODUCTION

Of the many daguerreotypes produced during the California Gold Rush from 1848 until the late 1850s, most were portraits taken indoors: outdoor views were a rarity.<sup>1</sup> Yet most daguerreotypists, as part of their practice, produced outdoor views. These views were typically taken from the ground level, of the mining activities, landscapes, buildings, and structures. The Matthew R. Isenburg Collection at the Archive of Modern Conflict (AMC) in Toronto contains 55 daguerreotype views that document the California Gold Rush from 1848 until approximately 1859. A close analysis of 18 of these views is the subject of this thesis. They include three whole plates, eight half plates, six quarter plates and one stereo image comprised of two sixth plates. Ten of the views have not been attributed to any maker, while eight have been attributed to George H. Johnson (c. 1823), Silas Wright Selleck (c. 1828–1885) and Robert H. Vance (1825–1876).

Outdoor views served both public and personal use. These include daguerreotypes used for public viewings; as sources for prints and engravings; and as records commissioned by individuals and businesses. The diversity in appearance of these outdoor views—compared to the uniform appearance of indoor portraits—reflects not only their different uses but also the varied conditions that daguerreotypists encountered when working outdoors. Compared to portraits made in the controlled environments of indoor galleries and saloons, views offer insights into the varied conditions that daguerreotypists confronted when working in the field.

The working conditions that daguerreotypists encountered when producing outdoor views, that would have differed from making studio portraits, include variable light conditions, the problems of transporting and operating camera apparatus to the site of the view, and of preparing and developing plates in a variety of settings and temperatures. This thesis project investigates in detail how these working conditions influenced the decisions that daguerreotypists made when producing views of the California Gold Rush; decisions about the camera apparatus they used, their choice of optics and aperture, variations in exposure times and decisions made about composition and vantage points.

This thesis project will describe and analyze a selection of outdoor views made during the California Gold Rush by taking into account how their appearance (composition, perspective, depth of field, focus, lighting) and the people, objects and activities integrated into the views—were affected by the decisions made in their production. The investigation will consider the decisions as

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<sup>1</sup> Peter E. Palmquist, *Carleton E. Watkins: Photographer of the American West* (Albuquerque, NM: University of New Mexico Press, 1983), 5.

responses to the working conditions presented by the outdoor environments in which the daguerreians operated and therefore will fully account for the first time the appearance of these early visual documents of the western American frontier.

## LITERATURE REVIEW

Much has been written about the California Gold Rush and how the daguerreotype was used to document this significant historical event. Similarly the challenges of producing outdoor views have been addressed in a general sense by many historians, practitioners and curators of nineteenth century photography. However, extensive investigations into precisely how daguerreotypists responded to these challenges at this particular time and place, and how the appearance of daguerreotype views can be used to understand these responses, is lacking.

This review covers literature that offers a range of information and analyses about the practice of making daguerreotype views. The review begins with publications that examine daguerreotype use in the United States, followed by literature about views made during the California Gold Rush. The review also covers literature about individual daguerreotypists and specialized studies of equipment and views.

General histories of photography describe the activities of some of the more widely known daguerreotypists who practiced in California during the Gold Rush and acknowledge the use of the daguerreotype to document mining scenes and activities. In *The Daguerreotype in America* (1968), Beaumont Newhall provides a detailed survey of the daguerreotype in which he refers to primary sources to demonstrate the different approaches between the practice of producing daguerreotypes of outdoor views and daguerreotype portraits in studios.<sup>2</sup> Newhall describes the technical approaches that daguerreotypists employed when composing outdoor scenes, including the types of lenses used and how panoramas were made. He notes the subject matter of many early outdoor views such as mining activities and panoramas of cities.<sup>3</sup> For example, he describes the subject matter of some of the 300 views that Vance produced and featured in his 1851 exhibit, *Views in California*.<sup>4</sup> In the 1971 publication, *Mirror Image: The Influence of the Daguerreotype on American Society*,<sup>5</sup> photography and art historian, Richard Rudisill provides a historical context to the occupational activities of daguerreotypists that documented mining scenes. However, he does not address the process of producing these daguerreotypes in great detail. Some of the equipment,

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<sup>2</sup> Beaumont Newhall, *The Daguerreotype in America*, 2<sup>nd</sup> revised ed. (New York, NY: Dover Publications, 1968), 67–75.

<sup>3</sup> Ibid., 84–87.

<sup>4</sup> Robert H. Vance, *Catalogue of Daguerreotype Panoramic Views in California* (New York, NY: Baker, Godwin & Company, 1851). (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*, <http://www.daguerreotypearchive.org>, Ewer Archive F8510001).

<sup>5</sup> Richard Rudisill, *Mirror Image: The Influence of the Daguerreotype on American Society* (Albuquerque, NM: University of New Mexico Press, 1971).

vantage points and technical approaches that daguerreotypists used to document outdoor views are described by photography historians Floyd and Marion Reinhart in their 1981 publication, *The American Daguerreotype*.<sup>6</sup> However, their text does not provide an in-depth analysis of the use of these techniques by daguerreotypists during the California Gold Rush.

In a more recent overview of daguerreotypes, *The Origins of American Photography: from Daguerreotype to Dry-plate, 1839–1885* (2007), photography curator Keith F. Davis examines the development and use of the daguerreotype in the United States.<sup>7</sup> Davis provides biographical information about practitioners during the California Gold Rush, however the approaches to producing outdoor views are not addressed in great detail.

Photography historian Peter E. Palmquist explores the role of the daguerreotype in shaping images of the American west in his chapter “Silver Plates on a Golden Shore: The Real Thing Itself,” in the 1991 publication, *America & the Daguerreotype*.<sup>8</sup> Palmquist describes how daguerreotype views of California were reproduced in painted panoramas and engravings that reached large audiences thus influencing their images of the West.<sup>9</sup> These images drew miners to California, many of whom subsequently appeared in the outdoor scenes that were documented by daguerreotypists. Some of the outdoor views produced during the California Gold Rush are described by founding president of the Daguerreian Society, John Wood, in his essay, “Theatrical Narratives and the Documents of Dream: California and the Great American Image,” published in Drew Heath Johnson and Marcia Eymann’s publication, *Silver & Gold: Cased Images of the California Gold Rush* (1998).<sup>10</sup> Wood describes the social context in which daguerreotypists worked, however this essay does not specifically address many of the conditions that surrounded the production of daguerreotype views.

Literature about daguerreotype production in California during the Gold Rush offers information about the daguerreotypists that worked in the region. In their 2000 publication, *Pioneer Photographers of the Far West: A Biographical Dictionary 1840–1865*, Peter E. Palmquist and Thomas R. Kailbourn, provide detailed biographies of daguerreotypists including Robert H. Vance,

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<sup>6</sup> Floyd and Marion Reinhart, *The American Daguerreotype* (Athens, GA: University of Georgia Press, 1981), 354–55.

<sup>7</sup> Keith F. Davis, *The Origins of American Photography: From Daguerreotype to Dry-Plate 1839–1885*, (Kansas City, MO: Hall Family Foundation: in association with The Nelson-Atkins Museum of Art; New Haven, CT, 2007).

<sup>8</sup> Peter E. Palmquist, “Silver Plates on a Golden Shore: The Real Thing Itself,” in *America & the Daguerreotype*, ed. John Wood (Iowa City, IA: University of Iowa Press, 1991).

<sup>9</sup> Palmquist, “Silver Plates on a Golden Shore,” 134–58.

<sup>10</sup> John Wood, “Theatrical Narratives and the Documents of Dream: California and the Great American Image,” in *Silver & Gold: Cased Images of the California Gold Rush*, eds. Marcia Eymann & Drew Heath Johnson. (Iowa City, IA: University of Iowa Press for the Oakland Museum of California 1998), 23–42.

George H. Johnson and others, while describing the social and economic contexts in which they worked.<sup>11</sup> The writers chronicle daguerreotypists' movements, studio locations, clients, business associates, and the content of their advertisements. In his essay, "The Daguerreotype in San Francisco," in the 1980 publication, *History of Photography*, Palmquist draws from primary sources such as newspapers and advertising to explain how daguerreians operated and promoted their businesses during the California Gold Rush.<sup>12</sup>

In the chapter "The Sad but True Story of a Daguerreian Holy Grail" in *Silver & Gold*, Palmquist provides insights into daguerreotypists' approaches to producing outdoor views by describing Vance's activities and the locations of his panoramas and views.<sup>13</sup> Similarly, Vance's work activities and studio locations are chronicled by the Chilean photography historian, Hernán Rodríguez Villegas, in his 2001 publication *Historia de la Fotografía en Chile Durante el Siglo XIX [History of Photography in Chile in the 19<sup>th</sup> Century]*. Rodríguez argues that Vance's documentation of Chilean mines and other views from 1847 to 1850 may have influenced his subsequent practice in California.<sup>14</sup>

Dolores A. Kilgo describes the specialized skills used to produce daguerreotype views and some of the reasons for making them in her 1994 publication, *Likeness and Landscape: Thomas M. Easterly and the Art of the Daguerreotype*.<sup>15</sup> Although *Likeness and Landscape* is specific to daguerreotypist Thomas M. Easterly (1809–1882), who practiced in the mid-western United States, it offers clues about how daguerreians of the California Gold Rush went about making views.

Photography historian and collector Matthew R. Isenburg's interest in the events of this period is reflected by his collection's books, documents, memorabilia, photographic equipment and materials that contextualize and offer a deeper understanding of these views. Many of these primary sources are the base of the research for this thesis. Moreover his own writing such as the essay "Early Equipment" in *The Daguerreian Annual 1993*,<sup>16</sup> contains extensive information about the history and uses of equipment by daguerreotypists in both indoor and outdoor settings.

In their 1998 book, *The Silver Canvas: Daguerreotype Masterpieces from the J. Paul Getty Museum*, art historians, Bates and Isabel Barrett Lowry focus on the aesthetic qualities of

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<sup>11</sup> Peter E. Palmquist and Thomas R. Kailbourn. *Pioneer Photographers of the Far West: A Biographical Dictionary 1840–1865*. (Stanford, CA: Stanford University Press, 2000).

<sup>12</sup> Peter E. Palmquist, "The Daguerreotype in San Francisco," *History of Photography* (July 1980): 207–38.

<sup>13</sup> Peter E. Palmquist, "The Sad but True Story of a Daguerreian Holy Grail," in *Silver & Gold*, 43–73.

<sup>14</sup> Hernán Rodríguez Villegas, *Historia de la Fotografía: Fotógrafos en Chile durante el Siglo XIX*. (Santiago, Chile: Centro Nacional del Patrimonio Fotográfico, 2001), 56.

<sup>15</sup> Dolores A. Kilgo, *Likeness and Landscape: Thomas M. Easterly and the Art of the Daguerreotype*, (St. Louis, MO: Missouri Historical Society Press, 1994).

<sup>16</sup> Matthew R. Isenburg, "Early Equipment," *The Daguerreian Annual* (1993): 201–54.

daguerreotype views of the California Gold Rush, including those made by Vance, and the way in which these are the result of decisions made about the composition of the scene and technical decisions including light, lens, and vantage point.<sup>17</sup>

Most literature about the daguerreotype and about daguerreotypists who worked during the California Gold Rush emphasizes biographical details such as their movements, studio locations, business practices, and the subject matter and historical contexts of the works they produced. None of the literature surveyed examines in great detail how daguerreotypes of outdoor views produced during the California Gold Rush exhibit qualities and characteristics that are the result of decisions made in response to conditions that were encountered when producing daguerreotypes outdoors.

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<sup>17</sup> Bates Lowry and Isabel Barrett Lowry, *The Silver Canvas: Daguerreotype Masterpieces from the J. Paul Getty Museum* (Los Angeles, CA: J. Paul Getty Museum, 1998), 187–98.

## CALIFORNIA GOLD RUSH VIEWS

### Background

From its presentation to the world by the French government in 1839, the daguerreotype was recognized for its ability to accurately translate details such as signage, figures and machinery. In 1852, an article in the *Photographic Art-Journal* proclaimed, “In actual nature, we could not, without the aid of a telescope, distinguish these small objects: the magnifying glass is the telescope of Daguerrean nature.”<sup>18</sup> The daguerreotype’s strength—in light of newer processes such as wet plate glass used in the United States by the mid-1850s—was its ability to capture a high level of detail. The following observation made in 1854 by a contributor known as “S.”—believed to be San Francisco daguerreotypist, William Shew (1820–1903)—in the publication, *Pioneer: or California Monthly Magazine* is typical:

Paper and glass photographs . . . are not equal in appearance and beauty of finish to daguerreotypes and probably will never become so, as the paper surface is not capable of receiving that polish which the silvered plate receives in daguerreotypes.<sup>19</sup>

By the late 1840s, some of the improvements to the daguerreotype process included faster lenses and more sensitive plates that allowed for shorter exposure times and the gilding of plates that produced more enriched tones to address the variety of light and dark tones of the outdoors.<sup>20</sup> These advancements allowed daguerreians to make images that were technically better, especially with respect to addressing the problems of movement, often associated with the subject matter in outdoor views.

The announcement of the discovery of gold by James W. Marshall at Sutter’s Mill, on January 24, 1848 launched a monumental transformation of the California region, particularly those areas where the majority of gold extraction and related activities took place: in the goldfields of northern California and the Sierra Nevada, along rivers flowing from these areas, and communities including Sacramento and San Francisco. The daguerreotype, still less than ten years old, was witness to the social upheaval and changes to the landscape. The incredible economic growth in this region was

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<sup>18</sup> Francis Wey, “Heliography on Plates,” trans. J.R. Snelling. *The Photographic Art-Journal*, Vol. 3. (January 1852): 43.

<sup>19</sup> S., (William Shew, attrib.), “Photography,” *Pioneer; Or, California Monthly Magazine* (San Francisco, CA: Le Count and Strong, July 1854): 34–40. (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*, <http://www.daguerreotypearchive.org>, Ewer Archive P8540006).

<sup>20</sup> Beaumont Newhall, *History of Photography: from 1839 to the Present*. Revised Edition. (New York, NY: Museum of Modern Art; Boston: Distributed by New York Graphic Society of Books, 1982), 29.

paralleled by California's population increase from 92,597 in 1850,<sup>21</sup> to 300,000 by 1854.<sup>22</sup> Between 1847 and 1849, the population of San Francisco alone grew from 400 inhabitants to 20,000,<sup>23</sup> and from "April 1849 through April 1850, 62,000 would-be miners landed in San Francisco's harbor."<sup>24</sup> (figure 34). Migrants traveled from the eastern states to California overland, through the mountains; by ship, crossing the Isthmus of Panama; or a longer route around Cape Horn.<sup>25</sup> An 1852 census noted only twelve practicing daguerreians in San Francisco and throughout rural California, although Palmquist believes the actual number was higher.<sup>26</sup> By 1854 "daguerreian commerce was nearing its apex in San Francisco. The city was home to a number of excellent artists."<sup>27</sup> Newhall estimates that fifty daguerreians worked in San Francisco between 1850 and 1864.<sup>28</sup>

Most daguerreotypists in California had previous experience working in the profession and therefore they often came with some equipment,<sup>29</sup> which would have served them well since at the time in San Francisco there was a lack of equipment and suppliers for their craft.<sup>30</sup> Starl characterized the average daguerreotypist as "... a man in his mid-thirties with a professional training and experience, who had artistic leanings or at least some technical knowledge."<sup>31</sup> Advertisements from this period convey the competitive approaches daguerreotypists took to running their businesses. According to Drew Heath Johnson:

California photographers adopted flamboyant and combative business practices. Scrambling to obtain a slice of the inexhaustible demand for photographic records of the Gold Rush, photographers made extravagant claims about the technical and artistic qualities of their daguerreotypes.<sup>32</sup>

By establishing themselves in towns such as Stockton, Sacramento and Marysville and other

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<sup>21</sup> U.S. Census Bureau, "Historical Census Statistics on Population Totals By Race, 1790 to 1990, and By Hispanic Origin, 1970 to 1990, For The United States, Regions, Divisions, and States," <http://www.census.gov/population/www/documentation/twps0056/tab19.pdf> (accessed August 22, 2013).

<sup>22</sup> Davis, *The Origins of American Photography*, 137.

<sup>23</sup> Ibid., 56.

<sup>24</sup> Marcia Eymann, "Introduction," in *Silver & Gold*, xxv.

<sup>25</sup> Peter E. Palmquist, "The Pioneers: Landscape and Studio," in *Capturing Light: Masterpieces of California Photography 1850 to the Present*, ed. Drew Heath Johnson (Oakland, CA: Oakland Museum of California, 2001), 7.

<sup>26</sup> Palmquist, "The Pioneers: Landscape and Studio," 8.

<sup>27</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 329.

<sup>28</sup> Newhall, *The Daguerreotype in America*, 85.

<sup>29</sup> Peter E. Palmquist, "Carleton Watkins. A Biography. Chapter 3: Shadow Catching in El Dorado 1849-1856," *The Daguerreian Annual* (1990): 181-82.

<sup>30</sup> Palmquist, "The Daguerreotype in San Francisco," 210.

<sup>31</sup> Timm Starl, "A New World of Pictures: The Use And Spread of the Daguerreotype Process," in *A New History of Photography*, ed. Michel Frizot (Köln: Könemann, 1998), 44.

<sup>32</sup> Drew Heath Johnson, "Art & History," *The Daguerreian Annual* (1994): 168.



small settlements that were tied to mining activities,<sup>33</sup> daguerreotypists benefited through close contact with miners who wanted their portraits taken. Some daguerreotypists also traveled to mining camps and further afield where they found people eager to have their likenesses taken.<sup>34</sup> By the early 1850s, daguerreotypists were visiting many mining camps and settlements and continued to take mostly portraits, however “some photographers began to specialize in mining scenes, traveling from mining boom to mining boom in search of business.”<sup>35</sup> Palmquist estimates that portraits accounted for over “95 percent of all daguerreotype images”<sup>36</sup> and most “were pictures of the miners and others far from home.”<sup>37</sup> Meanwhile, views taken outdoors that document the mining activities, events and environments of the period are rare.<sup>38</sup> According to Keith Davis, “a relative handful of scenic daguerreotypes were made in the United States.”<sup>39</sup>

The term ‘view’ is often used to describe visual documents of outdoor settings produced by means of painting and photography and in “this early era of photography, the term ‘landscape’ was frequently used synonymously with ‘view’ to describe any scene recorded outside the gallery.”<sup>40</sup> Daguerreotypists promoted their services to make ‘views’ as well as portraits in advertisements published in illustrated periodicals. In one such advertisement in the *San Francisco Daily Pacific News* on January 21, 1851, Vance offered “Views taken of the city, or any part of it, at the shortest notice.”<sup>41</sup> In another advertisement published in the *San Francisco Golden Era* in early 1854, George H. Johnson promoted “Daguerreotypes of every description—Single Portraits, Groupings, Landscapes or views of Buildings, taken in a style which cannot be surpassed for beauty or accuracy.”<sup>42</sup>

Daguerreotype views are significant historical documents of the California Gold Rush because of their subject matter. They illustrate how river mining evolved during the 1850s—from pan-washing activities by individuals, to the use of rockers and long-toms (long sluice boxes) by small groups, to wooden flumes constructed by groups and companies in order to divert water from

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<sup>33</sup> Palmquist, “The Pioneers,” 9.

<sup>34</sup> Palmquist, “Carleton Watkins. A Biography. Chapter 3,” 183.

<sup>35</sup> Ibid.

<sup>36</sup> Palmquist. *Carleton E. Watkins*, 5.

<sup>37</sup> Palmquist, “The Daguerreotype in San Francisco,” 209.

<sup>38</sup> “Outdoor views were far less common. Many daguerreians advertised ‘views of residences and businesses,’ but only a handful (such as Robert H. Vance, 1825–76, . . .) had actually produced an extensive series of outdoor daguerreotypes of San Francisco and the California goldfields at an early time.” Palmquist, *Carleton E. Watkins*, 5.

<sup>39</sup> Davis, *The Origins of American Photography*, 210.

<sup>40</sup> Kilgo, *Likeness and Landscape*, 143.

<sup>41</sup> Palmquist, “The Daguerreotype in San Francisco,” 216. Published in *San Francisco Daily Pacific News* on January 21, 1851.

<sup>42</sup> Palmquist, “The Daguerreotype in San Francisco,” 229. Published in *San Francisco Golden Era*, January 1854.

rivers.<sup>43</sup> Davis writes, “These images are rich in information. They document changes in mining technology, from relatively small sluicing operations to the industrial approaches of quartz mining and hydraulic mining.”<sup>44</sup> Many of these views include miners, prospectors and members of surrounding communities. Bates Lowry and Isabel Barrett Lowry have observed how views that include miners can offer historians “specific facts about the workers, their clothes, their relative status, and their tools—an infinite number of details.”<sup>45</sup> In addition to documenting the events, activities and miners of the California Gold Rush, views offer insight into the conditions that daguerreians encountered outdoors including light, climate and terrain. In turn, these working conditions offer clues about the approaches that daguerreians took to produce the images.

The daguerreotype was an effective tool for producing views of the many scenes and activities of the California Gold Rush. As the German photographer and painter Eduard Vischer (1809–1878) found upon visiting the Californian mining regions in 1859:

The daguerreotype is especially suited to reproduce all these mechanical mining devices. In the mining region nature, too, seems bare of all cheerful embellishment, with a stark contrast between the naked masses of rock and the thin, straggly pine woods. Luxuriant foliage is seen but rarely.<sup>46</sup>

Photographer Ansel Adams (1902–1984) noted the daguerreotype’s ability to produce realistic depictions of scenes. Regarding the work of Vance, he observed a “clarity of line and edge, . . . beauty, and richness of tonal values.”<sup>47</sup> Vance himself described his daguerreotype views as being “the stereotyped impression of the real thing itself.”<sup>48</sup>

The clarity of daguerreotypes resulted in documents of the Gold Rush that are highly descriptive, in terms of the subjects that they depict, and how the subjects are depicted. In what follows, I will examine the appearance of Gold Rush views in general and account for their appearance by focusing on the subjects and purposes of 18 Gold Rush views in the Matthew R. Isenburg Collection, and the conditions under which they were produced.

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<sup>43</sup> “Gold Rush Photographer,” *Image: The Bulletin of the George Eastman House of Photography*, 1, no. 9 (December 1952): 3.

<sup>44</sup> Davis, *The Origins of American Photography*, 137.

<sup>45</sup> Lowry and Lowry, *The Silver Canvas*, 118.

<sup>46</sup> Newhall, *The Daguerreotype in America*, 87. Excerpt by Eduard Vischer, 1859, in *Quarterly of the Calif. Hist. Soc.*, XI (1932), 229. Vischer’s observation that “Luxuriant foliage is seen but rarely” offers insight into California’s outdoor environment, and how it translated into daguerreotype images. The green colour of foliage and trees would register as very dark on daguerreotypes, and contrast against lighter coloured hillsides of grass and rock. Thick forests with a prominence of green colour would register as very dark on the plate.

<sup>47</sup> “Gold Rush Photographer,” *Image*, 3.

<sup>48</sup> Vance, *Catalogue of Daguerreotype Panoramic Views in California*, preface.

## CALIFORNIA GOLD RUSH VIEWS

### Purposes

All of the Gold Rush views in the Isenburg Collection at AMC Toronto are documents in a literal sense of a scene, activity, structure, or event. Yet the purposes for their production vary and generally fall into one of two groups—those that were used in the public realm for public viewings or as sources for prints and engravings and those that were used in the private realm, such as commissioned works of personal or property records. The approaches that daguerreotypists took to address the working conditions they encountered in the field took into account the view's purpose.

### Purposes

#### Public Viewings and Engravings

Demand for daguerreotype views of the California Gold Rush stemmed from a growing interest in events that were quickly unfolding in the region, with San Francisco as a focal point: An “international curiosity about the City of Gold created a demand for pictures, and this demand the daguerreotype satisfied in part.”<sup>49</sup>

While daguerreians focused on the more lucrative activity of making portraits for which there was a great demand, the exhibition and sale of views in galleries were popular enough to warrant reports in contemporary periodicals and advertisements. For example, in 1851, “[William Shew (1820–1903)] began advertising his ‘Moveable Daguerreotype Saloon’ on Dupont Street, where patrons could view ‘his collection of views taken from the most interesting scenery in the interior of the state.’”<sup>50</sup> A year later, during the brief business partnership of the daguerreians, Seth Louis Shaw (1816–1872) and George H. Johnson, they placed an ad that “stressed that they had ‘some beautiful mining views on hand’”<sup>51</sup> in their San Francisco gallery.

One of the most notable instances of a public viewing of daguerreotype views is Vance's New York City exhibition, *Daguerreotype Panoramic Views in California*, in 1851. The exhibition

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<sup>49</sup> Newhall, *The Daguerreotype in America*, 85.

<sup>50</sup> Ibid., 497-99. Shew advertised viewings of his collections in the *San Francisco Alta California*, July 16, 22, 25, September 28, 1851.

<sup>51</sup> Palmquist & Kailbourn. *Pioneer Photographers of the Far West*, 328.

featured 300 whole plate views, listed in a catalogue that accompanied the exhibition.<sup>52</sup> Most of these views were produced in the first part of 1851.<sup>53</sup> Vance also included views he produced during his time in South America, from 1847 to 1850. In addition to the typical views featuring what Palmquist describes as ‘man-centered activity’, Vance’s exhibition included ‘scenics’ which were quite rare. Palmquist explains, “Since virtually all daguerreotypes were commissioned by miners or the owners of businesses, there was simply no market for purely scenic views.”<sup>54</sup>

In addition to generating public interest,<sup>55</sup> exhibiting views would have had other favourable outcomes. Abel Alexander has observed that views produced in Chile during Vance’s time working there “formed part of the publicity campaigns to increase the renown and prestige of the daguerreotypists.”<sup>56</sup> Vance certainly achieved this goal back in the United States, where his exhibition generated great interest among the daguerreotype community in the eastern states,<sup>57</sup> and garnered praise from contributors to publications such as *Photographic Art-Journal*:

They are most artistic in design, and executed with a skill, evincing, not only a perfect mastery of the manipulatory art, but an exquisite taste for the sublime and beautiful. On looking upon these pictures, one can almost imagine himself among the hills and mines of California.<sup>58</sup>

Although neither a popular or financial success, Vance’s exhibition had the effect of immediately establishing him “as one of the nation’s most skillful daguerreotypists.”<sup>59</sup>

The use of daguerreotype views as sources for engravings, lithographs, paintings and drawings has been widely documented. As early as 1840, the American painter and inventor, Samuel F.B. Morse (1791–1872), recognized the daguerreotype’s use as an aid for landscape views.<sup>60</sup> In 1843, the publication, *Artist*, noted that the “Daguerreotype as an aid to artists both in landscape and portraiture is not yet fully appreciated; nor is the practice of producing prints from photographs so general as it is likely to become.”<sup>61</sup> In California daguerreotypists traveled to goldfields and settlements to produce daguerreotypes that were used as models for published

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<sup>52</sup> Vance, *Catalogue of Daguerreotype Panoramic Views in California*, excerpt from the catalogue.

<sup>53</sup> Palmquist, “Carleton Watkins. A Biography. Chapter 3,” 179.

<sup>54</sup> Palmquist, “The Pioneers,” 9.

<sup>55</sup> Palmquist, “The Daguerreotype in San Francisco,” 220.

<sup>56</sup> Abel Alexander, “Robert Vance: Pioneer of the Daguerreotype in Chile,” translated by Thomas R. Kailbourn. *The Daguerreian Annual* (1993): 23.

<sup>57</sup> However, “[a]lthough it won critical acclaim, Vance’s exhibition was not a resounding popular success.” Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 561.

<sup>58</sup> “Mr. Vance’s Photographic Views,” *Photographic Art-Journal* Vol. 2 (October 1851): 252–53.

<sup>59</sup> Lowry and Lowry, *The Silver Canvas*, 200.

<sup>60</sup> Reinhart and Reinhart, *American Daguerreian Art*, 73.

<sup>61</sup> “Uses of the Daguerreotype,” *Artist*, (New York) 1:5 (January 1843): 235. (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*, <http://www.daguerreotypearchive.org>, Ewer Archive P8430003).

illustrations.

A very interesting by-product of the daguerreotype popularity was their rather widespread use as models by newspaper artists of the time. In the absence of the half-tone process, lithographic artists and wood engravers produced suitable illustrations for the contemporary illustrated newspapers. Often an artist or editor would openly acknowledge the daguerreotype as a model.<sup>62</sup>

Illustrations based on daguerreotypes were recognized as influential in shaping impressions about the Gold Rush region among readers in the eastern United States:

On October 23, the *Alta* noted that [daguerreian, William] Shew 'is about taking a series of views of various prominent buildings in the city to show our friends on the Atlantic that we are not living altogether in canvas tents.'<sup>63</sup>

This observation from 1851 reveals the degree of change San Francisco underwent in a short period of time, from little more than tents and temporary structures, to buildings and an urban setting that must have surprised and shocked readers unfamiliar with the region.

In the 1850s, American publications such as Boston's *Gleason's Pictorial Drawing-Room Companion* (1851), New York *Illustrated News* (1853) and *Harper's Weekly* (1857), began publishing illustrations based on daguerreotypes.<sup>64</sup> An 1854 issue of *Gleason's Pictorial Drawing-Room Companion* contains an illustration entitled *Notion Company's Works, California*. (figure 21). It is one of four illustrations of Gold Rush scenes that accompanied an article entitled, 'Scenes in California'.<sup>65</sup> This illustration was modeled from a whole plate daguerreotype made by George H. Johnson in approximately 1852.<sup>66</sup> This daguerreotype, or a variant of it, is in the Isenburg Collection (figure 1).

Daguerreotypes intended for use by engravers were sometimes left laterally reversed, especially if they included signage or other distinguishing features that would have required 'right-reading'. According to Newhall:

Since a daguerreotype image is usually reversed, as in a mirror, a prism or mirror had to be placed over the lens—unless the daguerreotype served as a model for an engraver, who needed a reversed image.<sup>67</sup>

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<sup>62</sup> Robert A. Weinstein "Gold Rush Daguerreotypes," *American West: Magazine of the Western History Association*, (August 1967): 39.

<sup>63</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 497.

<sup>64</sup> Davis, *The Origins of American Photography*, 176.

<sup>65</sup> *Gleason's Pictorial Drawing-Room Companion*, Boston, MA: M.M. Ballou, (March 25, 1854), 185.

<sup>66</sup> Isenburg notes that "[t]his very daguerreotype, or one taken within a minute or two of it, was used for a wood engraving in the 1854 article in *Gleason's*." Richard S. Field, Robin Jaffee Frank, Matthew R. Isenburg, and Alan Trachtenberg, *American Daguerreotypes from the Matthew R. Isenburg Collection* (New Haven, CT: Yale University Art Gallery, 1989), 50.

<sup>67</sup> Newhall, *The Daguerreotype in America*, 84.

A laterally reversed image might have been preferred if an engraver were to create a highly accurate reproduction of a daguerreotype, achieved by etching directly onto the daguerreotype plate.<sup>68</sup> However, the process of etching was not widely used, instead,

Daguerreotypes, like field sketches, continued to be redrawn for reproduction on the surface of a printing plate.<sup>69</sup>

In *Sights Once Seen: Daguerreotyping Frémont's Last Expedition Through The Rockies*, the daguerreotypist and photography historian Robert Shlaer describes how John Charles Frémont (1813–1890) worked with daguerreotypist, Solomon Nunes Carvalho (1813–1890) to produce daguerreotype views. Although these views no longer exist, illustrations from engravings made from the daguerreotypes survive.<sup>70</sup> In 1994, Shlaer used these engravings to locate the vantage points that the illustrations—and therefore Carvalho's daguerreotypes—captured to produce his own daguerreotypes. Shlaer explains that

The fact that daguerreotypes are usually reversed from left to right was well understood by the artists and engravers of the period. When presented with one they would normally correct it laterally while preparing an illustration from it for printing.<sup>71</sup>

Often there are subtle differences between a daguerreotype and its related illustration. For example, in Johnson's daguerreotype, there are more figures depicted than in its related engraving in *Gleason's Pictorial Drawing-Room Companion*. Furthermore, in the engraving, most figures face the camera, while they are more randomly positioned in the daguerreotype. These differences may have resulted from an engraver who took artistic liberties. According to Davis:

engravers inevitably altered or rearranged the data of the photographs to 'improve' it—to make it simpler or more picturesque. Such manipulation represented a further move away from the gritty specificity of the original image.<sup>72</sup>

Another example of how engravers altered images can be found in an illustration entitled *The Riot At Sacramento City*, published in *Illustrated California News* (San Francisco) on September 1, 1850.<sup>73</sup> Alterations are apparent since the moving figures appear motionless, a feat that would have been impossible to achieve because of the long exposures of the daguerreotype process. Text

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<sup>68</sup> Martha A. Sandweiss, *Print the Legend: Photography and the American West* (New Haven and London: Yale University Press, 2002), 97.

<sup>69</sup> Ibid.

<sup>70</sup> Shlaer, *Sights Once Seen: Daguerreotyping Frémont's Last Expedition Through The Rockies* (Santa Fe, NM: Museum of New Mexico Press, 2000), vii–viii.

<sup>71</sup> Ibid., 48.

<sup>72</sup> Davis, *The Origins of American Photography*, 177.

<sup>73</sup> "We offer our thanks to Mr. Johnson," *Illustrated California News*, San Francisco, September 1, 1850, 5. (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*, <http://www.daguerreotypearchive.org>, Ewer Archive P8500005)

accompanying the illustration notes that Johnson provided the newspaper with several views of the event:

We offer our thanks to Mr. Johnson, the clever Daguerrean artist, for his courtesy in volunteering to further the purpose of our visit to Sacramento city, by furnishing our engraver with views of the locality where the battle scene was enacted, which he took unweariedly, one after another, from different places of observation, in order that the most advantageous points of view might be decided on by actual comparison.<sup>74</sup>

This example illustrates how daguerreians responded to the demand by publishers for multiple views of a single event. It also reveals the role that daguerreians played in satisfying a wide interest in public events, by producing non-reproducible daguerreotypes that were used as models for engravings that appeared in popular periodicals.

## **Purposes**

### Private Commissions

The rapid population growth and development—of new houses, commercial buildings and mining operations—created a demand for commissioned views. Daguerreotypes made during the California Gold Rush were often commissioned for use as personal or property records.

In the goldfields, daguerreians found a lucrative market for portraits of the miners, merchants and others associated with mining activities. Palmquist notes that by “1851–53 . . . visits to the goldfields were commonplace.”<sup>75</sup> Portraits were often sent home to family and friends. “By early 1851 almost every Easterner could boast a friend or relative who had ‘gone West’.”<sup>76</sup> But daguerreians also found a market for views in “diggings and towns like Timbuctoo, Grizzly Flat and Springfield, in order to provide visual witness for . . . miners’ relatives back home.”<sup>77</sup> Many of these views depict miners, the towns and encampments where they lived, and mining operations where they worked.

Daguerreians took a competitive approach to promoting their services to make views for personal and property records. They promoted their services with broadsides that announced their arrival to gold diggings and smaller settlements.<sup>78</sup> In 1852, Johnson offered to make views with

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<sup>74</sup> Ibid., 6.

<sup>75</sup> Palmquist, “Carleton Watkins. A Biography. Chapter 3,” 182–83.

<sup>76</sup> Palmquist, “Silver Plates on a Golden Shore,” 140.

<sup>77</sup> Field et al., *American Daguerreotypes*, 50.

<sup>78</sup> “This type of advertisement [broadside] was given out as handbills as well as being posted

little advance notice, in a variety of weather conditions.<sup>79</sup> Vance's approach in an 1853 advertisement was to highlight his experience producing views and the high caliber of his camera apparatus: "Particular attention will be paid to taking views of buildings, machinery, &c.; having an entirely new and improved apparatus, expressly for taking views."<sup>80</sup>

In an 1851 issue of the Sacramento City *Daily Union*, an article promoted George H. Johnson's offer to produce views of homes and businesses:

The perfection to which he has brought his pictures has excited the astonishment of all who have ever seen them, and no better chance of presenting friends at home with correct likenesses of themselves, or views of their residences, can be had, than that now offered by Mr. Johnson.<sup>81</sup>

Palmquist has identified advertisements from as early as 1849 that reveal a demand for views of the homes and surroundings of those who moved to the region.<sup>82</sup> Many advertisements claimed to offer views that were visually pleasing including "Landscapes or views of Buildings, taken in a style which cannot be surpassed for beauty or accuracy."<sup>83</sup> An advertisement by Vance that appeared in an 1859 issue of *Hutchings' California Magazine* offered large sizes of views and asked readers, "Think of the pleasure which it would give friends at home, to receive a correct picture of the place where you reside!"<sup>84</sup> (figure 22).

Two examples of commissioned views of dwellings include *Outdoor Scene Of Building With Shaving Equipment In Background*, c. 1850 (quarter plate) (figure 2) and *Moses Warren's Cabin, California*, c. 1850 (quarter plate) (figure 3). By unknown photographers, both views were commissioned by Moses Warren, a carpenter who also commissioned the view of storefronts on a street in the Californian mining community, Georgetown, *F.A. Hornblower Mining Store*, 1850 (quarter plate) (figure 4). A resident of Georgetown originally from Connecticut, Warren had also commissioned two portraits and "probably sent [them] home to family in East Lyme, Connecticut, to illustrate his life in the California mountains."<sup>85</sup> In the background of *Outdoor Scene Of Building With Shaving Equipment In Background* (figure 2) and behind a cabin that may have been Warren's

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conspicuously about town." Isenburg, "Early Equipment," 252.

<sup>79</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 328.

<sup>80</sup> Ibid., 561.

<sup>81</sup> "Daguerreotype View," *Daily Union*, Sacramento City, May 30, 1851, n.p., second page of issue. (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*, <http://www.daguerreotypearchive.org>, Ewer Archive N8510017).

<sup>82</sup> Palmquist, "The Daguerreotype in San Francisco," 207–38.

<sup>83</sup> Ibid., 229. George H. Johnson made this claim in an 1854 advertisement.

<sup>84</sup> *Hutchings' California Magazine*, (San Francisco, CA: Hutching & Rosenfield, Publishers, February 1859).

<sup>85</sup> Mark S. Johnson, "Argonaut Moses Warren & The Quinebaug Gold Company From The Isenburg Collection at AMC Toronto," *The Daguerreian Annual* (2012): 160.



dwelling or business operation, there seems to be both a sawmill and gold digging.<sup>86</sup>

As the cabin is shown front and center this image's intent was obviously to document it while including some of the surrounding landscape. This may well be Moses Warren's home or his business—or most likely, both. The shaving mirror and wind-blown towel suggests this was *somebody's* domicile.<sup>87</sup>

There are several examples in the Isenburg Collection of daguerreotypes that depict mining activities that appear to have been commissioned by the owners of the mine. Lowry and Lowry describe a daguerreotype from 1852 that depicts the construction of a flume on the American River, and they believe it was commissioned by a mining company in order to provide a record for its shareholders.<sup>88</sup> Isenburg notes how often “the owner(s) or other well-dressed visitors would be prominently featured alongside a display of gold.”<sup>89</sup> Views of mining activities often depict miners attempting to remain still, thus allowing the slow exposure to better document their work activities. There are a variety of mining activity scenes where “some of the larger groups we are obviously also looking at hired hands, but in the smaller ones we know these people all have a stake in it together and are working for the good of the group.”<sup>90</sup> In some views, the mining company is known (figures 1, 14) and in others the company is not identified. In scenes where an owner or authority figure is not visible or is less apparent, it becomes even less certain who commissioned the view.

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<sup>86</sup> Ibid., 173.

<sup>87</sup> Ibid.

<sup>88</sup> Lowry and Lowry, *The Silver Canvas*, 202.

<sup>89</sup> Field et al., *American Daguerreotypes*, 50.

<sup>90</sup> Wood, “Theatrical Narratives and the Documents of Dream,” 37.

## CALIFORNIA GOLD RUSH VIEWS

### Subject Matter

The eighteen daguerreotypes—three whole plates, eight half plates, six quarter plates and one stereo image comprised of two sixth plates—that I analyzed for this thesis are views made from c. 1849–1856 of mining settlements, mining scenes, commercial properties, dwellings, and the city of San Francisco.<sup>91</sup> I chose these eighteen views as a representative sample of all 55 views of the California Gold Rush in the Isenburg Collection at AMC Toronto. The subjects that these eighteen plates depict, their apparent purposes and the conditions under which they were produced, are shared among most of the 55 outdoor views. By identifying the shared characteristics of the views in this collection—subject, purpose, and the outdoor conditions that dictated the daguerreotypists' decisions (addressed in Section 4)—I intend to explain why these views appear the way they do.

Of the eighteen views, only eight can be attributed—to George H. Johnson, Silas W. Selleck and Robert H. Vance. What we know about these daguerreians' work, clients and background, offers greater context to the subject matter depicted in their views, as well as the views that are non-attributed. This information may also provide a better understanding of how the views were used, the conditions under which they were produced, and general practices of the unknown makers.

On January 24, 1849, Johnson arrived in San Francisco by ship from New York where he was a working daguerreotypist. By July of that year, he moved to Sacramento.<sup>92</sup> His gallery was among the earliest to be established in California.<sup>93</sup> He made “regular trips into the gold fields, producing many strong images—often in the half- or whole-plate sizes—of mining towns, encampments, claims, and sluices.”<sup>94</sup> Wood engravings from Johnson's views brought his work to the wider public: “*Industry Bar, Yuba River*, was based on one of his views, and it appeared on the front page of the *Sacramento Union* on October 30, 1852.”<sup>95</sup> In November 1852, Johnson moved to San Francisco where he opened a gallery and continued to work as a daguerreotypist.<sup>96</sup>

Selleck moved to California in 1851 from New York City, where he had been working as a

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<sup>91</sup> The creation dates of these daguerreotypes range from approximately 1849 to 1856. For the most part the dates have been estimated by Matthew R. Isenburg, and by other researchers, and are usually based on the following criteria: subject matter including location and mining technology; accompanying letters and documents when these are available; and the case, matting, glass, and techniques used in the object's creation.

<sup>92</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 328.

<sup>93</sup> Palmquist, “The Daguerreotype in San Francisco,” 210.

<sup>94</sup> Davis, *The Origins of American Photography*, 57.

<sup>95</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 328.

<sup>96</sup> Ibid.

daguerreotypist since 1846.<sup>97</sup> His time spent mining upon his arrival in California,<sup>98</sup> would have given him a familiarity with the subjects he documented. By September 14, 1852, “Selleck was working as an operator for the gallery of George Howard Johnson”<sup>99</sup> in Sacramento. After the Sacramento fire in November 1852, Johnson and Selleck opened a gallery in San Francisco, and in early 1854, Johnson opened a new gallery.<sup>100</sup> By 1853, Selleck and Johnson had operated a field studio in various gold diggings,<sup>101</sup> which *Humphrey’s Journal* described as a “fine business in that part of the diggings.”<sup>102</sup> Situated in the diggings and the surrounding settlements and encampments would have provided the daguerreians with immediate access to prospective clients, including proprietors with commercial properties to document.

Robert H. Vance arrived in San Francisco from Connecticut, by way of South America. A skilled daguerreian, he first went to Valparaíso, Chile, where he opened a gallery in early 1847.<sup>103</sup> Before his move to California in 1850, he worked in Santiago and Valparaíso and photographed in the gold diggings of Copiapó. None of the daguerreotypes taken by Vance during his time in South America are known to exist today, however four—of a total of 300 works—were included in his 1851 New York City exhibition, *Views in California*.<sup>104</sup> Between 1850 and c. 1863, Vance operated galleries in various locations throughout California including San Francisco, Sacramento and Marysville.<sup>105</sup> He traveled extensively to gold diggings and encampments where he produced portraits of miners and others connected to mining activities, in addition to making views for clients.

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<sup>97</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 485.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Ibid., 486.

<sup>101</sup> Ibid.

<sup>102</sup> *Humphrey’s Journal*, Vol V, (Oct 1, 1853), 190.

<sup>103</sup> Alexander, “Robert Vance,” 14.

<sup>104</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 560.

<sup>105</sup> Ibid., 559.

## Subject Matter

### Mining Settlements

Two views of the 18 depict mining settlements. In one, *A Main Street in Orleans Flats*, c. 1852 (half plate), signage reveals the name of the settlement (figure 8). The view entitled *Street View Of A Cash Store*, c. 1850 (half plate) depicts miners and other people in front of a commercial property with a sign that reads 'Cash Store' (figure 9). Both views appear to emphasize the people, the structures, and the use of space in the settlements. Although the daguerreotypes depict a specific view of each settlement, each offers a sense of the activities that one might expect to encounter in early mining communities.

## Subject Matter

### Mining Scenes

Five mining scenes attributed to George H. Johnson were produced between 1850 and 1852, during which time he mostly operated in Sacramento.<sup>106</sup> Of them, *Mining And Assorted Activity On The American River, Near Sacramento*, c. 1852 (whole plate) (figure 5), would have been produced within close proximity to Johnson's gallery in Sacramento, while three others would have required that Johnson travel further afield, to Barton's Bar, Yuba River, and to Grizzly Flats (appendix 1). In *Notion Company Works, Barton's Bar, Yuba River*, c. 1852 (whole plate) (figure 1) the figures are emphasized:

While the two machines in the foreground are operated by manpower, those just discernible in the distance are being turned by the paddlewheel above the dam. A flume leading from the paddlewheel presumably is supplying water for the Long Toms in operation at the right (and possibly to the left). Two men hold up the traditional pan containing gold (carefully punched into the daguerreotype plate and gilded).<sup>107</sup>

Two other views attributed to Johnson—a half plate and a quarter plate—depict mining scenes in which the mining apparatus and surroundings are emphasized, while the figures are given less prominence (figures 6, 17). One, *Diverted River at Mining Operation*, c. 1851 (quarter plate) (figure 6), is accompanied by an inscription on a note within the case:

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<sup>106</sup> "Although he was only one of the many daguerreians who took their cameras to the mines, his are among the very few such images that can be linked to a maker, thanks to his practice of embossing his cases with his name." Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 327.

<sup>107</sup> Field et al., *American Daguerreotypes*, 51.

A typical example of a diverted river. The entire American River was diverted in the same way shown here, confined in a wooden sluice to drain the riverbed to get at its golden treasure and then used as a source of power (note the paddle wheels) as well.

The four views by unknown makers that depict mining scenes include three half plates and one quarter plate (figures 13, 16, 19, 20). For the most part, groups of miners are featured amongst the mining apparatus as in the views by Johnson. In some of the views, the miners appear to be acting out or demonstrating their work activities (figures 13, 20). Spanning from 1849 to 1853, they document a range of mining techniques, including placer mining and the use of long toms. Most include what might be owners, prospectors, and other members of mining communities. The inclusion of trees, buildings, hills, and other features, provides context to the mining activities.

## **Subject Matter**

### Commercial Properties

Commercial properties are depicted in three views made from 1850 to 1852. They include one quarter plate view attributed to Silas W. Selleck (figure 7), one quarter plate and one half plate, both by unknown makers (figures 4, 15). The figures in all of the views appear to be merchants, proprietors, and others who are associated with the commercial property or surrounding community. The two views by unknown makers include foreground and background details that offer a sense of how the structures relate to their surroundings. The exception is Selleck's *Merchant Tailor Shop With Proprietor, California*, c. 1851 (quarter plate) (figure 7), in which the merchant's building has been isolated from its surroundings.

## **Subject Matter**

### Dwellings

Two views in this study depict dwellings (figures 2, 3). Both views are quarter plate in size and the makers are unknown. According to Mark S. Johnson, these dwellings were built by the carpenter, Moses Warren, and were located close to the Californian mining settlement, Georgetown.<sup>108</sup> Objects that one might expect to be found inside the dwelling such as a mirror, table

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<sup>108</sup> Johnson, "Argonaut Moses Warren," 159, 173.

and shovel, are depicted outside. These objects provide details about the interior of the dwellings. In both views, the dwelling and its surroundings are emphasized—the buildings are off centre—which has the effect of communicating information about the space in which they are located as much as the structure itself.

## **Subject Matter**

### The City (San Francisco)

The two views by Robert H. Vance depict the city environment: *Portsmouth Square, San Francisco*, c. 1854 (two 1/6 plate stereo) (figure 10) and *Excelsior Building, San Francisco*, 1856 (whole plate) (figure 11). Vance's two views prominently feature the built environment of San Francisco and are testament to the incredible architectural development that took place in this city from the late 1840s to the mid 1850s. The Excelsior Building exemplifies this development:

Located in San Francisco, the major outlet for California's gold, this brick building at 170 Montgomery Street could not have existed a scant half-dozen years earlier. In 1848, San Francisco was nothing more than a collection of wooden structures.<sup>109</sup>

While *Excelsior Building, San Francisco*, 1856, depicts a group of people standing in front of the building and little foreground, *Portsmouth Square, San Francisco*, c. 1854 includes several elements in the foreground such as fencing, trees, the square, the street, horse-drawn wagons and some figures. In both views the subject is as much the architecture as it is the surroundings and activities. In a sense, the subject appears to be the city itself, a subject that generated vast interest at the time:

But of all American cities, San Francisco was the most frequently daguerreotyped. Its rapid growth, the pride of its citizens, and international curiosity about the City of Gold created a demand for pictures, and this demand the daguerreotype satisfied in part.<sup>110</sup>

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<sup>109</sup> Field et al., *American Daguerreotypes*, 55.

<sup>110</sup> Newhall. *The Daguerreotype in America*, 85.

## CALIFORNIA GOLD RUSH VIEWS

### Working Conditions

The daguerreotype views analyzed in this thesis project include a diversity of subject matter. They were all produced outdoors and away from the gallery. Compared to the gallery setting, where daguerreotypists carried out the majority of their business,<sup>111</sup> outdoor settings presented a different set of working conditions that had to be addressed. To adapt to these conditions required a high degree of skill and “considerably more time and effort” than those in the studio.<sup>112</sup> Some of the working conditions that had to be addressed were unpredictable light and weather, operating camera equipment in a variety of settings, transporting supplies, and preparing and developing plates away from the gallery. Daguerreians responded by developing approaches that ensured successful outcomes.

The direction and intensity of light are a product of weather, time of day and year. Daguerreians had to consider these factors when planning and making views. Lighting conditions dictated the ideal vantage points from which to successfully document a scene. The light and climate in California offered daguerreians favourable conditions to produce outdoor views. The New York City daguerreian, Robert A. Carden made this point after a visit to California in 1856:

The Art in California bids fair to rival the cities of the Eastern States, and it may be said with credit, that there are many who honor the profession in this once far off land. There are some advantages possessed in that portion of the world at a certain season of the year, viz. the dry season, when a constant succession of clear weather for more than six months, can be depended upon. The peculiar clear and cloudless sky is certainly more advantageous to the practice of the Art than our uncertain weather—now rain and then sunshine. With these advantages it is not strange that there are many specimens well worthy of note, and some indeed are equal to any produced in the large cities of the Atlantic States.<sup>113</sup>

Despite its advantages, outdoor conditions in California could never be as predictable as more familiar lighting and working conditions in the gallery setting. Contemporary photography manuals and journals addressed concerns about the erratic aspects of outdoor light. In 1852, the *Photographic Art-Journal* publication recommended that:

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<sup>111</sup> Palmquist, “The Daguerreotype in San Francisco,” 225. Palmquist claims that outdoor views were not the focus of business activities for most daguerreians in San Francisco because of the profitability and higher demand associated with portraits: “Scenic views aside, it was the ‘miniature’ or portrait which provided the bulk of income for the San Francisco daguerreian.”

<sup>112</sup> Kilgo, *Likeness and Landscape*, 144.

<sup>113</sup> Robert A. Carden, “Photography in California,” *Photographic and Fine Arts Journal*, New York, 10:4 (April 1857): 112–13. (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*, <http://www.daguerreotypearchive.org> P8570003).

the proper time for the light to act upon the plate depends on so many circumstances, the hour of the day, the season of the year, and the preparation of the plate, that it is impossible to give any rule; but the time, with a good lens, a bright day, and a properly prepared plate, in the open air, ought not to exceed ten or fifteen seconds.<sup>114</sup>

In their *A System of Photography* published in 1849, the daguerreotypists S.D. Humphrey and M. Finley claimed that the ideal light condition for producing views is “either a cloudy day, or just after sunset.”<sup>115</sup> The diffused lighting associated with these conditions resulted in less contrast and shadows—more favourable for documenting details across the entire scene.

Daguerreians encountered a variety of terrain and other conditions when traveling to remote locations. Rinhart and Rinhart note, “The traveling daguerreian artist sometimes brought his camera into remote areas, under hazardous conditions.”<sup>116</sup> The effort required to transport and set up equipment such as tripods with nonadjustable legs on uneven surfaces in diverse locations presented the traveling daguerreian with many challenges different from producing portraits in the gallery where equipment and supplies were readily available. More impressive is the fact that Vance, Johnson and other daguerreotypists used whole plates that required larger sized apparatus—camera, optics, sensitizer box and mercury bath—all of which resulted in heavier loads and greater transport challenges (see figure 23).

During this period many people gave advice about supplies, equipment and transport. In the 1850 publication, *Some Notes on Photography on Metal Plates*, translated from *Quelques Notes sur la Photographie sur Plaques métalliques*, Jean-Baptiste Louis Gros (1793–1870), an ambassador and daguerreian who traveled and made views, offered advice for minimizing volume and explained how the camera could be used to store equipment and supplies. To further assure readers, he affirmed that the “traveling case” he prescribed “was made to travel on the back of a mule in mountains that are almost inaccessible.”<sup>117</sup> Back in the United States, *The Daguerreian Journal* also offered advice about what traveling daguerreians should carry with them:

Traveling artists were also advised that they should have a box containing all complete polishing apparatus, together with a stock of chemicals, a coating box, and a supply of plates. However, it was suggested that, wherever possible, the box be kept at the photographer’s lodging and the plates buffed and coated beforehand, thus saving time in the

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<sup>114</sup> Robert J. Bingham, “Photographic Manipulation,” *Photographic Art-Journal* 3, (March 1852): 187.

<sup>115</sup> S.D. Humphrey and M. Finley, *A System of Photography, Containing an Explicit Detail of the Whole Process of Daguerreotype, According to the Most Approved Methods of Operating; Including All the Late Valuable Improvements*, (Canandaigua, NY, 1849), in *Daguerreotype Process: Three Treatises, 1840–1849*. (New York, NY: Arno Press, 1973), 56.

<sup>116</sup> Rinhart and Rinhart, *The American Daguerreotype*, 350.

<sup>117</sup> Jean-Baptiste Louis Gros, *Some Notes on Photography on Metal Plates*, translation (non-attributed) of *Quelques Notes sur la Photographie sur Plaques métalliques* (Paris, 1850), 101.



field.<sup>118</sup>

Portable horse-drawn studios and tents provided the option to sensitize, fix, and gild plates in the field, away from the gallery. This was especially useful when travel to and from the gallery within the same day was not possible.<sup>119</sup> Many accounts document methods of travel and transporting apparatus. William Shew operated a mobile daguerreian saloon that was prominently located in the Portsmouth Square Plaza in San Francisco. On July 25, 1851, the *San Francisco Alta California* observed:

It is to be a traveling daguerreotype establishment, with which the proprietor intends to travel around the city and country, taking views and portraits.<sup>120</sup>

Palmquist describes how the daguerreians, Isaac Wallace Baker (1818–c. 1862) and Perez Mann Batchelder (1818–c. 1873), traveled to remote towns and mines with a

portable daguerreian van. This horse-drawn mobile studio featured large skylights and side-windows . . . Prospectors could pose for portraits in the portable studio, or in some cases the camera was taken directly to miners in the field to record mining operations.<sup>121</sup>

Working with plates in the outdoors presented risks such as dust and excess light. In the 1858 publication, *American Hand Book of the Daguerreotype*, S.D. Humphrey warned “The polished plate should not be allowed to come in contact with a strong current of air, for it tends to oxidize the surface.”<sup>122</sup> Considering the condition of working in the outdoors and the effect it had on the process taken by daguerreians to obtain a view, it is not surprising that *The Daguerreian Journal* gave Vance such praise for his New York exhibition of 300 views in 1851:

We must say the operator has the proof of untiring industry . . . When we consider the disadvantage of operating in a tent or the open air, and in a new country, we are much surprised by such success; as a collection we have never seen its equal.<sup>123</sup>

Preparing and developing plates was also difficult. The outdoors presented less than pristine conditions for maintaining clean plates with a uniform polish. To work properly, the buffs “needed to be absolutely dry, for damp buffs polished poorly and produced daguerreotypes with a scummy, gray appearance.”<sup>124</sup> Also, the delay in time between exposure and development meant that the

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<sup>118</sup> Rinhart and Rinhart, *The American Daguerreotype*, 354.

<sup>119</sup> Mike Robinson, interviews by author, Toronto, ON, June 2013.

<sup>120</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 496.

<sup>121</sup> Palmquist, “The Pioneers,” 9.

<sup>122</sup> S.D. Humphrey, *American Hand Book of the Daguerreotype*, 1858. Reprint. (New York, NY: Arno Press, 1973), 165.

<sup>123</sup> “Daguerreotype Panoramic Views in California,” *The Daguerreian Journal*, Vol. 2, (November 1, 1851): 371.

<sup>124</sup> Shlaer, *Sights Once Seen*, 53.

latent image would fade to some degree. Sensitizing in the field was more challenging because shifts in environmental conditions meant less uniformity of sensitizing halogens on the surface of the plate.

Daguerreotypists always tried to maintain uniformly warm coating boxes which would sensitize the plates evenly. In cool weather a fire was usually left overnight inside the studio, so that the sensitizing equipment was ready for immediate use the next morning. Unevenly warmed coating boxes sensitize plates in an extremely nonuniform manner.<sup>125</sup>

Areas of the plate that were unevenly sensitized often display abrupt shifts in tonal value, as evidenced by the darker portion of the half plate, *Grizzly Flats, California*, made by Johnson c. 1851. (figure 17, lower centre)<sup>126</sup>

Daguerreotypists responded to the working conditions of making views—along with the view's purpose and subject matter—by making decisions that took into account their obtaining correct perspectives; choosing optics for minimizing exposure times, addressing variable light conditions and obtaining greater detail and focus; obtaining multiple views of the same subject; and composing and arranging scenes.

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<sup>125</sup> Shlaer, *Sights Once Seen*, 54.

<sup>126</sup> Mike Robinson, interviews by author, Toronto, ON, August 2013.

## DECISIONS AND RESULTS

### Obtaining Correct Perspective

Daguerreotypes represent the subject as a positive mirror image. Daguerreians could laterally correct the image prior to its formation on the plate by using a prism or a mirror situated on a 45-degree angle to the lens (figure 24). The result was an image with the same lateral perspective as the subject that it depicted. Lateral correction was not as frequently carried out with portraits since “people were accustomed to seeing themselves reversed in mirrors”<sup>127</sup> As noted earlier, views were sometimes not laterally corrected in order to facilitate their use for engravers, or when correction devices were not available or feasible to use.

As well, images were sometimes not laterally corrected due to the lack of a reflector large enough for use with a portrait lens—a half plate view would have required a whole-plate sized mirror which may have been less convenient to travel with, especially since the camera itself was sometimes used to store equipment and supplies. The Cathan’s Reflector landscape lens with a prism built into the lens addressed this problem. However, it was a smaller lens (f/22 to f/45) and therefore required longer exposure times—not ideal in scenes with low light, people or other moving subjects. The use of reflectors with faster portrait lenses—most of which were Petzvals—with apertures of f/3.5 to f/5.6, could be problematic since removing and replacing the lens cap to capture the exposure had to be carried out very quickly, sometimes too quickly, in order to prevent overexposure of the plate.<sup>128</sup> This problem was addressed by stopping down the lens with a diaphragm, thus lengthening the exposure time. Therefore, making images right-reading with a portrait lens could be carried out in this manner. Hand-made reflectors and diaphragms provided a solution for many daguerreians who only used faster portrait cameras.<sup>129</sup>

The daguerreotype views in the Isenburg Collection demonstrate examples of the ways in which daguerreotypists laterally corrected views, especially where signage and architecture is depicted.

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<sup>127</sup> Weinstein, “Gold Rush Daguerreotypes,” 36.

<sup>128</sup> “The Petzval design had a relatively large aperture, too large for convenient use outdoors because the very short exposures it allowed in direct sunlight were hard to control with a lens cap.” Shlaer, *Sights Once Seen*, 55.

<sup>129</sup> Mike Robinson, interviews by author, Toronto, ON, June 2013.

## Obtaining Correct Perspective

Reflective devices for correcting lateral perspective:  
Unknown Maker, *A Main Street in Orleans Flats*, c. 1852 (half plate)

Literature published around the time of the Gold Rush tended to promote the lateral correction of views. In an 1849 publication, Humphrey and Finley declared “views are always most desirable when taken in right position; that is, without being reversed in the camera.”<sup>130</sup> In 1851, Humphrey wrote, “landscapes and buildings require to be correct as regards the position of their several parts.”<sup>131</sup> Furthermore, in 1850, Baron Gros claimed that when producing views, he used mirrors or prisms to laterally correct them.<sup>132</sup>

This prescribed approach is evident in the view entitled *A Main Street in Orleans Flats*, c. 1852 (half plate) (figure 8). The right-reading signage along the main street of this mining settlement indicates that the image was corrected with a prism, or a mirror positioned at a 45-degree angle to the camera’s optic. A long depth of field resulted in much of the image being in focus—from the buildings and figures in the foreground, to the signage, trees, buildings and flag mast in the background. This long depth of field with relatively sharp focus along the perimeter of the image, is characteristic of landscape cameras, such as the camera produced by C.C. Harrison beginning in 1850, over one year before the estimated creation of the view of Orleans, in 1852 (figure 29). This camera was made for taking views, and as noted in the November 1, 1850 issue of *The Daguerreian Journal*, “The arrangement is simple and compact, and presents the landscape without being reversed.”<sup>133</sup> An announcement in the next issue published on November 15, 1850, claimed that this view camera produced images without distortion and that it had a very long focal distance of nineteen inches.<sup>134</sup> Although the Cathan’s Reflector and French Landscape Lens also had long focal lengths ideal for producing landscape views that were well focused throughout, C.C. Harrison’s view camera worked faster. The Cathan’s Reflector required around forty to ninety seconds for an exposure on a sunny day,<sup>135</sup> and the French landscape lens required up to ten seconds on a sunny day, while the C.C. Harrison view camera could produce exposures in

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<sup>130</sup> Humphrey and Finley, “A System of Photography,” 55.

<sup>131</sup> “Landscape Camera,” *The Daguerreian Journal*, Vol. 2 (August 15, 1851): 204.

<sup>132</sup> Gros, *Some Notes on Photography*, 38.

<sup>133</sup> “New Invention—Mr. C. C. Harrison,” *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (November 1, 1850): 20.

<sup>134</sup> “Camera For Views,” *The Daguerreian Journal*, Vol. 1, New York, NY: S.D. Humphrey, (November 15, 1850): 56.

<sup>135</sup> As noted on the packaging of the Cathan’s Reflector (figure 31).

seconds.<sup>136</sup> The shorter exposure time of the Orleans view—quite possibly made with the C.C. Harrison view camera—was facilitated by a very strong midday sun (indicated by the short, well defined shadows) and is suggested by the relatively motionless figures throughout, as well as the flag, which is quite still at its closest point to the flagstaff. The manner in which the figures throughout this scene—even those in the far distance—are gazing in the direction of the camera suggests that they were aware that a view was being made and that they were directed to stay still, in order to accommodate the slightly longer exposure of a landscape camera with a long focal length.

If the view of Orleans Flats was made with a C.C. Harrison view camera, a prism instead of a mirror was used to correct the reversed image. This prism was similar to the Cathan's Reflector that came before it: "Instead of being placed in front of the lens, it replaced the lens elements."<sup>137</sup> (figure 31). The prism corrected reversed images and reduced distortion more effectively than placing a reflective mirror on a 45-degree angle to a portrait lens.<sup>138</sup> Despite its strengths, the use of prisms had its limitations. During the late 1840s and early 1850s, there were few suppliers in California from which to obtain the devices.<sup>139</sup> In addition, in March 1852, the *Photographic Art-Journal* noted that a glass prism is "very much more expensive and difficult to obtain perfect and free from striae."<sup>140</sup> Also, the C.C. Harrison camera, as with other view cameras, required more time for its exposures. Therefore many daguerreians chose to use faster portrait cameras, combined with reflective mirrors as a method for correcting reversed images.<sup>141</sup> Mirrors used to laterally correct images could be hand crafted with readily available materials including a plate of glass and a sheet of tin,<sup>142</sup> thus eliminating dependency on suppliers of ready-made reverse mirrors. The ability to travel with a single portrait camera—which would have been used to produce portraits of the miners and others in the mining settlements—and to adapt it with a handmade reflective mirror to take laterally corrected views, meant that daguerreotypists traveling to the gold diggings and mining settlements could travel with just one camera outfit.

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<sup>136</sup> Mike Robinson, interviews by author, Toronto, ON, March 2013.

<sup>137</sup> Isenburg, "Early Equipment," 248.

<sup>138</sup> "Landscape Camera," 229.

<sup>139</sup> Prior to 1850, "The problem of obtaining adequate daguerreian equipment and supplies was only one of many stumbling-blocks during this period of intense change." Palmquist, "The Daguerreotype in San Francisco," 209–10.

<sup>140</sup> Bingham, "Photographic Manipulation," 186.

<sup>141</sup> "There have been excellent cameras introduced for taking views, but the time of exposure, which is increased in proportion to the focal length, is considered an objection; consequently many adhere to the old plan of using the speculum, or rather, substitute a mirror." Humphrey, *American Hand Book*, 70.

<sup>142</sup> Humphrey and Finley, "A System of Photography," 55.

## Obtaining Correct Perspective

Lateral perspective left uncorrected:

Unknown Maker, *Group Of Miners Working A Long Tom In California Gold Camp*, 1849  
(half plate)

A long depth of field in the half plate view entitled *Group Of Miners Working A Long Tom In California Gold Camp*, 1849 (figure 13), resulted in a scene that is relatively well focused throughout—from the mining apparatus and activities in the foreground to the buildings and signage in the background. However, the soft focus evident along the edges of this view suggests that a Petzval portrait lens with its characteristic wide aperture was used (figure 32). The small aperture required to obtain the long depth of field could have been achieved by placing a brass stop or a hand made diaphragm with a small hole in it over the portrait lens (figures 33, 39).

This view appears to have been used as a model for a steel engraving by Adams & Co. (figure 35). The unknown maker of this view did not turn the camera onto its side to obtain the more common horizontal image. Instead, he chose a vertical plate alignment, which was quite rare for views.<sup>143</sup> Many elements of the mining scene are included such as wood structures in the background—one identified as 'Brooks and Campbell'. The reversed letters on the signage and the incorrect placement of buttons on the men's shirts indicate that the scene was not laterally corrected.

There are a number of reasons why the daguerreian might have decided to not laterally correct the scene, apart from lacking a mirror to carry out the reversal; it may have been left laterally reversed if its intended use was a reference for an engraving. However, the daguerreotype's surface does not exhibit the damage one would expect if it had been traced over as a reference for an engraving. If it was used as a model for an engraving, perhaps the artist instead only made a visual reference to the plate and thus avoided damaging it. Another reason why the view may have been left laterally reversed is that placing a mirror in front of the lens would have obstructed the daguerreian's ability to manually remove and then replace the lens cover fast enough to prevent overexposure.

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<sup>143</sup> The Daguerreian Society, NEA Research Database, <http://www.daguerre.org> (accessed July 1, 2013).

## Obtaining Correct Perspective

Limitations of the tripod for obtaining correct lateral perspective:

George H. Johnson, *Sterrett & Company*, c. 1851 (half plate), and

Unknown Maker, *S. McDonnell's Gold Miner's Store, Garden Valley*, c. 1851 (half plate)

A handwritten sign that reads 'Sterrett & Company' suggests that the half plate view, *Sterrett & Company*, made by Johnson c. 1851 (figure 14), was laterally corrected. This is further supported by the correct placement of buttons on the men's shirts and trousers. The inclusion of the sign suggests that this view was intended as a record of the company's mining operations. The soft focus evident on the top, right and left sides of the image, the small depth of field and short exposure time as indicated by the mostly motionless figures, all suggest that this view was made with a Petzval portrait lens. It is likely that Johnson laterally corrected the view with a reflective mirror attached to the outside of the camera.

Johnson's chosen vantage point allowed him to document the activity, apparatus and surroundings. The elevated position from which this view was made offers a comprehensive record of the miners and the mine. The terrain on which Johnson's tripod was positioned may have offered a more even surface compared to the rough terrain of the depicted diggings. Most tripods in use during the 1850s required slight modifications in order to be used on uneven surfaces. This would involve removing the rolling base (figure 36).

The advantages of this spider dolly base is its stability as well as its mobility with a larger camera in a studio setting, yet the rolling base could be removed to allow the unit to be used in the field as a normal tripod since the wheels would be impractical in rough terrain. The entire tripod, though made of wood, unscrewed into its component parts for compactness when traveling.<sup>144</sup>

There were only three ways to adjust the tripod; tilt, swivel and height.<sup>145</sup> Leveling the camera to the horizon would have been much easier on a flatter surface. Moving and adjusting the tripod on an uneven surface would have required time and effort as a "change of position, angle, or perspective required repositioning of the tripod or stabilizing device."<sup>146</sup> The corrective mirror on the outside of the camera would also have had to be adjusted to maintain a flat horizon—a further investment of time.

The half plate view, *S. McDonnell's Gold Miner's Store, Garden Valley*, c. 1851 (figure 15), depicts buildings that served commercial purposes—a miner's supply store and an 'Express and

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<sup>144</sup> Isenburg, "Early Equipment," 222.

<sup>145</sup> Ibid., 247.

<sup>146</sup> Field et al., *American Daguerreotypes*, 11.

News Office'. The over two dozen people assembled in front of the buildings mostly gaze in the camera's direction. Isenburg has identified the location of this view as the mining town of Garden Valley, located in El Dorado County, "a meeting point for those who worked in nearby diggings."<sup>147</sup> The area surrounding this town would have likely offered the daguerreotypist additional views to photograph.

Side lighting suggests that this view was made earlier or later in the day. The many poorly-lit figures illustrate the less than ideal lighting conditions. Yet, the building's façade and signage were exposed well enough to convey detail. This was achieved with a longer exposure. A mirror was used to laterally correct the view, thus making the signage right-reading. Newhall notes that "city views with signs reading backward were not acceptable, particularly if merchants had commissioned them."<sup>148</sup> Decisions about lighting and lateral correction emphasize the building and not the people in this view, and therefore offer clues about the view's commercial purpose, likely as a property record.

The angled horizon of the view and obstruction in the foreground suggest some of the conditions that the daguerreian encountered. The awkward angle might have been a response to the need to include several elements into a single view, but it is more likely that it was a response to the uneven terrain on which the tripod was positioned and a limited number of available vantage points from which to make this view while including the desired elements—buildings and signage. As noted above, non-adjustable tripod legs on uneven terrain would have made it difficult to achieve a level horizon, and adjustments to correct this would have required time that the daguerreotypist may not have considered an option, in light of the large group of people waiting for the view to be made and less than ideal light conditions. Furthermore, laterally correcting this scene with a reverse mirror would have made it more difficult to level the horizon, since the camera itself could only be adjusted front to back, which only allowed the camera to be angled up and down. When one considers the deliberate approach the daguerreotypist made to properly expose important elements and the effort he made to laterally correct the scene, it is unlikely that the uneven horizon and distracting post in the foreground were accidental, or overlooked. The movement of the camera, tripod and mirror to obtain a level view would have made it difficult to straighten the horizon. In contrast to *A Main Street in Orleans Flats*, c. 1852 (figure 8), in which the camera was probably located on a flat surface of a wide street, *S. McDonnell's Gold Miner's Store, Garden Valley*, c. 1851, demonstrates the challenges of composing scenes when there are limited

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<sup>147</sup> Ibid., 55.

<sup>148</sup> Newhall, *The Daguerreotype in America*, 84.



options to make adjustments to the camera's apparatus, which in this case arose from limited vantage points and uneven terrain.

## DECISIONS AND RESULTS

### Light and Exposure Times

Decisions about which optic to use and how it was used, were often influenced by a number of factors—the view’s purpose and subject matter, and the conditions associated with its production. The Cathan’s Reflector and Lens had a built in prism enabling it to produce sharp, laterally corrected landscape views (see figure 31). However, it required long exposure times of forty to ninety seconds in sunlight,<sup>149</sup> and probably half that for the California sun.<sup>150</sup> Long exposure times meant that the Cathan’s Reflector and Lens was not ideal for scenes that included moving subjects such as tree branches, shadows and especially people. The French landscape lens—not as widely used in the United States—<sup>151</sup> had a small aperture of f/16 and it required longer exposure times of approximately ten seconds in sunlight conditions<sup>152</sup> (see figure 37). Therefore in most light conditions with this lens, it was difficult to obtain a view in which figures remained completely still.

The announcement in 1851 of C.C. Harrison’s view camera addressed the problem of longer exposure times required by existing lenses made for landscapes. A reverse prism was attached to the lens that had a focal length of 19 inches.<sup>153</sup> Lenses made specifically for landscapes had longer focal lengths compared to portrait lenses, longer fields of view, and they produced sharper images. Landscape lenses used with larger plates sizes could produce very sharp images, as noted by Baron Gros:

I always use a large plate and the lenses with a long focal point, which were sent to me from America or supplied by M. Charles Chevalier in Paris, have always given me images with a very striking sharpness; it is a recognition that I hasten to give him.<sup>154</sup>

The landscape lens could be used to produce views that were sharp throughout the entire image because of its flatness of field, compared to portrait lenses that could also produce well-focused images, however had greater curvature and less flatness of field. Yet, most of the Isenbourg Collection’s Gold Rush views were made with Petzval portrait lenses. These lenses were faster and offered daguerreians the option to travel into the field with a single camera outfit that could be used to make both indoor portraits and outdoor views. The following section examines four views

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<sup>149</sup> Isenbourg, “Early Equipment,” 248.

<sup>150</sup> Mike Robinson, interviews by author, Toronto, ON, March 2013.

<sup>151</sup> Shlaer, *Sights Once Seen*, 55.

<sup>152</sup> Mike Robinson, interviews by author, Toronto, ON, March 2013.

<sup>153</sup> “Camera For Views,” *The Daguerreian Journal*, 56.

<sup>154</sup> Gros, *Some Notes on Photography*, 60.

made from 1850 to 1856.

## Light and Exposure Times

Minimizing exposure times with the Petzval portrait lens:

George H. Johnson, *Mining And Assorted Activity On The American River, Near Sacramento*, c. 1852 (whole plate)

In the whole plate view, *Mining And Assorted Activity On The American River, Near Sacramento*, c. 1852 (figure 5), Johnson used a Petzval portrait lens to document what Isenburg described as a “depiction of typical river mining operations of the early 1850s.”<sup>155</sup> Johnson’s view includes dozens of people, mostly miners, and “smartly dressed townsfolk”<sup>156</sup> including young children. Most of these people are gazing towards the camera and it appears that they made an effort to stay still for the duration of the exposure, perhaps at Johnson’s request. A fast portrait lens enabled Johnson to reduce the exposure time and therefore more accurately depict the people associated with the mining scene in what was likely a commissioned record. This would be very difficult to achieve with a slower landscape lens.

The Petzval portrait lens was designed by Joseph Petzval (1807–1891) and produced by Voigtländer in 1840<sup>157</sup> (see figure 32). Portrait lenses were produced in the United States by the lens manufacturers, C.C. Harrison, and Holmes Booth and Haydens by the mid-1850s.<sup>158</sup> The shorter exposure times associated with portrait lenses were due in large part to a wide aperture. Views made with a portrait lens are often softly focused along the edges—particularly in the left, right and top edges. However, the bottom edge normally included foreground that was within the range of focus.<sup>159</sup> “Its useful angle of view was narrower than that of the French landscape lens [of twenty from the axis], being limited to about twelve degrees from the axis.”<sup>160</sup>

Johnson’s view prominently features a few well-dressed men in the foreground, some holding a pan of gold—perhaps they oversaw the mining operations. Positioning them along the bottom edge of the view illustrates that Johnson understood the properties of the Petzval portrait

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<sup>155</sup> Field et al., *American Daguerreotypes*, 50–51.

<sup>156</sup> Ibid., 50.

<sup>157</sup> Isenburg, “Early Equipment,” 205.

<sup>158</sup> Ibid., 205.

<sup>159</sup> Ibid., 204–205. The portrait lens was developed by Joseph Petzval (1807–1891) in 1840. Its wide aperture of f/3.5 meant that exposure times were shorter, and therefore it was ideal for making portraits of people. By the 1850s, variations of the lens were produced by other makers. “Most of these Petzval type copies are great for portraiture, but because of field curvature and astigmatism only the center is in good focus. This is why some outdoor scenes are critically sharp in the center and fuzzy at the edges.”

<sup>160</sup> Shlaer, *Sights Once Seen*, 37.

lens well—that the soft focus would be limited to the left, top and right edges, and not the foreground.

Despite the shortfalls of the Petzval portrait lens—“its large size, its weight, and, for landscape use, its narrow depth of view”<sup>161</sup>—its use as an all-purpose tool in the outdoors prevented the need to also bring a landscape view camera into the field. Travel would have been lighter with a single outfit, especially one that could be modified to produce images that were more detailed—by stopping down the aperture, at the expense of slightly lengthening the exposure time. A smaller load of equipment and supplies would have offered Johnson the opportunity to travel with greater ease to additional locations to make both views and portraits. The portrait lens’s short exposure time was suitable—and perhaps even necessary—to accurately document an outdoor scene such as this one with a lot of activity and a greater likelihood of moving people.<sup>162</sup>

### Light and Exposure Times

Obtaining greater depth of field by decreasing the aperture of a portrait lens:

Unknown Maker, *Mining Scene With Building Made Of Sail Cloth – Seven Miners With Board Sluices*, c. 1850 (half plate)

In the half plate view, *Mining Scene With Building Made Of Sail Cloth – Seven Miners With Board Sluices* (figure 16), the centre of the image is more focused and has a longer depth of field compared to the rest of the image; more than one might expect considering that this view was likely produced with a Petzval portrait lens that has a wide aperture and shorter depth of field. The longer depth of field has the affect of providing a substantial amount of information about the mining activities and the surroundings of this scene. Perhaps this view was commissioned by the mine’s owner or owners, who might be among some of the figures depicted.

A diaphragm could be used to decrease the aperture and thus increase a view’s area of focus and overall sharpness. In the article, “Landscape Camera,” published in *The Daguerreian Journal* in 1851, this approach was described as a solution to focusing on the various depths so common in landscape scenes:

In such cases, where the diversity of distance is great, a diaphragm is required between the lens and the objects, having an opening in its centre called an aperture, which by more or less contracting the surface of the lens, reduces the quantity of light permitted to act in

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<sup>161</sup> Ibid., 55.

<sup>162</sup> Ibid. The daguerreian, Carvalho’s reasons for using a Petzval lens instead of a landscape lens: “Fifteen seconds of exposure needed in direct sunlight if a landscape lens had been employed. By contrast, one second was all the exposure time required with a Petzval lens under the same circumstances.”

forming the image; by which means, . . . it is formed with greater accuracy and precision of outline than would be the case were the rays permitted to pass through the whole surface of the lens.<sup>163</sup>

Diaphragms were often hand crafted by punching out a piece of board, paper, or lens cover (see figure 30). Reducing the amount of light going into the camera would have lengthened the exposure time, allowed the daguerreotypist to obtain a longer depth of field and therefore include more details in focus. In this view of a mining scene (figure 16), the movement made by some of the miners and attempts by others to remain still by resting on their tools, is evidence of a longer exposure time.

The daguerreotypist chose a vantage point from which the miners would receive side lighting from the sun, and the sluice and buildings are prominently featured in the foreground and background, respectively. Had the view been made from a vantage point to the left of the image, the miners would have been fully lit, but the buildings and the contents of the sluice which help describe the mining activity, would have been excluded. By choosing a vantage point that includes mining activities and surroundings, and by stopping down the aperture to include the background buildings in focus, the daguerreotypist provided greater context to the view.

### **Light and Exposure Times**

Ensuring greater detail and focus with a landscape lens:

Robert H. Vance, *Excelsior Building, San Francisco*, 1856 (whole plate)

Isenburg notes that *Excelsior Building, San Francisco* (whole plate) was made by Vance in 1856.<sup>164</sup> (figure 11). In this view, a diverse group of people, including children and a driver on a horse-drawn wagon, gaze upwards towards the camera. The inclusion of well-dressed people—possibly with connections to businesses in the building—suggests that this view might have been commissioned as a record of not only the location, but also an event.<sup>165</sup> Isenburg claims that the building's new signage suggests this view may be a documentation of the building's opening.<sup>166</sup> Having been laterally corrected, this view provides an accurate record, what Kilgo describes as “straightforward, reportorial . . . a backdrop for contextual portraits of residents or business

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<sup>163</sup> “Landscape Camera,” 204.

<sup>164</sup> Field et al., *American Daguerreotypes*, 55.

<sup>165</sup> Ibid.

<sup>166</sup> “The occasion for this superb photograph is surely the opening of the Excelsior Building in March of 1856.” Ibid.

proprietors.”<sup>167</sup> The relatively sharp corners and edges of the image strongly suggest that Vance used a view camera with a landscape lens. A portrait lens would have produced an image with edges that were softly focused.

The Excelsior building faced west and was located at 170 Montgomery Street.<sup>168</sup> (appendix 2). The short, defined shadows suggest that this view was made on a sunny afternoon, perhaps just after midday. The small aperture of view cameras meant that longer exposure times were required. Vance’s approach to obtaining accurate and well-focused views was likely a result of techniques described by Baron Gros in his thorough and detailed manual about the practice of daguerreotype photography with a landscape view camera:

I always work with large plates, I use long focus lenses, I correct views or monuments with a prism or a parallel mirror, I use a very small opening, and under these conditions, which demand a prolonged action of light on the sensitive layer, I get very beautiful images in eight and five seconds in the sun, and fifteen or twenty if it is cloudy.<sup>169</sup>

The particularly strong sun in California shortened exposure times,<sup>170</sup> and benefited the use of slower view cameras to produce accurate and sharp outdoor views.

When Vance made this view, the Excelsior Building was located a couple blocks from the gallery he had from 1854 to 1863, located at 119 & 121 Montgomery Street.<sup>171</sup> <sup>172</sup> (appendix 2, figure 12). The short distance to transport his view camera, whole plates and other equipment was much more manageable compared to transporting this equipment over long distances into the field.

In his advertisements, Vance promoted his talent and abilities for making high quality views. For instance, he emphasized the fact that he used specialized equipment. Palmquist and Kailbourn describe how in advertisements from 1853, Vance declared that “Particular attention will be paid to taking views of buildings, machinery, &c.; having an entirely new and improved apparatus, expressly for taking views.”<sup>173</sup> Therefore it is not surprising that Vance used what appears to be a view lens to produce this extremely sharp and accurate view of the Excelsior Building. Vance may have used a C.C. Harrison view camera since it would have allowed him to capture the scene in much less time than other view cameras (figure 29). An 1852 advertisement for Harrison’s American Cameras republished the following acclaim by *The Daguerreian Journal*:

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<sup>167</sup> Kilgo, *Likeness and Landscape*, 145.

<sup>168</sup> Field et al., *American Daguerreotypes*, 55.

<sup>169</sup> Gros, *Some Notes on Photography*, 41.

<sup>170</sup> Mike Robinson, interviews by author, Toronto, ON, March 2013.

<sup>171</sup> Palmquist, “The Daguerreotype in San Francisco,” 208.

<sup>172</sup> Vance’s hallmark and the locations of his galleries—Marysville, Sacramento, and San Francisco—are embossed in the interior of the case facing the daguerreotype (figure 12).

<sup>173</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 561.

'We have recently seen a view taken with one of Harrison's *View Cameras*, which is certainly one of the best that has ever been produced. It is worked with a clear field, and with a sharpness we rarely witness in an ordinary daguerreotype.'<sup>174</sup>

Most of the people depicted in this scene remained quite still. They may have known to stay still or were directed by Vance to do so, because of the longer exposure time compared to that of a portrait camera. The bright light conditions and time of day would have helped to reduce the exposure time, therefore lessening the amount of time required for the people to remain still.

This view was taken from the vantage point of the second or third floor window of a building across Montgomery Street. This would have limited the amount of options Vance had to position his camera—backward and forward, and from side to side. It is therefore impressive that he was able to include all elements of the scene in his composition. Due to the limited space available for Vance to position his camera, he likely had little choice but to include important details of the scene right to the plate's edges. Had he used a portrait lens, the edges and therefore the details would have been out of focus.

### **Light and Exposure Times**

Addressing low light conditions with a portrait lens:

Silas W. Selleck, *Merchant Tailor Shop With Proprietor, California, c. 1851* (quarter plate)

Silas W. Selleck's view, *Merchant Tailor Shop With Proprietor, California, c. 1851* (quarter plate) (figure 7) is a straight-on perspective of a building façade. The narrow field of focus meant that a portrait lens was suitable for this scene. Selleck likely could have decided how far back to position his camera. He positioned it further away from the merchant's building and framed the building with empty space. Therefore, the softly focused edges—characteristic of views made with portrait lenses—did not affect the appearance of the building. The right-reading signage indicates that Selleck used a reverse mirror to laterally correct the scene. The low light level—suggested by the scene's lack of defined shadows—meant that a very long exposure would have been required if a view camera was used. Selleck's decision to use a portrait lens—possibly stopped down with a diaphragm—was likely a response to less than optimal lighting conditions.

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<sup>174</sup> C.C. Harrison *View Camera* advertisement, 1852, Antique and Classic Cameras, [www.antiquecameras.net/18481875advertisements.html](http://www.antiquecameras.net/18481875advertisements.html) (accessed June 30, 2013).

## DECISIONS AND RESULTS

### Multiple Views of the Same Subject

The Isenburg Collection contains evidence that daguerreians produced more than one view of the same scene, at times a near duplicate and at other times taken from different vantage points. By examining two views of mining scenes that were produced by George H. Johnson from 1851 to 1852, this section will explore how Gold Rush daguerreians might have used and potentially benefited from the practice of making multiple exposures of a scene despite their adding time and effort to the daguerreian's work .

### Multiple Views of the Same Subject

Multiple views for engravings:

George H. Johnson, *Notion Company Works, Barton's Bar, Yuba River*, c. 1852 (whole plate)

In 1852 on Barton's Bar, Yuba River—far away from his gallery in Sacramento, Johnson set up his daguerreotype camera and exposed a whole plate to the scene in front of him. The result, *Notion Company Works, Barton's Bar, Yuba River*, c. 1852 (figure 1), depicts a busy mining operation with most miners posed in the diggings, surrounded by a variety of mining apparatus, including conveyor pumps, a flume and long toms.<sup>175</sup>

As noted earlier, Isenburg discovered a wood engraving in an 1854 issue of the illustrated pictorial, *Gleason's Pictorial Drawing-Room Companion* that is strikingly similar to the daguerreotype (figure 21).<sup>176</sup> There are variations between the daguerreotype view and the illustration. The engraving depicts fewer figures—thirteen, mostly facing the camera and in pairs or discernible groups. Meanwhile, the daguerreotype depicts more figures—at least sixteen—that are randomly positioned, some facing the camera and others standing sideways. The mining apparatus in both views is featured prominently, although apparatus in the engraving has been coloured to stand out from the surrounding rocks. The colours of the miner's shirts in the illustration do not correspond with those in the daguerreotype in which reds register darker while blues appear

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<sup>175</sup> Field et al., *American Daguerreotypes*, 51.

<sup>176</sup> *Gleason's Pictorial Drawing-Room Companion*, (March 25, 1854), 185. One of four illustrations of Gold Rush scenes that accompanied an article entitled, 'Scenes in California' this illustration was modeled from a whole plate daguerreotype made by George H. Johnson in approximately 1852. This daguerreotype, or a variant of it, is in the Isenburg Collection.



lighter.<sup>177</sup> Interestingly, a man, perhaps an operator of the mine, who appears in the daguerreotype holding a pan of gold and standing behind the miners, does not appear in the illustration.

Considering all of the variations between the engraving and the daguerreotype, it is possible that the engraver took artistic liberty to make alterations to what the daguerreotype, or a near duplicate of it, depicted. Another explanation for discrepancies between the daguerreotype and illustration is that the engraving was based on another taken around the same time. However, considering the near exactness of position and grouping of some figures and activities, this seems less likely.

Johnson and other daguerreians would have been aware of the demand for views of significant events of the Gold Rush that appeared as wood engravings and lithographs in publications that had global reach.<sup>178</sup> The publication of illustrations based on Johnson's views of the Gold Rush helped to promote his work:

Johnson's daguerreotypes of the goldfields received publicity when a wood engraving, *Industry Bar, Yuba River*, based on one of his views, appeared on the front page of the *Sacramento Union* on October 30, 1852.<sup>179</sup>

His work in the field making both commissioned records of mining operations and daguerreotypes destined for use by engravers would have provided good reason to make multiple exposures.

Johnson used a whole plate to make *Notion Company Works, Barton's Bar, Yuba River* c. 1852. The accompanying whole plate camera outfit would have increased the weight of the load he had to transport to mining scenes in remote locations such as this one in Yuba River. These locations were a significant distance from his gallery located in Sacramento at the time (appendix 1).<sup>180</sup> Whole plate views contained a high level of detail that would have provided engravers with more information for their illustrations. Whole plates required longer exposure times.<sup>181</sup> Johnson would have reduced this time by using a fast Petzval portrait lens. Evidence that this optic was used is indicated by the soft focus along the edges of this view. By positioning himself further away from the scene, Johnson prevented the soft focus from affecting the subject of this view—the miners and

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<sup>177</sup> There are two miners holding a pan, and standing to the far right of the daguerreotype. In the illustration, one of the miner's shirts has been coloured light blue. Yet, in the daguerreotype, neither of these miners' shirts is light blue, since this colour would have registered as very light in the daguerreotype. This is further evidence of a discrepancy between the daguerreotype and the engraving.

<sup>178</sup> Johnson, "Art & History," 168.

<sup>179</sup> Palmquist and Kailbourn. *Pioneer Photographers of the Far West*, 328.

<sup>180</sup> Ibid.

<sup>181</sup> N.P. Lerebours, "A Treatise On Photography: Containing the latest Discoveries and Improvements to the Daguerreotype," translated by J. Egerton; with a preface, notes and alterations, by H.H. Snelling. *Photographic Art-Journal*, Vol. 1 (March 1851): 164. A chart entitled, "Duration of the Exposition" summarizes the exposure durations in various light conditions: "With the object illuminated by the sun" and "a fraction of a second (1/6); 1 to 4 sec (1/4); 3 to 6 sec (1/2); 6 to 10 sec (whole) . . ."

equipment, the very part of the view that engravers would have been most interested in reproducing and therefore required to be most detailed.

## Multiple Views of the Same Subject

Multiple views that offer various perspectives of a scene  
George H. Johnson, *Grizzly Flats, California*, c. 1851 (half plate)

*Grizzly Flats, California*, c. 1851 (figure 17), is one of a number of half plate views that Johnson took of the mining settlement and its surroundings. A near duplicate of this scene is depicted in a daguerreotype attributed to Johnson in the Zelda Mackay Collection at the Bancroft Library, University of California Berkley entitled, *Diggings at Grizzly Flat, El Dorado Co.*, c. 1851–1852 (figure 25). Also a half plate, the view was taken from nearly the same vantage point, yet in it there are two men in the foreground, compared to only one figure in the foreground of the view from the Isenburg Collection. A second variant view at the Bancroft Library—attributed to Johnson on the case pad—is entitled, *Settlement and mining operation in Grizzly Flats, El Dorado County, Calif.*, c. 1851–1852 (figure 27). It depicts the same location as the view in the Isenburg Collection, yet there are no figures in it and it was taken from a vantage point further away and to the left. Of the two variant views in the Bancroft Library, the Online Archive of California claims, “The details are so similar they are presumed to have been taken by the same photographer on the same day.”<sup>182</sup>

A note enclosed in the case of the Isenburg Collection’s *Grizzly Flats, California*, c. 1851 is inscribed: ‘Panorama of Grizzly Flat, famous Gold Rush town, 33 miles south of Hangtown (Placerville). In foreground are mining operations of Jacob Phillips.’ Phillips might have commissioned Johnson to make this daguerreotype, in addition to the variations in the Bancroft Library. All of these views appear to be property records intended to accurately document the settlement and mining operations—they are laterally corrected as evidenced by signage on the buildings; much of the scene is in sharp focus; and owners and others often appear in the foregrounds of the panoramas.

As noted, Johnson previously produced variant daguerreotype views that were used as the basis for engravings.<sup>183</sup> If the views of Grizzly Flats were indeed commissioned as property records,

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<sup>182</sup> Online Archives of California.  
<http://www.oac.cdlib.org/ark:/13030/tf1199n5bx/?layout=metadata&brand=oac4> (Accessed August 30, 2013).

<sup>183</sup> We offer our thanks to Mr. Johnson,” *Illustrated California News*, San Francisco, (September 1, 1850), 6. (From Gary W. Ewer, ed., *The Daguerreotype: an Archive of Source Texts, Graphics, and Ephemera*,

Johnson's approach to produce variants of the scene could have been motivated by a desire to obtain a survey of the location consisting of many views, as well as for as engravings.

The different light conditions apparent in the three views suggest that Johnson made these variants at different times of the day, or on different days (figures 18, 26, 28).<sup>184</sup> Therefore it is also possible that he produced multiple variations of the same scene, under different lighting conditions, in order to test plates, or to test exposures for other views that were produced in the surrounding area. These three views are evidence of how various approaches can be taken to document a single scene—from different vantage points under different light conditions—and of how these variations might have offered the daguerreotypist opportunities to use these views for different purposes.

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<http://www.daguerreotypearchive.org>, Ewer Archive P8500005). The text accompanying *The Riot At Sacramento City*, published in *Illustrated California News (San Francisco)* on September 1, 1850, notes that Johnson provided the newspaper with several views of the event.

<sup>184</sup> Sunlight is directed from opposite directions in two of the views, while in another view, there are no pronounced shadows.

## DECISIONS AND RESULTS

### Compositions and Mise en scène

The choice of vantage point and composition were often determined by working conditions that daguerreians encountered outdoors. This section considers the decisions that daguerreians might have made about composition and mise en scène and what might have affected those decisions.

### Compositions and Mise en Scène

#### Choosing vantage points for a city scene

Robert H. Vance, *Portsmouth Square, San Francisco*, c. 1854 (two 1/6 plate stereo)

In *Portsmouth Square, San Francisco*, c. 1854 (figure 10), approaches taken by Vance to compose the scene such as selecting a vantage point from an elevated perspective suggest his response to some of the working conditions when making this view. This view depicts the former Jenny Lind theatre that was purchased by the city and converted into City Hall.<sup>185</sup> At the time, Vance's gallery—located on the corner of Sacramento Street and Montgomery Street—was no more than 300 metres away (appendix 2). Therefore, Vance only had a short distance to transport his equipment and he may not have had to bring many supplies since he could have sensitized and developed his plates in his gallery.

In 1856, a wet plate negative of Portsmouth Plaza attributed to English photographer, George R. Fardon (1806–1886) was made from a similar—if not the same—vantage point as Vance's two 1/6 daguerreotype stereo:

Although attributed to G. R. Fardon, there is some possibility that the negative for this view was made by Watkins from the window of J.M. Ford's San Francisco gallery which overlooked Portsmouth Plaza.<sup>186</sup>

Vance likely would have had to be granted permission by occupants of the building—perhaps J.M. Ford—in order to access its second or third storey and to position his camera in a window from where he made his view. By choosing an elevated vantage point, Vance followed some of the approaches to making views of buildings that literature about camera techniques prescribed such

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<sup>185</sup> Matthew R. Isenburg, *A Closer Look*, DVD (Cecil, PA: Dream Catchers Films, Inc., c. 1998).

<sup>186</sup> Palmquist, *Carleton E. Watkins*, 7.

as maintaining correct perspectives. In 'A Treatise on Photography', which appeared in an 1851 issue of *Photographic Art-Journal*, N.P. Lerebours argued:

It is also requisite to choose a position at an elevation of about one-third of the total height of the edifice; otherwise in order to take the whole of it, it would become necessary to incline the camera, and then the vertical lines, which ought to be perpendicular and parallel to each other, would, . . . meet at an accidental point of incidence of the sky, and cause the edifice to appear as if falling.<sup>187</sup>

The vantage point for Vance's stereo view did present some limitations, however, with respect to what could be included in the view. Situated in the interior of a building, Vance would not have had much room to move his camera back or forwards. If the City Hall building was the intended subject of this view, the distance between the camera and the City Hall building required the inclusion of other elements such as the fence in the foreground, the El Dorado building to the left of City Hall and other details such as a horse-drawn carriage.

By deciding to use a landscape lens, Vance ensured that all elements in the view were in sharp focus throughout its long depth of field and along the scene's edges. Ample light on the City Hall's west facing façade accounts for the appearance of some figures and horse-drawn carriages that did not disappear through motion. Planning an ideal time to make a view—for example, when a building is fully lit, or when weather conditions are optimal—was not always possible, as noted by Gros:

One will not have studied the way in which a monument is lit at every hour of the day so as to take a picture when the light strikes in the most favorable manner the most picturesque or the most characteristic aspect.<sup>188</sup>

It is likely that Vance planned the ideal time to make this view, since his gallery was close by and since he was probably familiar with this building, possibly the site of Ford's gallery, as noted above.<sup>189</sup>

The appearance of Vance's *Portsmouth Square, San Francisco*, therefore, reflects how the conditions he encountered dictated his decisions, such as selecting a high vantage point, in order to achieve the most desired results.

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<sup>187</sup> Lerebours, "A Treatise On Photography," 319.

<sup>188</sup> Gros, *Some Notes on Photography*, 82.

<sup>189</sup> Palmquist, *Carleton E. Watkins*, 7.

## Compositions and Mise en Scène

Choosing vantage points for a mining scene

Unknown Maker, *Fourteen Man In Cut*, c. 1850 (quarter plate).

Unknown Maker, *Outdoor Scene Of Building With Shaving Equipment In Background*,

c. 1850 (quarter plate) and

*Moses Warren's Cabin, California*, c. 1850 (quarter plate)

*Fourteen Man In Cut*, c. 1850 (figure 19), is a quarter plate view of a mining scene that depicts fourteen miners, some situated in the ditch and others standing on higher ground. It appears that the daguerreotypist chose a vantage point from within the ditch, while including surrounding elements such as a building on a hill in the background. This is a tight composition in which the miners fill the frame and may have resulted from limited space available for the placement of the camera. Yet many layers of activity are effectively captured in this view. Furthermore, strong sunlight directed from behind the camera lights the entire scene, so that the miners' faces, the apparatus and the surroundings are all visible. By using a portrait lens, the left, right and top edges of the plate are in soft focus and the depth of field has been shortened causing some figures in the background to be out of focus.

The chosen vantage point—from in the ditch and up close—creates the effect of a group portrait. Miners, mostly gazing at the camera, are neatly circling the perimeter of the ditch, while a fifteenth person, perhaps the mining operator, in addition to the 'fourteen man in cut', gazes to the side in an authoritative pose. His dagger is visible and his patterned sweater, tinted a red hue, sets him apart from the group. It is highly probable that the daguerreian directed everyone in regard to their position, since they are mostly well lit, the composition is quite symmetrical and balanced, no one is obstructed and the scene has been composed so everyone fits within the frame of the view.

The unknown maker of *Outdoor Scene Of Building With Shaving Equipment In Background*, c. 1850 (figure 2), composed this quarter plate view by selecting a vantage point to include the dwelling in the context of its surroundings.<sup>190</sup> As a record of Moses Warren's property and dwelling, it is understandable why a vantage point was chosen to include as much of the building and its surroundings as possible. Two walls of the building are depicted, thus providing many details about the structure and its inhabitant. This approach of including the utmost amount of information by means of a carefully chosen vantage point is also apparent in another quarter plate view

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<sup>190</sup> Johnson, "Argonaut Moses Warren," 173. Johnson refers to this view as '*Georgetown, CA, Cabin Built by Moses Warren*'.

commissioned by Warren, *Moses Warren's Cabin, California*, c. 1850 (figure 3).<sup>191</sup> In both views, the sun is high in the sky, the direction of light is slightly angled—as evidenced by the shadows—and the intensity of lighting provides depth to the scenes while illuminating the subjects. It appears that the portrait lens was stopped down to a smaller aperture, thus ensuring a long depth of field that is most pronounced in the centre of both views. An absence of people or other moving objects—apart from a towel in one of the views and tree branches—permits the use of a small aperture with the associated long exposure time.

The vantage points of both views capture personal possessions that impart information about the inhabitants of the dwellings. This is particularly noticeable in *Moses Warren's Cabin, California*, in which objects related to food, transport, mining equipment and tools, are neatly featured in an unobstructed manner along the perimeter of the dwelling. These objects further add to the staged and deliberate approach taken to compose these scenes.

## **Compositions and Mise en Scène**

### Arranging a scene

#### Unknown Maker, *Busy Mining Scene With Group Of Workers*, c. 1853 (half plate)

In the half plate entitled, *Busy Mining Scene With Group Of Workers*, c. 1853 (figure 20), an unknown maker composed the view so that the miners and their activities were depicted in the foreground. Mining apparatus is depicted in the middle ground and offers greater context to this mining scene. The background in the upper half of the view features the natural backdrop of a valley, which defines the surroundings of the mining activities.

One of the most striking features of this view is the staged pose of many of the miners whose activities such as handling tools and pans, appear to be frozen in time. Meanwhile, the blurred motion of some of the other figures is proof that a longer exposure was used to make this view. Evidence that the daguerreotypist directed the miners to stay still is suggested by the fact that none of the figures are gazing at the camera; this approach may have been carried out to create an illusion of spontaneous activity, or to minimize noticeable eye movement or blinking. The duration of the exposure might have been lengthened as a result of stopping down the portrait lens to a smaller aperture so that activity in the middle ground would be in focus.

This mining scene is a literal and descriptive record of mining activities and could have been a commissioned record, or made for an engraving in an illustrated publication. The daguerreian's

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<sup>191</sup> Ibid. 174., Johnson refers to this view as 'Cabin Built by Moses Warren'.

decisions to compose and arrange the scene might have been carried out to meet the intended purpose of the view.



## CONCLUSIONS

This thesis introduces a methodology that considers the working conditions surrounding the production of daguerreotype views of the California Gold Rush from 1848 to 1856. These conditions include unpredictable light and weather, the necessity of operating camera equipment in a variety of settings, transporting supplies, preparing and developing plates away from the gallery and the subject matter of the view. Combined with what is known about the Gold Rush and what has been researched about the daguerreotype during this period, this methodology may be applied in order to account for the appearance of daguerreotype views and to better understand the decisions that daguerreians made in taking these views according to their intended purpose.

Daguerreians during this period made decisions when creating outdoor views that varied significantly from the approaches they took to make portraits in more controllable and familiar indoor environments. These decisions included using apparatus to correct perspectives; using optics to capture greater detail, reduce distortion, address variable light conditions, and minimize exposure times; producing multiple views of the same subject; and composing scenes by selecting vantage points, and arranging elements in a single scene.

An examination of the considerable number of outdoor views in the Matthew R. Isenburg Collection at the Archive of Modern Conflict in Toronto offers a rare opportunity to understand daguerreotype views from the California Gold Rush and to account for their making.

## ILLUSTRATIONS



Figure 1. George H. Johnson, Notion Company Works, Barton's Bar, Yuba River, c. 1852 (whole plate). Isenburg Collection at AMC Toronto.





Figure 2. Unknown Maker, Outdoor Scene Of Building With Shaving Equipment In Background, c. 1850 (quarter plate). Isenburg Collection at AMC Toronto.





Figure 3. Unknown Maker, Moses Warren's Cabin, California, c. 1850 (quarter plate). Isenburg Collection at AMC Toronto.



Figure 4. Unknown Maker, F.A. Hornblower Mining Store, 1850 (quarter plate). Isenburg Collection at AMC Toronto.





Figure 5. George H. Johnson, Mining And Assorted Activity On The American River, Near Sacramento, c. 1852 (whole plate). Isenburg Collection at AMC Toronto.



Figure 6. George H. Johnson, Diverted River at Mining Operation, c. 1851 (quarter plate). Isenburg Collection at AMC Toronto.





Figure 7. Silas W. Selleck, Merchant Tailor Shop With Proprietor, California, c. 1851 (quarter plate). Isenburg Collection at AMC Toronto.





Figure 8. Unknown Maker, A Main Street in Orleans Flats, c. 1852 (half plate). Isenburg Collection at AMC Toronto.





Figure 9. Unknown Maker, Street View Of A Cash Store, c. 1850 (half plate). Isenburg Collection at AMC Toronto.





Figure 10. Robert H. Vance, Portsmouth Square, San Francisco, c. 1854 (two 1/6 plate stereo). Isenburg Collection at AMC Toronto.





Figure 11. Robert H. Vance, Excelsior Building, San Francisco, 1856 (whole plate). Isenburg Collection at AMC Toronto.



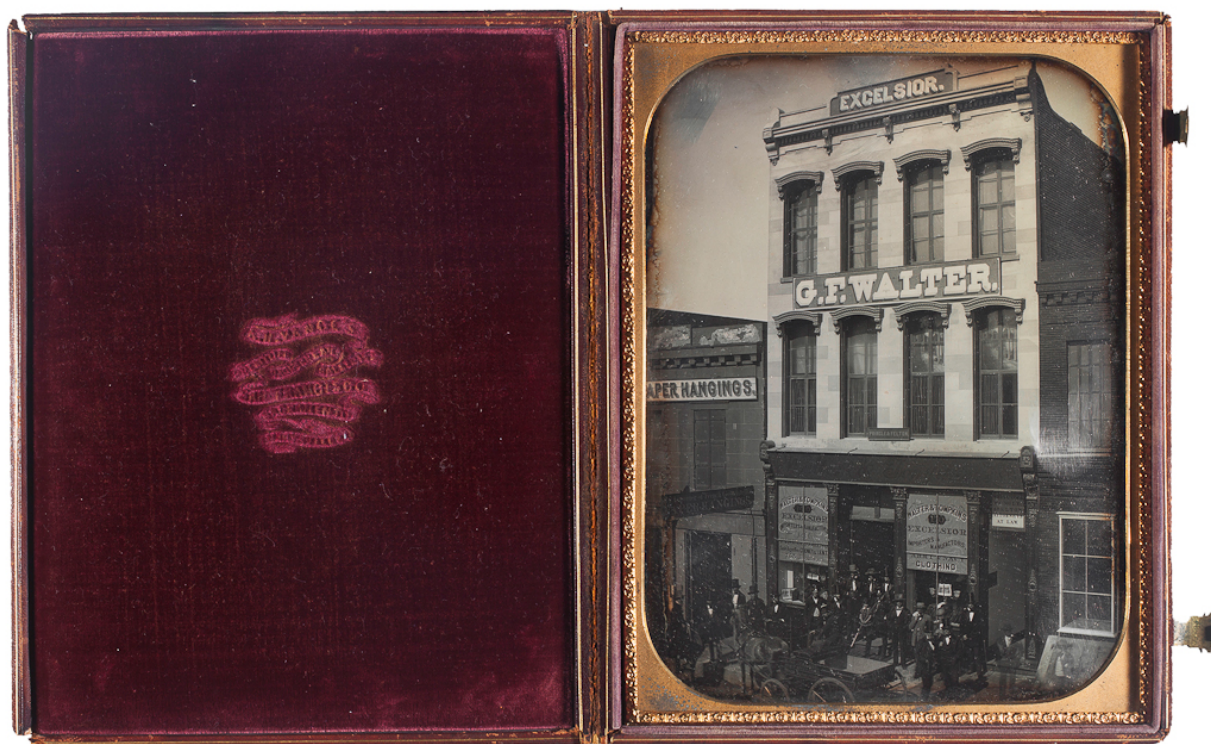


Figure 12. Robert H. Vance, Excelsior Building, San Francisco, 1856 (whole plate), with case. Isenburg Collection at AMC Toronto.





Figure 13. Unknown Maker, Group Of Miners Working A Long Tom In California Gold Camp, 1849 (half plate). Isenburg Collection at AMC Toronto.





Figure 14. George H. Johnson, Sterrett & Company, c. 1851 (half plate). Isenburg Collection at AMC Toronto.





Figure 15. Unknown Maker, S. McDonnell's Gold Miner's Store, Garden Valley, c. 1851 (half plate). Isenburg Collection at AMC Toronto.





Figure 16. Unknown Maker, Mining Scene With Building Made Of Sail Cloth – Seven Miners With Board Sluices, c. 1850 (half plate). Isenburg Collection at AMC Toronto.



Figure 17. George H. Johnson, Grizzly Flats, California, c. 1851 (half plate). Isenburg Collection at AMC Toronto.





Figure 18. George H. Johnson, Grizzly Flats, California, c. 1851 (half plate). Detail. Isenburg Collection at AMC Toronto.



Figure 19. Unknown Maker, Fourteen Man In Cut, c. 1850 (quarter plate). Isenburg Collection at AMC Toronto.





Figure 20. Unknown Maker, Busy Mining Scene With Group Of Workers, c. 1853 (half plate). Isenburg Collection at AMC Toronto.





NOTION COMPANY'S WORKS, CALIFORNIA.

men at work, pumps, wheels, etc. This year the company has made nothing; last year every one concerned made handsomely. By many it is attributed to bad management on the part of the officers. The first view on this page gives a representation of the Notion Company's works, at Barton's Bar, showing the men at work, and two men giving the results of a day's labor. The last view gives a miner's tent in the foreground, and Ross's Bar, on

the Yuba River, in the distance, with the river turned from its bed. The village is also seen in the distance. Ross's Bar is one of the richest bars in the river, and is one of the first that was worked. It is about twenty miles above Marysville. As compared with Australia, our own gold region on the Pacific coast, is certainly far more desirable for many reasons, and that it is quite as prolific in the golden ore, is beyond a doubt. California,

too, is very far in advance of the British El Dorado in point of social and political condition, and is already able to afford society, and agreeable society, too, for the most refined. It really seems to us like a dream, the whole rise and progress of the gold story of California; more like an Arabian Night story, with a big and powerful genie, and a good boy, Aladdin, to be enchanted and made rich!

Figure 21. 'Notion Company's Works, California,' Gleason's Pictorial Drawing-Room Companion, 1854. Isenburg Collection at AMC Toronto.



**RE-OPENED!**



**R. H. VANCE,**  
 Corner of Montgomery and Sacramento Sts.,  
 SAN FRANCISCO,  
 HAS AGAIN RE-OPENED HIS FIRST PREMIUM GALLERY.

*With all the improvements of the day.*

Having greatly enlarged the same, and made extensive additions to the arrangements of his light and operating rooms, he feels confident of being able to execute pictures as well, if not better, than can be obtained in any other part of the world. He intends to improve on his former work, which has been pronounced throughout the United States, inferior to none. It has been acknowledged by all that during the past FIVE YEARS I have far exceeded all other artists in California in the perfection of my pictures, and there are thousands who claim that they are unsurpassed in the world.

Being the owner of JAMES A. CUTTING'S PATENT RIGHT for Atmospherically Scaling Ambrotypes, I shall continue to give my patrons the

**GENUINE  
 PATENT AMBROTYPES**

*At the Reduced Prices.*

Plain Photographs, of the size of the largest Daguerreotype, only \$3.00 each, if five are taken. Who will not give a large frame picture to a friend, when it can be obtained for only \$3.00? We guarantee as good a plain photograph, if not better, than can be obtained in the United States, and a hundred per cent better than those taken by ANY artist on the Pacific Coast.

Very large size Photographic Views for only \$5.00 each, if three are taken. Think of the pleasure which it would give friends at home, to receive a correct picture of the place where you reside! Improve the fine weather while it lasts, and send in your orders.

I have arranged my business so that hereafter I shall be at my rooms at all times, to attend personally to my patrons; and with the assistance of my operators who have been with me for years, and of the other attaches of my establishment, I can safely guarantee that all who favor me with a call will receive the best of work with despatch, as I have four Operating Rooms and six distinct light, which enables me to suit the light to the various styles of features, by which PERFECT LIKENESSES of all may be obtained, and without detention to my numerous customers, having four times the capacity of any other room in the State.

REMEMBER THE PLACE.

**R. H. VANCE,**  
 Corner Montgomery and Sacramento Sts., San Francisco.

Figure 22. Robert H. Vance advertisement. *Hutchings' California Magazine*. (San Francisco, CA: Hutching & Rosenfield, Publishers, February 1859). Isenburg Collection at AMC Toronto.



Figure 23. American 1850s style sensitizing boxes, American cast iron mercury baths, and box cameras (1/4 plate and whole 4/4 plate sizes). Isenburg Collection at AMC Toronto.



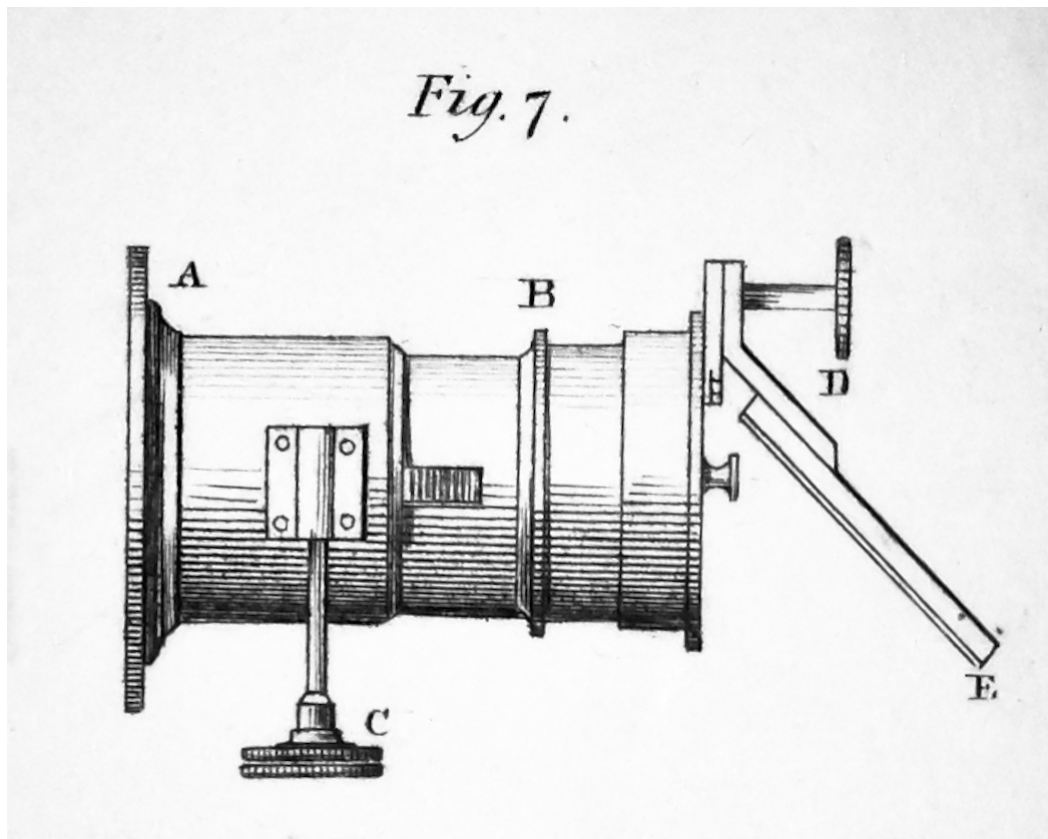


Figure 24. Mirror for reversing images (E). Illustration from plate. N.P. Lerebours, *A Treatise on Photography; Containing the Latest Discoveries and Improvements Appertaining to the Daguerreotype*, translated by J. Egerton. (London: Longman, Brown, Green, and Longmans, 1843).



Figure 25. George H. Johnson, Diggings at Grizzly Flat, El Dorado Co., c. 1851–1852 (half plate).  
Zelda Mackay Collection at the Bancroft Library, University of California Berkley.



Figure 26. George H. Johnson, Diggings at Grizzly Flat, El Dorado Co., c. 1851–1852 (half plate), detail. Zelda Mackay Collection at the Bancroft Library, University of California Berkley.





Figure 27. George H. Johnson, Settlement and Mining Operation in Grizzly Flats, El Dorado County, Calif., c. 1851–1852 (half plate). Zelda Mackay Collection at the Bancroft Library, University of California Berkley.



Figure 28. George H. Johnson, Settlement and Mining Operation in Grizzly Flats, El Dorado County, Calif., c. 1851–1852 (half plate), detail. Zelda Mackay Collection at the Bancroft Library, University of California Berkley.

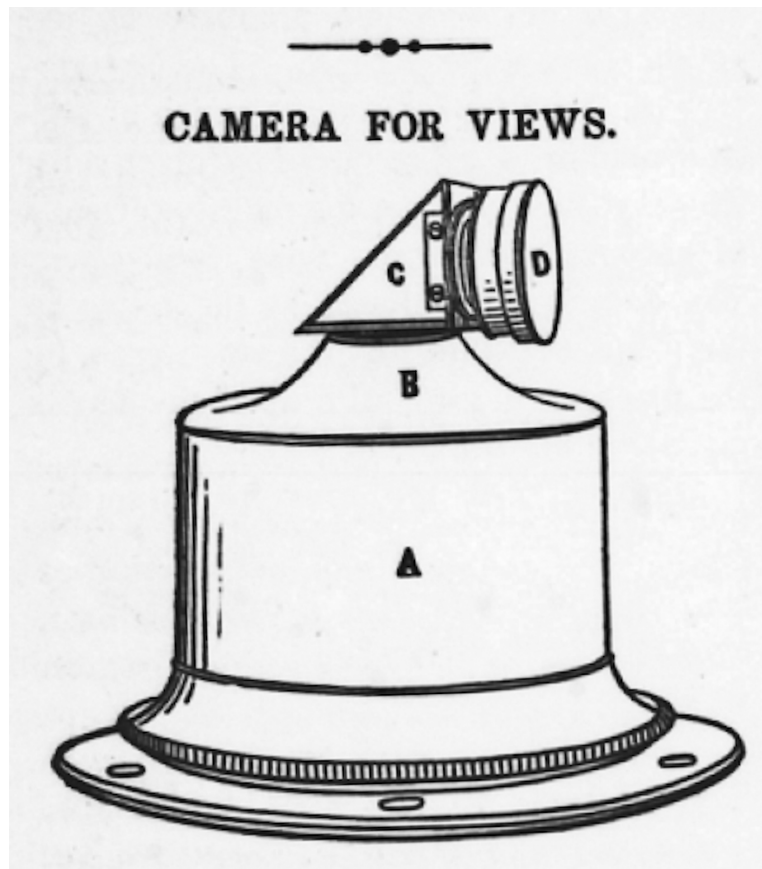


Figure 29. Illustration of C.C. Harrison's camera for views. *The Daguerreian Journal*, Vol. 1. November 15, 1850, 56.



Figure 30. Hand crafted diaphragm. Front and back views. Isenburg Collection at AMC Toronto.





Figure 31. Cathan's Reflector and Lens. Isenburg Collection at AMC Toronto.





Figure 32. Voigtländer Petzval-type portrait lens on box camera,  $\frac{1}{4}$  plate size. Isenburg Collection at AMC Toronto.



Figure 33. Brass stop supplied with a Lerebours lens. Front and back views. Isenburg Collection at AMC Toronto.

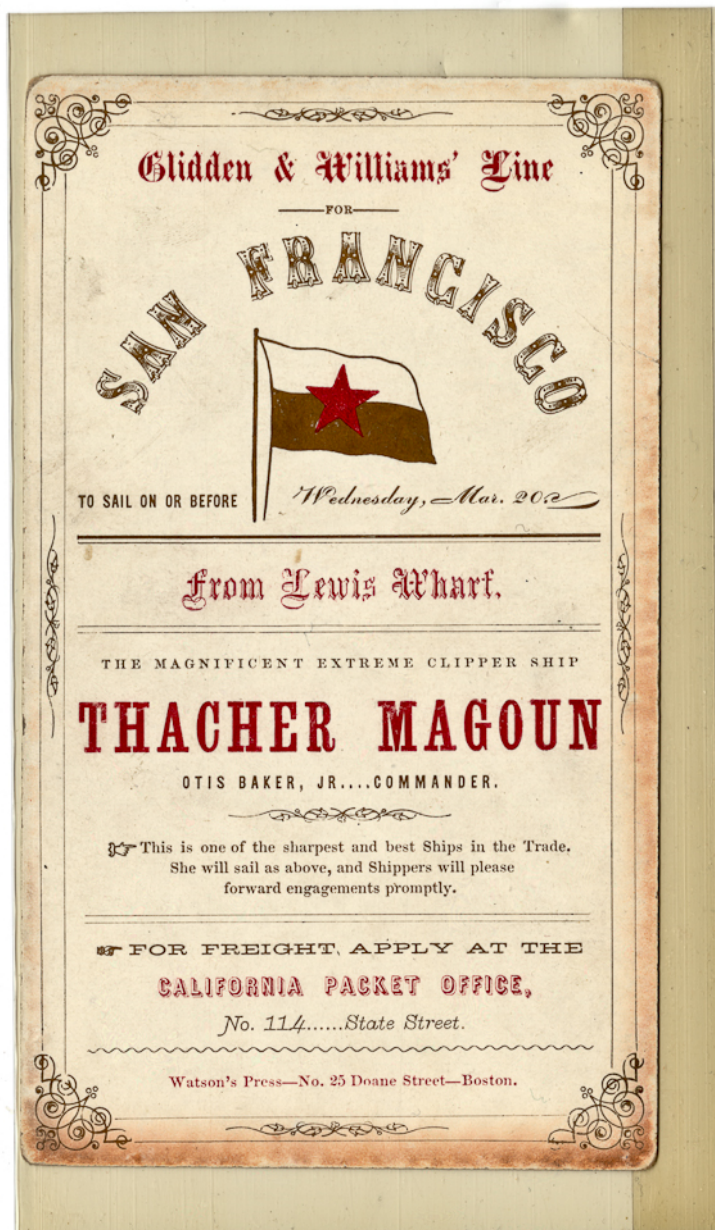


Figure 34. Handbill for clipper ship to California, 1850s. Isenburg Collection at AMC Toronto.





Figure 35. Transaction – Adams & Co. (recto and verso). Engraving of daguerreotype, 'Group Of Miners Working A Long Tom In California Gold Camp,' 1849 (half plate). Isenburg Collection at AMC Toronto.



Figure 36. Iron center tripod with  $\frac{1}{4}$  plate camera. Isenburg Collection at AMC Toronto.



Figure 37. French landscape lens. Isenburg Collection at AMC Toronto.





Figure 38. American  $\frac{1}{4}$  plate box camera. Isenburg Collection at AMC Toronto.

## APPENDICES

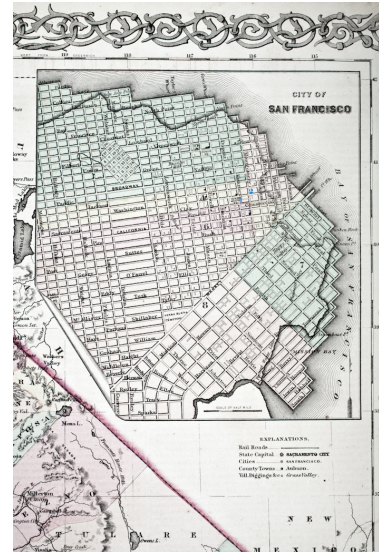


Appendix 1. Map of California, J.H. Colton & Co. No. 172, 1855. Isenburg Collection at AMC Toronto.

George H. Johnson:

- Johnson's gallery listed in various locations (1851–1852) within close proximity on J Street, Sacramento
- 1** *Mining And Assorted Activity On The American River, Near Sacramento*, c. 1852 (whole plate)
- 2** *Notion Company Works, Barton's Bar, Yuba River*, c. 1852 (whole plate)
- 3** *Grizzly Flats, California*, c. 1851 (half plate)
- 3** *Diverted River at Mining Operation*, c. 1851 (quarter plate)





Appendix 2. Map of San Francisco, (detail from Map of California), J.H. Colton & Co. No. 172, 1855. Isenburg Collection at AMC Toronto.

Robert H. Vance:

- Vance's gallery location in San Francisco (1854–1863), located “at the southwest corner of Sacramento and Montgomery Streets.”<sup>192</sup>

1 Portsmouth Square, San Francisco, c. 1854 (two 1-6 plate stereo)

2 Excelsior Building, San Francisco, 1856 (whole plate), located at 170 Montgomery Street.<sup>193</sup>

<sup>192</sup> Palmquist & Kailbourn. *Pioneer Photographers of the Far West*, 562.

<sup>193</sup> Field et al., *American Daguerreotypes*, 55.

## BIBLIOGRAPHY

### Sources: Secondary

- Alexander, Abel. "Robert H. Vance: Pioneer of the Daguerreotype in Chile." Translated by Thomas R. Kailbourn. *The Daguerreian Annual* (1993): 11–30.
- Craig, John S., ed. *Craig's Daguerreian Registry*, Revised Edition Volume 2. Torrington, CT: John S. Craig, 2003.
- Davis, Keith F. *The Origins of American Photography: from Daguerreotype to Dry-plate, 1839–1885*. Kansas City, MO: Hall Family Foundation: in association with The Nelson-Atkins Museum of Art; New Haven, CT, 2007.
- Dornin, George D. *Thirty Years Ago, 1849–1879: Gold Rush Memories of a Daguerreotype Artist*. Edited by Peter E. Palmquist. Nevada City, CA: Carl Mautz Pub., 1995.
- Field, Richard S., Robin Jaffee Frank, Matthew R. Isenburg, and Alan Trachtenberg. *American Daguerreotypes from the Matthew R. Isenburg Collection*. New Haven, CT: Yale University Art Gallery, 1989.
- "Gold Rush Photographer." *Image: The Bulletin of the George Eastman House of Photography*, 1, no. 9 (December 1952): 3.
- Holliday, J.S., *Rush For Riches: Gold Fever and the Making of California*. Berkley, CA: Oakland Museum of California, 1999.
- , *The World Rushed In: The California Gold Rush Experience*. New York, NY: Simon and Schuster, 1981.
- Isenburg, Matthew R. *A Closer Look*, DVD. Cecil, PA: Dream Catchers Films, Inc. c. 1998.
- Isenburg, Matthew R. "Early Equipment." *The Daguerreian Annual* (1993): 201–54.
- Johnson, Drew Heath. "Art & History." *The Daguerreian Annual* (1994): 167–68
- , ed. *Capturing Light: Masterpieces of California Photography 1850 to the Present*. Oakland, CA: Oakland Museum of California, 2001.
- , & Marcia Eymann. *Silver & Gold: Cased Images of the California Gold Rush*. Iowa City, IA: University of Iowa Press for the Museum of California, 1998.
- Johnson, Mark S. "Argonaut Moses Warren & The Quinebaug Gold Company From The Isenburg Collection at AMC Toronto." *The Daguerreian Annual* (2012): 145–75.
- Kilgo, Dolores A. *Likeness and Landscape: Thomas M. Easterly and the Art of the Daguerreotype*. St. Louis, MO: Missouri Historical Society Press, 1994.

- . "Vance's Views in St. Louis: An Update." *The Daguerreian Annual* (1994): 211–12.
- Kingslake, R. "Charles Chevalier and the 'Photographe a Verres Combines'." *Image: The Bulletin of the George Eastman House of Photography*, 10, no. 5 (1961): 17–20.
- Lowry, Bates & Isabel Barrett Lowry. *The Silver Canvas: Daguerreotype Masterpieces from the J. Paul Getty Museum*. Los Angeles, CA: J. Paul Getty Museum, 1998.
- Newhall, Beaumont. *History of Photography: from 1839 to the Present*. Revised Edition. New York, NY: Museum of Modern Art; Boston: Distributed by New York Graphic Society of Books, 1982.
- . *The Daguerreotype in America*, 2<sup>nd</sup> revised ed. New York, NY: Dover Publications, 1968.
- Online Archives of California. <http://www.oac.cdlib.org/> (accessed August 1, 2013)
- Owens, Kenneth N., ed. *Riches For All: The California Gold Rush and the World*. Lincoln, NB: University of Nebraska Press, 2002.
- Palmquist, Peter. *Carleton E. Watkins: Photographer of the American West*. Albuquerque, NM: University of New Mexico Press, 1983.
- . "Carleton Watkins. A Biography. Chapter 3: Shadow Catching in El Dorado 1849–1856." *The Daguerreian Annual* (1990): 179–88.
- . "Robert H. Vance: The Maine and Boston Years, 1825-1850." *The Daguerreian Annual* (1991): 199–216.
- . "Silver Plates on a Golden Shore: The Real Thing Itself." In *America & the Daguerreotype*, edited by John Wood, 134–58. Iowa City, IA: University of Iowa Press, 1991.
- . "The Daguerreotype in San Francisco." *History of Photography* (July 1980): 207–38.
- . "The Sad but True Story of a Daguerreian Holy Grail." In *Silver & Gold: Cased Images of the California Gold Rush*, edited by Marcia Eymann and Drew Heath Johnson. 43–73. Iowa City, IA: University of Iowa Press for the Oakland Museum of California, 1998.
- . "William Herman Rulofson – The P.T. Barnum of American Photography." *The Daguerreian Annual* (1993): 137–40.
- . & Thomas R. Kailbourn. *Pioneer Photographers of the Far West: A Biographical Dictionary 1840–1865*. Stanford, CA: Stanford University Press, 2000.
- Rinhart, Floyd and Marion. *American Daguerreian Art*. New York, NY: Clarkson N. Potter, Inc., 1967.
- . *The American Daguerreotype*. Athens, GA: University of Georgia Press, 1981.
- Rodríguez Villegas, Hernán. *Historia de la Fotografía: Fotógrafos en Chile durante el Siglo XIX*. Santiago, Chile: Centro Nacional del Patrimonio Fotográfico, 2001.
- Rudisill, Richard. *Mirror Image: The Influence of the Daguerreotype on American Society*. Albuquerque, NM: University of New Mexico Press, 1971.

- Sandweiss, Martha A. *Print the Legend: Photography and the American West*. New Haven and London: Yale University Press, 2002.
- Scharf, Aaron. *Pioneers of Photography: An Album of Pictures and Words*. New York, NY: Harry N. Abrams, 1976.
- Shlaer, Robert. *Sights Once Seen: Daguerreotyping Frémont's Last Expedition Through The Rockies*. Santa Fe, NM: Museum of New Mexico Press, 2000.
- Starl, Timm. "A New World of Pictures: The Use and Spread of the Daguerreotype Process." In *A New History of Photography*, edited by Michel Frizot, 32–57. Köln: Könemann, 1998.
- Stilgoe, John R. "Landscape in Limbo." *America & the Daguerreotype*, edited by John Wood, 58–72. Iowa City, IA: University of Iowa Press, 1991.
- Taft, Robert. *Photography and the American Scene*. New York, NY: Dover Publications, Inc. 1964.
- The Daguerreian Society, NEA Research Database, <http://www.daguerre.org> (accessed July 1, 2013).
- U.S. Census Bureau, "Historical Census Statistics on Population Totals By Race, 1790 to 1990, and By Hispanic Origin, 1970 to 1990, For The United States, Regions, Divisions, and States." <http://www.census.gov/population/www/documentation/twps0056/tab19.pdf> (accessed August 22, 2013).
- Weinstein, Robert A. "Gold Rush Daguerreotypes," *American West: Magazine of the Western History Association*, August 1967.
- Wolf, Daniel, ed. *The American Space: Meaning in Nineteenth-Century Landscape Photography*. Middletown, CT: Wesleyan University Press, 1983.
- Wood, John. "Theatrical Narratives and the Documents of Dream: California and the Great American Image." In *Silver & Gold: Cased Images of the California Gold Rush*, edited by Marcia Eymann & Drew Heath Johnson. 23–42. Iowa City, IA: University of Iowa Press for the Oakland Museum of California, 1998.

## Sources: Primary

- Antisell, T. "Photography." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (November 15, 1850): 53–55.
- Bingham, Robert J. "Photographic Manipulation." *Photographic Art-Journal*, Vol. 3, New York, NY: W.B. Smith, (March 1852): 181–88.
- Bisbee, A. "History and Practice of Daguerreotyping." 1853. Reprint, New York, NY: Arno Press, 1973.

- "Camera For Views." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (November 15, 1850): 56.
- Carden, Robert A. (R.A.C.) "Photography in California." *Photographic and Fine Arts Journal*, New York, 10:4 (April 1857): 112-13.
- Claudet, A. (Antoine). "Researches on the Theory of the Principal Phaenomena of Photography in the Daguerreotype Process." London, 1849. In *Daguerreotype Process: Three Treatises, 1840-1849*. New York: Arno Press, 1973.
- "Daguerreian Artists' Register." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (January 1, 1851): 128.
- "Daguerreotype Panoramic Views in California." *The Daguerreian Journal*, Vol. 2. New York, NY: S.D. Humphrey, (November 1, 1851): 371.
- "Dark Tent For Landscapes." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (September 1, 1851): 231-33.
- Dewy, Geo. W. "Portraiture." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (May 1, 1851): 366-67.
- Draper, J.W. "On Certain Spectral Appearances, And On The Discovery Of Latent Light." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (May 1, 1851): 353-54.
- Fauvel-Gouraud, François. "Description of the Daguerreotype Process, Or a Summary of M. Gouraud's Public Lectures, According to the Principles of M. Daguerre. With a Description of a Provisory Method for Taking Human Portraits." Boston, 1840. In *Daguerreotype Process: Three Treatises, 1840-1849*. New York, NY: Arno Press, 1973.
- Fitzgibbon, J.H. "Daguerreotyping." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (August 1, 1851): 167-69.
- Gleason's Pictorial Drawing-Room Companion*. Boston, MA: M.M. Ballou, March 25, 1854.
- Gros, Baron (J. B. Louis). *Some Notes on Photography on Metal Plates*. Translated. Paris, 1850.
- Humphrey, S.D. *American Hand Book of the Daguerreotype*. 1858. Reprint, New York, NY: Arno Press, 1973.
- Humphrey, S.D. and M. Finley. "A System of Photography, Containing an Explicit Detail of the Whole Process of Daguerreotype, According to the Most Approved Methods of Operating; Including All the Late Valuable Improvements." Canandaigua, NY, 1849. In *Daguerreotype Process: Three Treatises, 1840-1849*. New York, NY: Arno Press, 1973.
- Humphrey's Journal*, Vol. 5. New York, NY: S.D. Humphrey, (October 1, 1853): 190.
- Hutchings' California Magazine*. San Francisco, CA: Hutching & Rosenfield, Publishers, (February 1859).

- "Landscape Camera." *The Daguerreian Journal*, Vol. 2. New York, NY: S.D. Humphrey, (August 15, 1851): 204-06.
- "Landscape Camera." *The Daguerreian Journal*, Vol. 2. New York, NY: S.D. Humphrey, (September 1, 1851): 229-31.
- Lerebours, N.P., "A Treatise On Photography: Containing the latest Discoveries and Improvements to the Daguerreotype." Translated by J. Egerton; with a preface, notes and alterations, by H.H. Snelling. *Photographic Art-Journal*, Vol. 1. New York, NY: W.B. Smith, (March 1851): 146-68.
- "A Treatise On Photography: Containing the latest Discoveries and Improvements to the Daguerreotype." Translated by J. Egerton; with a preface, notes and alterations, by H.H. Snelling. *Photographic Art-Journal*, Vol. 1. New York, NY: W.B. Smith, (April 1851): 212-321.
- "Mr. Vance's California Views." *The Photographic Art-Journal*, Vol. 2. New York, NY: W.B. Smith, (October 1851): 252-53.
- "New Invention-Mr. C. C. Harrison." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (November 1, 1850): 20.
- "On The Application Of Science To The Fine And Useful Arts: Improvements In Photography." *The Daguerreian Journal*, Vol. 1. New York, NY: S.D. Humphrey, (April, 15 1851): 328-30.
- S., (William Shew, attrib.). "Photography," *The Pioneer; Or, California Monthly Magazine*. San Francisco, CA: Le Count and Strong, July 1854.
- "The Daguerreotype Art; Its Present State And Future Prospects." *The Photographic Art-Journal*, Vol. 2. New York, NY: W.B. Smith, (August 1851): 99-101.
- "The Difficulties Of The Art." *The Photographic Art-Journal*, Vol. 2. New York, NY: W.B. Smith, (October 1851): 232-34.
- "To The Public." *The Daguerreian Journal*, Vol. 1, New York, NY: S.D. Humphrey (November 1, 1850): 15-16.
- Ure, Andrew. *A Dictionary of Arts, Manufacturers, and Mines*, New York, NY: D. Appleton & Company, 1844.
- "Uses of the Daguerreotype." *Artist* (New York), 1:5 (January 1843): 235.
- Vance, Robert H. *Catalogue of Daguerreotype Panoramic Views in California*. New York, NY: Baker Godwin, and Company, 1851.
- Wey, Francis. "Heliography on Plates." Translated by J.R. Snelling. *The Photographic Art-Journal*, Vol. 3. New York, NY: W.B. Smith, (January 1852): 41-45.