

The Presidio & Ferries Railroad

The first commercially successful passenger-carrying endless cable railway, aka cable car line, emerged in San Francisco in 1873, courtesy of Andrew Hallidie, William Eppelsheimer, and their financial backers. During the next sixteen years eight separate cable car companies spread lines out over San Francisco's hills and flatlands. When the Presidio & Ferries Railroad commenced full service in January of 1882, it became San Francisco's fifth cable car line and the first to cross Russian Hill.¹ It also brought efficient and convenient street railway service to the lightly settled Spring Valley neighborhoods at the foot of Pacific Heights on the city's north end.

The Presidio & Ferries connected its namesake terminals with a multi-modal transportation system over a route that mimicked the old Presidio Road. Although the Presidio & Ferries was primarily a cable car line, it also incorporated steam engine and horse car lines. The cable car segment began near Portsmouth Square, formerly the terminal for horse-drawn omnibuses providing transportation to the Presidio. In 1882 Portsmouth Square was still the heart of "downtown." The cable ran along Montgomery (now Columbus) Avenue—a street that did not exist in omnibus days—turned up and over the Union Street hill, and ran out Union Street as far as Steiner Street. There, a steam engine, better known as a "steam dummy," hauled passengers in mainline-railroad-style coaches along a line that ran into the Presidio via Harbor View, an area on the bay adjoining the Presidio's eastern boundary. A short horse car line linked ferry terminals clustered at the foot of Market Street with the cable railway's terminal near Washington Street and Montgomery Avenue.



Horse car meets cable train at the foot of Montgomery Avenue. Courtesy of the San Francisco History Center, San Francisco Public Library.

Montgomery Avenue made the Presidio & Ferries a practical possibility. To be financially successful any cable car line crossing Russian Hill needed to reach downtown. Without Montgomery Avenue cutting diagonally across the original North Beach street grid, a cable car line connecting the Portsmouth Square area to Union Street over the only feasible routes would need to make two 90° turns. But early San Francisco cable car lines, like the Presidio & Ferries, could make 90° turns only when running downhill.² A cable car could turn from Powell Street onto Union Street (and vice versa), because both streets ran downhill toward the intersection, but it could not make the same turn over level or uphill terrain, and thus, for example, could not turn from Washington Street onto Powell Street. A Presidio & Ferries cable line over Union Street unable to reach downtown directly could have terminated at Washington Square, although this was an unpromising spot from a ridership perspective. A horse car line could have connected Washington Square to downtown, but it would have had to traverse streets already franchised to competing and hostile street railway companies.³ Transfer agreements with competitors were not a given. Even if promoters of the Presidio & Ferries had managed to secure the necessary franchises or purchased operating rights, employing horse cars to reach downtown would have represented an expensive technological step backwards. Cable cars, albeit more expensive to install, were faster, more capacious, and cheaper to operate than horse cars.⁴ Montgomery Avenue created a straightforward route from Spring Valley, via Union Street, into downtown. Had it not become part of San Francisco's street plan, the Presidio & Ferries Railroad probably never would have existed.

If Montgomery Avenue provided essential infrastructure for the Presidio & Ferries Railroad, Henry Casebolt provided its animating vision. Casebolt, a manufacturer of carriages, wagons, and street cars contracted to build the Front Street, Mission & Ocean Railroad (FSM&O, more commonly known as the "Sutter Street Railroad") in 1865. Financial backing for this street railway was shaky at best. Casebolt accepted stock in partial payment for his contract, but when he completed construction, the company still owed him \$31,500 and had no money in the treasury to pay it.⁵ Casebolt invested his own money to get the railroad up and running. Eventually he became its superintendent, a position he would hold until his retirement in 1880. In a drive to attain profitability Casebolt secured trackage rights to extend his railroad to the ferries. He obtained the dormant franchise of the Fort Point Railroad and initiated an omnibus service from Broadway and Polk streets, terminus of the FSM&O's Polk Street branch, to Harbor View and the Presidio. Casebolt eventually created the first railway link between the Presidio and San Francisco's waterfront and blazed the way for the Presidio & Ferries Railroad.



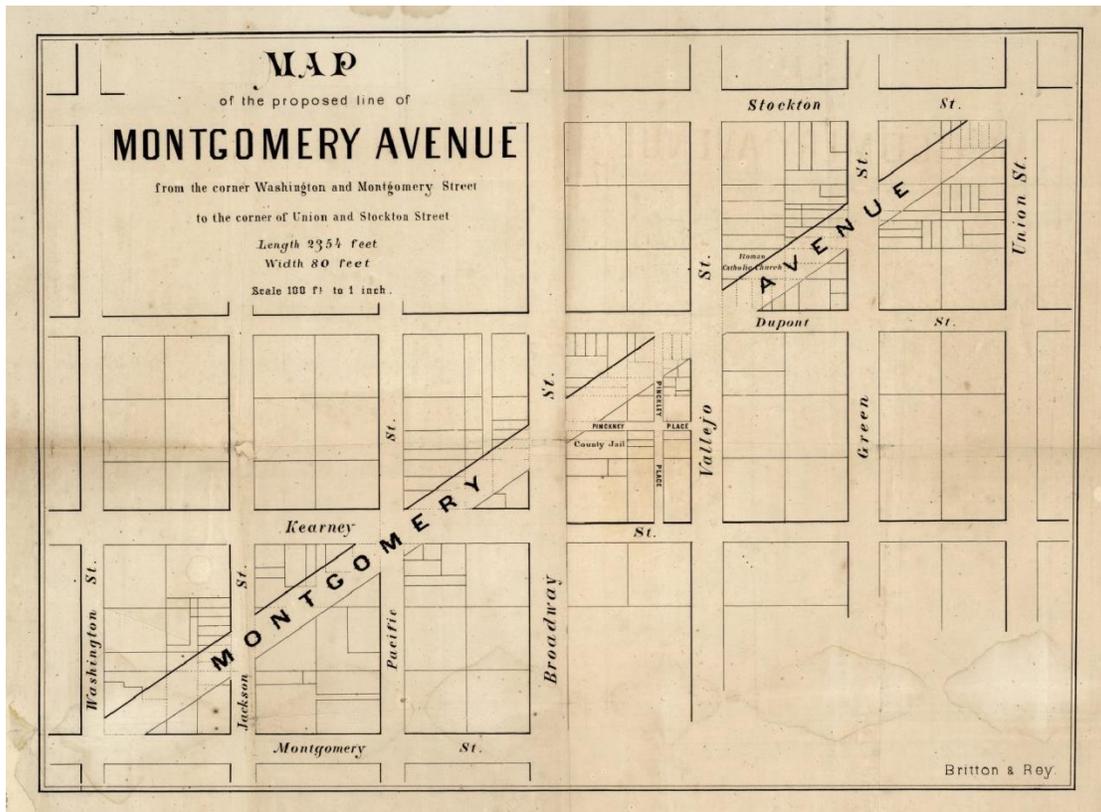
Jean-Jacques Vioget's 1839 Yerba Buena survey. Note the slightly tilted orientation of the primordial street grid. Land Case Map E-921 Courtesy of the Bancroft Library, University of California, Berkeley.

Montgomery Avenue

San Francisco's street plan evolved from Jean-Jacques Vioget's pioneering survey of Yerba Buena completed in 1839. Although Vioget's survey retained Yerba Buena's first street, Calle de la Fundación, laid out by William Richardson in 1835, its new streets formed a grid oriented on Yerba Buena cove. Blocks contained six square lots measuring 50 vara per side.⁶ Vioget's grid was not orthogonal—its streets did not intersect at right angles. Jasper O'Farrell corrected this defect in his 1847 extension of Vioget's survey. He also laid out Market Street on an imaginary line from the center of Yerba Buena cove through the cleavage of Twin Peaks. Blocks bordering Market Street on the north were truncated into gores. South of Market Street O'Farrell created blocks with 100 vara lots. Blocks of the so-called "100 vara survey" faced Market Street without truncation. This asymmetric layout meant streets north and south of Market Street did not, in general, have a smooth continuation into each other.

In the late 1860s this situation began to irritate William Ralston and other south of Market property holders. They began agitating and lobbying for a "Montgomery Street straight" plan, which would eventually be partially implemented via New Montgomery Street. Perhaps this political activity inspired North Beach property owners to seek their own improvement to O'Farrell's street plan. On February 2, 1870 a meeting of property owners convened to determine if enough popular support existed to persuade the state legislature to create a new 80 foot wide street running diagonally from the northwest corner of Washington and Montgomery streets to the southeast corner of Union and Stockton streets. Archibald C. Peachy, a lawyer and exponent of the project, argued that steep street grades—impassable for horse-drawn wagons carrying heavy loads—and a lack of direct access to downtown suppressed both population

growth and real estate values in North Beach. The new thoroughfare would correct these deficiencies by exploiting the natural topography between Russian and Telegraph hills. It would create considerable new real estate frontage on a broad avenue and drive out the “disreputable class of persons” currently occupying the district.⁷ By the end of the month Senator John H. Saunders, Democrat of San Francisco, introduced a bill to open and establish a public street in San Francisco to be called Montgomery Avenue. The proposed route of the avenue was also extended through Washington Square to Jefferson Street.

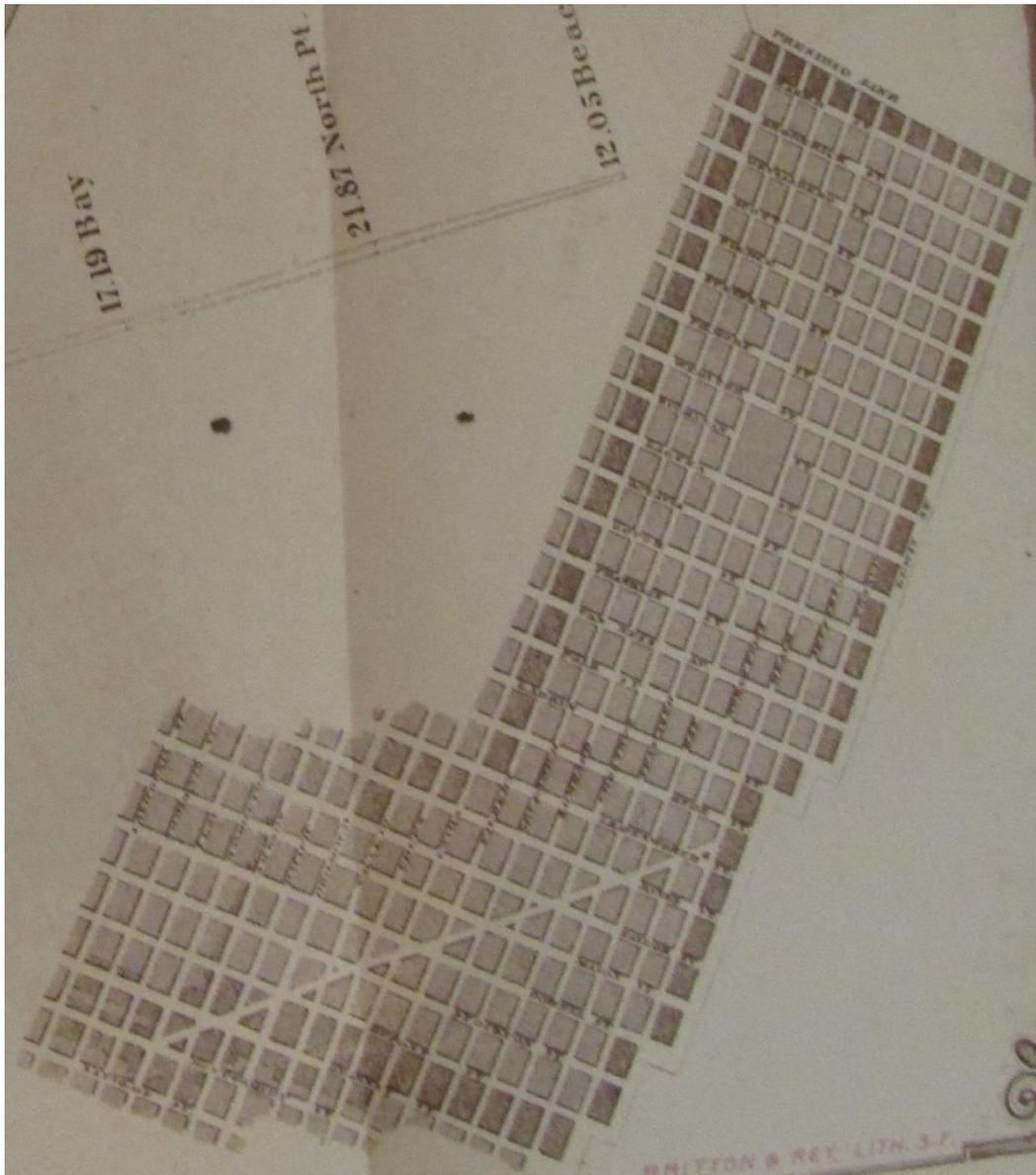


This is the original proposal for Montgomery Avenue, envisioning a limited thoroughfare between Washington and Union streets. It reflects the belief, still somewhat justified, that all the action along the avenue would be confined there. Note that an extension of Montgomery Avenue toward the North Beach waterfront would have cut through the heart of Washington Square. Map courtesy of the David Rumsey Map Collection, www.davidrumsey.com.

Archibald Peachy actively lobbied in Sacramento for passage of the Montgomery Avenue bill. His “pleasant, taking way that finds favor” converted most skeptics to advocates. Unfortunately, the proposed route of Montgomery Avenue would have cut through the city jail as well as St. Francis church and the Convent of the Presentation on Powell Street. Vigorous protests from parishioners and clergy brought about a revision of the route. The new route would leave behind many more irregular lots than the original and terminate at Beach Street.⁸ The state legislature rapidly approved the Montgomery Avenue bill, and it became law March 29, 1870.

An assessment district defined in the Montgomery Avenue Act would bear all costs of opening the avenue. The act created a three person commission to determine those costs; they included: the value of property actually taken for the avenue, the value of property improvements damaged by those takings, and the costs of grading, paving, curbing, sidewalk construction, administrative fees and salaries, and raising buildings to new street grades on Montgomery Avenue and

intersecting streets. Benefits to the assessment district were also estimated. The commissioners labored at this task for over a year and finally released their report in late May, 1871. It pegged the total cost of the project at \$2,679,485 and estimated the benefit of Montgomery Avenue to the assessment district at \$8,543,500.



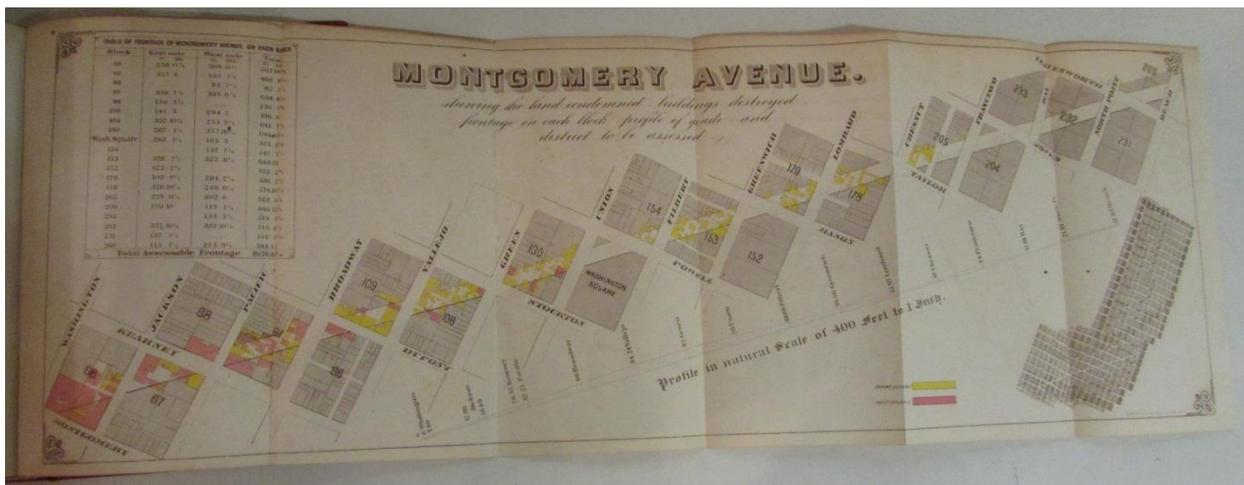
The 1872 assessment district. Montgomery Avenue cuts across the street grid. The large, empty rectangular block represents Lobos Square, now Moscone Recreation Center. Some of the lots depicted were under water. Courtesy of the San Francisco History Center, San Francisco Public Library.

Property owners within the assessment district immediately attacked the report. Assessments were too high and benefits exaggerated. At a general community meeting held to discuss the report some speakers alleged their assessments nearly equaled the value of their properties, and one claimed the value of all property assessed in North Beach did not reach \$2,000,000. Another “excitable and rather unreasonable owner of real estate in the vicinity” advocated hanging the commissioners. Public ire rained down on Archibald Peachy. Not only was he due to receive hefty compensation as attorney for the Montgomery Avenue commissioners, while also renting space to them in the Montgomery Block, which he part-owned, but the assessment rate on the

Montgomery Block was just 7% of its estimated value, even though Montgomery Avenue would begin right outside its door, while assessments on properties relatively remote from Montgomery Avenue ran as high as 50%.⁹ Even though most property owners in the assessment district believed Montgomery Avenue would be a desirable improvement, they were outraged at the cost.

Outraged property owners and their representatives soon formed a Montgomery Avenue Opposition League. The league sought to bring enough political and electoral pressure on the state legislature to force repeal of the Montgomery Avenue Act. About 12% of property owners in the assessment district filed official protests over their assessments.¹⁰ The Montgomery Avenue commissioners heard these protests but delayed filing their final report. That the commissioners collected \$500 a month each for their dilatory activity only further inflamed passions in the opposition league. The commissioners finally filed their report at the end of December 1871, but it hardly mattered. A bill repealing the Montgomery Avenue Act was introduced in the legislature on December 7, 1871 and became law March 1, 1872.

Less than two weeks after repeal of the original Montgomery Avenue Act a replacement bill was introduced in the state assembly. Unlike the original bill, the replacement did not seek a uniform grade for the new avenue. The new grade would conform to grades on crossing streets. This change entailed major cost savings. Expensive regrading and resewering on crossing streets would no longer be required. Estimated cost of the project was halved to \$1,300,000. Major property owners along the proposed line of Montgomery Avenue, eager to enjoy its promised benefits, backed this new bill and agreed to pay all costs associated with the former commission and to reuse its surveys and other work as far as practicable. The new Montgomery Avenue bill did not actually order the avenue opened. It allowed it to be opened on petition of a majority of property owners in the assessment district defined by the bill. This change would have interesting consequences. The new Montgomery Avenue bill became law April 1, 1872.



with 437,060 feet of street frontage. These blocks constituted the area officially benefited by Montgomery Avenue. In late May, 1872 owners of 225,000 feet of frontage petitioned the mayor to open the avenue. This triggered creation of a board of public works tasked with determining costs and benefits associated with opening Montgomery Avenue as well as issuing bonds to pay for it. This was not a board of the city and county but an independent, quasi-corporation created for the sole purpose of opening Montgomery Avenue. The board worked rapidly, piggybacking on work by the previous Montgomery Avenue Commission, and submitted its report in late September. The county court heard objections to this report in late October then confirmed it November 14, 1872, clearing the way for a bond issue. The board of public works ultimately issued \$1,579,000 worth of bonds.¹¹ Solicitation for bids on \$1000 par value, 30-year Montgomery Avenue bonds payable at 6% per annum began November 30, 1872.

The bonds did not sell like hotcakes. The mayor, city auditor, and treasurer supervised bond sales and reserved the right to reject “any and all unreasonable bids” for the bonds. They set 85% of par value as the minimum bid.¹² Many property owners seeking damage awards who were expected to accept bonds in lieu of cash payments refused to play along. If they bid at all, it was below the minimum. Others refused to bid and demanded immediate, full payment in gold. Property conveyed to the city at the east end of the avenue allowed demolition to begin there in May, 1873, but unless all owners conveyed their property, the avenue would never be completed. Twenty property owners who had been paid in full had not even removed their “obstructions” (aka buildings) as required. The board of public works moved to sell these buildings to the highest bidder. As 1873 drew to a close, a number of property owners remained adamant in their refusal to accept bonds for their properties. The old International Hotel on Jackson Street became the poster child for this refusal.¹³ A lawsuit challenging the 1872 Montgomery Avenue Act’s constitutionality also threatened the project.

Opening Montgomery Avenue

Prospects for the completion of the avenue brightened considerably in 1874. The California Supreme Court brushed aside the lawsuit recently filed. Then, in February, a large sale of bonds went through that yielded enough cash to pay off the owners of the International Hotel and other properties. The obstinance of these property owners paid off. They received cash for their properties, not bonds. On September 22, 1874 the board of public works declared Montgomery Avenue clear of all obstructions and open throughout its whole extent, although the stretch between Chestnut and North Point streets needed grading to create a gentle and continuous slope, and the whole avenue needed sewerage and paving. Title to all land taken for and composing Montgomery Avenue was now vested in the city and county. Responsibility for all further necessary work on the avenue passed into the hands of the board of supervisors. Predictably, progress stalled. Most of the avenue was little more than a quagmire. Not only was the avenue an “eyesore and a nuisance,” but property owners were slow to erect new buildings fronting on it.¹⁴ The avenue remained in bad shape through the end of 1875, although there was some planking at the east end, basalt paving stones between Union and Powell streets, and sidewalks and curbs over the crown of the Montgomery Avenue hill between Vallejo and Powell streets.



Opening Montgomery Avenue required demolishing the Miners Exchange Building. Roy D. Graves pictorial collection, BANC PIC 1905.17500 v.3:25—ALB, v.3. Courtesy of the Bancroft Library, University of California, Berkeley.

Other serious problems plagued the avenue. The 1872 decision to make the grade of Montgomery Avenue conform to the grades of intersecting streets rather than vice versa—a major cost-cutting move—meant several blocks along the avenue actually tilted. Some were as much as six to eight feet higher on one side than the other.¹⁵ It took an act of the legislature to correct this defect, and on April 3, 1876 a bill passed into law authorizing the necessary grade changes. The act created a three-person commission to assess damage to property from regrading. All this commission work took time, and the avenue remained in disgraceful condition through the end of 1876. Only those blocks south of Broadway were in anywhere near acceptable condition. “Ever since the rainy season commenced it has abounded in mud-holes of various extent and depth throughout its whole length,” wrote the *San Francisco Chronicle* on Dec 1, 1876. Crews finally began regrading work in February, 1877 and completed their work through to Chestnut Street by late October.¹⁶ The avenue got paved in a piecemeal fashion with basalt blocks from Washington to Lombard streets between August 1876 and June 1879.

Opening Montgomery Avenue did not dampen the ire of property owners on the hook for its costs. They complained the assessment burden on their properties actually lowered property values. And why, they wondered, should they bear the sole burden of opening the avenue when the whole city benefited from it. Especially peeved were property owners delinquent in paying assessments for the avenue or for its regrading. The city threatened to sell their properties to pay off the delinquencies. Naturally, some of them sued San Francisco’s tax collector to block the sales. They received temporary injunctions. On June 22, 1878 judge E. D. Wheeler, writing for the Nineteenth District Court, refused to block the sales and dissolved the temporary injunctions, on what some might view as a technicality.¹⁷ Although judge Wheeler dissolved the injunctions,

he accepted the plaintiffs' principal factual argument against the assessments and the Montgomery Avenue bonds themselves—namely, that no majority of owners in frontage in the assessment district actually requested opening Montgomery Avenue.

The Fate of Montgomery Avenue Bonds

Were Montgomery Avenue bonds valid or void? This question languished in legal limbo for three years until a state supreme court ruling on October 26, 1881 settled the matter. In deciding *Mulligan vs. Smith* the court effectively released all property owners in the Montgomery Avenue assessment district from their obligations for Montgomery Avenue bonds.¹⁸ The supreme court agreed with Judge Wheeler that the petition signed by a majority in frontage in the Montgomery Avenue assessment district was invalid. A sufficient number of legally defective signatures undermined that majority. Defective signatures included people not on the assessment roll, just one of several tenants in common on the roll, and corporate officers lacking the authority to sign. Neither the mayor's certification of the petition nor the county court's confirmation of the board of public works report conclusively proved the validity of the petition. Therefore the board of public works created by the 1872 Montgomery Avenue act had no authority to levy assessments and the county court had no jurisdiction to confirm such authority. Both the assessments and the sale of property for their delinquency were invalid and void.¹⁹

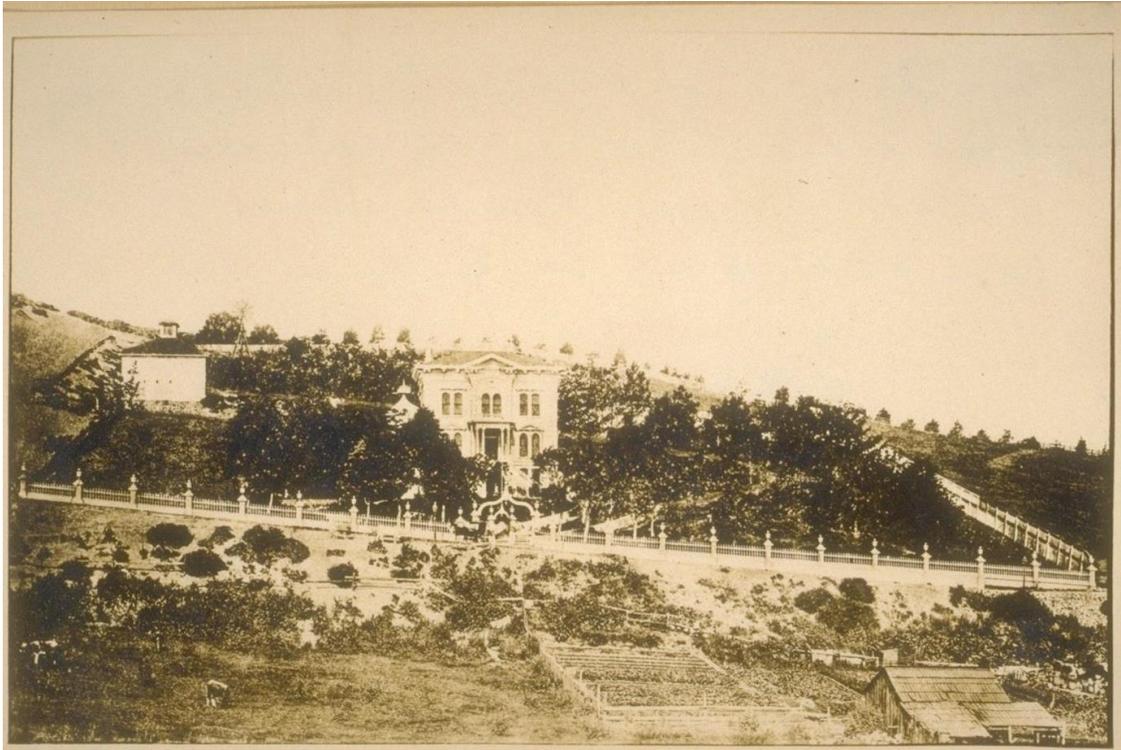
Where did that leave the bondholders? Out of luck. Although many assessments were delinquent, enough others were paid over the years to cover interest on the bonds through 1879; however, the sinking fund established to pay bond principal had virtually no money in it. Assessments did not begin flowing into it in until 1880.²⁰ As revenue collected from assessments dropped so did bond interest payments. In the fiscal year beginning July 1, 1880, a little over 20% of Montgomery Avenue bond coupons could be redeemed. Assessment payments dried up. Although some property owners continued paying assessments through 1881, by the end of 1882, even those payments ceased. For the fiscal year beginning July 1, 1882 the interest account for Montgomery Avenue bonds held 95¢, and there was just \$12,318.20 in the sinking fund.²¹ Eventually the money in this sinking fund was transferred to the city's general fund.

Many original bondholders sold their bonds for pennies on the dollar to speculators, who over the years sought various legal remedies to compel the city to pay back interest and make good on the principal. None succeeded since the 1872 Montgomery Avenue Act explicitly exempted the City and County of San Francisco from any obligation to pay off either principal or interest.²² After the bonds matured on January 1, 1903, Union Trust Co. sued the state of California seeking to recover the principal and unpaid interest on 855 Montgomery Avenue bonds in its possession. On December 21, 1908 the state supreme court blocked this last gasp attempt at recovering something for the bonds.²³ The state would not be forced to pay. The original owners along Montgomery Avenue who eschewed cash and accepted bonds for their lost or damaged property took a financial beating. Perhaps they found some solace in enhanced property values. The speculators got nothing.

Henry Casebolt and the Sutter Street Railroad

Henry Casebolt, a blacksmith, came to San Francisco in the mid-1850s and co-founded Casebolt & Darbyshire, a carriage manufacturer located on Kearny Street between Pine and California streets. When street railways first came to San Francisco, Casebolt jumped into street car manufacturing. Eventually he partnered with David Kerr and established a factory on the

southwest corner of Market and Fifth streets. Casebolt & Kerr built cars for the Front Street Mission & Ocean Railway (FSM&O), which, as noted above, Casebolt would ultimately supervise and control. On May 1, 1866 horse-drawn cars of the FSM&O began running from Sutter and Sansome streets out Sutter Street to Polk Street and along Polk Street to a depot at Broadway Street.



Casebolt owned the entire block bounded by Pierce, Vallejo, Scott, and Green streets. The structure on the extreme left is a carriage house/stable. Note how the driveway curves along gentle gradients from Pierce Street to reach it. Chinese vegetable gardens in the foreground. Jesse Brown Cook Scrapbooks documenting San Francisco history and Law Enforcement, BANC PIC 1996.003 v.34:32b—fALB, v.34. Courtesy of the Bancroft Library, University of California, Berkeley.

The FSM&O depot at Polk and Broadway overlooked Spring Valley. Something about this suburban area appealed to Henry Casebolt. He built a fine home on Pierce Street in the late 1860s²⁴ and bought real estate along the Presidio Road. He moved his carriage and car factory from Fifth and Market streets to the northeast corner of Union and Laguna streets at the end of 1872. When the FSM&O initiated service along Polk Street, horse-drawn omnibuses provided the only public transportation through Spring Valley. The area was lightly settled at the time, but omnibuses saw relatively heavy service on weekends except during the rainy season. The Presidio itself and Fort Point, as well as the Harbor View area, were attractive weekend destinations for San Franciscans. Despite the draw of these locations, the old omnibus company faltered financially. It signed its own death warrant by refusing to pick up passengers at the FSM&O depot. Miffed by this refusal, Casebolt initiated a competing omnibus line on April 7, 1867 running from the depot over the Presidio Road and on to Fort Point. The old omnibus line soon ceased operation while business boomed for Casebolt's omnibuses. He quickly added two more coaches to his fleet and, on Sundays, dispatched two coaches, rather than just one, per hour.²⁵ This new omnibus service helped push the FSM&O to profitability.



Henry Casebolt's street car factory, at the corner of Union and Laguna streets, was vacant at the time of this photograph but would soon host construction of a fleet of cars for the Presidio & Ferries Railroad. The Laguna Street wing of the factory, in a slightly remodeled form, still exists. Courtesy of the San Francisco History Center, San Francisco Public Library.

Despite the success of his omnibuses, Casebolt could see their future was dim. They were slow and had low capacity. Their route over the Presidio Road was often impassible in winter. After purchasing the unused franchise of the Presidio and Fort Point Railroad, Casebolt constructed a single track (with passing sidings) horse car line from the FSM&O depot to Harbor View, a place on "a small island in the bay near Fort Point."²⁶ The "island" was actually a long peninsula of sand. Why was this place a destination for a horse car line?

Harbor View Park

It was really two things. San Francisco's bay shore was short on sandy beach and long on mudflats. The original Presidio anchorage was on this peninsula of sand,²⁷ which ran north of the mainland from near Fort Point to Divisadero Street. In 1864 Rudolph Herman, a German émigré who arrived in San Francisco in 1854,²⁸ opened Harbor View House in the area north of Jefferson Street and west of Baker Street. It was a roadhouse/hotel, catering primarily to soldiers stationed at an army base far from any Civil War action. Prior to the Civil War various roadhouses along the Presidio Road held target shooting contests now and again, but after the war and perhaps because of it, target-shooting became the rage. Numerous shooting clubs, often organized along ethnic lines, held regular daylong contests. Shooters competed for prizes—sometimes valuable ones. Herman capitalized on the enthusiasm for target shooting and opened the National Shooting Gallery west of Harbor View House in late 1867. He received a permit for his shooting gallery—not to exceed 200 yards in length—on October 9, 1867, and the Scheutzenverein—German for "marksmen's club"—held its first shooting match there on Dec. 1, 1867.²⁹ Harbor View offered certain advantages for rifle shooting. It was relatively isolated and adjacent to open land in the Presidio. Shooters could fire on targets set in front of a sand hill backstop.

Errant shots would fly out into the bay. For forty years the Harbor View peninsula would be San Francisco's premier target-shooting venue.

Once Casebolt's horse cars began running to Harbor View, Herman could afford to develop his holdings. By 1870 he had constructed a dance pavilion³⁰ and begun landscaping his grounds. His property, now known as "Harbor View Park," offered many attractions to fraternal organizations in addition to target shooting. Patrons could dance in the pavilion, drink in the bar, picnic on the grounds, eat in a restaurant, or stroll along a sandy beach to picturesque Fort Point. In the 1880s Herman erected hot and cold saltwater baths on his property near the beach. Harbor View Park became a full-fledged family resort. By the time other old-line resorts like the Willows or Woodward's Gardens had begun to fade or had disappeared, Harbor View Park was hitting its stride. Even the development of Golden Gate Park failed to diminish Harbor View's popularity. There was no target shooting in the park, and the Pacific Ocean did not offer the same benign environment for swimming the bay did. Eventually other entertainment operators opened near Harbor View Park and the whole area remained a popular destination into the early 20th century.

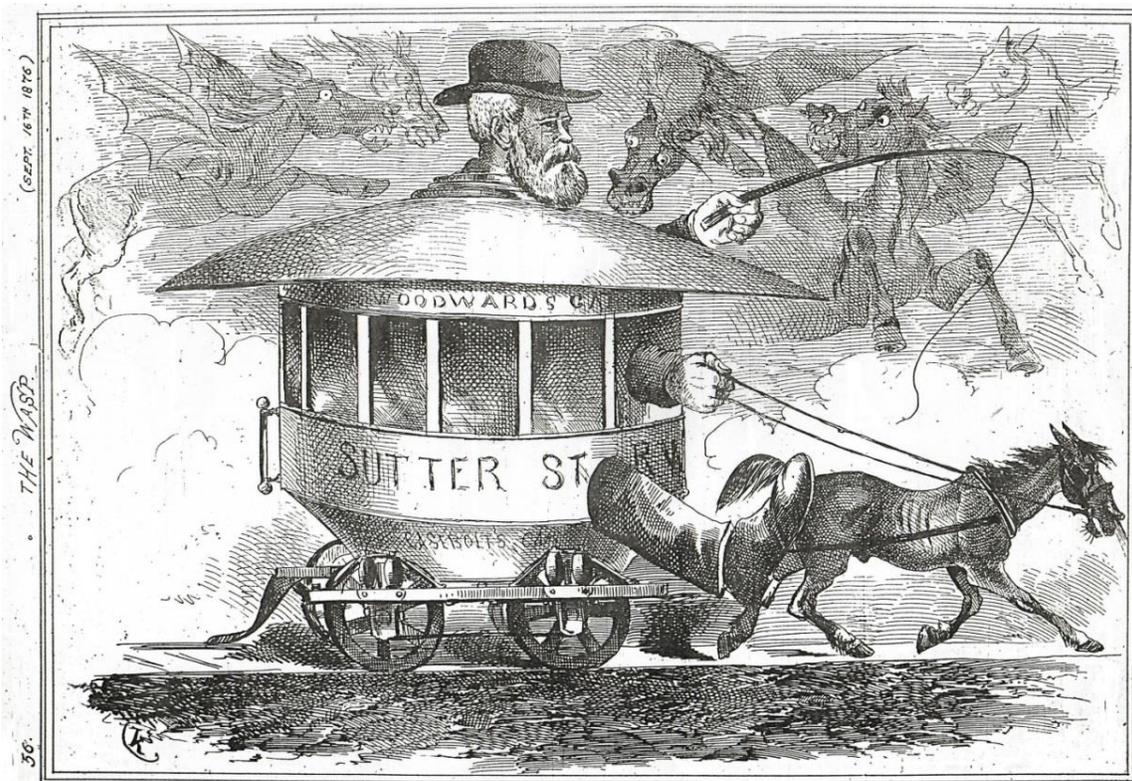


A balloon car. Allegedly, Henry Casebolt sits in the driver's seat. Courtesy of the San Francisco History Center, San Francisco Public Library.

Balloon Cars and the End of Horse Car Service to Harbor View

Notwithstanding the weekend-excursion draw of Harbor View and environs, Casebolt realized he had to economize on the "Presidio branch" of his railway. He opened the Presidio branch using heavy cars drawn by four horses.³¹ These cars ran fine on relatively level terrain, but not so well

over the uneven topography west of Polk Street. The segment between Polk and Filbert streets and Union and Gough streets featured particularly steep climbs and descents. Other up-and-down segments further taxed the stamina of the horses. Four-horse teams did not pay, despite, and perhaps because of, heavy weekend traffic to Harbor View. Casebolt responded to this drain on company resources by substituting lightweight cars and two-horse teams for the heavyweight, four-horse cars.³² He soon deemed these lightweight cars failures as well. Casebolt wanted single-horse “bobtail” cars on the Presidio branch, but its hilly terrain was too much for a single horse to handle. It was hard work even for two-horse teams. He then took two steps to address this problem. First he acquired franchise rights allowing him to run track west on Vallejo Street from Polk Street as far as Octavia Street and north along Octavia Street to connect with his old track on Union Street.³³ This route avoided the worst uphill sections of the old route from Polk Street to Union Street. Then in the fall of 1874 Casebolt began turning out a new type of super-lightweight car at his Union Street factory. This was the infamous balloon car, perhaps the most reviled vehicle in San Francisco transit history. Typical horse cars could be operated from either end, but balloon cars, like bobtail cars, could not. Bobtail cars needed a turntable or a loop track to reverse directions, but Casebolt designed the balloon car so its rounded body could revolve on a central pivot. When a balloon car driver unlatched the pivot, the car’s own horses could rotate the car body so it faced in the opposite direction. The balloon car could reverse direction anywhere. Casebolt thought this feature would prove convenient.³⁴ Unfortunately, the pivot wore out rapidly. As Walter J. Thompson the *San Francisco Chronicle* columnist put it, “The result was that in a short time every balloon car was as wabbly (*sic*) as a ship in the trough of the sea without a rudder, and to the passengers the sensations were about the same as if they were on that ship. As developers of headaches and as contrivances conducive to the dislocation of the human anatomy the balloon cars were worthy of first merit medals.” Frank Pixley, editor of the original *Argonaut*, derided balloon cars as “revolving water closets.” Derailments also plagued the balloon cars, and passengers were expected to climb out and assist the driver in heaving the car back up on the tracks. In July of 1878 Casebolt announced his intention to discontinue balloon car service. Some of the balloon car bodies ended up at Harbor View Park where picnickers used them as “summer” houses providing shelter from the prevailing winds.³⁵



Casebolt's patent absurdity, killing time and preparing material for the Glue factory.

Heartless Henry Casebolt and the ghosts of balloon car horses past. *The Wasp*, September 16, 1876.

Service deteriorated over the outer section of the Presidio branch after June of 1875. No cars ran beyond Union and Octavia streets for at least nine months. In February of 1876 the Sutter Street Railroad offered the Presidio branch to Rudolph Herman, cars and all, if he would operate the line. Herman, who had been providing connecting omnibus coach service to Harbor View from the Union Street terminus of the Polk Street line during the long periods of service suspension on the Presidio branch, declined the offer. On many days Casebolt's balloon cars ran no farther than Vallejo and Octavia streets, and on November 20, 1876 a city supervisor accused the Sutter Street Railroad of abandoning all regular street car service north of that intersection and sought revocation of the company's charter on that account.³⁶

Casebolt gave up on horse car service on the Presidio branch. Horse cars were too slow and too expensive to operate. The Sutter Street Railroad purchased two small steam locomotives of a type recently perfected by Baldwin Locomotive Works of Philadelphia.³⁷ Known as "steam dummies," these locomotives looked something like horse cars. Baldwin advertised them as "noiseless." Casebolt built five coaches in the style of mainline railroad coaches of the day at his Union Street factory. Although the Sutter Street Railroad bought the equipment for the Presidio branch, Rudolph Herman would operate the line from Octavia and Union Streets to Harbor View.³⁸ Steam dummies began running to Harbor View in late September of 1877.

By the time the Sutter Street Railroad began converting its horse car lines to cable power in 1877, Casebolt's influence in street railways was waning. He shuttered his Union Street factory in 1877.³⁹ He retired as superintendent and sold his interest in the company in January of 1880. Casebolt believed in the future of Spring Valley and Harbor View, but his successors did not. They disposed of the Presidio branch line by selling it lock, stock, and barrel to the Presidio &

Ferries Railroad in 1881 and made no move to block that railroad's application for a franchise over the route to Harbor View.⁴⁰ The Polk Street line remained a horse car backwater until late November 1888 when cable cars replaced horse cars on both Polk Street and Pacific Avenue. A four-block long horse car shuttle remained on Polk Street from Pacific Avenue to Union Street so riders on the Polk Street line could transfer to the Presidio & Ferries at Union Street.



A Presidio & Ferries cable train at Union and Steiner streets. Note the wheeled grip. Roy D. Graves pictorial collection, BANC PIC 1905.17500 v.39:349—ALB, v.39. Courtesy of the Bancroft Library, University of California, Berkeley.

The Presidio & Ferries Railroad

In September of 1878 a group of investors, which included Andrew Hallidie, petitioned the board of supervisors for a franchise to run a “wire railroad” from the intersection of Montgomery Street and Montgomery Avenue to Union Street, out Union Street to Gough Street, and from there to the Presidio Reservation “by the most feasible route,” which the franchise defined as Union Street to Steiner Street to Greenwich Street to the Presidio Reservation.⁴¹ The Presidio branch of the Sutter Street Railroad had, of course, already blazed this route. In 1879 the petitioners applied for and received a modified franchise that included a connection via Washington and Jackson streets to the ferry terminals at the foot of Market Street and an adjusted route to the Presidio Reservation via Greenwich, Baker, and Jefferson streets. The board of supervisors overrode a mayoral veto to approve this franchise.⁴²

James B. Stetson, supervisor for the twelfth ward, which encompassed Spring Valley and the Sutter Street Railroad's entire Presidio branch, defended his override vote with some telling remarks about the transportation situation in Spring Valley. “This part of the city is practically isolated from the business and other portions of the city, and can only be reached by a tedious and winding road, and is to all intents and purposes as isolated as the village of San Mateo.” The new street railroad would be “a poor man's road” and would afford “the people” “cheap travel” to the pleasures of the Presidio and Harbor View.⁴³ Another supervisor noted that property

owners in Spring Valley being assessed for the opening of Montgomery Avenue deserved modern transit service along that avenue and out Union Street.

In the spring of 1879 and prior to receiving its franchise, the Presidio Railroad—it would reincorporate as the Presidio & Ferries Railroad January 1, 1882—solicited plans and specifications for construction of a “cable road” from the intersection of Washington Street and Montgomery Avenue to Union and Steiner streets.⁴⁴ Construction commenced at Washington Street and Montgomery Avenue in mid-June of 1880 but was immediately halted by a temporary injunction and restraining order granted to the venerable Omnibus Railroad Company, which had opened its first horse car line in 1861. The Omnibus Company claimed the 1872 act authorizing Montgomery Avenue created a contractual right for it to use the avenue that could not be “invaded” by the Presidio Railroad. A superior court decision rejected this and other arguments made by the Omnibus Company and dissolved the injunction and restraining order. The Omnibus Company appealed that decision to the state supreme court but lost in a close decision. The way was finally cleared for construction to begin.⁴⁵



Presidio & Ferries cable train at Union and Steiner in the early days. Passengers bound for Harbor View will board steam dummy trains on Steiner. The four-story pump house and windmill belong to Stephen Tilton whose 1872 home now sits at 2460 Union Street. The house originally stood near the center of Tilton’s lot. WNP26.688 OpenSFHistory Echeverria/Brandt Collection.

By today’s standards, construction of the Presidio & Ferries Railroad was nearly instantaneous. In a little over a year the road was open for business. The railroad erected its power house and carbarn at the top of the Union Street hill on Sharp Place and built its cars at Henry Casebolt’s old streetcar factory on Union Street. Crews spooled out and spliced two cables on October 8 and 9, 1881. The eastern cable measured 11,000 feet once spliced; the western, 13,000. Sixteen horses were needed to pull the western cable up the hill from Van Ness Avenue to Larkin Street.⁴⁶ The first test car successfully rolled over the Union Street track from Laguna Street to

Steiner Street on October 9, 1881, thus complying with terms of the railroad's franchise. The Presidio & Ferries opened for revenue service on January 1, 1882.⁴⁷ The Presidio & Ferries ran cable trains, consisting of a lead car that gripped the cable and one or more trailer cars. The horse car section on Washington and Jackson Streets, with a one-block run on Montgomery Street and tracks on East Street adjacent to the ferry terminals, remained a fixture on the line until the end of cable car service in 1906. Initially, technological limits forced the selection of horse cars on the Washington/Jackson loop. As noted above,⁴⁸ when the Presidio & Ferries cable line was designed in 1879, the so-called "pull curve" had not been invented. In a pull curve the grip retains its hold on the cable through the curve. A cable car can drop the cable and roll around a curve by gravity—a "let go" curve—but it cannot use this method to negotiate level or uphill curves. Pull curves would have been needed at two locations, if not more, to haul Presidio & Ferries cars to the foot of Market Street. Franchise issues on Washington and Jackson streets also came into play and would ultimately block the Presidio & Ferries from extending cables to the waterfront.

The horse car connection to the ferry terminals opened in late April of 1882. Scheduled running time from the ferries to Harbor View was only thirty-six minutes.⁴⁹ Transfers from several horse car lines meant that many San Francisco residents now had easy access to Harbor View Park, which undoubtedly contributed to the rising popularity of Herman's resort. Steam dummies and coaches were stabled in a round house/repair shop on Jefferson Street opposite the National Shooting Gallery. An extension of the steam dummy segment into the Presidio opened in August of 1883.⁵⁰ The extension ran from Jefferson and Baker streets through the Presidio boundary and across marshlands to a depot near the post hospital. Some of this trackage crossed the marshlands on a trestle. This direct link to the Presidio was something the earlier Sutter Street Railroad steam dummy line had not provided. Civilian employees now had an easy commute to the Presidio, and soldiers and any family members had a reliable way to reach downtown San Francisco.

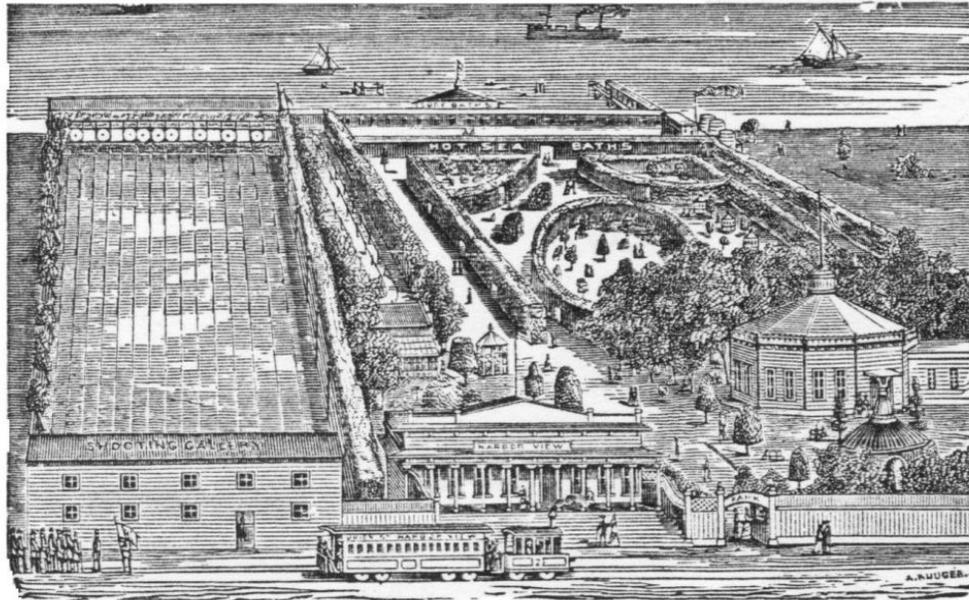


Steam dummy No. 3 and Coach B pose just north of the Presidio Station, located near today's intersection of Lincoln Boulevard and Girard Road. Marshutz & Cantrell, a San Francisco firm, built No. 3 in 1885. Beyond the train lies Thompson Reach. Note the row crops. The cultivated area would later become a firing range. Roy D. Graves pictorial collection, BANC PIC 1905.17500 v.39:364—ALB, v.39. Courtesy of the Bancroft Library, University of California, Berkeley.

Growth and Change in Spring Valley and Harbor View

The Presidio & Ferries line had a negligible effect on real estate in North Beach and the eastern slope of Russian Hill. These areas were already well developed by the time the railroad commenced service. West of Larkin Street was a different story. The *Chronicle* in a July 28, 1888 article about increased service on the Presidio & Ferries line (base service had trains running on four minute headways) estimated that in the preceding year 150 residences had been constructed between Larkin and the Presidio. In 1887 the Pacific Cable Railroad Company, a trust company controlling many of the patents applicable to cable railway construction and operation, noted that real estate values on land bordering the Presidio & Ferries route had enjoyed a 20% jump in assessed value from 1879 to 1884.⁵¹ The Spring Valley industrial landscape had changed since Sutter Street Railroad days. Many of the pioneer industries bordering Washerwoman's Lagoon no longer existed in 1880, and the lagoon itself had been partially filled with sand and its remaining waters drained by the Lombard Street sewer. Lobos Square (site of today's Moscone Recreation Center) had been graded flat, a project that marked the beginning of the end for the great sand dunes separating Spring Valley from the bay shore.⁵² By the end of the 1880s most of the dairies in Spring Valley (aka Cow Hollow) were about to shut down, condemned and shunned for producing impure milk.⁵³ Two major manufacturing facilities came to the neighborhood shortly after service on the Presidio & Ferries began: a coal gas plant at Fillmore and Bay Streets and a factory for producing heavy forgings on the site of today's Marina Safeway. This latter facility, The Phelps Manufacturing Company, advertised itself as a specialist in "cable road work."⁵⁴ By the 1880s Spring Valley's transformation from a semirural past to an urban future was in full swing, and the Presidio & Ferries was an integral part of that transformation.

The CONEY ISLAND of SAN FRANCISCO



HARBOR VIEW HOT SALT WATER BATHS

The Only Comfortable Family Baths in this City. Terminus of the Union Street Cable Road. Ask Conductors for Particulars.

Author's Collection.

Completion of the Presidio & Ferries Railroad stimulated growth in pleasure facilities at Harbor View. Rudolph Herman opened bath houses for surf bathing in July of 1883 and a hot salt water bath complex featuring porcelain tubs and private rooms in May of 1885.⁵⁵ Herman received some competition in 1882 when P. H. Hink opened Seaside Gardens (later to be known as Germania Garden) on the east side of Baker Street between Jefferson and Beach streets. Seaside Gardens immediately made a name for itself hosting band concerts at its pavilion. Perhaps this new facility contributed to overcrowding on the steam dummy line. Conditions were so bad at times patrons chose to walk back to Union and Steiner streets.⁵⁶ Hink opened his own bath house in 1883 at the corner of Divisadero and Jefferson streets. The resorts at Harbor View and Seaside Gardens were often the scene of much gaiety. *The San Francisco Chronicle* of July 1, 1889 reported on a day of concurrent picnics. At Seaside Gardens the Sharpshooters of the Alps held their annual picnic. The grounds were crowded. A merry-go-round was set up for the kids and a lottery table for the adults. Dancing couples filled the pavilion. The Garibaldi Guard and the Bersaglieri were in attendance. The paper went on to say, "The red uniforms of the guards and the green plumes of the Bersaglieri added a touch of color to the scene and captured the feminine eyes. Under the trees and in the quiet nooks the dark-eyed daughters of sunny Italy sat and talked small nothings with the boys in uniform and then danced until they were tired." Over at Harbor View the First Hebrew Ladies Mutual Benefit Association held its picnic. The beach was crowded and the bathhouses full. A string orchestra played in the dance pavilion. "The floor was crowded and the couples bumped into each other at every turn, but it did not matter; they were there for fun, and were consequently too good humored to be annoyed with such little things. The festivities were kept up until late, and the merry-makers came home tired, but feeling the better for their exercise."

The picnic season at Harbor View Park and Seaside Gardens boosted profits for the Presidio & Ferries Railroad. Another revenue generator out by Harbor View was the Presidio athletic grounds constructed by the Presidio & Ferries on a plot of former marshland filled in and leased by the estate of James G. Fair.⁵⁷ The athletic grounds occupied land bounded by Baker, Broderick, Francisco, and North Point streets. The grounds were fitted up with a grandstand capable of holding 1,500 spectators and included a clubhouse with lockers and showers for the athletes.⁵⁸ Baseball games were the most popular activity at the athletic grounds in its early years, but football, rugby, soccer, cricket, and lacrosse contests were held there as well and eventually predominated as newer baseball fields were built around town. The grounds contained a cinder track and were host to track-and-field meets, which achieved a degree of popularity in the first decade of the twentieth century, perhaps inspired by the revival of Olympic Games. The Presidio athletic grounds opened in June of 1896 and closed in the summer of 1912 in advance of site preparation for the Panama Pacific International Exposition.



Cable trains ran into the Presidio over this track on Greenwich Street from 1892 until 1906. Note the gap in the Presidio wall and the off-center cable slots. Courtesy of SFMTA Photo | sfmta.com/photo.

As the 1880s drew to a close, the Presidio & Ferries Railroad began formulating plans to extend its cable line out Union Street and into the Presidio via Baker and Greenwich Streets. The extension would eliminate steam dummy transfers and create a faster, more direct connection between downtown and the Presidio. The railroad advertised for construction bids in late 1889 but did not begin work until 1891 because the city needed to establish official grades along

streets, like Union Street, that cut through the old Laguna Survey in eastern Spring Valley. Establishing official grades for these streets was a prelude to opening them. In 1891 Van Ness Avenue ended just north of Vallejo Street at the edge of a 40-foot cliff. Most of the area north of this cliff between Van Ness Avenue and Gough Street as far as Filbert Street eventually would be covered in fill. Union Street itself would be raised ten to twelve feet above its old grade. Since the Presidio & Ferries was a profitable street railway, paying regular dividends, its financial position allowed it to secure a \$250,000 mortgage on its property in 1891 to fund the Presidio extension. The railroad raised its roadbed to Union Street's new grade by building a trestle between Van Ness Avenue and Gough Streets. Cable trains would rattle over this trestle for well over two years. The Presidio extension required installation of a pull curve at Union and Baker streets and necessitated modification of the Hallidie screw-type bottom grip used on the original line. The old Presidio terminal and steam dummy trackage within the Presidio were abandoned when the extension opened in August of 1892. Steam dummy service to Harbor View remained, but the dummies ran on Baker Street only. Baker Street received two blocks of new track in mid-1893, which allowed the dummies to reach the Harbor View baths, practically on the bay's shoreline.⁵⁹



Presidio & Ferries cable train heading downtown at Union and Mason streets. Note the roof of a second trailer. Courtesy of the San Francisco History Center, San Francisco Public Library.

Riding and Working on the Railroad

By today's standards, the Presidio & Ferries provided an enviable level of service. On the cable section, headways varied from four to six minutes depending upon the time of day. After 1888 the most common headway was four minutes. On Sundays headways were often three minutes.

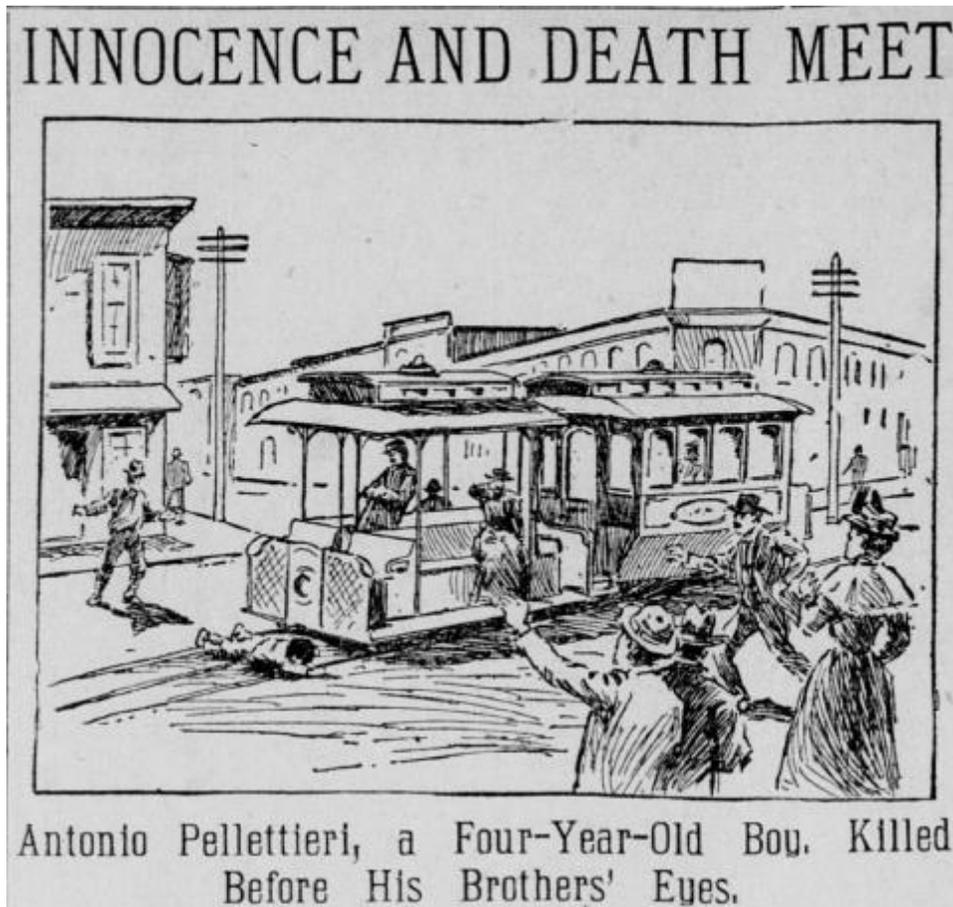
Horse cars shuttled from the ferry terminals to Montgomery and Washington streets from 6:30 AM until 10:00 PM. The cable ran from 6:00 AM until midnight, and the steam dummy pulled its railway-style coaches between Union and Steiner streets and the Presidio from 6:40 AM until 11:00 PM. Headways on the steam dummy line were fifteen minutes between 10 AM and 6 PM and thirty minutes otherwise. The Presidio & Ferries operated six two-horse cars, four steam dummies, and five coaches. The cable line's original car roster comprised twelve grip cars (also called "dummies") and eighteen trailers. By 1885 the line had ten grips and ten trailers in regular service, with fourteen grips and cars (division unknown) in reserve. In 1885 the road averaged 3,250 riders a day. The car roster expanded further when the Presidio extension opened in 1892. Rather than purchase new equipment, the Presidio & Ferries acquired second-hand grips and trailers from the California Street Cable Railroad, which had recently modernized its own fleet with the type of double-ended car still plying California Street today. Riders despised the shabby, hand-me-down cars, which were placed in service without being repaired or even cleaned.⁶⁰



Presidio & Ferries steam dummy No. 1 and railway coach on Baker Street in Harbor View. Note the skirts on the coach, fitted there to divert wayward pedestrians from unforgiving iron wheels. Roy D. Graves pictorial collection, BANC PIC 1905.17500 v.39:361—ALB, v.39. Courtesy of the Bancroft Library, University of California, Berkeley.

Gangs of hoodlums terrorizing patrons on public transportation is not just a modern phenomenon. Such a gang, none older than fifteen, boarded a Presidio & Ferries car at the Harbor View station in 1890 and proceeded to frighten the passengers, mostly women and children, with “foul language” and “low horse play.” Two conductors on the car did nothing. Once these passengers transferred to a cable train on Union Street, other “tough youngsters” amused themselves by throwing rotten vegetables at the passing train. A more serious incident occurred a year later when a group of about fifty hoodlums, male and female, crowded into a car at Harbor View. “All stages of intoxication were exhibited,” and before the car had gone a block

several fights had broken out. Four or five windows were smashed, one by the head of a young man from Sacramento. As with most such incidents that occur today, no arrests were made.⁶¹



San Francisco Call June 3, 1898

Fatal accidents on the Presidio & Ferries occurred at a higher rate than they do on the Municipal Railway today. The steam dummy line averaged one fatality a year for its first six years of operation. Inebriation may have played a part in some of these accidents as well as general carelessness. Trying to board a moving train is never a good idea. On the cable line at least four fatal accidents involved children running in front of a train, although one adult fell from a train (probably from the open grip car) and was subsequently dragged underneath it. Cable machinery was responsible for two gruesome accidents, one fatal. The nonfatal accident occurred in an underground vault at Montgomery Avenue and Washington Street. An employee engaged in oiling the sheaves and pulleys there lit a gas jet in the vault not knowing the cable had dropped below its designed level and cut through a gas supply pipe. Gas accumulated in the vault, which was sealed by a manhole cover, until it exploded. Miraculously the employee escaped with his life, though he was seriously burned. He had smelled gas but discounted it. The fatal accident occurred at the powerhouse. An employee there charged with applying resin to a belt connected to the main driving wheel dropped the resin, slipped trying to retrieve it, and dislodged the belt in a way that trapped his hand in the driving wheel. He was dragged completely around the wheel and died of a fractured skull.⁶²

Electric Dreams Realized

Endless wire rope street railways enjoyed fifteen years as state-of-the-art technology. That all came to an end on February 2, 1888 when Frank J. Sprague opened the first commercially successful electric street railway system in Richmond, Virginia. Although the Presidio & Ferries extended its cable into the Presidio in August, 1892, by 1894 the company was planning for a conversion of its main line from horse and cable power to electric traction. In June of 1894 the board of supervisors granted the company the right to power its cars with electricity. The plans contemplated a counterbalance section between Larkin and Polk streets similar to the type used for nearly fifty years on Fillmore Street between Broadway and Green streets. The company wanted to electrify the Washington/Jackson horse car section of its line, but failed to reach an agreement with the Market Street Railway, which had acquired franchise rights on Washington and Jackson streets when it absorbed the Central Railroad. The Market Street Railway had also stymied earlier plans by the Presidio & Ferries to extend its cable line down to the waterfront. So the Presidio & Ferries remained a multi-modal horse-, cable-, and steam-powered system until April 18, 1906.⁶³



Roadbed damage to Union Street between Steiner and Pierce streets. Gothic structure on left is the Bixler mansion. Courtesy of the National Archives.

The great earthquake destroyed the railroad's powerhouse. What the shaking had left undone the ensuing firestorm finished. The roadbed suffered severe damage. A large section of it gave way between Steiner and Pierce streets, and in many places the earthquake's force actually closed the cable slot itself. The fire burned up all the cars.⁶⁴ It did not reach Harbor View, but the steam dummies and their coaches would never run on Baker Street again. The Presidio & Ferries decided to rebuild itself as an electric trolley line. Its franchise rights would expire in less than eight years—too short a time to recoup its investment in a rebuilt cable line. Rebuilding could be

done on the cheap. No powerhouse would be needed. The railroad would buy its power from United Railroads. Company leaders believed the engineering challenge of surmounting Russian Hill could be solved by a variation on the counterbalance principle. City hall was reluctant to green-light electrification. Some voices argued the railroad's franchises had already expired. Not everyone was happy with this foot-dragging. One supervisor complained his friends were suffering from lack of access to the salt water baths at Harbor View. Finally, on August 27, 1906, the supervisors ratified the validity of the railroad's franchises and cleared the way for electrification.⁶⁵

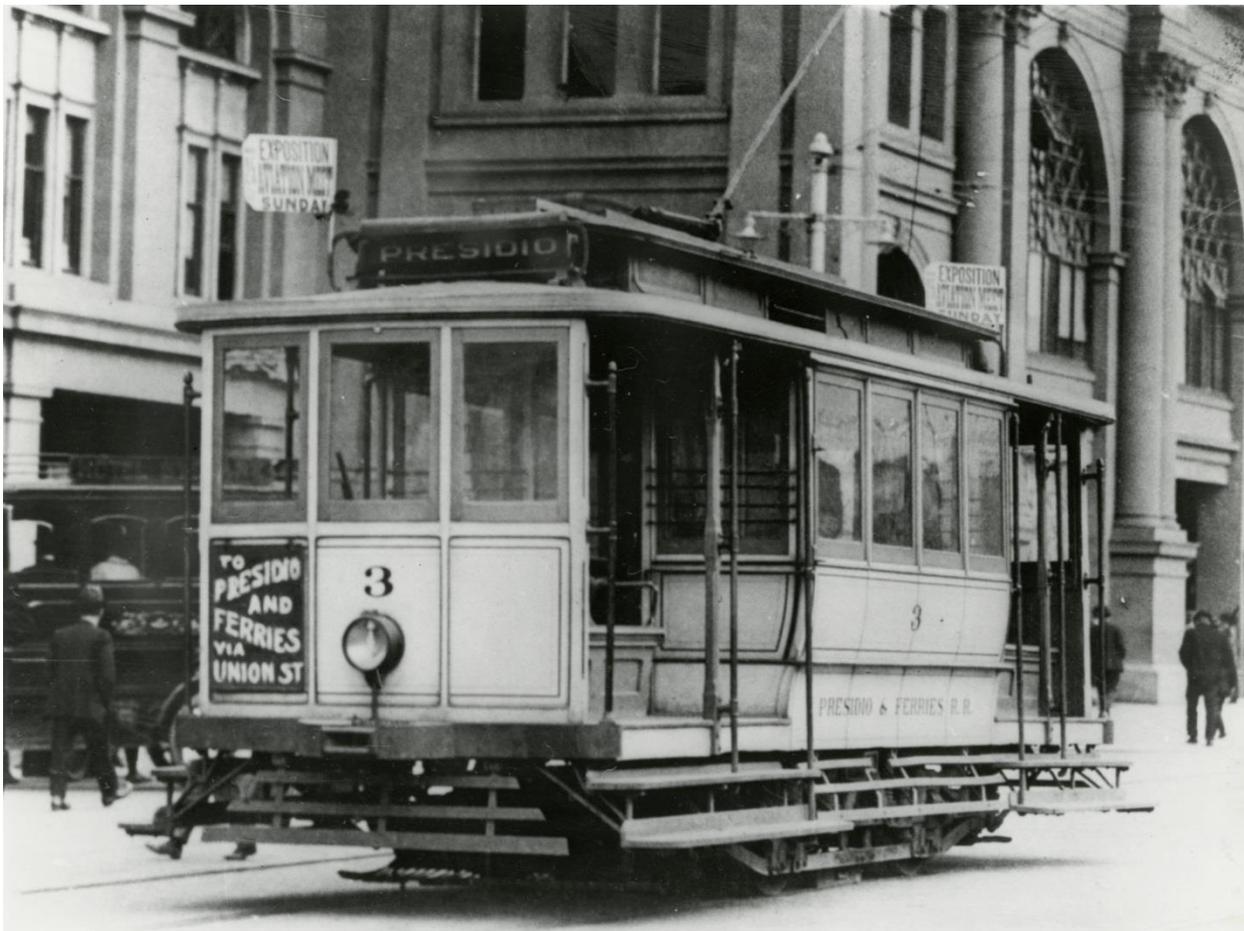


Presidio and Ferries car barn at Filbert and Gough streets. The two-story building behind the car barn once housed the Occidental Laundry. WNP27,5388 OpenSFHistory Echeverria/Brandt Collection.

By late March 1907 the old broad gauge tracks and cable conduit with its heavy supporting material had been removed from Union Street between Polk and Pierce streets and replaced by a new standard gauge roadbed. The board of supervisors balked at granting an operating permit for this segment of the Union Street line, and the city attorney rejected the railroad's performance bond.⁶⁶ Despite this opposition the Presidio & Ferries began training motormen on a short electrified section between Steiner and Fillmore streets in April, 1907 and provided limited service between Pierce and Polk streets in May, 1907 during the Carmen's Union strike. The Presidio & Ferries enjoyed good relations with its workers, who did not walk out at the beginning of the strike, but when the union men, acting under orders from their union's president, refused to issue transfers to the Polk Street line of United Railroads, they were

discharged and replaced with non-union operators. The strike effectively collapsed in November, 1907, and the Carmen's Union itself folded in February, 1908.

By the fall of 1907 four-wheel, single-truck electric cars purchased second hand from United Railroads were running out Union Street from Polk Street to Baker Street and thence to Harbor View.⁶⁷ Work on the eastern part of the line was in progress from the ferries to Powell Street but moving slowly. The board of supervisors would allow the avenue to be ripped up only three blocks at a time. Although United Railroads no longer blocked electrification on Washington and Jackson streets, work ceased during the fall harvest season on Washington Street where the line passed through the produce district.⁶⁸ No solution for running cars over the steep grade between Larkin and Polk streets on Union Street had been settled upon. All other blocks on Union Street could be ascended by the little electric cars. Finally, in June of 1908 the board of supervisors granted the Presidio & Ferries a franchise to run electric cars from Union and Larkin streets to Franklin and Union streets via Larkin, Vallejo, and Franklin streets. In the late spring of 1909 service was restored to the Presidio and the Presidio & Ferries once again connected its namesake terminals.⁶⁹



Presidio & Ferries #3, a four-wheel single truck electric streetcar purchased second hand from United Railroads, waits at the Ferry Building. Courtesy of the San Francisco History Center, San Francisco Public Library.

The Presidio & Ferries continued its profitable operation until its franchise expired on December 13, 1913. The city purchased twenty-nine obsolete four-wheel streetcars, track, roadbed, and miscellaneous equipment for \$312,535.32 and turned it all over to the recently created Municipal Railway.⁷⁰ The city also agreed to lease the nearly new car barn at Filbert and Gough streets for a

year with options for two further years. The Presidio & Ferries car barn later became the site of the eight-lane Marina Bowl and Car Barn restaurant. Harbor View Park survived the amputation of its rifle range due to the opening of Lyon Street and as late as 1910 was serving cracked crab, clam chowder, and “all short orders” at the tavern on its “beautiful grounds” while providing hot and cold salt water baths at the Baker Street terminus of the Presidio & Ferries electric car line. Some of Harbor View’s landscaping remained to grace the grounds of the California Building at the Panama Pacific International Exposition. Cars ran out Baker Street as far the Presidio athletic grounds until 1912,⁷¹ but site preparation for the exposition put an end to that as well as Harbor View Park by the middle of the year.

One physical part of the Presidio & Ferries Railroad survives in the Jackson Square Historic District. The much-remodeled horse car barn still stands at 440 Jackson Street.

Footnotes

1 The Presidio and Ferries Railroad incorporated January 1, 1882, the day it commenced revenue operation. Prior to that date it was incorporated as the Presidio Railroad and then as the Presidio and Ferry Railroad. The railroad was commonly referred to as the Union Street line. A note on ‘and’ versus ‘&’: Both forms appear in newspaper reports, with ‘and’ predominating, but I prefer ‘&’ since it appears on car body lettering.

2 The curve connecting Montgomery Avenue and Union Street worked only because street grades at that intersection allowed cars traveling in either direction to drop the cable and roll through the curve by gravity—a so-called “let go” curve. It was not 100% effective. Passengers were sometimes called upon to push. A cable car system in Dunedin, New Zealand installed the world’s first “pull curve” in 1881. This engineering advance, in which the cable is not dropped while a car negotiates a curve, came along too late to become part of the original design of the Presidio & Ferries Railroad.

3 The North Beach and Mission, Omnibus, and City Railroads held franchises on Powell, Stockton, and Dupont (Grant Avenue) streets. The North Beach and Mission and Omnibus Railroads actively opposed the Presidio & Ferries Railroad at every turn. In the face of this opposition, backers of the Presidio & Ferries considered ending the cable at the intersection of Union Street and Montgomery Avenue and operating horse cars from there to the waterfront. They likely envisioned using Montgomery Avenue, however, and not the older streets. *San Francisco Chronicle* October 30, 1879, p. 4.

4 Horse car horses could work about four hours a day and had about a four year service life. Each horse dropped around ten pounds of horse manure on the streets per day and also drenched the pavement with urine. The manure contained tetanus virus which meant that any cut or scrape suffered on the street carried the risk of fatal disease. Frequent and copious urination eliminated smooth pavements like asphalt for horse car lines because the horses tended to slip and fall on such slick, smooth surfaces. Instead, cobblestones or other forms of intermittent pavement were used to ensure traction for horse hooves. See George W Hilton, *The Cable Car in America* (La Jolla: Howell-North Books, 1982) 15 or <http://www.cable-car-guy.com/html/cchorse.html>.

5 The Front Street, Mission & Ocean Railroad would become the Sutter Street Railroad in 1872. The name change required an act of the state legislature to become official. For details on Casebolt’s financial underwriting of the railroad see H. Casebolt, *Historical Report of the*

Management and Financial Condition of the Sutter Street Rail Road Company from September 22, 1865 to June 10, 1872, (San Francisco: Cubery & Co., 1873).

6 The term vara, as used in San Francisco surveying, equaled thirty-three inches.

7 This class included Chinese and denizens of the Barbary Coast. *Daily Alta California* March 19, 1870, p. 2.

8 Peachy's lobbying: *San Francisco Chronicle* February 26, 1870, p. 1; opposition to the original route and subsequent changes to it: *San Francisco Chronicle* March 18, 1870, p. 1. The new avenue would be 6,226 feet long. Board of Supervisors, *San Francisco Municipal Reports for the Fiscal Year 1872-73*, (San Francisco: Spaulding & Barto, 1873) 490.

9 Hang the commissioners: *Daily Alta California* June 8, 1871, p. 3 and *San Francisco Chronicle* June 8 1871, p. 1. Assessments: *San Francisco Chronicle* June 9, 1871, p. 2.

10 *Daily Alta California* July 11, 1871, p. 2.

11 Status of the board of public works: *Statutes of California Passed at the Nineteenth Session of the Legislature 1871-72*, (Sacramento: T. A. Springer, state printer, 1872), 911-924; bond issue: Board of Supervisors, *San Francisco Municipal Reports for the Fiscal Year 1880-81*, (San Francisco: Geo. Spaulding & Co., 1881) 534.

12 Advertisement for Montgomery Avenue bonds: *Daily Alta California* Nov. 30, 1872, p. 2; bids rejected below 85% of face value: *Daily Alta California* April 8, 1873, p. 1 and May 8, 1873, p. 1.

13 Constructed in 1854 on Jackson between Montgomery and Kearny streets, the hotel was "the palace hotel of the Pacific" until about 1860 when it began a rapid descent to third rate status. Montgomery Avenue cut right through it. *San Francisco Chronicle* Oct. 5, 1874, p. 3.

14 *Daily Alta California* Jan 17, 1875, p. 2 and the *San Francisco Real Estate Circular*, July 1875.

15 The April 1876 *San Francisco Real Estate Circular* reported a tilt ranging from six to eight feet. *The San Francisco Chronicle* May 18, 1875, p. 3 reports an eleven foot tilt in one place.

16 Montgomery Avenue would not be graded as far as Bay Street until July 1879 and would not be graded from Bay Street to North Point Street until the late 1890s.

17 Wheeler ruled that the manifest illegality of opening Montgomery Avenue did not "cloud" the title of properties being sold by San Francisco's tax collector. He cited a state Supreme Court decision in a classic demurrer. *California Legal Record*, 1:13-14 (San Francisco: F. A. Scofield & Co., 1878), 262-263. Wheeler quashed injunctions ordered in two separate lawsuits: Louis Dutertre vs. William Ford, Tax Collector, the City and County of San Francisco, filed March 15, 1877 and Patrick Plover and numerous others vs. William Ford Tax Collector, filed March 26, 1877, Board of Supervisors, *San Francisco Municipal Reports for the Fiscal Year 1876-77*, (San Francisco: Spaulding & Barto, 1877), 267-8. Formal dissolution of the injunctions occurred on July 11, 1878. The Nineteenth District Court was a California, not a federal court. Prior to

ratification of California's second constitution in 1879 limited jurisdiction county courts were overseen by multi-county district courts of general jurisdiction.

18 The plaintiff actually lost his case. He had bought a deed to property sold to recover delinquent assessments and sued to gain possession of it from the old owner of record. The tax deed transferred no title. *San Francisco Chronicle* October 27, 1881, p. 4.

19 The supreme court granted a motion for a new trial, but that trial, and subsequent appeal, returned the same result.

20 See *Statutes of California Passed at the Nineteenth Session of the Legislature 1871-72*, (Sacramento: T. A. Springer, state printer, 1872), 911-924 for the timing of payments into the sinking fund.

21 Coupons apparently were redeemed on a first-come first-served basis. Details on Montgomery Avenue assessments, the interest account, and the sinking fund may be found in the appropriate years of *San Francisco Municipal Reports*.

22 Numerous lawsuits sought to compel the city to pay interest and principal on the Montgomery Avenue bonds. Others sought to validate deeds transferred via property sales for delinquent assessments. They all failed. One of these lawsuits even climbed the judicial ladder all the way to the U.S. Supreme Court. See the *San Francisco Chronicle* August 25, 1885, p. 5 and August 26, 1885, p. 2 for details of a U.S. Circuit Court decision and April 13, 1886, p. 8 and April 14, 1886, p. 2 for details of the U.S. Supreme Court decision.

23 See the *San Francisco Chronicle* June 24, 1904, p. 10 and December 22, 1908, p. 17.

24 Casebolt's house was "nearly completed" in March of 1868 per the *Daily Alta California*, March 11, 1868, p. 1. It stands today at 2727 Pierce Street between Vallejo and Green Streets. At the time of the *Alta* report Pierce Street was called Grant Street.

25 Omnibus line for sale: *Daily Alta California* December 18, 1865, p. 2 (advertisement); no pick-up at FSM&O depot: Casebolt, *Historical Report of the Management and Financial Condition of the Sutter Street Railroad Company from September 22, 1865, to June 10, 1872*, 1873, 3; new omnibus service to the Presidio and Fort Point: *Daily Alta California*, April 6, 1867, p. 2 (advertisement); additional coaches *Daily Alta California*, April 14, 1867, p. 2 (advertisement).

26 *Daily Alta California* March 11, 1869, p. 2 (advertisement). The line commenced service January 6, 1869. It ran down Polk Street from the depot at Broadway Street to a point between Union and Filbert streets where it traversed thoroughfares no long in existence until it connected with Union Street near Gough Street. The line then ran out Union Street to Steiner Street where it turned north for a block to Greenwich Street and then west to Baker Street (originally via Broderick and Lombard streets, later via Greenwich Street the whole way). The Baker Street portion of this route ran over a causeway perhaps constructed by Casebolt with help from Rudolph Herman, proprietor of the Harbor View House and National Shooting Gallery.

27 See J. N. Bowman, "The Spanish Anchorage in San Francisco Bay," *California Historical Society Quarterly*, 24:4 (December 1946), 319-324.

28 *The Bay of San Francisco: the Metropolis of the Pacific Coast and Its Suburban Cities: A History*, 1892, Lewis Publishing Co., Chicago IL, 1:687.

29 Permit: *Daily Alta California* October 10, 1867, p. 1; Scheutzen-verein: *Daily Alta California* December 2, 1867, p. 1.

30 First mention of the pavilion: *Daily Alta California*, October 28, 1870, p. 1.

31 The Presidio branch was also referred to as the “Harbor View branch,” the “Presidio and Fort Point branch,” or just the “Fort Point branch.” It was also referred to as the Sutter Street Railroad’s “Western Division.” Four-horse teams: *San Francisco Chronicle* May 13, 1869, p. 3.

32 The *Daily Alta California* January 27, 1876, p. 1 offers details on the useful life of horses on the Sutter Street Railroad; in 1875 the Sutter Street Railroad had 51 cars and 240 horses and spent \$15,000 on per year on new horses. The average useful life of a horse car horse was four years. For lightweight two-horse car service to Harbor View see the *Daily Alta California*, March 26, 1871, p. 4.

33 Board of Supervisors, *San Francisco Municipal Reports for the Fiscal Year 1879-801*, (San Francisco: W. M. Hinton & Co., 1880) 895. After laying track along Vallejo and Octavia streets, Casebolt moved the terminus of the Polk Street line from Broadway and Polk streets to Union and Laguna streets.

34 New terminal: *Daily Alta California* June 6, 1874, p. 4; trial run of a balloon car: *Daily Alta California*, September 1, 1874, p. 1. In the *San Francisco Chronicle* of February 4, 1938 a letter in the “People’s Safety Valve” from a former bobtail car driver confirms SF bobtail cars used turntables. For Casebolt’s views on the convenience of balloon cars see his reply to Frank Pixley in the *Daily Alta California* July 7, 1878, p. 2.

35 Thompson: *San Francisco Chronicle* April 8, 1917, p. 28; Pixley *Daily Alta California* July 7, 1878, p. 2; decision to discontinue balloon cars *Daily Alta California*, July 7, 1878, p. 2; for balloon car bodies at Harbor View Park see “The People’s Safety Valve” column in *San Francisco Chronicle* of February 4, 1938 and February 5, 1938.

36 No cars beyond Union and Octavia streets: *San Francisco Chronicle* February 24, 1876, p. 2; offer to Rudolph Herman: *Daily Alta California* February 17, 1876, p. 1; Herman’s omnibuses: *Daily Alta California* July 29 1875, p. 1; threat to revoke charter: *Daily Alta California* Nov. 21, 1876, p. 1.

37 Walter Rice Ph.D. and Emiliano Echeverria, *When Steam Ran on the Streets of San Francisco* (Forty Fort PA: Harold E. Cox, 2002), 17-24. The locomotives had names: No. 1 was named “Harbor View,” and No. 2 was named “Casebolt.”

38 *Daily Alta California* June 12, 1877, p. 1. The permit was granted June 11, 1877.

39 Casebolt offered the factory for lease in August of 1875. See the *Daily Alta California* August 6, 1875, p. 3. The *Daily Alta California* August 4, 1877, p. 1 reported a foiled safe-cracking at

the factory. The final city directory listing for the Casebolt & Son car manufactory at the northeast corner of Union and Laguna appeared in the 1876 edition.

40 Rice and Echeverria, *When Steam Ran on the Streets of San Francisco*, 24. Casebolt's successors abandoned the connection from Polk Street to Union Street over Vallejo and Octavia Streets and removed the track when the Presidio & Ferries initiated service on Union Street. *San Francisco Real Estate Circular*, November, 1881. Rice and Echeverria *op. cit.* p.24

41 Board of Supervisors, *San Francisco Municipal Reports for the Fiscal Year 1879-80*, (San Francisco: W. M. Hinton & Co. 1880) 903.

42 *Daily Alta California* December 31, 1879, p. 1.

43 *ibid.*

44 *Daily Alta California*, April 19, 1879, p. 2. The same ad appeared on subsequent dates.

45 Articles in the *Daily Alta California*, September 28, 1880, p. 1 and December 16, 1880, p. 2 contain details on the arguments and legal reasoning in this case. The court held that laws governing street railroads were of a "general nature" and that provisions in an act like the 1872 Montgomery Avenue act exempting a corporation from the uniform operation of a law of a general nature must be void. The Omnibus Railroad Company received a valid franchise to use Montgomery Avenue in 1879 subsequent to the Presidio Railroad's 1878 franchise and was in no position to assert a legal right of priority.

46 *Daily Alta California* October 10, 1881, p. 1. The reporter confuses Mason Street with Union Street several times in the article.

47 It was the only cable line besides the Clay Street Hill Railroad to use Andrew Hallidie's screw-type bottom grip—not surprising since Hallidie was an investor in the road. Mechanically, this was something of a reactionary design. Hilton, *The Cable Car in America*, 205.

48 See footnote 2.

49 *San Francisco Chronicle* April 22, 1882, p. 2.

50 *San Francisco Chronicle* August 19, 1883, p. 16.

51 Pacific Cable Railway Company, *The System of Wire-Cable Railways for Cities and Towns*, (Felton, CA: Big Trees Press, 1967). The assessment figures come from Exhibit No. 1 in an unpaginated appendix.

52 Robert Bardell, "What Lies Beneath the Marina?," *The Argonaut: Journal of the San Francisco Historical Society*, 14:2 (Winter 2003).

53 William Kostura, "The Cows of Cow Hollow," *The Argonaut: Journal of the San Francisco Historical Society*, 9:1 (Spring 1998).

54 W. H. L. Corran, *Langley's San Francisco Directory*, (San Francisco: Francis, Valentine & Co., 1889) 13.

55 Surf bathing: *San Francisco Chronicle* July 27, 1883, p. 2; hot salt water baths: *San Francisco Chronicle* May 30, 1885, p. 3.

56 *San Francisco Chronicle* April 9, 1888, p. 8.

57 For a photograph of the Presidio athletic grounds see:
<http://digitalassets.lib.berkeley.edu/calheritage/ucb/graves/figures/I0013168A>.

58 *The San Francisco Call* May 15, 1896, p. 8 and March 6, 1896, p. 7.

59 Contracts let: *San Francisco Chronicle*, December 29, 1889, p. 13; mortgage: *San Francisco Chronicle*, February 8, 1891, p. 6; Trestle: *San Francisco Chronicle*, December 8, 1892, p. 10; Baker Street track: *San Francisco Chronicle* May 4, 1893, p. 7.

60 Equipment details come from *The Daily Alta California*, October 17, 1881, p. 1, *San Francisco Chronicle*, September 29, 1885, p. 5, and from Rice and Echeverria, *When Steam Ran on the Streets of San Francisco*, 24. Hinton, in *The Cable Car in North America*, 206 claims the company had 63 cars, but he offers no breakdown of equipment type and provides no references to check his claim. The start and stop times are approximate. See *San Francisco Chronicle*, April 3, 1887, p. 10, and July 28, 1888, p. 8, and the *Daily Alta California*, April 11, 1889, p. 8 for more specific details. The *Alta* article indicates service to the Presidio began at 10 AM. This is probably a mistake. For complaints about used equipment and the Union Street roadbed itself see the *San Francisco Chronicle*, August 30, 1893, p.3.

61 *San Francisco Chronicle* September 22, 1890, p. 9 and October 19 1891, p. 10.

62 Death by dummy: *Daily Alta California*, May 15, 1883, p. 1, May 26, 1885, p. 2, October 5, 1885, p. 1, January 16, 1887, p. 8, and December 24, 1887, p. 2, and *San Francisco Chronicle*, August 11, 1888, p. 8, and January 24, 1892, p. 20; death on the cable: *San Francisco Chronicle*, March 8, 1882, p. 3, November 22, 1889, p. 5, December 2, 1893, p. 16, June 3, 1898, p. 9, and November 17, 1902, p. 8; gas explosion: *San Francisco Chronicle*, January 21, 1899, p. 12; Death in powerhouse: *San Francisco Chronicle*, February 24, 1891, p. 6.

63 Plans for electrification: *San Francisco Call*, June 26, 1894, p. 3, and March 24, 1895, p. 24; Market Street Railway blocks cable extension: *San Francisco Chronicle*, July 20, 1893, p. 5—the writer of this article apparently confused the City Railroad with the Central Railroad; Market Street Railway blocks electric line to waterfront: *San Francisco Chronicle*, February 15, 1896, p. 13, and March 2, 1896, p. 11.

64 *San Francisco Chronicle* April 30, 1906, p. 11.

65 Franchises expired: *San Francisco Chronicle*, June 16, 1906, p. 4; missing baths: *San Francisco Chronicle*, July 11, 1906, p. 3; franchises good, will “electricize”: *San Francisco Chronicle*, August 22, 1906, p. 14; supervisors approve trolley line: *San Francisco Chronicle*, August 28, 1906, p. 14.

66 Ready to operate but no permit: *San Francisco Chronicle*, March 21, 1907, p. 3; performance bond rejected: *San Francisco Call*, April 13, 1907, p. 10.

67 Electric cars to Harbor View baths (advertisement): *San Francisco Chronicle*, August 12, 1907, p. 5 (advertisement); eastern terminus at Polk Street: *San Francisco Chronicle*, September 29, 1907, p. A43.

68 Progress reports: *San Francisco Chronicle*, August 15, 1907, p. 16 and September 29, 1907, p. A43.

69 New franchise: *San Francisco Call* June 9, 1908, p. 16; Presidio service: *San Francisco Chronicle* April 21, 1909, p. 18.

70 M. M. O'Shaughnessy, *The Municipal Railway of San Francisco, 1912-1921* (San Francisco: J. A. Prud'homme Composition Co., 1921) 71. Anthony Perles, *The People's Railway* (Glendale, CA: Interurban Press, 1981) 36 puts the final purchase price at \$312,332.67.

71 Harbor View Park open (advertisement): *San Francisco Chronicle*, March 19, 1910, p. 2; California Building landscaping: Charles L. Camp et. al., *From Land's End to the Ferry*, (San Francisco: The Black Vine Press, 1942) chapter 4; cars still running: *San Francisco Chronicle*, January 7, 1912, p. 50.