



SAN FRANCISCO PLANNING DEPARTMENT

HEARING DATE: October 7, 2015

CASE NUMBERS: 2015-007181OTH: 815-825 Tennessee Street

TO: Historic Preservation Commission

FROM: Shannon Ferguson
Preservation Planner, 415-575-9074

REVIEWED BY: Tim Frye
Preservation Coordinator, 415-575-6822

RE: Landmark Designation Application submitted by John A. Loomis on behalf of Dogpatch Neighborhood Association

1650 Mission St.
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San Francisco,
CA 94103-2479

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The Department received a Landmark Designation Application dated July 20, 2015 for 815-825 Tennessee Street (Assessor's Block 4059 Lot 001A and Block 4059 Lot 001B; subject property) prepared by John Loomis, on behalf of the Dogpatch Neighborhood Association (Project Sponsor). The subject property was designed by August J. Nordin in 1926 for the Bowie Switch Co. with an addition in 1942 by William Mooser II or William Mooser III.

This memo provides an initial assessment by Planning Department Staff (Staff) for the HPC in consideration for deliberation as to whether or not the property warrants inclusion on the Landmark Designation Work Program, requires additional information or initiation as a landmark based on information presented in the application.

Property Description

The unreinforced brick masonry commercial building is located at the southwest corner of Tennessee and 19th streets. The Tennessee Street façade (west) is two-stories tall with a one story addition to the south. The 19th Street elevation (north) has a partial basement due to the slope of the street and is primarily one story with the second story located at the west. The north elevation has two signs, one at the basement level and another large sign at the first story.

Background & Previous Evaluations

- 1990:** The subject property was identified as an Unreinforced Masonry Building (UMB).
- 2001:** Surveyed as part of the Central Waterfront Cultural Resources Survey and was assigned a National Register Status Code of "4D2." In 2003, the State of California converted all National Register Status Codes (NRSC) into California Historical Resource Status Codes (CHRSC). All properties listed with a NRSC of "4D2" were converted into CHRSC of "7N1," thus identifying these properties as "Needs to Be Reevaluated"

(Formerly NR SC4) – may become eligible for NR w/restoration or when meets other specific conditions.”

- 2003:** Designation of Dogpatch Historic District. The subject property is outside the Dogpatch Historic District boundaries; however the district is located across Tennessee Street.
- 2012** Assigned a CHRSC of “5B,” identifying the property as Contributor and individually eligible Central Waterfront/Third Street Industrial Historic District.
- June 2014:** Tetra Tech determined demolition of the subject property with retention of a portion of the building incorporated into a new six story residential apartment building would not be diminish historic integrity and character of the Dogpatch Historic District and Central Waterfront Third Street Industrial District
- August 2012:** Tim Kelley Consulting determined the building was not individually eligible for the California Register of Historical Resources, but was a contributor to the potential Third Street Industrial District, a sub-area of the Potrero Point Historic District.
- July 2014:** The Department supports original survey findings and determination by Tetra Tech.
- September 2014:** Department publishes Community Plan Exemption for proposed project.
- October 2014:** Planning Commission approves proposed demolition of subject building with the retention of a portion of the building to be incorporated into proposed project for a new five-story residential building with 69 dwelling units.
- April 2015:** John A. Loomis presented testimony to the Historic Preservation Commission on the subject property.

Landmark Designation Application

The information presented in the Landmark Designation Application prepared by Mr. Loomis lists the building permits and ownership history, a description of the subject property and neighborhood, copies of patents held by the original owner, and current photographs. Not included in the submittal are copies of building permits, occupant history, historic photographs, maps, newspaper articles, original building drawings if available and other references. Mr. Loomis has provided a statement of significance for events, persons, architecture, and as a valued visual landmark. The following briefly

summarizes some of the information found in the applicant's statement of significance followed by Staff's initial assessment in italics:

- 815-825 Tennessee Street is nominated for its association with significant events. The Bowie Switch Co. played an important role in electricity and the electrification of the United States. The Bowie Switch Co. was the first innovative new technology enterprise in the San Francisco Bay Area and an early precursor to Silicon Valley. The subject property is also associated with the contribution of the Irish, Italian, and Chinese entrepreneurs and workers of the Dogpatch and Central Waterfront.

Documentation does not support the subject property's unique role in electricity or electrification of the United States, its role as the first new technology enterprise in the Bay Area, and its role as an early precursor to Silicon Valley. The contributions of ethnic workers/entrepreneurs who worked in the building to the Dogpatch and Central Waterfront is also not supported.

- The property is nominated for its association with Augustus Jessie Bowie Jr. (1872-1955) who studied electrical and mechanical engineering at MIT and registered four patents on electrical switches/products between 1914 and 1916. Bowie commissioned the subject property in 1926 to manufacture these products. Bowie should be considered the great-grandfather of Silicon Valley.

Staff's assessment is that Bowie invented and patented his electrical switches/products before construction of the subject property; therefore Bowie's important achievements are not directly associated with the subject property. In addition, Bowie's role in the development of Silicon Valley seems unlikely.

- The property is nominated for its significant architecture. Although utilitarian in character, the building is classical in proportion and scale and is as "utilitarian classical as is the Villa Emo by Andrea Palladio."¹ It is part of the urban fabric and its brick construction relates to the earlier brick warehouse across the street. The building is a unique departure in scale from other brick warehouses in the Central Waterfront. With its small scale and the residential typology of its second floor, the subject property represents a significant architectural shift in response to the shift from heavy to light manufacturing. It is also significant as a work of noted architect August J. Nordin, known for the Swedish American Hall.

Department Staff agrees the subject property is utilitarian in character. Although lacking any elaborate ornamentation, it has simple brick beltcourses that suggest a classical arrangement of base-shaft-capital. The Tennessee Street façade appears to have been symmetrically arranged prior to the current alterations. However, Staff's assessment is that the subject property is an

¹ Application for Historic Landmark Designation prepared by John A. Loomis, July 20, 2015, p. 3.

undistinguished example of a utilitarian, industrial style warehouse with minimal classical detailing. DPR form 523B states, "small industry such as the Bowie Switch Co. was typical of the later development of the Central Waterfront. The industry did not rely on access to the water nor the rail lines for distribution of its goods. Instead, it relied on the emerging trucking industry."² Department staff finds that the building is typical of the small industrial businesses in the area at this time period and does not appear to be individually significant. Department Staff acknowledges the significance of August J. Nordin as a master architect. Between circa 1897 and 1936, August J. Nordin (1869-1936) designed more than 300 buildings. Nordin's designs most frequently display Classical Revival style ornament, which was dominant in San Francisco architecture from the turn of the century through the late 1920s. Over the course of his career, Nordin demonstrated flexibility in adapting his designs to different construction methods. Surviving examples of Nordin's work demonstrate his mastery of divergent architectural styles and his skill in working with a variety of building materials. Nordin more frequently employed individualized designs as opposed to variants on a single design theme, and his strengths as a designer are evident in the careful balance of scale, proportion and ornament. Because Nordin is better known for his high style designs, department staff does not find the subject property to be an exemplary example of his work during this time.

² Tim Kelley, Department of Parks and Recreation, Building, Structure, and Object Record, July 20, 2001.

Examples of August Nordin's Work



Whiteside Apartments at 150 Franklin Street, designed by August Nordin and completed in 1912. (Google Maps)



The Altamonte Hotel at 3048 16th Street, designed by August Nordin and completed in 1912. (Google Maps)



2168-2174 Market Street, the Swedish American Hall, Landmark #267 was designed by August Nordin and constructed in 1907.



Twin Oaks Hotel, 1010 Post Street, designed by August Nordin and completed in 1907. (Google Maps)



Cristobal Apartments at 750 O'Farrell Street (1913) at top; Parking garage at 675 Post Street (1919) at bottom. buildings incorporate a Greek key motif. (Google Maps)



Edwin Bennett residence at 140 Divisadero Street completed in 1905. (Google Maps)



New Era Hall at 2117 Market Street, commissioned by Edwin Bennett and completed in 1907. (Google Maps)

- The subject property is also nominated as a valued visual landmark that has special character or meaning to the city and its residents. Prominent visual features on the north elevation facing 19th Street are two graphic murals: the HSIN TUNG YANG FOOD CO. is the only visual testament to the Chinese contribution in the Dogpatch and Central Waterfront; while The Sandwich Shop is “reminiscent of the early graphic design work of Andy Warhol in retro graphics.”³

Staff believes the features on the 19th Street elevation are signs, not murals. Murals generally serve as a means of publicly communicating ideals, values, hopes, and aspirations of a people and often serve as an alternative vision of history as well as a major medium of social criticism and protest.⁴ In addition, the features on the 19th Street facade conform to the definition of a business sign, wall sign type with parallel copy painted directly on the wall.⁵ The signs are visually prominent by virtue of their size, but the signs do not appear to be a valued visual landmark with special character or meaning to the city and its residents. Staff acknowledges that signs can be character-defining features in some situations, such as Landmark #264 Twin Peaks Tavern sign. However, Staff does not find the signs a character defining feature of the subject property.

Integrity

Based on photographs submitted with the application, it appears that the primary Tennessee Street façade has had all major openings at the first story infilled. Several of the openings have been modified from their original configuration with removal of the bulkhead. Indeed, attached permit history shows one of the windows was first modified for a vehicular opening in 1958. The second story has fared better with only one infilled opening while all other openings retain their original sash. In addition, anchor bolts have been installed at the parapet wall. Other alterations are unknown due to the lack of historic photos submitted with the application. Because the significance of the subject property has not been fully demonstrated in the application, evaluation of its integrity cannot be completed at this time.

Recommendation

Department staff finds that the subject property does not rise to the level of significance as required under Article 10 of the Planning Code for an individual City Landmark. Moreover, the subject property does not appear to meet the Historic Preservation Commission’s priorities for designation, which includes properties associated with an underrepresented ethnic/cultural association, property type or neighborhood, and modern design.

³ Application for Historic Landmark Designation prepared by John A. Loomis, July 20, 2015, p. 4

⁴ Coleman, Floyd, “Keeping Hope Alive: The Story of African American Murals,” in *Walls of Heritage, Walls of Pride: African American Murals*, Robin J. Dunitz and James Prigoff (San Francisco: Pomegranate, 2000), 10.

⁵ “Signs” General Planning Information published by the San Francisco Planning Department, November 2012. <http://sf-planning.org/modules/showdocument.aspx?documentid=8941>.

The Historic Preservation Commission may choose to:

- Add or not add 815-825 Tennessee Street to its Landmark Designation Work Program.
- Direct Staff or the project sponsor to provide additional information.
- Initiate or not initiate landmark designation based on application.

ATTACHMENTS:

Exhibit A: Parcel Map and Aerial Photo

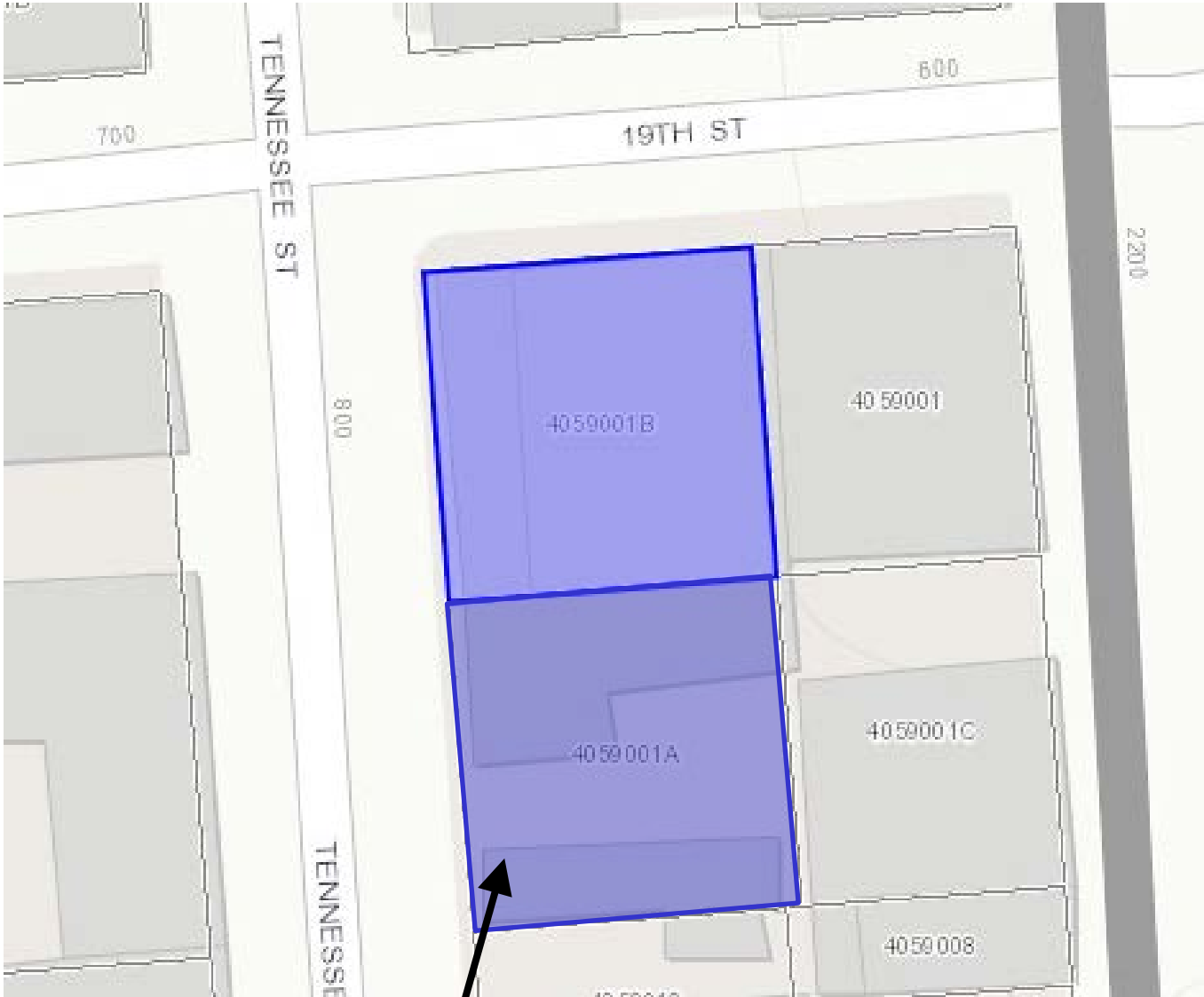
Exhibit B: Photograph of the Subject Property

Exhibit C: Landmark Designation Application for 815-825 Tennessee Street prepared by John A. Loomis (including historical research and current photos)

Exhibit D: Previous evaluations

Exhibit E: John A. Loomis testimony dated April 15, 2015

Parcel Map



SUBJECT PROPERTY



Exhibit A: Landmark Designation Application
Case Number 2015-007181OTH
815-825 Tennessee Street

Aerial Photo



SUBJECT PROPERTY



Exhibit A: Landmark Designation Application
Case Number 2015-0071810TH
815-825 Tennessee Street

Site Photo



Exhibit B: Landmark Designation Application
Case Number 2015-007181OTH
815-825 Tennessee Street

EXHIBIT C:

LANDMARK DESIGNATION APPLICATION,
815-825 TENNESSEE STREET,
PREPARED BY JOHN A. LOOMIS

21 July 2015

Dogpatch Neighborhood Association
c/o John A. Loomis FAIA
755 Tennessee St. #2
San Francisco, CA 94107
loomis.ja@gmail.com
415 529 0100

San Francisco Planning Department
Attn: Landmark Designation Application
1650 Mission Street, Suite 400
San Francisco, CA 94103-9425

To Whom It May Concern:

On July 14, 2015 Dogpatch Neighborhood Association voted to rescind its previous approval for the project at 815-825 Tennessee St. in San Francisco. This vote was the result of the discovery of new information that compromised the integrity of the official documents that represented the subject property and add value to landmark criteria.

Dogpatch Neighborhood Association thereby voted to pursue landmark status for the subject property under Section 1004 of the San Francisco Planning Code.

We present herein this submittal, the Application for Historic Landmark Designation for the preliminary application review meeting with Planning Department Preservation staff.

We look forward to meeting with your staff of professionals to assure that the application meets the standards of the San Francisco Planning Department. Please do not hesitate to contact me in advance with any questions or comments whatsoever if so desired.

Thank you for your kind attention.

Sincerely,

A handwritten signature in black ink, appearing to read 'John A. Loomis', followed by a horizontal line extending to the right.

John A. Loomis FAIA



**SAN FRANCISCO
PLANNING
DEPARTMENT**

APPLICATION FOR

Historic Landmark Designation

Planning Department
1650 Mission Street
Suite 400
San Francisco, CA
94103-9425

T: 415.558.6378
F: 415.558.6409

Landmark designation is authorized by Section 1004 of the San Francisco Planning Code. The designation process includes a review of the Landmark Designation Application by the Planning Department and the Historic Preservation Commission. Final approval is made by the San Francisco Board of Supervisors.

PRESERVING SAN FRANCISCO HISTORY

Since 1967, San Francisco's Historic Preservation Program has helped preserve important facets of the city's history. The list of designated city landmarks and landmark districts includes iconic architectural masterpieces, monuments to historic events, and places associated with cultural and social movements that have defined our city. However, there are still many more untold stories to celebrate through landmark designation.

PROPERTIES ELIGIBLE FOR LANDMARK DESIGNATION

Most San Francisco landmarks are buildings. But a landmark can also be a structure, site, feature or area of special historical, architectural or aesthetic interest. Collections of properties can also be designated as landmark districts.

Landmarks can be significant for a variety of reasons. The criteria are based on those used by the National Register of Historic Places. They include:

- Properties significant for their association with historic events, including the city's social and cultural history
- Properties significant for their association with a person or group important to the history of the city, state or country
- Properties significant for their architecture or design
- Properties that are valued as visual landmarks, or that have special character or meaning to the city and its residents
- Collections of properties or features that are linked by history, plan, aesthetics or physical development.

INCENTIVES FOR LANDMARK DESIGNATION

Landmark designation recognizes the property as a significant element of San Francisco history. There are also various incentives, including the following:

- Eligibility for the Mills Act program, which can result in property tax reduction
- Eligibility to use the California Historical Building Code
- Eligibility for land use incentives under the San Francisco Planning Code
- Eligibility to display a plaque regarding the building's landmark status

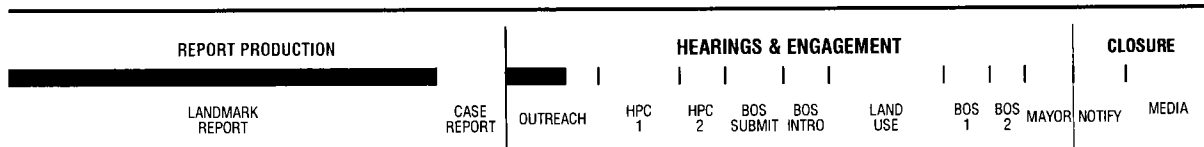
HOW TO APPLY TO DESIGNATE A LANDMARK

Any member of the public may nominate a property for landmark designation. The application must contain supporting historic, architectural and/or cultural documentation. More information about the Planning Department's Historic Preservation program can also be found here: <http://www.sf-planning.org/index.aspx?page=1825>

THE LANDMARK DESIGNATION PROCESS

The landmark designation process is a multi-step process. This includes the following:

1. Set a preliminary application review meeting with Planning Department Preservation staff. The meeting will focus on reviewing the draft designation application. Preservation staff can provide advice for improving the application, including any additional research which may be needed.
2. Submit the completed final application for review. Once it is determined to be complete, Preservation staff will place the application on the agenda for a Historic Preservation Commission (HPC) hearing.
3. During the hearing, the HPC will hear public testimony and determine if the property meets the criteria for landmark designation. If so, the Commission will vote to initiate landmark designation and schedule a follow-up hearing.
4. If the landmark designation is for a district, the Planning Commission will provide its review and comment on the proposed designation prior to the HPC making a final recommendation to the Board of Supervisors.
5. At the second hearing, the HPC will hear public testimony and vote on whether to recommend landmark designation to the Board of Supervisors.
6. An HPC recommendation supporting landmark designation will be forwarded to the Board of Supervisors and will be heard by its Land Use and Economic Development Committee. This is a public hearing where the owner(s) and members of the public can offer testimony.
7. The Land Use and Economic Development Committee will forward its recommendation on the designation to the full Board of Supervisors for a first reading. The Board of Supervisors will vote on the designation. A majority of Supervisors must vote in favor of the landmark designation for it to be approved. This is a public hearing, although no public testimony will be heard.
8. At a following Board of Supervisors hearing the proposed designation will have a second reading. This is a public hearing, although no public testimony will be heard. If the majority of Supervisors remain in favor of the landmark designation, the designating ordinance is sent to the Mayor for final signature.



COMPLETING THE APPLICATION

Please fill out all of the sections of the application. Use the checklist at the end of this application to ensure that all required materials are included. If more space is needed, please feel free to attach additional sheets as necessary. If you are unsure how to answer any of the questions, please contact Planning Department preservation staff.

Please submit the completed application to:
 San Francisco Planning Department
 Attn: Landmark Designation Application
 1650 Mission Street, Suite 400
 San Francisco, CA 94103-9425

Historic Landmark Designation Application

1. Current Owner / Applicant Information

Date: **July 20, 2015**

PROPERTY OWNER'S NAME:

DM Development Partners, LLC

PROPERTY OWNER'S ADDRESS:

**448 Linden St.,
San Francisco, CA 94102**

TELEPHONE:

415 692 5060

EMAIL:

info@dm-dev.com

APPLICANT'S NAME:

Dogpatch Neighborhood Association, John A. Loomis FAIA

SAME AS ABOVE

APPLICANT'S ADDRESS:

**Dogpatch Neighborhood Association
c/o John A. Loomis FAIA
755 Tennessee St. #2
San Francisco, CA 94107**

TELEPHONE:

415 529 0100

EMAIL:

loomis.ja@gmail.com

CONTACT FOR PROJECT INFORMATION:

SAME AS ABOVE

ADDRESS:

TELEPHONE:

EMAIL:

2. Location of the Proposed Landmark

STREET ADDRESS OF PROJECT:

815/825 Tennessee Street

ZIP CODE:

94107

CROSS STREETS:

19th Street and 20th Street

ASSESSORS BLOCK/LOT:

4059/001A - 4059/001B

LOT DIMENSIONS:

100 ft x 100 ft (each)

LOT AREA (SQ FT):

20,000 sq.ft. (combined)

ZONING DISTRICT:

UNU - Urban Mixed Use

HEIGHT/BULK DISTRICT:

58-X

OTHER ADDRESS / HISTORIC ADDRESS: (if applicable)

ZIP CODE:

3. Property Information

HISTORIC NAME OF PROPERTY (IF APPLICABLE)

Bowie Switch Co.

DATE OF CONSTRUCTION:

1926

ACTUAL YEAR

ESTIMATED YEAR

SOURCE FOR DATE OF CONSTRUCTION:

HRE 815-125 Tennessee St. Tim Kelly Consulting, August 2012

ARCHITECT OR BUILDER:

August J. Nordin

ARCHITECTURAL STYLE

Industrial

SOURCE OF INFORMATION FOR ARCHITECT OR BUILDER

HRE 815-125 Tennessee St. Tim Kelly Consulting, August 2012

HISTORIC USE

Electrical switch factory

PRESENT USE

small sandwich shop but mostly empty

PROPERTY INCLUDED IN A PRIOR HISTORIC SURVEY?

Yes No ...

SURVEY NAME:

HRE 815-125 Tennessee St. Tim Kelly Consulting, August 2012, Page 6 Turnbull, DPR 523 Update: 815

SURVEY RATING:

CHRSC 5B

4. Statement of Significance

The proposed landmark is significant for the following reason(s). Please check all that apply:

- It is associated with significant events or patterns, or reflects important aspects of social or cultural history
- It is associated with a person or persons important to our history
- It is significant for its architecture or design, or is a notable work of a master builder, designer or architect
- It is valued as a visual landmark, or has special character or meaning to the city and its residents
- It contains archaeological deposits that have the potential to yield important information about history or prehistory

Please summarize why the property or district should be designated a San Francisco Landmark. Whenever possible, include footnotes or a list of references that support the statement of significance. Copies of historic photographs, articles or other sources that directly relate to the property should also be attached.

Summary - The subject building is significant because: 1) As the Bowie Switch Co., it is the first technology enterprise in the San Francisco Bay Area and play a significant role in the electrification of the United States; 2) its founder, pioneer engineer Augustus Jesse Bowie Jr. (1878-1955), with many electrical patents to his credit, was the Bay Area's first technology entrepreneur and arguably the great-grandfather of Silicon Valley; 3) It is significant for architect August Nordin's utilitarian classicism in the buildings design which also reflects the shift from heavy to light industrial production; 4) it is a visual landmark with prominent red, white and blue graphic mural on the northern facade with proud 4ft high Chinese characters and 2ft high English text proclaiming HSIN TUNG YANG FOOD CO., a significant testament to Chinese contribution to Dogpatch and the Central Waterfront.
(SEE APPENDIX FOR FURTHER INFORMATION)

5. Property / Architecture Description

Please provide a detailed description of the exterior of the building and any associated buildings on the property. This includes the building's shape, number of stories, architectural style and materials. For example, is the building clad with wood, brick or stucco? What materials are the windows and exterior doors made of? Please be sure to include descriptions of the non-publicly visible portions of the building. Attach photographs of the property, including the rear facade.

(SEE APPENDIX)

6. Neighborhood or District Description

Please provide a narrative describing the buildings both adjacent to, and across the street from, the subject property. This includes describing their architectural styles, number of stories, exterior materials (e.g., wood or stucco cladding) and landscape features, if any. Attach representative photographs.

If the application is for a landmark district, please provide similar information describing the architectural character of the district. Also be sure to include a map outlining the boundaries of the district, as well as a list of all properties including their addresses, block and lot numbers, and dates of construction. This information may be gathered using the San Francisco Property Information Map, available here: <http://ec2-50-17-237-182.compute-1.amazonaws.com/PIM/>

(SEE APPENDIX)

9. Occupant History Table

Please list occupants of the property (if different from the owners) from the date of construction to present. It is not necessary to list the occupants for each year. A sample of every five to seven years (e.g. 1910, 1917, 1923, etc.) is sufficient. For multi-unit buildings, please use a representative sampling of occupants. A chronological list of San Francisco city directories from 1850 – 1982 is available online. Choosing the “IA” link will take you to a scan of the original document:

<http://www.sfgenealogy.com/sf/sfdatadir.htm>

Beginning with the year 1953, a “reverse directory” is available at the back of each volume, allowing you to look up a specific address to see the occupants.

**Note: Do not complete this section if the application is for a landmark district*

OCCUP:	DATES (FROM – TO):	NAME(S):	OCCUPATION:
1.			
2.			
3.			
4.			
5.		n/a see Section 8	
6.			
7.			
8.			

If the property is significant for having been used by an occupant, group or tenant important to history, please expand on this information below.

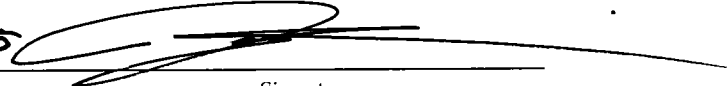
10. Public Information Release

Please read the following statements and check each to indicate that you agree with the statement. Then sign below in the space provided.

- I understand that submitted documents will become public records under the California Public Records Act, and that these documents will be made available upon request to members of the public for inspection and copying.
- I acknowledge that all photographs and images submitted as part of the application may be used by the City without compensation.

John A. Loomis FAIA

21 JUL ~~2016~~ 2015



Name (Print):

Date:

Signature:

FOR PRELIMINARY APPLICATION REVIEW



The Hsin Tung Yang (New Eastern Sun) building is a distinctive brick structure, an important actor in Bay Area history of technology and innovation, and a proud testament to the multi-cultural history of the Dogpatch / Potrero Hill / Central Waterfront neighborhoods. It is the only brick structure in these districts that is not being preserved.

APPENDIX

4. Statement of Significance

Associated with Significant Events:

The PC and Internet are to the early 21st century what electricity and electrification were to the early 20th century. The Bowie Switch Co. played an important role in this new cutting edge technology and in the electrification of the United States that so profoundly changed people's lives. Moreover, the Bowie Switch Co. was the first innovative new technology enterprise in the San Francisco Bay Area and an early precursor to Silicon Valley. In terms of landmark criteria, this is the most unique contributing significant event. But the subject property also bears broader socio-cultural significance. Given its three major enterprises: Bowie Switch Co., C.J. Figone & Sons and Hsin Tung Yang Food Co., 815/825 Tennessee St. stands as a testament to the contribution of Irish, Italian, and Chinese entrepreneurs and workers to Dogpatch, the Central Waterfront, and San Francisco.

Associated with a Person Important to our History

Augustus Jesse Bowie Jr. (Dec. 10, 1872 – June 22, 1955) is the San Francisco Bay Area's first technology entrepreneur and arguably the great-grandfather of Silicon Valley. He was grandson of Dr. Augustus Jesse Bowie (Oct. 23, 1851 – July 6, 1887) who came to San Francisco from Maryland, lured by the booming economy of the Gold Rush. In short time Dr. Bowie assumed a prominent place among San Francisco's *arriviste* elite. His grandson Augustus Jesse Bowie Jr. challenges the researcher because he assumed the exact name of his father, Dr. Bowie's son, also, Augustus Jesse Bowie Jr. In 1863 the elder Augustus Jesse Bowie Jr. received the first Bachelor of Arts degree to be awarded by San Francisco's St. Ignatius College. He went to Europe where he received a doctorate in engineering at Heidelberg, and returned to San Francisco with a German wife. Bowie Jr. the elder wrote treatises on mining in the Sierra and irrigation in the Central Valley that are still found in print.

Augustus Jesse Bowie Jr., the younger, and founder of the eponymous "Switch Co." also studied at St. Ignatius College, following which he went east and entered Harvard College, graduating with an A.B. in 1893. He went directly on to MIT where in 1896 he got an S.B. in Electrical and Mechanical Engineering, and was described as "a star man in his class".^{Bowie}

Augustus Jesse Bowie Jr.'s coming of age and intellectual interests coincided with the biggest technological shift of the 20th century - electrification. The major players of this tech revolution were Joseph Swan, Thomas A. Edison, Nikola Tesla, and numerous others. The locus of innovation in and promulgation of electrification in the United States was in the northeast, and Bowie did well to study at MIT where he undoubtedly crossed paths with Edison and others. While George Roe's California Electric Light Company in San Francisco commenced operations with a capacity to light 21 lights in 1879, despite incremental expansion San Francisco did not realize a significant electrical capacity until the 1920s. In those intervening years, Bowie was busy inventing and patenting new products, among which are:

- US1110374: 23 Jan. 1906, 15 Sept. 1914, Electrical Switch.
- US 982789: 18 Apr. 1907, 31 Jan. 1911, Electromagnetic Power Transmitting Mechanism.
- US 1230372 A: 9 Dec. 1909, 19 Jun. 1917, Electric Switch.
- US1168595 A: 26 Feb. 1910, 18 Jan 1916, Lighting-arrester.

At some point Bowie, returned to California to Sacramento where he found work with the Sacramento electric, Gas and R.R. Company. And it can be reasonably assumed that Bowie was back in San Francisco prior to January 23, 1906, and the earthquake, when he filed this, presumably his first patent application in which he stated his residence as San Francisco.:

Application filed January 23, 1906. Serial No. 297,433.

To all whom it may concern:

Be it known that I, Augustus J. Bowie, 'Jr., a citizen of the United States, residing in San Francisco city and county, State of California, have invented certain new and useful Improvements in Electrical Switches; and I do hereby declare the following to be and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same. This invention relates of electric switches; The object of the invention is to provide a switch which shall be durable and shall promptly

and surely destroy arcs formed at a complete and perfect break in the circuit to be interrupted...

With the patents created in the first two decades of the twentieth century, Bowie was poised to leverage the market potential of these new products as electrification took San Francisco full force in the 1920s, and he founded the Bowie Switch Co. in 1926 at Tennessee and 19th Streets. Despite the Great Depression, the early 1930s saw activity on the part of President Franklin D. Roosevelt to support electrification in rural America where there was both great need and great poverty. This activity culminated in the Rural Electrification Act of 1935 and extended the wave of electrification beyond the urban centers and across the continental United States, increasing demand for Bowie's products. The subsequent war effort further increased the demand, and in 1942 the facility added its most significant addition, the assembly facility to the east. On August 19, 1944, by virtue of Executive Order 9466, Roosevelt directed the Secretary of the Navy "to take possession of and operate the plants and facilities of certain machine shop companies" in San Francisco, where the Bowie Switch Co. was number 34 of 99.

World War II marked the apogee of the Bowie Switch Co. It continued to produce electrical products until 1960, but under the company of A.B. Chance. Bowie died in 1955. If William Shockley, with the transistor, is considered the father of Silicon Valley, and Lee De Forest, with the vacuum tube, is considered the grandfather, then it is not a stretch that Augustus Jesse Bowie Jr., with his switches, and as the first technology pioneer of the San Francisco Bay Area, would be the great-grandfather of – Silicon Valley.

(N.B. non of the above arguments are found in any of the HRE's for 815-825 Tennessee St.)

Significant for its Architecture

The Bowie Switch Co. was designed by August Nordin, an active early twentieth century architect know for the Swedish American Hall and other Beaux Arts style buildings. The two additions were by William Mooser II and/or III. The building very much reflects Nordin's classical training. While the building is utilitarian in character, there is careful attention to issues of classical proportion and scale. The end elevation is very close to a vertical golden section and the Tennessee St. elevation is composed of two horizontal golden sections. The symmetry and order of the two story end elevation on 19th St. is positively Palladian. The classical striation is there; blind arcade, architrave, frieze, and cornice, not with exact classical detail, but they are all very much there. The Bowie Switch Co. is as utilitarian classical as is the Villa Emo by Andrea Palladio. Moreover, this is the kind of forgotten American Classicism that Colin Rowe discovered in the 1950's in West Texas and made the foundation of his remarkable career connecting classicism to modernism in architecture.

Through the use of classical organization, Nordin consciously wanted to make both an unban and urbane statement unlike the other masonry warehouse structures in the area. The subject building occupies a corner as part of an urban fabric instead of as a stand alone building. At the same time, through its use of brick, it engages in a harmonic discourse with the larger, earlier brick warehouse directly across Tennessee, now known as the Minnesota lofts.

815-825 Tennessee's architecture also presents a unique departure in scale from the other brick warehouses of the Central Waterfront. 815/825 Tennessee St. It is smaller, and its second story is more a nod to residential typology than to industrial typology. Why this remarkable shift in scale? This because the other industrial structures in the Central Waterfront were built for smokestack industries that produced large products. The Bowie Switch Co. produced small products and here we witness the significant architectural shift in response to the shift from heavy to light manufacturing.

(N.B. non of the above arguments are found in any of the HRE's for 815-825 Tennessee St.)

Valued as a Visual Landmark with Special Character or Meaning

The most prominent visual feature on either façade of the entire building, is a red-white-and-blue painted graphic mural, 60ft. long and 7ft. high, bearing the text "HSIN TUNG YANG FOOD CO.," in 4ft. high Chinese characters and 2ft. high Roman letters. Easy to miss is a charming punctuation irregularity, *just to be sure* the text ends with both a period "." and a comma ",", a punctuation equivalent to "belt and suspenders". Hsin Tung Yang stands for New Eastern Sun, and an abstract rising sun framed by a diamond is present at the left as the logo. Below the logo on is the entrance to the still operating sandwich shop and to its right, reminiscent of the early graphic design work of Andy Warhol in retro graphics, is the painted sign "the Sandwich Shop".

It goes without saying that the 4ft. high Chinese characters, towering over the words in English half as high speak with true pride. "HSIN TUNG YANG FOOD CO.," is the only visual testament to the Chinese contribution to not just Dogpatch, but the entire Central Waterfront.

(N.B. the graphic mural is not only not discussed, but not described in any of the HRE's for 815-825 Tennessee St.)



7. Building Permits and History of Alterations

Please list all building permits from the date of construction to present. Be sure to include any alterations or additions to the building. These include changes such as window replacement, construction of a new garage, or installation of roof dormers. Also attach photocopies of building permits. Copies of building permits are available from the Department of Building Inspection, 1660 Mission Street, 4th Floor (<http://sfdbi.org/record-request-form>).

***Note: Do not complete this section if the application is for a landmark district*

PERMIT:	DATE:	DESCRIPTION OF WORK:
1.	1926	Construction of two story structure.
2.	1927	Addition of metal clad storage shed.
3.	1930	Brick extension to the south.
4.	1942	Brick assembly plant extension to the east.
5.	1942	Relocation of metal shed to south perimeter of property.
6.	1955	Repair of fire damage.
7.	1958	Change window to vehicular door.
8.	1962	Internal conversion to meat processing plant.

Please describe any additional alterations that are not included in this table. For example, have any obvious changes been made to the property for which no building permit record is available?

8. Ownership History Table

Please list all owners of the property from the date of construction to present. Building ownership may be researched at the San Francisco Assessor-Recorder's Office, located at City Hall, Room 190.

**Note: Do not complete this section if the application is for a landmark district*

OWNER:	DATES (FROM – TO):	NAME(S):	OCCUPATION:
1.	before 1926	Charles and Nellie Monson	unknown
2.	4/30/1926 - 3/18/1942	Augustus Jesse Bowie Jr.	Bowie Switch Co.
3.	3/18/1942 - 6/20/1960	A.B. Chance	Chance Switch Co.
4.	6/20/1960 - 5/1/1962	Julliard, Inc.	Key Distributing Co.
5.	5/1/1962 - 8/29/1963	Ralph H. and Eleanor F. Montali, and Edward L. and Loretta A. McKeany	C.J. Figone & Son Inc.
6.	8/29/1963 - 3/24/1983	C.J. Figone & Son Inc.	C.J. Figone & Son Inc.
7.	3/24/1983 - 9/30/1985	Seacliff Partnership	Hsin Tung Yang Food Co.
8.	9/30/1985 - 3/2015	Mai Su Wuan Lee and Mai Living Trust	Hsin Tung Yang Food Co.

If the property is significant for its association with a person important to history, please be sure to expand on this information in Section 9.

Submittal Checklist

Use the checklist below to ensure that all required materials are included with your application.

CHECKLIST:	REQUIRED MATERIALS:
<input checked="" type="checkbox"/>	Photographs of subject property, including the front, rear and visible side facades
<input checked="" type="checkbox"/>	Description of the subject property (Section 5)
<input checked="" type="checkbox"/>	Neighborhood description (Section 6) with photos of adjacent properties and properties across the street
<input checked="" type="checkbox"/>	Building permit history (Section 7), with copies of all permits
<input checked="" type="checkbox"/>	Ownership history (Section 8)
<input checked="" type="checkbox"/>	Occupant history (Section 9)
<input type="checkbox"/>	Historic photographs, if available
<input type="checkbox"/>	Original building drawings, if available
<input checked="" type="checkbox"/>	Other documentation related to the history of the property, such as newspaper articles or other references

5. Property / Architecture Description

(Adopted and modified from HRE, Tim Kelly Consultants, 2012.)

The building at 815-825 Tennessee Street, aka Hsin Tung Yang (New Eastern Sun) Food Co., is located on the southeast corner of Tennessee Street and 19th Street. The property consists of two square parcels, which cover a rectangular area measuring 20,000 square feet, with 200 feet of frontage along Tennessee Street. The terrain in the area is sloped, descending to the north and east. In relation to the subject building, the grade along Tennessee Street is flat, but slopes down to the east, along 19th Street, and the rear of the building. Tennessee and 19th streets are two-way arteries with broad concrete sidewalks and minimal landscaping in the immediate vicinity of the subject property. The property includes a paved equipment yard to the south of the main building, which is enclosed by a chain link fence and rolling gate. The yard lies between the subject building and an outbuilding, which is located at the south edge of the lot.

B. Exterior

The subject building is an unreinforced brick masonry warehouse. The majority of the building is one story, with a partial second-story that spans a portion of the front (west side) of the building. Additionally, due to the slope of the lot, the basement level is exposed at the northeast corner of the building. The building has an L-shaped plan, with a one-story ell that projects to the south from the left side of the south facade. The building sits on a concrete foundation, and exhibits an early twentieth-century industrial style. The exterior walls of the building have unfinished common-bond brick surfaces. The building is capped by a parapeted flat roof on both the one- and two-story portions. A flat-roofed monitor runs east-west at the center of the lower roof, perpendicularly abutting the partial second story.

The primary façade faces west onto Tennessee Street and is two stories high, with a one-story portion on the right side. It has a flat wall plane with a number and variety of openings at both story levels. The first story features primarily infilled openings, including a large vehicular entrance and two very large window openings on the left side, and another vehicular entrance flanked by two similar window openings on the right side. These openings are infilled with stucco panels. Between the two infilled entrances and corresponding sets of windows are two pedestrian entrances. On the left is a tall, narrow opening fitted with wood double doors that have panels with diagonal boards in a chevron pattern, typical of such industrial buildings of the late 19th, early 20th century. These doors are mounted by a louvered metal transom. To the right is another equally tall, but narrower opening with a standard-height, fully glazed (but infilled) wood door, surmounted by a fixed, twelve-light, steel sash, wire glass window. On the one-story portion of the primary façade there is a narrow vehicular entrance that is infilled with a stucco panel, but inset with a smaller metal roll-up door. To its right are two very large, infilled window openings. The first and second stories are separated by a simple, shallow brickwork beltcourse. On the second story of the primary façade are a dozen window openings, regularly spaced across the façade. The majority feature brick sills and jack arch lintels, and one-over-one, double-hung, wood sash windows. Only one opening on the left half of the façade is infilled with brick. Above the second story windows is another shallow brick beltcourse and two slightly recessed horizontal stucco panels, one on each half of the façade. The roofline is generally flat, but slightly higher

on the left and steps down on the right, with a small tab at the far right end. The parapet wall is studded by tie-rod ends and has brick coping capped with metal flashing.

The north façade of the building faces 19th Street and is primarily one-story, with the exposed basement level under the left side and the narrow end of the partial second story rising above the right end of the façade. It has a flat wall plane with few openings clad in unornamented common bond brick. The board-form concrete basement level is clad with stucco and features an entrance on the left side. This entrance consists of a vehicular opening infilled with an aluminum-frame storefront assembly with a fully-glazed door. The storefront assembly is recessed slightly so that it is situated behind the track of a sliding wood-frame and diagonal board door. To the right of this entrance is a large horizontal opening fitted with a ten-light, steel sash, wire-glass window that is covered by a metal screen. A high concrete curb runs along the remainder of the base of the wall. The concrete foundation at the basement level is separated from the brick masonry of the first story by a simple beltcourse.

The majority of the first story, and the most distinctive feature of the whole building, is occupied by a red-white-and-blue painted graphic mural, 60ft. long and 7ft. high, bearing the text “**HSIN TUNG YANG FOOD CO.,**” in 4ft. high Chinese characters and 2ft. high Roman letters. Hsin Tung Yang stands for New Eastern Sun, and an abstract rising sun framed by a diamond is present at the left as the logo. Below the logo on is the entrance to the still operating sandwich shop and to its right, reminiscent of the early graphic design work of Andy Warhol in retro graphics, is the painted sign “*the* Sandwich Shop”. (Not mentioned in HRE TKC 2012.)

To complete the north façade, at the right end is a large infilled window opening at the ground floor, matching and completing the blind arcade of the Tennessee St. façade. Above, on the second story, there is a pair of one-over-one, double-hung, wood-sash windows that are separated by a wood mullion and have a brick sill and jack arch lintel. The roofline above the one-story portion of the façade is flat and unadorned, but topped by a metal railing. The roofline of the second story features the same best courses and coping, tie rod ends, and metal flashing seen on the primary, the Tennessee St. façade.

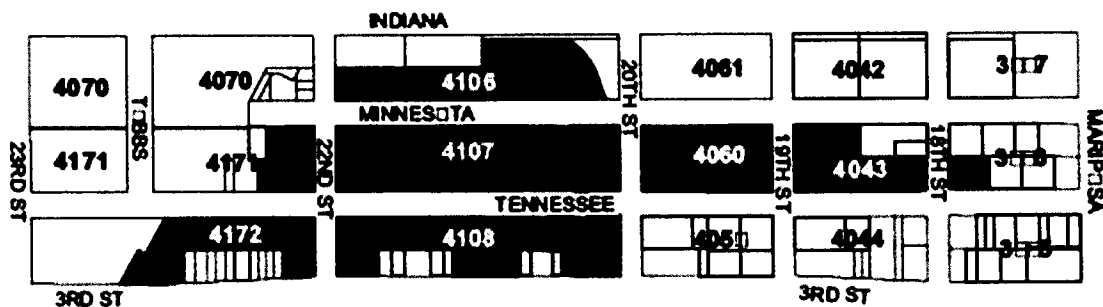
The east façade abuts the neighboring buildings and is not readily visible. A small portion that is visible above the roofline of the neighboring building consists of an unfenestrated brick wall surface that bears traces of painted signage. The roofline is flat and unadorned, but steps up at the center, corresponding to the monitor at the center of and running the length of the roof. The north facing clerestory of this monitor provides ample soft natural light to the interior space.

The south façade faces the small equipment yard that lies adjacent to the subject building. It is one-story and, due to the southern ell, features a projecting bay on the left side and a recessed bay on the right side. A small, flat-roofed, corrugated metal shed is attached to the left corner of the projecting bay and a vehicular entrance is located to its right. A large infilled window opening is located on the left, and a smaller service entrance with an insulated metal door pierces the wall, partially overlapping the infilled window opening. On the east façade of the projecting bay is a corrugated metal lean-to with a shed roof. The recessed bay is largely concealed by a broad corrugated metal canopy that extends over the projecting bay.

The outbuilding located at the southern edge of the property is a long, rectangular structure, oriented east-west. It has a high concrete foundation and is clad with corrugated metal. The gable roof is also clad with corrugated metal and has a narrow monitor along the front half of the ridge. A pair of twelve-lite, fixed, steel sash windows are located on the west façade, while a number of pedestrian and service entrances are located along the north façade.

6. Neighborhood or District Description

The subject building sits at the geographic center of Dogpatch Historic District, which is bounded on the south by Tubbs St., on the north by Mariposa St., on the east by Third St, and on the west by Indiana Street. Dogpatch is a mixed use neighborhood of residential, PDR and other commercial activities. As a result, the architectural typology broad and varied. Victorian houses are cheek by jowl with metal shed repair facilities and artists lofts. Nearby on Minnesota street stands an excellent example of adaptive reuse, a repurposed historic brick industrial building are now condominiums. Other more recent twentieth century production facilities range from well articulated works of mid-century modern design to anonymous concrete block structures with Victorian houses interspersed. Particularly characteristic of Dogpatch are these late 19th century, early 20th century houses that exhibit styles including Greek Revival, Queen Anne, Italianate, and Eastlake. Particularly notable are the clusters and pairs of identical Eastlake cottages based on the plans of San Francisco architect John Cotter Pelton, Jr.



815/825 Tennessee St. above in red. (adapted from San Francisco Planning Code: Article 10, Appendix L)

The Central Waterfront Plan calls for Adaptive Reuse to be a guiding principle for development. With projects ranging from the Esprit Condominiums, to the Piccino Café complex, there is probably no neighborhood in the Central Waterfront that has been more creative and successful in implementing Adaptive Reuse.

The immediate vicinity of 815-825 Tennessee St. is surrounded by a variety of structures. Across the street to the northwest is a one story concrete block, flat roofed warehouse building. Immediately to north across the street is a one story concrete warehouse facility with a bowstring truss roof structure. To the east the buildings on the property line are not perceptible. To the south is a one story wood frame classroom building that serves the Piccola Scuola Italiana on that property. Across Tennessee Street to the west is a notable building, a two-story brick warehouse, renovated as residences inside, the Minnesota Lofts. On the exterior it maintains its original brick façade and appearance, and a good urban neighbor to the subject building across the street.

Bibliography

- a. Kelly & VerPlank and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, June 2001.
- b. The Central Waterfront Neighborhood Plan, December 2002.
- c. Kelly & VerPlank and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008.
- d. Tim Kelly Consulting, LLC, *Historical Resource Evaluation, 815-825 Tennessee Street, San Francisco, California*, August 2012.
- e. Preservation Team Review form completed by the firm Tetra Tech, Inc. (June 2014).
- f. *Supplement to FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco*, by Tetra Tech, Inc., June 2014.

UNITED STATES PATENT OFFICE.

AUGUSTUS JESSE BOWIE, JR., OF SAN FRANCISCO, CALIFORNIA.

ELECTROMAGNETIC POWER-TRANSMITTING MECHANISM.

982,789.

Specification of Letters Patent. Patented Jan. 31, 1911.

Application filed April 18, 1907. Serial No. 368,950.

To all whom it may concern:

Be it known that I, AUGUSTUS J. BOWIE, JR., a citizen of the United States, residing in San Francisco, county of San Francisco, State of California, have invented certain new and useful Improvements in Electromagnetic Power-Transmitting Mechanism; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to electro-magnetic transmitting mechanism characterized by a positively operated driving member and a driven member in inductive relation to the driving member, one of said members being provided with an electric winding to generate a magnetic field in which the other member operates, whereby movement of the driving member will develop a certain stress or pressure in the driven member serving to move the latter.

The primary objects of the invention are to provide a simple and efficient power transmitting mechanism, which affords great flexibility and ready control and practically eliminates vibration and wear between the parts.

In the accompanying drawings:—Figure 1 is a longitudinal section of one form of machine embodying the invention; Fig. 2 is an end view thereof, partly in section; Fig. 3 is a side elevation of the rotary driven member; Fig. 4 is a longitudinal section of a modified form of the invention; Fig. 5 is an end view, partly in section of the machine shown in Fig. 4; Fig. 6 is a fragmentary view of the rotary driven member; Fig. 7 is a longitudinal section of a modification in which the driving and driven members are mounted upon parallel shafts; Fig. 8 is an end view thereof; Fig. 9 shows in side elevation an application of the invention to a change or multiple speed gear; Fig. 10 is a similar view of a modified form of multiple speed transmission; Fig. 11 illustrates, in side elevation, the application of the invention for differential driving; Fig. 12 shows, in end view, the employment of multiple driving members with a single driven member; Fig. 13 shows the application of multiple transmission

mechanisms uniting two lines of shafting; Fig. 14 illustrates the application of the invention for reversing the direction of the driven shaft; Figs. 15, 16, and 17 are details of a modified form of the disk or rotor.

The ordinary forms of power transmission gear employ mechanical contact to transmit power from a prime mover to the driven element or secondary mover, and this transmission is usually effected by shafting, positive clutches, positive gears, belting, or friction clutches, which last allow the secondary element to be gradually brought up to speed by rubbing contact between the surfaces of the clutch members. In all of these forms of transmission mechanism, and more particularly in the case of friction clutches and gearing, the unavoidable wear on the parts presents a serious difficulty and the mechanism is generally lacking in flexibility and tends to take up and transmit vibrations, which increases the wear on the parts in contact and also detracts from the efficiency of all of the mechanism on both sides of the transmission devices. Moreover, the older types of power mechanism all involve considerable difficulty and the employment of much energy in the control thereof, to wit, in throwing them in and out of commission and changing from one speed to another. The present invention, as hereinbefore indicated, is intended to obviate these difficulties and to provide a transmission system which is absolutely independent of mechanical contact, and therefore devoid of wear, which possesses great flexibility without liability to vibration and is capable of absolute control with a minimum expenditure of energy and without the usual sudden jar or shock which characterizes the change of condition in the ordinary types of transmission mechanism. Furthermore, the invention contemplates the provision of transmission mechanism which will possess the advantageous characteristics of all of the older forms of direct transmissions, whether they be of the clutch type or of the gear type.

When an electric conductor is moved in a magnetic field, across the lines of force, a difference of electrical pressure or potential between the ends of the conductor will be generated, said pressure or potential vary-

ing directly with the lines of force which the conductor cuts in a unit time. If, while the conductor is being moved, as described, its two ends be connected, by another conductor not moving in the field of force, a current will flow in the circuit so formed, the strength of which is determined by Ohm's law, viz., the current equals the voltage generated in the moving conductor, divided by the resistance of the circuit. Under these conditions of operation, power is required to move the conductor across or through the magnetic field, said power being substantially equal to the power generated in the electric circuit, less frictional losses. The present invention is based upon this principle of operation, and, in its fundamental aspect, the invention comprises a magnetic circuit having an air gap and a magnetizing coil and a conductor of appropriate shape and design inserted in the air gap. Obviously, either element of the system, as thus broadly outlined, may be either the primary or the secondary, to wit, the driving or the driven element, but in the description of the invention, to be hereinafter more specifically set forth, it will be assumed that the primary or driving element consists of the mechanism carrying a magnetic circuit, with the air gap and magnetizing coil, and the secondary or driven element is the conductor inserted in the air gap. While this broad designation is adapted for, in a measure, simplifying the description of the apparatus, it is to be distinctly understood that the reverse arrangement of the elements considered as driving or driven members may be employed, and is within the scope of the appended claims.

40 The primary element is driven by extraneous power applied thereto, and the secondary or driven element is so arranged, relative to the primary, that the rotatory magnet with its air gap, will generate a difference of electric pressure between certain parts of the secondary conductor. The design of the conductor and magnetic circuit is such as to provide a suitable return circuit for the current which will then flow in the conductor, and said return circuit is preferably arranged so that no voltage is generated therein, but, if desired, the construction may be such that a voltage is generated therein which may be made to increase the total voltage and hence the current. Under these conditions, the voltage developed will be proportional to the difference of speeds of the air gap magnet and the conductor. The circulation of current in the secondary conductor will cause the secondary element to exert a pull of P lbs. on the primary. This pull multiplied by the difference in the speed of the primary and secondary at the place where the voltage is generated will represent

the energy of the circulating current. Since action and reaction are equal, the pull P will be transmitted to the secondary, and, if the latter moves, it will develop and deliver energy at a rate equal to the product of P and its linear velocity. In other words, if we consider the present case in which the conductor or secondary element runs in an air gap and the velocity of the prime mover is V_1 feet per second, and that of the secondary mover is V_2 feet per second, then PV_1 ft. lbs. per second equals the total energy or output of the prime mover, and PV_2 ft. lbs. per second equals the energy or output of the secondary mover, and $P(V_1 - V_2)$ ft. lbs. per second equals the energy employed in the circulating current in the secondary, or, in other words, the lost energy. Thus, provided current may be made to flow within the secondary, the primary will drive the secondary, without mechanical connection, but with a certain slip, the velocity of the secondary being always somewhat less than that of the primary. It will be apparent that the apparatus may thus be employed as a clutch with a certain definite slip, which latter, by proper design, may be made as small or as large as desired, to suit the particular exigencies of any individual case.

Referring to Figs. 1, 2 and 3 of the drawing, 1 indicates a power shaft, which is driven from any suitable prime mover, and upon said shaft there is secured a magnet consisting of a central core having radial projections 2, a connecting yoke piece 2' from which extend pole pieces 3 having faces lying adjacent the corresponding faces on the arms 2 and producing air gaps between said faces. Mounted upon the core is a coil 4, the opposite ends of which are connected with slip rings 8 and 9, upon which bear conductor brushes 14 and 15, respectively, which are connected with leads 10 and 11 from any suitable source of electric power. The rheostat 13 is interposed in one of the leads to regulate the current delivered to the coil 4, and a switch 12 is employed to make and break the circuit. The energization of the magnetic coil causes magnetic currents or lines of force to be set up in the body of the magnet and to flow across the air gaps 5 between the pole faces. Mounted loosely on the shaft 1, concentric with said shaft and projecting within the air gaps, is the secondary conductor which is preferably and conveniently constructed as a cylinder 6, having its ends of enlarged or increased cross-sectional area and provided with a series of slots in its surface parallel to the axis. The slitted arrangement of the armature is designed to cut down eddy currents and to give direction to the electric current generated, while the increased cross sectional area of the cylinder provides an adequate

conductor for the accumulated currents which flow therein from the metal of the cylinder included between the slits.

The magnet may be divided longitudinally in order to facilitate its mounting upon the shaft and the portions of said magnet may be rigidly connected together by any appropriate means. The pole pieces on the two halves of the magnet are preferably arranged opposite each other and alternate with blank spaces of about equal area. Secured to the cylinder 6, and constituting the support therefor is a pulley 7 loosely mounted on the shaft 1 and said pulley may constitute an element from which power is taken from the rotatory cylinder 6, which forms the secondary element of the transmission system. For transmitting small powers, a permanent magnet may be substituted for the electromagnet hereinbefore referred to.

The operation of the apparatus, as thus described, is substantially as follows:— When the secondary element 6 is at rest and the primary mover, viz., the electro-magnet, is being rotated by means of extraneous power applied to shaft 1, and switch 12 is closed, the secondary conductors of the drum or cylinder 6, formed by the metal between the successive slits therein, will be cut by lines of force passing between the poles of the magnet and will consequently have a definite electrical pressure generated therein. This pressure will in all cases be in the same direction, viz., parallel to the axis, and will cause current to flow in paths indicated generally in Fig. 3, to wit, along the portions of the cylinder defined by the slits, and moving through one air gap between the pole faces, thence through the enlarged end of the cylinder, and back through the portion of the cylinder not included between the pole faces, and thence passing through the next air gap in the series, through the other enlarged end of the cylinder to the place of beginning. The current generated under each pole will, of course, divide, part flowing each way through the enlarged ends, or in opposite circumferential directions. As hereinbefore explained, this flow of current in the secondary will cause the latter to rotate, and the energy of its rotation may be utilized by a belt placed upon pulley 7.

It will be noted that mechanism such as just described has practically all of the advantages of a friction clutch, as a means for transmitting energy, without, however, possessing the inherent objection to friction clutches incident to the great wear imposed upon the rubbing surfaces, which must, therefore, be made very large to allow for the consequent heating. Should it be desired to cut out this clutch like transmission mechanism, after the apparatus gets up to

speed, without interfering with the operation of the primary or magnetic mover, a friction, or other mechanical clutch 7', may be associated with the pulley 7, in the manner shown in Fig. 1. The hub of the clutch 7' slides on a feather on the shaft, and through a lever or corresponding device may be made to engage the hub of 7, and then the magnetic clutch may be cut out. The clutch 7' may be made to operate by electric attraction if desired, in the manner commonly used for such work. Where the pulley 7 drives a load which is liable to run away, or when it is desired to stop the pulley quickly, a brake may be employed. In this event 7' will be rigidly attached to 7, and the pulley 7'' will be loose on the shaft. On the pulley 7'' is a brake. If desired this brake may be mechanically or electrically controlled, so as not to be released until current is turned on to coil 4, or until this current reaches a predetermined value, or else the releasing of the brake may throw current into coil 4; and also breaking the circuit through 4 may set the brake.

Current for the magnetic coil of the prime mover may be derived from an independent source, as hereinbefore indicated, or such current may be furnished by a generator of any preferred form attached to or driven from said prime mover, and, if desired, the magnetism of the prime mover itself may be used to produce a field for this current generator. In any of the arrangements indicated a rheostat or other convenient means may be employed to control the current flowing in the primary magnetic coil, so that the secondary may be started up gradually or its speed altered to any desired degree, while it is running. It will be noted that this control, dependent as it is upon the mere shifting of the rheostat, is exceedingly simple, and, inasmuch as the slip and the torque in the secondary mover are dependent on the strength of the primary magnet, the ready regulation of the latter by means of the rheostat affords a mode of control that is particularly advantageous where nice gradations of speed are desired.

In Figs. 4, 5 and 6 there is illustrated a modified form of power transmitting mechanism which differs in construction but not in mode of operation from that heretofore described. Referring to said figures, 16 indicates the shaft which is driven from a suitable source of power and keyed upon said shaft is an electro-magnet 17 provided with a central core and radial arms terminating in pole faces 18 which lie opposite each other in the two magnet halves and alternate with blank spaces. Mounted upon the central core is the magnet coil 19, the

energization of which produces a magnetic flux in each of the air gaps 20, formed between the pole faces 18. Mounted loosely upon the shaft 16 and surrounding the magnet 17 is a generally cylindrical frame formed by spider-like members 22, 23, between which is rigidly secured a disk 21 which constitutes the secondary or driven member of the electro-magnetic transmission mechanism. Said disk 21 is provided with radial slots, to divide the surface of the disk into radial sections, which serve the same purpose as the sections in the cylinder 6, in the construction hereinbefore described. Said disk 21 is concentric with the magnet 17 and projects into and through the air gaps formed between the several pole faces 18, and the inner and outer peripheries of the disk are thickened or increased in cross-section to produce low resistance paths for the currents generated in said disk in a manner altogether similar to the arrangement hereinbefore described. The cylindrical member, which supports the disk 21 may conveniently constitute the support for the means for transmitting the power developed by the rotation of this disk, and in the present instance, this transmitting means is driving pulley 24, formed on one end of member 22. Current is supplied to the magnet coil 19 from insulated slip rings 29 and 30, which cooperate with the brushes 31 and 32 connected with a source of current supply, which slip rings are connected with brushes 26 and 25, respectively, on the spider-like member 24, which latter brushes bear upon insulated rings 27 and 28, respectively, concentric with the shaft 16 and secured to the side of magnet 17, said rings 27 and 28 being connected to the respective ends of the magnet coil 19.

When the magnet 17 is positively driven from a suitable source of power applied to the shaft 16 and current is passed through the coil 19 of said magnet, rotation of disk 21 is set up, under substantially the same conditions as rotation of the drum 6 is effected in the machine hereinbefore described. The direction of flow of the induced currents in disk 21 is graphically illustrated in Fig. 6. It will also be noted that the secondary element, to wit, the revolving cylinder formed by members 22 and 23, together with band pulley 24 may be modified to dispense with one of the spiders, viz., 22, so that the cylindrical member will overhang the magnet 17. Under these conditions, slip rings 28 and 29 may be connected directly to the respective ends of the magnet coil without the interposition of the brushes 25, 26 and contact rings 27 and 28.

The conductor of the secondary element may be of any desired metal or combinations of metals and may, if desired, be

laminated. If the element be made of copper, a high degree of conductivity is obtained. By making it of iron or steel its strength is increased and the necessary magnetizing power is decreased and hence the size of the magnet coil may be correspondingly decreased. These general considerations apply as well to the modifications shown in Figs. 1, 2, and 3.

A convenient and efficient construction of the secondary element is that in which the combination of metals is effected by slotting or recessing the metal forming the faces of the element and applying another metal conductor in the slots thus formed. For example, in the disk form of secondary element shown in Figs. 4, 5 and 6 the construction may be varied to that form shown in Fig. 15, in which the disk 90 is provided with radial slots 91 in which are inserted copper bars 92, which are united at their inner and outer ends by copper rings 93 and 94. In this particular form of the secondary element the copper constitutes a closed circuit for the induced currents. In applying the same general principle of construction to the drum type of secondary element, as shown in Figs. 1, 2 and 3, the well known squirrel cage form of armature may be substituted for that hereinbefore described, with good effect.

In Figs. 7 and 8 there is shown an application of the invention which admirably adapts the same as a substitute for gearing for driving one shaft from another one parallel therewith. In this construction the electro-magnetic element, with its air gap, is similar to that shown in Figs. 4 and 5. 33 is the shaft, driven from a prime mover or other suitable source of power, said shaft having magnet 34 rigidly mounted thereon, said magnet being provided with pole faces 35, facing each other and forming an air gap 37. These pole faces, as shown, are continuous, but, if desired, the magnet may be constructed with separate isolated pole faces arranged opposite each other, as in Figs. 4 and 5. Magnet coil 36, mounted upon the central core of the magnet, when energized by suitable current, causes a magnet flux to be set up across the air gap 37. The disk 38, which constitutes the secondary element is conveniently mounted upon a central spider or equivalent support 39, which is fast upon shaft 40, which latter is the driven element. The shafts 33 and 40 are so located that said disk 38 projects within the air gap 37 in such manner as to cut the lines of force traversing the air gap, so that, when the magnet 34 is rotated with its shaft 33, and current is supplied to the coil 36, disk 38, with its connected shaft 40, is likewise caused to revolve, the speed of the latter depending upon the speed of said magnet 34, and the strength of the current flowing in magnet

coil 36. The slip rings and cooperating elements for supplying current to the magnet coil 36 are not shown in this figure, but it will be understood that they are to be applied in substantially the same manner as shown in Fig. 1. It will also be observed that speed of the variation of shaft 40 may be effected by shifting the shafts toward or from each other, thereby causing a greater or less amount of the disk 38 to project within the air gap.

In all of the constructions heretofore described, instead of providing the magnets with alternate poles and blank spaces, practically the whole available area of the magnet may be used to constitute an air gap by making the poles on each side alternately of opposite polarity. This may be accomplished by providing a winding for each pole, adjacent poles on the same side being wound in opposite directions, and the central winding, as illustrated, being omitted.

Fig. 9 shows an adaptation of the invention for obtaining a change or variable speed in the driven shaft from a driving shaft running at a fixed speed. Referring to said figure, 41 is the driving shaft, and 42, 43 and 44 are electro-magnetic clutches or transmission mechanism of the type shown in Fig. 1, for example, with the pulley member 7 in each case replaced by a spur gear 48, 49 and 50, respectively. These gears are of gradually increasing size and mesh with correspondingly reduced gears 51, 52 and 53, fast upon the shaft 54. It will be apparent that when any one of the elements 42, 43 or 44 are energized by an electric current, it will cause the corresponding gear attached to its secondary element to be rotated, and thereby drive the shaft 54 at a corresponding speed, the other intermeshing gears running idly. By this means the shaft 54 may be driven at any desired speed by coupling the appropriate electro-magnetic transmission mechanism to shaft 41 by merely closing the appropriate circuit.

Fig. 10 illustrates the application of a series of electro-magnetic transmission mechanisms, of the general type shown in Fig. 7, for imparting variable speed to a parallel shaft. In this figure, 103 is the driving shaft which is rotated from a suitable source of power, upon which is rigidly mounted a series of electro-magnetic elements 100, 101, and 102, of the same general type as that shown in Fig. 7, but of successively diminishing diameters. With each of the elements 100, 101 and 102 cooperates a secondary element or disk 104, 105, and 106 which increase in size proportionately as the cooperating elements diminish. By energizing the coils of any one of the elements 100, 101, or 102, it will be apparent that the speed of shaft 107 may be varied accordingly.

The invention also finds a particularly

advantageous application as a substitute for the ordinary type of differential transmission gear, such, for example, as is usually employed in driving automobiles. Such an application is illustrated in Fig. 11, in which 55 is the main shaft driven from the engine or other prime mover, and has mounted thereon electro-magnetic power transmission mechanisms 56 and 57 of the type hereinbefore described, and, as illustrated, having the same general characteristics of construction and operation as the form shown in Figs. 1, 2 and 3. The gears 58 and 59, which are connected to the secondary elements of the respective electro-magnetic mechanisms mesh with gears 60 and 61, respectively, on shafts 62 and 63. By regulating the current delivered to the magnet coils of the elements 56 and 57, it will be apparent that any relative speed may be maintained as between the driven axles 62 and 63. If said shafts 62 and 63 are connected to drive the wheels of an automobile, for example, the proper regulation of the relative speeds of the shafts 62 and 63 may be made to exactly compensate for the difference in speeds of the inner and outer wheels of the automobile when turning a corner, and thereby avoid the slip of one or both of the wheels of the vehicle, which is a prevalent evil in automobiles employing the ordinary type of differential gear. The accurate regulation of the current supplied to the coils of elements 56 and 57 may be effected by connecting the rheostats by means of which the current strength is regulated, to the steering gear of the automobile in such manner that when the steering gear is operated to turn the machine, the current to the transmission mechanism controlling the outside wheel will be increased and that to the corresponding mechanism controlling the inside wheel will be appropriately diminished, so that the relative speeds of the two wheels will be exactly regulated as to avoid slipping of the wheels. Of course, the tendency of the automobile wheels to slip will be more or less obviated by the flexibility of the electro-magnetic clutches, themselves, as the secondary elements are capable of a certain amount of slipping themselves, without interposing any wear or shock on the rest of the mechanism so that even if the current supplied to the magnets is not accurately regulated to compensate for the turning of the machine, the wheels of the latter will nevertheless take up a differential speed incident to the turning movement, without imposing any strain on the driving mechanism, and with little or no tendency of the vehicle wheels to slip.

Fig. 12 illustrates the application of several prime movers, to drive a secondary mover and thereby to increase or regulate the power imparted to the latter. In this figure, 64 is a rotary disk of the same gen-

eral type as that employed in Figs. 7 and 8 which is brought into operative relation with multiple magnetic members 64' similar to 34, shown in Figs. 7 and 8, all of which are positively driven by extraneous power. When all the magnets in the elements 64' are energized, all of said elements will exercise a driving effect upon the common secondary mover 64, and, correspondingly, if one or more of the elements 64' are deenergized, the speed or power developed in the element 64 will be accordingly diminished.

In Fig. 13 there is illustrated a further modification of the same idea, except in this arrangement the several electro-magnetic elements 110 are mounted upon a common shaft 111 and cooperate with secondary mover disks 112, fast upon shaft 113. By energizing all of the electro-magnetic elements 110, maximum power may be transmitted to shaft 113, and, by deenergizing one or more of the said magnetic elements, the power transmitted to said shaft 113 will be correspondingly diminished.

In Fig. 14, there is shown an application of the invention as a reversing mechanism. For this purpose there are employed on shaft 65 two electro-magnetic elements 66 and 69. Upon the driven shaft 67 there is one secondary mover disk 68 cooperating with magnetic element 66 and one electro-magnetic element 72. Running in the air gaps of magnetic elements 69 and 72 is a disk 71 mounted upon a shaft 70. When magnetic element 66 is energized it will drive shaft 67 through the intermediacy of disk 68 in one direction. When element 69, however, is energized, it will inductively effect disk 71 and cause the same to rotate, and said disk will concurrently drive the magnetic element 72, when the latter is energized causing the same to rotate and drive shaft 67 in a reverse direction.

From the foregoing it will be apparent, that, inasmuch as the elements of the electro-magnetic inductive system, forming the basis of this invention, exercise a mutual pull or stress, one on the other, if one of the elements be relatively fixed or restrained more or less, it will exercise a positive braking effect upon the other, so that the system may be used to retard or restrain movement, in which aspect it presents another important phase of power transmission. By fixing one of the elements heretofore described in the various modifications, as primary and secondary mover, or restraining the movement thereof by some positive means, the fixed element will act as a retarding medium on the moving element, when current is turned onto the magnet. This apparatus will not stop movement of the element to be braked, entirely, but will so far retard the same as to admit of its being positively stopped by a mechanical brake of much less power than

would be necessary to arrest its movement if the retarding action of the cooperating element were not present. The application of the invention as a brake or retarding mechanism has not been specifically illustrated, but it will be clearly understood that any of the forms of the invention heretofore described may be converted into a brake or retarding apparatus by merely fixing or limiting the movement of one of the electro-magnetic elements, to wit, the element carrying the electro-magnet, or the cooperating disk or drum inductor element.

It will be apparent from the foregoing that the invention is capable of general application wherever clutches, gearing, belting, brakes, and the like might be employed and by selecting a proper form of electro-magnetic transmitting mechanism, the desired conditions of power or speed transmission may be attained, accurate regulation may be effected, and the elements of wear, vibration and shock entirely eliminated.

Many particular advantageous applications of the invention might be enumerated, but, in passing, it may be remarked that in the operation of steam turbines; the invention will be most effective, inasmuch as, owing to the high speed of rotation of the turbines, no form of gearing involving mechanical contact is found satisfactory for transmitting power from the turbine shaft to other moving elements. By employing an electro-magnetic transmission gear or clutch, constructed in accordance with this invention and arranged to meet the particular circumstances of the case, the speed developed by the turbine may be properly reduced for the operation of machinery. The invention also provides an efficient mode of reversing machinery driven by steam turbines, as, for example, by employing an electro-magnetic reversing gear of the type shown in Fig. 14, in which shaft 65 will be driven directly by the turbine.

What I claim as my invention is:—

1. Power transmission mechanism comprising a positively driven primary element and a secondary element driven therefrom, said primary and secondary elements being connected respectively to a main shaft and a counter-shaft out of alinement therewith and forming an electro-magnetic inductive system without mechanical connection.
2. Power transmission mechanism comprising a positively driven primary element mounted on a rotatable main shaft, and a secondary element mounted on a rotatable counter-shaft, out of alinement with the main shaft, and driven therefrom, said primary and secondary elements forming an electro-magnetic inductive system, involving a magnetic circuit including an air gap, and an electric conductor interposed in said air gap.

3. Power transmission mechanism comprising a positively driven primary element mounted on a rotatable main shaft, and a secondary element mounted on a rotatable counter-shaft, out of alinement with the main shaft and driven therefrom, said primary and secondary elements forming an electro-magnetic inductive system involving a magnet having an air gap, and an energizing coil for said magnet, and an electric conductor interposed in said air gap.

4. Power transmission mechanism comprising a positively driven primary element, and a secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic inductive system involving a magnet having an air gap, an energizing coil for said magnet, and a slotted electric conductor interposed in said air gap.

5. Power transmission mechanism comprising a positively driven primary element, and a secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic inductive system involving a magnet having an air gap, an energizing coil for said magnet, and an electric conductor interposed in said air gap, said electric conductor being provided with slots transverse to the direction of its movement.

6. Power transmission mechanism comprising a positively driven primary element, and a secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic inductive system involving a magnet having an air gap, an energizing coil for said magnet, and an electric conductor interposed in said air gap, said conductor having a section of increased conductivity at one or both ends of the portion interposed in the air gap.

7. Power transmitting mechanism comprising a plurality of positively driven primary elements, a secondary element rotatively driven directly from one of said primary elements, an independent secondary element rotatively driven from another of said primary elements, a tertiary element rotatively driven from said independent secondary element, the respective sets of primary and secondary and primary, secondary and tertiary elements forming separately controlled electro-magnetic induction system for reversing the direction of the ultimate driven member.

8. Power transmission mechanism comprising a positively driven rotatory primary element, a rotatory secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic induction system, involving a magnet having an air gap, an energizing coil for said magnet, and an electric conductor interposed in said air gap and formed as a rotor of iron or the like provided with re-

cesses and connected conductors of superior conductivity in said recesses.

9. The combination in a power transmitting mechanism, of a positively driven power shaft, two independent shafts adapted to be driven therefrom, and electro-magnetic inductor mechanisms for transmitting power between the first-mentioned shaft and the latter shafts, each of said electro-magnetic transmitting mechanisms comprising a primary element mounted on the positively driven shaft, and a secondary element on one of the independent shafts, and each of said transmitting mechanisms involving a magnet having an air gap, an energizing coil for said magnet and an electric conductor interposed in said air gap and means for supplying and regulating current to the respective magnet coils.

10. Power transmission mechanism comprising a positively driven primary element, and a secondary element driven therefrom, said primary and secondary elements being connected respectively to a main shaft and a counter-shaft out of alinement therewith and forming a magnetic inductive system, without mechanical connection.

11. The combination in a power transmitting mechanism of a positively driven power shaft, a counter shaft out of alinement therewith, and electro-magnetic induction mechanism transmitting power between said shafts, in combination with an idler operative related to the said shafts and forming one element of the electro-magnetic induction mechanism, whereby the direction of drive of the counter-shaft may be reversed.

12. The combination with a positively driven power shaft, of a driven shaft, and a plurality of electro-magnetic induction mechanisms transmitting power between said shafts, the respective power transmission mechanisms including speed transmission gearings of relatively different ratios, whereby the speed of transmission may be varied.

13. The combination with a positively driven power shaft, of a driven shaft and a plurality of electro-magnetic induction mechanisms transmitting power between said shafts, the respective power transmission mechanisms including speed transmission gearings of relatively different ratios, and means for varying the power of the electro-magnetic induction mechanisms at will, whereby the speed of transmission may be gradually varied.

14. Power transmission mechanism comprising a positively driven primary element, a secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic induction system, involving an inducing magnet having opposing polar faces of opposite signs, and an in-

duced element made up of a material having good electrical conductivity reinforced by a material having good magnetic permeability, said induced element being interposed in the air gap between the polar faces.

15. Power transmission mechanism comprising a positively driven primary element, a secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic induction system, involving an inducing magnet having opposing polar faces of opposite signs and an induced element made up of a supporting structure of material having high magnetic permeability on the surface of which is secured a series of connected conducting strips, said induced element being interposed in the air gap between the polar faces.

16. Power transmitting mechanism comprising a positively driven primary element, a secondary element driven therefrom, said primary and secondary elements forming

an electro-magnetic induction system, involving an inducing magnet having an air gap and a composite induced element moving in said air gap and made up of a material having good electrical conductivity and a material having good magnetic permeability.

17. Power transmitting mechanism comprising a positively driven primary element, a secondary element driven therefrom, said primary and secondary elements forming an electro-magnetic induction system, involving an inducing magnet having an air gap and an induced element moving in said air gap made up of a supporting structure of good magnetic permeability on the surface of which is secured a series of strips of copper connected together.

In testimony whereof I affix my signature, in presence of two witnesses.

AUGUSTUS JESSE BOWIE, JR.

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A. J. BOWIE, JR.
 ELECTROMAGNETIC POWER TRANSMITTING MECHANISM.
 APPLICATION FILED APR. 18, 1907.

982,789.

Patented Jan. 31, 1911.

4 SHEETS-SHEET 1.

Fig. 2.

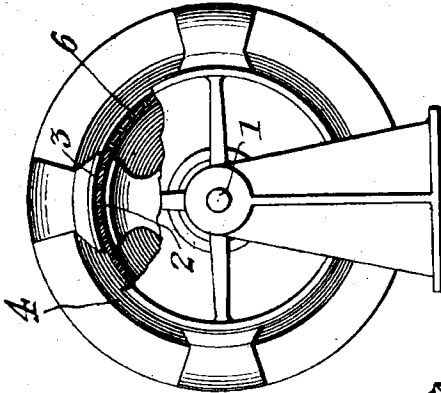


Fig. 3.

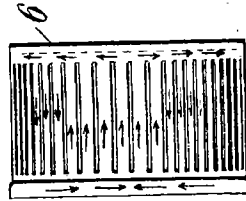
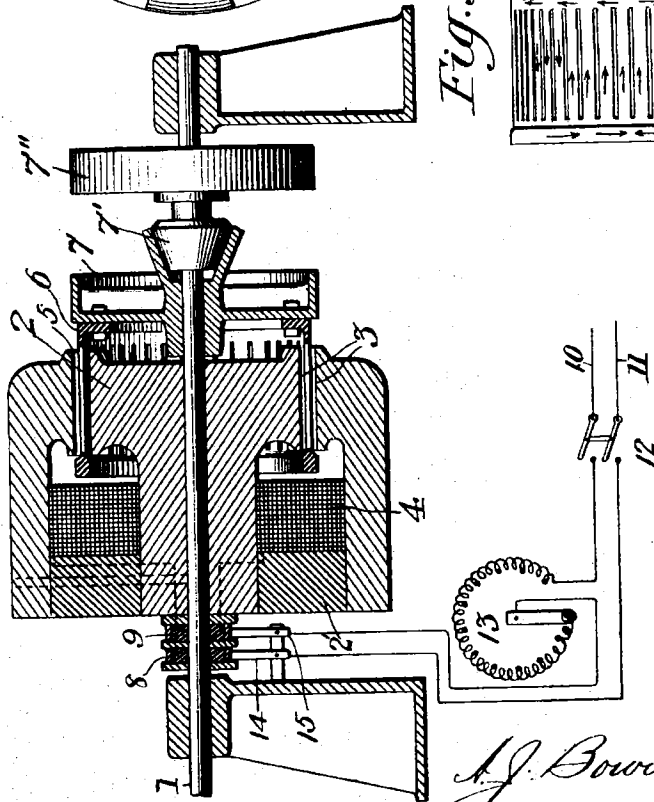


Fig. 1.



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4 SHEETS—SHEET 2.

Fig. 5.

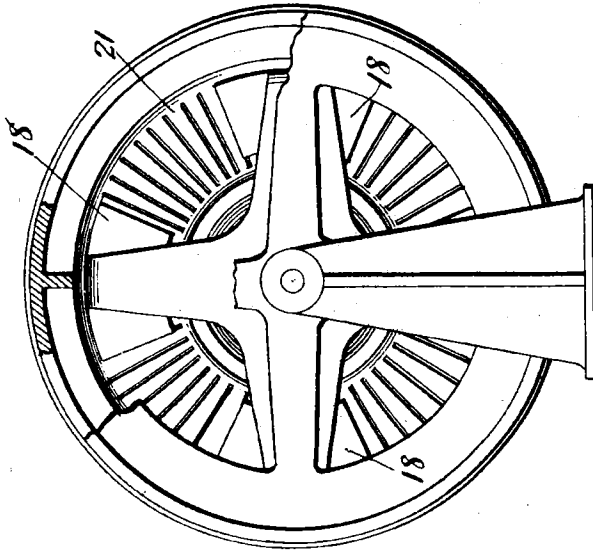


Fig. 6.

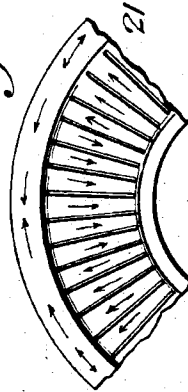
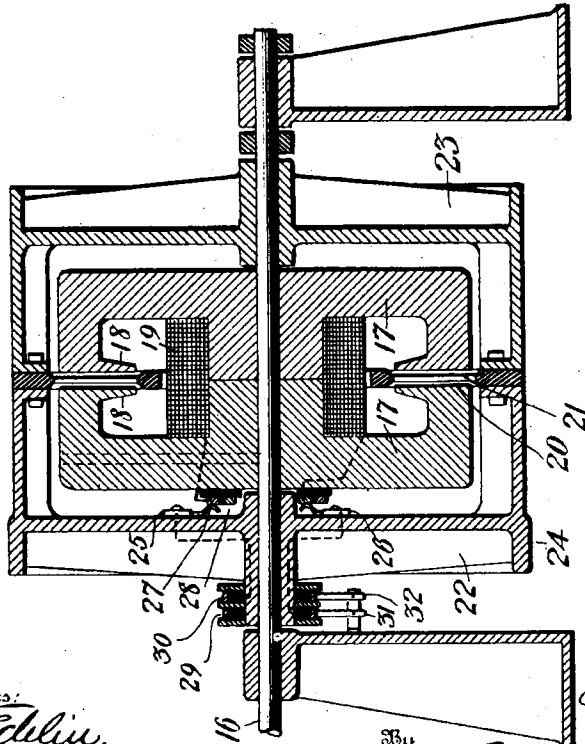


Fig. 4.



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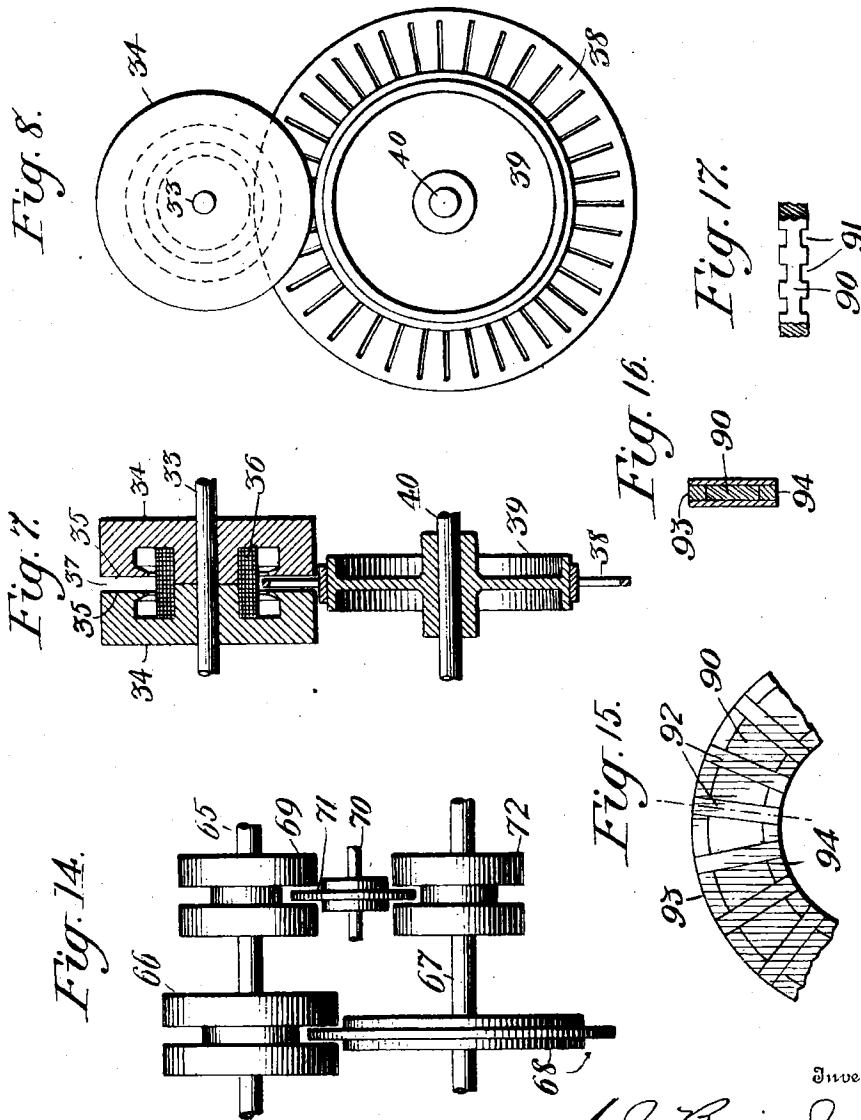
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4 SHEETS-SHEET 3.



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4 SHEETS—SHEET 4.

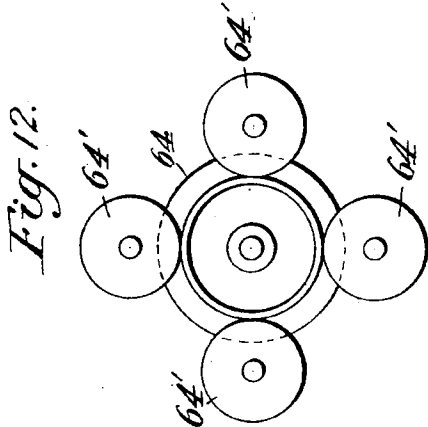


Fig. 12.

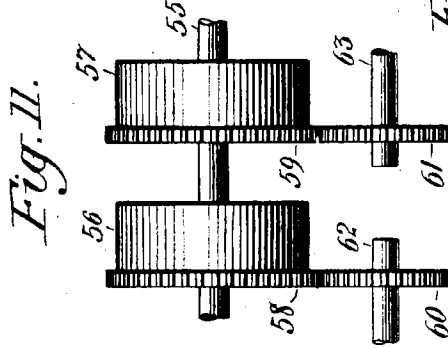


Fig. 11.

Fig. 13.

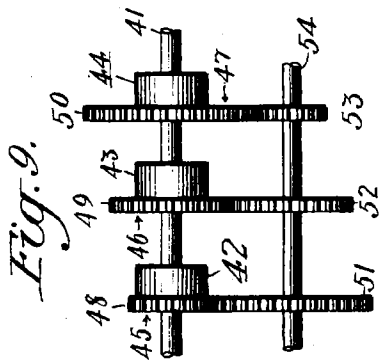
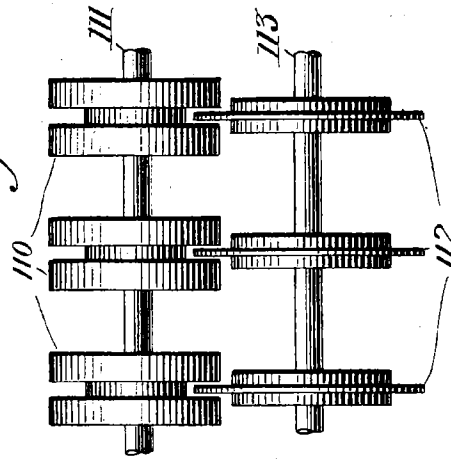


Fig. 9.

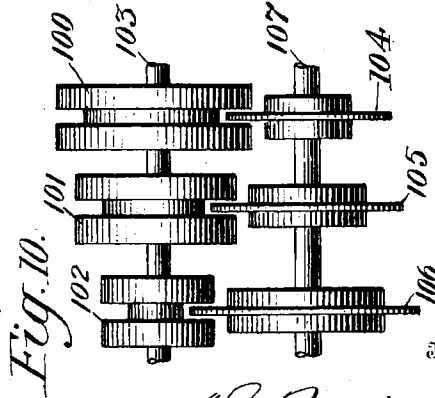


Fig. 10.

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UNITED STATES PATENT OFFICE.

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ELECTRICAL SWITCH.

1,110,374.

Specification of Letters Patent. Patented Sept. 15, 1914.

Application filed January 23, 1906. Serial No. 297,433.

To all whom it may concern:

Be it known that I, AUGUSTUS J. BOWIE, Jr., a citizen of the United States, residing in San Francisco city and county, State of California, have invented certain new and useful Improvements in Electrical Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates of electric switches.

The object of the invention is to provide a switch which shall be durable and shall promptly and surely destroy arcs formed at its contacts and effect a complete and perfect break in the circuit to be interrupted.

The invention can be best explained in connection with the accompanying drawings, in which,

Figure 1 is a plan view. Fig. 2 is a vertical section on the line 2—2 of Fig. 1, looking in the direction of the arrow. Fig. 3 is a side elevation. Fig. 4 is an enlarged view of a detail. Fig. 5 is an enlarged view of a modified detail. Fig. 6 is an enlarged detail view of the switch contacts and adjacent parts with the switch in a partly opened position, and Fig. 7 is a plan view of the same parts.

Referring to the drawings, the switch is mounted upon a suitable supporting frame which may consist of posts A, to which are secured the horizontal beams B. Upon the support is mounted the circuit interrupting apparatus which consists of a plurality of single pole switches C, D and E, which may be so connected with relation to each other as to form breaks in series or in parallel in the circuit to be interrupted or they may be connected in any other suitable or desirable relation. The several single pole switches constituting the entire switch are similar in construction and therefore a description of one of them will apply to each, except for a difference to be hereinafter noted.

Each of the single pole switches comprises the blade 1 carried upon a support formed of the horizontal tube 2, to which are secured the upright tubes 3 and 4. The upright tubes at their upper ends are fitted with petticoat insulators 5 and 6, to which the blade 1 is secured. The blade 1 when moved into its uppermost position engages with the clips 7 and 8. Bars of angular cross section which have respectively the legs 9 and 10, 11 and

12, the legs of each bar being at an angle with each other, are suitably supported at points removed from their vertices 13 and 14, by insulators 15, 16, 17 and 18, carried by the frame. The two bars are arranged in the same plane and so secured that their vertices approach more closely to each other than any other points upon the two bars and the legs 9 and 11 diverge from each other as they recede upwardly from the vertices. These legs 9 and 11 form the arc-breaking horns for the switch. The bars comprising the breaking horns are preferably of angular cross section, in order that the requisite stiffness of structure may be obtained so that their supports may be removed a considerable distance from the vertices and the shortest arcing distance between the bars be made to exist at the vertices. Secured to the switch blade 1 is an arc guide 19 which extends upwardly in proximity to the vertices of the bars comprising the horns. This guide should decrease in width upwardly, so that as it is moved downwardly its width at the portion adjacent to the vertices of the horns will decrease, and the arc gap between the vertices will be increased as the switch is opened. Preferably the guide is arc-shaped as shown.

To prevent arcing at the main clips 7 and 8, auxiliary following contacts 20 and 21 carried by the springs 22 and 23 are provided, which follow the switch blade in its downward movement for a certain distance, and part from contact therewith after the blade has left the clips 7 and 8. The following contacts may conveniently form electrical connection with the switch blade by means of the lugs 24 and 25 secured to the guide 19. The following contacts are located adjacent to the vertices of the bars comprising the arc-breaking horns. It is preferred that the bars comprising the horns be of iron or steel which by its peculiar magnetic properties aids in destroying the arcs. Other magnetic material than iron or steel might be used.

The switch blade and its supporting means hereinbefore referred to are carried upon the vertical bar 24', which is mounted to move vertically in the support or frame. The manner of mounting this bar in the frame is shown in detail in Fig. 4, from which it will be seen that the hole in each bar of the frame through which the bar 24' passes is of such size as to give liberal clearance to the bar which is guided by a metal

plate 25 secured to the top of the frame bar. The edges of the apertures in the plate 25 through which the bar 24' passes are rounded as shown to permit flexibility of movement to the bar, whereby it may adjust itself.

To the lower end of each of the bars 24' is secured a link 26 which is in turn pivoted to a lever 27 secured to the rock shaft 28 mounted in suitable bearings upon the frame. One of the levers 27, or more, if desired, extends beyond rock shaft 28 and to its outer end 29 may be attached a rope or rod which extends to a convenient height to be grasped by an operator.

Upon one or more of the bars 24', a spring 30 may be placed which prevents the jar in opening the switch.

In order to guide the switch accurately, the tube 2 of each of them extends between guiding bars 31 and 32, which are secured to the frame.

It will be noticed on reference to Figs. 1 and 3 of the drawings, that the end pairs of arc breaking horns diverge outwardly from the neighboring pair of horns. This has the effect of more widely separating the upper ends of the different pairs of horns at which the arcs break, for a given sized frame, then would be the case if the horns of a pair lay in the same plane throughout their lengths.

The operation of the apparatus is as follows. As seen in the drawings, the knife of the switch is shown as being out of contact with the main clips 7 and 8. Normally, however, the knife 1 will be in engagement with the clips 7 and 8. Assuming the latter to be the position of the switches, if it be desired to break the circuit, the bars 24' are moved downwardly by one of the levers 27, which can be accomplished by moving the outer end of the lever upwardly. This results in drawing down the tube 2 and with it the knife 1 which thereupon leaves the clips 7 and 8, breaking the circuit, at the clips. The circuit through the switch is, however, maintained by the contacts 20 and 21 which follow the movement of the knife and remain in contact with the lugs 24 and 25 for some time after the knife has left the clips. Continued movement of the knife downwardly breaks the circuit through the switch at the lugs 24 and 25, at which the arcs will be formed. It will be observed that as the circuit is maintained through the follower contact when the knife leaves the main clips no arcing will occur at the clips. They will be thus freed from deterioration through the burning which would be caused if arcing occurred at those points. The circuit having been broken at the follower contacts if the downward movement of the knife be continued, the arcs at the contacts will complete the circuit through the arc guide 19, and it will be seen that as this

guide moves downwardly the arc will be gradually lengthened until finally the arcing distance will be shorter directly between the vertices of the bars comprising the breaking horns which are in electrical connection with the switch clips 7 and 8 respectively than through the arc guide. The arc will then jump to the horns, as they project beyond the clips. This point having been reached in the movement of the knife, it will be unnecessary to move it farther, as the breaking operation so far as it is concerned, has been accomplished. The gases of the arc established between the vertices at the bases of the horns will tend to rise owing to their heated condition and the magnetic field set up by the current and the diverging horns will stretch the arc as it rises until it has been sufficiently attenuated to no longer maintain the circuit. As has before been remarked where the breaking horns are of magnetic material, the magnetic properties aid in dissipating the gases constituting the arc and improve the operation of the device.

The closing of the switch will involve operations opposite to those already described, as will be readily understood without further description.

In order to facilitate the breaking and to prevent the forming of unduly strong arcs, especially where currents of high volume or voltage are to be broken, it has been found advantageous to insert a resistance which may take the form of an inductance, as shown, if desired in the circuit formed between the following contacts, through which the current flows after the blade 1 has parted from the main contacts 7 and 8. This may be accomplished by a construction as shown in Fig. 5. This figure illustrates but one of the contacts of the switch, but as the other contact is precisely like it, the description of the construction in this figure will suffice for both. Referring to Fig. 5, the resistance R has one end connected with the main contact 8, while its other end is connected with the breaking horn 11 and the following contact 23, the following contact and the breaking horn being insulated from the stationary contact by insulation 33 and 34. Otherwise the construction is the same as that shown in the remaining figures. It will be obvious that with the construction as shown in Fig. 5, the resistance R at each of the terminals of each of the single pole switches will be inserted in the circuit maintained through the following contacts when the circuit through the main contacts is broken. This has the effect of cutting down the current passing through the following contacts and also the voltage of the arc, so that the completion of the break is accomplished without damage to the apparatus and in a prompt and efficient manner.

While the invention has been illustrated

in what is considered its best application, it is to be understood that it may have other applications and be embodied in various structures. The invention should not therefore be limited to the application or structure shown, but should be interpreted to include any changes within the scope of the appended claims.

It will be observed that the arc-breaking horns employed in my switch are of that type which is known as the linear type and in which the electro-dynamic action of the current and the heat of the arc combine to carry the arc up the horns until it breaks, without the need of employing a blow-out magnet.

What I claim is—

1. The combination with a switch, having main contacts adapted to be moved into and out of engagement, of a pair of diverging arc-breaking horns associated with said contacts, a blade-like conducting bridge extending between said horns and forming an upwardly extending gradually narrowing conducting path between them, and mechanism for separating the bridge and the horns after the main contacts are opened, whereby upon the breaking of the circuit two arcs are formed between the bridge and the horns, and by the upward movement of the arcs and the downward movement of the bridge, are finally merged into a single arc which is carried up the horns and distended to break it; substantially as described.
2. The combination with a switch comprising main contacts adapted to be moved into and out of engagement, of a pair of diverging arc-breaking horns associated with said contacts, a gradually narrowing conducting bridge extending between said horns, following contacts adapted to maintain connection with the bridge until after the main contacts are opened, and mechanism for withdrawing the bridge from between the horns, whereby the two arcs are formed at the following contacts and transferred to the horns and by the upward movement of the arcs and the downward movement of the bridge are finally merged into a single arc which is carried up the horns and distended to break it; substantially as described.
3. The combination with two diverging arc-breaking horns, of switch terminals near the bases of said horns, a bar adapted to engage with said terminals and an arc-shaped guide mounted on said bar and extending between the bases of said horns into such relation thereto that as the bar and the horns are separated to break the circuit two substantially horizontal arcs are formed between the horns and the guide, and these arcs are finally merged into a single arc which is carried up the horns and distended to break it; substantially as described.

4. The combination with two diverging arc-breaking horns, of switch terminals near the bases of said horns, a bar adapted to engage with said terminals, a conducting guide mounted on said bar and extending between the bases of said horns, said guide decreasing in width as it leaves said bar, and following contacts adapted to maintain connection with said guide until after the main contacts are opened, whereby the circuit is broken between the following contacts and the guide to form two arcs which by the upward movement of the arcs and the downward movement of the bridge are finally merged into a single arc which is carried up the horns and distended to break it; substantially as described.

5. The combination with a switch having relatively movable contacts, of diverging arc-breaking horns formed of magnetic material; substantially as described.

6. The combination with a switch having relatively movable contacts, of diverging arc-breaking horns adjacent to said contacts and a bridge extending between the bases of the said horns, said switch comprising main contacts and flexible following contacts, the main contacts being a greater distance apart than the nearest points of said horns, said following contacts being mounted to follow the circuit opening movement of the bridge and maintain contact therewith until after the main contacts are open and then to transfer the arc to said horns; substantially as described.

7. A circuit interrupting device comprising a plurality of switches and a plurality of pairs of diverging arc-breaking horns adapted to receive arcs from said switches, the horns of a pair diverging upwardly from each other and the pairs diverging outwardly from each other; substantially as described.

8. The combination with two diverging arc-breaking horns, of switch terminals near the bases of said horns, a contact member adapted to engage with said terminals, a guide mounted on said contact member and extending between the bases of said horns, following contacts mounted near the vertices of said horns, and adapted to engage the guide during its initial movement, and a conductor connecting the main contacts with the following contacts and horns, said conductor including a resistance, whereby when the main contacts are open the current is diverted through the resistance to the following contacts and horns; substantially as described.

9. In an electric switch, a pair of contacts and a pair of arc-disrupting horns adapted to receive and distend the arc formed when said contacts are opened to disrupt it, in combination with a combined circuit-closing member and arc guide com-

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prising a circuit-closing blade arranged to
bridge the contacts to close the circuit and
an arc guide carried by the blade and actu-
ated upon the circuit-opening movement
5 thereof to guide the arc across the gap be-
tween the arc-disrupting horns and transfer
it thereto; substantially as described.

10 10. In an electric switch, a pair of con-
tacts and a pair of arc-disrupting horns
adapted to receive and distend the arc
formed when said contacts are opened to
disrupt it, in combination with a combined
circuit-closing member and arc guide com-
prising a circuit-closing blade arranged to

bridge the contacts to close the circuit and 15
an arc guide carried by the blade and actu-
ated upon the circuit-opening movement
thereof to maintain the circuit after the
said contacts are opened and then to guide
the arc across the gap between the arc-dis- 20
rupting horns and transfer it thereto; sub-
stantially as described.

In testimony whereof I affix my signature,
in presence of two witnesses.

AUGUSTUS JESSE BOWIE, JR.

Witnesses:

FRANK ADAMS,
E. F. GRIFFITH.

A. J. BOWIE, JR.
ELECTRICAL SWITCH.
APPLICATION FILED JAN. 23, 1906.

1,110,374.

Patented Sept. 15, 1914.

4 SHEETS—SHEET 1.

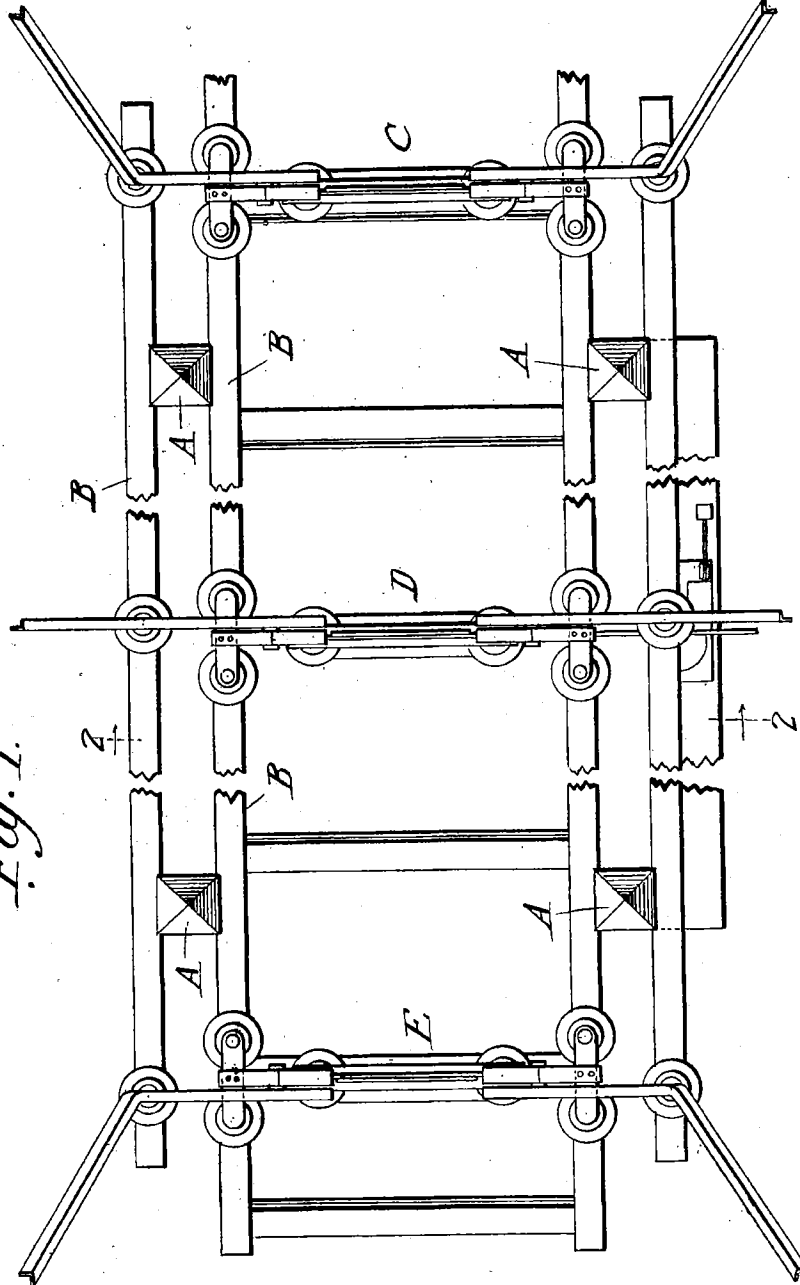


Fig. 1.

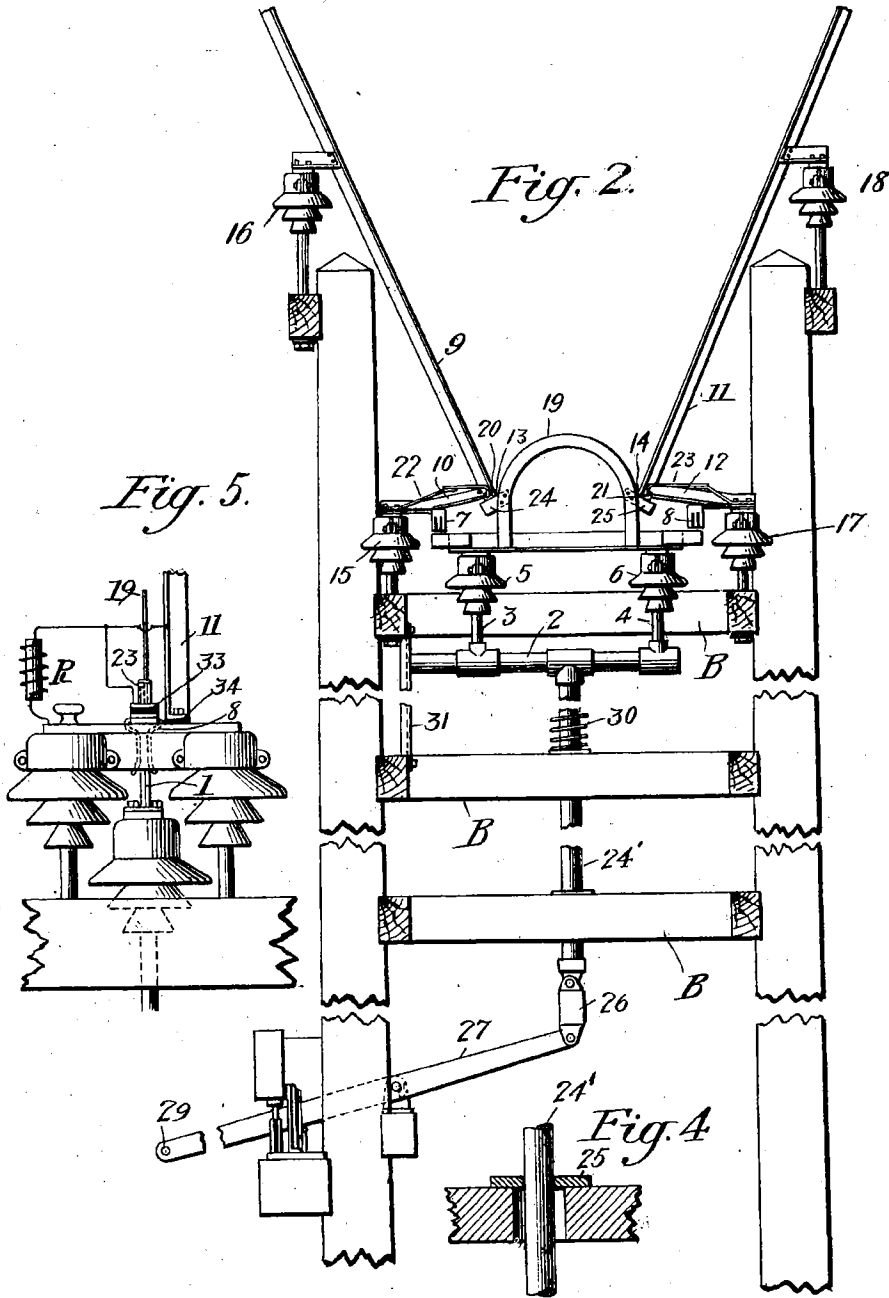
Witnesses:
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1,110,374.

Patented Sept. 15, 1914.

4 SHEETS—SHEET 2



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APPLICATION FILED JAN. 23, 1906.

1,110,374.

Patented Sept. 15, 1914.

4 SHEETS—SHEET 3.

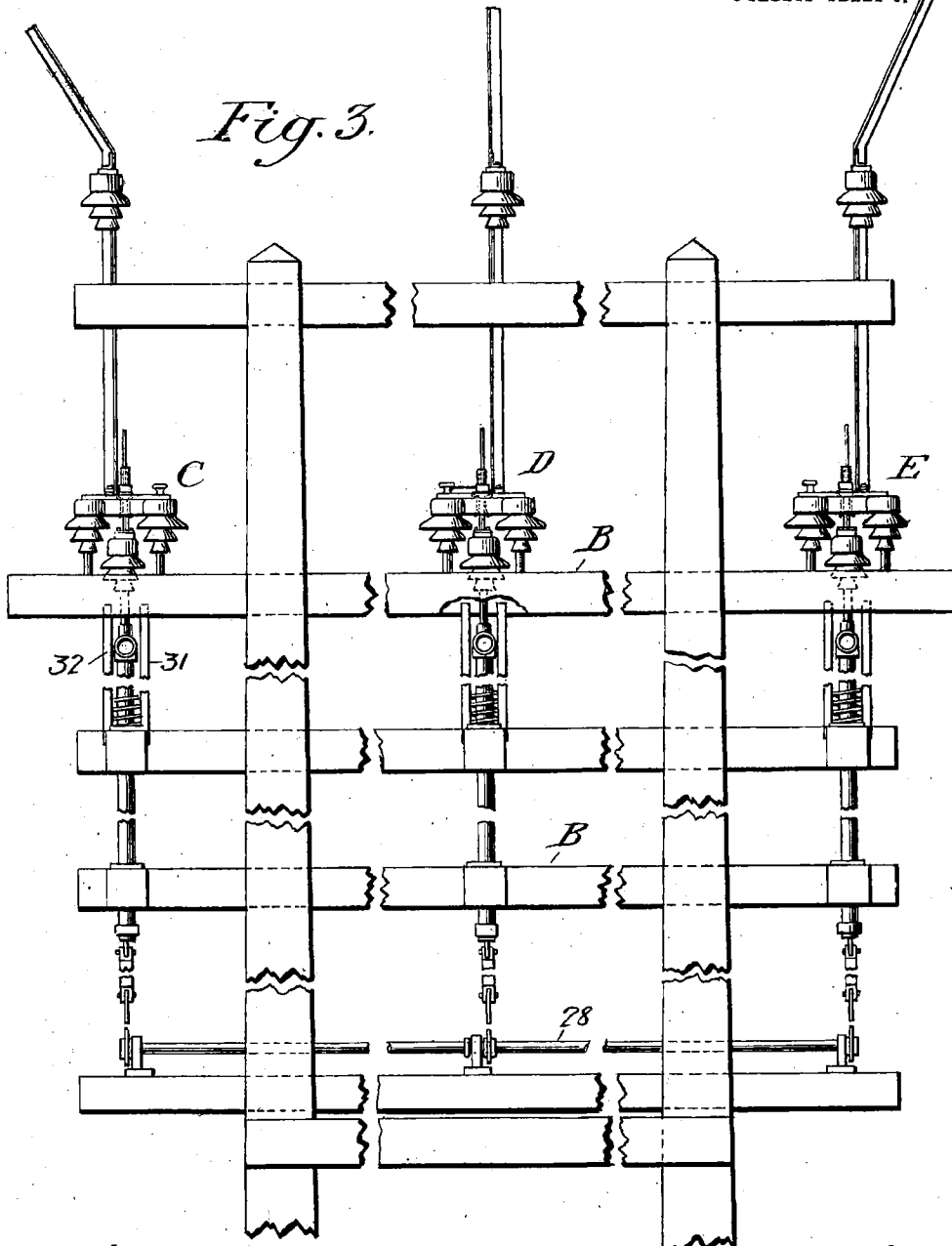


Fig. 3.

Witnesses:
R. W. Edelin
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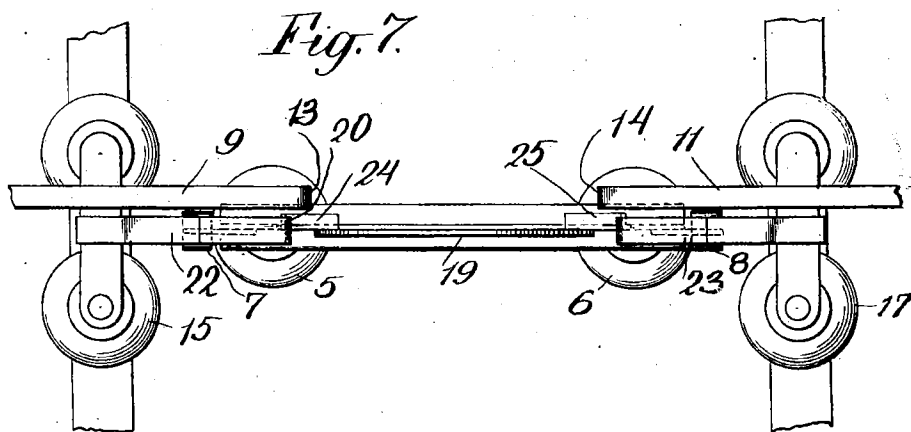
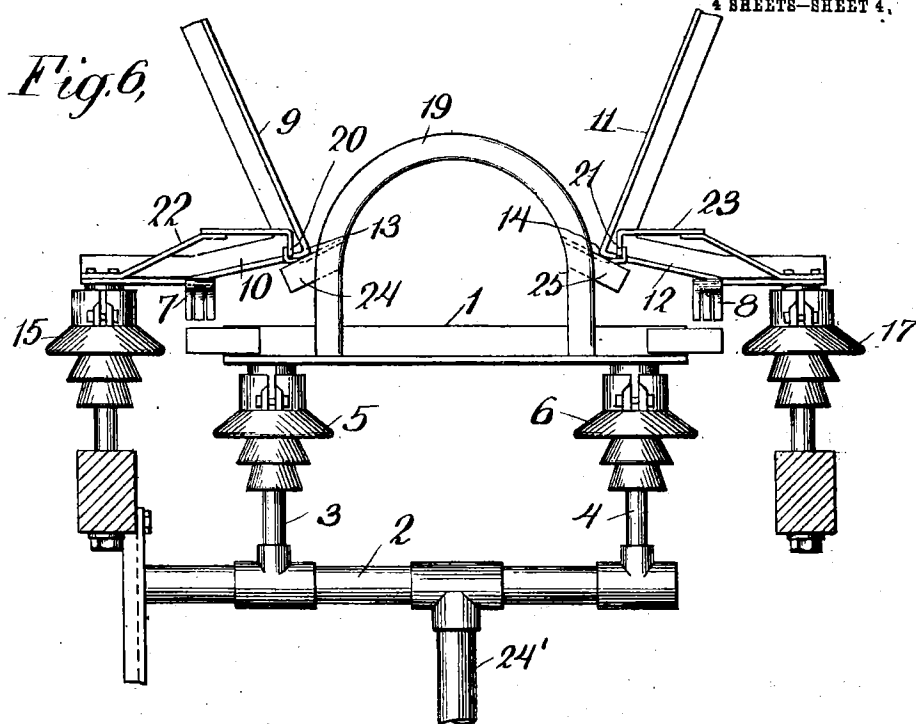
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 ELECTRICAL SWITCH.
 APPLICATION FILED JAN. 23, 1906.

1,110,374.

Patented Sept. 15, 1914.

4 SHEETS—SHEET 4.



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UNITED STATES PATENT OFFICE.

AUGUSTUS JESSE BOWIE, JR., OF SAN FRANCISCO, CALIFORNIA.

LIGHTNING-ARRESTER.

1,168,595.

Specification of Letters Patent.

Patented Jan. 18, 1916.

Application filed February 26, 1910. Serial No. 546,180.

To all whom it may concern:

Be it known that I, AUGUSTUS J. BOWIE, Jr., a citizen of the United States, residing at San Francisco, county of San Francisco, State of California, have invented certain new and useful Improvements in Lightning-Arresters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in lightning arresters.

The object of the invention is to provide a lightning arrester capable of withstanding safely severe discharges; of discharging without affecting materially the line voltage; also being free for all practical purposes from self induction.

The arrester is of the horn type, and may be used with either an electrolytic, or other resistance element. The setting of the horns determines the break-down point, and the resistance elements limit, and control the ensuing flow of current. An efficient arrester of this type should possess the following qualifications:—The discharge path should have very low self-induction. The action caused by the horns should make the resulting arc ascend promptly to the point of rupture. The resistance element through which the current must pass should so limit the flow of current as not to affect materially the line voltage. The arrester must have a free path to ground to carry off severe discharges. The horn gap should be the maximum possible for a given voltage, and the horns should be so constructed that they do not burn. The horns should be stiff, light, and rigid, and also readily adjustable. In all these particulars my arrester makes a material improvement over others now in use, as will be shown.

The accompanying drawings indicate in detail the principles of the arrester:—

Figure 1 is a plan view of a two pole arrester. Fig. 2 is an end elevation in section, of the same. Fig. 3 is a diagrammatic arrangement of a single pole arrester with a different resistance connection. Fig. 4, and Fig. 5, show diagrammatic arrangements of arresters with multiplex connection. Fig. 6 shows an enlarged elevation of a horn. Fig. 7 shows a cross section of the same, at S. Fig. 8 shows a plan of a resistance element. Fig. 9 shows a cross sectional

elevation of the same. Fig. 10 shows an enlarged end elevation of an insulator, with crank for adjusting gap spacing. Fig. 11 shows a side elevation of detail of tapering horn made of two sizes of pipe.

Referring to the drawings Figs. 1 and 2, A^1 , A^2 , A^3 , are insulators carrying the metal caps B^1 , B^2 , B^3 , C^1 , C^2 are horns fixed in position in the caps, and E^1 , E^2 , D^1 , D^2 , are smaller horns readily adjustable to give the desired gap. From a practical standpoint, the adjustable horns D^1 , D^2 ,—with larger horns acting as an extension have important advantages over any method of adjusting the main horns, which on account of their length must be rigidly supported. It will be observed that the main horns used in my lightning arrester are of the linear type, wherein the electrodynamic action of the current, and the heat of the arc combine to carry the arc up the horns, till it breaks without the need of a blowout magnet. The horns C^1 , D^1 , are connected electrically to the line to be protected.

F^1 , F^2 , are resistances connecting the horns C^2 , and E^2 to ground, P. The horns C^2 , D^2 , and E^1 are connected together electrically.

G^1 , G^2 are horn gaps, and G^3 is an air gap between two plates of metal, H^1 , and H^2 . H^1 is connected to horn E^2 , and H^2 is connected to ground.

F^1 is preferably made a high resistance, and F^2 a lower resistance. The gaps are usually so set that G^2 requires a smaller voltage than G^3 , but a higher voltage than G^1 to break it down.

The action is as follows: The great majority of disturbances on electric lines are not severe, and these will pass off by breaking down the gap G^1 , and going to earth over the high resistance F^1 . The line current will then follow up the discharge, the strength of current being limited by the high resistance F^1 , which is so proportioned as not to affect appreciably the voltage. The heat of the arc, and the electromagnetic effect of the horns will cause the arc to rise up the horns rapidly until it is so attenuated that it can no longer hold, and the circuit will be broken. Should the disturbance be more severe and be unable to pass off over the resistance F^1 , then the gap G^2 will in turn break down, and will put the resistance F^2 in multiple with F^1 , and both resistances will handle the current. On account of the lower resistance this may

cause a slight momentary effect on the voltage. However, on account of the limiting effect of the resistance, the current is quickly withdrawn from the gap G^2 , and then as in the first case, it is limited by the resistance F^1 , and is quickly broken. In event of a direct stroke of lightning, or of any other disturbance of extreme severity, which the two resistances are unable to carry off, the discharge will break down the gap G^3 , and will go direct to earth without resistance. This free discharge is of the utmost importance for an arrester which is to furnish complete protection. The resistances attached to the gaps will quickly withdraw the current, step by step, as just explained, and the circuit will be broken. At the same time the combined length of all the gaps in series is available to break the circuit in case there is any tendency for the arc to hold.

Fig. 3 shows diagrammatically a resistance arrangement where the resistances F^1 , and F^2 are in series, the outer end of F^2 being grounded, and the connection between F^1 , and F^2 being attached to the horn E^2 . The graduation of the resistances F^1 , and F^2 , wherein the former is made large, and the latter relatively small, is of much importance in the practical operation of the arrester. Thus F^1 will take care of by far the greater part of the disturbances without appreciably affecting the voltage of the system, while F^2 will handle the severe discharges without serious effect on the line. Thus only the discharges of the utmost severity will go to earth without resistance in series, and resistance would be very detrimental to insert in their path.

The arrangement of horns shown in Figs. 1, and 2 is of importance in the economical construction of the arrester, as it allows the horns which are in electrical contact to be mounted on the same insulator caps B^2 . To accomplish this practically, and to make the greatest possible arcing distances, the planes of the horn gaps G^1 , and G^2 are made divergent. Also the upper end of horn E^1 is made adjacent to horn C^2 with which it is in electrical contact below. This results in a considerable saving in the cost of construction, and has many electrical advantages.

Lightning arresters in addition to protecting each line from excessive voltages to ground, are also called upon to protect against excessive voltage between the different wires of the same circuit. For this purpose it is desirable to afford an easier path between lines than would be available were both lines to discharge through the full resistance and air gaps. To accomplish this, I employ a multiplex connection, joining together electrically corresponding points as J in the resistance elements. Also an additional gap to ground may be provided

in series with all legs of the arrester. This arrangement in effect is shown in Figs. 4, and 5, which indicate two diagrammatic arrangements of arresters for three phase circuits with multiplex connection. The notation is the same as in the previous figures.

M^1 , and M^2 are wires uniting the different phases' resistances.

F^3 is a resistance common to the resistances of all the phases, and G^4 is a common gap to ground. As the air gap determines the point of discharge of the arrester, this arrangement allows for any relative adjustment of discharge points between lines, and also between lines, and ground. It is generally preferable to use a single gap G^4 between the multiplex connection and ground, but if desired a plurality of gaps may be used in place of the gap G^4 .

It is generally advisable in horn arresters, particularly where the voltage is not very high, and the gap in consequence is small, to make the gap as large as possible, in order to prevent small variations in the length of the gap, due to mechanical or other reasons, from altering materially the point of discharge. The break down voltage between terminals depends on the shape of the terminal. Needle points will break down most readily, and hence for a given voltage require a maximum separation. Large cylinders on the other hand require to be placed much closer together to break down, and on this account are undesirable. However needle points are undesirable since they will burn off, and hence will alter the gap. In this respect cylindrical surfaces are very desirable, as they will not burn readily. In my arrester I combine as far as is practical the advantages of both types of gap.

The facing fronts of the two sides of the gap in my arrester have a cross section of a partly circular shape, the circular part being small in section. The metal behind this is made smaller than the diameter of the front of the horn, and is then increased in section farther back to provide ample stiffness. This is shown in Figs. 6, and 7 which are enlarged details of the small horns. The lower part of horn, Q , is made of non magnetic material, and the upper part, R , of iron or steel. Thus the path of the current at the point of break down is as non inductive as possible. After the gap has broken down, it is desirable to rupture the circuit as soon as possible. For this reason the upper parts of the horns are made of magnetic material.

The arc is urged upward not only by its own heat, but also by magnetic effect of the current causing it. This effect is greatly intensified in a cylindrical horn of iron or steel, particularly when it is hollow, caus-

ing the current to concentrate near the surface. The hollow cylindrical horn is of great value not only for the reasons mentioned, but also because it resists burning by the current, and the wind and weight stresses for such a section are a minimum for a given weight of metal. This is most important where dealing with horns supported from insulators since the length for high voltage must be considerable, entailing an expensive supporting structure unless the stresses are reduced to a minimum. For these reasons the horns C^1 , and C^2 are also of iron, and are made tapering in section, the upper end being small, and the lower end being larger. In practice I make these horns of iron pipe, and obtain the taper by using different sizes, fitting into one another, the upper edge of the outer pipe being beveled, in order to present no sharp edge for the arc to hang on. This is shown in Fig. 11 which shows a side elevation of the horn, where pipe 9 is driven into pipe 10. As the arc ascends the horns, its resistance increases. The tapered tubular horn has important electrical advantages. The size of the horn must be proportioned to the current it has to carry. The section must be such as not to permit of material burning by the arc, or allow it to be overheated by the current it must carry while the arc is ascending. Hence a smaller section is desirable at the top, than at the bottom, since the current, when the arc is near the upper end, is materially less in value than when it is near the lower end, owing to the high resistance of the long arc. The tubular section has the very important advantage that the radiating surface of the horn is greatly increased, as the ensuing heat of the arc may be carried away from within, as well as from without, thus greatly increasing the safety, and reliability of operation. The tubular horn is also of particular value, as it presents no edge on which the arc may hang, and cause burning of the horn. If desired an increased number of horn or other gaps in series may be used. All gaps of the arrester may be adjusted when the arrester is alive by mounting the insulator pins holding the insulators A^1 on a rock shaft. This will give simultaneous adjustment of all gaps G^1 . Correspondingly the gaps G^2 may be simultaneously adjusted.

Fig. 10 shows an enlarged end elevation of the insulators A^1 , and their support, illustrating the manner of adjustment just mentioned. The insulators A^1 are mounted on insulator pins 1, which in turn are rigidly mounted on a rock shaft 11 which is supported on bearings 4, mounted on the supporting structure 3. A nut 7, is rigidly mounted on the supporting structure, and carries a screw 5, provided with a hand wheel 6, and two stops, 8, 8, which engage

a crank 2, rigidly attached to the rock shaft. The latter may hence be rocked by turning the hand wheel 6, which will simultaneously alter all gaps G^1 .

It is desirable after the arc starts, to drive it upward as rapidly as possible. To accomplish this I make the horns of such shape that the point S on the horn where the arc will start is so located that current flowing through the horn to the point of arcing must flow in a substantially upward direction. This adds the electromagnetic blow out effect to that of the heat of the arc, and results in promptly extinguishing the arc.

The resistance element is shown in Figs. 8 and 9. It consists of several jars filled with a liquid resistance, the jars setting vertically over one another, the lower part of each jar serving as a cover for the jar below. The jars are fastened together by bolts K which prevent their overturning. They are supported only from the bottom, but if desired may be braced at the top by connections from the caps of the insulators electrically connected to the top jar. The jars are preferably made of porcelain or earthen ware, and this method of support is of important practical advantage in avoiding any costly method such as providing insulators for supporting the column, and at the same time it allows a cheap grade of material to be used for the jars, the potential gradient along the outside of the same being very small. The division of the resistance element into comparatively small units has other practical advantages in that each unit is readily handled, and resistances of any value may be readily assembled from a small number of standard resistances. Each jar L has two electrodes O and N for conveying the current into and out of the liquid. The lower electrode O consists of a flat plate, but the upper electrode N is made with its lower sides inclined to the horizontal. This construction is used to prevent the collection of bubbles due to electrolysis which would form on the plate electrode if horizontal and would affect the resistance. T is a metallic connection between the lower electrode of one jar and the upper electrode of the jar below. It is firmly cemented in the upper jaw. The electrodes are made of aluminum which I find has practically no effect on the conductivity of the liquids I employ. To guard against evaporation in some cases I cover the surface of the liquid with oil and also I make connection between the top of each jar and the atmosphere through the valve V. A second valve W may also be used. Except for these two valves there is no connection to atmosphere and consequently no chance for evaporation. The valve V is a pressure relief valve which will open before the pressure in the jar rises

to a dangerous point. The valve W is the reverse type of valve to take care of the condition of a partial vacuum in the jar such as might arise after the jar was overheated. If
 5 desired one valve of suitable design may be used to perform the two functions and to provide safety against both pressure and vacuum.

I have described my invention in what I consider its best form, but the invention
 10 may have other applications and may be embodied in various structures. The invention should not therefore be limited to the application or the structure shown.

Reference is made to my co-pending application Serial No. 297,433 filed January 23rd,
 15 1906, in which I have broadly claimed certain elements which are further elaborated and employed in the invention covered by these specifications.

20 What I claim is:—

1. In a horn type lightning arrester, a plurality of air gaps in series, primary horns substantially vertical at the gap limits, secondary horns mounted in electrical connection
 25 with said primary horns, the horns mounted on insulated supports.

2. In a horn type lightning arrester, a plurality of air gaps in series, primary horns substantially vertical at the gap limits, secondary horns mounted in electrical connection
 30 with said primary horns, the horns mounted on insulated supports, the primary horns on one side of the gaps diverging from the primary horn mounted on the opposite side of the gap.
 35

3. In a horn type lightning arrester, a plurality of air gaps in series, primary horns substantially vertical at the gap limits, secondary horns mounted in electrical connection
 40 with said primary horns, the horns mounted on insulated supports, a conductor between one or more of the pairs of said horns in which is interposed a resistance.

4. A plurality of horn-type, single pole,
 45 lightning arresters, with resistances between corresponding horns and a common electrical connection, in combination with an air gap connected between said connection and ground.

5. A plurality of horn-type, single-pole,
 50 lightning arresters, with resistances between corresponding horns and a common electrical connection, in combination with an air gap and resistance connected between said connection and ground.
 55

6. A lightning arrester consisting of three or more air gaps, a primary horn, and a secondary horn mounted on each side of one or more of the air gaps, conducting members
 60 between two or more of said gaps, a path of electrical conductivity between each of said conductors and the ground and resistance interposed in said path.

7. In a horn-type lightning arrester, a
 65 horn, the lower part of which is of non-mag-

netic material and the upper part of magnetic material.

8. In a horn type lightning arrester, a pair of diverging horns, one of said horns comprising a main horn in combination with
 70 a small adjustable horn having a base and an arcing edge, connection between said base and said arcing edge, said connection being substantially vertical near said arcing edge.

9. In a horn type lightning arrester a pair
 75 of diverging horns, one of said horns comprising a main horn in combination with a small adjustable horn the upper end of which is so located as to form substantially a continuance of the main horn, said adjustable horn having a base and an arcing edge,
 80 connection between said base and said arcing edge, said connection being substantially vertical near said arcing edge.

10. A lightning arrester consisting of
 85 three or more air gaps, a primary horn, and a secondary horn mounted on each side of one or more of the air gaps, conducting members between two or more of said gaps,
 90 a path of electrical conductivity between each of said conductors and the ground and resistance interposed in said path, said electrical paths joining before they reach the ground and a resistance interposed in their common circuit to the ground.
 95

11. A lightning arrester consisting of
 100 three or more air gaps, a primary horn, and a secondary horn mounted on each side of one or more of the air gaps, conducting members between two or more of said gaps,
 105 a path of electrical conductivity between each of said conductors and the ground and resistance interposed in said path, said electrical paths joining before they reach the ground and said resistance being adjustable.
 110

12. In a horn type lightning arrester, a primary horn in combination with a secondary horn of greater length and of magnetic material.

13. In a horn type lightning arrester, a
 110 primary horn in electrical connection with a secondary horn of magnetic material.

14. In an electric arc-breaking device, a tubular tapering horn of magnetic material and annular cross section having its interior
 115 open to the atmosphere.

15. In an electric arc-breaking device, a tubular tapering horn of magnetic material and annular cross section having its interior
 120 open to the atmosphere, mounted upon an insulated base, and adapted to convey a formed arc in an upward direction.

16. In an electric arc-breaking device, a tubular tapering horn of magnetic material and annular cross section having its interior
 125 open to the atmosphere, mounted upon an insulated base, and adapted to convey a formed arc in an upward direction, in combination with a primary horn of smaller proportions on which the arc is first formed.
 130

17. In an electric arc-breaking device, a tubular tapering horn of magnetic material and annular cross section having its interior open to the atmosphere, mounted upon an insulated base, and adapted to convey a formed arc in an upward direction, in combination with a primary horn of smaller proportions on which the arc is first formed, said primary horn of non-magnetic material.
18. In an electric arc-breaking device, a tubular tapering horn of magnetic material and annular cross section having its interior open to the atmosphere, mounted upon an insulated base, and adapted to convey a formed arc in an upward direction, in combination with a primary horn of smaller proportions on which the arc is first formed, said primary horn of non-magnetic material, and said primary horn being formed with a curved edge of smaller cross section than the body of said primary horn, substantially as described.
19. In an electric arc-breaking device, a tubular tapering horn of magnetic material mounted upon an insulated base and adapted to convey a formed arc in an upward direction.
20. In an electric arc-breaking device, a tubular tapering horn of magnetic material mounted upon an insulated base and adapted to convey a formed arc in an upward direction, in combination with a primary horn of smaller proportions on which the arc is first formed.
21. In an electric arc-breaking device, a tubular tapering horn of magnetic material mounted upon an insulated base and adapted to convey a formed arc in an upward direction, in combination with a primary horn of smaller proportions on which the arc is first formed, said primary horn of non-magnetic material.
22. In an electric arc-breaking device, a tubular tapering horn of magnetic material mounted upon an insulated base and adapted to convey a formed arc in an upward direction, in combination with a primary horn of smaller proportions on which the arc is first formed, said primary horn of non-magnetic material, and said primary horn being formed with a curved edge of smaller cross section than the body of said primary horn, substantially as described.
23. In an electric arc-breaking device, a tubular tapering horn of magnetic material contacts at the limit of a gap or gaps, horns adjacent to two or more of said contacts formed with curved edges on which the arc first forms, said curved edges of smaller cross section than the body section of the horn and projecting from the body section substantially as described.
24. In an electric arc breaking device contacts at the limit of a gap or gaps, horns adjacent to two or more of said contacts formed with curved edges on which the arc first forms, said curved edges of smaller cross section than the body section of the horn and projecting from the body section substantially as described.

In testimony whereof, I affix my signature in the presence of two witnesses.

AUGUSTUS JESSE BOWIE, JR.

Witnesses:

M. H. WHITE,
H. W. CROZIER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

A. J. BOWIE, JR.
 LIGHTNING ARRESTER.
 APPLICATION FILED FEB. 26, 1910.

1,168,595.

Patented Jan. 18, 1916.
 2 SHEETS—SHEET 1.

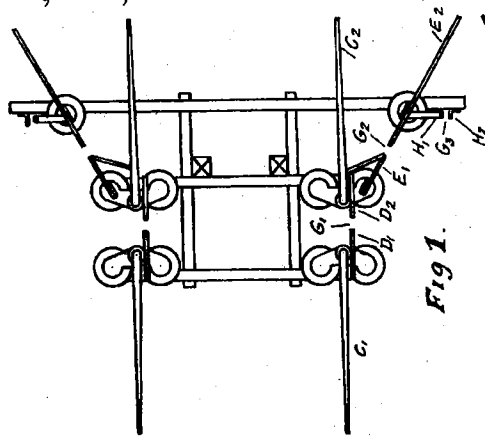


Fig. 1.

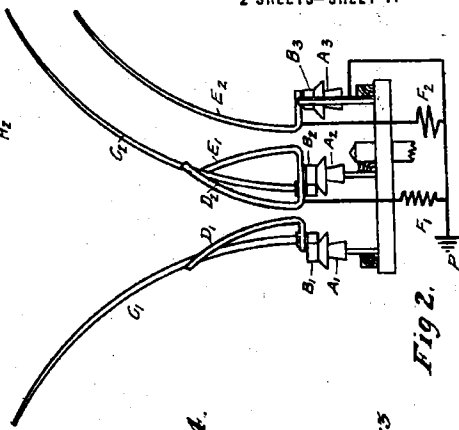


Fig. 2.

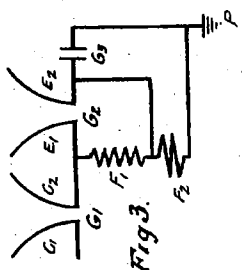


Fig. 3.

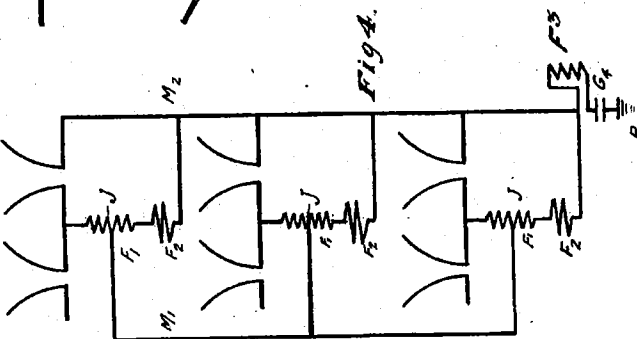


Fig. 4.

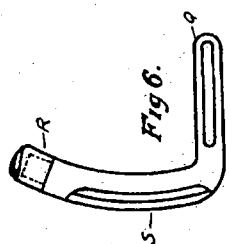


Fig. 6.

Fig. 7.

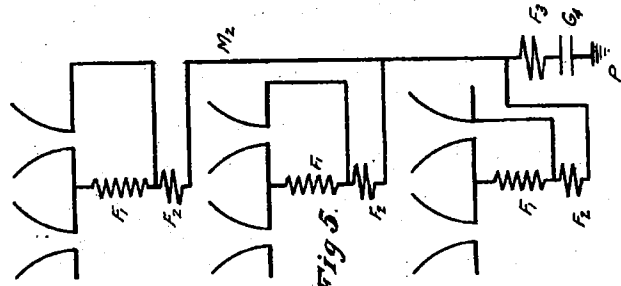


Fig. 5.

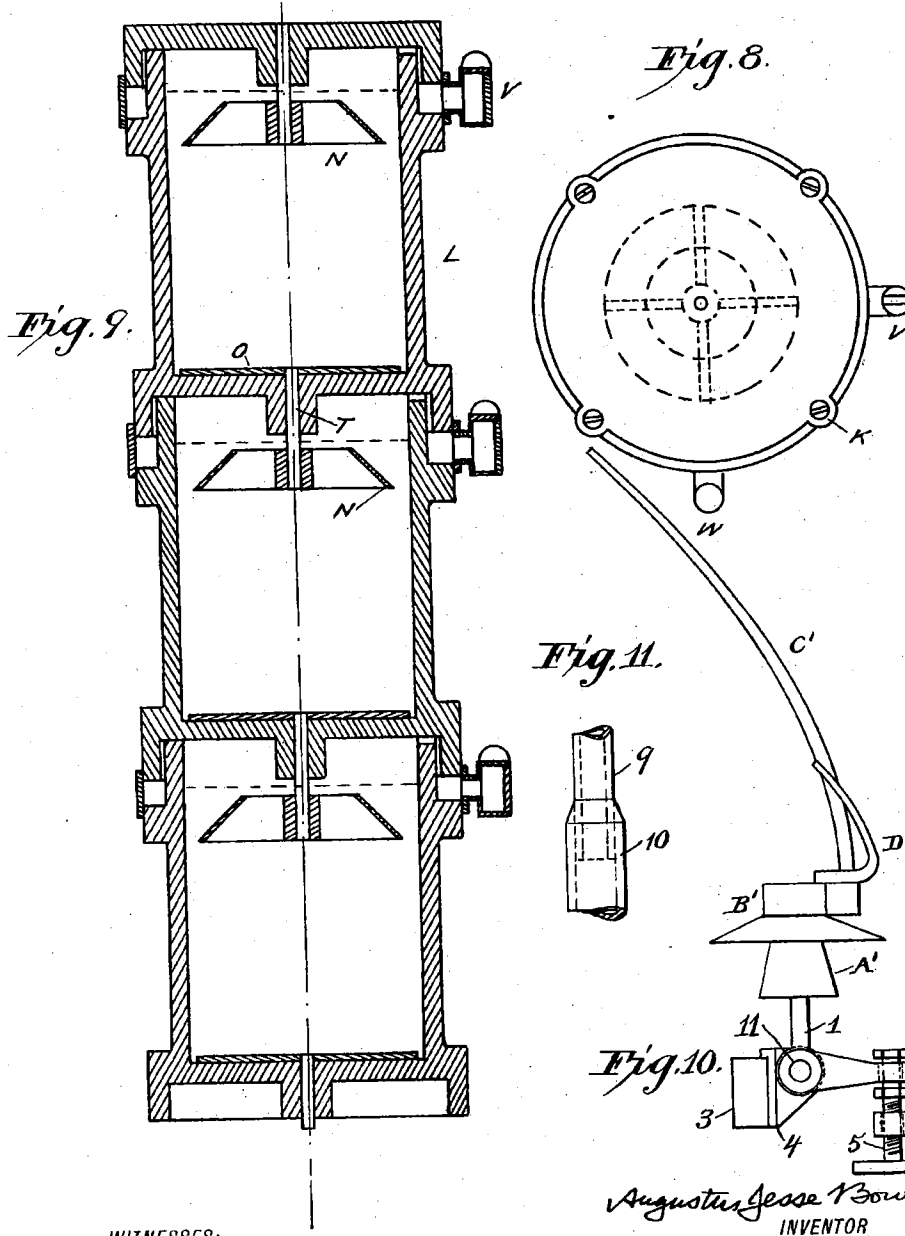
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A. J. BOWIE, JR.
 LIGHTNING ARRESTER.
 APPLICATION FILED FEB. 26, 1910.

1,168,595.

Patented Jan. 18, 1916.
 2 SHEETS—SHEET 2.



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 INVENTOR

UNITED STATES PATENT OFFICE.

AUGUSTUS JESSE BOWIE, JR., OF SAN FRANCISCO, CALIFORNIA.

ELECTRIC SWITCH.

1,230,372.

Specification of Letters Patent. Patented June 19, 1917.

Application filed December 9, 1909. Serial No. 532,236.

To all whom it may concern:

Be it known that I, AUGUSTUS J. BOWIE, Jr., a citizen of the United States, residing at San Francisco, county of San Francisco, State of California, have invented certain new and useful Improvements in Electric Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric switches. The object of the invention is to provide a switch to open the circuit promptly and to destroy the resulting arc, without damage of any nature.

The accompanying drawings explain the switch in detail.

Figure 1. is a plan view.

Fig. 2 is a vertical section on the line 1, 1, of Fig. 1 looking in the direction of the arrow.

Fig. 3. is an enlarged detail of an auxiliary contact.

Fig. 4. is an elevation of part of a horn.

Fig. 5. is a cross section of the same.

Fig. 6. is a plan of a form of switch for very severe duty.

Fig. 7. is an end elevation of the same.

Fig. 8. shows diagrammatically a resistance connection.

Fig. 9 is an enlarged plan of a cap, and contact.

Fig. 10 is a side elevation of the same.

Fig. 11 is an enlarged plan of the operating crank.

Fig. 12 is an end elevation of the same.

Referring to the drawings, the switch is mounted on a suitable supporting frame work, which may consist of poles "A", to which are attached supports "B". Upon these supports is mounted the switch, which consists of a plurality of single pole switches "C. D. E." which may be connected so that the breaks in the circuit are in series or in parallel, or in any other suitable or desirable relation. The several single pole switches constituting the entire switch are similar in construction and therefore a description of one will apply to each, except for a difference hereinafter noted.

Each single pole switch comprises a blade F pivoted with a hinge contact on a cap G, and engaging a switch clip H, mounted on the opposing cap I. On a rock shaft J is mounted an insulator pin K, carrying the

insulator L, with cap M, which operates the switch blade F by the link N. O is a spring fastened to the blade F, and carries at its outer end an auxiliary contact P, which engages the horn Q and makes the final break of the switch after the blade has left the clip, and prevents burning of the main contacts. On opening the switch, the resulting arc is carried upward between the contact P and the horn Q, and as the blade is moved back of the horn R, the arc is transferred from P to the horn R, and then being established between the horns, will rise rapidly due to the magnetic effect of the current and the heat of the arc. Owing to the divergence of the horns, the arc will be lengthened until it can no longer hold, and the circuit will be broken. Motion is transmitted to the rock shaft J by the handle S which turns through an angle slightly more than 180°, S is connected to the shaft T, carrying a crank U, which operates the shaft J, through the link V, and the crank W, which latter may be an extension of one of the insulator pins. Thus, if desired, the shaft, T, can operate the switch by turning always in the same direction without reversing the direction of rotation. In this event, the shaft would be turned through 180 degrees for each operation of the switch, the first motion setting the switch in one position and the second motion of 180 degrees setting the switch in reverse position. There is a decided advantage in this method of operation of the switch, particularly when power operation, such as, for instance, electric operation of the switch, is employed, in which event the direction of rotation of the motor operating the switch does not need to be reversed, but the motor will always operate in the same direction, suitable limit switches being used to cut out the power mechanism at the desired point of the stroke.

The horns are preferably made of iron, circular in section and hollow, tapering in size so that the upper end is smaller than the lower end. The taper may be made gradually, or in steps. In practice I make the horns of several sizes of iron pipe, one fitting inside the other, the lapping edges being beveled so as to present no sharp edge. This is shown in Figs. 4 and 5. The circular horn has important advantages over any other type. There is always a tendency for an arc to hang on a sharp edge, and to cause burning of the metal. The round horn

is free from this objection. The circular horn is of maximum strength in all directions for a given metal weight and thickness. The wind pressure on a cylindrical surface is only about one-third of that on a flat surface of equal projected area. In the practical construction of horn switches, one of the most important considerations is to reduce the mechanical strains on the long horns, due to wind pressure, since otherwise the supporting insulators and structure become unduly expensive. A tapered cylindrical horn is hence of great importance in practical construction, the upper end being small, as it is subject to small strains, and the lower end being made sufficiently large to stand the strains due to the wind. Another important advantage of the cylindrical horn particularly of the iron horn is that the magnetic effect causing the arc to ascend is more effective than in any other type of construction, and this is very important in the extinguishing of the arc. With the iron horn there is a closed magnetic circuit, which greatly intensifies the blow-out action.

The tapered tubular horn has important electrical advantages, particularly when made of iron or steel. The size of the horn is determined in part by the current it must carry. The section must be such as not to permit of material burning by the arc. Hence a smaller section is desirable at the top than at the bottom, since the current when the arc is near the upper end is much less in value than when it is near the lower end, due to the high resistance of the long arc. The tubular section has the important advantage that the ensuing heat of the arc may be carried away from within, as well as from without, thus decreasing the danger of over heating. The tapering tubular horn of iron or steel is especially advantageous.

The mechanical operation of the switch by the rotation of the shaft T through slightly over 180° has many advantages. The crank U being just over the dead point, locks the switch open and closed. The maximum power due to the toggle action is available at starting the switch and also for slowing down the momentum of the moving parts when stopping, and at the same time the length of stroke is limited in both directions.

The upward motion of the switch blade is of importance in starting the arc in the proper direction, giving it a direct initial start upward.

The switch as shown is a three pole switch. The outside pairs of horns are bent away from the center pair to increase the distance between the arcs when distended. This results in a material saving of framework as it allows closer spacing of the wires of the switch than would be otherwise allowable.

Figs. 6 and 7 show a type of switch for very high voltage, and severe duty. Each wire has two sets of horn gaps in series, each being bridged by a knife blade.

A conductor 12 connects the adjacent caps G' G'' and their hinge contacts. The operating mechanism is somewhat different from that of the other type. The links N, N, are attached by pins 2, 2, to the cap 3, mounted on insulator 4, which is carried by insulator pin 5, mounted so as to be free to rotate in bearing 6. A crank 7, and connecting rod 8 connect together all individual switches forming the entire switch. The shaft 9 is rotated by a handle 10, and transmits motion to the switches. The rotation of insulator 4, and cap 3, operates simultaneously the switch blades F, F, opening the two breaks simultaneously.

The upper ends of the horns R' R'' are adjacent to each other. This has an important advantage in that should the arc be so severe as to reach the top of the horns, the two arcs will unite and form a single arc which will suddenly leave the center horns and become so lengthened that they will instantly break the circuit. It is evident that the upper ends of the horns R' R'' may be connected if desired, the horns being in contact at the lower end, but such connection is not usually desirable.

A resistance 11 shown diagrammatically in Fig. 8 may be connected across one of the gaps between the caps G' I' of Fig. 6 when the load to be opened is very large. On opening the switch the arc across the gap shunting the resistance will open first, the resistance acting so as to withdraw the current from the gap. The current being then greatly cut down, the other gap has a much reduced load to break, which it can then easily handle. Another important advantage of this method of operation is that the current being gradually broken, the possibility of rise of pressure in the circuit is greatly reduced.

It is sometimes desirable in the case of very high pressure lines to economize in switch cost and instead of using a double break switch as shown in Figs. 6 and 7, to make each side of the switch an independently operated single break switch, so as to serve for two switches instead of one. At switch stations on lines this may be done to advantage. Each single break switch will then handle any normal load, but should the load be too severe for one switch to handle, then in such an emergency the other switch can be pulled to open the line, thus acting just like the double switch. In fact this arrangement is substantially the same if arranged to avail itself of the union of the two or more arcs as outlined.

It is of advantage also to have the two or more set of breaks in one line arranged as

shown, so as to make the total arc in case of a union of the arcs as long as possible. So I arrange the horns of the different breaks in series, so as to be in the same vertical plane if there is not lateral divergence; but should the horns diverge laterally as in the Figs. 6 and 7, I arrange the horns in series, so that a horizontal line will cut all horns as shown.

It is understood that a plurality of breaks instead of two breaks may be used in series in each line, and that any part of them may be shunted by different resistances.

While the invention is shown in what I think its preferred form, it may have other applications and be embodied in various structures. It should not be limited to the application or structure shown.

Reference is herein made to my co-pending application, Serial No. 297,433, filed January 23rd, 1906 in which I have broadly claimed some of the elements utilized in my present invention, but which I have further improved herein.

What I claim is:

1. The combination with a switch comprising contacts, of diverging horns adjacent to said contacts, respectively, and of a movable member mounted on a pivot insulated from ground, said member comprising main and auxiliary contactors adapted to engage the said contacts, the auxiliary contactor sliding upwardly on the horn with which the arc is formed in opening the switch.

2. The combination with a switch comprising insulating bases, of contacts mounted on said bases, of diverging horns fixed in position and adjacent to said contacts, and of a movable member comprising main and auxiliary contactors, said member being pivoted on one of said insulating bases and being adapted to engage the said contacts, the auxiliary contactor sliding upwardly on the horn with which the arc is formed in opening the switch.

3. The combination with a switch comprising main and auxiliary contacts, of diverging horns adjacent to said main contacts, and of a movable member comprising main auxiliary contactors, said member being adapted to engage the said contacts, one end of said member moving in an upward and lateral direction between said horns on opening the switch, the auxiliary contactor sliding upwardly on the horn with which the arc is formed in opening the switch.

4. The combination with a switch com-

prising main contacts of a movable member adapted to engage therewith, and of a pair of diverging horns adapted to distend and break the arc, and of a rock shaft for operating said movable member, and of a link for transmitting motion from said rock shaft to said movable member, and of insulating means mounted on said rock shaft and located between said rock shaft and said link.

5. The combination with a switch comprising contacts, of a movable member adapted to engage said contacts, and of a pair of diverging horns adapted to distend and break the arc, and of a rock shaft for operating said movable member through a link, and of insulating means mounted on said rock shaft and adapted to operate said link, and of an auxiliary shaft adapted to operate said rock shaft through a crank mounted on said auxiliary shaft and a link connected therewith.

6. The combination with a switch comprising contacts, of a movable member adapted to engage said contacts and of means for operating said member, and of a rock shaft adapted to operate said member through said means, and of a link for operating said rock shaft, and of an auxiliary shaft and a crank mounted thereon adapted to operate said rock shaft through said link, said auxiliary shaft being adapted to rotate through substantially 180 degrees for each operation of the switch, so that switch may be operated without reversal of motion of said auxiliary shaft.

7. The combination with a switch comprising a plurality of breaks, of a pair of diverging horns at each break, adapted to distend and break the arc, and of permanent electrical connections between some of said horns, the upper ends of said horns which are permanently connected, being adjacent.

8. The combination with a switch comprising a plurality of breaks in series, of a pair of diverging horns at each break, adapted to distend and break the arc, and of permanent electrical connections between the proximate horns of adjacent gaps, the upper ends of said proximate horns being adjacent.

In testimony whereof, I affix my signature in the presence of two witnesses.

AUGUSTUS JESSE BOWIE, JR.

Witnesses:

HENRY BELL TRUETT,
J. M. WHITE.

A. J. BOWIE, JR.
 ELECTRIC SWITCH.
 APPLICATION FILED DEC. 9, 1909.

1,230,372.

Patented June 19, 1917
 3 SHEETS—SHEET 1.

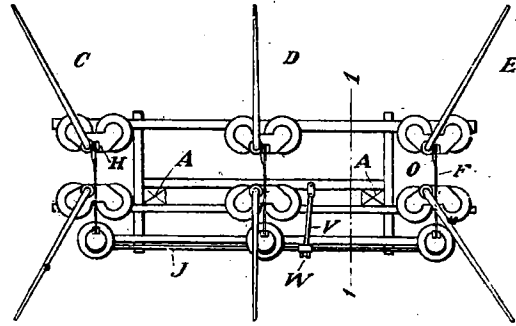


Fig. 1

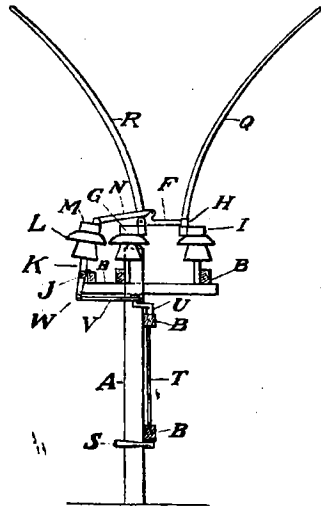


Fig. 2.

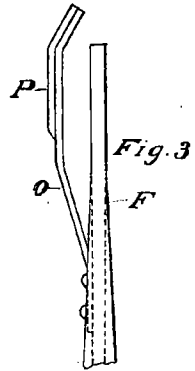


Fig. 3.



Fig. 5



Fig. 4.

WITNESSES:
Wm. G. D. New

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A. J. BOWIE, JR.
 ELECTRIC SWITCH.
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1,230,372.

Patented June 19, 1917

3 SHEETS—SHEET 2.

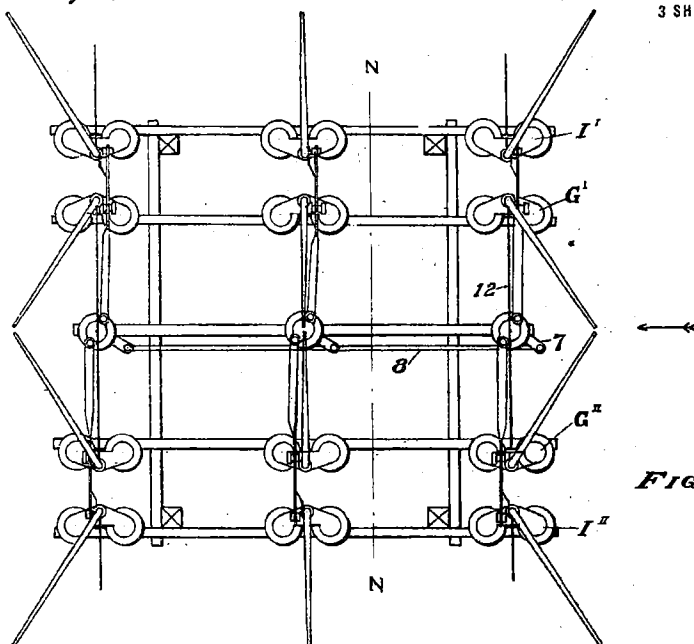


FIG. 6.

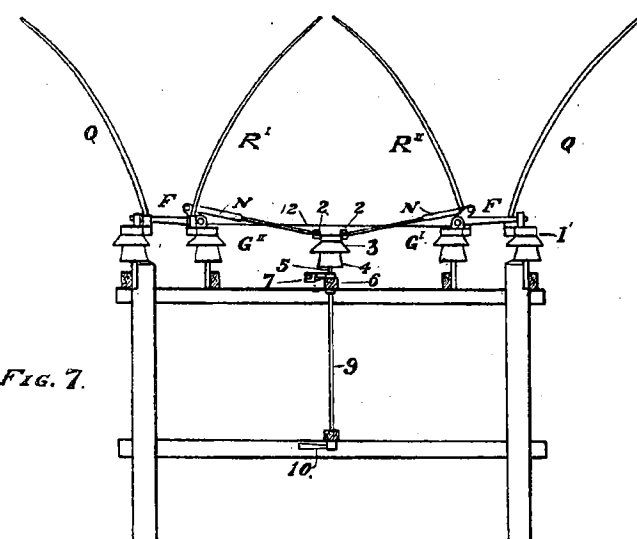


FIG. 7.

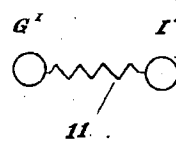


FIG. 8.

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WITNESSES:
L. C. Bennett
W. G. Drew

A. J. BOWIE, JR.
ELECTRIC SWITCH.
APPLICATION FILED DEC. 9, 1909.

1,230,372.

Patented June 19, 1917.
3 SHEETS—SHEET 3.

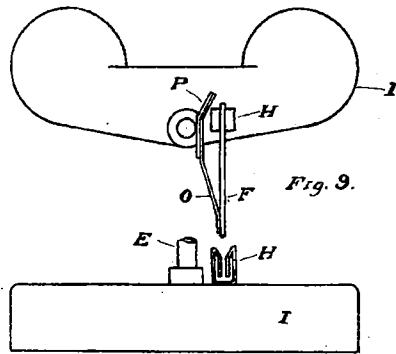


Fig. 10.

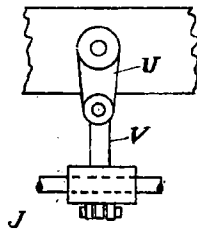


Fig. 11.

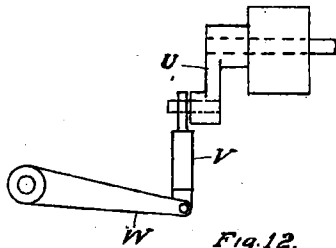


Fig. 12.

WITNESSES:

Henry B. Frielt
Mark White

INVENTOR

Augustus Jesse Bowie, Jr.

CODE OF FEDERAL REGULATIONS



TITLE 3—THE PRESIDENT 1943—1948 Compilation

CONTAINING THE FULL TEXT OF PRESIDENTIAL DOCUMENTS PUBLISHED IN THE
FEDERAL REGISTER DURING THE PERIOD JUNE 2, 1943—DECEMBER 31, 1948
With Ancillaries and Index

Published by the Federal Register Division, National Archives and Records Service
General Services Administration, as a Special Edition of the Federal Register
Pursuant to Section 11 of the Federal Register Act as Amended

**UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1957**

**For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price \$7**

5. Possession, control, and operation of any plant or facility, or part thereof, taken under this order shall be terminated by the Secretary of the Navy within 60 days after he determines that the productive efficiency of the plant, facility, or part thereof prevailing prior to the interruptions of production, referred to in the recitals of this order, has been restored.

FRANKLIN D ROOSEVELT

THE WHITE HOUSE,

August 19, 1944.

1. John Albertoli Machine Co., 418 Beach Street.
2. Brunigs Machine Works, 523 Brannan Street.
3. Coen Co., 40 Boardman Place.
4. Cook Research Labs, L. H. Ltd., 950 Crane, Menlo Park.
5. Crane Co., 301 Brannan Street.
6. Forderer Cornice Works, 269 Potrero Ave.
7. Goodrich Mfg. Co., 1834 McKinnon Ave.
8. Int'l. Totalizer Co., Inc., 716 S. Railroad Ave., San Mateo.
9. King Gun Sight Co., 171 2nd Street.
10. Thos. King Co., 69 Clementina Street.
11. Krenz, Oscar, 612 Bryant Street.
12. Lietz, The A. Co., 632 Commercial Street.
13. Marine Electric Co., 195 Fremont Street.
14. National Motor Bearing Co., Redwood City.
15. Pacific Coast Envelope Co., 400 2nd St.
16. Pacific Elevator & Equipment Co., 45 Rausch Street.
17. Pacific Machine Shop, 360 11th Street.
18. Reichel, C. R. & Co., 718 Natoma Street.
19. Schmidt Lithograph Co., 2nd & Bryant Streets.
20. Staples & Pfeiffer Co., Inc., 528 Bryant Street.
21. Stone-Ryals Electric & Mfg. Co., 470 Natoma Street.
22. J. A. Symon, Machine Works, 3648 18th Street.
23. Tubbs Cordage Co., 22nd & Iowa Streets.
24. Vincent Whitney Co., 130 10th Street.
25. Weule Co., Louis, 119 Steuart Street.
26. American Can Co.:
(Machine Shop) 499 Alabama Street.
(Pacific Factory) 22nd & 3rd Streets.
(United Factory) 19th & Treat Ave.
27. American Laundry Machine Co., 1600 Bryant Street.
28. W. R. Ames Co., 150 Hooper Street.
29. Atlas Elevator Co., 417 6th Street.
30. Atlas Heating & Ventilating Co., 557 4th Street.
31. Chas. M. Bailey Co., 667 Folsom Street.
32. Bertsch Machine Works, 2440 3rd Street.
33. Bodinson Mfg. Co., 2401 Bayshore Blvd.
34. Bowie Switch Co., 19th & Tennessee Streets.
35. E. D. Bullard Co., 351 8th Street.
36. C. F. Bulotti Machinery Co., 829 Folsom Street.
37. Busch Mfg. Co., 78 Natoma Street.
38. Butte Electric & Mfg. Co., 124 Russ Street.
39. California Packing Corporation, 101 California Street.
40. California Pallet Mill Co., 725 Tehama Street.
41. California Press Mfg. Co., 1800 Folsom Street.
42. California Screw Co., 74 Clementina Street.
43. Cherry-Burrell Corp., 777 Folsom Street.
44. Christie Machine Works, 201 Harrison Street.
45. Cochran Mfg. Co., South San Francisco.
46. Curle Mfg. Co., 500 Sansome Street.
47. Cyclops Iron Works, 837 Folsom Street.
48. Dalmo Victor Co., 18th & York Streets.
49. Davis Machine Works, 400 7th Street.
50. Duart Manufacturing Co., 984 Folsom Street.
51. International Sales Company, 2045 Evans Avenue.
52. Metals Manufacturing Co., 2770 Folsom.
53. De Laval Pacific Company, 61 Beale Street.
54. Dorward Pump Company, 210 Mission Street.
55. Elite Machine Works, 227 7th Street.
56. Fairbanks Morse and Company, 630 3rd Street.
57. Federal Mogul Service, 655 Turk Street.
58. General Tool, Die & Stamping Works, 1601 Howard Street.
59. Greenberg's, M., Sons, 765 Folsom Street.
60. Jenkins Machine Works, 18th Street & Treat Avenue.
61. Judson Pacific Company, 1200 17th Street.
62. Kehoe Display & Fixture Company, 541 Market Street.
63. King Sales & Engineering Company, 210 1st Street.
64. Kingwell Brothers, Ltd., 444 Natoma Street.
65. Kortick Mfg. Company, 335 1st Street.
66. Larkin Specialty Mfg. Company, 288 1st Street.
67. Mailer Searles, Inc., 300 7th Street.
68. Metal Products Fabricating Company, 119 Kansas Street.
69. Montague Pipe & Steel Company, 1999 3rd Street.
70. Mutual Engineering Company, South San Francisco.
71. National Welding Equipment, 223 Main Street.
72. Niagara Duplicator Company, 128 Main Street.
73. Northern Packing Company, Pier 92.
74. Orton Machine Company, 390 Fremont.
75. Pacific Can Company, Williams & Newhall Streets.
76. Pacific Electric Mfg. Company, 5815 3rd Street.
77. Pacific Foundry Company, 3100 19th Street.
78. Pacific Pumping Company, 960 Howard Street.
79. Pacific Screw Company, 566 Van Ness South.
80. Payne's Bolt Works, 201 Main Street.
81. Pelton Water Wheel Company, 2929 19th Street.

- 82. Price Pump Company, 1350 Folsom Street.
- 83. Ray Oil Burner Company, 401 Bernal Avenue.
- 84. S. F. Screw Products Company, 755 Brannan Street.
- 85. Shanzer, H. M., Company, 85 Bluxome Street.
- 86. Soule Steel Company, 1750 Army Street.
- 87. Superior Grinding & Motor Company, 865 Post Street.
- 88. Troy Laundry Machinery Company, 1201 Folsom Street.
- 89. Turner Machinery Company, 1655 Folsom Street.
- 90. Union Machine Company, 934 Brannan Street.
- 91. Victor Equipment Company, 844 Folsom Street.
- 92. Joseph Wagner Mfg. Company, 441 Folsom Street.
- 93. Welchart-Fairmont Company, 287 Natoma Street.
- 94. Wesix Electric Heater Company, 390 1st Street.
- 95. West Coast Laundry Machine Company, 3246 17th Street.
- 96. Western Crown Cork & Seal Corporation, 25th Street & Potrero Avenue.
- 97. Williams-Wallace Company, 160 Hooper Street.
- 98. H. C. Wood Machine Works, 514 Bryant Street.
- 99. Q. R. S. Neon Corporation, Ltd., 690 Potrero Avenue.

EXECUTIVE ORDER 9467

AMENDMENT OF EXECUTIVE ORDER NO. 1888 OF FEBRUARY 2, 1914, AS AMENDED, RELATING TO CONDITIONS OF EMPLOYMENT IN THE SERVICE OF THE PANAMA CANAL AND THE PANAMA RAILROAD COMPANY ON THE Isthmus of Panama

By virtue of the authority vested in me by section 81 of title 2 of the Canal Zone Code, as amended by section 3 of the act approved July 9, 1937, 50 Stat. 487, it is hereby ordered as follows:

SEC. 1. Paragraph 6 of Executive Order No. 1888 of February 2, 1914, as amended by the Executive order of February 20, 1920, is amended to read as follows:

"6. No employees shall receive compensation at a rate in excess of \$100 a month or 50 cents an hour unless they are citizens of the United States or of the Republic of Panama; and such citizens shall be given preference for employment in all grades: *Provided, however,* (a) that aliens may be employed in positions for which the rate of compensation is in excess of \$100 a month or 50 cents an hour (1) if they occupied the same or similar positions for two years or more during the construction of the Canal, or (2) if

such action is deemed necessary by reason of an emergency, in which latter case, however, the aliens shall be replaced by citizens of the United States or of the Republic of Panama as early as practicable; and (b) that the Governor is authorized to increase the rate of compensation of not more than 200 alien employees to a rate exceeding \$100 a month or 50 cents an hour."

SEC. 2. Paragraph 16 of the said Executive order is amended to read as follows:

"16. Employees may be granted such passes and reduced rates on the Panama Railroad, for use by the employees, dependent members of their families, or relatives temporarily residing with them, as may be authorized by the Governor in his discretion."

SEC. 3. Paragraph 19 of the said Executive order is amended to read as follows:

"19. All employees in cases of illness or injury will receive free medical care and attendance in the hospitals. If medical attendance is furnished in quarters, a charge may be made under regulations to be prescribed by the Governor. Employees shall be charged for medical care and attendance furnished members of their families at the hospitals and at their quarters at such rates and under such regulations as may be prescribed by the Governor."

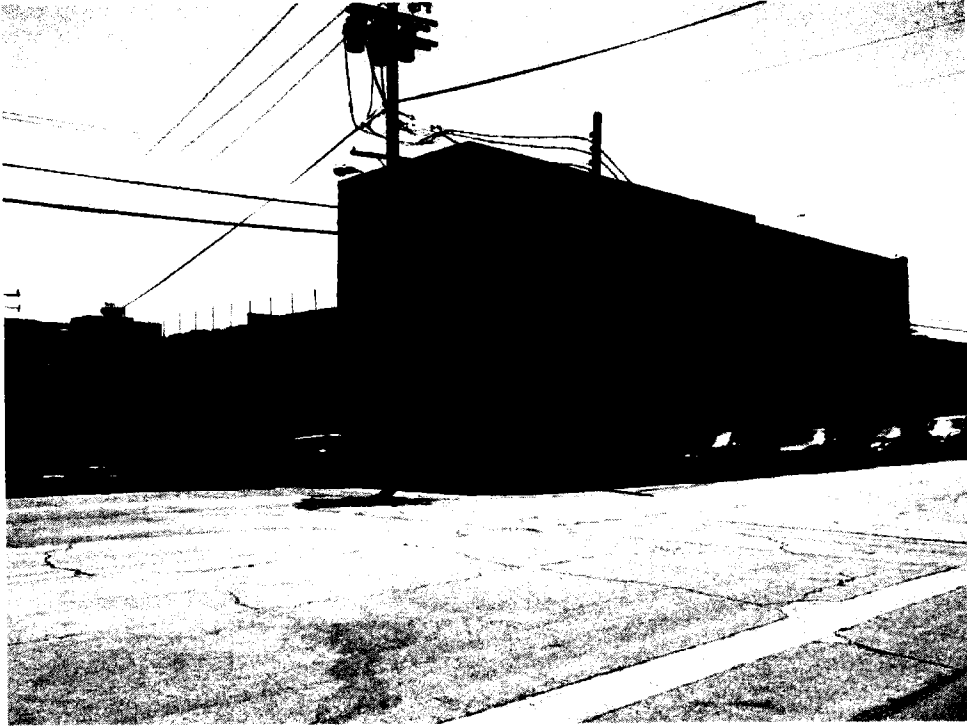
SEC. 4. Paragraph 20 of the said Executive order, as amended by the Executive order of February 20, 1920, is amended to read as follows:

"20. All employees who are citizens of the United States, and alien employees who receive compensation at a rate in excess of \$100 a month or 50 cents an hour, with the exception of those who receive such compensation under authority of subparagraph (c) in paragraph 6 of this Order, as amended, shall be entitled to leave privileges under this Order."

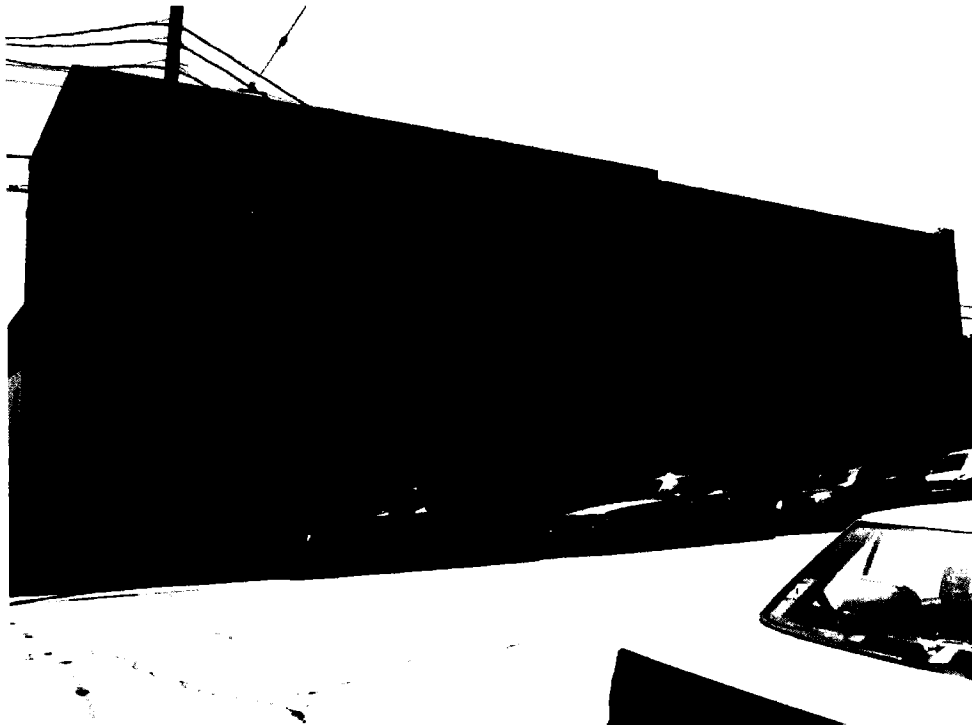
SEC. 5. Paragraph 24 of the said Executive order, as substituted in Executive Order No. 2514 of January 15, 1917, and amended by Executive Order No. 8931 of November 1, 1941, is amended to read as follows:

"24. Absences of one-half day or more when regularly authorized, and absences on account of illness or injury when supported by the certificate of an authorized physician in the service of The Panama

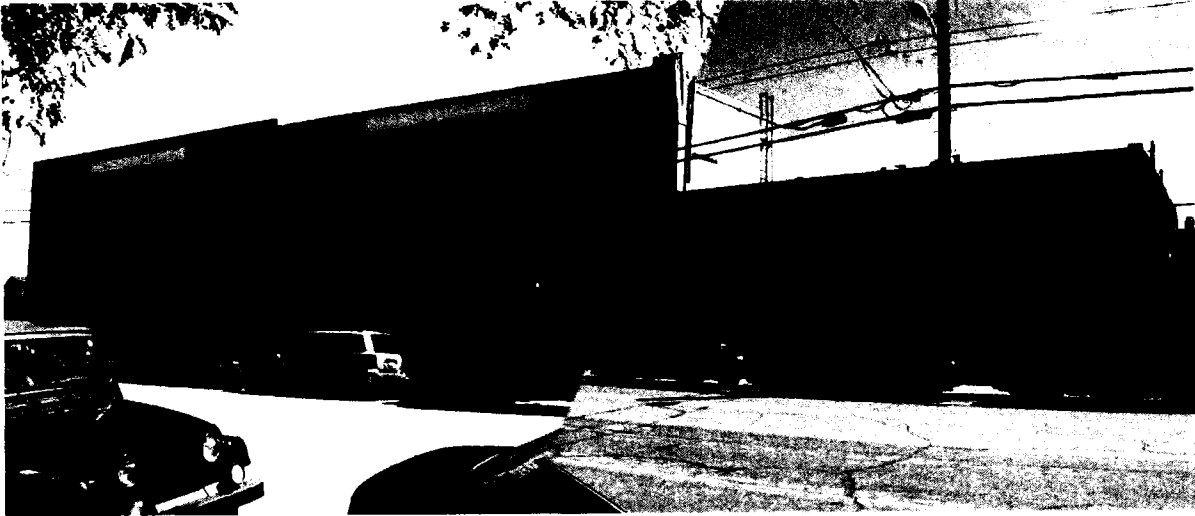
PHOTO APPENDIX



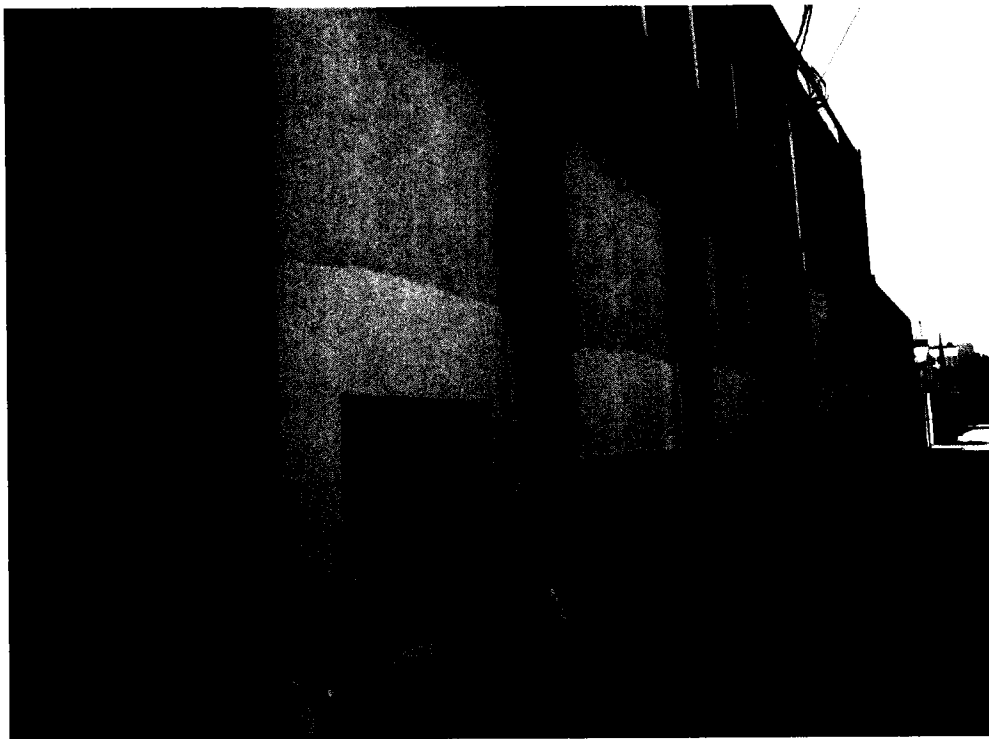
North and primary (west) façades, looking southeast.



Primary (west) façade, looking southeast.



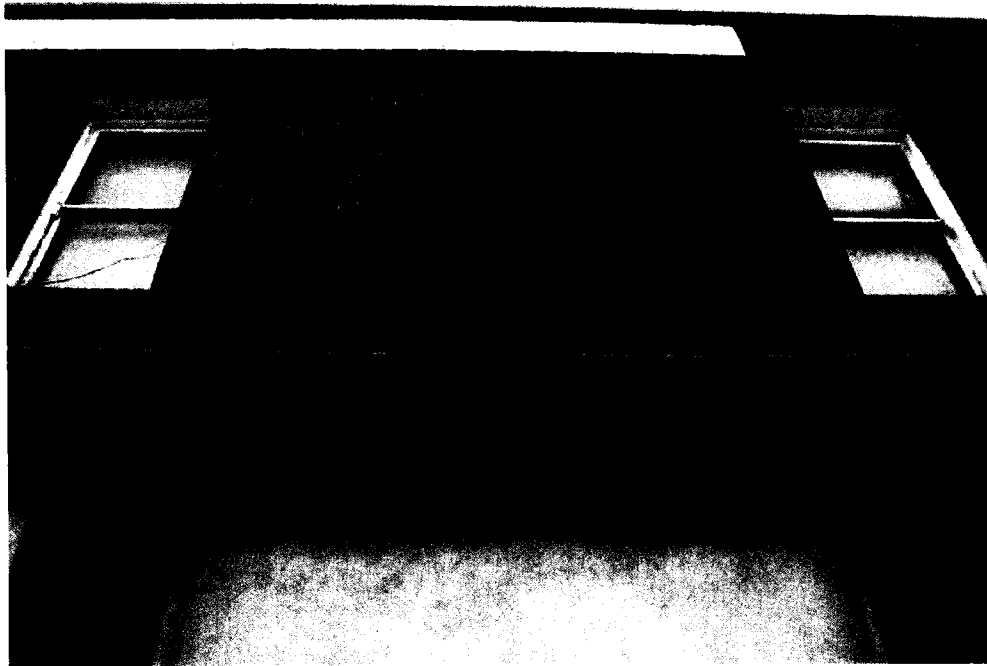
Primary (west) façade, looking east.



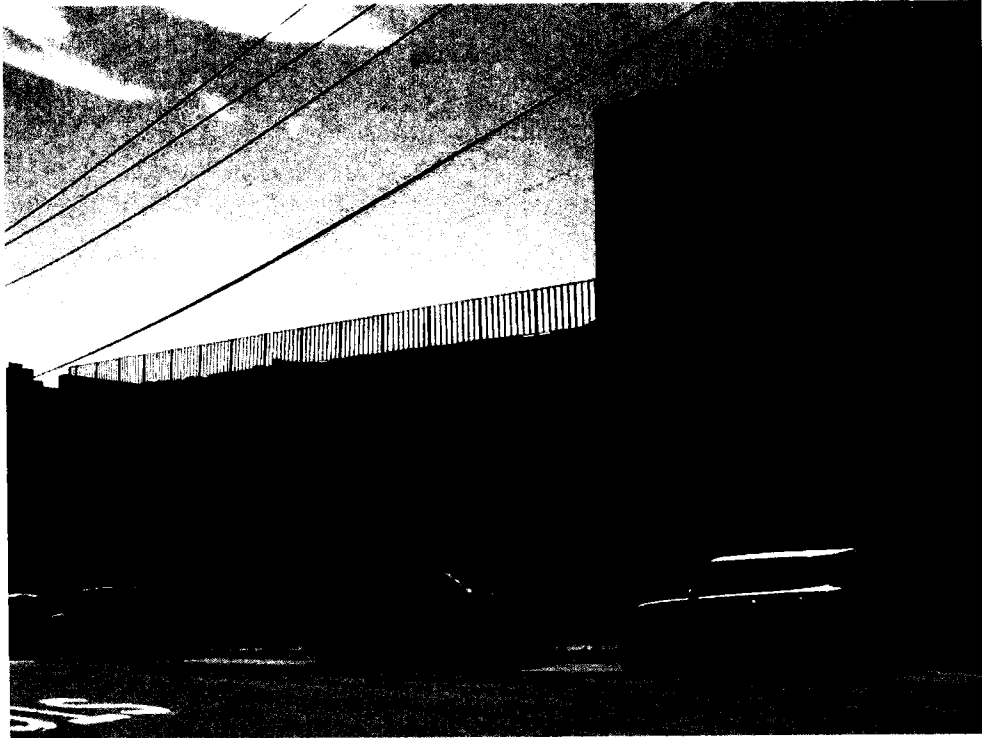
Detail of infilled openings on primary (west) façade, looking south.



Detail of two entrances at center of primary (west) facade.



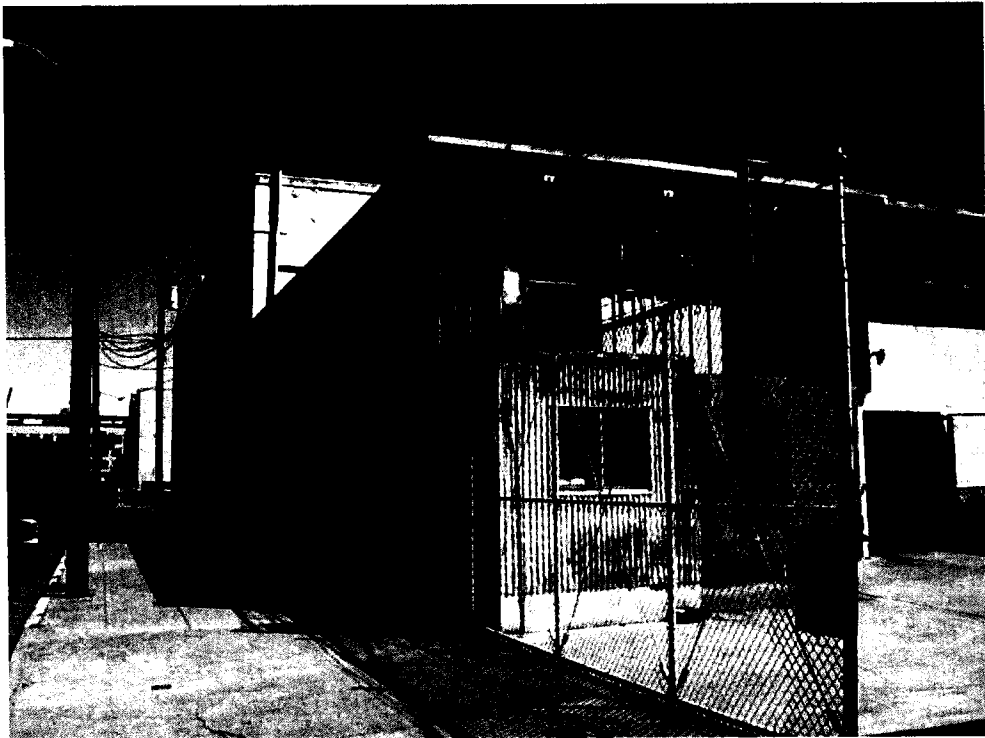
Detail of upper story of primary (west) facade.



North façade, looking southeast.



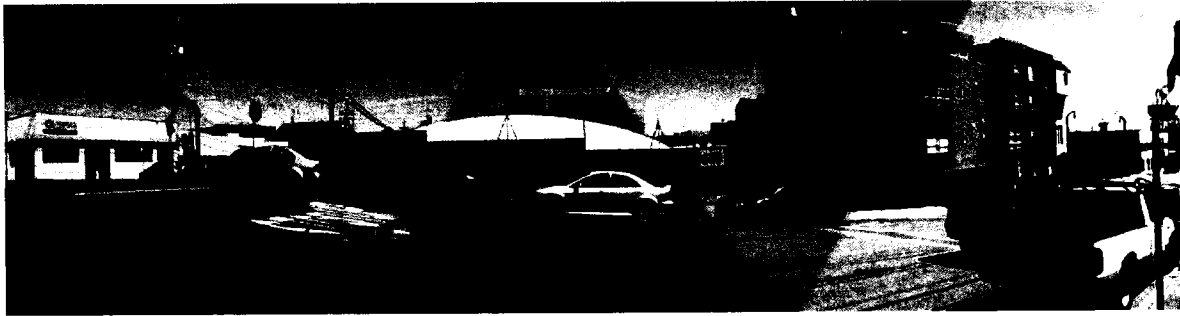
Detail of basement entrance at east end of north façade.



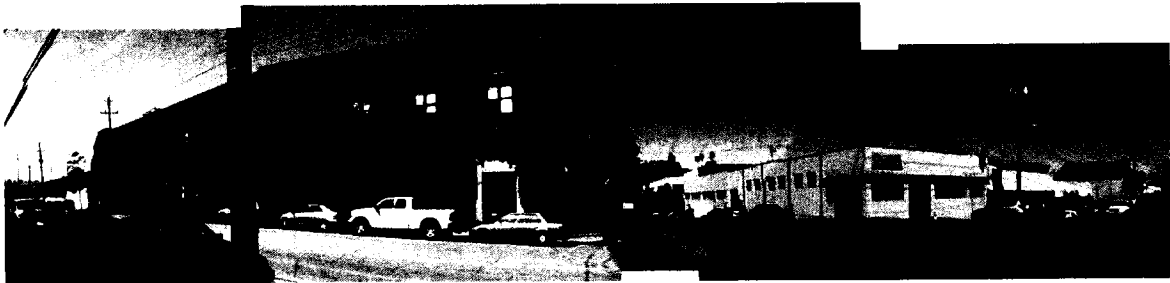
Primary (west) facade and portion of south façade, looking northeast.



View to east of subject property, looking at intersection of 19th and 3rd streets.
(Portion of subject property visible at far right.)



North block face of 19th Street, opposite subject property.



West block face of Tennessee Street, opposite subject property.
(All buildings visible lie within the Dogpatch Historic District.)

EXHIBIT D:

PREVIOUS EVALUATIONS

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code _____

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 5 Resource name(s) or number (assigned by recorder) 815-825 Tennessee Street

P1. Other Identifier: 82

***P2. Location:** Not for Publication Unrestricted

***a. County** San Francisco

***b. USGS 7.5' Quad** San Francisco North, CA **Date** 1995

***c. Address** 815-825 Tennessee Street

City San Francisco

Zip 94107

***e. Other Locational Data:** Assessor's Parcel Number Block: 4059 Lots: 1A and 1B

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Three sections, each with three bays, comprise this brick building, which is located on the corner of Tennessee and 19th Streets. The two-story center section was built in 1926 followed by the two-story corner section in 1930. The single-story section on the southern end was not constructed until 1942. There is also a single-story metal building on the southern portion of lot 1A that was constructed by 1942.

The Tennessee Street façade of this unreinforced masonry building features nine bays, each with a large recessed window or door opening at the ground level that has been infilled. Bolted concrete bumpers are located at the base of the openings that were constructed for vehicles and the under side of the large recessed openings features a metal band bolted to the brick. An infilled opening of the corner section contains a thick metal door, perhaps a freezer door. Two doors still function in the center section – a tall double wooden door with transom in a recessed entryway and a single metal door below fixed industrial steel sash windows. The single-story section contains a roll-up steel door. Each bay of the two-story sections features two recessed double-hung wooden sash windows with sills of brick headers and lintels of brick headers and stretchers. Projecting stringcourses of brick stretchers are located between the first and the second stories and between the second-story windows and the masonry ties at the top of the building. A recessed horizontal area for signage is centered in the upper section of the two-story facades; "C. J. Figone & Son" is painted in the corner section, and "Old Plantation Brand" appears in the center section. The plain parapet is capped by a projecting brick stringcourse and steps up where the second-story section ends.

(See Continuation Page 2).

***P3b. Resource Attributes:** (list attributes and codes) HP 8 Industrial Building; HP 45 Unreinforced Masonry Building

***P4. Resources Present:** Building Structure Object Site District Element of District Other



P5a. Photo 1

P5b. Photo: (view and date)
 View of corner and center section from Tennessee Street looking southeast

05-14-2001

***P6. Date Constructed/Age and Sources:** historic
 1926 – Building Permit
 1930 – Building Permit
 1942 – Building Permit

***P7. Owner and Address:**
 The Mai 1993 Living Trust
 % Su Wuan Lee Mai
 2416 Butternut Drive
 Hillsborough, CA 94010

***P8. Recorded by:**
 Planning Department
 City & County of San Francisco
 1660 Mission Street, 5th Floor
 San Francisco, CA 94103

***P9. Date Recorded:** 05-21-2001

***P10. Survey Type:**
 Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
 Building Permits #156055, 182106, 69142

***Attachments:** None Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (list)



Photo 2. View of single-story section from Tennessee Street looking east. May 14, 2001.



Photo 3. View from the intersection of 19th and Tennessee Streets looking southeast. May 14, 2001.

***P3a Cont.**

The two-story corner bay on the 19th Street façade follows a similar design pattern as those on the Tennessee Street façade. The remainder of the 19th Street façade is single-story and single-story over a basement reflecting the downward slope to the east of 19th Street. A large painted sign that reads, "Hsin Tung Yang Foods Co.," covers most of this façade, which also features a single metal door with sidelights and transom. A metal fence is located on the flat roof.

(See Continuation Page 3).



Photo 4. View from Tennessee Street looking southeast. May 14, 2001.

***P3a Cont.**

(See Photo 4) This single-story, freestanding accessory building is sheathed in corrugated metal panels. The end fronting Tennessee Street contains industrial steel sash windows, and the northern end features several roll-up steel doors and a pedestrian door. A metal shed is attached to the southern façade and a light monitor runs along the spine of the gabled roof.



Photo 5. View from Tennessee Street looking northeast. May 14, 2001.



Photo 6. View of metal shed looking northeast. May 14, 2001.

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or # 815-825 Tennessee Street

- B1. Historic name: Bowie Switch Co.
- B2. Common name: C. J. Figone & Son
- B3. Original Use: Switch Factory
- B4. Present use: Food processing

*B5. Architectural Style: Industrial

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed in 1926. Additions 1927(shed, Photo 6), 1930 (brick extension), 1942 (brick extension), 1942 shed (Photo 6) relocated on lot. 1955, repair of fire damage. 1958, change window to vehicular door. 1962, internal conversion to meat processing plant. Parapets repaired/braced 1994.

*B7. Moved? No Yes Unknown Date: n/a Original Location: n/a

*B8. Related Features: Metal shed

B9a. Architect: August Nordin; Frank A. Johnson; William Mooser

b. Builder: unknown

*B10. Significance: Theme Industrial Development and Settlement Area San Francisco's Central Waterfront
Period of Significance 1854-1948 Property Type Industrial Applicable Criteria A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

Block 4059 was one of the last blocks fronting 3rd Street to be lowered in grade to street level. In 1900, about two-thirds of the block was some 45 feet above 3rd Street. Two buildings occupied the block, a saloon and shop with a small barn at the corner of 3rd and 19th Streets and a large house towards the center of the southern portion of the block. By 1915, the hill was leveled and 20th street was opened and the large dwelling was removed. The second building was also removed by 1920. By 1920, however, a series of commercial structures were constructed on the newly leveled southern portion of the block. Between 1938 and 1940, 3rd Street was widened some twenty feet into the block

The Bowie Switch Company was in the business of manufacturing electric switches. Augustus J. Bowie was the proprietor. Small industry such as the Bowie Switch Co. was typical of the later development of the Central Waterfront. The industry did not rely on access to the water nor the rail lines for distribution of its goods. Instead, it relied on the emerging trucking industry.

This complex retains sufficient integrity of location, design, setting, materials, workmanship, feeling, and association. This property is a contributor to a fully documented historic district that may become eligible for listing in the National Register when more historical or architectural research is performed. This resource is significant under Criterion A: Resources that are associated with events that have made a significant contribution to the broad patterns of our history.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Sanborn Maps 1886, 1900, 1915, 1920. WPA Land Use Map, 1940. Block Books 1935, 1946, 1965, current.

B13. Remarks:

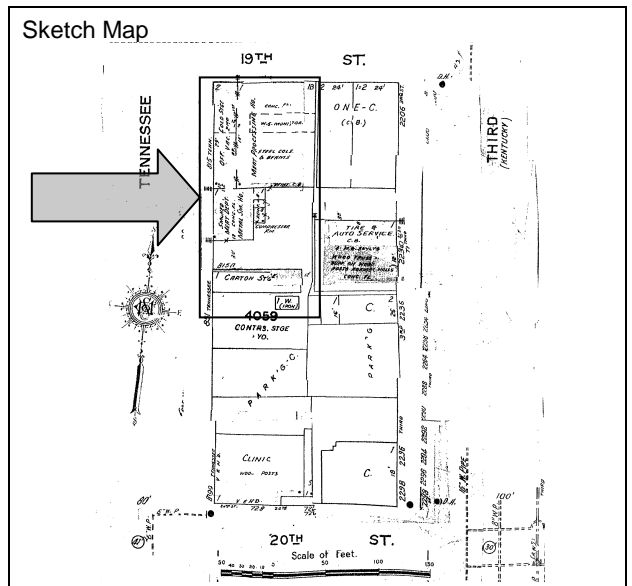
*B14. Evaluator:

Tim Kelley, historian, Central Waterfront Survey Advisory Committee

*Date of Evaluation:

July 20, 2001

(This space reserved for official comments.)



State of California & The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary# _____

HRI # _____

Trinomial _____

Page 1 of 2

*Resource Name or # (Assigned by recorder) 815-825 Tennessee Street

*Recorded by: Page & Turnbull

*Date 11/8/2012

Continuation

Update

815-825 Tennessee Street (APN 4059/001A & 001B) was surveyed in 2001 by the City of San Francisco as part of the Central Waterfront Cultural Resources Survey and was assigned a National Register Status Code of "4D2." In 2003, the State of California converted all National Register Status Codes (NRSC) into California Historical Resource Status Codes (CHRSC). All properties listed with a NRSC of "4D2" were converted into CHRSC of "7N1," thus identifying these properties as "Needs to Be Reevaluated (Formerly NR SC4) – may become eligible for NR w/restoration or when meets other specific conditions."

The building appears to be unchanged since the last survey. Constructed in 1926 on former Santa Fe Land Improvement Company holdings, 815-825 Tennessee Street was initially occupied by the Bowie Switch Company, an electric switch manufacturer. The two-story brick building is typical of later industrial development in the Central Waterfront/Third Street Industrial District that began to permeate the previously residential Dogpatch and relied on truck access rather than water or rail. The building played a significant individual role in this trend, and appears eligible for local designation both individually and as a contributor to the Central Waterfront/Third Street Industrial District. This district is eligible for local designation under Criterion A (Events), which includes resources that are "associated with events that have made a significant contribution to the broad patterns of our history."

815-825 Tennessee Street has been assigned a new California Historical Resource Status Code of "5B," thus identifying the property as "Contributor and individually eligible or listed as coded (1/2/3)." This property was not assessed for its potential to yield information important in prehistory or history, per National Register Criterion D (Information Potential).



815-825 Tennessee Street, primary façade (6 February 2007)

State of California & The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary# _____
HRI # _____
Trinomial _____

Page 2 of 2

*Resource Name or # (Assigned by recorder) 815-825 Tennessee Street

*Recorded by: Page & Turnbull

*Date 11/8/2012

Continuation

Update



Corner of 19th & Tennessee Streets, looking southeast (6 February 2007)

FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco

June 10, 2014

Prepared for:

**ROEM Development Corporation
1650 Lafayette Street
Santa Clara, CA 95050**

and

**City and County of San Francisco
Department Planning
1650 Mission Street, Suite 400
San Francisco, California 94103**

Prepared by:

**Tetra Tech, Inc.
1999 Harrison Street, Suite 500
Oakland, CA 94612**

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Figure 1 Dogpatch Historic District

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A 815-825 Tennessee Street New Construction Renderings

1. SUMMARY

ROEM Development Corporation (ROEM) proposes to demolish most of the building at 815-825 Tennessee Street in San Francisco, a two-story industrial building constructed of unreinforced masonry in 1926, and construct a new building in its place. A small portion of the original building, the northwest corner that contains the original main façade, will be retained. The existing building is a contributor to the Central Waterfront Historic District of San Francisco in the sub-area of the Potrero Point Historic District and is adjacent (across Tennessee Street) from the Dogpatch Historic District of San Francisco.

Tetra Tech prepared this Historical Resources Evaluation Report (HRE) on behalf of ROEM. Tetra Tech concludes that the proposed project complies with the Secretary of the Interior's Standards for Rehabilitation (Standards) and the guidelines offered in Article 10 of the Planning Code, Appendix L as they apply to infill new construction adjacent to a historic district.

Tetra Tech has determined that the historic integrity of the Dogpatch Historic District would not be diminished as a result of new infill construction at 815-825 Tennessee Street and the district would continue to retain the physical characteristics that convey its historic significance.

2. INTRODUCTION

ROEM proposes to remove virtually all of the existing building at 815-825 Tennessee Street (except an original portion at the northwest corner) and construct a new five-story, 69-unit residential apartment building in its place. This report analyzes the proposed project's compatibility under the Secretary of the Interior's Standards for Rehabilitation as it relates to new infill construction adjacent to a historic property, the Dogpatch Historic District. Tetra Tech also used the guidelines in Article 10, Appendix L of the Planning Code to evaluate the design of the new building and its compatibility with the historic buildings found within the Dogpatch Historic District. This report will evaluate the proposed project against the Standards as well as take into consideration the guidelines in Article 10 of the Planning Code for new construction adjacent to the Dogpatch Historic District, as requested by the San Francisco Planning Department staff. The report is focused only on the exterior design of the new construction. Tetra Tech was not asked to evaluate the proposed project against the Standards as they apply to the Central Waterfront District or to include an analysis of any potential impacts that may result from the removal of a contributing resource to the Central Waterfront Historic District because there are modern buildings and infill already in existence along Third Street, not far from the proposed project location.¹

3. PAST EVALUATIONS

3.1 CENTRAL WATERFRONT HISTORIC RESOURCES SURVEY

The building at 815-825 Tennessee Street is within the 2008 survey area of the Central Waterfront Historic Resources Survey and at that time was assigned a status code of "5B"

¹ Richard Sucre, San Francisco Planning Department, personal communication with Julia Mates, Tetra Tech, Inc. November 1 and November 5, 2013.

which indicates that the property is “locally significant both individually (listed, eligible or appears eligible) and as a contributor to a district that is locally listed, designated, determined eligible or appears eligible through survey evaluation.”² The Central Waterfront District is comprised of three sub-areas the Dogpatch Historic District, Pier 70, and the Potrero Point Historic District. The building at 815-825 Tennessee is a contributor to the potential Third Street Industrial District, a sub-area of the Potrero Point Historic District. The proposed Third Street Industrial District is a narrow linear district bounded by Eighteenth Street to the north, Illinois Street to the east, Twenty-Fourth Street to the south, Third Street to the west, and those parcels that encompass the Pacific Gas & Electric Station A, and the Western Sugar Refinery. The proposed district also includes several properties on the west side of Third Street between Twentieth and Twenty-Second Streets and the contiguous block bounded by Nineteenth, Third, Twentieth, and Tennessee Streets.³

3.2 UNREINFORCED MASONRY BUILDING (UMB) SURVEY

The building at 815-825 Tennessee Street was included in the 1990 San Francisco Landmarks Preservation Advisory Board architectural/historical survey of UMBs constructed in San Francisco between 1850 and 1940. The building at 815-825 Tennessee Street was identified as a UMB in this survey.

3.3 HISTORICAL RESOURCES EVALUATION

The building at 815-825 Tennessee Street was reevaluated for its historic significance in August 2012 by Tim Kelley Consulting. The reevaluation resulted in the determination that the building did not meet the criteria needed for individual listing on the California Register of Historical Resources because “it does not possess strong enough historical associations and physical integrity to be eligible for individual listing”.⁴ This evaluation did agree with previous evaluations that the building was a contributor to the potential Third Street Industrial District, a sub-area of the Potrero Point Historic District.

4. DESCRIPTION OF THE RESOURCES

4.1 815-825 TENNESSEE STREET

The following general description of the building at 815-825 Tennessee Street was extracted from the previous evaluation that was conducted for this building by Tim Kelley Consulting, *Historical Resource Evaluation, 815-825 Tennessee Street, San Francisco, California*, 2012.

The building at 815-825 Tennessee Street is located on the southeast corner of Tennessee Street and 19th Street. The property consists of two square parcels, which cover a rectangular area measuring 20,000 square feet, with 200 feet of frontage along Tennessee Street. The building is an unreinforced masonry warehouse, the majority of which is one story, with a partial second-story that spans a portion of the front (west side) of the building. The

² Kelley & VerPlanck and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008, 4; San Francisco Planning Department Preliminary Project Assessment Amendment 815-825 Tennessee Street, Case No. 2013.0220U, May 23, 2013.

³ Kelly & VerPlanck and Page & Turnbull, March 2008, 9.

⁴ Tim Kelley Consulting, LLC, *Historical Resource Evaluation, 815-825 Tennessee Street, San Francisco, California*, August 2012.

basement level is exposed at the northeast corner of the building. The building has an L-shaped plan, with a one-story ell that projects to the south from the left side of the façade. The building sits on a concrete foundation, and exhibits an early twentieth-century industrial style. The exterior walls of the building have unfinished common-bond brick surfaces. The building is capped by a parapeted flat roof on both the one-and two-story portions. A flat-roofed monitor runs east-west at the center of the lower roof.

The primary façade faces west onto Tennessee Street and is two stories high, with a one-story portion on the right side. It has a flat wall plane with a number and variety of openings at both story levels. The first story features primarily infilled openings, including a large vehicular entrance and two very large window openings on the left side, and another vehicular entrance flanked by two similar window openings on the right side. These openings are infilled with stucco panels, some of which are inset with metal doors or hatches, or louvered metal vents. Between the two infilled vehicular entrances and corresponding sets of windows are two pedestrian entrances.

The Kelley Consulting evaluation states that “the building is a good example of an early twentieth century industrial building with numerous characteristics that served its utilitarian use.” These include:

- brick construction;
- partial second story;
- flat roof; and
- large window and door openings⁵

The façade of the building is shown in Photograph 1.



Photograph 1: 815-825 Tennessee Street, primary (west) façade
Photograph taken by Tetra Tech
November 1, 2013

⁵ Tim Kelley Consulting, *Historical Resource Evaluation, 815-825 Tennessee Street*, 25.

4.2 DOGPATCH HISTORIC DISTRICT

The Dogpatch Historic District is generally bounded between Minnesota, Tennessee, and Third Streets, odd and even addresses from Mariposa Street to Tubbs Street, as shown in Figure 1. The district's western boundary along Tennessee Street is directly across the street from the building at 815-825 Tennessee Street. The Dogpatch Historic District is a nine-block enclave of industrial workers' housing, located east of Potrero Hill in the Central Waterfront district. Figure 1 shows the district's boundaries. It is comprised of flats and cottages that used to be workers' housing as well as several industrial, commercial, and civic buildings that were constructed between 1870 and 1930.⁶ The district is comprised of residential, industrial/commercial contributing resource types.

The Dogpatch Historic District is significant under the National Register of Historic Places at the local level under Criterion A (Events/Patterns of History) and Criterion C (Design/Construction). The period of significance of the district begins in 1867, when the Long Bridge was opened, until the end of World War II, in 1945. Industrial buildings within the Dogpatch Historic District are usually within a four-story range with many of the industrial/commercial buildings one or two stories in height. They are typical examples of warehouse design and are often large in bulk with ground level openings for rail or vehicular access. These industrial and warehouse buildings within the district lack strong fenestration patterns or contain large, metal sash windows. Standard brick masonry is found on the older commercial buildings along with concrete block and stucco. The contributing industrial and commercial buildings within this district lack ornamentation, which is common for utilitarian buildings. Flat roof forms with raised parapets are typically found on industrial and commercial buildings within the district. Red brick is typical of industrial/commercial contributing buildings with some muted earth tones of red, brown, gray or blue, found on reinforced concrete and stucco.⁷

⁶ City and County of San Francisco, Planning Code Article 10: Appendix L: Dogpatch Historic District 2011, 3.

⁷ City and County of San Francisco, Dogpatch Historic District 2011, 9.

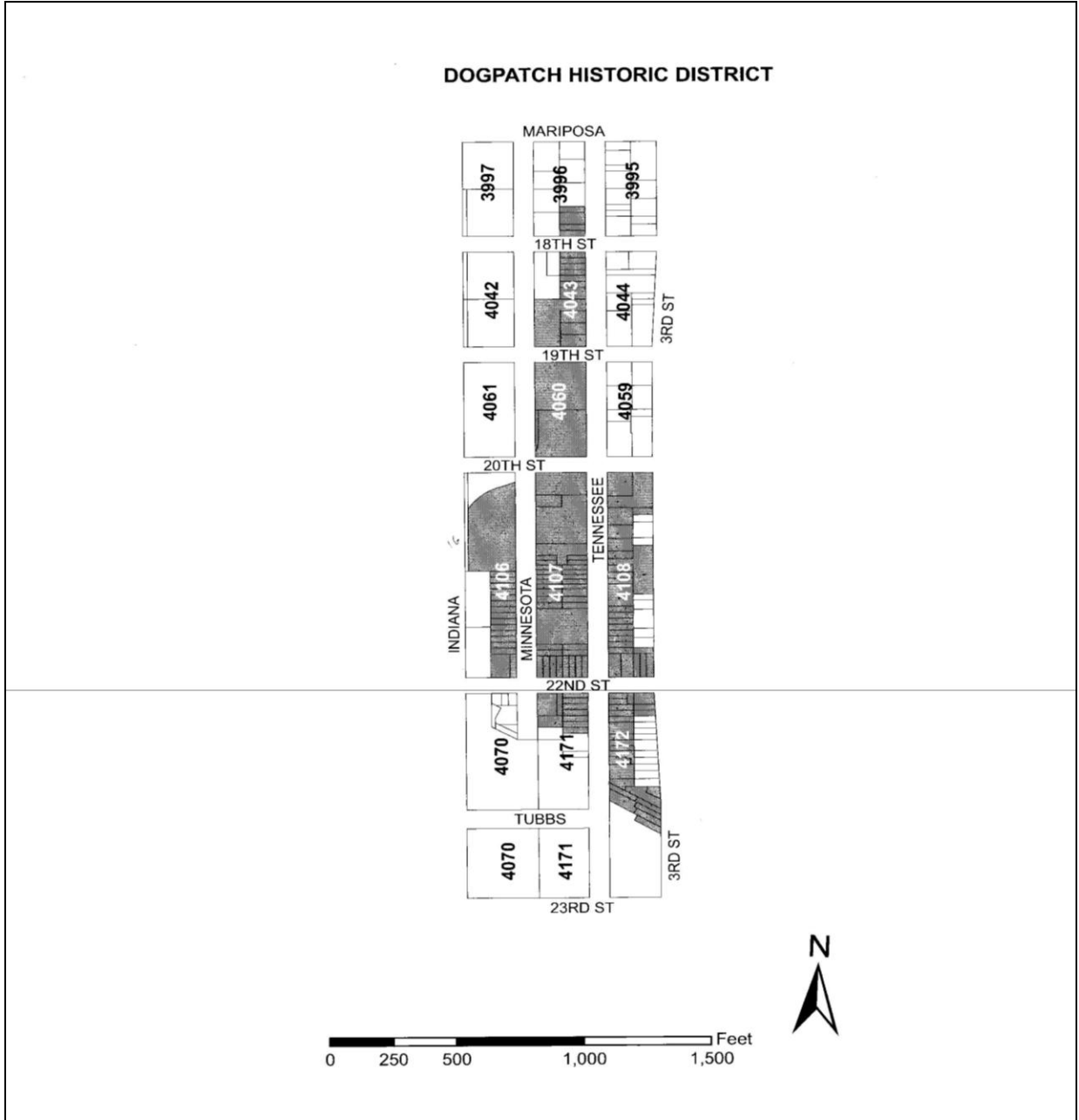


Figure 1
Dogpatch Historic District

Map courtesy of City and County of San Francisco, Planning Code Article 10: Appendix L: Dogpatch Historic District, 2008.

5. EVALUATION OF THE PROJECT

5.1 SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings provide guidance for working with historic properties. Federal agencies and local governments use the Standards to evaluate proposed rehabilitative work on historic properties. The Standards for Rehabilitation (36 CFR, Part 67) make up that section of the overall historic preservation project standards and address the most prevalent treatment. Rehabilitation is defined as “the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.”⁸

Standards are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historic resources. In accordance with CEQA Section 15064.5(3), complying with the standards is considered sufficient to mitigate the impact on historical resources to a level of less than significant (including historic districts and individually eligible resources).

There are four sets of Standards used to guide the treatment of historic properties. For the purposes of this report and evaluation, the historic property is the Dogpatch Historic District, adjacent to the proposed project's new infill construction. The description of the four sets of standards, below are taken from the guidelines:

Preservation—The Standards for preservation “require retention of the greatest amount of historic fabric, along with the building’s historic form, features, and detailing as they have evolved over time.”

Rehabilitation—The Standards for Rehabilitation “acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building’s historic character.”

Restoration—The Standards for Restoration “allow for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing materials from other periods.”

Reconstruction—The Standards for Reconstruction “establish a limited framework for re-creating a vanished or non-surviving building with new materials, primarily for interpretive purposes.”⁹

Normally, one set of Standards is chosen for a project, based on the proposed project activities. With regard to the proposed project at 815-825 Tennessee Street, the most appropriate Standard to apply are the Standards for Rehabilitation, as the project involves constructing new

⁸ National Park Service, Kay D. Weeks and Anne E. Grimmer, *The Secretary of the Interior Standard's for the Treatment of Historic Properties: with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (US Department of the Interior: Washington, D.C.: 1995).

⁹ Weeks and Grimmer, *The Secretary of the Interior Standard's*, 2.

infill adjacent to the Dogpatch Historic District.¹⁰ The new construction design should meet the changing use of the building while not compromising the historic integrity or historic character-defining features of the historic district.

5.2 CITY AND COUNTY OF SAN FRANCISCO PLANNING CODE, ARTICLE 10: APPENDIX L

The City and County of San Francisco reviews the historic resources described under Article 10 of the San Francisco Planning Code when it evaluates impacts on historic resources. Article 10 describes the procedures regarding the preservation of sites and areas of special character or special historical, architectural, or aesthetic interest or value, such as officially designated city landmarks and buildings included within locally designated historic districts.¹¹

Appendix L of Article 10 of the Planning Code provides specific guidance for exterior changes to buildings within the Dogpatch Historic District as well as additions to existing contributing buildings and new infill construction within the district. This guidance is provided Section 10 of Appendix L entitled *New Infill Construction Guidelines for Preservation of Historical, Architectural, and Aesthetic Landmarks*. Although the building at 815-825 Tennessee Street is not a contributing resource to the Dogpatch Historic District and the newly constructed building will not be a contributor to or located within the district, it will be located in close proximity (directly across the Tennessee Street boundary on the district's west side) and therefore the proposed project warrants consideration against the new infill guidelines provided in Article 10. As stated in Article 10, infill construction within and adjacent to the historic district should reflect the district's historic character without creating a false sense of history.

5.2.1 Standards for Rehabilitation

The analysis below applies each of the ten individual Standards for Rehabilitation and guidance under Article 10 of the Planning Code to the proposed project's exterior facades, based on the proposed project renderings Tetra Tech received from ROEM. The drawings are included in Appendix A.

SOI Rehabilitation Standard 1: *A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

Appendix L to Article 10: *New construction shall not destroy historic materials features and spatial relationships that characterize the property. New construction is contemporary, yet compatible.*

The project will not change the historic use of buildings within the Dogpatch Historic District. The district consists of residential dwellings as well as commercial/industrial buildings so the addition of an apartment complex nearby is compatible with the historic residential use of properties found within the district. The scale and massing of the new building will be larger but compatible with the industrial/commercial property types found within the adjacent district, although the new use will be residential. The addition of badly

¹⁰ Rich Sucre, personal communication with Julia Mates, November 4, 2013.

¹¹City and County of San Francisco Planning Department, *San Francisco Preservation Bulletins*, (City and County of San Francisco, 2004) available at http://www.sfgov.org/site/planning_index.asp?id=41423.

needed residential infill housing on the site replacing declining industrial uses will provide additional economic development and will support commercial revitalization of the Dogpatch Historic District.

The building at 815-825 Tennessee Street was originally used as a commercial/industrial building, housing businesses including an electrical supply manufacturers (the Bowie Switch Company and the A.B. Chance Company), wholesale liquor distributor (Key Distributing Company), a wholesale meat business (C.J. Figone & Son), and food sales businesses (IQF Food Sales and Western Meat Snacks, Inc.).¹² After the completion of the proposed project, the new building will be used as a residential apartment building. The existing building is not suitable for rehabilitation from its former uses to commercial/residential use. The proposed project will not change any distinctive materials, features, spaces, or spatial relationships of the Dogpatch Historic District.

Therefore, the proposed project complies with the Rehabilitation Standard 1 and the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 2: *The historic character of a property will be maintained and reserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

Appendix L to Article 10. *New construction shall not destroy historic materials, features and spatial relationships that characterize the property. Any new work shall be compatible with the historic materials, features, size, scale, proportion, and massing of the historic District.*

The proposed project will not remove or alter distinctive materials, features, or spatial relationships within the Dogpatch Historic District. The proposed project is designed to respect the district's historic, character defining features. The northwest corner and main façade of the original building (at the west side) is sided in brick, which will remain. The new building will have exterior walls with veneers of metal, plaster, masonry, stone, and wood composite—all materials that create a visual compatibility with the original building and with buildings in the neighborhood. The retention of the original red brick wall siding at the northwest corner, window walls, metal details, brick veneers, and flat roof of the new building are compatible with the historic materials within the historic District. These materials are compatible in overall color, character, and texture of the historic features of the adjacent district.

Although the new construction will be residential in use, the massing and scale of the new building will be designed with features typical to a warehouse in the Dogpatch Historic District-- large in bulk and several stories high, flat roof, simple ornamentation, regularly spaced, multi-light window openings across the façade, and ground level openings. These architectural features are prevalent on commercial buildings located within the district. The new construction will not destroy character defining features of the Dogpatch Historic District and will have a contemporary design that is compatible with the district.

¹² Kelley, *Historical Resource Evaluation, 815-825 Tennessee Street, 22.*

As designed, the proposed project is in compliance with Rehabilitation Standard 2 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 3: *Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties will not be undertaken.*

Appendix L to Article 10. *Infill construction should reflect the character of the district...without creating a false sense of history.*

The design for the proposed apartment complex does not include false historicism or any added conjectural features. The original principal façade and portions of its original north elevation will be retained as a physical record of the building's history. The proposed exterior of the new building would be designed in a style that is sympathetic to the style, scale and proportion of the historic district but would have a contemporary design so that it is distinguished from original historic buildings and structures within the district.

As designed, the proposed project is in compliance with Rehabilitation Standard 2 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 4: *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

Appendix L to Article 10: *No corresponding standard.*

The proposed project will not remove or alter any features or characteristics of the Dogpatch Historic District that were added after the period of significance and that are considered to be historic character-defining elements. There are several buildings that have been constructed recently in and adjacent to the Dogpatch Historic District and the proposed project will be integrated with other modern buildings in the area.

As designed, the proposed project would comply with Rehabilitation Standard 4.

SOI Rehabilitation Standard 5: *Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

Appendix L to Article 10: *Infill construction materials are compatible with the district in general character, color, and texture.*

None of the buildings within the Dogpatch Historic District will be altered as part of the proposed project. A portion of the original building that contains the principal brick façade will remain and be a visual reminder of the building's original use and the industrial history of the neighborhood. The new building will be constructed with materials that are compatible with the materials and finishes of the buildings within the district. The design of the new building includes red brick at the facades, muted earth tone color, paint, and materials, and simple, detailing that relates to the simple, traditional, vernacular form. These

features will be sympathetic to and blend with the distinctive materials and features found on buildings within the district.

As designed, the proposed project would comply with Rehabilitation Standard 5 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 6: *Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.*

Appendix L to Article 10: *Appropriate restoration of inappropriate alterations is encouraged. New construction should be compatible with the historic character of the district in terms of scale, massing, fenestration, materials and detail.*

Original character-defining features of the Dogpatch Historic District will not be compromised by the proposed project. The new apartment building will have a contemporary design that will reflect the character of the district; however none of the buildings within the district are part of the proposed project.

As designed, the proposed project would comply with Rehabilitation Standard 6 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 7: *Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that can cause damage to historic materials will not be used.*

Appendix L to Article 10: *Sandblasting and certain chemical treatment detrimental to masonry will not be approved.*

The proposed project will not use physical or chemical treatments. None of the buildings within the Dogpatch Historic District are part of the proposed project.

As designed, the proposed project would comply with Rehabilitation Standard 7 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 8: *Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

Appendix L to Article 10: *No corresponding standard.*

If any archaeological material is encountered during construction, then all construction should be halted and a proper analysis undertaken by qualified specialists in order to comply with Rehabilitation Standard 8.

As designed, the proposed project would comply with Rehabilitation Standard 8 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 9: *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment.*

Appendix L to Article 10: *New construction shall not destroy historic materials, features, and spatial relationships that characterize the property. Any new work shall be differentiated from the old and shall be compatible with the historic materials, features, size, scale and proportion of the property and its environment.*

The proposed new apartment building will be largely compatible in scale proportion, massing, and size with the Dogpatch Historic District and will not destroy historic materials, features, or spatial relationships that characterize the district. The new construction will be a residential building designed in a manner that retains the large scale proportion, massing, multi-light fenestration, brick materials, flat roof, and simple ornamentation that is similar to the brick warehouse currently at this location but the appearance of the new building will be differentiated from historic buildings in the district. The new construction will be contemporary in style, yet compatible with architectural styles found within the District.

New construction will be differentiated from the original hard corner of the building that will be retained. The exterior siding materials on the new construction will be compatible with the original portion of the building but will have a distinctly different appearance from the retained portion of the original building.

As designed, the proposed project would comply with Rehabilitation Standard 9 and with the standards set forth in Appendix L to Article 10.

SOI Rehabilitation Standard 10: *New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

Appendix L to Article 10: *The structure respects the general size, shape, and scale of the character-defining features associated with the district and its relationship to the character-defining features of the immediate neighbors and the district.*

The proposed project will be sited adjacent to the Dogpatch Historic District and will be compatible with the buildings within the district but will be clearly differentiated from the historic fabric of the district by its contemporary design. The design of the new apartment building will be inconspicuous and will not result in a radical change to the historic district. Therefore, removal of the building in the future will not compromise the historic integrity of the district because the building is not within the district's boundaries. The new construction will complement the district so as not to stand out or be noticeable or highly visible from within the district so that if removed in the future, it will not impact essential form and integrity of the historic District.

6. CONCLUSION

The proposed project will demolish the current industrial/commercial warehouse building at 815-825 Tennessee Street and construct a new six-story residential apartment building in its place. The proposed work is adjacent to the Dogpatch Historic District but will not impact the district's historic character or integrity. The proposed project follows a design that is mindful of preservation, including retaining a portion of the original building, yet incorporates a contemporary design that respects the district's character defining features and incorporates some of the general scale, materials, features, and simplicity of the current warehouse. The project complies with the Standards for Rehabilitation and the standards found for new infill construction in Appendix L of Article 10 of the San Francisco Planning Code.

7. BIBLIOGRAPHY

City and County of San Francisco. Planning Code: Article 10: Appendix L: Dogpatch Historic District. 2011.

City and County of San Francisco Planning Department. Preservation Bulletins website: <http://www.sf-planning.org/index.aspx?page=1827>, accessed November 2, 2013.

Kelley & VerPlanck and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008.

San Francisco Planning Department. *CEQA Review Procedures for Historical Resources*. San Francisco, 2005.

San Francisco Planning Department. Preliminary Project Assessment Amendment 815-825 Tennessee Street. Case No. 2031.0220U. May 13, 2013.

Sucre, Richard. Personal Communication with Julia Mates. November 1 and 5, 2013.

Tim Kelley Consulting, LLC. Historical Resource Evaluation, 815-825 Tennessee Street, San Francisco, California. August 2012.

Weeks, Kay and Anne E. Grimmer. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (US Department of the Interior: Washington, D.C., 1995).

8. PREPARER'S QUALIFICATIONS

Tetra Tech Historian Julia Mates conducted research, reviewed project information, assessed and evaluated potential historical resources, and wrote this report. Ms. Mates meets the history and architectural history professional qualifications, as outlined by the federal government in Title 36, Code of Federal Regulations, Part 61. She has an MA in History/Public History from California State University, Sacramento.

Tetra Tech Cultural Resources Specialist Kevin Doyle served as the technical peer reviewer for the HRE. He has 28 years of experience and training in all aspects of cultural resource management and environmental planning. He is the QA/QC reviewer for all internal and subcontractor cultural resources reports for Tetra Tech's Oakland, Portland, Albuquerque, Irvine, and Boulder offices.

APPENDIX A

815-825 Tennessee Street New Design Renderings

PREPARED FOR:

ROEM

NEW PROJECT PERSPECTIVE



**Supplement to FINAL Historical Resources
Evaluation
for Proposed Infill Construction at
815-825 Tennessee Street, San Francisco**

June 27, 2014

Prepared for:

**ROEM Development Corporation
1650 Lafayette Street
Santa Clara, CA 95050**

and

**City and County of San Francisco
Department Planning
1650 Mission Street, Suite 400
San Francisco, California 94103**

Prepared by:

**Tetra Tech, Inc.
1999 Harrison Street, Suite 500
Oakland, CA 94612**

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1. INTRODUCTION

ROEM Development Corporation (ROEM) proposes to demolish most of the building at 815-825 Tennessee Street in San Francisco, a two-story industrial building constructed of unreinforced masonry in 1926, and construct a new building in its place. Tetra Tech submitted a Historical Resources Evaluation Report (HRE) for 815-825 Tennessee Street on behalf of ROEM on June 10, 2014. This supplemental information is provided upon request from the San Francisco Planning Department to analyze the historic integrity of the Third Street Industrial Historic District (a sub-historic district of the Central Waterfront Historic District) as it relates to the demolition and proposed new construction at 815-825 Tennessee Street. This supplemental information is an additional analysis and should be considered along with the final HRE submitted June 10, 2014, which included an analysis of the Dogpatch Historic District and the proposed new construction.

Tetra Tech applied the Secretary of the Interior's Standards for the Treatment of Historic Properties (standards) as well as the guidelines in Article 10, Appendix L of the Planning Code to evaluate the proposed project. Tetra Tech has determined that the historic integrity and character of the property, the Third Street Industrial District would not be diminished as a result of new infill construction at 815-825 Tennessee Street and the district would continue to retain the physical characteristics that convey its historic significance.

2 CENTRAL WATERFRONT HISTORIC DISTRICT –THIRD STREET INDUSTRIAL DISTRICT

This district is located between Pier 70 and the Dogpatch Historic District and was historically developed with light industrial, repair, warehousing, and food processing businesses, as well as wholesale businesses that relied on the rail lines that ran along Third Street.¹ The Central Waterfront District as a whole, including the Third Street Industrial District, is locally significant under Criterion 1 (Events) for its association with industrial development within the City of San Francisco from 1872-1958 and under Criterion 2 (Design/Construction) as many of the contributing buildings are good examples of late-19th and early-20th century American industrial design.²

The Third Street Industrial Historic District is bounded by Eighteenth Street to the north, Illinois Street to the east, Twenty-Fourth Street to the south, Third Street to the west, and those parcels that encompass the Pacific Gas & Electric Station A, and the Western Sugar Refinery. The proposed district also includes several properties on the west side of Third Street between Twentieth and Twenty-Second Streets and the contiguous block bounded by Nineteenth, Third, Twentieth, and Tennessee Streets.³

Tetra Tech's qualified architectural historian conducted a field visit to identify whether or not any of the contributors to the Third Street Industrial District has been demolished since a 2008 survey conducted by Kelly & VerPlanck and Page & Turnbull was completed.

¹ Kelley & VerPlanck and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008, 11.

² Kelley & VerPlanck and Page & Turnbull, March 2008, 1.

³ Kelly & VerPlanck and Page & Turnbull, March 2008, 9.

Demolition of contributors to the district could result in a reduction of the historic integrity of the district if yet another contributor, such as 815-825 Tennessee Street, was to be removed from the district as well.

Table 1, below, lists the buildings that are contributors to the Third Street Industrial Sub-District, as included in the Department of Parks and Recreation (DPR) 523L form, prepared in 2008 and the results of the field check conducted by Tetra Tech on June 24, 2014.

Table 1
Contributors to Central Waterfront: Third Street Industrial District

Address	Resource Name	Status
2085 Third Street	Gilmore Oil Co. Office Building	Existing
2121 Third Street	Seaside Oil Co. Plant	Demolished; modern building currently under construction
2289-2295 Third Street	Mixed use commercial building & boarding house	Existing
2201-2203 Third Street	Alberta Candy Company	Existing
2225 Third Street	M. Levin and Sons Warehouse	Existing
2255 Third Street	Jos. Levin and Sons Warehouse	Existing
815-825 Tennessee Street	Bowie Switch Co.	Existing
2250 Third Street	None	Existing
2290-2298 Third Street	Anglo California Trust Co.	To be demolished ⁴
724-728 20th Street	Dr. Frank M. Close Medical Clinic	Existing
2350 Third Street	None	Existing
2440 Third Street	Bertsch Machine Works	Existing
2360-2364 Third Street	Pellegrini Bros. Winery	Existing

⁴ San Francisco Planning Department, Executive Summary Large Project Authorization, 2290 3rd Street, Website: <http://commissions.sfplanning.org/cpcpackets/2005.0408X.pdf>, accessed June 25, 2014.

2400 Third Street	Goodyear Rubber Co.	Existing
2301 Third Street	American Can Co. Building	Existing
2530 Third Street	(1516-1510 Kentucky Street)	Existing
2542-2544 3rd Street	(1522 Kentucky Street)	Existing
2501 Third Street	American Can Co. Southern Ext.	Existing
1201 Illinois Street	PG&E Power Plant historic buildings	Existing
1300 Illinois Street	Currently American Medical Response	Existing
435 23rd Street	Western Sugar Refinery Warehouses	Existing

3 EVALUATION OF THE PROJECT

Detailed descriptions of standards as well as a description of the City and County of San Francisco Planning Code, Article 10: Appendix L is provided in the HRE for 815-825 Tennessee Street, submitted June 10, 2014. The discussion below is supplemental information and the same standards were applied in evaluating the proposed project's historical architectural impact to the Third Street Industrial District.

The demolition of the building at 815-825 Tennessee Street will remove a contributor to the Third Street Historic District. However, most of the contributing buildings within the district are still in existence and the district has not undergone heavy alterations since it was identified in the architectural surveys, most recently in 2008. Removal of one contributing building to the district will not detract from the overall historic integrity of the district and would represent a relatively small impact to the district's historic appearance as a large number of contributing buildings will still be present. The building at 815-815 Tennessee Street is removed geographically from the other contributing buildings within the district, the largest concentration of which are along Third Street between 18th Street and 24th Street. The building at 815-825 Tennessee Street one block west of Third Street and therefore new construction there will not detract from the historic concentration of buildings along Third Street.

The proposed new structure is sympathetic to the Third Street Industrial District and incorporates many of the materials, design references and elements found in contributing buildings within the district. The new building will retain a portion of the original building, and is sympathetic to the industrial character and integrity of the district.

5.0 CONCLUSION

The proposed project will demolish the current industrial/commercial warehouse building at 815-825 Tennessee Street and construct a new five-story residential apartment building in its place. The loss of the building at 815-825 Tennessee Street, a contributor to the Third Street historic districts will not compromise the historic integrity or character of the district.

Although the removal of a contributing resource will have an impact on the district, in this case it will be a small incremental one because most of the other contributing buildings within the district remain. The removal and construction of a new building located away from the concentration of contributing buildings along Third Street also decreases any impact to the district's historic character. The design of the new construction, including the materials and elements used will be sympathetic to the industrial style and character of the contributing buildings within the district, further diminishing the impact the project will have on the historic district. The retention of a portion of the original building also enhances the sympathetic nature of the design of the new construction. The project complies with the Standards for Rehabilitation and the standards found for new infill construction in Appendix L of Article 10 of the San Francisco Planning Code.



August 6, 2015

Jaqui Braver
DM Development
448 Linden Street
San Francisco, CA 94102

Dear Jaqui:

This letter is in response to your request for Tetra Tech, Inc. (Tetra Tech) to address Mr. John Loomis' comments about the proposed project at 815-825 Tennessee Street made in communications to the San Francisco Preservation Commission and DM Development. Tetra Tech has prepared two Historic Resource Evaluation (HREs) for the proposed project. The HREs are a "final HRE" dated June 10, 2014, and a "supplemental HRE" dated June 27, 2014. Background information and responses to Mr. Loomis' comments follow.

Background

ROEM Development proposes to demolish most of the original building at 815-825 Tennessee Street and construct a new building on the property. The existing building is in the Central Waterfront/Third Street Industrial Historic District and adjacent to (but not within) the Dogpatch Landmark (Historic) District.

In late 2013, ROEM Development retained Tetra Tech to prepare an HRE that analyzed the proposed project and its compatibility with the Secretary of the Interior's Standards for Treatment of Historic Properties (the Standards) as they relate to new infill construction in close proximity to a historic architectural resource. Tetra Tech submitted the final HRE on June 10, 2014. The final HRE is provided as Attachment A.

In the final HRE, Tetra Tech determined that the proposed project would not diminish the historic integrity of the Dogpatch Landmark District and the district would retain the physical characteristics that convey its historic significance.

After submittal of the final HRE, the San Francisco Planning Department (Planning Department) requested a supplemental analysis of the historic integrity of the Third Street Industrial Historic District (a sub-historic district of the Central Waterfront Historic District) as it relates to the demolition of a contributing resource (815-825 Tennessee Street). Tetra Tech submitted the supplemental HRE to the Planning Department on June 27, 2014. The supplemental HRE is provided as Attachment B.

In the supplemental HRE, Tetra Tech concluded that the proposed project would not diminish the historic integrity and character of the Central Waterfront/Third Street Industrial District and that the district would continue to retain the physical characteristics that convey its historic significance. We also determined that the proposed new building is sympathetic in design to the Central Waterfront/Third Street Industrial Historic District and incorporates many of the materials, design references, and

elements found in contributing buildings within the district. The new building would retain a portion of the original building and is sympathetic to the industrial character and integrity of the district.

In preparing both the HREs, Tetra Tech analyzed the proposed project and made recommendations to the Planning Department using criteria and guidance found in the:

- California Environmental Quality Act (CEQA),
- Secretary of the Interior’s Standards for Treatment of Historic Properties,
- San Francisco Historic Preservation Bulletin: 16 City and County of San Francisco Planning Department CEQA Review Procedures for Historic Resources,
- California Register of Historical Resources, and
- Article 10 of the San Francisco Planning Code.

These regulations and guidance documents provide specific measures upon which architectural historians who meet the Secretary of the Interior’s Professional Qualification Standards base their determinations regarding demolition of historic resources and new infill construction within the City and County of San Francisco (in some instances, additional regulations may also apply). When determining if a historic resource would be significantly impacted by a proposed project, Tetra Tech’s architectural historians applied these criteria objectively, without considering subjective personal preference or viewpoints.

In preparing both HREs, Tetra Tech also reviewed these previous reports and evaluations:

- The California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008,
- Historical Resource Evaluation, 815-825 Tennessee Street, San Francisco, California, August 2012, and
- The California Department of Parks and Recreation 523 District Record: Central Waterfront Historic District, July 2001.

Tetra Tech’s analysis and the conclusions in each of the HREs were used by the Planning Department to assess whether the proposed project would result in a significant impact on the Central Waterfront/Third Street Industrial Historic District or the adjacent Dogpatch Landmark District under CEQA and other applicable regulations and guidance. The Planning Department reviewed Tetra Tech’s HREs and concurred with the findings and conclusions of these reports, as stated in the Community Plan Exemption Checklist and Preservation Team Review Form, Case No. 2013.0220E, on May 13, 2013.

Response to Comments

Below are Mr. Loomis’ comments on the supplemental HRE, excerpted from a communication to the San Francisco Historic Preservation Commission on April 15, 2015, and Tetra Tech’s responses. Note that Mr. Loomis refers to the building at 815-825 Tennessee Street as Hsin Tung Yang.

COMMENT 1: “The key document, the Supplement to FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco, prepared by Tetra Tech Inc. presents a twisted premise for demolition. It first acknowledges that Hsin Tung Yang is of significance

to the “Third Street Industrial District” (making no mention of Dogpatch Landmark District). Then with no evidentiary support whatsoever, Tetra Tech declares that “Removal of one contributing building to the (Third Street Industrial) district will not detract from the overall historic integrity of the district...” (p.4). That is, because it is on the periphery of the district, it is – expendable – not mentioning whatsoever that Hsin Tung Yang sits at the geographic center of the – Dog Patch Historic District.”

RESPONSE 1: The building at 815-825 Tennessee Street is only a contributor to the Third Street Industrial District, which is a sub-district of the Central Waterfront Historic District. It is not within the Dogpatch Landmark District and is not a contributor to this historic district. For reference, the boundaries of the Dogpatch Landmark District are defined in Article 10, Appendix L of the Planning Code. Mr. Loomis’ claim that the building “sits at the geographic center” of the Dogpatch Landmark District may be related to public perception of the boundaries of the Dogpatch neighborhood, the entirety of which is not a historic district. Since the building is only within the Central Waterfront/Third Street Industrial Historic District, the supplemental HRE appropriately analyzes the removal of one contributor to this district and the design and compatibility of the new building with the existing Central Waterfront/Third Street Industrial Historic District. A separate document, the final HRE, analyzed the proposed project’s impact on the adjacent Dogpatch Landmark District and determined that it would not physically impact any resource within this district.

COMMENT 2: “In the Supplement to FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco, June 27, 2014, the Planning Department’s justification for demolition is:

‘Removal of one contributing building to the (Third Street Industrial) district will not detract from the overall historic integrity of the district and would represent a relatively small impact to the district’s historic appearance as a large number of contributing buildings will still be present. The building at 815-815 [sic] Tennessee Street is removed geographically from the other contributing buildings within the district, the largest concentration of which are along Third Street between 18th Street [and 24th Street] and therefore new construction there will not detract from the historic concentration of buildings along Third Street.’

“This disingenuous determination is seriously misleading and seriously - flawed. It barely mentions Dogpatch Landmark District in the Introduction and then focuses solely on the Central Waterfront: Third Street Industrial District in the Evaluation and Conclusion. By constructing an argument that focuses on Third Street and ignores Dogpatch Landmark District, a logic path is set up to condemn Hsin Tung Yang. A false and twisted premise emerges. Planning ignores the fact that Hsin Tung Yang’s location is on the central spine of Dogpatch Landmark District – Tennessee Street...”

RESPONSE 2: The two HREs focus on the proposed project in relation to different historic districts. The supplemental HRE evaluates impacts to the Central Waterfront/Third Street Industrial Historic District and the final HRE evaluates impacts to the adjacent Dogpatch Landmark District. As previously stated, the building is not within the Dogpatch Landmark District. Refer to the final HRE for a discussion of the proposed project in relation to the Dogpatch Historic District.

COMMENT 3: “And Planning makes no mention of the context of the brick building across the street and how it and Hsin Tung Yang act together as a material and historic urban construct in Dogpatch. Of course

the removal of Hsin Tung Yang may not have a profound effect on Third Street. Because the effect will be elsewhere - on Tennessee Street.”

RESPONSE 3: The analysis of the proposed project included field visits to the area and consideration of the historic buildings that comprise the Dogpatch Landmark District. The proposed project was assessed as it relates to the Dogpatch Landmark District under the Standards, and it was determined that the new building would not remove or alter distinctive materials, features, or spatial relationships within the Dogpatch Landmark District. The proposed project is designed to respect the district’s historic character and defining features. The northwest corner and main façade of the original building (at the west side) is sided in brick, which would remain. The new building would have exterior walls with veneers of metal, plaster, masonry, glazing, wood composite, and glass—all materials that create a visual compatibility with the original building and with buildings in the neighborhood. The retention of the original red brick wall siding at the northwest corner, window walls, metal details, brick veneers, and flat roof of the new building are compatible with the historic materials within the historic District. These materials are compatible in overall color, character, and texture with the historic features of the adjacent district.

COMMENT 4: “But most disturbing is the dangerous precedent of the ‘Removal of one contributing building to the district will not detract from the overall historic integrity of the district...’, implying that if historic buildings are merely removed one by one their loss will not be felt – until they are all gone? Is this not like the frog in the pot on the stove who does not feel it when the water finally boils him dead?”

RESPONSE 4: Tetra Tech’s architectural historians applied the aforementioned regulations and guidance, including CEQA and the Standards, to determine if the removal of a contributor to the Central Waterfront/Third Street Industrial Historic District would impair the historic resource’s continued eligibility for listing in the California Register of Historical Resources. Careful consideration was given to the criteria set forth by the regulatory framework, including the location of 815-825 Tennessee Street, the concentration of contributors along Third Street, and the conformance of the design of the new building with the historic district, to ensure that removal of this building would not greatly diminish the historic resource’s ability to convey its significance.

The commenter points to the possible cumulative effect of multiple alterations to the historic district that may, over time, render it no longer eligible for listing in the California Register of Historic Places. Any further alterations within the historic district must comply with all applicable regulations and guidance, including CEQA and the Standards, and be reviewed by the San Francisco Planning Department, which, as a Certified Local Government, must ensure the district maintains its historic integrity. This process was put in place and is expected to function to preserve the district’s long-term historic integrity.

Additional Comments

Mr. Loomis made additional comments on a previous HRE prepared by Tim Kelly Consulting (TKC), which responded to Mr. Loomis’ comments in a letter on July 31, 2015.

Among these comments, Mr. Loomis provided further information regarding historical individuals associated with the building that he feels warrant further discussion. TKC’s response to these comments included a correction regarding one of the individuals associated with the building and concluded that due to the mistaken identity, the historical individuals associated with the building did not affect the conclusion regarding the building’s importance.

Mr. Loomis also commented on the importance of the building's murals and signs. The building's murals and sign are of more modern origin, they were added to the building in the early 1980s, when the building purchased by Su-Wan Lee Mai, according to the San Francisco Assessor's Office records. CEQA guidelines generally exclude buildings and structures constructed less than 45 years of age. Alterations to historic-age buildings and structures that were completed during the modern period are not considered historically significant characteristics of the building without demonstration of strong overriding architectural or historical significance to those modifications. Mr. Loomis has not demonstrated the overriding historical significance needed to associate the modern sign with the historical significance of the building. Indeed, the addition of the sign along the 19th Street façade actually *detracts* from the building's historic integrity as it obstructs the original brick exterior siding at this elevation. The sign, therefore, does not rise to the level of significance necessary to qualify the building to be considered a historical resource.

Mr. Loomis also posed interesting future adaptive reuses for buildings in the Dogpatch neighborhood and his suggestions may be helpful.

Conclusion

The assertion that the supplemental HRE is inadequate seems to stem largely from the fact that the final HRE has not been considered. The final HRE addresses the Dogpatch Landmark District, while the supplemental HRE addresses the Central Waterfront/Third Street Industrial Historic District. In addition, the distinction between the Dogpatch Landmark District and the Dogpatch neighborhood may have influenced the commenter's views.

The final and supplemental HREs were prepared in accordance with applicable regulations and guidance and present valid conclusions. The Planning Department reviewed and concurred with the findings and conclusions of these reports. The developer has included the Dogpatch Neighborhood Association throughout its design process for the new construction in an effort to construct a building that is meaningful to its neighbors. The Planning Department has supported several studies and assessments related to this area, including the Eastern Neighborhoods EIR, the Central Waterfront architectural survey, as well as requiring an HRE for new construction related to the Dogpatch Landmark District. Furthermore, no "new" information or research has been brought to light regarding historical significance of the building or deficiencies in the previously prepared HRE's to warrant further evaluations or assessments of the building.

Sincerely,



Julia E. Mates
Historian/Architectural Historian

Attachments:

- A Final Historic Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco (June 10, 2014)

B Supplement to Final Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco (June 27, 2014)

Attachment A:
Final Historic Resources Evaluation for Proposed
Infill Construction at 815-825 Tennessee Street,
San Francisco (June 10, 2014)

Attachment B
Supplement to Final Historical Resources
Evaluation for Proposed Infill Construction at
815-825 Tennessee Street, San Francisco (June
27, 2014)

TIM KELLEY CONSULTING, LLC

HISTORICAL RESOURCES

July 31, 2015

Jaqui Braver
DM Development
448 Linden Street
San Francisco, CA 94102

Dear Jaqui,

As you requested, I have reviewed comments made by John Loomis regarding the adequacy of the Historical Resource Evaluation (HRE) conducted by my firm (TKC) in August 2012 on the building at 815-825 Tennessee Street, San Francisco. The comments reviewed were made in an undated letter to the San Francisco Historic Preservation Commission, an email to DM Development dated June 8, 2015, and comments embedded in a PDF copy of our 2012 HRE dated 5/28 and 5/29/2015.

In general I would say Mr. Loomis's comments show a passion for and good deal of erudition regarding architectural design, but an incomplete understanding of the CEQA process for evaluation of potential historical resources. In particular they fail to recognize the different parameters for deeming a property an individually significant resource or a component/contributor to a historic district. In addition they seem not to realize that established historic districts are defined by specified boundaries. Mr. Loomis protests that the subject building is "in the geographic center of Dogpatch." However, the HRE simply stated that 815-825 Tennessee Street is not located within the boundaries of the Dogpatch historic district. It goes on to note that it is within and contributes to the potential Potrero Point Historic District, of the Third Street Industrial District sub-area. Thus, as our report affirms, the building is a historical resource, and the question of whether it is in the Dogpatch neighborhood is procedurally irrelevant.

Mr. Loomis advances two arguments he believes were overlooked in TKC's analysis of the significance of the building: a supposed importance to Chinese cultural history based on its occupancy by a processor of Chinese foodstuffs, evidenced by a painted sign on the 19th Street façade; and the historical importance of Augustus J. Bowie Jr., the original owner, to "the electrification of the United States." Regarding the painted sign and its communication of Chinese cultural history, that association, slight at best, dates from 1983, far short of the normal CEQA guideline for the association to be at least 45 or 50 years old. Failing that test, the building would need to demonstrate "exceptional significance" to Chinese cultural history in order to be considered an historical resource.

Regarding the claims for Augustus J. Bowie Jr., it must be noted that electrification of the United States began in the 1870s, around the time of Bowie's birth, and was ubiquitous by the time of the founding of the Bowie Switch Company and construction of the subject building. Mr. Loomis appears to conflate the original owner of the building with his father, who confusingly was also styled Augustus J. Bowie Jr., and was a pioneer mining and hydraulic engineer historically significant in California history. His son, founder of the electrical switch firm, is not known to have been historically significant. He is not cited in the San Francisco Biographical Index, one standard indicator of significance. His

TIM KELLEY CONSULTING, LLC

HISTORICAL RESOURCES

citations in newspaper indexes are in reference to his social position, which does not establish historical significance. To establish that he and this building were historically significant based on his contributions to electrical technology would require that he and his company somehow stand out among the 126 other similar firms listed in San Francisco at the time this building was constructed.

Due to sharing the same name as his father and to variations in its rendering there is some uncertainty over the number of patents each man applied for. Allowing for the active career periods of each, their involvement in different fields, and the time of the elder Bowie's death, it appears the junior Bowie did register 7 patents for various electrical devices, five between 1906 and 1914, well before construction of this building and two in the late 1920s and early 1930s. However, the application for each specifies it is only an "improvement" on previous existing mechanisms.

In addition, the number of subsequent patents that reference any of Bowie's, a common measure of the earlier patent's fundamental importance to evolving technology, is tiny. One of his patents from 1907 has garnered only 7 citations in the past 108 years, while the other six combined have been cited 9 times. Thus, indications are that the Bowie patents cover incremental improvements in switch technology, not seminal inventions.

I attach an annotated PDF of the original HRE with comments by Mr. Loomis and responses to those comments by TKC. Please let me know any questions or comments you may have.

Sincerely,



Tim Kelley Consulting
Historical Resources

HISTORICAL RESOURCE EVALUATION

815-825 TENNESSEE STREET

SAN FRANCISCO, CALIFORNIA



TIM KELLEY CONSULTING, LLC

HISTORICAL RESOURCES

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Summary of Comments on TKC HRE
10_23_12 (Loomis comments).pdf

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I. INTRODUCTION

Tim Kelley Consulting (TKC) was engaged to conduct a Historical Resource Evaluation (HRE) of 815-825 Tennessee Street (APN 4059 001A/001B). The property includes a two-story industrial building with a partial daylight basement. The building was constructed in 1926, of unreinforced brick masonry, and is designed in an early-twentieth century industrial style. This report examines whether the property is eligible for listing in the California Register and evaluates the possible impact of the proposed project on any Historical Resources.

II. SUMMARY

This report finds that 815-825 Tennessee Street may be eligible for listing in the California Register as a contributor to the potential Potrero Point Historic District, within the Third Street Industrial District sub-area but is not individually significant. The proposed project, which involves partial demolition and construction of a new building, would have a substantial adverse effect on the resource, which could be mitigated to less than significant by mitigation measures suggested in this report.

III. CURRENT HISTORIC STATUS

The Planning Department database was searched to determine whether the property was identified in any recognized register of historical resources. The specific registers included are listed below.

A. Here Today

Here Today: San Francisco's Architectural Heritage is one of San Francisco's first architectural surveys. Undertaken by the Junior League of San Francisco and published in 1968, the survey did not assign ratings to buildings. However, the survey does provide brief historical and biographical information for what the authors believed to be significant buildings. The Board of Supervisors adopted the survey in 1970. The survey files, on file at the San Francisco Public Library's San Francisco History Room, contain information on approximately 2,500 properties. The subject property is not included in either the published book, *Here Today*, or the survey files.

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B. Department of City Planning Architectural Quality Survey

The Department of City Planning's Architectural Quality Survey, or 1976 Survey, was a reconnaissance survey that examined the entire City of San Francisco to identify and rate, on a scale of "0" (contextual) to "5" (extraordinary), architecturally significant buildings and structures. No historic research was performed and the potential historical significance of a resource was not considered when assigning ratings. According to the authors, the 10,000 rated buildings comprise only around 10 percent of the city's building stock. Due to its age and its lack of historical documentation, the 1976 Survey has *not* been officially recognized by the city of San Francisco as a valid local register of historic resources for CEQA purposes, although it is still used on a consultative basis. The subject property is not included in the 1976 Survey.

C. San Francisco Architectural Heritage

San Francisco Architectural Heritage (Heritage) is the city's oldest not-for-profit organization dedicated to increasing awareness of and advocating for the preservation of San Francisco's unique architectural heritage. Heritage has completed several major architectural surveys in San Francisco, including Downtown, the South of Market, the Richmond District, Chinatown, the Van Ness Corridor, the Northeast Waterfront, and Dogpatch. Heritage ratings range from "A" (highest importance) to "D" (minor or no importance) and are based on both architectural and historical significance. The subject property was not surveyed by San Francisco Architectural Heritage.

D. California Historical Resource Status Code

Properties listed in the California Historic Resources Information System (CHRIS) or under review by the California Office of Historic Preservation (OHP) are assigned status codes of "1" to "7," establishing a baseline record of historical significance. Properties with a status code of "1" are listed in the California or National Register. Properties with a status code of "2" have been formally determined eligible for listing in the California or National Register. Properties with a status code of "3" or "4" appear to be eligible for listing in either register through survey evaluation. Properties with a status code of "5" are typically locally significant or of contextual importance. Status codes of "6" indicate that the property has been found ineligible for listing

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in any register, and a status code of “7” indicates that the property has not yet been evaluated. The property was initially evaluated in 2001 as part of the City of San Francisco’s Central Waterfront Cultural Resources Survey and was assigned a status code of 4D2. In 2003, the California Office of Historic Preservation revised the status code system and the property was reassigned a code of 7N1 indicating that it “needs to be reevaluated – may become eligible for National Register with restoration or when meets other specific conditions.” More recently, the property was evaluated once again, as part of an update to the Central Waterfront Survey, and assigned a status code of 5B¹ indicating that it is “locally significant both individually (listed, eligible, or appears eligible) and a contributor to a district that is locally listed, designated, determined eligible or appears eligible through survey evaluation.”

E. Unreinforced Masonry Building (UMB) Survey

In 1990, the San Francisco Landmarks Preservation Advisory Board undertook an architectural/historical survey of Unreinforced Masonry Buildings (UMBs) constructed in San Francisco between 1850 and 1940. The Landmarks Board prioritized the survey of UMBs into three groupings of buildings with “Priority I” resources rated the highest. Over 2,000 UMBs are located in the city today. The subject property was identified as a UMB by this survey.

IV. DESCRIPTION

A. Site

The building at 815-825 Tennessee Street is located on the southeast corner of Tennessee Street and 19th Street. The property consists of two square parcels, which cover a rectangular area measuring 20,000 square feet, with 200 feet of frontage along Tennessee Street. The terrain in the area is sloped, descending to the north and east. In relation to the subject building, the grade along Tennessee Street is flat, but slopes down to the east, along 19th Street, and the rear of the building. Tennessee and 19th streets are two-way arteries with broad concrete sidewalks and minimal landscaping in the immediate vicinity of the subject property. The property includes a paved equipment yard to the south of the main building, which is

¹ DPR 523L form, 7/24/2012, Page & Turnbull

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enclosed by a chain link fence and rolling gate. The yard lies between the subject building and an outbuilding, which is located at the south edge of the lot.

B. Exterior

The subject building is an unreinforced brick masonry warehouse. The majority of the building is one story, with a partial second-story that spans a portion of the front (west side) of the building. Additionally, due to the slope of the lot, the basement level is exposed at the northeast corner of the building. The building has an L-shaped plan, with a one-story ell that projects to the south from the left side of the south facade. The building sits on a concrete foundation, and exhibits an early twentieth-century industrial style. The exterior walls of the building have unfinished common-bond brick surfaces. The building is capped by a parapeted flat roof on both the one- and two-story portions. A flat-roofed monitor runs east-west at the center of the lower roof, perpendicularly abutting the partial second story.

The primary façade faces west onto Tennessee Street and is two stories high, with a one-story portion on the right side. It has a flat wall plane with a number and variety of openings at both story levels. The first story features primarily infilled openings, including a large vehicular entrance and two very large window openings on the left side, and another vehicular entrance flanked by two similar window openings on the right side. These openings are infilled with stucco panels, some of which are inset with metal hatches or doors, or louvered metal vents. Between the two infilled vehicular entrances and corresponding sets of windows are two pedestrian entrances. On the left is a tall, narrow opening fitted with wood double doors that have screened openings at the top, panels of diagonal boards at the center, and metal louvered vents at the bottom. These doors are surmounted by a louvered metal transom. To the right is another equally tall, but narrower opening with a standard-height, fully-glazed (but infilled), wood door, surmounted by a fixed, twelve-light, steel-sash, wire glass window. On the one-story portion of the primary façade there is a narrow vehicular entrance that is infilled with a stucco panel, but inset with a smaller metal roll-up door. To its right are two very large, infilled window openings. The first and second stories are separated by a simple, shallow brickwork beltcourse. On the second story of the primary façade are a dozen window openings, regularly spaced across the façade. The majority feature brick sills and jack arch lintels, and one-over-

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one, double-hung, wood sash windows. Only one opening on the left half of the façade is infilled with brick. Above the second story windows is another shallow brick beltcourse and two slightly recessed horizontal stucco panels, one on each half of the façade. The roofline is generally flat, but slightly higher on the left and steps down on the right, with a small tab at the far right end. The parapet wall is studded by numerous tie-rod ends and has brick coping capped with metal flashing.

The north façade of the building faces 19th Street and is primarily one-story, with the exposed basement level under the left side and the narrow end of the partial second story rising above the right end of the façade. It has a flat wall plane with few openings clad in unornamented common bond brick. The board-form concrete basement level is clad with stucco and features an entrance on the left side. The entrance consists of a vehicular opening infilled with an aluminum-frame storefront assembly with a fully-glazed door. The storefront assembly is recessed slightly so that it is situated behind the track of a sliding wood-frame and diagonal board door. To the right of this entrance is a large horizontal opening fitted with a ten-light, steel-sash, wire-glass window that is covered by a metal screen. A high concrete curb runs along the remainder of the base of the wall. The concrete foundation at the basement level is separated from the brick masonry of the first story by a simple beltcourse. The majority of the first story is spanned by a large stuccoed panel that bears painted signage. At the right end is a large infilled window opening, like those on the primary façade. Above, on the partial second story, there is a pair of one-over-one, double-hung, wood-sash windows that are separated by a wood mullion and have a brick sill and jack arch lintel. The roofline above the one-story portion of the façade is flat and unadorned, but topped by a metal railing. The roofline of the partial second story features the same beltcourses and coping, tie rod ends, and metal flashing as seen on the primary façade.

The east façade abuts neighboring buildings and is not readily visible. The small portion that is visible above the roofline of the neighboring building consists of an unfenestrated brick wall surface that bears painted signage. The roofline is flat and unadorned, but steps up at the center, corresponding to the monitor at the center of the roof.

 Author: johnloomis Subject: Sticky Note Date: 5/28/2015 3:05:56 PM

A shocking oblique understatement for the highly visible, high legible 60' long, 7' high "Hsin Tung Yang Food Co.," graphic mural, not to mention the charming "*the* Sandwich Shop" other sign in the lower left hand corner - Why such a glaring omission?

 Author: TKC Subject: Sticky Note Date: 7/22/2015 2:52:08 PM

The sign in question dates from the 1980s, less than the 50 year threshold for historical significance under California Register and CEQA guidelines, and arguably reduces the historical integrity of the building.

The south façade faces the small equipment yard that lies adjacent to the subject building. It is one-story and, due to the southern ell, features a projecting bay on the left side and a recessed bay on the right side. A small, flat-roofed, corrugated metal shed is attached to the left corner of the projecting bay and a vehicular entrance is located to its right. A large infilled window opening is located on the left, and a smaller service entrance with an insulated metal door pierces the wall, partially overlapping the infilled window opening. On the east façade of the projecting bay is a corrugated metal lean-to with a shed roof. The recessed bay is largely concealed by a broad corrugated metal canopy that extends out more than half the length of the projecting bay.

The outbuilding located at the southern edge of the property is a long, rectangular structure, oriented east-west. It has a high concrete foundation and is clad with corrugated metal. The gable roof is also clad with corrugated metal and has a narrow monitor along the front half of the ridge. A pair of twelve-lite, fixed, steel-sash windows are located on the west façade, while a number of pedestrian and service entrances – some with flush metal doors – are located along the north façade.

C. Interior

The interior was not examined for this report.

[See section XI. **Appendix** for current images of the subject property.]

V. HISTORIC CONTEXT


A. Neighborhood

The building at 815-825 Tennessee Street is located within the Potrero Hill neighborhood, which is bounded by 16th Street on the north, the Bayshore Freeway (Highway 101) on the west, Cesar Chavez Street on the south, and the waters of San Francisco Bay on the east. The subject property is situated in the eastern portion of the neighborhood (east of Highway 280,

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 Author: johnloomis Subject: Sticky Note Date: 5/28/2015 3:12:22 PM

Throughout the report there is confusion in the designation of "Neighborhood" as Potrero Hill, Third Street Industrial District, Central Waterfront, and Dogpatch. This confused nomenclature recurs throughout.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 1:27:26 PM

Neighborhood definitions are often perceived subjectively and commonly driven by speculative gentrifying forces. The neighborhood designation in the report is taken from the official Neighborhood Groups Map on the Planning Department website (<http://www.sf-planning.org/index.aspx?page=1654>)



which bisects the area) and is close to Dogpatch.² The area is also commonly referred to as the Central Waterfront.

What is now the Potrero, an area that includes the Dogpatch neighborhood, was largely uninhabited pastureland until the American period. After secularization of the Missions, Potrero Hill became part of the vast Rancho Potrero de San Francisco.³ The years following American conquest of California and the Gold Rush witnessed the spread of settlement south of Market Street, but access to the Potrero area was hindered by the wide expanse of Mission Bay. The first attempts to settle the area were made by squatters and, in 1849, by John Townsend and Cornelius de Boom, who attempted to establish a settlement on Potrero Point. Their effort proved unsuccessful primarily due to the remoteness of the site and conflicting land claims.⁴

Industrial development proved far more fruitful in the area and, within five years of Townsend and de Boom's failed venture, increased population pressures in the South of Market District, combined with a new city ordinance forbidding dangerous industries near settled areas, compelled industries to move beyond the city limits and into the Potrero.⁵ Due to its remote location and deep-water anchorage, Potrero Point soon developed into the most important zone of heavy industry on the West Coast.

Railroads played a decisive role in the area's physical development during the late 19th and early 20th centuries. Perennially the most powerful forces in California politics, the Southern Pacific, the Central Pacific, and the Atchison, Topeka & Santa Fe Railroads acquired valuable industrial lands on Potrero Point, as well as the submerged "water lots" of Mission Bay. In 1869, the Atchison, Topeka & Santa Fe acquired much of the rugged Potrero Point peninsula, including the acreage that now comprises Dogpatch.

The completion of the Transcontinental Railroad in 1869 caused an economic downturn in San Francisco as the market was suddenly flooded with inexpensive goods manufactured and

² San Francisco Planning Department, Neighborhood Groups Map, <http://www.sf-planning.org/index.aspx?page=1654>.

³ "Genesis of Our Hill," *Potrero View* (September 1976), p. 1.


⁴ Hubert Howe Bancroft, *History of California, Vol. 6*, (San Francisco: A.L. Bancroft and Co., 1888), p. 194

⁵ Coast Survey Map of 1857.

 Author: johnloomis Subject: Sticky Note Date: 5/28/2015 3:11:53 PM

NOT true.

The "subject property" is in the geographic center of Dogpatch.

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The boundary of the Dogpatch historic district is defined in Appendix L of Article 10 of the Planning Code as running along the west side of Tennessee Street between 18th and 20th streets, thereby excluding this building on the east side of Tennessee.

shipped from the East Coast. As domestic industries collapsed, land values declined, and the development of Potrero Point temporarily halted. In 1871, the State of California auctioned off the remaining water lots surrounding Potrero Point and, despite another slump that lasted from 1878 to 1884, industry in the area continued to expand.

The Santa Fe Land Improvement Company, the real estate wing of the Atchison, Topeka & Santa Fe Railroad, invested heavily in what is now Dogpatch, developing and maintaining property there until the Second World War. The Improvement Company also actively blasted the vein of serpentine that ran through the area and used the rubble as a source of landfill. During the last decade of the nineteenth century, the cleared parcels were developed with housing and industrial buildings.

During the late 1870s, residential flats west of Kentucky Street (now 3rd Street, one block east of Tennessee Street) began to coalesce into a district of industrial workers' housing, mixed-use or commercial structures, and several community buildings, forming Dogpatch into a residential area. Nevertheless, the density of residential development remained sparse in comparison with other areas until the early years of the twentieth century. Reasons for the relatively uneven level of development include the presence of large rock outcroppings and the fact that the majority of the neighborhood was owned by the railroad.

The expansion of Union Iron Works was the most significant factor in the development of the area, and for the next seventy years the fortunes of the neighborhood ebbed and flowed with those of the largest shipyard on the West Coast. During first years of the decade, relatively few residents worked at Union Iron Works. Nevertheless, by the end of the decade the workforce had expanded to constitute more than a thousand men. The neighborhood grew in response as empty lots were graded, subdivided, and developed. The quasi-rural district of single-family dwellings grew into a workingman's suburb inhabited largely by immigrant families of industrial workers.

After destruction in the 1906 earthquake, the South of Market district was rebuilt almost entirely as an industrial neighborhood and, as a result, many South of Market refugees remained in

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Potrero Hill, either taking up residence in the older industrial neighborhoods, like Dogpatch, or building on the underdeveloped expanses of Potrero Hill. The new development was a rebirth of the South of Market community in a new location. As South of Market had been, Potrero Point and Dogpatch were characterized by a mixture of industrial and residential uses, with small workingman's cottages, large hotels and flats located cheek-by-jowl with various workshops and factories.

From the turn of the 20th century through 1920, Union Iron Works/Bethlehem Steel's San Francisco Yard came to dominate employment in Dogpatch. In 1900, Union Iron Works was already the single-largest employer in the neighborhood, and, thanks to aggressive World War I-era expansion, by 1920 Bethlehem Steel's San Francisco Yard employed 50% of the householders in the neighborhood. However, from a socio-economic perspective, the area became poorer as the workforce became increasingly comprised of unskilled laborers. Stagnation during the Great Depression also took a toll on the neighborhood, pushing residents farther into poverty by eliminating many of the area's industrial jobs. Many left the area altogether. This residential attrition due to the economy, followed by the growing accessibility of private automobiles that allowed workers to live farther from their jobs, meant that residential uses in the neighborhood declined. As industry near the waterfront continued to develop, industrial uses encroached on the formerly residential areas.

World War II was the most influential event to affect the Central Waterfront area. Local industries, including Bethlehem Steel, regained their former momentum as they were contracted to construct ships and other materiel for the war effort. The war even revived residential uses in the area, as huge numbers of war workers of diverse origins and ethnicities flooded into the Bay Area. To accommodate their numbers, housing projects were constructed on the south slope of Potrero Hill.

In the 1950s and 1960s, a post-war downturn sent the area into another period of residential decline. A sudden out-migration of residents allowed industrial development to expand again, however. Highway 101 and the 280 Freeway were cut through the neighborhood at this time, spurring controversy due to their displacement of many of the area's established residents.

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However, the freeways ultimately increased the accessibility of the neighborhood and made industrial properties even less dependent on rail and water transportation, a trend that had begun in the 1940s with the widening of 3rd Street. Starting in the 1960s, Potrero began to attract a demographic of artists and members of marginalized communities, like LGBTs. This was due to low rents in the area and proximity to other areas with similar demographics, such as the Mission and South of Market. This accessibility also attracted young hi-tech industry workers during the Dot-Com Boom of the 1990s. These more financially well-off individuals began to drive up rent prices in the area, but also contributed to gentrification, which continues today.

B. Project Site History

Images of the subject property first appear in the 1900 Sanborn Fire Insurance map, which shows that the subject block was very sparsely developed with a large house and a commercial building housing a saloon (Figure 1). Neither building was located within the boundaries of the subject parcel on the northwest corner of the block. The topography of the block also appears to have been irregular, with a steep embankment separating the elevated southeastern portion of the block from the lower northwestern portion. This may account for the relative lack of development on the block, as other surrounding blocks appear to have been flatter and more heavily developed with clusters of dwellings, boarding houses, commercial establishments, and some small industrial facilities.

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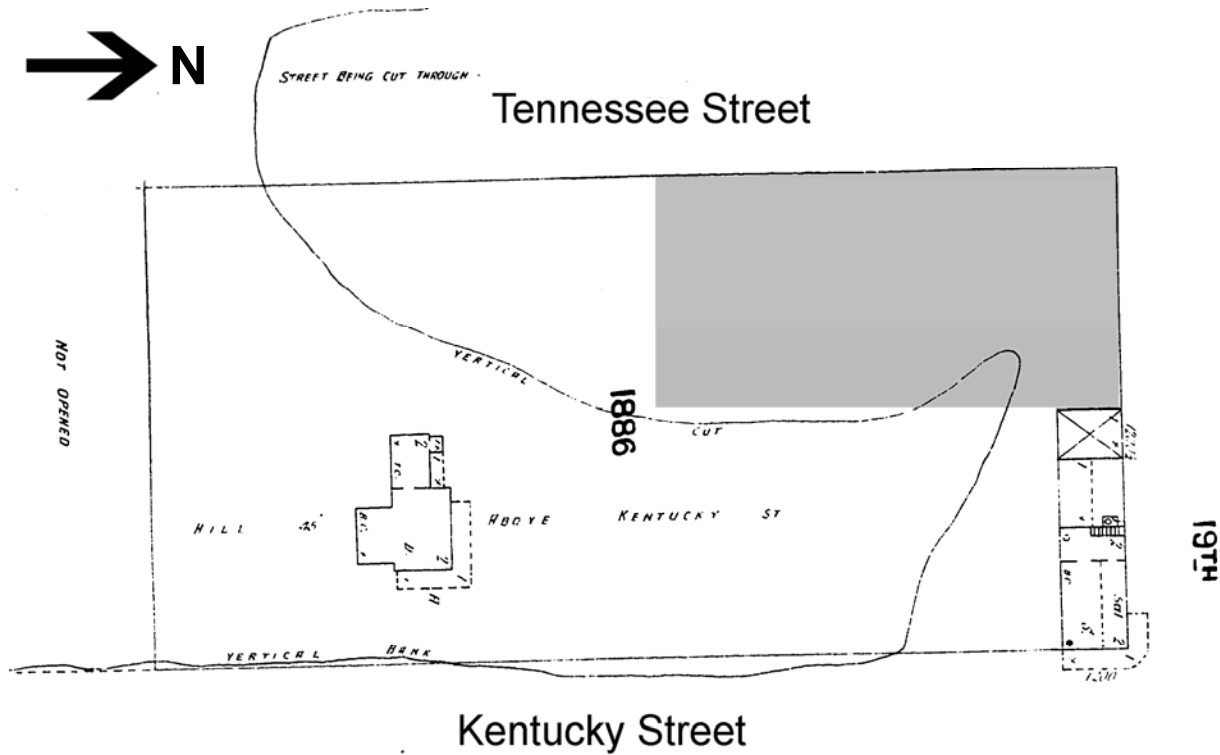


Figure 1 – 1900 Sanborn Fire Insurance index map. Approximate location of subject property shaded.

In 1914, the Sanborn Fire Insurance map shows that the large dwelling on the subject block no longer stood, but the saloon building remained (Figure 2). Notation of the steep embankment bisecting the block is not present, suggesting that some grading of the land had occurred. But otherwise, the block remains undeveloped and no improvements were made to the subject property. As with fourteen years previously, other blocks in the area were more heavily developed with multi-family dwellings; commercial establishments, especially saloons; some community buildings, like churches and an emergency hospital; and a large wool scouring factory across Tennessee Street from the subject property.

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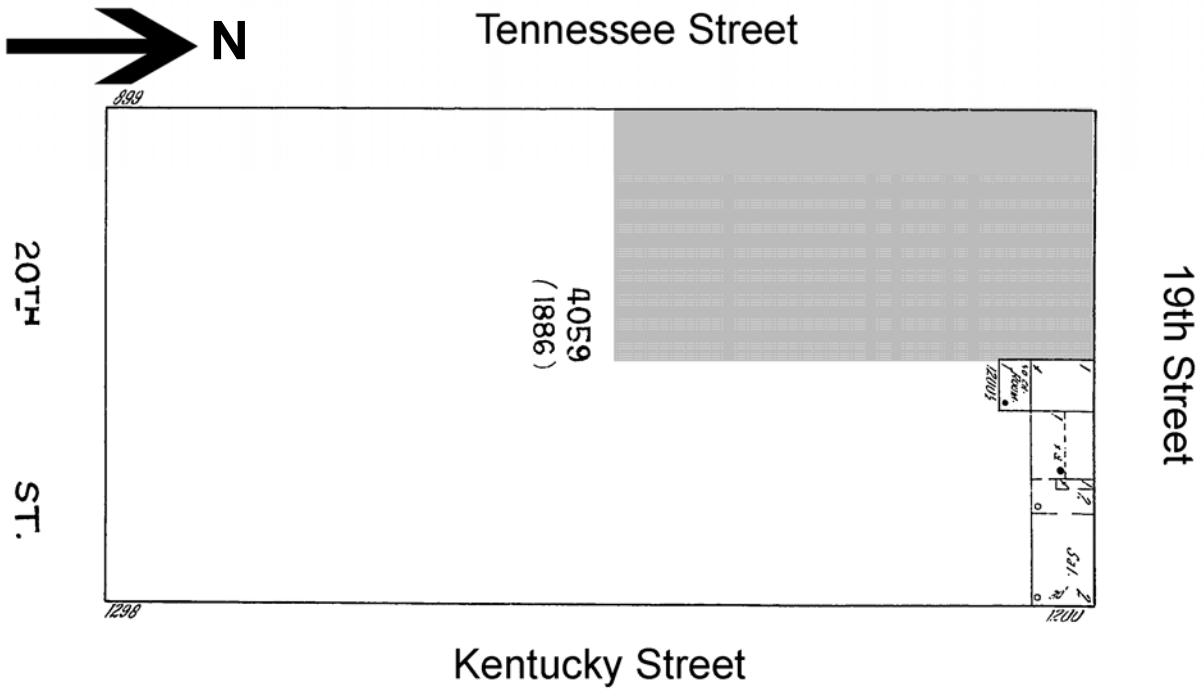




Figure 2 – 1914 Sanborn Fire Insurance map. Approximate location of subject property shaded.



Figure 3 – Aerial view, August 1938, by Harrison Ryker. Arrow indicates subject property. (Source: David Rumsey Map Collection)

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In 1926, the subject building  was constructed and it appears in a subsequent 1938 aerial photograph along with a storage shed that was erected at the south side of the lot in 1936 (Figure 3).⁶ The photo shows that the building had much the same form as it does presently, although the southern ell appears to be narrower, only about as wide as the partial second story, while today it is almost twice as wide. Building permit records indicate that a one-story brick and steel addition was made to the building in 1942, and may account for this change, either enlarging or replacing the ell seen in the 1938 photograph. In 1938, the subject block had gained a large building or series of connected buildings at the southeast corner, which no longer stand. The surrounding blocks remained moderately developed, but show that some dwellings and smaller buildings had been replaced by increasingly larger industrial buildings, as the industrial uses of the Central Waterfront encroached on the early residential development of Dogpatch. 

In 1942, just before a transfer of ownership between the original and subsequent owner, a number of changes were made to the property. These included the erection of the addition mentioned previously, relocation and alteration of the corrugated iron shed in the equipment yard (possibly lengthening it toward the west side of the lot as seen on a later Sanborn map), and the installation of a concrete slab in the equipment yard.⁷

In 1950, the subject property remained much the same, although by that time, the southern ell had been widened, or removed and replaced (Figure 4). It also appears that the existing outbuilding was lengthened toward the west side of the lot and that another shed was constructed on the east side of the equipment yard. In 1955, a fire damaged the building, which was subsequently repaired. And in 1958, the original steel sash windows on the primary façade were removed and the openings infilled, as they remain today.⁸ The subject block continued to develop with a number of larger commercial and industrial buildings, while the surrounding area featured fewer and fewer small buildings (dwellings and commercial establishments) and increasing numbers and sizes of industrial facilities; essentially making the neighborhood less dense, but shifting its character and use patterns dramatically.

⁶ San Francisco Department of Building Inspection, building permit record.


⁷ Ibid.

⁸ Ibid.

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 Author: johnloomis Subject: Sticky Note Date: 5/28/2015 3:22:57 PM

This and the text below apparently correct an error in earlier HRE's. The two story building was built in 1926, but apparently in two phases. The buildings built in 1936 were replaced by the 1924 structure.

 Author: TKC Subject: Sticky Note Date: 7/22/2015 3:14:20 PM
typo 1924 should be 1942

 Author: johnloomis Subject: Sticky Note Date: 5/28/2015 3:20:41 PM

A precedent and argument for the historical coexistence of residential and industrial buildings in historic Dogpatch.

 Author: TKC Subject: Sticky Note Date: 7/22/2015 3:16:08 PM
No claim to the contrary is being made.

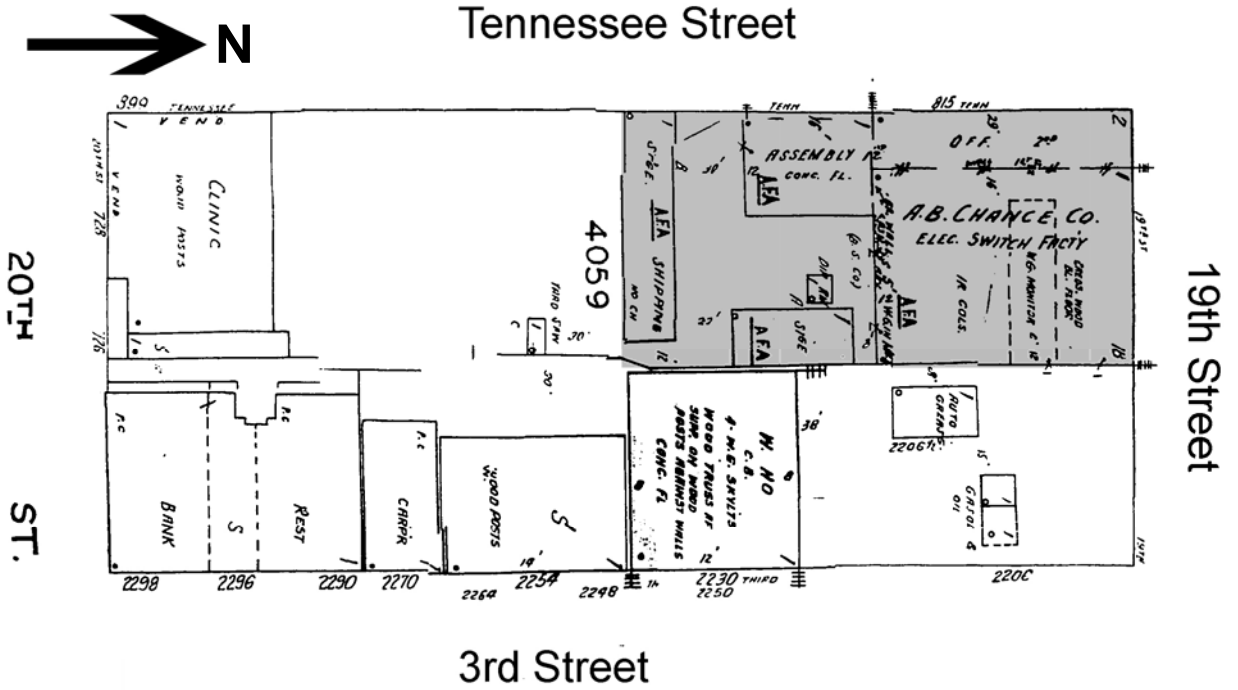


Figure 4 – 1950 Sanborn Fire Insurance map. Subject property shaded.

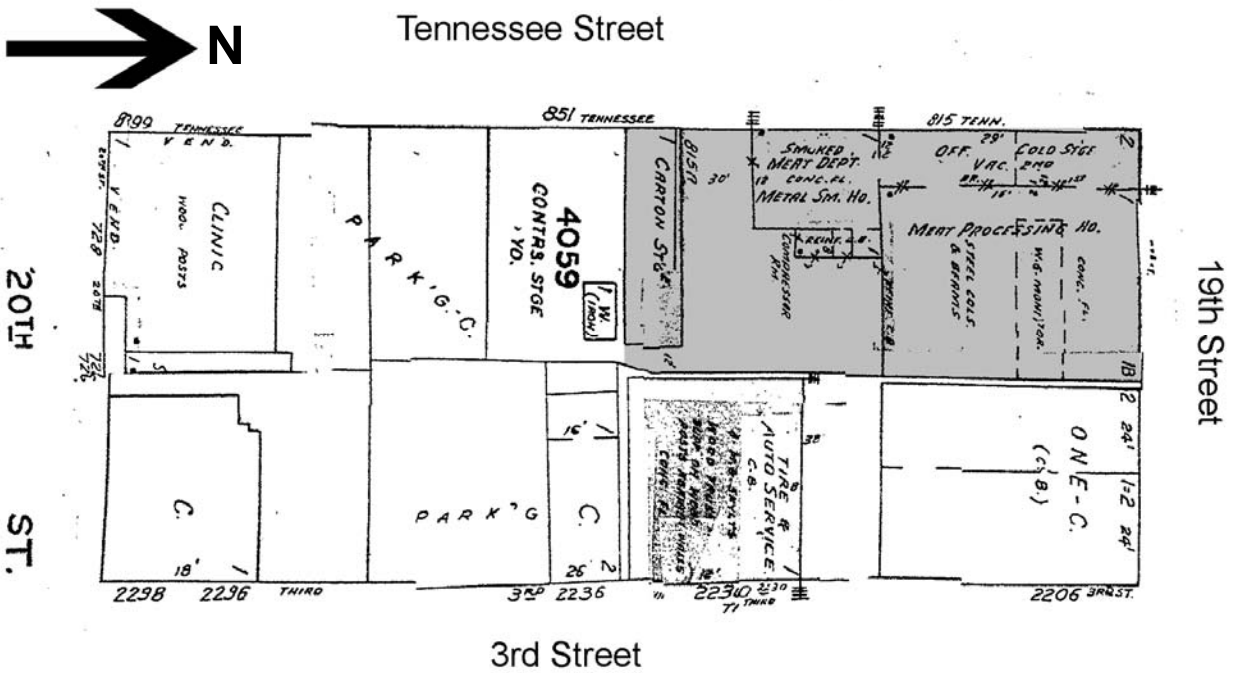


Figure 5 – ca. 1998 Sanborn Fire Insurance map. Subject property shaded.

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In the mid-1990s, the building footprint looked much as it had in 1950 (Figure 5). Small exceptions included the removal of the shed on the east side of the equipment yard, and the addition of the lean-to on the east side of the southern ell. The block gained a few more large industrial buildings, many accompanied by open parking lots and equipment yards, and the surrounding neighborhood experienced corresponding patterns of growth. Around this time, in 1994, sections of the building's original parapets were removed due to cracking. This included parapets along the first story of the north and south facades, and the right side of the primary facade on both the second story and southern ell.⁹

The following building permits were found in Department of Building Inspection files for the subject property. These records represent major alterations to the property and do not include tenant improvements, systems upgrades, and other minor alterations:

- Permit #22766, 24 September 1936 – Erect steel frame storage shed at south side of lot. Contractor: Michel & Pfeffer Iron Works. Owner: Bowie Switch Co.
- Permit #65560, 4 March 1942 – Install reinforced concrete slab in manufacturing/storage yard. Owner: Bowie Switch Co.
- Permit #65967, 6 April 1942 – Alterations to present corrugated iron shed; move to new location on lot, close up and alter doors. Owner: Bowie Switch Co.
- Permit #66316, 25 April 1942 – One-story, steel and brick addition made to existing factory building. Architect: William Mooser. Owner: Bowie Switch Co.
- Permit #161001, 4 October 1955 – Repair fire damage. Owner: A.B. Chance Co.
- Permit #190151, 30 June 1958 – Remove metal sash, install concrete ramp to provide forklift runway. Owner: A.B. Chance Co.
- Permit #23487, 23 March 1962 – Alter existing building; install coolers, freezer, cutting room, and equipment. Owner: C.J. Figone & Son.
- Permit #241586, 29 August 1962 – Alteration work, including plaster, insulation, paint, rails, and refrigeration work. Owner: C.J. Figone & Son.


⁹ Ibid.

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 Author: johnloomis Subject: Sticky Note Date: 5/28/2015 3:35:47 PM

Apparently the building changed hands in 1942, but did it? Could A. B. Chance be Augustus Bowie Chance?

Augustus Jesse Bowie Jr. died in 1958.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 10:31:23 AM

see page 18; the A B Chance Co was founded in 1907 by Albert Bishop Chance and is a large national manufacturer

- Permit #56465, 12 April 1971 – Alter existing office to meat slicing room. Owner: C.J. Figone & Son.
- Permit #420658, 25 March 1977 – Erect temporary metal accessory storage addition to existing metal building. Owner: C.J. Figone & Son.
- Permit #505834, 22 September 1983 – Repair and replace existing toilets for handicapped use. Repair furnace (?) room. Enclose existing canopy with metal studs, plaster exterior, add walk cover in exterior yard. Owner: Hsin Fu Mai.
- Permit #583064, 13 February 1988 – Alter and remodel, convert dry storage room to a bakery. Owner: New Horizon.
- Permit #748817, 28 June 1994 – Remove cracked parapets. Owner: Su-Wuen Lee Mai.

D. Architectural Style

The industrial building at 815-825 Tennessee Street is designed in an early-twentieth century industrial style. It incorporates a utilitarianism that plays to the building's function and dispenses with most ornamental or decorative features, although it does make a few concessions to enhance aesthetics on the two story portion. Utilitarian design is common in industrial buildings of all eras, which were subject to heavy use and needed to be functional. Typically they are found in industrial use districts where they are not readily visible to the general public and have no need to be visually attractive. The important aspects of design in such buildings are their ability to accommodate large areas of unbroken interior space, and sturdy construction to support heavy machinery and withstand hard use and potential damage from the industrial activities taking place inside them. Aspects like symmetrical or even logically-organized form and massing are unimportant and utilitarian buildings often exhibit an accretion of additions that reflect the need for expansion to serve function alone.

Most industrial buildings of the early-twentieth century consisted of low-rise, rectangular structures that filled the majority of their lots. Roofs were flat or had vaulted or shallow gable configurations supported by trusses and surrounded by parapets. The buildings had concrete slab floors and unbroken interior space. Large windows, skylights, clerestories, and monitors were common to allow as much light and air as possible into interior working spaces. Large

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doors were also typical to allow bulky machinery, vehicles, and cargo to enter and leave the building. Mezzanines and partial second stories were common and acted to segregate administrative activities from manufacturing activities.¹⁰ All of these traits are present in the design of 815-825 Tennessee Street.

The building at 815-825 Tennessee Street, built in the 1920s in the mixed-use but increasingly industrial Dogpatch neighborhood, incorporates some more refined elements of design as well, all concentrated in the two story volume facing Tennessee Street. Similar to many commercial buildings of the era, it is constructed of brick and incorporates a few subtle decorative elements such as beltcourses, jack arch window headers, and defining brickwork at the parapet. Because the first story openings on the primary facade have been infilled, it is difficult to interpret the architectural elements there, although the windows and doors were obviously large, serving the need for light, air, and passage of bulky items. However, the second story, which housed offices, exhibits regularly spaced, average-sized fenestration more akin to commercial buildings. Therefore, the presentation to Tennessee Street is more aesthetically enhanced, while the rest of the building's form and features are essentially utilitarian.

E. Architect & Builder

The original building permit for the building at 815-825 Tennessee Street was not found during research efforts; however, an entry in *Building & Engineering News* indicates that the building was designed by August Nordin and built by Vogt & Davidson. Nordin was born in Stockholm, Sweden in 1869 and began practicing architecture in San Francisco sometime around 1900. From 1908 to 1936, his practice was located in the Mills Building in downtown San Francisco. Nordin was responsible for designing more than 300 buildings in the city, including many single- and multi-family residential structures. Some of his best-known works include "100 Carl Street (1900) and 435 Cabrillo (1912), flats at 1080-82 and 1086-88 Fulton (1902), the Whiteside Apartments (1912) at 150 Franklin, the Windeler Apartments (1915) at 424 Ellis, the Cristobol Apartments (1913) at 750 O'Farrell, the Altamont Hotel (1912) at 3048 16th Street...

¹⁰ Page & Turnbull, "Market & Octavia Neighborhood Plan Area Historic Context Statement" (20 December 2007) 113.

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the building at Hyde and Beach that houses the famed Buena Vista Cafe (1911),” and the Swedish American Hall (1907) at 2174 Market Street. Nordin died in 1936.¹¹

Little is known about builders Vogt & Davidson. A city directory from the year the subject building was constructed lists only Alfred H. Vogt as a building contractor. During 1926, *Building & Engineering News* shows that, at the time they were working on 815-825 Tennessee Street, Vogt & Davidson also bid on a large number of public works projects like wharves and docks, roadways, bridges, a firehouse, library, school annexes, and improvements at the U.S. Marine Hospital and the Mare Island Navy Yard. They built St. Agnes Roman Catholic Church at Masonic and Page streets and an Associated Oil distributing plant in Alameda. They also invested in a couple of apartment and flats buildings as both owners and contractors.¹²

It should also be noted that the building’s southern ell is a later addition, constructed in 1942, and designed by William Mooser. The Mooser family was prominent in San Francisco architecture from the 1860s to the 1960s and consisted of William Mooser I (1834-1896), William Mooser II (1868-1962), and William Mooser III (1893-1969). All three were well-known architects in their own right, who had a joint practice and overlapping careers. Either William Mooser II or William Mooser III was responsible for the design of the addition at 815-825 Tennessee Street, but the permit does not specify which Mooser it was. In any case, the addition would be a minor footnote in the career of either Mooser, the senior of whom was the first city architect and designer of the Ghirardelli Chocolate Factory, the junior of whom was the lead architect for the Santa Barbara County Courthouse (1929), and who together designed the likes of the Streamline Moderne style Aquatic Park Bathhouse (now the National Maritime Museum).¹³

¹¹ San Francisco Architectural Heritage, “Swedish Society Continues Proud Stewardship of its Historic Home,” *Heritage News*, May/June 2000, Vol. XXVII No.3. 7.

¹² *Building & Engineering News*, vol. 26, 1926.

¹³ David Perry, “William Mooser,” *Encyclopedia of San Francisco*, <http://www.sfhistoryencyclopedia.com/articles/m/mooserWilliam.html>.

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F. Owners and Occupants

The following table lists the subject property's owners and their tenure dates, as well as the names of a sampling of tenants who occupied the property:¹⁴

Owner	Date of Ownership	Occupancy
Charles and Nellie Monson	pre-1926	No building on lot
August J. Bowie	4/30/1926 – 3/18/1942	Bowie Switch Co.
A.B. Chance Co.	3/18/1942 – 6/20/1960	A.B. Chance Co.
Julliard, Inc.	6/20/1960 – 5/1/1962	1961-1963: Key Distributing Co. 1962- 1981: C.J. Figone & Son
Ralph H. and Eleanor F. Montali, and Edward L. and Loretta A. McKeany	5/1/1962 – 8/29/1963	
C.J. Figone and Son, Inc.	8/29/1963 – 3/24/1983	
Seacliff Partnership	3/24/1983 – 9/30/1985	Hsin Tung Yang Food Co. (New Horizon)
Mai Su Wuan Lee and Mai Living Trust	9/30/1985 – present	

The earliest known owners of 815-825 Tennessee Street were Charles and Nellie Monson, who owned the property prior to the construction of the current building on the lot. The Monsons were Swedish immigrants and Charles Monson was the proprietor of the Monson Brothers planing mill, which city directories confirm was not located at 815-825 Tennessee Street.¹⁵



In 1926, the year the current building was constructed, the Monsons sold the property to Augustus J. Bowie, who was an electrical and mechanical engineer.¹⁶ Bowie commissioned the construction of the subject building to house his business, the Bowie Switch Company, which manufactured electrical supplies.¹⁷ The Bowie Switch Company was located at the subject property from 1926 until 1942.

¹⁴ San Francisco Block Books. San Francisco County Assessor's Office, sales ledgers. San Francisco city directories. San Francisco Department of Building Inspection, permit records.

¹⁵ U.S. Federal Census records, 1920. San Francisco city directories.

¹⁶ U.S. Federal Census records, 1920.

¹⁷ City directories; 1938, 1940.

Author: johnloomis Subject: Sticky Note Date: 5/29/2015 10:49:18 AM

TKC's research ignores this important figure.

Augustus J. Bowie Jr (Dec. 19, 1872 - June 22, 1955) was a polymath engineer with books on irrigation in the Central Valley and mining in the Sierra's still in print. He was born and raised in San Francisco, graduated from St. Ignatius College and went on to degrees at Harvard College, 1893 and MIT 1896 with studies in electrical and mechanical engineering.

He went on to become an important inventor and the Bay Area's first technology entrepreneur with patents registered in the U.S. Patent Office. He undoubtedly came into contact with Edison during his time on the East coast. He returned to San Francisco where with his 1926 founding of the Bowie Switch Co. and other activities, he played a major role in the history of the electrification in United States.

If William Shockley is considered the father of Silicon Valley with the transistor, and Lee De Forest is considered the grandfather with the vacuum tube, then it is no stretch that Augustus Jesse. Bowie Jr. is the great-grandfather of technology in Silicon Valley and the Bay Area.

This is preliminary research gleaned from the Internet. Further research is advised in the archives of the U.S. Patent Office, St. Ignatius College (USF), Harvard College, and MIT as well as in local San Francisco newspapers et al. resources of the period.

Author: TKC Subject: Sticky Note Date: 7/23/2015 1:51:38 PM

This appears to confuse the founder of the Bowie electrical switch company with his father, a mining engineer also styled Augustus J Bowie Jr. The picture shown in Loomis's memo to the Historic Preservation Commission shows a portrait of the senior Bowie. The Bowie in question in this report is not mentioned in the San Francisco Biographical Index and is referred to only in his role as a socialite in newspaper indexes. Neither social prominence nor graduation from a prestigious university establishes historical significance for CEQA purposes. Nor would this building express those characteristics.

In 1942, the Bowie Switch Company was acquired by the A.B. Chance Company and ownership of the subject property transferred to the latter.¹⁸ The A.B. Chance Company was founded in Centralia, Missouri in 1907. Its business was initially based on manufacturing the diverse inventions of founder Albert Bishop Chance and included such things as telephone pole anchors, automotive supplies, equipment for working on power lines, and airplane parts during World War II. During the war, the company concentrated on producing equipment and supplies for the utilities industry and embarked on an aggressive expansion campaign. Its acquisition of the Bowie Switch Company was part of this war era growth.¹⁹ According to the 1950 Sanborn Fire Insurance map, A.B. Chance Company operated an electric switch factory in the building, maintaining the building's original use.

Despite the A.B. Chance Company's continued expansion in the 1960s, it disposed of the subject property in 1960, with a sale to Juillard, Inc. Juillard, Inc. was a wholesale liquor business; however, it does not appear to have been located at the subject property. For a number of years after 1962, it was located at nearby 840 Tennessee Street, but the subject property was occupied by Key Distributing Company, a different but possibly allied wholesale liquor business, from 1961 to 1963. C.J. Figone & Son, a wholesale meat business, also occupied the building starting in 1962. That year, Juillard, Inc. sold the property to a partnership of Ralph H. and Eleanor F. Montali, and Edward L. and Loretta A. McKeany. This group only held ownership for about one year, while the building was occupied by Key Distributing and C.J. Figone & Son. In 1963, the property was sold to C.J. Figone & Son, and soon Key Distributing Company left the premises.

C.J. Figone & Son owned the subject property until 1983 and occupied it until 1981. During the majority of that time, it was the only business at the property; however in 1978, IQF Food Sales was located at the address and in 1980 and 1981, Western Meat Snacks, Inc. was an occupant.

¹⁸ City of San Francisco Assessor's Office, sales ledgers.

¹⁹ Missouri Office of Historic Preservation, National Register Nomination: F. Gano Chance House, ca 1978.

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In 1983, the property was sold to the Seacliff Partnership, in 1985 was purchased by Su-Wuan Lee Mai, and was eventually transferred to the Mai Living Trust.²⁰ The Hsin Tung Yang Food Company, owned by Mai and her husband, and for which signage currently exists on the subject building, moved into the building as early as 1983 and remains to the present. The Hsin Tung Yang Food Company (also known by the name New Horizon) was founded in Taiwan in 1967 and expanded to San Francisco in 1979. It sells preserved meat and jerky products produced in the building at 815-825 Tennessee Street.²¹

VI. EVALUATION OF HISTORIC STATUS

The subject property was evaluated to determine if it is eligible for listing in the California Register of Historical Resources, either individually or as a contributor to a historic district. The California Register is an authoritative guide to significant architectural, archaeological and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-eligible properties (both listed and formal determinations of eligibility) are automatically listed. Properties can also be nominated to the California Register by local governments, private organizations or citizens. This includes properties identified in historical resource surveys with Status Codes of 1 to 5 and resources designated as local landmarks or listed by city or county ordinance. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed for use by the National Park Service for the National Register. In order to be eligible for listing in the California Register a property must be demonstrated to be significant under one or more of the following criteria:

Criterion 1 (Event): Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

Criterion 2 (Person): Resources that are associated with the lives of persons important to local, California, or national history.

²⁰ San Francisco Assessor's Office, sales ledgers.

²¹ Hsin Tung Yang, <https://www.htyusa.com/index.php?>

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 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 10:45:08 AM

But no description or evaluation of the 60' long 7' tall graphic mural.

 Author: TKC Subject: Sticky Note Date: 7/22/2015 3:43:25 PM


Irrelevant to CEQA consideration.

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 10:57:55 AM

The cursory research executed to date should adequately ensure that Criterion 1 and Criterion 2 are met. See above.

 Author: TKC Subject: Sticky Note Date: 7/31/2015 9:45:38 AM

In the 1926 city directory Bowie Switch Co is one of 127 electrical supply firms listed, at least 16 of which described themselves as manufacturers. This number had grown from 4 when they first appeared in the 1878 directory, around the time of Bowie's birth and 48 years prior to construction of this building. There is no indication Bowie was particularly significant in this historical pattern. Nor is there any indication A J Bowie was personally important to local or California history


Criterion 3 (Architecture): Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values. 

Criterion 4 (Information Potential): Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California or the nation.

The following section examines the eligibility of the subject property for listing in the California Register under those criteria.

A. Individual Eligibility


- Criterion 1 (Events)

Although the recent re-evaluation of 815-825 Tennessee Street put forward for the first time an opinion that the building is eligible for local listing both individually and as a district contributor under Criterion 1, TKC believes the building is not individually eligible for listing in the California Register under this criterion. The building is generally associated with development patterns that are significant in the history of San Francisco's Central Waterfront, including Potrero Hill and Dogpatch, but does not stand out as an individually noteworthy property within these patterns. Built in 1926, the subject building contributed to the growth of industrial and residential development in the Central Waterfront area during a time of relative prosperity following World War I. However, it is one of many buildings in the immediate area that reflect this trend and was not a particularly early or significant element in these development patterns. The building was constructed on a block that had remained relatively undeveloped for many years and it did not supplant any existing residential structures. Therefore, it did not actively contribute to the fluctuating growth patterns of industrial and residential development that shaped the Dogpatch neighborhood. Together with other similar nearby buildings, the subject property might contribute to a context supporting a theme of general industrial growth, but it does not illustrate the context on its own in such a way as to be individually significant. 

Additionally, the property is not associated with any specific events of historical significance. Therefore, 815-825 Tennessee Street does not appear to be individually eligible for listing in the California Register under Criterion 1.

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 10:55:14 AM

By TKC's own data Criterion 3 is met. But TKC backs off.
See comments above on "Architectural Style" and below.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 10:11:21 AM

Here too there is a confusion between the level of significance necessary to establish individual significance and to establish status as a contributor to a historic district. This building qualifies as a district contributor, not individually.

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 11:18:43 AM

Quite to the contrary by simple observation, and an odd comment considering the proximity of the massive brick industrial building, now Minnesota Lofts, directly across on Tennessee St.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 10:14:15 AM

The Minnesota Lofts building was constructed at least 26 years before 815 Tennessee Street, any design influence flows to this building, not from it.

- Criterion 2 (Persons)

The industrial building at 815-825 Tennessee Street is not associated with any significant persons in the history of San Francisco or the State of California. The property has primarily been owned and occupied by business entities and although some have been associated with specific individuals, like August J. Bowie, the identity of the business is typically more prominent than that of the business owner or founder. In other cases, such as the A.B. Chance Company, the business is a large national entity and the business owner likely never had extensive contact with the branch located in San Francisco. Ultimately, no names found to be associated with the subject property rise to a level of importance to be considered significant historical figures. Therefore, 815-825 Tennessee Street is not individually eligible for listing in the California Register under Criterion 2.

- Criterion 3 (Architecture)

The building at 815-825 Tennessee Street is a relatively good example of an early twentieth-century industrial building. It exhibits numerous characteristics of its type that served its utilitarian use, including its brick construction, partial second story, flat roof, and large window and door openings. These elements are all strongly indicative of the time period in which the building was constructed and directly reference the functions of the building. However, other similar brick masonry industrial buildings are present in the Central Waterfront area and are also readily able to illustrate the building type and its conventions. Additionally, due to extensive window infill and other alterations, the subject building has diminished integrity, which makes its architectural significance questionable (see Section VII). Ultimately, although it may contribute to a context of brick industrial buildings in the area, 815-825 Tennessee Street does not appear to stand alone as the best or only example of its type in the Central Waterfront and is therefore not individually eligible for the California Register based on its architectural merit.

The November 27, 1926 edition of *Building & Engineering News* indicates that the subject building was designed by architect August Nordin and constructed by builders Vogt & Davidson. Nordin was a relatively prominent and prolific architect in San Francisco during the early part of the twentieth century and was best known for designing residential and

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community buildings, including the Swedish American Hall. Upon his death in 1936, Nordin's obituary was published in *Architect & Engineer*, suggesting that he was a recognized and respected architect, who could be qualified as a master.²² Nordin's work at 815-825 Tennessee Street is not strongly representative of his portfolio of work, however, as he was primarily known for designing residential and community buildings that were relatively ornate and had high aesthetic appeal. The utilitarian industrial building, which features little architectural embellishment, is not a typical or prime example of Nordin's work and many other better examples of his designs are located throughout San Francisco. The building also is not significant for its associations with contractors Vogt & Davidson, who primarily dealt with public works projects and who have better examples of their work, like the St. Agnes Church, still extant in San Francisco. They do not appear to rise to the status of master builders. Additionally, although master architects William Mooser II and/or William Mooser III are associated with the design of the southern ell addition in 1942, the addition does not qualify as a significant element of the subject building, nor as an influential design or important achievement in the Moosers' careers. They are known for far more monumental and high style works, such as the Santa Barbara County Courthouse and the Aquatic Park Bathhouse. Based on this lack of significant association with or representation of the work of a master architect 815-825 Tennessee Street is not individually eligible for individual listing in the California Register under Criterion 3.

- Criterion 4 (Information Potential)

This criterion ordinarily refers to potential archeological value. A full analysis of archeological value is beyond the scope of this report. The property does not appear eligible for listing on the California Register under Criterion 4.

B. Potential for Historic Districts

A property may also become eligible for listing on the California Register as a contributor to a historic district. Guidelines define a district as an area that "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically

²² *Architect & Engineer*, (January 1936) 57.

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or aesthetically by plan or physical development.”²³ To be listed on the California Register, the district itself must be eligible under the criteria already discussed. The documentation of the district must enumerate all properties within it, identifying each as a contributor or non-contributor. The district itself, as well as each of its contributors, then become historic resources.

The subject property is located within the boundaries of a potential historic district, which was identified by recent survey efforts to update the Central Waterfront Survey. The identified Third Street Industrial District sub-area of the Potrero Point Historic District comprises the area outside of Pier 70 and the Dogpatch neighborhood and includes the subject property. The boundaries are described as:

Eighteenth Street to the north (inclusive of the Carpenters' Union Hall at 2069 Third Street), Illinois Street to the east, Twenty-fourth Street to the south, Third Street to the west, and those parcels that encompass PG&E Station A (APN 4175 006) and the remnants of the Western Sugar Refinery (APN 42320010). The proposed district also includes several properties on the west side of Third Street between Twentieth and Twenty-Second streets and the contiguous block bounded by Nineteenth, Third, Twentieth, and Tennessee streets.²⁴

The Third Street Industrial District consists of:

a large number of manufacturing, repair, and processing plants primarily constructed during the first half of the twentieth century. Its significance is based on its high concentration of significant light industrial and processing properties remaining in the Central Waterfront district. The linear character of the district boundaries is dictated by the separation of heavy maritime industrial uses along the waterfront from the residential enclave of Dogpatch. The intermediate zone between the two areas gradually developed with light

²³ Office of Historic Preservation, "Instructions for Recording Historical Resources" (Sacramento, 1995.)

²⁴ Kelley & VerPlanck and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008.

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 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 11:44:47 AM

The property most certainly deserves to be considered an historic resource within an historic district.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 10:49:45 AM

and is recognized as such in the paragraph below this comment

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 11:56:22 AM

Dogpatch is a highly vital and successful mixed use neighborhood, not at all a residential enclave. TKC should know better.

Here we note an ongoing manipulation of the facts by TKC to suit his client. This is hardly the research of an independent professional.


 Author: TKC Subject: Sticky Note Date: 7/23/2015 10:55:58 AM

The passage referred to is clearly identified as quoted from the governing district record, the client for which was the city of San Francisco.

industrial, repair, warehousing and food processing businesses, as well as some wholesale businesses, such as oil distribution companies, that needed to have proximity to rail lines along Third Street as well as a local labor force of blue collar workers. Historically, the blocks between Third and Illinois have been occupied by manufacturing operations and warehouses...²⁵

While the subject property does not possess strong enough historical associations and physical integrity to be eligible for individual listing, it does possess associations and architectural character that fit the development patterns and physical fabric of the potential district. Its construction date also falls within the district's period of significance (1872-1958), and therefore, it appears to be qualified to be grouped with similar properties that form a California Register-eligible potential historic district.


VII. INTEGRITY

In addition to being determined eligible under at least one of the four California Register criteria, a property deemed to be significant must also retain sufficient historical integrity. The concept of integrity is essential to identifying the important physical characteristics of historical resources and hence, evaluating adverse change. For the purposes of the California Register, integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance”  (California Code of Regulations Title 14, Chapter 11.5). A property is examined for seven variables or aspects that together comprise integrity. These aspects, which are based closely on the National Register, are location, design, setting, materials, workmanship, feeling and association. *National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation* defines these seven characteristics:


- *Location* is the place where the historic property was constructed.
- *Design* is the combination of elements that create the form, plans, space, structure and style of the property.

²⁵

ibid.

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 11:54:50 AM

Based on the information provided by TKC and the additional information provided in these comments, the building certainly qualifies.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 10:57:16 AM

As is noted on the following page of the report.

- *Setting* addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building/s.
- *Materials* refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.
- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history.
- *Feeling* is the property's expression of the aesthetic or historic sense of a particular period of time.
- *Association* is the direct link between an important historic event or person and a historic property.

The subject property appears to be eligible for listing in the California Register as a contributor to a potential historic district, therefore its period of significance would coincide with that of the district: 1872-1958. The following discussion addresses the building's integrity to that period:


The building has integrity of location and setting, having never been moved from its current site in a generally light-industrial area of the Dogpatch neighborhood. Its integrity of design, materials, and workmanship are diminished, however, as the building has undergone alterations since its construction. As is common with industrial buildings, frequent alterations are often made in order to improve functionality. Insertion and infill of openings is common, as are additions. At the subject property, the infill of major openings on the primary façade, with loss of the original sash has diminished the integrity of the building as it was during the period of significance. The property still retains its utilitarian industrial character and subtle decorative features, and the changes that have been made to it do not completely obscure the building's true age, original appearance, or historical use, but the alterations do detract from the architectural character of the building. Therefore, 815-825 Tennessee Street has only fair integrity. This loss of integrity makes the building a poor candidate for individual listing on the California Register, but does not preclude it from being a contributing element in a historic district.



 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 12:03:17 PM

This argument is flawed and disputable. The infill is not strong issue. To what other "alterations" does TKC refer? Is there any historic structure in the Central Waterfront that is in mint, unaltered condition?

This argument bodes ill for all historic structures in the Central Waterfront.

 Author: TKC Subject: Sticky Note Date: 7/31/2015 9:48:07 AM

Again a lack of understanding of the difference between individual and district contributor eligibility for the California Register, as well as the CEQA requirement for historic integrity.

VIII. EVALUATION OF PROJECT SPECIFIC IMPACTS UNDER CEQA

This section analyzes the project specific impacts of the proposed project on the environment as required by CEQA.

A. Status of Existing Building as a Historical Resource

As reported above, the industrial building at 815-825 Tennessee Street appears to be eligible for designation as a historic resource in the California Register by virtue of being a contributor to a potential historic district. In addition, both the Potrero Point District and the Dogpatch District are themselves historical resources.



B. Project Description

The proposed project will partially demolish the existing building, retaining and restoring the two story portion facing Tennessee Street. This portion will be converted to residential use with the flat roof being used as a common terrace. The single story portions of the extant building will be replaced by new construction that will consist of either a five- or six-story-over-basement multiple-family residential building. The building will contain 72 to 86 residential units with parking in the basement.²⁶

C. Analysis of Project Specific Impacts under CEQA

(1) Partial Demolition

The proposed project includes two major components: (1) partial demolition of the existing building and (2) construction of a replacement residential building. According to CEQA, a “project with an effect that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment.”²⁷

Substantial adverse change is defined as: “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired.”²⁸ The significance of a historical resource is materially

²⁶ Sternberg Benjamin Architects, “Project Information and Building Sections: 815-825 Tennessee Street,” October 4, 2012.


²⁷ California Resources Agency. “California Environmental Quality Act (CEQA) Statute and Guidelines,” subsection 15064.5(b).

²⁸ Ibid., subsection 15064.5(b)(1).

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 12:08:23 PM


An issue that is addressed nowhere in the HRE is the principle of Adaptive Reuse, one of the cornerstone principles of the Central Waterfront Plan.

Hsin Tung Yang, or 815-825 Tennessee St. is a prime candidate for Adaptive Reuse. And there is no neighborhood that does Adaptive Reuse better than Dogpatch.

 Author: TKC Subject: Sticky Note Date: 7/31/2015 9:50:01 AM

An HRE is not intended to speculate on adaptive reuse. Its purpose is to evaluate the historical significance of the building and the potential impacts of a specific project. This report analyzed impacts of an earlier project proposal, not the current one.

impaired when a project “demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance” and that justify or account for its inclusion in, or eligibility for inclusion in, the California Register.²⁹

This project would retain and restore the portion of the existing building that does most to convey its historical significance, while demolishing areas that are less important for that purpose. Although this would cause an adverse change to the property and to the Potrero Point District to which it is a contributor, TKC believes the impact can be mitigated to a level less than significant. Demolition would not cause a substantial adverse change to the Dogpatch District, since the existing building is not within the boundaries of that district. 


(2) Replacement Building

Any replacement building at this site would have a potential effect on the Potrero Point District, in which it would be located. In addition, it would have a lesser potential effect on the Dogpatch District since, although the property is outside that district, it is part of the district's immediate surroundings.


The defining DPR 523D form for the Third Street Industrial District does not provide a description of specific character-defining features for contributing properties. However, as its name suggests, the district includes primarily light industrial properties. cursory observation shows that most are one to two story buildings with boxy, voluminous massing; staunch construction types such as brick or concrete; large windows and service entrances; and utilitarian finishes, like brick, concrete, or stucco, with minimal architectural ornamentation.

The Dogpatch Historic District has more specific guidelines for both characteristics of industrial buildings within it and for the design of any new construction. TKC proposes that, given the similarity in character and close proximity of the two districts, the Dogpatch guidelines be used in assessing this project. In Article 10 of the Planning Code, characteristics of industrial buildings within the Dogpatch district are listed as below:

²⁹ Ibid., subsection 15064.5(b)(2).

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 12:27:22 PM

Dogpatch Historic District extends along Tennessee St. from south of 22nd St. to Mariposa St. to the north. 813-825 Tennessee St. is at the geographic center.

 Author: TKC Subject: Sticky Note Date: 7/23/2015 11:06:31 AM

See Appendix L of Article 10 of the Planning Code. The Dogpatch Historic District excludes the east side of Tennessee Street on this block.

1. Overall Form and Continuity-Building height is generally within a four-story range and many of the industrial/commercial structures are one or two stories in height. Typically, these buildings are constructed closer to the property line than the residential structures found in the district.
2. Scale and Proportion-The buildings are of typical warehouse design, large in bulk, often with large, ground level openings originally designed for rail or vehicular access. Industrial/commercial structures are found throughout the district, often surrounded by residential buildings. While gaps may exist, because of height, bulk and setback, there is regularity to the overall form of industrial/commercial buildings. A small cluster of brick and stucco public buildings (police, fire, and hospital) are easily recognizable from other industrial/commercial structures found in the district. These resources, while offering a different scale and proportion, are compatible with the plain reinforced concrete and brick-faced structures characteristic of 20th century industrial architecture.
3. Fenestration-For the most part, the district's industrial/commercial buildings lack strong fenestration patterns, which typically are not supportive of a warehouse function. Windows exist near entrances and in some cases, offer small storefronts to display products. Early 20th century warehouse buildings were often constructed with office spaces above warehouse functions. In this case, double-hung, residential-type windows can be found. Larger industrial, metal sash windows are prevalent on commercial buildings built after 1920. Door openings are often massive to facilitate easy access of bulk materials.
4. Materials-Standard brick masonry is found on the older industrial/commercial buildings in the district; reinforced concrete was introduced as a cladding material following the earthquake and fire of 1906. Concrete block and stucco are also found on some 20th century, industrial/commercial buildings.
5. Color-Red brick is typical, with some yellow and painted brick. Muted earth tones of red, brown, green, gray, and blue are found on reinforced concrete, concrete block, and stucco-faced buildings.
6. Texture.-Typical facing materials give both a rough textured or smooth appearance, depending on the cladding material.

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7. Architectural Detail-Industrial and commercial buildings typically lack ornamentation. Warehouses by their very nature are utilitarian; warehouses constructed towards the end of the Dogpatch Historic District period of significance (1943) have even less ornamentation than older counterparts. Cornices are simple and may be abstract versions of more elaborate cornices found on larger, commercial structures in San Francisco's Financial District. Where detail occurs, it is often found surrounding entryways to industrial/commercial buildings.

Article 10 also lists the following guidelines for new construction or additions to industrial buildings in the Dogpatch district:

1. Materials. The traditional cladding materials of industrial/commercial structures found in the district are brick, reinforced concrete, cinder block, and stucco; they are encouraged over other cladding materials.
2. Fenestration. Fenestration should be proportionate and in scale with traditional patterns within the district. Wood or metal sash windows are encouraged, while "slider" windows of vinyl or aluminum construction on either industrial or commercial buildings are discouraged.
3. Roofline. Flat roof forms are encouraged on industrial and/or commercial structures; gabled roof forms may be appropriate for commercial structures that include residential upper floors.
4. Parapets. Raised parapets are typically found on industrial and/or commercial structures in the Dogpatch Historic District and are encouraged where appropriate. Parapets should be kept to a minimum height necessary to screen rooftop equipment, or to facilitate characteristic design features.
5. Design Features. The addition of bay windows, porches, balconies or other typically residential features to new or existing industrial/ commercial structures in the district are discouraged. These elements may be appropriate on commercial structures that include residential upper floors.
6. Style. New construction in a contemporary, yet compatible, idiom is encouraged.

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7. Scale and Proportion. New construction must be compatible with the massing, size, scale and architectural details of industrial/commercial resources found in the Dogpatch Historic District.
8. Setbacks. New construction should conform to existing setback patterns found in the district.
9. Detailing. Detailing on new construction should relate to the simple, traditional vernacular forms found on industrial/commercial structures in the district.

The replacement building as depicted in preliminary project drawings dated 10/4/2012 calls for a five or six story residential building. Although the drawings are at an early conceptual level, they currently show rectilinear massing with no articulation of the facades indicated. The building occupies the full lot, with a one or two story base on the east side serving as open space. Two alternate designs are shown, one with five stories of living space and a partial gabled roof form, the other with six stories and a flat roof. Thus, at a conceptual stage, the replacement building appears generally compatible with the guidelines for new construction as given above.

If the final design of the new building follows the requirements given above regarding materials, fenestration, ornament, style, etc. TKC believes the building will not cause a substantial adverse change in the significance of the Potrero Point Historic District. Although the proposed replacement is taller than the existing building and generally taller than other buildings in the two districts, that fact alone does not rise to the level of a significant impact under CEQA. In addition, the new building will be set back 27 feet from the extant Tennessee Street façade, this will read as separate from the historic building.

D. Analysis of Cumulative Impacts under CEQA

This section analyzes the possible cumulative impacts on the potential Third Street Industrial District related to the proposed project at 815-825 Tennessee Street. The subject property is considered a contributor to the potential District, which encompasses 45 parcels, 27 of which are contributors.

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Methodology

This analysis was conducted in accordance with the published Guidelines for the California Environmental Quality Act (CEQA Guidelines) 1 which define Cumulative Impacts as:

“two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” (section 15355)

The Guidelines offer two methods of analysis; the List Approach (section 15130(b)(1)(A)), or the Projection Approach (section 15130(b)(1)(B)). This report adopts the List Approach in which “all of the past, present, and probable future projects” are examined to determine if there is risk of a Cumulative Impact. TKC examined the San Francisco Property Information Map for each of 45 contributing buildings in the potential District to identify all projects involving demolition

Project Description

The proposed project will partially demolish the existing building at 815-825 Tennessee Street and will replace the demolished portion with new construction that will consist of either a five-and-a-half-story or six-story-over-basement multiple-family residential building. The new building will contain 72 to 86 residential units with parking in the basement

Cumulative Impact Analysis

TKC concludes that there would be two physical effects on the potential district:

- Partial demolition of the existing building
- Replacement of the demolished portion with a taller building

Table 1 shows all known past, present and future demolitions in the Third Street Industrial District. It omits the subject project at 815-825 Tennessee. We have listed projects that both predate and postdate the identification of the potential district in order to see trends presumably based on underlying economic factors. For the same reason, we have listed projects that, though proposed, have never been executed. These trends, though subject to economic fluctuations and now also to increased regulation, may be assumed to persist and thus to indicate probable future projects.

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Table 1 Demolitions Proposed in the Third Street Industrial District


APN	Address	Contributory	Project Description	Date	Status *
4045002/ 4045006	2121 3rd St/ 740 Illinois St	Yes	Proposed project would demolish the existing commercial fueling facility and construct 70 dwelling units and 52 parking spaces. The new structure would be approximately 66 feet in height, six stories, and would total approximately 62,516 sq. ft.	2/12/2010	Closed (not executed)
4059009	2290-2298 3rd Street	Yes	Demolition of an existing one-story, commercial building and construction of a six-story, mixed-use building with 80 dwelling units, 80 off street parking spaces and appx. 14,000 GSF of ground floor commercial use.	9/6/2011	Active
4172055- 61	2554 3rd ST	No	Shadow Study Prop K, New Condominiums - 5-9 units	7/31/2001	Closed (executed)

- “Active” status means there is an open environmental case. “Open” means permits have been applied for but no environmental case is shown. “Closed” is self-explanatory.

In summary, three full demolitions have been proposed in the potential District prior to the subject project, of which one has been executed. Each of the proposed replacement buildings is taller than the predecessor buildings. Two of the proposed demolitions involve contributors to the district. Although the total loss of contributing buildings would eventually erode the eligibility of the district for listing on the California Register, this project is a partial demolition that would retain and restore the most significant portions of the existing building. Thus, there appears to be no cumulative impact on the Third Street Industrial District related to the partial demolition proposed for this project.

 Author: johnloomis Subject: Sticky Note Date: 5/29/2015 12:39:29 PM

Non of these so called precedents in any way compare to the historical and architectural value of Hsin Tung Yang, or 815-825 Tennessee St. These are not relevant comparisons and therefore not relevant evidence.

 Author: TKC Subject: Sticky Note Date: 7/27/2015 11:30:29 AM

The cases cited all involve the demolition of buildings in the historic district, two contributors to the district such as 815 Tennessee and one non contributor. They are relevant to the proposed question of whether there is a demonstrated risk of cumulative effect on the district from demolitions. For that purpose the possible architectural qualities of the buildings are irrelevant. What is important is their status as components of the district.

E. Suggested Mitigations

This report identifies potential adverse changes in the significance of two historical resources, both related to partial demolition of the subject building. The resources are the building itself and the Third Street Industrial District. The impact on the building is direct, while that on the district is indirect. Mitigations for each are suggested below.

For the building

1. HABS, Level II recordation of the existing building, consisting of
 - a. large format black and white photographs of the visible facades and representative interiors
 - b. original or as-built drawings of the building
 - c. a written historical narrative of the building
 - d. A publicly accessible interpretive display to be permanently installed in the new building

For the District

1. Interpretive signage marking the boundaries of the Third Street Industrial District, to include scannable links to a website containing relevant documentation of the district

IX. CONCLUSION

The project proposes to partially demolish the existing brick industrial building at 815-825 Tennessee Street and replace the demolished portions with a new 5 or 6 story residential building. It would also restore the façade of the two story retained portion. The current building is identified as a contributor to the Third Street Industrial District, which has been found eligible for local listing or designation through survey evaluation. Thus it is a historical resource for purposes of CEQA. The proposed partial demolition of the building would cause a substantial negative change to the building itself but would not contribute to a cumulative negative change to the district, which is also a historical resource.

Partial demolition of the building could be mitigated to a less than significant impact by HABS Level II recordation and provision of a permanent publicly accessible interpretive display in the new building. The effect of the partial demolition on the district could be mitigated by installation of interpretive signage marking the district boundaries.

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X. BIBLIOGRAPHY

Published

Architect & Engineer, January 1936.

Bancroft, Hubert Howe. History of California, Vol. 6. San Francisco: A.L. Bancroft and Co., 1888.

Building & Engineering News, vol. 26, 1926.

California Resources Agency. "California Environmental Quality Act (CEQA) Statute and Guidelines," subsection 15064.5(b) (1-2).

California Office of Historic Preservation. "Instructions for Recording Historical Resources," Sacramento, 1995.

Coast Survey Map, 1857.

"Genesis of Our Hill," *Potrero View*. September 1976.

Missouri Office of Historic Preservation. National Register Nomination: F. Gano Chance House. ca 1978.

Page & Turnbull, "Market & Octavia Neighborhood Plan Area Historic Context Statement." 20 December 2007.

Sanborn Fire Insurance maps; San Francisco California, 1900, 1914, 1950, ca.1998.

San Francisco Architectural Heritage, "Swedish Society Continues Proud Stewardship of its Historic Home," Heritage News, May/June 2000, Vol. XXVII No.3.

San Francisco Block Books.

San Francisco City Directories.

"San Francisco, Colma, Daly City Street Address List," 1933.

San Francisco Planning Department. "CEQA Review Procedures for Historical Resources." San Francisco, 2005.

U.S. Department of the Interior, National Park Service. "National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation." Washington, D.C.: National Park Service, rev. ed. 1998.

Public Records

This page contains no comments

City and County of San Francisco, Planning Code: Article 10: Appendix L: Dogpatch Historic District, 2011.

Kelley & VerPlanck and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008.

Page & Turnbull, Department of Parks and Recreation 523 Update Record: 815-825 Tennessee Street (24 July 2012).

San Francisco County Assessor's Office, sales ledgers.

San Francisco Department of Building Inspection, building permit records.

United States Federal Census Records, 1900-1940.

Websites

Hsin Tung Yang, <https://www.htyusa.com/index.php>

David Perry, "William Mooser," Encyclopedia of San Francisco,
<http://www.sfhistoryencyclopedia.com/articles/m/mooserWilliam.html>.

San Francisco Planning Department. "Neighborhood Groups Map." <http://www.sf-planning.org/index.aspx?page=1654>.

_____. "San Francisco Property Information Map." <http://ec2-50-17-237-182.compute-1.amazonaws.com/PIM/>.

Other

Sternberg Benjamin Architects, "Project Information and Building Sections: 815-825 Tennessee Street," 22 June 2012.

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XI. PHOTO APPENDIX



North and primary (west) façades, looking southeast.



Primary (west) façade, looking southeast.

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Primary (west) façade, looking east.



Detail of infilled openings on primary (west) façade, looking south.

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Detail of two entrances at center of primary (west) facade.



Detail of upper story of primary (west) facade.

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North façade, looking southeast.



Detail of basement entrance at east end of north façade.

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Primary (west) facade and portion of south façade, looking northeast.



View to east of subject property, looking at intersection of 19th and 3rd streets.
(Portion of subject property visible at far right.)

This page contains no comments



North block face of 19th Street, opposite subject property.



West block face of Tennessee Street, opposite subject property.
(All buildings visible lie within the Dogpatch Historic District.)

This page contains no comments

EXHIBIT E:

JOHN A. LOOMIS TESTIMONY DATED APRIL 15, 2015

4/15/15

Gen. Pub. Com.

15 April, 2015

Historic Preservation Commission of San Francisco

Dear Colleagues,

I am not a newcomer to historic preservation. In 1985 I wrote a survey of historic preservation in the United States, "Conservazione - Il Futuro del Passato," for the Italian architecture magazine *Casabella*. Between architecture and academic careers I worked for the nonprofit historic preservation / technology start-up CyArk 3D Heritage Archive. In May will be published my book *Una Revolución de Formas, las Olvidadas Escuelas de Arte de Cuba*, more architectural history, though instrumental in the preservation of Havana's now renown art schools.

You are probably asking yourself, "Why is he making this testimony now?". The answer is that in 2013-14 I was serving as director of the California State University campus in Florence, Italy with its cohort of architecture, art, and humanities students. I returned to San Francisco in August 2014. When I saw the announcement for the hearing for the Hsin Tung Yang building for October 16, I made a hastily researched testimony. The Planning Commission's approved demolition of Hsin Tung Yang (New Eastern Sun) seemed incongruous to me, I continued my research. The Planning Department was slow to respond to my requests, and parsed documents out one by one. Having had friends in the Planning Department over the years, I chalked this up to a heavy workload. It was only when I found out on my own that the documents I was requesting and others were readily available on their website that I began to think that their behavior was intentional.

The more I researched and the more missing information and flaws I found in the Historic Resource Evaluations, the more my bafflement and suspicion was reinforced. In summary the missing information and flaws are:

1. I was under the mistaken impression that after Jackson Square and Ghirardelli Square brick buildings were as sacrosanct as Victorian houses in San Francisco. If Hsin Tung Yang were in Chinatown, North Beach or Fisherman's Wharf it would be untouchable, no? Hsin Tung Yang is a fine unreinforced masonry, brick structure, well executed. It dates from 1926, the same year as the landmarked brick Judson-Pacific-Murphy Co building (Corovan site). It is of greater architectural interest and bears a more significant urban presence. Its two story, one story morphology is unique and sets it apart from the typology of all other brick structures in the Central Waterfront area.
2. Hsin Tung Yang was originally constructed in 1926 as the Bowie Switch Co., the founder of which, Augustus Jesse Bowie Jr., graduate of both St. Ignatius College and MIT, was an early Bay Area engineer and technology entrepreneur. Predating Lee de Forest by a generation he can certainly be viewed as the unsung beginning of the genealogy of Bay Area electronics and Silicon Valley. Bowie deserves attention.
3. The architect of the Bowie Switch Co was August Nordin who designed the Swedish American Hall and over 300 other buildings in San Francisco.
4. The Bowie Switch Co. was expanded to the corner in 1930. At a later date it became the C.J. Figone Co. In 1942 the lower structures were built. In 1962 it was acquired by the Hsin Tung Yang Co. of Taiwan. With Irish, Italian, and Chinese genealogy, the building celebrates three multi-cultural patches in the historic fabric of the Dogpatch quilt.
5. The "Hsin Tung Yang Food Co.," mural is fantastic and completely overlooked in all the reports. The commercial mural speaks with as much ethnic pride as the wonderful cultural murals of the Mission and deserves to be recognized as such. It is also worthy for its aesthetic value and charm. Note the grammatical "error", period and coma in "Co.," – the punctuation equivalent of belt and suspenders. And below in a wonderful Andy Warhol moment is "the Sandwich Shop". Andy Warhol in that this is so much like his early

graphic design work around 1958, especially the way the italic "the" overlaps the capital "S" in "Sandwich". Does this not deserve to be preserved as urban art?

6. The key document, the *Supplement to FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco*, prepared by Tetra Tech Inc. presents a twisted premise for demolition. It first acknowledges that Hsin Tung Yang is of significance to the "Third Street Industrial District" (making no mention of Dogpatch Historic District). Then with no evidentiary support whatsoever, Tetra Tech declares that "Removal of one contributing building to the (Third Street Industrial) district will not detract from the overall historic integrity of the district..." (p.4). That is, because it is on the periphery of the district, it is – expendable – not mentioning whatsoever that Hsin Tung Yang sits at the geographic center of the – Dog Patch Historic District.
7. You have probably read the *San Francisco Chronicle* article about Andy and Deborah Rapport the former San Francisco art galleries that are beginning to move to Dogpatch. The Hsin Tung Yang space with the north facing sawtooth clerestory would make a spectacular art gallery. But the space could also be successfully used for a market, dance studio, enterprise incubator, just to name a few of the purposes for which it could be creatively used.
8. According to the *Central Waterfront Neighborhood Plan*, December 2002, Objective 1 states "Preserve notable landmarks in the Central Waterfront of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with the past." This statement clearly advocates adaptive reuse for structures like Hsin Tung Yang.

I will not go into the design proposal by Roem other than to say that it is a historic preservation travesty of facadism as well as an extremely clumsy, ill proportioned design.

Where to go now?

I don't know what authority the Historic Preservation Commission precisely has. Perhaps you have the authority to countermand the Planning Department's determination and grant the landmark status to Hsin Tung Yang. If not, I would suggest halting the development process, conducting an investigation or hearing into the flawed evaluation, and/or engaging a truly and expert historic preservation professional to conduct a professional and impartial new Historic Resource Evaluation.

Thank you for your patience.

Sincerely,



John A. Loomis FAIA

Bibliography

- a. Kelly & VerPlank and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, June 2001.
- b. The Central Waterfront Neighborhood Plan, December 2002.

- c. Kelly & VerPlank and Page & Turnbull, California Department of Parks and Recreation 523 District Record: Potrero Point Historic District, March 2008.
- d. Tim Kelly Consulting, LLC, *Historical Resource Evaluation, 815-825 Tennessee Street, San Francisco, California*, August 2012. (this key document was not made available).
- e. Preservation Team Review form completed by the firm Tetra Tech, Inc. (June 2014).
- f. *Supplement to FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco*, by Tetra Tech, Inc., June 2014.

Hsin Tung Yang Food Co.
Aka 815-25 Tennessee St.
John A. Loomis FAIA

San Francisco is about to lose an important historic landmark in Dogpatch.



The Hsin Tung Yang (New Eastern Sun) building is a distinctive brick structure, an important actor in Bay Area history of technology and innovation, and a proud testament to the multi-cultural history of the Dogpatch / Potrero Hill / Central Waterfront neighborhoods. It is the only brick structure there that is not being preserved. It is about to be demolished in disregard of San Francisco Planning policies.

There are three reasons why Hsin Tung Yang deserves to be preserved.

1. Architectural and urban design value
2. Social, cultural, and technological history
3. Opportunity to do what Dogpatch does better than any other neighborhood in San Francisco - Adaptive Reuse.

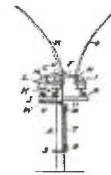
Located in the Dogpatch Historic District, Hsin Tung Yang is unique among Central Waterfront brick industrial buildings because it departs from the warehouse typology and is instead composed of a two story block anchoring the corner, wrapped on the other two sides by a high one story structure. The northern side of this one story structure sports a one tooth sawtooth clerestory illuminating the generous interior space with cascading northern light. Across the street is the handsome brick façade of the 701 Minnesota loft condos. Together the brick buildings on each side of Tennessee St. create a harmonious urban ensemble that should not be violated. This is noted nowhere in the Historic Resource Evaluations.

The inboard half of the two story structure was constructed in 1926 as the Bowie Switch Co. It was expanded to the corner in 1930. At a later date it became the C.J. Figone Co. In 1942 the

lower structures were built. In 1962 it was acquired by the Hsin Tung Yang Co. of Taiwan for food production. With Irish, Italian, and Chinese genealogy, the building celebrates three multi-cultural patches in the historic fabric of the Dogpatch quilt. This is noted nowhere in the Historic Resource Evaluations.



1,230,372. ELECTRIC SWITCH. AUGUSTUS JESSE BOWIE, JR., San Francisco, Cal. Filed Dec. 9, 1909. Serial No. 532,236. (Cl. 175-282.)



1. The combination with a switch comprising contacts, of diverging horns adjacent to said contacts, respectively, and of a movable member mounted on a pivot insulated from ground, said member comprising main and auxiliary contactors adapted to engage the said contacts, the auxiliary contactor sliding upwardly on the horns with which the arc is formed in opening the switch.
2. The combination with a switch comprising insulating bases, of contacts mounted on said bases, of diverging horns fixed in position and adjacent to said contacts, and of a movable member comprising main and auxiliary contactors, said member being pivoted on one of said insulating bases and being adapted to engage the said contacts, the auxiliary contactor sliding upwardly on the horns with which the arc is formed in opening the switch.
3. The combination with a switch comprising main and auxiliary contacts, of diverging horns adjacent to said main contacts, and of a movable member comprising main auxiliary contactors, said member being adapted to engage the said contacts, one end of said member moving in an upward and lateral direction between said horns on

Augustus Jesse Bowie Jr., the founder of the Bowie Switch Co. is an important early figure in Bay Area technology history. He was a graduate in engineering at both St. Ignatius College (now University of San Francisco) and MIT. He became an inventor, successfully filing numerous patents, most notable of which were for the electrical switch. If Lee De Forest of San Francisco is considered the grandfather of Silicon Valley, then Augustus Jesse Bowie Jr. is our long lost great grandfather. This is noted nowhere in the Historic Resource Evaluations.



In its final life as Hsin Tung Yang the building acquired a magnificent 7ft. tall, 60ft. long, graphic mural along 19th street. Proudly emblazoned in red, white and blue is the sign "Hsin Tung Yang Food Co.," in English letters 2ft. high and in Chinese characters – 4 ft. high. Note the endearing detail, both a period and a comma , "Co.," the punctuation equivalent of - belt and suspenders.



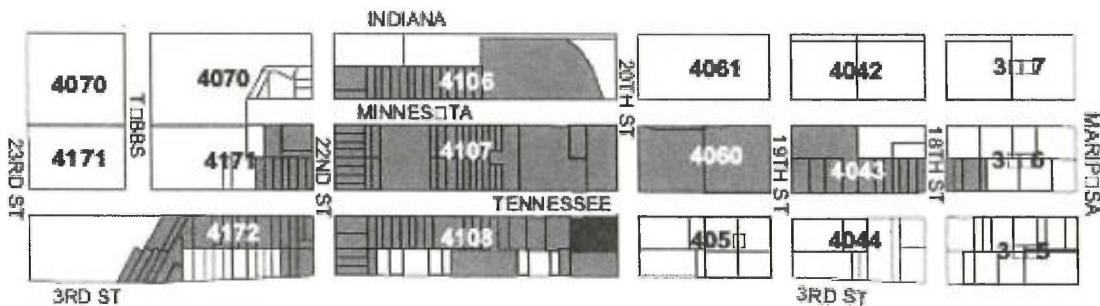
Then below, in a totally early Andy Warhol moment, cheery retro graphics proclaim "*the* Sandwich Shop". This is noted nowhere in the Historic Resource Evaluations.



In the *Supplement to FINAL Historical Resources Evaluation for Proposed Infill Construction at 815-825 Tennessee Street, San Francisco*, June 27, 2014, the Planning Department's justification for demolition is:

"Removal of one contributing building to the (Third Street Industrial) district will not detract from the overall historic integrity of the district and would represent a relatively small impact to the district's historic appearance as a large number of contributing buildings will still be present. The building at 815-815(sic) Tennessee Street is removed geographically from the other contributing buildings within the district, the largest concentration of which are along Third Street between 18th Street and therefore new construction there will not detract from the historic concentration of buildings along Third Street."

This disingenuous determination is seriously misleading and seriously - flawed. It barely mentions Dogpatch Historic District in the Introduction and then focuses solely on the Central Waterfront: Third Street Industrial District in the Evaluation and Conclusion. By constructing an argument that focuses on Third Street and ignores Dogpatch Historic District, a logic path is set up to condemn Hsin Tung Yang. A false and twisted premise emerges. Planning ignores the fact that Hsin Tung Yang's location is on the central spine of Dogpatch Historic District – Tennessee Street, http://noehill.com/sf/landmarks/sf_dogpatch.aspx. And Planning makes no mention of the context of the brick building across the street and how it and Hsin Tung Yang act together as a material and historic urban construct in Dogpatch. Of course the removal of Hsin Tung Yang may not have a profound effect on Third Street. Because the effect will be elsewhere - on Tennessee Street.



But most disturbing is the dangerous precedent of the "Removal of one contributing building to the district will not detract from the overall historic integrity of the district...", implying that if historic buildings are merely removed one by one their loss will not be felt – until they are all gone? Is this not like the frog in the pot on the stove who does not feel it when the water finally boils him dead?

Hsin Tung Yang could be converted to any of many wonderful new uses and is ripe for adaptive reuse. And no one does adaptive reuse better than - Dogpatch. This is noted nowhere in any of the Historic Resource Evaluations.

Instead we get San Francisco's latest contribution to – façadeism.

