Descriptive Summary

Title: Railroads in California
Date: 1876
Collection Number: MS-R115
Creator: Clement, L. M.
Extent: 0.1 linear feet (1 folder)
Languages: The collection is in English.
Repository: University of California, Irvine. Library. Special Collections and Archives.
Irvine, California 92623-9557

Abstract: L. M. Clement was one of the leading civil engineers responsible for surveying and building the eastbound route of the Central Pacific Railroad, thereby contributing to the completion of the transcontinental railroad in 1869. The collection comprises a handwritten copy of Clement's twelve-page report on the state of the California railroads before 1876, including assessments of Chinese laborers and their supervision, an evaluation of the condition of California's roads, and a description of the role of chief engineer in a railroad project.

Access
The collection is open for research.

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Preferred Citation

For the benefit of current and future researchers, please cite any additional information about sources consulted in this collection, including permanent URLs, item or folder descriptions, and box/folder locations.

Acquisition Information
Acquired in 2004.

Processing History
Processed by Cyndi Shein in 2008.

Biography
Lewis Metzler Clement was one of the leading civil engineers responsible for surveying and building the eastbound route of the Central Pacific Railroad, contributing to the completion of the transcontinental railroad in 1869. He was born August 12, 1837 in Niagara-on-the-Lake, Ontario, Canada. He received an engineering degree from McGill University in Montréal. He first worked as a shipping clerk with the Central Ohio Railroad. Later he worked for E. R. Blanchard, General Freight Agent of the Ohio and Mississippi Railway Company in St. Louis, Missouri.

Clement moved from Missouri to California in January 1863. He became the right-hand man of Theodore Dehorne Judah, chief engineer of the Central Pacific Railroad. Clement and Judah were central figures in the planning and construction of the first railroad that traveled eastward. In 1863 they began laying track eastward from Sacramento, California across California's Sierra Nevada mountains and through the deserts of the Nevada and Utah territories. The Central Pacific hired thousands of Chinese immigrants to lay the track and blast nine tunnels through the mountains. Shortly thereafter, the Union Pacific began laying track westward from Omaha, Nebraska. The two rail lines met at Promontory, Utah on May 10, 1869, completing the nation's first transcontinental railroad. Clement was made assistant chief engineer upon Judah's death (1863) and later became the acting chief engineer of the project.

In 1881 Clement became chief engineer of the Pacific Improvement Company, a subsidiary of the Southern Pacific Railroad, for which he designed and built power plants and cable and electric railways in the West. He invented the first electric control system for railroads and designed an "Emigrant Sleeping Car," the forerunner to the Pullman Car.

L.M. Clement died October 29, 1914 in Hayward, California.


Collection Scope and Content Summary
The collection comprises a single handwritten copy of Clement's twelve-page report on the state of the California railroads, including insights on Chinese laborers and their supervision, an evaluation of the condition of California's roads, and a description of the role of chief engineer in a railroad project. Clement's stated purpose is to share "practical observations which he has made during the performance of his professional duties" with "engineers and others" who might benefit from his experience (Clement p. [1]). "Copy made November 16, 1876" is written on the cover under the author's name.

**Indexing Terms**

The following terms have been used to index the description of this collection in the library's online public access catalog.

**Subjects**
- Clement, L. M. -- Archives.
- Railroads -- California.
- Railroad engineers -- California -- Archives.
- Railroad construction workers -- California -- Archives.
- Transportation -- California -- Archives.
- Alien labor, Chinese -- California -- Archives.

**Occupations**
- Civil engineers
- Railroad engineers