## HIRAM MARTIN CHITTENDEN: FROM WESTERN NEW YORK TO THE PACIFIC NORTHWEST

Trish Hackett Nicola (1798)

Hiram Martin Chittenden, the son of William and Mary (Wheeler) Chittenden, was born on October 25, 1858, in Yorkshire, Cattaraugus County, New York. He attended a local one-room schoolhouse for several years then went to Ten Broeck Free Academy in Franklinville. He met his future wife, Nettie Parker, of Arcade, New York, at the Academy. Chittenden concurrently won a scholarship to Cornell University and was offered an appointment to the United States Military Academy at West Point. He finished two terms at Cornell then started at West Point. He graduated with honors in 1884 with a commission in the Corps of Engineers. He and Nettie were married at Arcade six months later. Chittenden read law with an attorney in Flushing and was admitted to the bar of New York State in 1887.

Some of Chittenden's military assignments included the Missouri River Commission, a survey for a canal on the Ohio River, tourist roads in Yellowstone National Park, flood control on the Sacramento River, various irrigation projects, and the survey of the boundaries of Yosemite Park.<sup>2</sup>

"Chittenden served two tours at Yellowstone National Park--1891 to 1893 and 1899 to 1905. His engineering accomplishments in Yellowstone included masonry Entrance Gate at Gardiner, the Melan Arch Bridge over the Yellowstone River above the Upper Falls, the road through Sylvan Pass, the road over the almost impossible summit of Mount Washburn, and the Golden Gate viaduct, the most difficult piece of work he executed in the park." Chittenden persuaded Congress to vote the funds that made these projects possible. Funding went from \$70,000 in 1883 to a three-year appropriation of \$750,000 in 1902. It was money well spent.<sup>3</sup>

Over the years Chittenden published many articles and reports about his work. He also wrote a guidebook about Yellowstone National Park and three history books which covered the history of steamboat navigation on the Missouri River, the life and letters of Father Pierre-Jean De Smet, S.J. and the American Fur Trade of the West.<sup>4</sup> His personal diaries contain idyllic memories of growing up on the family farm in Western New York.<sup>5</sup>

By 1905 Chittenden's health had deteriorated due to overexposure, exhaustion and typhoid attacks. After a few months recovering in a sanitarium in Wauwatosa, Wisconsin, he received an assignment as district engineer in Seattle.<sup>6</sup>

For many years the people of Seattle wanted to build a canal to connect the waters of Puget Sound with the fresh water of Lake Washington. They could not agree on the route or the configuration of the project. Chittenden proposed building two locks—a large one for freighters and log rafts and a smaller one for pleasure boats and tugs. There was still an issue of where to place the locks. There were many complicated negotiations but eventually all sides came to an agreement. Chittenden is credited with being the catalyst for planning and building a canal linking Puget Sound and Salmon Bay at Ballard, in Seattle, Washington. The canal required

<sup>&</sup>lt;sup>1</sup> Gordon B. Dodds, *Hiram Martin Chittenden: His Public Career*, (Lexington: The University Press of Kentucky, 1973), 2-7.

<sup>&</sup>lt;sup>2</sup> Dodds, 8-23.

<sup>&</sup>lt;sup>3</sup> Historic Road in the National Park System, "Labors of Love: The Projects of Hiram M. Chittenden" <a href="http://www.cr.nps.gov/history/online\_books/baldwin/chap7.htm">http://www.cr.nps.gov/history/online\_books/baldwin/chap7.htm</a>, (accessed April 10, 2007.)

<sup>&</sup>lt;sup>4</sup> Dodds, preface, viii

<sup>&</sup>lt;sup>5</sup> Bruce Le Roy, editor, "H. M. Chittenden: A Western Epic," (Tacoma: Washington State Historical Society, 1961), 105.

<sup>&</sup>lt;sup>6</sup> Dodds, 127.

<sup>&</sup>lt;sup>7</sup> Dodds, 134-5.

digging cuts between Salmon Bay and Lake Union and between Lake Union and Lake Washington, and building four bascule bridges in the neighborhoods of Fremont, Ballard, the University District, and Montlake. The construction began in 1911, and was officially opened in 1917 but some of the construction was not finished until 1934. In Seattle the Government Locks are also known as the Ballard Locks but the official name is Hiram M. Chittenden Locks. The canal is called the Lake Washington Ship Canal.<sup>8</sup>

["A bascule bridge is a drawbridge with a counterweight that continuously balances the span, or "leaf," throughout the entire upward swing in providing clearance for boat traffic. Bascule is a French term for seesaw and balance and bascule bridges operate along the same principle. They are the most common type of movable bridge in existence because they open quickly and require relatively little energy to operate." The most famous bascule bridge in the world is Tower Bridge across the Thames in London. A local bascule bridge is the Col. Patrick O'Rourke Bridge in Rochester, N. Y.9]

Hiram M. Chittenden died in Seattle on October 9, 1917 at the age of 58. He was survived by his wife, Nettie, and three children, Eleanor, Hiram M., Jr., and Theodore P. Chittenden.<sup>10</sup>

There are examples of Chittenden's engineering talents in many states across the country. Seattle is fortunate to have the Hiram M. Chittenden Locks, a popular destination where visitors can watch vessels pass through the locks from fresh water Lake Washington, into the salt water of Puget Sound. It is an amazing engineering feat!

<sup>&</sup>lt;sup>8</sup> HistoryLink.org Online Encyclopedia of Washington State History, "Lake Washington Ship Canal -- A Snapshot History" (by Walt Crowley), <a href="http://www.historylink.org/">http://www.historylink.org/</a> (accessed March 30, 2007).

<sup>&</sup>lt;sup>9</sup> Wikipedia Online Encyclopedia, "Bascule bridge," <u>www.en.wikipedia.org</u> (accessed April 10, 2007.)

<sup>10</sup> Dodds, 186, 205.