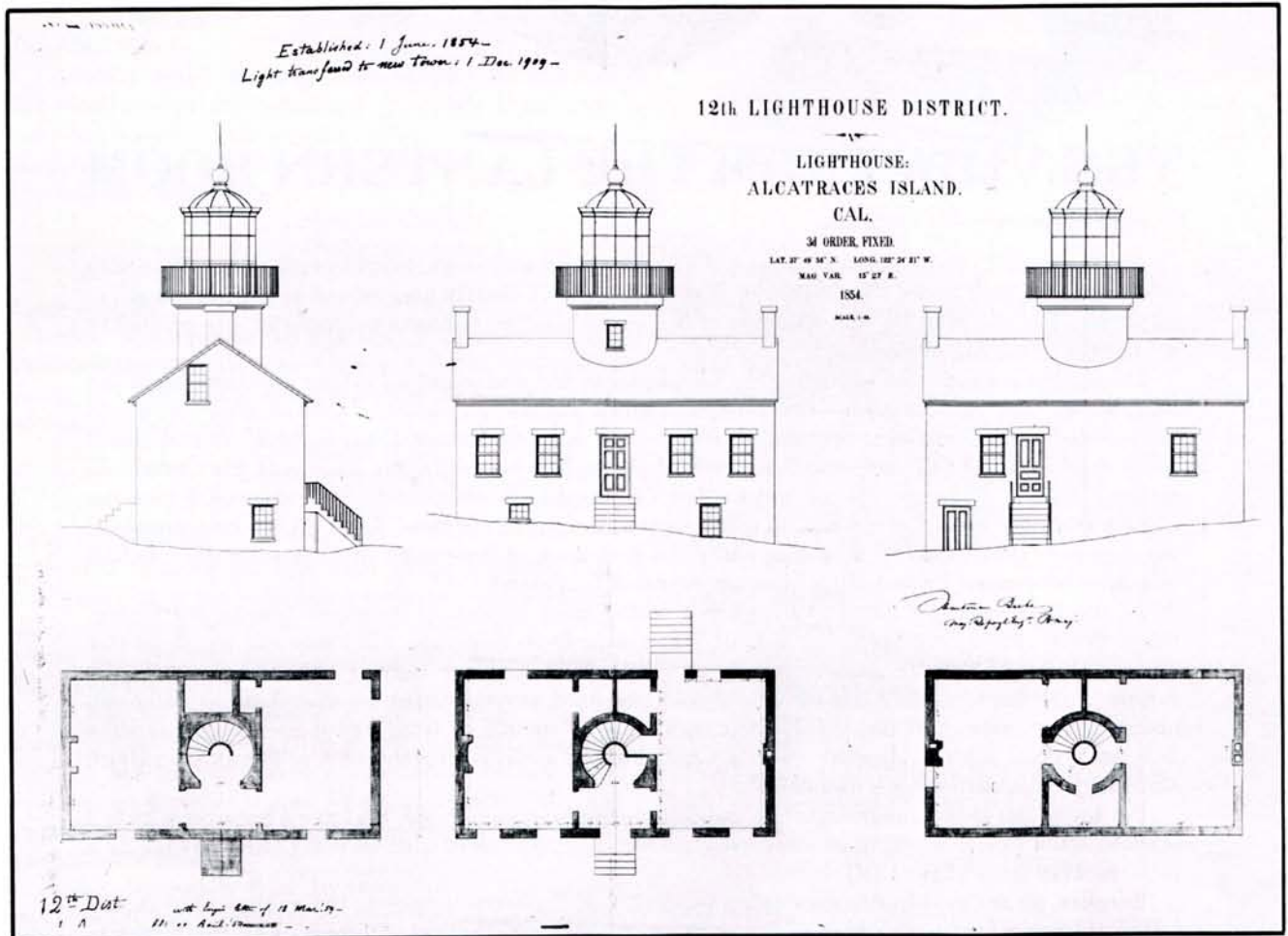


Alcatraz and the First West Coast Lighthouses

by Wayne Wheeler



Gold! was the cry shouted at Sutter's Mill in 1849. The cry echoed down the Sacramento River Valley to the sleepy little village of San Francisco. Gold!, the cry that brought thousands of people 'round the Horn to San Francisco, a departure point to the Sierras with the promise of fortunes to be made. Hundreds of sailing ships were pressed into service to transport

the 49'ers from the east coast to California. Many, far too many, of those ships came to grief on the rocks of the dark and fog shrouded coast.

The U.S. Lighthouse Service successfully petitioned Congress for funds to construct lighthouses along the west coast. Lighthouses, the service argued, were mandatory to safely guide the increasing number

of vessels plying western waters. Acts passed in 1850 and 1851 provided funds for an initial string of eight lighthouses and the establishment of several buoys along the west coast.

Once Congress authorized the funds and designated the places where the lighthouses were to be constructed, the selection of the actual sites was left to the Coast

Survey. A party from that service, headed by A.M. Harrison, proceeded to the west coast and made the final selections.

The contract to construct the lighthouses was awarded to the Baltimore firm of Gibbons and Kelley. It called for seven lighthouses to be constructed in California (Point Loma at San Diego, Point Conception, Point Pinos, Southeast Farallon Island, Fort Point and Alcatraz in San Francisco Bay and Humboldt Bay) and one in the Territory of Oregon (at the mouth of the Columbia River at Cape Disappointment—now the State of Washington). The contractor was to be paid \$15,000 for each of the seven California lighthouses and \$31,000 for the one at Cape Disappointment at the mouth of the Columbia River.

The specifications for all eight instructed the contractor to build one and a half story "Cape Cod" style houses with a tower thrust through the center of the structure. The "house" consisted of a cellar, two rooms on the first floor (parlor and kitchen) and two bedrooms on the second floor. Additionally, on the rear of the structure a small enclosed wooden porch was attached to the kitchen with the wet sink and of course there was the obligatory little "house behind the house."

Through the center of the structure was a round tower which contained the stairs that connected all levels with the lanternroom that surmounted the tower. Just below the lanternroom was a small watch room where the equipment was prepared for the night. It was in this room that the "wickie," an affectionate term for the keeper, readied the lamp for the night. He polished the brass of the oil lamps, cleaned the glass chimneys, installed and adjusted the wicks, etc. The contractor had the option of using rubble stone, brick or granite blocks as the basic building material for the exterior of the houses and the tower. The lanternroom was to be of wrought iron capped by a copper dome. Because of the lack of ground water and rain most of the year the rain gutters and down spouts funneled winter rain water into a cistern located in the basement.

The firm of Gibbons and Kelley dispatched the Bark ORIOLE (1,223 tons burden) loaded with men, equipment and the necessary supplies to construct all eight lighthouses with exception of the basic building material for the exterior walls. That was to be procured locally depending on just what was available in each area. In fact, all three materials (brick, granite and rubble stone)

were used at different sites. The work crew consisted of 14 mechanics, 2 bricklayers, 2 carpenters, 1 painter, 1 blacksmith, 1 plasterer/bricklayer, 2 stonemasons, and 5 workmen.

Around the Horn came the good ship ORIOLE arriving in San Francisco on January 29th, 1853. An advance party, which had arrived the previous month, had the foundations of the Alcatraz and Fort Point lighthouses well underway.

The work party that landed on the Farallons was promptly ejected by the egg companies ...

The contractor landed work parties at several of the preselected sites so that several lighthouses could be constructed concurrently. The San Francisco area was to receive three of the first eight stations; Southeast Farallon Island, Fort Point (an area presently under the south tower of the Golden Gate Bridge) and Alcatraz. The work party that landed on the Farallons was promptly ejected by the (bird) egg companies but later gained a foot hold with the assistance of a U.S. Marshall.

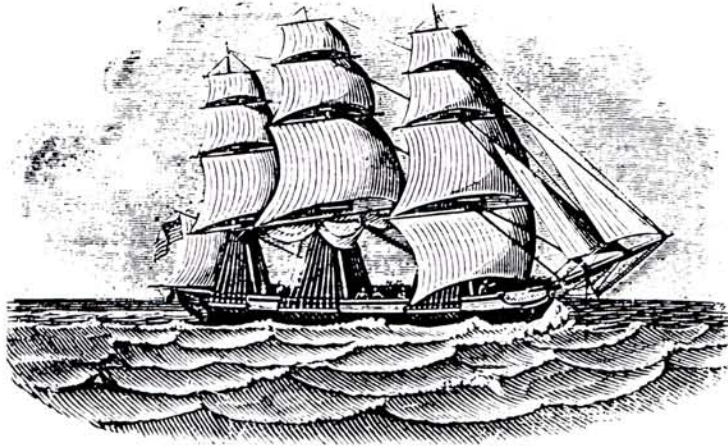
All went smoothly with the construction of Alcatraz and Fort Point and they were completed in a matter of months. The work parties then concentrated on the Farallon lighthouse. Because of the limited amount of space on the 425 foot high peak of that island, the house was separated



Alcatraz Lighthouse—1908 just prior to demolition. Note the cellar is above ground and that this structure did not receive the leanto kitchen addition added to the other seven.

The building to the left of the lighthouse was the home of the warden of the federal prison.

Official U.S. Coast Guard photo



from the tower and constructed at the base of the mountain. The Point Pinos lighthouse in Pacific Grove was the next structure to be completed. The ORIOLE then sailed to aptly named Cape Disappointment in Oregon Territory. The treacherous Columbia River Bar claimed the good ship Oriole and all the materials slated for the last four lighthouses. Fortunately not a man was lost, but work was delayed until new materials for the Cape Disappointment and the other lighthouses could be procured.

After replacement materials were procured the contractor split his work force into two parties; one constructed the Cape Disappointment and Humboldt Bay (North Spit) lighthouses and the other the Cape Conception and Point Loma (San Diego) structures.

When the contractor arrived at San Diego he discovered that the site where he was to build the lighthouse was on a 422 foot high bluff miles from the nearest road. Gibbons and Kelly petitioned the government for more funds to construct a road and necessary small bridges so that they might reach the site. After some haggling the government conceded the funds and eventually paid Gibbons and Kelly \$30,000 for constructing Point Loma, double the initial amount.

Although all the lighthouses were completed by 1854 it would be two years after Alcatraz was finished

before that structure—the first west coast lighthouse—displayed a light.

In 1852 Congress transferred the administration of America's lighthouses from the Fifth Auditor of the Treasury to a newly formed U.S. Lighthouse Board. The new Lighthouse Board was made up of two officers from the Navy, two officers from the Army (Corps of Engineers) and two civilians "of high scientific attainment." The Lighthouse Board immediately made sweeping changes in the administration and operation of America's lighthouses.

The government instructed the contractor that he was not to install the reflector system of lighting in the west coast lighthouses.

New rules and regulations were implemented, the country was divided into twelve lighthouse districts, each administered by a Naval officer as Inspector and Army Corps of Engineer officer as District Engineer. The entire west coast became the 12th Lighthouse District with offices in San Francisco. The new board dispatched a change order to Gibbons and Kelly instructing them that they were not to construct and install reflector systems in the west

coast lighthouses, but that they would be sent Fresnel lenses from France. The communique also stated that approximately \$1,000 would be deducted from each lighthouse constructed (as the contractor no longer had to furnish the optic).

The person in charge of America's lighthouses (from 1820 until 1852) deemed the Fresnel system too expensive and declined to employ them. However, the newly created Lighthouse Board decided that all United States lighthouses would receive a Fresnel lens. (Please see the Human Interest and Technical sections of this issue regarding Fresnel and his magic lantern). The Board issued a change order to Gibbons and Kelly and immediately dispatched two young officers to Europe to buy every Fresnel lens they could lay their hands on.

Well, eventually the lens for Alcatraz arrived and that lighthouse officially became the first lighted on the west coast on the night of June 1st, 1854. Alcatraz really never had a very exciting life as a lighthouse ...oh, a few prison riots in later years added a little spice, but generally Alcatraz led a rather banal existence. In fact most of the lighthouses in the approaches to and around San Francisco Bay lead a taciturn life. The original Alcatraz structure was replaced in 1909, partially because it was slightly damaged by the 1906 earthquake and, more importantly, because the new federal prison (of 1909) was about to overshadow it. The new lighthouse was one of the first prestressed concrete lighthouse towers in the country. In the 1960's the station was automated and the personnel removed. On November 30, 1969 seventy-eight Indians "invaded" Alcatraz Island claiming that the island was legally theirs; a Souix treaty of 1868 stated that Indians are entitled to any surplus government land. They reasoned that because the island had been unoccupied since 1963 they were entitled to it. The Indians remained on the

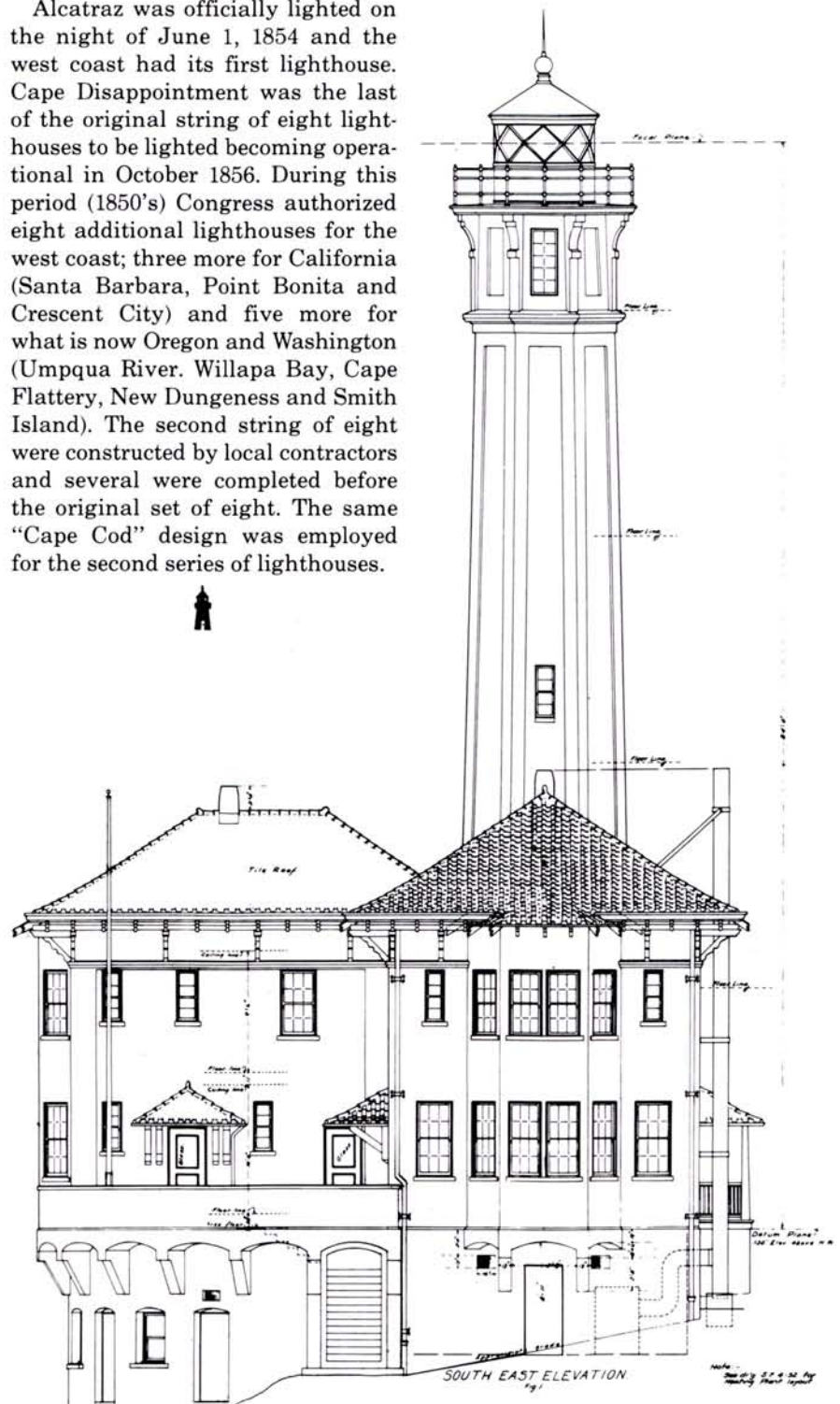
island in varying numbers for over a year. During the occupation many of the buildings were vandalized and several, including the lighthouse quarters, were destroyed by fire. Today only the tower with its modern rotating aero-beacon remains.

Although the lighthouses were completed, numerous problems remained to be solved. Just three months after the Fort (or Battery) Point lighthouse was constructed, and prior to the arrival of the lens from Europe, the Army decided that only *that* site would suffice for a fort to guard the bay. The lighthouse was razed before ever being lighted. The second Fort Point lighthouse, constructed on a seawall near the fort, had to be replaced within a few years due to erosion. The third, and final, Fort Point Lighthouse was a skeleton tower placed on the parapets of the fort. The keepers' homes were on a bluff above the fort. They gained access to the tower by crossing a bridge from the bluff to the top of the parapets. Fort Point was discontinued in 1934 due to the construction of the Golden Gate Bridge.

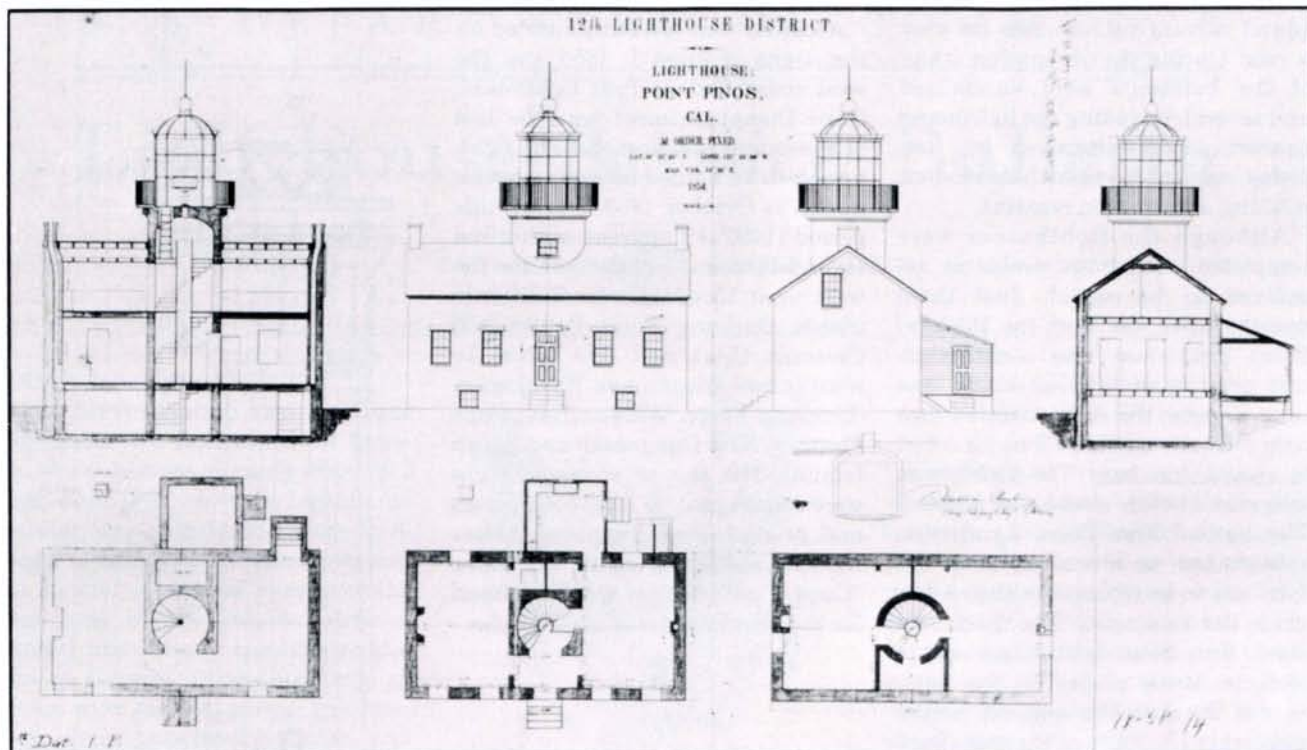
When Point Pinos was completed, but before the lens arrived, the Lighthouse Service hired one Charles Lawton and his wife as keepers. Lawton joined a posse in pursuit of a local desperado and during the ensuing chase was shot and killed. His wife became the first keeper of the Point Pinos flame. A few years later when she married a local man he was appointed keeper and she demoted to Assistant Keeper (Women's Lib clearly was a number of years away!)

The last major problem that confronted the first eight lighthouses occurred when the lenses arrived from France. The First Order lens slated for Southeast Farallon Island and Point Conception were too large to fit in the lantern rooms which had been designed for the "old" reflector systems. Both of those towers had to be torn down and reconstructed.

Alcatraz was officially lighted on the night of June 1, 1854 and the west coast had its first lighthouse. Cape Disappointment was the last of the original string of eight lighthouses to be lighted becoming operational in October 1856. During this period (1850's) Congress authorized eight additional lighthouses for the west coast; three more for California (Santa Barbara, Point Bonita and Crescent City) and five more for what is now Oregon and Washington (Umpqua River, Willapa Bay, Cape Flattery, New Dungeness and Smith Island). The second string of eight were constructed by local contractors and several were completed before the original set of eight. The same "Cape Cod" design was employed for the second series of lighthouses.

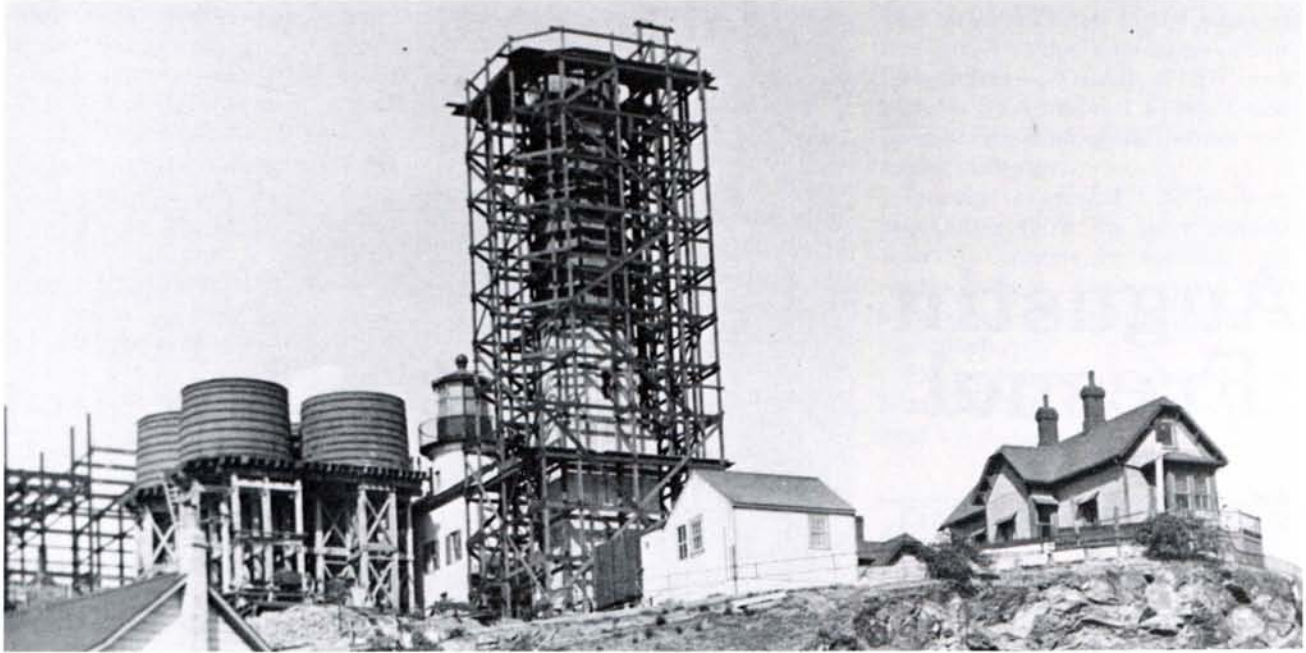


The second Alcatraz Lighthouse (1909). Constructed of reinforced concrete the structure is 84 feet tall and has three keepers quarters attached to the tower. The focal plane of the light is 200 feet above San Francisco Bay.
Official U.S. Coast Guard photo



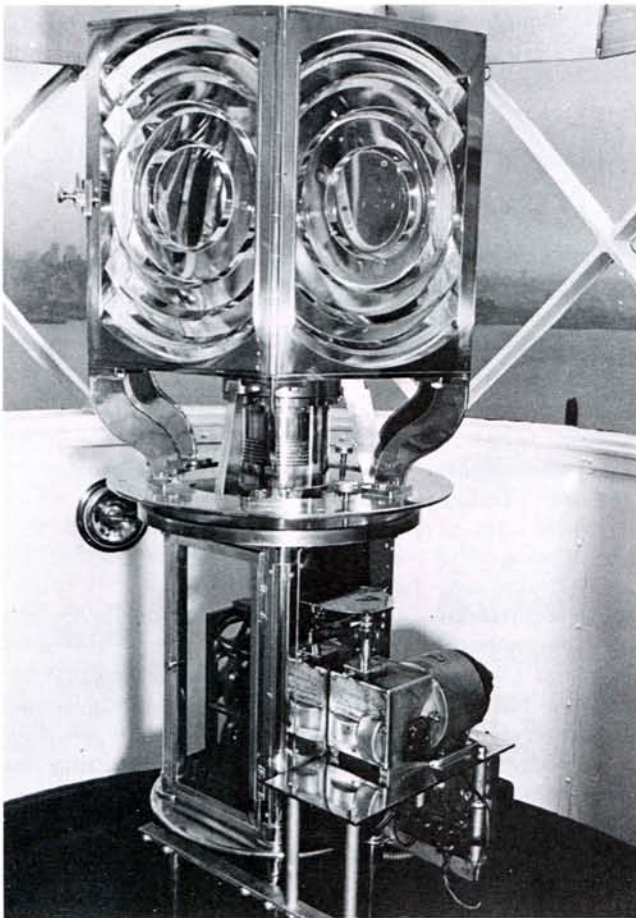
**The First 16 West Coast Lighthouses
Constructed in the 1850's (from south to north)**

Station (Series)	Year	Lens	Comments	Station (Series)	Year	Lens	Comments
Point Loma (1)	1855	3rd	Discontinued in 1891, presently under the jurisdiction of the National Park Service open to the public.	Fort Point (1)	1855	5th	Original building razed months after construction. Present skeleton tower on the parapets of Fort Point was discontinued when the Golden Gate Bridge began construction in 1934.
Point Conception (1)	1855	1st	Reconstructed in 1889. Not accessible to the public.	Alcatraz (1)	1854	3rd	Reconstructed in 1908. Only tower of 2nd lighthouse remains. 1st lens transferred to Cape St. Elias, AK. 2nd (Fourth order) in Alcatraz museum.
Santa Barbara (2)	1856	4th	Destroyed by an earthquake in 1926.	Humboldt Bay (1)	1856	4th	Discontinued in 1891. Replaced by Table Bluff. Structure razed sometime in the 1930's.
Point Pinos (1)	1854	3rd	Only one of original eight basically unchanged with original optic still in operation. Under jurisdiction of City of Pacific Grove, has excellent interpretive museum in building. Open on weekends. Hours erratic. Call (408) 372-4212 for information.	Crescent City (2)	1856	4th	Discontinued in 1951. Presently under jurisdiction of Del Norte County Historical Society. Nicely interpreted, open to public in summer at low tide. Active as a private aid to navigation. Has old Fresnel lens in museum. Call (707) 464-3089 for information.
Farallon I. (1)	1855	1st	Original house razed, tower decapitated, original lens in Navy-Marine Corps-Coast Guard Museum on Treasure Island in San Francisco Bay. Museum open to public daily from 10 a.m. to 4 p.m.	Umpqua River (2)	1856	3rd	Destroyed in 1861.
Point Bonita (2)	1855	2nd	Original lanternroom and lens relocated to present structure in 1877. Still operational and open to limited tours through NPS Golden Gate National Recreation Area by reservation. Call (415) 331-1540. Original tower and house razed.	Cape Disappointment (1)	1856	1st	Still in existence and operation. Not open to the public.
				Shoalwater Bay (2) or Willapa Bay	1858	4th	Destroyed by erosion 1941.
				Cape Flattery (2)	1857	1st	Still in existence. Not original lens. Very difficult to visit.
				New Dungeness (2)	1857	4th	In St. of Juan de Fuca. Rebuilt in 1927.
				Smith Island (2)	1858	4th	In St. of Juan de Fuca. Rebuilt in 1957



The 1909 Alcatraz tower under construction. The original tower can be seen sandwiched between the new tower and water tanks. The building on the far right is the warden's residence.

Official U.S. Coast Guard photo



Above: Workmen standing in front of the Farallon Island tower circa 1856. The first tower was too small to accommodate the 1st Order lens.

Official U.S. Coast Guard photo

Left: The Alcatraz 4th Order lens installed from 1911-1963. Flashing every 5s.

Official U.S. Coast Guard photo