JK, getting 6 pages photo copy

POINT CONCEPTION & Fog Signal

Calif.

Principal Keeper July 1, 1872 to June 18, 1895 T.L. Perry

This log; 1895/1910

Mar. 18, 1895 Ins. Nichols U.S.N. arrived on Steamer Madrona, on leaving the light house he took the light house journal with him. It having the records of the station since 1872, Eighteen hundred seventy two.

28 Keeper feed mules

March 30, 1895 Worked in river, cleaned balconeys, staris, and cleaned tubes. Feed mules made a place for the water to run out of chute, sweep up coal shed and split kindling for fires, in alter noon cleaned up barn and carried up a board that had blown down the hill, at 9;30 am Henry Rosendale when requested by me to go to Cleaning and washing of lantern windows told me that it was the man that lite ups business as him and the other boys had made arriangments to do it in that way, I told him the windows needed washing and to go do it, he refushed, but went and done it, afterwards he called me an Old Stinker and a old Son of Bitch and other names to lilfty to be thought of much less written in, fact is I never heard such filthy expressions used by one one man as those used by Henry Rosendale, my 2nd asst.

Apr. 1, 1895 Mr. Henry Boesen first asst arrived and was assigned to duty. V. J. Lettler 1 st asst. resigned. Keeper feed mules . 2nd asst clean up in river, Keeper put post for fence and repaired fence, 2nd asst. building lime box, 3 rd asst hauled one load of coal, 1 st asst went to Gaviota for furn. and family

Apr. 9 Keeper feeds mule morning and evening, he will not allowed any one else to feed them.

21 Keeper feed mules and cleaned up in tower, with to Whale camp with buck board for chickens

May 10, 1895 Keeper feed mules and writing official letter, painted doors in the sitting room, went to whale camp on business

11 Keeper at fog signal, left for Lompoc with official mail addressed to the L.H. Inspecitor, 3rd asst. writing out complaints against princ. keeper 2nd asst. at fog signal from 2 pm till sundown,

12 Keeper returned at 6;30 pm for Lompoc,, 3rd asst. at fog signal from sunrise till 10 am, at 10;00 he came up the hill telling keeper signal was all right, Keeper at 9 pm looked at boiler the safety valve lowing off water very low in the glass, and over 90 lbs. of steam, on and a very stron, fire on, if not discovered in a very short time the boilder would have blown up or been rendered useless. I pumped in water, slacked the fires and blew off steam by hand.

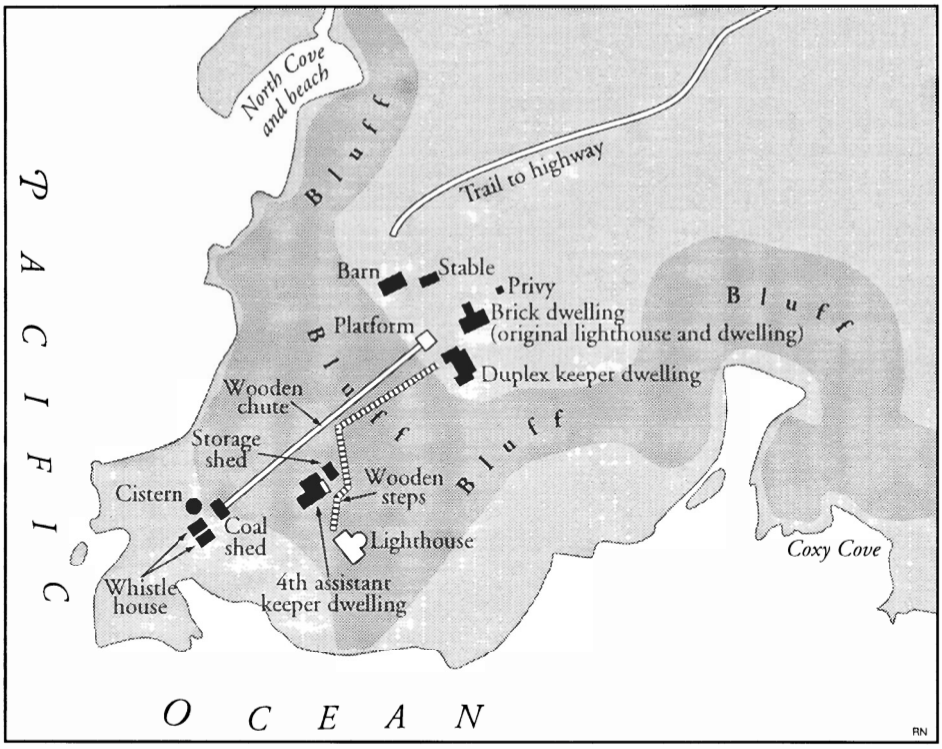
13 Keeper feed mules, raked and picked up yard. 3 rd asst. cleaned up in Tower and fog signal in the morning and let water out of # 2 boiler, he claimed he found the water going out over the top of the whistle, we have always saved the water in such cases by carrying it to the cistern in buckets

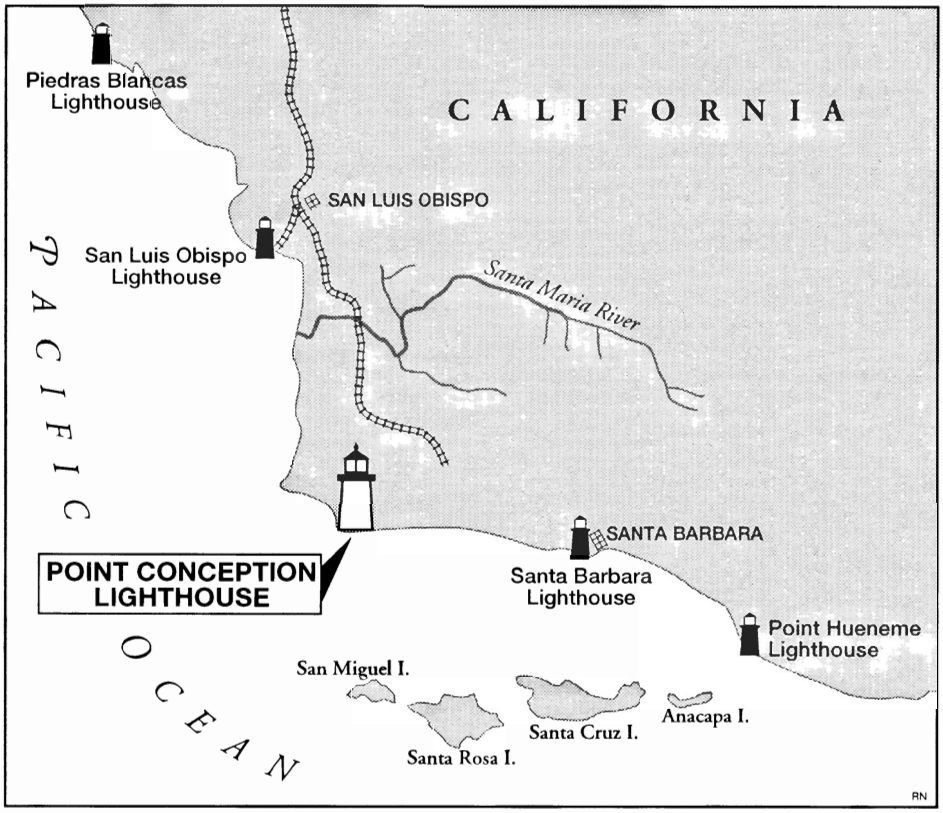
20 Killed all the mice stopped up all holes with cement and lumber.

June 6 Keeper left station, New Keeper; H.A. Weeks

This keeper wrote nothing

July 1, 1913 New Keeper G.A. Hussey


North Cove and beach
Bluff
Trail to highway
Barn
Stable
Privy
Brick dwelling
(original lighthouse and dwelling)
Platform
Duplex keeper dwelling
Wooden chute
Storage shed
Wooden steps
Cistern
Coal shed
Lighthouse
Whistle house
4th assistant keeper dwelling
Coxy Cove
PACIFIC
OCEAN
RN


Piedras Blancas Lighthouse
CALIFORNIA
SAN LUIS OBISPO
San Luis Obispo Lighthouse
Santa Maria River
PACIFIC
POINT CONCEPTION LIGHTHOUSE
SANTA BARBARA
Santa Barbara Lighthouse
Point Hueneme Lighthouse
San Miguel I.
Santa Rosa I.
Santa Cruz I.
Anacapa I.
OCEAN
RN

from: Santa Barbara Historical Society

OLDEN DAYS: Lighthouse Built at Point Concepcion

Oct 22 '67

By Stella Haverland Rouse

During the first three years of California's existence as a state, her senators and representatives in Congress attempted to secure an appropriation for lighthouses along the dangerous coast.

It was not until 1855 that lights were set up in the bay of San Francisco.

In July, 1855, the Santa Barbara Gazette complained about the Point Concepcion lighthouse in our own county:

"The building was put up in such an insecure and unworkmanlike manner that on three different occasions it has been materially damaged by the weather.

"Orders have been issued to the keepers to be prepared to receive the lantern twice within the past two months, and accordingly not only they, but the masters of coasting vessels have been looking anxiously for them . . .

"We are reliably informed by masters of vessels that, in case of the inability of the Board to ship the lanterns at once to the different stations, they should place a fog bell upon Point Concepcion which would be of material service to coast navigation . . .

"THE GREAT NUMBER of wrecks which have occurred south of San Francisco is very evidently of sufficient importance to merchants and owners of vessels to induce them to act together in obtaining from the Board the rapid prosecution of their duty."

Late in September the Gazette announced that the lamp and fixtures had arrived, and that the facility would be ready for use in about two months.

In February, 1856, when "Mr. Parkinson," keeper of the lighthouse, visited Santa Barbara, he "spoke very highly of the new lantern, it being of a superior order." The powerful reflector was made by a French master glass maker.

(According to the Independent, March 26, 1915, it was much more powerful than the Santa Barbara light. It had cost $15,000, and had "eight bulls-eyes, where the local one has only two.")

However, in April, 1856, the keeper informed the newspaper that a fog bell also was to be placed on the Point. It would be "of large size, weighing 5000 pounds, and in foggy weather will warn all navigators who approach within several miles of that dangerous locality."

A Press reporter described the lighthouse as he saw it on a horseback ride from the Santa Ynez Valley to the coast in July, 1877:

"THE CAPE WHEN viewed from the northward rises like a low island in the ocean; and seen from the high ridge on the Espada Rancho, where is first came in sight, it looked to be little above the surface of the water . . .

"We kept riding down the long slope, leaving Point Arguello on our left, El Tranquillon towering high above it, and the purple mountains behind us, the sapphire sea before us, and the island-like cape and its gleaming lighthouse to our front and left, thinking that we would make the Point very soon.

"But the wonderfully transparent atmosphere was deceptive, and when we reached the Espada Ranch house a grizzly old Indian vaquero . . . told us that it was eight miles away."

"On approach, the point is found to be a high promontory, stretching boldly into the ocean, and terminating abruptly. It is more than 200 feet above the ocean, and is conspicuous from land or sea in every direction for many miles."

The reporter described the structure as "a story-and-a-half brick building, plastered, having a low tower, also of brick, and plastered white, rising from the center . . .

"The quarters of the keeper are tastefully furnished and neatly kept by the lady of the lighthouse."

THE KEEPERS MADE daily records of the weather, and were "ready to relieve shipwrecked mariners should any such unfortunates ever make the Point."

The light was "a primary seacoast light, 250 feet above the water, and can be plainly seen from the high hills behind Santa Barbara, more than 40 miles away in a direct line.

"The illumination apparatus is of the 'first order of the system of Fresnel, and exhibits a revolving white light, showing a flash every half-minute!

"The apparatus, tower, fog-signal, engine and buildings . . . are kept in prime order, the place reminding me more of a military fort than anything I have seen lately."

However, in the annual report of the Lighthouse Board, June, 1880, the tower and dwellings were "reported in an insecure condition and should be rebuilt."

Since title to the property was not clear because it was an old land grant, the government would have to purchase the parcel before a structure, expected to cost $48,000, could be built.

The next year the lighthouse was rebuilt, this time being located below the cliffs, since the Lighthouse Board reasoned that the light had been shining out on a cloud layer at night.

THE LIGHT CONTINUED in use as one of the last of the oil burners, since it was not converted to electricity until August, 1948.

Keepers who were assigned to Point Concepcion were not overly enthusiastic about the location. In March, 1915, Mr. and Mrs. H. A. Weeks, who had lived there for twenty-five years, compared it to Santa Barbara's Mesa lighthouse, where they had been transferred:

"Santa Barbara is a more pleasant place. At Concepcion the lighthouse is out on the rocks, and many times in the morning the walls were white as if covered with snow, from the dried salt spray the waves hurled upward."

Mrs. Weeks added: "I have known the wind to blow a gale there for eight weeks at a time. I can hardly become used to the quietness of this climate."

Once a year a government supply boat arrived with oil and supplies; otherwise, existence at Point Concepcion was very lonely.

POINT CONCEPTION

1869

367. *Point Conception, Cal.*—The cistern at this station has been rendered unserviceable, doubtless from the effects of the earthquake last year. The necessary steps have been taken to repair the cistern. The station, with this exception, is in good order and condition. The fog-bell machinery is in good order and condition.

1872

405. *Point Conception, sea-coast of California.*—An appropriation was made March 3, 1871, for the establishment of a first-class steam fog-signal. A thorough examination and survey of the point were made with a view to ascertain the best location for the signal, and the supply of water. The structure has been completed, and the marchinery placed in position. Owing to ignorance on the part of the light-house keeper, the latter soon needed repairs. The pipes connecting the hydraulic ram with the cistern were not laid according to directions from the district engineer, and will have to be relaid. The cistern and water-shed, said to have been damaged by the recent earthquakes, will require an additional coat of cement. An abundant supply of water from an adjoining spring furnishes all that is required for the light-house and fog-signal. Many minor repairs to the light-house are needed.

1874

435. *Point Conception, sea-coast of California.*—An additional dwelling has been built at this station, the water-shed made for the fog-signal; the old dwelling, fences, out-houses, &c., have been thoroughly repaired. The title to this station is in dispute, but a survey is being made with a view to settling the matter.

1875

437. *Point Conception, sea-coast of California.*—The old dwelling at this station is in a bad condition, and the best plan is to pull it down, leaving the tower by itself, and to build for the accommodation of the keepers two more cottages similar to the one built last year. This being a first-order light and having a steam fog-signal, four keepers are required. One corner of the house has settled, making a serious crack. As the tower is in the center of the house, the latter having been built around it, when the walls of the house are removed the tower will be isolated and complete in itself. An appropriation of $12,000 is asked for the purpose of building the new dwellings. The tenure by which the Government holds 160 acres of land at this point has been a matter of correspondence during some years past. A portion of this is of no value to the Government for light house purposes, and can be abandoned without detriment to the public service. Negotiations are now in progress having in view the settlement of dispute in this regard.

1876

449. *Point Conception, sea-coast of California.*—The recommendation contained in the last annual report for an appropriation of $12,000 for repairing this station and building a keeper's dwelling to take the place of the present structure, which is in a very bad condition, is renewed.

1879

471. *Point Conception, entrance to Santa Barbara Channel, California.*—The fog-signal at this station was repaired, and a wire fence was set to inclose the cultivated portion of the reservation. A proposition was made to the owners of the rancho, by which the government should relinquish its claim to all the reservation, except a certain specified 30 acres, provided they should give the United States a deed for said tract of land, and grant a right of way to the landing, and other privileges.

1

POINT CONCEPTION

1880

481. *Point Conception, sea-coast of California.*—The tower and dwelling at this station are in an insecure condition, and should be rebuilt. Plans and estimates for rebuilding the tower, on a lower point on the bluff, were prepared, and Congress was asked for an appropriation of $38,000 for the purpose of rebuilding the structures; and also for $10,000 with which to secure a title to the land on which the station is located, which, under a recent decision of the honorable the Secretary of the Interior, does not belong to the United States. No appropriation was made by Congress; hence nothing can be done about acquiring title, until Congress meets again, and makes the necessary appropriation for the purpose. This station is one of the oldest established on this coast, and is also one of the most important. All sailing-vessels and steamers change course when off this point, either in going up or down the coast; and the extinguishment of the light and stoppage of the fog-signal would make navigation on this part of the coast exceedingly hazardous. It is hoped that Congress, at its next session, will make an immediately available appropriation of the amount required to put this station in an efficient condition, as well as for the purpose of purchasing the necessary site, and right of way thereto. The amount required for these purposes is $48,000. Wooden supports were placed against the tower to hold it up. Unless an appropriation be soon made, the light must be discontinued. The revolving machinery of the lens apparatus was thoroughly overhauled and repaired; a new set of chariot-wheels was furnished. The lantern was extensively repaired; and a new battery and new galvanized-iron wire, for connections between the various structures, was sent to the station. The cottage dwelling requires repainting inside and outside; otherwise, it is in good condition.

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481. *Point Conception, on the pitch of Point Conception, at the eastern side of the northern entrance to the Santa Barbara Channel, California.*—The new tower, with the oil-room and keeper's watch-room at its front, was built and is ready to receive the new lantern. The cottage under the bluff, with the necessary out-buildings for the assistant keeper, was finished. The old coal-shed was prepared for the reception of the duplicate boiler and engine, and a new coal-shed built. A new wooden building for the temporary storage of oil was built on the top of the bluff, and a pipe-line laid, through which the oil could be run to the brick storehouse at the foot of the tower. The building used temporarily as overseer's quarters was moved to the vicinity of the new cottage for use as a wood-shed and storehouse. The old dwelling had a wooden addition of two rooms made in its rear, was repaired and repainted, and was strengthened by two iron 1¼-inch tie-rods 38 feet long, running from end wall to end wall and anchored outside to plates of flat 1½-inch iron, each 2 feet long and 6 inches wide. A flight of steps was carried from the top of the bluff to the new tower; a new ½-inch galvanized pipe 1,100 feet long was laid from the hydraulic ram to the cistern at the old dwelling, and thence prolonged by ¾-inch pipe to the cistern at the fog-signal, and to the new cottage and tower. The reservoir at the spring was doubled in size, planked on its sides, and the dam raised about 3 feet. The old storehouse was moved from its position on the brow of the hill to the rear of the stable, and a new coal-chute, starting from the former position of the storehouse, was built to the new coal-shed. A new wooden storehouse, 24 feet by 18 feet, was built at El Cojo landing. The new boiler with the repaired engine and whistle column from the Point Reyes signal was placed in the old coal-shed fitted up for its reception, and the old boiler and machinery were thoroughly overhauled and repaired. A resurvey was made of the reservation according to the field notes of the deed, and the line of its land boundary marked by a fence. A plat of this survey, showing the position of all old and new structures, was made. With the materials on hand at the station, the keepers have painted the new store buildings and whitewashed the new coal-shed in the rear of the fog-signal. In the middle of May a lampist and two mechanics left San Francisco for the station, taking with them the new fourth-order lens for temporary use and glass for the new lantern. This fourth-order lens was placed on the new tower and a light from it exhibited. The first-order lens was then dismounted from the top of the old dwelling, on which a temporary platform was placed for the fourth-order light. The first order lens was then remounted on the new tower. The light was finally exhibited June 20. The working force then dismounted the iron work of the old lantern. The end wall of the old dwelling was taken down and rebuilt, and some necessary fencing has been done. 2

* Failed to note date Assumed it to be 1882 June 20 estab. dist ties with on Source & LIGHT LIST copy after 1882.

POINT CONCEPTION

1883

511. *Point Conception, on the pitch of Point Conception, entrance to the Santa Barbara Channel, California.*—The brick tower, which passed through the old dwelling, was taken down to a point below the level of the roof, and the open space was re-covered. The whole east end wall of the dwelling was rebuilt. A picket-fence was built around one of the dwellings, and a fence 400 feet long was put up along the edge of the bluff. The floor of the fog-signal building was relaid in concrete, and a part of the floor of one of the dwellings was bricked. To prevent the washing away of the earth under the long flight of stairs leading from the crest of the bluff to the plateau on which the light stands, a brick drain and retaining-wall were built. The duplicate boilers of the fog-signal and their main connections were covered with asbestos felting, and various minor repairs were made to the several buildings. The station is now in excellent condition.

1888

641. *Point Conception, entrance to Santa Barbara Channel, California.*—The lard-oil lamps were replaced by those burning mineral oil, and various minor repairs were made.

1892

832. *Point Conception, entrance to Santa Barbara Channel, California.*—Extensive repairs were made. The coal chute leading from the top of the hill to the signal houses was entirely rebuilt, and a platform 19 by 16 feet in plan was built at the top. The barn was rebuilt. The old oil house was fitted up as a dwelling for single keepers. A fence was built around the keeper's dwelling to prevent the blowing out of sand, which has been a source of annoyance for many years. A new kitchen chimney was built, and various minor repairs were made to the several buildings. One fog-signal boiler was retubed and patched; the condition of the other was so bad that it was condemned and replaced by a new one. As one of these boilers was new and the other thoroughly repaired last year, and were both again in a leaking condition from the tubes and plates being pitted with small holes, it was evident that some cause other than the usual wear and tear was to be looked for. An examination of the spring water used showed the presence of sulphuretted hydrogen. This, if in sufficient quantity, would account for the condition of the boilers. The matter is under careful investigation.

1894

873. *Point Conception, entrance to Santa Barbara Channel, California.*—A topographical survey was made of this site. Various minor repairs were made.

1895

889. *Point Conception, entrance to Santa Barbara Channel, California.*—The water supply has been a source of trouble for some time. It came partly from a spring and partly from rain caught on the roofs of the light-house structures. The supply from the spring was forced by a hydraulic ram to the cisterns on the hill where the dwellings stand, and from there a pipe took the surplus to the cistern at the signal. In this way the full supply of the spring could not be utilized at the signal, where it was most necessary. To remedy this a plan was adopted to lead the water, through a pipe running along the face of the cliffs, from the spring to the cistern at the signal, the fall being sufficient to allow the water to flow into the latter by gravity. Near the cistern a hydraulic ram is to be placed to force up the hill what water is required for the dwelling. By this plan the entire capacity of the spring is available for the signal, and only what is absolutely needed for household purposes need be diverted. At the end of the fiscal year this project was being carried out. Minor repairs were made.

POINT CONCEPTION
1897

994. *Point Conception, entrance to Santa Barbara Channel, California.*—The pipe line from the spring, where it ran along the face of the cliff, was broken by falling rocks. It was repaired and about 300 [illegible] of the overhanging bluff were removed for 60 to 70 feet back from the edge, involving the removal of 2,500 cubic yards of rock. Minor [illegible] were made.

1902

[illegible]5. *Point Conception, entrance to Santa Barbara Channel, California.*—A building to accommodate the fog-signal boilers and apparatus was built, and the machinery was set up. Both boilers were turned around so that the whistles are now on the seaward side of the stacks, and the steam and water pipes were rearranged so as to make the boilers, pumps, and whistles interchangeable. A windmill was installed at the spring to pump the water to a reservoir near the dwellings on top of the hill, whence it is conducted by gravity through a pipe to the signal.

1903 (Seattle RL.)

16. *Point Conception, near the entrance to Santa Barbara channel, seacoast of California.*—The first light was established at this station in the year 1855, and was exhibited from a tower rising from the center of the keeper's dwelling. This dwelling was a one-story structure, 38 feet by 20 feet in plan, stuccoed, with a brick tower, 13½ feet in diameter, extending up through the center and standing 220 feet above low water. In 1872 a fog-signal was attached to the station, which made additional keepers necessary. No quarters were provided for them at that time, but a small cottage, an old oil house, and some other outhouses that had been erected from time to time in the vicinity of the original keeper's dwelling were patched up for their accommodation, and in these two of the keepers, with their families, have managed to live since that time. In 1882 a new light-tower was built about 375 feet from the old site. About this time an assistant keeper's cottage was built in the vicinity of the new tower, and a duplicate fog-signal was supplied to the station and a house was patched up for the accommodation of the machinery. The fog-signal house was rebuilt last season and is in good condition. Since the new light-tower was completed so much of the old tower as projected through the roof was removed and the opening was roofed over. The new keeper's dwelling, near the new tower, is the only one at the station which is comfortable. The others are old, rotten, leaky, and ready to tumble down whenever subjected to any great stress of wind, weather, or earthquake. The old dwelling was so racked by an earthquake in 1868 that it became necessary to tie it up with iron rods. As far back as 1874 the light-house engineer recommended that it be torn down and that new dwellings be built for the accommodation of the keepers. The Board now is of the opinion that all the old buildings located on the high ground of this station should be torn down and that they be replaced by new quarters, supplied with modern conveniences for the accommodation of the four keepers with their families. It is estimated that a double set of quarters can be built here at a cost of about $15,000, and the Board recommends that an appropriation of this amount be made therefor.

16. *Point Conception, near entrance to Santa Barbara channel, seacoast of California.*—The mineral oil used at this station is stored in an oil room attached to the base of the tower. This was the method adopted when lard oil was in use, but it is not safe for the storage of the more inflammable mineral oil. An isolated brick oil house of the adopted type should be built here, and as this is a first order light-station the house must be a much larger one than is generally used. The act appropriating funds for oil houses limits the cost of each to $550. That sum will not build an oil house at this isolated station, where the cost of freight to the station is out of proportion to the cost of material to be used. It is estimated that an oil house, suitable in size and material for this station, can not be built for less than $1,500. The Board recommends that an appropriation of this amount be made therefor.

POINT CONCEPTION

1904

15. Point Conception, entrance to Santa Barbara Channel, California.—The act approved on April 28, 1904, appropriated $9,000 for a double dwelling for the light-keepers and $15,000 for a large oil-house. These improvements will be made during the coming year. Various repairs were made.

1905

15. Point Conception, entrance to Santa Barbara channel, California.—A brick chimney 40 feet high was built to replace the two iron smokestacks, and both boilers were connected with it by a branched iron smoke pipe. The steps leading down the hill to the signal were rebuilt, and a 10,000-gallon tank for the increased storage of water was erected on a masonry foundation. Various repairs were made.

Plans and specifications were prepared for the light-keeper's dwelling, provided for by the act approved on April 28, 1904, appropriating $9,000 therefor. Bids were opened on May 27, 1905. Only one bid was within the amount of the appropriation and this was withdrawn by the bidder, who claimed that he had omitted an item of cost which would have increased materially the amount of the offer. Under these circumstances all bids were rejected and the work was readvertised. The bids received will be opened on July 17, 1905.

The act approved on April 28, 1904, appropriated $1,500 for a large oilhouse. It is proposed to erect this oilhouse while the keeper's dwelling is being built.

1906

15. Point Conception, entrance to Santa Barbara channel, California.—On July 17, 1905, bids were opened for the construction of a keeper's double dwelling, as provided by the act approved on April 28, 1905, and the contract was awarded to the lowest bidders. The work was satisfactorily completed. The new dwelling is a frame structure two stories high, and contains six rooms and bath for each occupying keeper. A water tank was installed on a tower to supply the dwelling. A concrete retaining wall was built on the east of the old dwelling. Various repairs were made.

1907

14. Point Conception, entrance to Santa Barbara channel, California.—An oilhouse was completed. It is connected with the light tower by a concrete walk 3½ feet wide, 140 feet long. Measures were taken for installing by contract a fuel-oil burning system for the fog-signal. The plant includes a sump tank near the wagon road, connected by a 2-inch diameter gravity pipe line 650 feet long to a 10,000-gallon redwood storage tank 60 feet from the signal building. The oil is delivered by gravity to two special oil force pumps and is forced through the nozzles at the proper pressure under the signal boilers. The pumps and discharge-pipe lines are in duplicate and are interchangeable, each pump delivering to either boiler. On April 22, 1907, the installation was completed. The contract price was $2,660. A concrete retaining wall supporting an area around the quarters is being built, of which 200 running feet of wall 5 to 11 feet high was completed.

1908

Point Conception, California: The present dwelling consists of a double frame dwelling with quarters for two keepers, 6 rooms each, a single frame dwelling of 4 rooms, and the single dwelling which it is proposed to replace. This is a brick story-and-a-half building with 5 rooms, formerly used for displaying the light, which was located on top. It is over 60 years old, braced with iron rods, leaks badly, and is in a bad state of repair. It is proposed to replace it with a frame story-and-a-half dwelling.

1911

The sum of $4,300 was expended toward the construction of a dwelling at the *Point Conception light station, Cal.* At the end of the year 60 per cent of the work had been completed.

On June 30, 1911, the unexpended balance under the appropriation amounted to $2,163.

LIGHTKEEPER FROM THE PAST

by

W. F. TOWNE

During this bicentenial year many historical places, things and buildings have been brought to the attention of the people of America. There are many places that people have felt a need to restore and preserve so that we might be reminded of the past and reflect about with pride the things that have made our country.

In the Eleventh Coast Guard District there are many stations with long and proud histories, some are no longer used but are remembered and others are still in use but forgotten.

Part of the responsibility that the men of Lorsta Point Arguello have is to maintain the Light Station at Point Conception. Point Conception is one of the once proud stations that serves the Coast Guard but is being allowed to dwindle with time.

It's history dates back to 1602 when the Point got its name, "Punta De La Limpia Concepion". Then history jumps to 1856 when a lighthouse was built high on the cliffs at "Point Concepion". It was damaged by an earthquake in 1857 and later rebuilt on its present site in 1881.

There are possibly four buildings still remaining that date back to the late 1800's and early 1900's. One is the present lighthouse, another is a building near it that appears to have once been a boiler or storage

room. Yet another is the garage at the top of the hill above the light, and the forth is a cottage behind the hill. All are a part of the history of the men that took care of the station over the years.

When you work around or in these buildings a kind of nostalgia takes hold and you can almost feel the presence of the lighthouse keepers on their daily tasks, especially upon entering the lighthouse. The damp, musty, kerosene smell that engulfs you as you open the door almost has the effect of transporting you back in time. As you proceed in you almost expect to see the lighthouse keeper at work in the panaled room on the left and in the room on the right the kerosene drums and supplies that once stood there to keep the light burning.

A few more steps and your at the base of the spiral stairs leading up into the tower. There you pause and check the pendulum weight in its slow descent, keeping the lens revolving about the kerosene lamp that supplies the light.

Then you begin your ascent up the spiral stairs, stopping to pear out the windows (now boarded) along the way. At each level you check the pendulum cable to insure that it isn't fouled, stopping the lifesaving light from escaping.

As you approch the top of the stairs you see the lights playing through the prisms encased in the floor of the inside catwalk that surrounds the intricate lens system. From this catwalk you are protected from the weather by the glass cage around the top of the tower and you have an

unobstructed view of the shorelines to the north and south and of the spaciousness of the open sea. Maybe while your there, cleaning the glass cage or filling the kerosene lamp, a ship passes and your mind wanders on an imaginary voyage.

Then it is time to come down out of the tower and as you step from the lighthouse you return to the present. But not quite the same for you have had a touch with the past. Ask anyone who has the opportunity to enter the lighthouse at Point Conception and they will tell of feeling a change of mood and time.

This is a part of our history, the history of California and the Coast Guard. It is a part of history that, like has happened elsewhere, will be destroyed and forgotten in the rubble left behind.

Point Conception....first lighted Feb. 1, 1856.

First Keeper.. George Parkinson arrived in 1855....
served only until June 1, '56

2nd keeper....S. B. Meacham June-January 1856 (6 mos.)

3rd Keeper....John Scollan Jan '57 to Oct. 1, '61 (3 yrs. 9 mos)

4th keeper....Robert W. Smith '61-'68....etc...

Point Conception 65 miles by land from Santa Barbara...nearest point at which supplies can be obtained...road is only passable at very low water...The freight of goods cost more than the keepers pay..($800 per year)
nearest wood to the station was six miles
nearst water was 600 yards...
"I am cut off from all communications and without means to live on. My pays has not been forthcoming in over four months."

It might be added that the answer to his letter did not arrive until three monts later. The U.S. Post Office had never heard of Point Conception.

(Small wonder that he resigned shortly after receipt of the letter.)

At Point Conception the seacoast line of lights makes an abrupt 90 degree turn to the north to follow the coastline.

It is a danger spot that has caught many a sailor with unhappy surprise. Straight south of it are the nine Santa Barbara Islands which were lighted as late as the mid-1920's.(Anacapa Is. estab. 1912)

When the weather is bad and the visibility low, the going can, indeed be rough....that paft of the Calif. coastline has recorded 2,000 hours of fog a year.

On the beaches along Point Conception and Point Arguello are enough bleached or rusty bones of recked ships---that made the hard left turn to soon---to remind one of the Normandy beach-head after D-Day.

A gap of 12 miles lies between Arguello and Conception. Point Honda is 3 miles north of Arguello....the coast on both sectors---north and south of Point Arguello---is rocky, wave-swept and rough.

AMERICAN SOCIETY OF CIVIL ENGINEERS

SANTA BARBARA - VENTURA BRANCH
P.O. Box 98 Santa Barbara, CA 93102

December 1977

The Los Angeles Section Of ASCE
History and Heritage Committee
Walter H. Cates, Chairman
940 West Duarte Road Suite 12 A
Arcadia, CA 91006

HISTORICAL ENGINEERING LANDMARK CANDIDATE

POINT CONCEPTION LIGHTHOUSE

The Point Conception Lighthouse and Complex, is recommended for landmark recognition by the Santa Barbara-Ventura Branch of the American Society Of Civil Engineers.

The light is situated on a coastal promontory approximately centered on the North-South line of Santa Barbara County,in the State of California, specifically located by the following geodetic coordinates: Latitude 34°-36'-49" North, Longitude 120°-28'-18" West.

Our National Society particularily encourages its sections and branches to seek out and identify projects and structures founded in their respective regions and deserving of recognition for their interesting design, uniqueness,usefulness and historical signifigance.Following a field trip to the site with then President Robert Swalley,and with further examination of the data and information available,we believe Point Conception Light should be given Landmark Recognition. This worthy facility has well served coastal navigation continuously for 121 years,demonstrating a cost-benefit ratio, proven and exceptional.

The existing light,relocated at a lower elevation for cause,succeeded the first structure built in 1856. The present light, completed in 1881,measures its focal

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plane at elevation 133 above mean high water.The Designer of record was Lt. Col. R.S. Williamson, U.S. Corps of Engrs.,assigned to the 12th. Lighthouse District.The lantern light is a first order lens system.The original lantern and lens continues to serve.Henri Le Paute of Paris,built the Fresnel Lens in 1854 at a cost of $65,000.00.Light intensity is 1.5 million candle power.Light sources have varied from the original sperm (whale) oil,to kerosene lantern and currently lit by a 1,000 watt mercury vapor lamp.The lens and its assemblage were shipped from France,around Cape Horn and unloaded at Coho Bay-South of the Point.

The drawings of the light and its auxiliary facilities does not display engineering innovation beyond what could be found on the Eastern Seaboard or in Weastern Europe during this period, but considering the scarcity of Engineers and the general caliber of projects being erected in Central and Southern California during the 'Pioneer Era',Point Conception Light reflects a design whichparallels the State of The Art at that time.The tower foundation,tower,brick retaining wall,water system, reservoirs,cisterns, storage tanks and other facilities were adequately engineered, and the present condition and soundness of the Light records a quality design.

The construction of the light at Point Conception should not be compared with the arduous and dangerous building difficulties encountered at St. George Reef and Tillamook Rock Lights,however the site at Conception with its remoteness to existing settlements and lacking a safe harbor, railroad or Post road tested the flexibility and competence of the builder in supplying the project. The duration and schedule for construction and the size of the average work force were not available from our source.One reference indicates that Lt. Colonel T.H. Handbury was Director of Survey,T. Brown, Supt. of Construction and G. Farmer, Carpenter foreman.

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Materials brought to Coho Bay by ship,were transferred to lighters that rode the surf to beach beyond the tide. Horse,mule or oxen drawn carts and wagons,transported materials to the site over an unimproved trail.The Construction Supt. undoubtedly was familiar with a variety of equipment and techniques for handling,moving and spotting materials to specific locations on site, many of which had been invented or derived for the Logging, Mining and Shipping industries as well as for construction. A partial list would include-chutes,slides,slings,ramps, stiff-leg derricks,A-frame hoists,gin poles,skids,rollers, davits, drops,winches,block and tackle,come alongs,sky lines pulleys,jacks,undercutting,parbuckling,levers,donkey engines, and certainly not the least,the muscle of man and beast. We are not sure just how building materials were distributed during construction of the Lighthouse and other structures,but we assume any one or combinations of the above were employed.

The twelve foot six high, (20"-12") battered retaining wall of brick,behind the Lighthouse, the 32' long by 3' thick concrete footing and the massive,gravity type brick walls 9' at the base of the tower,along with the water system and its storage tanks and cisterns,one of 60,000 gallon capacity,the shutes,stairways and other structures built in this isolated, fog bound and windswept environment,warrants citing this project for recognition.Great care and high standards of workmanship were involved in installing the lens,tower frame and rotating mechanism.

Several Architectural details such as the stairway,wall panelling and granite coping are worthy of mention.

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In conclusion, we believe Point Conception Lighthouse qualifies through its design,location,distinction, construction and historic service for LANDMARK RECOGNITION, by the American Society Of Civil Engineers. We so endorse.

Cordially,

Russ Pyros

Russ Pyros, Chairman
History and Heritage Committee
Santa Barbara-Ventura Branch

Ref: The section committee is invited to prepare the text for the Landmark Recognition award.The presentation may be considered for April or May 1978. We are suggesting it be held at the Headquarters of the USCG Commander in Santa Barbara,or at such other place,the Committee may recommend. Drawings,Surveys,Historical references and random notes, photographs,sketches and miscellaneous reports are available for your further review in our file.Regretfully we are unable to supply extra copies of these materials for your use.

cc: Lt. Klaus Adie,USCG
Robert Burkhardt, President ASCE,SB-V Branch '77-'78
Lt. Com. Terence O'Connell, USCG
Lee Freeman, Proj. Mgr. Parsons Vandenberg Air Force Base
Robert Swalley, President ASCE,SB-V Branch '76-'77
Chief Bill Towne,USCG
Captain W. W. White, USCG

File

AMERICAN SOCIETY OF CIVIL ENGINEERS

SANTA BARBARA - VENTURA BRANCH

POINT CONCEPTION LIGHTHOUSE AWARD

The Santa Barbara-Ventura Branch in conjunction with the Los Angeles Section of the American Society of Civil Engineers, presents this certificate of recognition for the Lighthouse at Point Conception to:

LT. KLAUS ADIE

Santa Barbara Group Commander, USCG, at Santa Barbara Headquarters, on behalf of the Commanding Officer and Personnel of the Eleventh Coast Guard District.

This impressive and utilitarian structure easily meets the basic criteria established by the National Society and fully qualifies for Historical Landmark Status.

Awards of Recognition are granted on a nationwide basis to selected projects, geographically located in the jurisdiction of the separate sections and branches of the Society.

Working drawings for the present Lighthouse structure were prepared by the Corps of Engineers. We believe the long term and cost effective service to the maritime public, the excellence of engineering design and the current, fine condition of this facility is a tribute to all those persons who participated in its creation, function and support.

Following intensive consideration and evaluation during a period of sixteen months, the American Society of Civil Engineers, the Los Angeles Section and this Branch, endorses and acknowledges the unique and valuable heritage of this worthy, regional asset, the Lighthouse and Reservation at Point Conception, Santa Barbara County, California.

For the Society and this Branch,

Russ Pyros

RUSS PYROS, Chairman
History and Heritage Committee

Santa Barbara
April 27, 1978

1855

been built just at the edge of, if not within the woods. Whenever I have the means, by a proper survey, of determining the space from which the trees should be cut, to give full effect to the light throughout the entire arc of visibility called for by the position and elevation, I will have them removed.

Point Conception light-house.—Landed at Point Conception on the morning of the 31st ultimo. Mr. Merrill, with the workmen, materials for rebuilding the tower, and the main parts of the frame of the lantern, arrived on Monday week previous, the 20th. It required three days for the crew of the schooner, assisted by the workmen, to land the freight through the surf at the Coxo. The floors of the dwelling were already shored up, and the tower pulled down quite to the foundation; the new materials in part hauled to the site; the old materials in course of preparation for re-use, and one slope of the roof of the dwelling nearly shingled. The work had been somewhat retarded by the indisposition of one of the masons, caused by exposure to water in landing the materials. The only changes made in the plan already forwarded to the board were in removing the tower a few inches back from the centre of the building, in order to give room for opening the front door; to retain the position of the old walls of the cistern, as they are required as foundations for the walls carried up through the house, and for extending the cistern to the northwesterly corner of the cellar. Personal examination fully confirmed the report of Mr. Merrill of the character of the materials and workmanship employed in the construction. The rebuilding the tower was to commence on the 3d, with a fair prospect, considering the adverse circumstances under which the operations must be carried on, of completing the work at an early day. Among these may be mentioned the hauling of the materials, even to the sand and water used in building, over roads at points deep with sand, and of considerable acclivity, requiring the employment of four mule trains to draw even a fourth the usual load, and the absence of all labor and materials at any price, to meet a pressing emergency. Measurements were made of the dwelling. The height, also, of the site, was ascertained by plummet and level. It is 215 feet. The focal plane will be 33 feet above the ground, thus making the whole height of that plane, above high water of spring tides, 248 feet.

I left Point Conception on the morning of the 3d; a letter from Mr. Merrill of the 14th, received, of course, since my return, says: "The General Pierce arrived here on the 11th and has just finished landing her freight for this place." * * * "The freight was landed as well as it could be. Some of the boxes had to be opened on board on account of the weight of them; but I have taken all possible care that nothing should be lost or damaged." On the 19th he writes, "We have the brick work of the tower nearly up to the second floor, and are now in a condition to make pretty good progress." * * * * "The last freight was landed at the tower landing a considerable distance further from the house. I was compelled to send some thirty miles to get additional teams to do the hauling, as that part of the freight must be removed before the full of the moon, when the tide is highest and would reach it where it lies on the beach. The Spaniards

will not agree to do the work unless I will pay them down as fast as the work is done. I am therefore compelled to send to you for four hundred dollars. With this amount and what I have of my own, I can get along and pay all the hauling, my expenses," &c. Arrangements have been made with the Pacific M. S. S. company by which the fund required by Mr. Merrill will be landed at the Point, by the steamer Republic, which sails on Monday on her regular trip down the coast.

Light-house site at Santa Barbara.—As it was doubtful, from the character of the only tracing in the office on which the proposed site is marked, whether without assistance from some of the inhabitants the point selected could be found, in the uncertain stay of the steamer at Santa Barbara, an examination of the headland with that object was reluctantly relinquished. Enough of lay of the land was seen to show that the selection of the site for a light at Santa Barbara is a matter of some delicacy, inasmuch as it should subserve the double purpose, if possible, of a sea coast light and a harbor light. Since my return here I have received through the District Attorney of the United States for the southern district of California, certain resolutions of the municipal authorities of that city, proposing to convey gratis, on conditions which are named, the necessary land, not exceeding thirty acres, to the United States for the purposes of the light-house. (See letter of yesterday's date to Lieut. Thornton A. Jenkins, *Secretary, &c.*)

Light-house site at San Pedro.—Lieutenant Stevens, U. S. N., in his report upon this site, communicated by the superintendent of the coast survey under date of the 5th of February last, says: "and the elevation such, that a light sixty feet high may be seen over the adjoining land on the bays of San Pedro and San Vincent. The section of visibility of a light at that elevation is 243 degrees." * * He further says: "I have endeavored, while keeping within the requirements of the law, to designate as suitable localities such sites as would combine the purposes of a harbor light in each case with the adaptation to the general wants of commerce. I am constrained to say that, from the examination I was able to make of the ground, I do not conceive the site selected by Lieut. Stevens fulfils the conditions he lays down as well as the position marked on the tracing as 'Point,' which, protruding further out into the sea by about 1,400 feet, has consequently a larger arc of visibility. It fulfils equally well, too, the lighting of both the bays, San Vincent and San Pedro. Again, a light at the point marked 'Bluff,' if of sufficient elevation to be seen over the ground towards the west, and I think 60 feet would prove sufficient, would serve the purposes both of a seacoast light and a light for the bay of San Vincent equally well with the selected point, and for a light for the bay and anchorage of San Pedro, much better. I send for ready reference a copy of the tracing of San Pedro anchorage, on which the selected site as well as the positions 'Point,' 'Bluff,' &c., are shown."

Point Loma light-house.—Visited this light September 5th. The coping course of stone had been removed, and, after raising the tower two bricks in height, to give the domical arch sufficient thickness,

the same district. She has been actively and very profitably engaged upon these duties, and has saved to the light-house establishment large sums which would have been expended in chartering vessels for the purpose.

After this season she will be used in supplying and inspecting all the light stations in the two districts—tenth and eleventh—and her spare time, if she has any, will be employed in aid of the works of construction and repair in the same districts. The sailing tender Watchful, heretofore used in the tenth district, has been sold, being, since the purchase of the steamer, no longer necessary.

Thus the steamer has relieved two sailing vessels, performing all their duties and having enough time in excess to enable her to devote a considerable portion to duties not heretofore performed by the sailing vessels.

TWELFTH DISTRICT.

This district embraces the Pacific coast, from the southern boundary of California to the 41st parallel of latitude.

There are in this district nine light-houses and lighted beacons, and no light-vessels.

At the date of the last annual report this district comprised the entire Pacific coast of the United States, but upon the recommendation of the board, the honorable Secretary of the Treasury authorized the division of that coast into two districts, the 41st parallel of latitude being the line of separation, and which division was carried into effect on the 1st of July, 1867. This recommendation was based upon the reason that, in consequence of the great extent of coast-line originally assigned to the 12th district, and the difficulty and delay in reaching or communicating with many of the stations, the duty of properly attending the various and important aids to navigation could not be performed by one inspector with that promptness and care which the interest of the service required.

At *Point Loma* the roof of the keeper's dwelling was reshingled and the plastering on two of the rooms renewed.

At *Santa Barbara* some repairs are required to the cellar, and some slight renovation of plastering. The lens apparatus requires the addition of one or more panels, the present arc of illumination being limited to 180°, and vessels approaching outside of this angle cannot see the light.

At *Point Conception*, the cistern requires some repairs, leaking badly. A wooden shed is also needed at this station, large enough to shelter the horse and cart provided for the uses of the station, and also to store fuel.

Point Pinos requires slight repairs to the roof and cistern. They will be made by the keeper.

At *South Farallon*, the roof of the keeper's dwelling will probably have to be renewed during the next season.

At *Fort Point*, the fog-bell was taken from its original position on a framework in front of the fort and hung on an angle of the fort facing seaward. Slight repairs have been made to the dwelling.

At *Alcatraz* some needful but inexpensive renovations were made.

At *Humboldt bay*, the breakwater of logs which was constructed last year seems to have answered the purpose of protecting the foundation of the structure, although the sand on the spit is constantly changing, and it is not improbable that the breakwater may at some future time be washed away and the stability of the light-house endangered. In this view of the case the board has under consideration the propriety of removing this light to a point about four miles south of the entrance to Humboldt bay, known as Table bluff. This point is salient, with a firm and permanent foundation for a light-house, and a light there would subserve the purposes of navigation better than where it is now placed; it is not so frequently enveloped in fog as the spit where the light now stands.

1872

——. *Point Fermin, entrance to San Pedro Harbor, California.*—An appropriation of $20,000 was made June 10, 1872, for establishment of a light and fog-signal at this point. The site has been selected and a survey of the locality made. As there are several proprietors to the land, resort must be had to the California law of condemnation, in order to acquire title to the site, so that the construction will very probably be delayed beyond the fiscal year. A report, accompanied by a map of the site, has already been forwarded to the board. The structure can be rapidly built, as the material can be hauled over a very good road from New San Pedro, a distance of about five miles. The landing is safe and the anchorage-ground secure and well protected. A large well has been sunk near the settlement. It can furnish water during the construction, and, if necessary, can be purchased for the subsequent use of the keepers and for supplying the fog-signal.

——. *Point Hueneme, Santa Barbara Channel, California.*—An appropriation of $10,000, approved June 10, 1872, has been made for the establishment of a first-class fog-signal at this point. By direction of the board the site was selected in the month of June and surveys were made of the locality. Negotiations are in progress for its purchase.

405. *Point Conception, sea-coast of California.*—An appropriation was made March 3, 1871, for the establishment of a first-class steam fog-signal. A thorough examination and survey of the point were made with a view to ascertain the best location for the signal, and the supply of water. The structure has been completed, and the machinery placed in position. Owing to ignorance on the part of the light-house keeper, the latter soon needed repairs. The pipes connecting the hydraulic ram with the cistern were not laid according to directions from the district engineer, and will have to be relaid. The cistern and water-shed, said to have been damaged by the recent earthquakes, will require an additional coat of cement. An abundant supply of water from an adjoining spring furnishes all that is required for the light-house and fog-signal. Many minor repairs to the light-house are needed.

——. *Piedras Blancas, sea-coast of California.* — This point is about midway between Point Conception and Point Pinos light-houses, distant one hundred and fifty miles from each. An appropriation of $75,000 was approved June 10, 1872, for a first-order light and fog-signal at this point. By direction of the Board, an examination of the locality was made, a site selected for the light, and necessary surveys made to connect it with previous ones, by the county surveyor, for the purpose of defining the limits of the reservation set aside by direction of the President for light-house purposes. A report, accompanied by a sketch of the locality, has been submitted for the information of the board. The site belongs to the United States, and as soon as certain details in regard to it can be obtained, the plans will be made and the work commenced.

406. *Point Pinos, sea-coast of California, entrance to Monterey Bay.*—The suit for condemnation of land for right of way to this light-house has not yet been decided, the owners having appealed the case from the district court to the supreme court of California.

408. *Año Nuevo Island, sea-coast of California.*—A steam fog-whistle and keeper's dwelling have been constructed on this island, and it has been in operation since the 29th of May of this year.

409. *Pigeon Point, sea-coast of California.*—An appropriation was approved March 3, 1871, for continuing and completing the light-house and fog-signal at this point. The work was commenced June 9, 1871, and the tower and keeper's dwelling are already completed. The para-

1874

plans for the structure having been prepared, on the 21st of February of this year the work was commenced. It has progressed favorably since that time. In addition to the light-house keeper's dwelling, two large cisterns and the necessary out-houses have been built. The reservation is inclosed by a substantial fence, and the grounds in the immediate vicinity of the keeper's dwelling and tower are inclosed by a neat picket-fence. The lantern has been set up at the station. It is expected to exhibit the light during the present season.

433. *Point Hueneme, sea-coast of California.*—An appropriation of $22,000 was made by Congress on the 3d of March, 1873, for building a fourth-order light-house, the appropriation made by previous act for a fog-signal to revert to the Treasury. It being impracticable to procure the requisite amount of land for light-house purposes by purchase, a suit for condemnation was commenced against the owners of the land. The suit terminated favorably to the United States on the 6th day of November, 1873. Plans for the structure were prepared, and on the 25th of April work was commenced, and has progressed favorably since that time. An artesian well has been bored at the station, which is 7 inches in diameter and 152 feet in depth. This well furnishes an abundant supply of water for all necessary purposes.

435. *Point Conception, sea-coast of California.*—An additional dwelling has been built at this station, the water-shed made for the fog-signal; the old dwelling, fences, out-houses, &c., have been thoroughly repaired. The title to this station is in dispute, but a survey is being made with a view to settling the matter.

436. *Piedras Blancas, sea-coast of California.*—An appropriation of $75,000 was made by Congress on the 10th of June, 1872, for a first-order light-house and fog signal at this point. The plans for the tower having been prepared, the necessary party of mechanics and laborers was organized, the material to commence the work purchased, shipped to the point, and successfully landed through the surf on the 25th of April last. The work of blasting off the top of the rock on the site selected for the tower was then commenced. A contract for the iron-work of the tower has been made, and is nearly completed. The work of reducing the rock for a site for the tower has proved to be a very expensive operation; the rock being so hard as almost to resist the best tempered drills. Finding that to reduce the rock to the level of the base of the tower, as per plan, would add very largely to the cost of the structure, it was determined to reduce it to a level of the floor-line of the tower only. An equally good foundation was by this means obtained at less cost. It is expected to complete the brick-work of the tower for the lantern about November 1. Plans for a dwelling have been prepared, but the amount of the appropriation left after the completion of the tower will not be sufficient to construct it with the necessary cistern and out-houses. The lantern and lens for the station are in store. An appropriation of $10,000 is therefore required to complete the station. Piedras Blancas is one of the most important points on this coast, and a steam fog-signal of the most improved kind should be established there. An appropriation of $5,000 is therefore asked for that purpose.

—. *Point Sur, sea-coast of California.*—Vessels leaving San Francisco for the south, having proceeded as far as Pigeon Point light, take their departure from Point Sur, some sixty miles distant, the great indentation of the Bay of Monterey intervening. Vessels to the southward bound to San Francisco having arrived at Piedras Blancas, take their departure for Point Sur again about sixty miles distant; hence Point Sur is a most

important point, and should be i
ing the various points on the C
still required Point Sur claims
1866 the Light-House Board ord
made, and the following is an
officer:

Point Sur is a metamorphic sandston
from observations with the aneroid b
acres, its general shape being that of
direction of the wedge, as indicated by
west. The north side and top of Poin
very steep, making the ascent very diffi
of this point, or rock, are almost vertic
more than 10 or 12 feet in width. Poi
a mile from the foot of the range of l
coast, the intervening portion of the
weather the low land is overflowed, th
which is about three miles southeast
whole year, and near its mouth is a goo
which supplies can be sent to Point Su
impassable even for a horse.

The Coast Survey Directory
remarks:

From Piedras Blancas the coast ten
seven miles in an almost perfectly str
bearing, and at a distance of forty-nin
times called Lobos, making out nearly
at a distance of ten miles, Point Sur
upon approaching it a low neck of lan

From the preceding it is app
as a light-house site is very gre
tion there of a light-house, witl
an expensive operation. It will
of the rock before anything d
establishing this station. As n
available, it will cost not less t
$60,000 is asked to begin the w

437. *Point Pinos, sea-coast of*
station is still pending and wil
court for the county of Monter
November next.

441. *Point Montara, midway*
Francisco Bay and Harbor, sea-c
$15,000 was made by Congress,
steam fog-signal at this point.
able opinion to title given b
States. The boiler and the nec
a keeper's dwelling and signal-h
then be commenced.

442. *Farallones, off entrance*
this station is very much out
wants of a first-order station.
on the island, and is very dam
needed, and it is respectfully
$15,000 be made for this purpos
a small stable is also needed fo
other supplies up to the light-h

443. *Point Bonita.*—During a

1875

made t · this station. The light-house reservation is separated from the nearest public road by land owned and occupied as an orchard by a private citizen. A road to the public highway is necessary. The owner offers to sell a piece of land sufficient for a right of way, at the rate of $200 per acre, gold coin. This is not an exorbitant price; an appropriation of $500 is therefore recommended.

437. *Point Conception, sea-coast of California.*—The old dwelling at this station is in a bad condition, and the best plan is to pull it down, leaving the tower by itself, and to build for the accommodation of the keepers two more cottages similar to the one built last year. This being a first-order light and having a steam fog-signal, four keepers are required. One corner of the house has settled, making a serious crack. As the tower is in the center of the house, the latter having been built around it, when the walls of the house are removed the tower will be isolated and complete in itself. An appropriation of $12,000 is asked for the purpose of building the new dwellings. The tenure by which the Government holds 160 acres of land at this point has been a matter of correspondence during some years past. A portion of this is of no value to the Government for light house purposes, and can be abandoned without detriment to the public service. Negotiations are now in progress having in view the settlement of dispute in this regard.

438. *Piedras Blancas, sea-coast of California.*—The tower at this station was completed and the light put in operation on February 15th, 1875, the keepers being accommodated in the shanties built for use of the mechanics and laborers. Congress at its last session appropriated $15,000 for completing the station and establishing a steam fog-signal. This amount being deemed insufficient for the purpose, no work has been done under it. It is now necessary to erect the dwelling, as the shanties will not afford the necessary shelter during the rainy season. Plans for the structures have been made and the buildings will soon be commenced. In order that the fog-signal may be efficient, it will be necessary to blast off the highest point of Piedras Blancas rock, a rock that rises in the form of a seal, some distance from the main-land. But as the highest part of it is about 100 feet high, this will be attended with considerable expense. An appropriation of $20,000 will be required for this purpose, and in the event of the appropriation not being made, it will be better to delay establishing the signal.

——. *Point Sur, sea coast of California.*—This dangerous point, on which the steamer Ventura was lost on April 20, 1875, has been surveyed during the present season. A steam fog-signal would be of as much value here as a light. The expense of establishing either will be heavy, owing to the difficulty of securing a proper site. Both a light and fog-signal will eventually be established at this point, but the board does not ask an appropriation therefor this year.

439. *Point Pinos, sea-coast of California.*—Repairs and renovations have been made during the past year. Considerable repairs to the parapet-wall of the lantern are needed, and will be made during September.

443. *Point Montara, sea-coast of California.*—Having secured a good title to the land, the work of erecting a fog-signal structure and a keeper's dwelling was commenced in October last, and completed in February, 1875. The signal was put in operation on March 1, 1875. An abundant supply of water has been obtained from two sources—a creek running through the reservation, and from a spring near its southern border. Water from the creek is forced by a hydraulic ram to the

signal-house, where there
tion is in good order.

444. *Farallones Islands*
"The recommendations m
dwelling at this station i
small for the wants of a fi
rock quarried on the islan
structure is needed, and
asked for that purpose."

445. *Point Bonita, sea-c*
last annual report it beca
which the fog-signal stoo
stopped on October 1, 18
entire point graded off to
tion. New structures we
January 1, 1875, the expe
appropriation for repairs
signal is now upon a sec
306 feet above the sea.
secured by a light haze or
fog or haze. Pilots, stea
passing Point Bonita wit
the point where the fog-si
the light stands show plai
of about 100 feet. A goo
at the entrance of San F
of $25,000 is asked for u
this point.

448. *Yerba Buena Isl*
keeper's dwelling and to
up of the lantern and ill
received it will be imme
formerly in use at Yac
this station, and the lig
September. Congress,
establishing a steam fo
menced in June, and is
operation on the 1st of O
the buoy-depot, which h
A double-acting force-pu
through iron pipes to a
made very strong and sec
at least twenty years. T

449. *East Brother Isla*
San Pablo Bays, Californ
the wharf and tram-way.
and sea last spring. Th

450. *Mare Island, Strai*
made at this station, con
fog-bell tower. The foun
work will be done as soo

451. *Point Reyes, sea-co*
appropriated $3,000 for
station. This work has
rain-fall of eight inches a
caught. The average ra

1876

TWELFTH DISTRICT.

CALIFORNIA.

The district embraces all aids to navigation on the Pacific coast of the United States between the Mexican frontier and the southern boundary of Oregon, and includes the coast of California.

Inspector.—Commander A. T. Snell, United States Navy.

Engineer.—Lieut. Col. R. S. Williamson, Corps of Engineers, United States Army.

In this district there are—

Light-houses and lighted beacons	22
Fog-signals	0
Fog-signals operated by steam or hot-air engines	10
Unlighted beacons	27
Buoys actually in position	29
Buoys for relief and to supply losses	29
Dwelling, brick, common to twelfth and thirteenth districts, used for inspector's and engineer's purposes	1

The numbers preceding the names of stations correspond with those in "Light-house List of the Atlantic, Gulf, and Pacific Coasts of the United States," issued January 1, 1876.

LIGHT-HOUSES.

Point Loma, entrance to San Diego Bay, sea-coast of California.—The dwelling has been repaired, a portion of the wood-shed converted into a dwelling for the assistant keeper, and a barn built. The station is now in good condition.

Point Hueneme, sea-coast of California.—A close board fence, 10 feet high, has been erected to protect dwelling and out-houses from drifting sands. Portions of the reservation have been planted in grasses and shrubs, which by frequent irrigation have been made to grow.

Santa Barbara, sea-coast of California.—The structures at this station have been thoroughly renovated and repaired.

Point Conception, sea-coast of California.—The recommendation contained in the last annual report for an appropriation of $12,000 for repairing this station and building a keeper's dwelling to take the place of the present structure, which is in a very bad condition, is renewed.

Piedras Blancas, sea-coast of California.—A keeper's dwelling in progress at the date of last annual report has been completed.

Point Pinos, sea-coast of California.—The tower, parapet, and dwelling have been thoroughly repaired and renovated.

Farallones, off San Francisco, California.—The recommendations contained in the two last annual reports are repeated.

The dwelling at this station is very much out of repair, and much too small for the requirements of a first-order station. It was built in 1855 out of rock quarried on the island, and is very damp. A substantial wooden structure is needed.

An appropriation of $12,000 for repairs and for building a new keeper's dwelling is asked.

Point Bonita, sea-coast of California.—Considerable work has been done in removing the rock-obstructions in front of the fog-signal. A survey has been made to determine the best method of improving and protecting that portion of the roadway, about midway between the tower and the fog-signal, where slides have occurred. The plan determined upon is to make a tunnel through the rock, to avoid the most dangerous present roadway, and to cut away and properly slope the

TWELFTH DISTRICT.

CALIFORNIA.

This district embraces all aids to navigation on the Pacific coast of the United States between the Mexican frontier and the southern boundary of Oregon, and includes the coast of California.

Inspector.—Commander Silas Casey, jr., United States Navy.

Engineer.—Lieut. Col. R. S. Williamson, Corps of Engineers, United States Army.

In this district there are—

Light-houses and lighted beacons	22
Light-ships	0
Fog-signals operated by steam or hot-air engines	10
Day or unlighted beacons	34
Buoys actually in position	30
Spare buoys for relief and to supply losses	46

Steamer Shubrick, common to twelfth and thirteenth districts, used for buoy-tender and for supply and inspection.

The numbers preceding the names of stations correspond with the "List of Light-house, &c., on the Atlantic, Gulf, and Pacific Coasts of the United States," issued January 1, 1879.

LIGHT-HOUSES.

——. *Point Dume, California.*—This point was, by the President's order of January 26, 1867, reserved for light-house purposes. It is a rounded hill, the top of which is 202 feet above mean low tide, and is destitute of wood and water. In a little valley about one mile up the coast both wood and water can be found. The point is isolated, bounded on three sides by steep bluffs from 100 to 120 feet high, and only approachable on the open side to the north. It is 18 miles due west from Santa Monica. The distance from Point Fermin to Point Hueneme is 60 miles, and Point Dume is about in the middle of the space, not lighted by either of these lights. It is undoubtedly an important site for a future light and fog-signal station, and one where they would be of great advantage to the coast steamers. They would cost $15,000.

469. *Point Hueneme, entrance to Santa Barbara Channel, California.*—A 4-inch galvanized iron pipe was successfully inserted in the pipe of the artesian well, which is now in as good a condition as when first bored some years ago. A platform was built around the keeper's dwelling, as the strong wind drifted the sand so much as to undermine and endanger the structure.

470. *Santa Barbara, Santa Barbara Channel, California.*—Part of the reservation fence was blown down and destroyed during a heavy gale last winter. It has been rebuilt. No other repairs were needed.

471. *Point Conception, entrance to Santa Barbara Channel, California.*—The fog-signal at this station was repaired, and a wire fence was set to inclose the cultivated portion of the reservation. A proposition was made to the owners of the rancho, by which the government should relinquish its claim to all the reservation, except a certain specified 30 acres, provided they should give the United States a deed for said tract of land, and grant a right of way to the landing, and other privileges.

1880

Twelfth District.

Funck float, lard-oil lamps, in the lens apparatus. Mineral oil is now used exclusively. A survey of the reservation, showing the location of the various structures, was made. The station is now in excellent condition.

479. *Point Hueneme, entrance Santa Barbara Channel, California.*—A new set of chariot-wheels for the lens apparatus was furnished; the chimneys of the dwelling were pointed up and covered with a coating of cement-mortar; the fences and irrigating flumes were repaired; and other slight repairs were also made. Hains mineral-oil lamp was substituted for the Funck float, lard-oil lamp in the lens apparatus. Mineral oil is now exclusively used at this station. A quantity of various kinds of grass-seeds was sent to the keeper to experiment with, in trying to reclaim the sand-drifts on the reservation. The results of these experiments show that the burr-clover and lupine answer the purpose better than any other kinds.

480. *Santa Barbara, sea-coast of California.*—Slight repairs were made to this station. A survey of the reservation, showing the relative position of the light-house structures, fences, &c., was made. Hains mineral-oil lamp was substituted for the Funck float, lard-oil lamp, for use in the lens apparatus. Mineral-oil is now used at this station. The walls of the dwelling and tower, and the cellar-drains will be repaired, and the roof and wall of the dwelling will be painted this year. Otherwise, the station is in good condition.

481. *Point Conception, sea-coast of California.*—The tower and dwelling at this station are in an insecure condition, and should be rebuilt. Plans and estimates for rebuilding the tower, on a lower point on the bluff, were prepared, and Congress was asked for an appropriation of $38,000 for the purpose of rebuilding the structures; and also for $10,000 with which to secure a title to the land on which the station is located, which, under a recent decision of the honorable the Secretary of the Interior, does not belong to the United States. No appropriation was made by Congress; hence nothing can be done about acquiring title, until Congress meets again, and makes the necessary appropriation for the purpose. This station is one of the oldest established on this coast, and is also one of the most important. All sailing-vessels and steamers change course when off this point, either in going up or down the coast; and the extinguishment of the light and stoppage of the fog-signal would make navigation on this part of the coast exceedingly hazardous. It is hoped that Congress, at its next session, will make an immediately available appropriation of the amount required to put this station in an efficient condition, as well as for the purpose of purchasing the necessary site, and right of way thereto. The amount required for these purposes is $48,000. Wooden supports were placed against the tower to hold it up. Unless an appropriation be soon made, the light must be discontinued. The revolving machinery of the lens apparatus was thoroughly overhauled and repaired; a new set of chariot-wheels was furnished. The lantern was extensively repaired; and a new battery and new galvanized-iron wire, for connections between the various structures, was sent to the station. The cottage dwelling requires repainting inside and outside; otherwise, it is in good condition.

482. *Piedras Blancas, entrance to San Simeon Bay, sea-coast of California.*—The revolving machinery of the lens apparatus was overhauled and repaired; a new set of chariot-wheels was furnished, and the old ones repaired. Funck float-lamps were substituted for mechanical lamps.

Twelfth District.

landed from the tender. When this work is completed, this station will be in a more efficient condition than ever before. A survey of this site will soon be made, to define its boundaries according to the deed, and to mark out the line for a reservation fence. The survey will also show the location of the new tower and fog-signal structures.

491. *Pedras Blancas, on the point northwest of the entrance to San Simeon Bay, California.*—This station received extensive repairs and renovations during the past year. A new hook for the illuminating apparatus was made and put up. The necessary quantity of paints, oils, &c., was purchased and sent to the station, and the several structures were repainted by the keepers. Two galvanized-iron ring-bolts were put into the rocks near the landing, as fastenings for the boats when a landing is made. A system of electric call-bells, between the watch-room of the tower and the sleeping-quarters of the keepers, was established. The station is now in good condition.

492. *Point Pinos, on the point south side of entrance to harbor of Monterey, California.*—During the past year, a closed porch, to protect the entrance to the kitchen of the dwelling, and also to serve as a store-house, was built. A small quantity of paint, for renovating the tower, dwelling, and outhouses, and a new lock for the front door were provided. This station is now in good order.

493. *Santa Cruz, on Point Santa Cruz, at the entrance to Santa Cruz Harbor, California.*—The several structures were repainted and the fences were whitewashed. The station is in good condition.

494. *Anacapa Island, on the southwestern or seaward side of the island, California.*—The new boiler and machinery for the duplicate steam fog-signal were successfully landed in July last. Mechanics and laborers were sent at the same time, with the necessary materials for the construction of a coal-shed at the landing, for enlarging the signal-house for the reception of the duplicate boiler, and for making needed repairs to the dwelling, water-shed, and tramway. This work was completed in August last. After the duplicate signal was established, the old boiler and machinery of the original fog-signal were thoroughly overhauled and repaired. Both boilers were then covered with asbestos felting. A system of electric call-bells was established between the signal-house and the keepers' sleeping-rooms. Some slight repairs are needed to the machinery of the signals, and also to the dwelling and outhouses, the materials for which were sent to the station. The keepers will make these repairs, after which the station will be in good condition.

495. *Pigeon Point, on the extremity of Pigeon Point, California.*—A kitchen was fitted up in the second story of the keeper's dwelling, for the use of one of the assistant keepers. Other slight repairs were made to the dwelling. A new hook was made for the illuminating apparatus, and the watch-room of the tower was renovated. A system of electric call-bells was established between the watch-room of the tower, the engine-room of the fog-signal house, and the sleeping-quarters of the keepers. The old boiler, or boiler No. 1, and the machinery attached to it were repaired; the duplicate signal received slight repairs, and both boilers were covered with asbestos felting. Notwithstanding the repairs to boiler No. 1, it was found, after a critical examination, to be unsafe; and, as the small upright boiler of the duplicate signal could not be relied upon, it was found necessary to have a new horizontal boiler built to take the place of the old, unsafe one. The new boiler was sent to the station, and the fog-signal machinery and whistle were

Twelfth District.

well water was unfit for domestic purposes, and produced sickness in the keepers' families, a 10,000-gallon tank was put up during the past year, and arranged to catch that quantity from the roofs. The damage to the ceilings of the dwelling done by an earthquake was repaired, other minor repairs were made, and the station is now in good condition.

499. *Point Conception, on the pitch of Point Conception, at the eastern side of the northern entrance to the Santa Barbara Channel, California.*—The new tower, with the oil-room and keeper's watch-room at its front, was built and is ready to receive the new lantern. The cottage under the bluff, with the necessary out-buildings for the assistant keeper, was finished. The old coal-shed was prepared for the reception of the duplicate boiler and engine, and a new coal-shed built. A new wooden building for the temporary storage of oil was built on the top of the bluff, and a pipe-line laid, through which the oil could be run to the brick storehouse at the foot of the tower. The building used temporarily as overseer's quarters was moved to the vicinity of the new cottage for use as a wood-shed and storehouse. The old dwelling had a wooden addition of two rooms made in its rear, was repaired and repainted, and was strengthened by two iron 1¼-inch tie-rods 38 feet long, running from end wall to end wall and anchored outside to plates of flat 1½-inch iron, each 2 feet long and 6 inches wide. A flight of steps was carried from the top of the bluff to the new tower; a new ½-inch galvanized pipe 1,100 feet long was laid from the hydraulic ram to the cistern at the old dwelling, and thence prolonged by ¾-inch pipe to the cistern at the fog-signal, and to the new cottage and tower. The reservoir at the spring was doubled in size, planked on its sides, and the dam raised about 3 feet. The old storehouse was moved from its position on the brow of the hill to the rear of the stable, and a new coal-chute, starting from the former position of the storehouse, was built to the new coal-shed. A new wooden storehouse, 24 feet by 18 feet, was built at El Cojo landing. The new boiler with the repaired engine and whistle column from the Point Reyes signal was placed in the old coal-shed fitted up for its reception, and the old boiler and machinery were thoroughly overhauled and repaired. A resurvey was made of the reservation according to the field notes of the deed, and the line of its land boundary marked by a fence. A plat of this survey, showing the position of all old and new structures, was made. With the materials on hand at the station, the keepers have painted the new store buildings and whitewashed the new coal-shed in the rear of the fog-signal. In the middle of May a lampist and two mechanics left San Francisco for the station, taking with them the new fourth-order lens for temporary use and glass for the new lantern. This fourth-order lens was placed on the new tower and a light from it exhibited. The first-order lens was then dismounted from the top of the old dwelling, on which a temporary platform was placed for the fourth-order light. The first order lens was then remounted on the new tower. The light was finally exhibited June 20. The working force then dismounted the iron work of the old lantern. The end wall of the old dwelling was taken down and rebuilt, and some necessary fencing has been done.

503. *Año Nuevo Island, on the island bearing the same name, California.*—There is danger to the boiler-shed and cistern from the caving of the bank near them, under the influence of the winter storms. It is estimated that $800 will cover the cost of their temporary protection.

504. *Pigeon Point, on the extremity of Pigeon Point, California.*—Two

1883

TWELFTH DISTRICT.

This district extends from the boundary line between California and Mexico to the boundary line between California and Oregon, and embraces all the aids to navigation on the coasts and bays of California.

Inspector—Commander George W. Coffin, United States Navy.

Engineer—Captain Albert H. Payson, Corps of Engineers, United States Army.

In this district there are—

Light-houses and lighted beacons	22
Day or unlighted beacons	35
Fog-signals operated by steam or hot-air engines	11
Whistling buoys in position	4
Bell buoy in position	1
Buoys actually in position	43
Steamer Manzanita, buoy-tender, and for supply and inspection	1

507. *Point Lomet, on the west side of the entrance to San Diego Bay, California.*—A new water-shed and cistern were completed in December and January. It has an area of 2,900 square feet, and is in the fenced enclosure about the keeper's dwelling. The cistern is of brick, with a capacity of 11,000 gallons, and will have a Douglass pump, with a suction-pipe. The station has received various minor repairs and is now in good order. This light is the highest in the United States, its focal plane being 462 feet above the sea. It is, in consequence, often obscured by high fog, while the rest of the coast line is distinctly visible. As this makes the light of but little practical value to navigators, a new site for it has been selected lower down the cliff.

—. *Ballast Point, California.*—When the light at Point Loma is transferred to its new site, a stake-light, similar to those in use on the western rivers, should be placed on Ballast Point, as a guide into San Diego Harbor. Such a light would probably be all that is needed here for years to come. The expense would be practically limited to the pay of a keeper and the cost of erecting a building from which to display the stake-light, which would not exceed $1,500 or $2,000, as quarters for the keeper can doubtless be secured in the buildings near the point.

511. *Point Conception, on the pitch of Point Conception, entrance to the Santa Barbara Channel, California.*—The brick tower, which passed through the old dwelling, was taken down to a point below the level of the roof, and the open space was re-covered. The whole east end wall of the dwelling was rebuilt. A picket-fence was built around one of

Twelfth District

188. *Point Hueneme, on the main land, at the eastern entrance to Santa Barbara Channel, California.*—Repairs were made to the drain-boxes, irrigating flumes and fences during the year. In October last, the light-house structure was violently shaken by an earthquake, and the plastering was badly cracked and the ceiling fell off in some places, but no material damage was done.

189. *Santa Barbara, the point 2 miles southwesterly from Santa Barbara Landing, California.*—During the year the several structures were thoroughly painted, and the walls of the dwelling, the cellar floor, and drains were repaired. The roadway leading from the reservation to the county road was improved and repaired. The station is now in good condition; but the reservation fence, and that around the dwelling, should be renewed during the coming year.

190. *Point Conception, near the pitch of Point Concention, at western entrance of Santa Barbara Channel, California.*—Congress, at its last session, appropriated $10,000 for purchasing the necessary land, right of way, and other privileges, for light house purposes at this station, and also for the construction of a new light house tower and oil house, on a less elevated site. Of this amount, $10,000 were set apart for the purchase of the land and right of way. When the appropriation was made, an abstract of the title to the site was submitted to the United States attorney for California, with a request for his opinion as to its validity, when he prepared a deed which was forwarded to the Board. In the mean time, the plans of the proposed structure were approved by the Board, and arrangements were made for the purchase of all the necessary building materials, for the transportation of them to El Coxo Landing, and for hauling them from thence to the light station. When the metal-work and lantern for the new tower were finished according to plans and specifications, they were carefully boxed and taken to the buoy-depot at Yerba Buena Island, for storage. Nearly all of the building material was purchased, shipped, and safely landed, through the surf at El Coxo, and a portion of it was hauled from El Coxo to the station. The overseer and a part of the mechanics and laborers were sent to the station in June, and the work on the new tower and oil-house was commenced. It is expected that the light will be exhibited from the new tower by the middle of November next. As the steam fog signal needed immediate and extensive repair, it was found necessary to order a new boiler and establish a duplicate fog signal, for the old boiler and machinery may give out at any time. One of the sets of machinery and whistles used at Point Reyes, before whistles were substituted for sirens, will be used as the duplicate signal. This machinery, with the whistle and whistle-column, can be put in good condition at small cost, and will then serve as well as new ones. The old fuel house will be fitted up for the reception of the duplicate signal, and a new fuel house will be built, with a storage capacity for 100 tons of coal. As soon as the duplicate signal is ready for operation, the old boiler and machinery will be thoroughly repaired. The old brick dwelling will be repaired, and two new rooms will be added to it, making it sufficient for the accommodation of two families. A new four-room cottage will also be built, and the old cottage will be repaired. The reservoir at the spring from which the water supply is obtained will be strengthened and enlarged, and a new pipe-line will be laid from the hydraulic ram to the cistern and the dwellings. A store-house will be built at El Coxo Landing, in which the supplies for the station can be stored when

4 to 8. San Diego Bay lighted beacons, California.—A concrete oil-house was built.

—. *Santa Barbara channel islands, California.*—Three islands of this group, San Clemente, Anacapa, and San Nicolas, are reserved for light-house purposes. San Clemente was leased for a period of five years from January 1, 1906, at $1,000 per annum. Anacapa was leased to the highest bidder for five years from April 1, 1907, at $31 a year. San Nicolas was leased to the highest bidder for five years commencing on April 15, 1907, at $362.50 a year.

—. *San Pedro Breakwater, entrance to outer harbor, San Pedro, Cal.*—A light and fog-signal on the outer end of the breakwater will be useful to coasters as well as to commerce to and from the present harbor of Wilmington and which will spring up under the lee of the breakwater. It is expected that the concrete block forming the outer end of the breakwater will be finished in about one year, and it is recommended that the block be subjected to the storms of one year before the superstructure be commenced. The Board estimates that the proposed light and fog-signal, including quarters, can be built for $36,000, and it recommends that an appropriation of this amount be made therefor.

12. Point Hueneme, entrance to Santa Barbara Channel, seacoast of California.—The boundary line was surveyed and permanently marked. Minor repairs were made.

14. Point Conception, entrance to Santa Barbara channel, California.—An oilhouse was completed. It is connected with the light tower by a concrete walk 3½ feet wide, 140 feet long. Measures were taken for installing by contract a fuel-oil burning system for the fog-signal. The plant includes a sump tank near the wagon road, connected by a 2-inch diameter gravity pipe line 650 feet long to a 10,000-gallon redwood storage tank 60 feet from the signal building. The oil is delivered by gravity to two special oil force pumps and is forced through the nozzles at the proper pressure under the signal boilers. The pumps and discharge-pipe lines are in duplicate and are interchangeable, each pump delivering to either boiler. On April 22, 1907, the installation was completed. The contract price was $2,660. A concrete retaining wall supporting an area around the quarters is being built, of which 200 running feet of wall 5 to 11 feet high was completed.

15. Point Arguello, about 12 miles northwest of Point Conception, seacoast of California.—The construction of a 40,000-gallon concrete cistern was completed. The cistern is 2½ feet internal diameter, with wall 1 foot thick. The lower portion of the walls are in excavation and the upper portion reenforced with ¾-inch diameter rods. The top and floor are reenforced with expanded metal. A rectangular sheet-steel oil tank of 1,800 gallons capacity was installed for supplying the oil engines operating the air-compressor plant for a fog-signal.

—. *Point Sal, seacoast of California.*—A survey was made of 20 acres of this reservation best suited for the needs of a light-station. Some 22.2 acres and Lion Rock were selected and marked on the ground.

16. San Luis Obispo, seacoast of California.—A fuel-oil burning system was installed in the fog-signal. The fuel oil is received at the light-house wharf, where it can be pumped either from a sump well or from a barge alongsi operated by the boiler for the v oil through 1,600 feet of 4-incl wooden storage tanks near the oil is delivered by a 3-inch pip the burners. From the suction is interchangeable. The plant line to supply the wharf boiler

17. Piedras Blancas, 5 miles coast of California.—An inter necting the tower, fog-signal. Various repairs were made.

The following is an extract reports, and it is recommende appropriation therein mentione

The following is a copy of a lette tary of Commerce and Labor to the

"It is necessary to the safety of fornia, especially to the safety of t necessary to keep at that importan more secure and less dangerous stor quantities of mineral oil are now s tower, in which is a light which wa method of storage of mineral oil is recommended that an isolated brick illuminant can be kept. A building tity of oil needed for this first-ord named as the maximum for such building oilhouses.

"It is estimated that an oilhous $1,500, and the Light-House Board this Department concurs, that a therefor."

19. Point Pinos, entrance t beginning of the fiscal year th from the earthquake of April 1 and has been completed. The l top of the tower, and the towe the lantern floor. The origina thick. The tower was rebuil thickness and general design. ¾-inch diameter rods laid vert drilled into the remaining wall wire cable were used to fasten plied with water from the n Minor repairs were made. A laid and connected with an ele tank is on the framed support for the station. Minor repairs

20. Santa Cruz, northern en A concrete oilhouse was built.

21. Año Nuevo Island, sea redwood water tank was erect concrete piers. Various repair

23. Pigeon Point, seacoast o telephone system of 6 phones windmill destroyed by storm

1906

15. Point Conception, entrance to Santa Barbara channel, California.—On July 17, 1905, bids were opened for the construction of a keeper's double dwelling, as provided by the act approved on April 28, 1905, and the contract was awarded to the lowest bidders. The work was satisfactorily completed. The new dwelling is a frame structure two stories high, and contains six rooms and bath for each occupying keeper. A water tank was installed on a tower to supply the dwelling. A concrete retaining wall was built on the east of the old dwelling. Various repairs were made.

16. Point Arguello, about 12 miles northwest of Point Conception, seacoast of California.—The construction of a 40,000-gallon cistern of reenforced concrete, to increase the capacity for storage of water, was commenced. It will be completed soon.

17. San Luis Obispo, seacoast of California.—A small hoisting engine was installed in a house built therefor on the wharf, to facilitate landing of supplies. Minor repairs were made.

18. Piedras Blancas, seacoast of California.—A fog-signal operated by comprest-air was installed. The plant consists of a 20-horsepower oil engine, with air compressor sounding a 10-inch whistle. It was placed in a brick house built near the end of the point, which is large enough to contain a duplicate apparatus, which it is expected will be set up during the next fiscal year. A frame dwelling was built for use as quarters for the additional keeper whose appointment was thus made necessary.

The following is an extract from the Board's last annual report, and it is recommended that steps be taken to secure the appropriation therein mentioned for the purpose stated:

> The following is a copy of a letter dated December 10, 1904, from the Secretary of Commerce and Labor to the Secretary of the Treasury:
>
> "It is necessary to the safety of the light-station at Piedras Blancas, California, especially to the safety of the large quantity of mineral oil which it is necessary to keep at that important and isolated high-class light-station, that more secure and less dangerous storage facilities for the oil be provided. Large quantities of mineral oil are now stored in an oil room attached to the light tower, in which is a light which was originally designed to burn lard oil. This method of storage of mineral oil is considered to be dangerous. It is therefore recommended that an isolated brick oil house be built, in which this inflammable illuminant can be kept. A building of the size needed to store the large quantity of oil needed for this first-order light can not be built for $550, the sum named as the maximum for such buildings in the general appropriation for building oil houses.
>
> "It is estimated that an oil house suitable for this station can be built for $1,500, and the Light-House Board recommends, and in that recommendation this Department concurs, that an appropriation of this amount be made therefor."

20. Point Pinos, entrance to Monterey Bay, California.—This light tower was badly injured on April 18, 1906, by the earthquake. The tower was built in 1857 of brick laid up in lime mortar, and it rose thru the center of the dwelling. It was cracked thru at its junction with the springing line of the arch supporting the lantern floor, and some of the masonry fell out. The damage was so great that it became necessary to tear down and rebuild the tower with reenforced concrete. This work is now in progress. The act approved on July 30, 1906, appropriated $18,700 for rebuilding this station. The plans therefor are now being made.

22. Ano Nuevo Island, seacoast of California.—The keeper's quarters, originally intended for one keeper, were too small to afford suffi-

Twelfth District.

the dwellings, and a fence 400 feet long was put up along the edge of the bluff. The floor of the fog-signal building was relaid in concrete, and a part of the floor of one of the dwellings was bricked. To prevent the washing away of the earth under the long flight of stairs leading from the crest of the bluff to the plateau on which the light stands, a brick drain and retaining-wall were built. The duplicate boilers of the fog-signal and their main connections were covered with asbestos felting, and various minor repairs were made to the several buildings. The station is now in excellent condition.

512. *Piedras Blancas, on the point northwest of the entrance to San Simeon Bay, California.*—A smart earthquake shock occurred in May, but did no perceptible damage, except to cause a slight eccentricity of the revolution of the lens. An inch galvanized-iron pipe was laid, to enable the keeper to irrigate his vegetable-garden, and certain minor repairs were made. This station is now in good condition.

513. *Point Pinos, on the point south side of the entrance to Harbor of Monterey, California.*—A plank walk 350 feet long was built across the deep sand from the keeper's dwelling to the well and barn. The lard-oil lamps were replaced by mineral-oil lamps, and certain minor repairs were made.

515. *Año Nuevo Island, on the seaward side of Año Nuevo Island, California.*—Extensive repairs were made to the fog-signal boilers. A pump was placed in the kitchen, call-bells were set up between the dwelling and the fog-signal, a new pump was supplied for the cistern, and various minor repairs were made.

518. *Farallon, on the largest, or southeast, Farallon Islet, California.*—A suitable horse-power windlass, for hoisting supplies from the boats, was set up, and about 1,800 feet of rough lumber for fencing, and a supply of paint for the dwelling and tower, with various other supplies, were left at the station, which is now in good order.

519. *Point Boneta, entrance to San Francisco Bay, California.*—Mineral-oil lamps were substituted for lard-oil lamps, and various minor repairs were made to the buildings and the fog-signal machinery. The station is now in good condition.

520. *Fort Point, on the northwest of Fort Winfield Scott, entrance to San Francisco Bay, California.*—Two large dormer windows were cut in the roof of the keeper's dwelling, the roof was reshingled, a new floor was laid over the old one, various minor repairs were made to the buildings, and the fog-signal machinery was repaired. The station is now in good condition.

Twelft

521. *Alcatraz Island, San Francis*
ing 3,340 pounds, was cast at the
bell and other material sent the
to support the fog-bell was erect
increase the range of the bell.
upper bluff to the fog-bell platfo
station is now in good condition.

522. *Yerba Buena Island, San*
gallon tank, with pump and bo
water-supply of the fog-signal a
against fire, was supplied, and t
order. It enables the keepers to
ful stream of water upon any part
and has, also, an efficient head fo
The water from the upper tank i
ing to the tower, with hydrant-h
small tank which feeds the fog-s
feet. The new tank was covere
pump and boiler. Tools for the
of boiler-tubes to replace the old
dition.

523. *East Brother Island, off*
asphaltum covering to the water
cement. A space was partitione
oil-room, the feed-pipe from the
by 50 feet of 1-inch galvanized-i
made. The station is now in go

524. *Marc Island, on the eastern*
San Pablo Bay to the Straits of Ka
iron tops were fitted to the chim
bridge was thrown over a ravine
roadway were repaired. Variou
tion is now in good condition.

526. *Point Arena, on the end of*
signal boiler was replaced by a
feet, was built to the old signal
new signal is now in operation,
puted roadway question was final
and a new roadway was built.

Twelfth District.

—. *San Clemente Island, about 60 miles west of Point Loma, seacoast of California.*—The survey of this island, in progress at the time of the last annual report, was completed. It has since been determined to retain the reservation of the entire island for light-house purposes.

—. *Deadman Island, at the outer end of the jetty on the east side of the entrance to San Pedro Harbor, California.*—The following recommendation, which was made in the Board's last three annual reports, is renewed:

> The port of San Pedro, or Wilmington, is the seaport for Los Angeles. An enormous quantity of coal, lumber, and general freight is brought into this little harbor, which was made by breakwaters constructed by the United States. Deeply laden schooners discharge inside the harbor, while deep-water ships discharge into lighters out in the bay. It is necessary to use the tides in getting into this harbor, as there are but 12 feet of water on the bar at low tide. Fogs prevail at all seasons, and it is difficult to find the entrance at night or in foggy weather. It is recommended, therefore, that a harbor light and fog bell, operated by clockwork, be established on Deadman Island, at the entrance to this harbor, at an estimated cost of $5,000. This small island belongs to the Government, and is large enough for the purpose.

830. Point Hueneme, entrance to the Santa Barbara Channel, California.—The characteristics of this light were changed on April 15, 1892, from fixed red to occulting white, with an interval of five seconds between eclipses. The apparatus used is of a new pattern devised by Maj. D. P. Heap, U. S. A., engineer of the third light-house district. Its operation is satisfactory. The ownership of the land desired for a right of way to and from this station having changed hands, it was thought that arrangements might be made to secure a title for the $250 available. With this end in view the engineer of the district visited the station, laid out the lines of the property desired, and communicated with the new owner, but without avail. The price asked was still excessive. It was therefore decided that the land be acquired by condemnation, and the matter was placed in the hands of the United States attorney. As the $250 now available will not be sufficient to meet the expenses of the suit and the award of damages, it is recommended that the additional sum of $1,000 be appropriated for these purposes.

832. Point Conception, entrance to Santa Barbara Channel, California.—Extensive repairs were made. The coal chute leading from the top of the hill to the signal houses was entirely rebuilt, and a platform 19 by 16 feet in plan was built at the top. The barn was rebuilt. The old oil house was fitted up as a dwelling for single keepers. A fence was built around the keeper's dwelling to prevent the blowing out of sand, which has been a source of annoyance for many years. A new kitchen chimney was built, and various minor repairs were made to the several buildings. One fog-signal boiler was retubed and patched; the condition of the other was so bad that it was condemned and replaced by a new one. As one of these boilers was new and the other thoroughly repaired last year, and were both again in a leaking condition from the tubes and plates being pitted with small holes, it was

Twelfth District.

evident that some cause other than the usual wear and tear was to be looked for. An examination of the spring water used showed the presence of sulphuretted hydrogen. This, if in sufficient quantity, would account for the condition of the boilers. The matter is under careful investigation.

—. *Point Arguello, about 12 miles northwest of Point Conception, seacoast of California.*—The following recommendation, which appeared in the Board's annual report for the last three years, is renewed:

This point is about 12 nautical miles to the northward and westward of Point Conception. It is reported to be one of the foggiest places on the Pacific coast. In consequence of the sharp bend in the coast, the outlying rocks, and the almost constant fog that prevails, Point Arguello is one of the most important points on the coast at which a light and fog-signal station should be established. The United States already owns the site which is deemed most suitable for the buildings. It is therefore estimated that the work can be done at a cost not to exceed $35,000, and it is recommended that an appropriation of this amount be made therefor.

833. San Luis Obispo, near Port Harford, seacoast of California.—The landing wharf at this station was strengthened and an extension resting on five piles braced to each other and to the old structure was built out 8 feet into the bay. The land connection was raised and the approach was protected by a railing. The wharf has now a frontage of 36½ feet in length by 32½ feet in width. A hoisting derrick, consisting of a mast boom, tackles, and two stiff legs was erected and boat steps were put up. Repairs were made to the conductor pipes on the dwellings.

—. *Point Buchon, about 8 miles northwest from Point San Luis Obispo, California.*—The following recommendation, which was made in the Board's last three annual reports, is renewed:

This point is in San Luis Obispo County and is 17 miles distant from the town of San Luis Obispo by wagon road and trail. The nearest light-house is Piedras Blancas, about 30 nautical miles to the northward and westward. The point is prominent, and with its outlying rocks is very dangerous to navigators close inshore during a fog, especially as vessels going to and from Port Harford make a sharp turn just off this point. It is estimated that a light-house and fog signal can be erected at this point for $33,000.

835. Point Sur, seacoast of California.—A wooden fence was built around the dwelling and some minor repairs were made. A new whistle bell and some boiler tubes and a smokestack for the hoisting boiler were provided. A good road is needed from the station to the county road. The engineer in May selected a suitable route for this road. A survey was made. The work is to be done during the next fiscal year.

836. Point Pinos, entrance to Monterey Harbor, California.—The water company furnishing water to this station extended their main 1,600 feet nearer the station. This left that length of Government pipe unused. It was therefore taken up and stored at the light-house.

Twe

The following recommenda
nual report for the last three

The plot of land owned by the G
at any point on its boundary line.
it is essential that the United Stat
house lot and the seacoast. The
$2,000, and the Board recommends

841. Farallon, on the South
Francisco Bay, California.—
with a suitable boiler, will so
the station. Various minor

845. Alcatraz, on Alcatraz
An electrical-bell system was
ing, and sundry slight repair

—. *San Bruno Channel, so*
nia.—The channel is used by
with lumber and all manner
progress in South San Franci
obtained to enable deep-dra
wharves. It is proposed to
point indicated. It is claime
will be enabled to navigate t
of anchoring out in the bay
South San Francisco Land a
build these lights at their ow
lishment will furnish the la
hand the piles and pile-drive
establishment of these lights
that it would cost the Light
two beacons. The inspector
directed on June 9, 1892, to
proper measures for lighting
is expected that the lights w

847. Yerba Buena Island,
tank for the buoy depot was
tion. Repairs were made to
boiler for the pumping engin

—. *Quarry Point, Angel I*
Various petitions were receiv
ests asking that a fog signal
between the eastern side of
quite narrow. The strong ti
Gate have full force on a ves
case of ships being towed,
the current is enough to mak

TWELFTH DISTRICT.

This district extends from the boundary between California and Mexico to the boundary between California and Oregon. It embraces all aids to navigation on the seacoast, bays, rivers, and other tidal waters of California.

Inspector.—Commander Henry E. Nichols, United States Navy.

Engineer.—Maj. William H. Heuer, Corps of Engineers, United States Army.

There are in this district—

Light-houses and lighted beacons, including 3 post lights	39
Day or unlighted beacons	49
Lighted beacons used also as day marks	7
Fog signals operated by steam	15
Fog signals operated by clockwork	7
Fog signals operated by hand	1
Whistling buoys in position	12
Bell buoys in position	6
Other buoys in position	73
Steamer *Madroño*, buoy tender, and for supply and inspection	1
Steam launch of *Madroño*	1
Steam launch *Hazel*	1

LIGHT-HOUSES.

889. Point Conception, entrance to Santa Barbara Channel, California.—The water supply has been a source of trouble for some time. It came partly from a spring and partly from rain caught on the roofs of the light-house structures. The supply from the spring was forced by a hydraulic ram to the cisterns on the hill where the dwellings stand, and from there a pipe took the surplus to the cistern at the signal. In this way the full supply of the spring could not be utilized at the signal, where it was most necessary. To remedy this a plan was adopted to lead the water, through a pipe running along the face of the cliffs, from the spring to the cistern at the signal, the fall being sufficient to allow the water to flow into the latter by gravity. Near the cistern a hydraulic ram is to be placed to force up the hill what water is required for the dwelling. By this plan the entire capacity of the spring is available for the signal, and only what is absolutely needed for household purposes need be diverted. At the end of the fiscal year this project was being carried out. Minor repairs were made.

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1896

Twelfth District.

988. *Point Hueneme, entrance to Santa Barbara Channel, California.*—The following statement was made in the Board's annual report for 1894:

As the efforts made to secure a right of way to and from this station for any reasonable price, under the appropriation of $250, have failed, it is proposed, as was stated in the Board's last annual report, to obtain it by condemnation. It is estimated that this will cost not exceeding $3,000. It is recommended, therefore, in view of the great necessity for the road, that an appropriation of $3,000 be made for this purpose.

The Board renews and urges this recommendation.

990. *Point Conception, entrance to Santa Barbara Channel, California.*—The work of reconstructing the water supply of this station, as outlined in the last annual report, was completed in July, 1895. During the spring of this year the pipe line running along the face of the cliff was broken by falling rocks. The pipe was repaired, and to prevent a recurrence of the accident the overhanging cliff was blasted off for a distance of 150 feet back from the edge and the pipe brought in and fastened to the face of the rocks. Other threatening bowlders were also blasted off. Various repairs were made.

—. *Point Arguello, about 12 miles northwest of Point Conception, seacoast of California.*—The following recommendation, which appeared in the Board's annual report for the last seven years, is renewed:

This point is about 12 nautical miles to the northward and westward of Point Conception. It is reported to be one of the foggiest places on the Pacific coast. In consequence of the sharp bend in the coast, the outlying rocks, and the almost constant fog that prevails, Point Arguello is one of the most important points on the coast at which a light and fog-signal station should be established. The United States already owns the site which is deemed most suitable for the buildings. It is therefore estimated that the work can be done at a cost not to exceed $35,000, and it is recommended that an appropriation of this amount be made therefor.

993. *Point Sur, seacoast of California.*—The water supply is from a well on the sand spit supplied by springs from the hills; but as it is near the ocean level the water at times becomes slightly brackish and unfit for domestic use. It is proposed to remedy this by catching the rain water from the roofs of the buildings and storing it in wooden cisterns which will be provided. Various repairs were made.

The quarters at this station are insufficient to accommodate the keepers. One of them is now living in a small temporary structure that was erected for the use of the superintendent of construction while the station was being built. A proper keeper's dwelling can be erected for $6,000. It is recommended that an appropriation of this amount be made therefor.

Point Pinos, entrance to Monterey Bay, California.—The following recommendation, which was made in the Board's annual reports for the last seven years, is renewed:

The plot of land owned by the Government at this station does not touch the sea at any point on its boundary line. For convenience in landing stores and supplies it is essential that the United States should own the strip of land between the light-

Twelfth District.

across the roadway at the entrance to the grounds. The water tank was housed in to prevent evaporation of the water and injury to the tank by heat. Minor repairs were made.

The following recommendation, made in the Board's annual report for 1894, is renewed:

The light-house at this station was built in 1856. It is of brick with the outer wall stuccoed. The light is shown from an old-fashioned lantern with triangular-shaped glass, built on top of the dwelling. The structure is unsightly and uncomfortable, and in winter the walls are damp. To put this building in good repair would cost as much, if not more, than to build a new modern structure. This can be done, it is estimated, for not exceeding $7,500, and it is recommended that an appropriation of that amount be made therefor.

994. Point Conception, entrance to Santa Barbara Channel, California.—The pipe line from the spring, where it ran along the face of the cliff, was broken by falling rocks. It was repaired and about 300 feet of the overhanging bluff were removed for 60 to 70 feet back from the edge, involving the removal of 2,500 cubic yards of rock. Minor repairs were made.

—. *Point Arguello, about 12 miles northwest of Point Conception, seacoast of California.*—The following recommendation, which appeared in the Board's annual report for the last eight years, is renewed:

This point is about 12 nautical miles to the northward and westward of Point Conception. It is reported to be one of the foggiest places on the Pacific coast. In consequence of the sharp bend in the coast, the outlying rocks, and the almost constant fog that prevails, Point Arguello is one of the most important points on the coast at which a light and fog-signal station should be established. The United States already owns the site which is deemed most suitable for the buildings. It is therefore estimated that the work can be done at a cost not to exceed $35,000, and it is recommended that an appropriation of this amount be made therefor.

—. *Point Buchon, about 8 miles northwest from Point San Luis Obispo, California.*—The following recommendation, which was made in several previous annual reports, is renewed:

This point is in San Luis Obispo County, and is 17 miles distant from the town of San Luis Obispo by wagon road and trail. The nearest light-house is Piedras Blancas, about 30 nautical miles to the northward and westward. The point is prominent, and with its outlying rocks is very dangerous to navigators close inshore during a fog, especially as vessels going to and from Port Harford make a sharp turn just off this point. It is estimated that a light-house and fog signal can be erected at this point for $33,000.

997. Point Sur, seacoast of California.—The drinking water, supplied from springs, was unfit for domestic purposes. A 20,000-gallon tank was therefore erected back of the dwelling and pipes were arranged to conduct to it the water caught on the roofs. The trestles and bridges on the line of the railway were renewed, the track was straightened, and the hoisting engine was placed on a timber and concrete foundation. The accommodation for the four keepers is insufficient. The recommendation made in the last annual report, that an appropriation

Twelfth District

of $6,000 be obtained to build a new cottage, i
matter was somewhat urgent, the old quarter
of construction, since used by an assistant l
repaired, and enlarged to render them habitabl
funds may be available for the new cottage.
made.

998. Point Pinos, entrance to Monterey Bay, (
ng recommendation, which was made in the B
the last eight years, is renewed:

The plat of land owned by the Government at this sta
at any point on its boundary line. For convenience in
it is essential that the United States should own the stri
house lot and the seacoast. The owners have offered t
$2,000, and the Board recommends that an appropriation

1000. Año Nuevo Island, seacoast of Californi
small boats was built by the keeper, mostly wi
the beach. A small quantity was furnished to
were made.

1001. Pigeon Point, extreme end of Pigeon Po
fornia.—A fence was built around the reservati
down. Some 8,240 feet of lumber and 320 pos
repairs were made.

The following recommendation, made in the B
reports, is renewed:

There are standing, outside of the light-house site, but
the light-house structures, a fisherman's shanty and a l
break out in either of these buildings, it would endange
station. It is proposed, in order to obviate this danger,
land to the eastward of the station, say 150 feet wide.
to the light-house reservation. This it is estimated can
$5,000, and it is recommended that an appropriation of thi

1002. Point Montara fog-signal station, seaco
sounding-board placed back of the fog whistles
small, much of the sound passing landward ove
board, 12 feet high, extending over three-quarte
roof, was erected and securely fastened to the
brace rods. Various repairs were made.

1003. Farallon Island, off the entrance to San
Ocean, California.—The old tramway leading fro
the dwellings and fog signal was torn up and a n
graded with sand from the beach. It was carri
ravines on trestles and bridges, extended to the
was built last year. It is 3,559 feet long.
destroyed by lightning on February 18, 1897, v
lightning arresters were put in to prevent a recu
As this station has of late years frequently bee

1902

keeper to land to attend to the lamp. To remedy this, one side of the beacon was planked over covering the piles and bracing, thus preventing the boat from being drawn under by the current.

12. Point Dume, northern entrance to Santa Monica Bay, California.—A survey of the site for the new station to be established at this point, and of the wharf site, and rights of way for a pipe line and wagon roads was made. As the owner of these lands and privileges would not sell for a reasonable price, a suit was brought for condemnation of the property. The matter is now in the hands of the United States attorney. The spring from which it is proposed to take the water supply for the light-station being on public land, this was reserved for light-house purposes by order of the President, dated November 11, 1901, and by order dated April 30, 1902. Plans and specifications for the structures are being prepared.

13. Point Hueneme, entrance to Santa Barbara Channel, California.—A fence was built inclosing the additional land purchased last year lying between the original light-house grounds and the town of Hueneme. This required 7,395.1 feet of fencing. Immediately after the fence was completed it was damaged by a heavy windstorm; the injury was repaired.

14. Santa Barbara, Pacific Ocean, near Santa Barbara Landing, California.—Minor repairs were made.

The following recommendation, made in the Board's last five annual reports, is renewed:

> The light-house at this station was built in 1856. It is of brick with the outer wall stuccoed. The light is shown from an old-fashioned lantern with triangular-shaped glass, built on top of the dwelling. The structure is unsightly and uncomfortable, and in winter the walls are damp. To put this building in good repair would cost as much, if not more, than to build a new modern structure. This can be done, it is estimated, for not exceeding $7,500, and it is recommended that an appropriation of that amount be made therefor.

15. Point Conception, entrance to Santa Barbara Channel, California.—A building to accommodate the fog-signal boilers and apparatus was built, and the machinery was set up. Both boilers were turned around so that the whistles are now on the seaward side of the stacks, and the steam and water pipes were rearranged so as to make the boilers, pumps, and whistles interchangeable. A windmill was installed at the spring to pump the water to a reservoir near the dwellings on top of the hill, whence it is conducted by gravity through a pipe to the signal.

18. Piedras Blancas, seacost of California.—The following is a copy of a letter dated January 10, 1902, from the Secretary of the Treasury to the chairman of the Senate Committee on Commerce:

> This Department has the honor to acknowledge the receipt of a letter from your committee dated January 8, 1902, inclosing for suggestions a copy of Senate bill No. 2448, for the establishment of a light and fog-signal station at Point Buchon, California.
>
> The Department begs leave to state in reply that the matter was referred to the Light-House Board, which reports that the following recommendation appears in its annual report for 1901:
>
> "—. *Point Buchon, about 8 miles northwest from Point San Luis Obispo.*—The recommendation was made in the Board's annual reports for 1897, 1898, and 1899, and several previous ones, that an appropriation be made to establish a light and fog-signal at this point at an estimated cost of $33,000.
>
> "'This point is in San Luis Obispo County, and is 17 miles distant from the town of San Luis Obispo by wagon road and trail. The nearest light-house is Piedras Blancas, about 30 nautical miles to the northward and westward. The point is

The following recommendation, made in the Board's last six annual reports, is renewed:

The light-house at this station was built in 1856. It is of brick, with the outer wall stuccoed. The light is shown from an old-fashioned lantern, with triangular-shaped glass, built on top of the dwelling. The structure is unsightly and uncomfortable, and in winter the walls are damp. To put this building in good repair would cost as much, if not more, than to build a new modern structure. This can be done, it is estimated, for not exceeding $7,500, and it is recommended that an appropriation of that amount be made therefor.

15. Point Conception, entrance to Santa Barbara Channel, California.—The act approved on April 28, 1904, appropriated $9,000 for a double dwelling for the light-keepers and $15,000 for a large oil-house. These improvements will be made during the coming year. Various repairs were made.

18. Piedras Blancas, seacoast of California.—The act approved on March 3, 1903, appropriated $15,000 for the establishment here of a fog-signal and keeper's dwelling. The plans and specifications for this work have been prepared. Various repairs were made.

20. Point Pinos, entrance to Monterey Bay, California.—About 7,723 feet of new fencing was built on the line of the reservation inclosing the original land and the portion purchased some years ago, except that on the ocean and bay frontages the fence is placed on the highland at a safe distance back from the high-water line.

22. Año Nuevo Island, seacoast of California.—A smokestack, with umbrella, hood, etc., was put up to replace the old one which had rusted out. The following quotation is taken from the Board's annual reports for 1902 and 1903, and the recommendation made therein is renewed:

This station is principally important on account of its fog-signal, which is a 12-inch steam whistle, giving blasts of 10 seconds followed by silent intervals of 55 seconds. The light is but a lens lantern. To keep the station in good condition, and to have the fog-signal always in operation when necessary, two keepers are required. The dwelling for the two keepers is barely sufficient for one, as both are men of family and are worthy of something better in the way of living accommodations. The dwelling is a one-story frame structure, 36 feet by 28 feet in plan, with a small kitchen attached and no cellar. It has been partitioned off, so that the two keepers with their families live in it, but at great inconvenience and discomfort. The Board is of the opinion that it is necessary to encourage capable men to take service with the Light-House Establishment; that to do so it is necessary that they should be provided, at least, with reasonable accommodations. It is estimated that an additional keeper's dwelling can be built here for $6,000, a much larger sum than would be required were it not that the island is in the open sea, outside of all freighting accommodations, and that the material for the dwelling would have to be transported to the site by special arrangements. The Board recommends that an appropriation of this amount be made therefor.

23. Pigeon Point, extreme end of Pigeon Point, seacoast of California.—The windmill used to pump water from the spring at this station was destroyed during a violent storm. A new aermoter mill, 10 feet in diameter, was purchased and set up on the steel tower to replace it. A new engine governor and a quantity of pipe fittings were furnished for the signal.

The following recommendation, made in the Board's annual reports for ten years up to and including that for 1903, is again made:

There are standing, outside of the light-house site, but close to the fence inclosing the light-house structures, a fisherman's shanty and a hay barn. If

also did what carpenter work was necessary to put the beacons in good order.

9. Point Fermin, westerly side of entrance to San Pedro Bay, seacoast of California.—A flagstaff was erected and soil was deposited around the buildings to fill up holes and grade the grounds. Minor repairs were made.

10. Deadmans Island Breakwater beacon, San Pedro Bay, California.—The fenders and lower girts of the lighted beacon, destroyed by marine insects, were renewed.

—. *Santa Barbara channel islands, California.*—Three islands of this group, reserved for light-house purposes, are leased. The lessees have paid the rental for the ensuing year, as prescribed in the respective leases, as follows: San Clemente Island, $1,000; Anacapa Island, $25, and San Nicolas Island, $362.

15. Point Conception, entrance to Santa Barbara channel, California.—A brick chimney 40 feet high was built to replace the two iron smokestacks, and both boilers were connected with it by a branched iron smoke pipe. The steps leading down the hill to the signal were rebuilt, and a 10,000-gallon tank for the increased storage of water was erected on a masonry foundation. Various repairs were made.

Plans and specifications were prepared for the light-keeper's dwelling, provided for by the act approved on April 28, 1904, appropriating $9,000 therefor. Bids were opened on May 27, 1905. Only one bid was within the amount of the appropriation and this was withdrawn by the bidder, who claimed that he had omitted an item of cost which would have increased materially the amount of the offer. Under these circumstances all bids were rejected and the work was readvertised. The bids received will be opened on July 17, 1905.

The act approved on April 28, 1904, appropriated $1,500 for a large oilhouse. It is proposed to erect this oilhouse while the keeper's dwelling is being built.

17. San Luis Obispo, seacoast of California.—The dam in the creek from which water is taken to supply this station was no longer safe; hence it was rebuilt so as to give a larger reservoir, and was provided with gateways to allow the silt to pass through and thus keep the water clean. The pipe line was overhauled and connected up to the new reservoir. A wire fence was built around the dam to prevent cattle from fouling the water. The fog-signal boilers were reset in brickwork. An 8-horsepower hoisting engine was installed on the wharf to facilitate the landing of supplies.

18. Piedras Blancas, seacoast of California.—A contract was made for building a keeper's dwelling and a structure for the new fog-signal, for which an appropriation was made by the act approved March 3, 1903.

The following is a copy of a letter dated December 10, 1904, from the Secretary of Commerce and Labor to the Secretary of the Treasury:

It is necessary to the safety of the light-station at Piedras Blancas, California, especially to the safety of the large quantity of mineral oil which it is necessary to keep at that important and isolated high-class light-station, that more secure and less dangerous storage facilities for the oil be provided. Large quantities of mineral oil are now stored in an oil room attached to the light

tower, in which is a light which was origin
method of storage of mineral oil is consider
recommended that an isolated brick oilhous
illuminant can be kept. A building of the
tity of oil needed for this first-order light
named as the maximum for such buildin
building oilhouses.

It is estimated that an oilhouse suitable f
and the Light-House Board recommends,
Department concurs, that an appropriation

22. Año Nuevo Island, seacoast of C
tions were prepared for an addition
work was delayed until April on acco
transportation of the materials to t
landing is dangerous. At the end of
been done on the keeper's dwelling.
the buildings and the rain shed was i
wall was built to stop the inroads o
undermine the fog-signal building.
keeper's dwelling is completed it wil
tion for all the keepers.

23. Pigeon Point, extreme end of P
nia.—The following is a copy of a l
from the Secretary of Commerce and
on Commerce:

This Department has the honor to ackno
December 17, 1904, from your committee,
6178, "To purchase an additional strip of la
at Pigeon Point, California," on which sugg
of the bill and the propriety of its passage.

In reply this Department begs leave to s
whom the matter was referred, reports t
reports it recommended that an appropriati
and that it is still of opinion that this appr
recommended on page 255 of the Book of E

The following is an extract from pages 1
for 1904:

"The following recommendation, made i
years up to and including that for 1903, is

"'There are standing, outside of the lig
inclosing the light-house structures, a fish
a fire should break out in either of these bu
tures of the light-station. It is proposed,
an additional strip of land to the eastward
purchased and added to the light-house res
be done for not exceeding $5,000, and it is
of this amount be made therefor.'

"This Department concurs in the recom
in this case."

An oilhouse is needed here, for the
letter dated December 10, 1904, from
Labor to the Secretary of the Treasur
house at Piedras Blancas, California,
chapter. It is estimated that it can b
recommends that an appropriation of

24. Point Montara, seacoast of C
commenced here last year were comp
replaced the old one.

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS:
Officer in Charge
USCG Lorsta Pt. Arguello
Hqd 1st Aerospace Div.
Vandenburg AFB, Ca.
93437

U. S. COAST GUARD LIGHT STATION POINT CONCEPTION

The known history of Point Conception* goes back in time to a period when Juan Cabrillo sailed along the California coast in search for glory and gold. On October 18, 1542, he encountered heavy winds upon rounding the Point and was forced to turn back to San Miguel Island, where he died. Second-in-Command, Bartolome Ferrelo, took charge and again tried to round the Point, but he also was unsuccessful. The Point was named Punta De La Limpia Concepion by Vizcaino in 1602, who after Juan Cabrillo's expedition, was the next Spanish sailor to venture the Pacific waters along the California coast.

It was here at Point Concepion in 1856, that the Lighthouse was built high on the sandstone cliffs, above the present lighthouse location. The lens and steel tower of the building were made in France at a cost of $65,000 and was brought around Cape Horn by ship.

A report indicates that the Lighthouse was severely damaged during the Fort Tejon earthquake of January 9, 1857. The Lighthouse was moved in 1881, and rebuilt from the top of the bluff to a mesa midway down, 133 feet above the Pacific waters at its present location.

The classic Fresnel glass lens made in Paris, France in 1854, is still in use today. The lens is classified as a first order, 16 panel lens, and measures 7 feet high and 5 feet in diameter. The intensity of the light is rated at 1,500,000 candlepower, as the light is magnified through the lens bullseye from a 1,000 watt mercury vapor lamp. It can be seen at a distance of some twenty miles. Each of the 16 lens panels displays a 2 second period of light, followed by an eclipse of 28 seconds. A brass plate affixed to the base of the lens housing reads:

"Revolving Light Fresnel System
Constructed by Order of the Honorable Secretary
of the Treasury and the Lighthouse Board
Henry LePaute, Constructor Paris, 1854"

The first Lighthouse Keepers used lard oil fuel for the five wick lantern. In 1911, an incandescent oil vapor lamp was used for the Beacon lamp until 1948, when electricity was installed as the source of power.

Revolving of the lens was originally accomplished by a 150 pound weight attached to wire cabling and gearing, which had to be cranked up every 4 hours. The advent of electricity changed that and now it is turned by an electric motor. The original system still stands intact and can be placed into service would a malfunction occur with the electric motor, a salute to the craftmanship of those men who left their mark to the history of the lighthouse.

The Foghorn, a double diaphram horn powered by electricity, can be heard for 18 miles. The intensity is so strong that warning signs are posted at least 50 feet from the horn, alerting the danger to one's ears. Each 30 seconds, for a 3 second period, the signal sounds its call of warning to the passing ships.

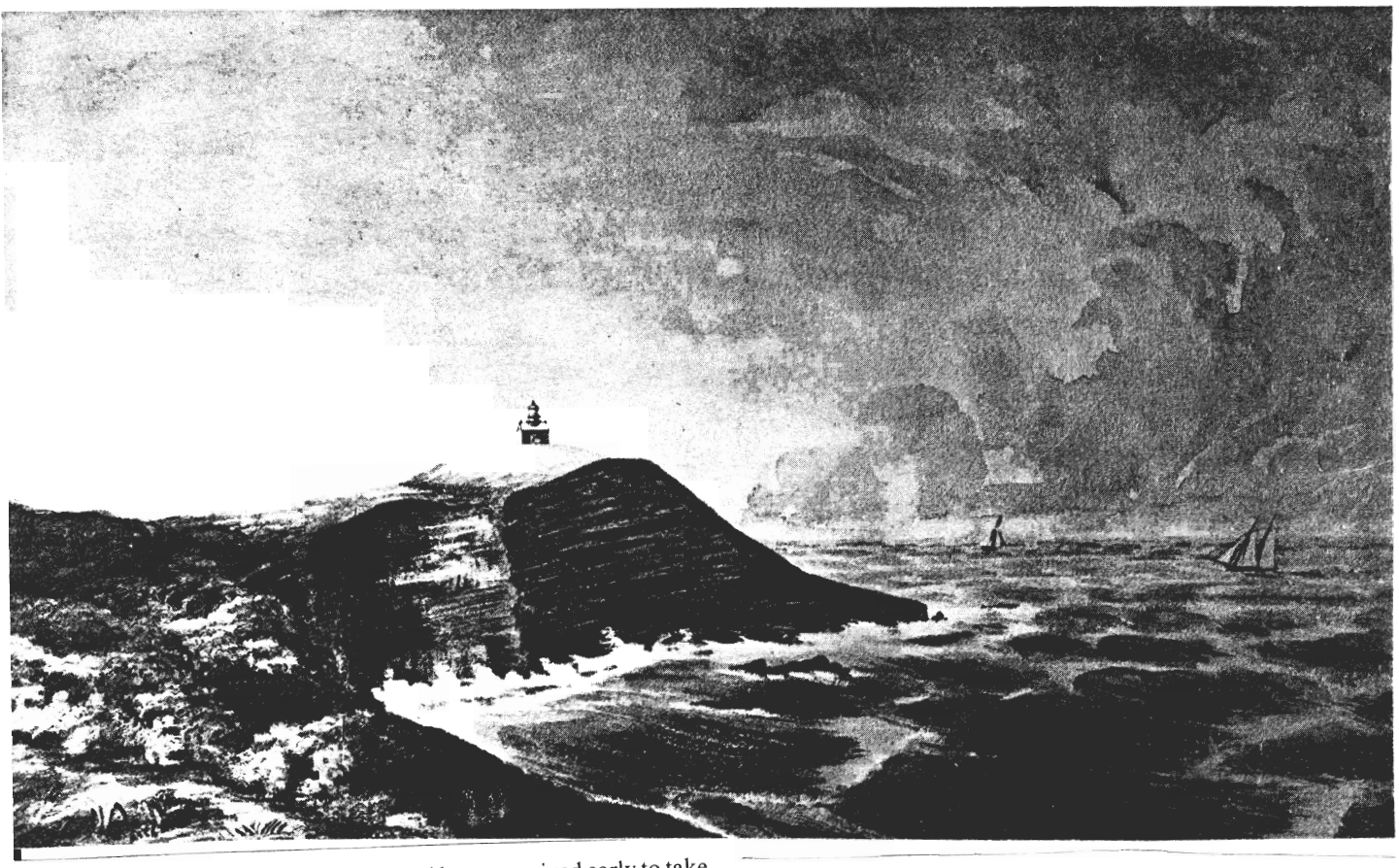
The Lighthouse Keepers of Point Concepion left the station on February 15, 1973. The station's equipment is now electronically automated and monitored by U. S. Coast Guard personnel at the Point Arguello Loran Station, on Vandenberg AFB, California. Only a grounds keeper and his family reside at the station now, a mute attestment to the heritage and tradition of those Lighthouse Keepers of yesterday - - - 117 years ago.

Written permission to visit the Lighthouse Station must be obtained from the: Commander, Eleventh Coast Guard District
Union Bank Building
400 Oceangate
Long Beach, Ca. 90822

Permission must also be acquired from the owner of the surrounding Ranchland in gaining access to the Point Conception Station.

*Point Concepion, relates to the original spelling of the location to keep in mind the true feeling and thoughts of those first Spanish sailors who named the Point, known today as Point Conception.

Point Conception lighthouse, California, about 1855. This structure was replaced by a new tower at a slightly lower location in 1882. This section of the California coast had a reputation as the "graveyard of the Pacific." After a sketch by Major Hartman Bache. *Photo 26-LG-65-9 in the National Archives.*



When George Parkinson, the assigned keeper arrived early to take his post, he found the lighthouse far from finished and curious Indians milling around inside. A few months later he complained to his superiors about spending much of his time having to nail on loose boards blown off by the incessant winds. He described his location as, "this dreadful promontory of desolation." He was still there in 1875 when large cracks developed in the lighthouse caused by the settling of the ground beneath the foundation. Parkinson, depressed with his situation, made minor repairs and when the inspector arrived he was horrified to see the deterioration, and recommended the authorities seek funds for a new lighthouse. Seven years were to pass before those appropriations were forthcoming, and none too soon. The new tower was constructed on the side of the primeval monolith, 100 feet lower than its predecessor permitting more freedom from the frequent prevailing high fog. At this writing, that tower, circa 1882, still stands in a nature-scarred sector of the California coast.

An important landmark sought out by the Spanish galleons crossing the Pacific from the Indies was bold Point Conception, sometimes referred to as the "Cape Horn of the Pacific." Rough seas, swift currents and unpredictable winds are common occurrences often encouraged by strong gales. A marked change in climatic and meteorological conditions prevail in the vicinity of the 220 foot headland, rising rather ominously at the west end of Santa Barbara Channel.

The 52 foot pioneer lighthouse was located 133 feet above the water and the construction period was fraught with problems. Contracted out to Gibbons and Kelly, the work got underway in 1854-55, but as the station neared completion, lighthouse inspector Bache, cried, "inferior workmanship," and made the builders tear down the tower and rebuild it; no cure, no pay. Only after all requirements were satisfied did the schooner *General Pierce* deliver the lens and lighting apparatus. While landing the equipment through the surf, damage occurred which delayed a planned Christmas 1855 target date for commissioning. Because of missing parts the lamp was not lighted until February 1, 1856.

At Point Conception the seacoast line of lights makes an abrupt 90-degree turn to the north to follow the coastline. It is a danger spot that has caught many a sailor with unhappy surprise. Straight south of it are the nine Santa Barbara Islands which were lighted as late as the mid-1920's. They are the islands Captain Watson was afraid of when he miscalculated his position, made his turn to port too soon, and piled his destroyers on the rocks.

When the weather is bad and the visibility low, the going can, indeed, be rough. On that part of the California coast, lighthouse keepers have recorded more than two thousand hours of fog a year.

On the beaches along Point Conception and Point Arguello are enough bleached or rusty bones of wrecked ships—that made the hard left turn too soon—to remind one of the Normandy beachhead after D-Day. Some of these accidents took heavy toll of lives as well as ships, large and small. Among them are large vessels such as the S. S. *Harvard* of long-time coastal fame and the Japanese *Nippon Maru*.

A gap of twelve miles lies between Arguello and Conception. The distance is shorter between Arguello and Points Pedernales and Honda to the north. The coast on both sectors—north and south of Point Arguello—is rocky, wave-swept, and rough. It was here that the seven destroyers already mentioned were beached in 1923.

August 25, 1977

ROUGH DRAFT

Reference - ASCE Historic Civil Engineering

Landmark 4 criteria to determine candidate eligibility.

1. Outstanding stature as a Civil Engineering feat or memorial.
2. Uniqueness.
3. Innovation of importance in design and construction.
4. Historical significance.

CANDIDATE: POINT CONCEPTION LIGHTHOUSE

Brief History

Original lighthouse was commenced in 1855, completed in 1856 at elevation 219 feet above mean high water. Premises established as a Naval Reservation by Presidential Order of October 1, 1851 (President Millard Fillmore). Reservation of 30 acres was purchased by the Lighthouse Service in 1881. Location: Latitude 34°36'49" North, Longitude 120°28'18" West.

The present lighthouse was relocated and rebuilt in 1880. (See photos). Focal plane - 133 feet above mean high water. This lighthouse has been in constant service for 97 years. Drawings for the existing 1880 lighthouse were prepared under the direction of Lt. Col. R. S. Williamson, U.S. Engineers Corp. Engineers 12th Lighthouse District, February 22, 1880.

The lighthouse has a first order lantern - Fresnel Lens used in original and 1880 lighthouses. It was constructed by Henri LePaute of Paris in 1854 and cost $65,000. Lens and tower were transported by ship around Cape Horn and unloaded at Coho Bay. Light Intensity: 1.5 million candlepower. Light Source: Original sperm whale oil lamp, kerosene lantern and today, 1000 watt mercury vapor lamp.

Qualifying Criteria

1. Qualifies for the 1880 period as an outstanding specialized structure.

2. Unique to its class. The 1880 Conception Lighthouse Plan was one of a kind.
3. Great construction challenge. Site remote.
4. Of considerable historical significance honoring a distinguished, ongoing service life.

Engineering Construction Parameters

A. Structural Design

1. 32 Foot concrete foundation base with 9' wide massive brick base walls reflecting structural design of period.
2. 15' high battered brick retaining wall, 20" at base, 12" at top.

B. Site Supply Logistics

Difficult transport. Ship at Coho Bay, wagon to site. Difficult materials handling problem at 1880 site. Site conditions - heavy winds and fog. Southern Pacific Railroad not completed in vicinity until 1901.

C. Developed - Support Facilities - Water Source - Storage Distribution (Eclipse Windmill 18' Diameter), 60,000 Gallon Brick Cistern Oil Storage - Boiler House structures for steam fog horns, etc.

D. Architecture - brick tower, granite sills and drip, copper roof.

E. Auxiliary Buildings - residences, stairways, cableways, etc. (See other notes and photos.)

Of Interest: Spiral staircase, unusual design - interior cabinetry and paneling of high quality.

AMERICAN SOCIETY OF CIVIL ENGINEERS

SANTA BARBARA - VENTURA BRANCH

POINT CONCEPTION LIGHTHOUSE AWARD

The Santa Barbara-Ventura Branch in conjunction with the Los Angeles Section of the American Society of Civil Engineers, presents this certificate of recognition for the Lighthouse at Point Conception to:

LT. KLAUS ADIE

Santa Barbara Group Commander, USCG, at Santa Barbara Headquarters, on behalf of the Commanding Officer and Personnel of the Eleventh Coast Guard District.

This impressive and utilitarian structure easily meets the basic criteria established by the National Society and fully qualifies for Historical Landmark Status.

Awards of Recognition are granted on a nationwide basis to selected projects, geographically located in the jurisdiction of the separate sections and branches of the Society.

Working drawings for the present Lighthouse structure were prepared by the Corps of Engineers. We believe the long term and cost effective service to the maritime public, the excellence of engineering design and the current, fine condition of this facility is a tribute to all those persons who participated in its creation, function and support.

Following intensive consideration and evaluation during a period of sixteen months, the American Society of Civil Engineers, the Los Angeles Section and this Branch, endorses and acknowledges the unique and valuable heritage of this worthy, regional asset, the Lighthouse and Reservation at Point Conception, Santa Barbara County, California.

For the Society and this Branch,

Russ Pyros

RUSS PYROS, Chairman
History and Heritage Committee

Santa Barbara
April 27, 1978

Point Concepcion Light

Thurs 4/28/77

Channing Peake
688-5507
688-7132

Coast Guard station

Bixby Corp - Coho Ranch - Surrounding Property

Ranch Supt. Brad Lundberg 736-7300 - Foreman

Security - Lee Mann 865-3664 - Resides near station

Hollister Ranch - Barry Gordon 968-1538 LNG

Nancy Kay - Mr. Murray LNG Attorney allen -

Route Hwy 101 - Hwy 1 to Jamala Beach Rd -

meet @ 9:30 AM @ Gate near RR Crossing

LT. JAY Schneider - CE - USCG

VS Coast Guard - Santa Barbara Base Sending Dwgs

Commander - Lt. Terrence O'Connell

96V-7430

805-865-3296-7-8

Guards men for Tour - Chief Bill Towne
Pt. arguello

Rob Swalley - office 966-7156 P&S Box 98 SB 93107

Res: 504 Consuelo Ave. 964-1970

Pt. Concepcion Light

1.5 Million Candle Power - 1000 Watt Mercury Vapor Light

Include Pt. Arguello Life Boat station

30 second

16-24 Brick Walls w plastered

Skirt of granite - arch Details - Windows - Wood Panelling

Corbelled tower - good Door & cabinet Hdwe

→ Dual Base - light + Life Boat station 1934-1953?

Pictures by Bob Swalley. 5/12/77 Going to Boat House

→ Letter to Mr. Wm. P. Fick, Deputy Base Civil Engr.
4392nd AEBOSG - BE
Vandenberg AFB, CA 93437

cc: Chief Officer Wm [illegible] - USCG Pt Arguello

Officer in charge
Loran Station
Pt. Arguello, CA 93437

8/23/77

Reference - ASCE Historic Civil Engineering (Rough Draft)
Landmark 4 criteria to determine candidate Eligibility.
1. Outstanding stature as a Civil Engineering feat or Memorial 2. Uniqueness 3. Innovation of importance in design and Construction 4. Historical significance — — —

Draft

Candidate: Point Conception Lighthouse —

Brief History - Oregonal lighthouse was commenced in 1855 completed in 1856 - at Elevation 219 feet above M^an H^igh W^ater Premises) Established as a Neval Reservation by Presidential order of Oct 1, 1851 - (President Millard Fillmore) - Reservation of 30 acres was purchased by the Light House Service in 1881 Location: Latitude 34° 36' 49" North Longitude 120° 28' 18" West. see photos
The Present lighthouse was relocated and rebuilt in 1880 - Focal plane 133 feet above M H W. This lighthouse has been in constant Service for 97 Years. Dwgs for the Existing 1880 Lighthouse were prepared under the direction of Lt. Col R. S. Williamson, U.S. Engineers Corp. - Engr. 12th ~~District~~ Lighthouse District, Feb. 22, 1880.
Light House has a first order Lantern - Fresnel Lens used in oregonal and 1880 Light Houses was constructed by Henri Le Paute of Paris in 1854 and cost $65,000^{00}$. Lens and ~~Housing~~ Tower were Transported by Ship around Cape Horn and unloaded at Cobo Bay. Light Intensity 1.5 million candlepower - Light Source oregonal Sperm Whale Oil Lamp, Kerosene Lantern and today 1000 watt mercury Vapor Lamp.

qualifying Criteria

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2. Unique to its class – The 1880 Conception LH Plan was One of a Kind.
3. Great Construction Challenge – Site remote
4. Of Considerable Historical Significance having a distinguished, ongoing Service Life" –

Engineering / Construction Parameters

A – Structural Design

1. 3½ foot concrete foundation Base with 9' Wide massive Brick Base Walls reflecting structural design of Period.
2. 15' high Battered Brick retaining Wall 20" @ Base 12" at top

B Site Supply Logistics – Difficult transport – Ship at Coho Bay – Wagon to site – Difficult materials handling problem at 1880 Site. Site conditions – Heavy Winds and Fog. SP Railroad not Completed in Vicinity Until 1901.

C. Developed – Support facilities – Water Source – Storage Distribution (Eclipse Windmill 18' Diam) 60,000 Gal Brick Cistern Oil Storage – Boiler house structures for Steam fog horns etc.

D. Arch – Brick Tower, Granite Sills & Drip, Copper Roof.

E. Auxiliary Bldgs – Residences, Stairways, Cableways etc.

→ see other notes & Photos

of Interest –

Spiral Staircase unusual design – Interior Cabinetry and Panelling of high Quality.

County memo denounces plans for the LNG port

By Robert H. Sollen
News-Press Staff Writer

The two county planning staff members in charge of preparing the county's local coastal plan have denounced plans for a liquefied natural gas (LGN) port near Point Concepcion.

They say they are especially upset about proposed legislation that would take the county government out of the site selection process.

The memo was written by Kim Skinnarland and Paul Relis who are working on the local coastal plan that is required under the state Coastal Act of 1976.

They said they are concerned about the possibility of state pre-emption of local authority, the safety of the LNG port, and the need for such a facility.

The proposed plant at Cojo Creek four miles east of Point Concepcion would import and store the gas in liquid form, regassify it and ship it out via pipeline.

Such a plant near Point Concepcion would almost surely mean additional development in the area, Miss Skinnarland and Relis said.

"This pre-emption (of local authority) would be most critical to the county," their memo said, "since the site . . . is presently general planned and zoned for open space and agriculture. A decision made by the state to convert this land to heavy industry could effectively destroy much of the land-use planning effort carried on over the last several years and may create dangerous precedents for other energy-related facilities within the Santa Barbara Coastal Zone . . .

"It would be naive to assume that development in the Hollister Ranch area will cease with the construction of an LNG facility. Economic considerations alone would indicate the desirability of locating other industry nearby to use the 'cold' produced by the revaporization process . . . Since Southern California Edison Co. owns an additional 775 acres immediately adjacent to the proposed LNG site, the potential for LNG ancillary industries exists."

The memo, addressed to Al Reynolds, county environmental co-ordinator, said that the state has failed to explore the potential of energy conservation and alternative energy sources, such as solar, that might eliminate the need for LNG imports.

Miss Skinnarland and Relis recommend that the county not approve an LNG port at the site "unless there is a demonstrated state and national need, and only after all alternatives such as solar and energy conservation have been thoroughly studied and determined to be infeasible."

Western LNG Terminals has applied for permits to build ports at Point Concepcion and Los Angeles. State legislation expected to be introduced soon will strongly recommend the consideration of offshore sites, perhaps one of the Channel Islands, as a preferable alternative to the mainland areas.

The local coastal plan that Miss Skinnarland and Relis are preparing will mesh all county master plan elements and zoning ordinances with the state Coastal Act. After the local coastal plan is certified by the Coastal Commission, the county will be authorized to process applications for coastal development projects, taking over this task from the commission.

Bill introduced that boosts Pt. Concepcion as LNG site

A long-anticipated bill by Assemblyman Terry Goggin (D), San Bernardino, was introduced today that appears to vastly increase the possibility of a liquefied natural gas (LNG) port at Point Concepcion.

The bill would practically rule out a site in a populated area in favor of an offshore or remote site.

The only remote site presently under consideration is Point Concepcion and the Goggin bill would require the state Coastal Commission to determine whether an offshore plan could be built within a reasonable time.

If not, it appears that only Point Concepcion remains as a suitable site under the proposed legislation.

Western LNG Terminals has filed applications for permits for LNG ports at Oxnard, Los Angeles and Point Concepcion.

County offers assistance on review of LNG terminal

The Board of Supervisors yesterday agreed to offer the county's services to the Federal Power Commission (FPC) if that agency is asked to do an environmental review of a proposed offshore site for a liquefied natural gas terminal.

But the board made it clear that its offer was not to be interpreted as an endorsement of any terminal site or, for that matter, the need for more LNG at all.

The action came at the suggestion of Albert Reynolds, county environmental co-ordinator.

Reynolds pointed out that the Brown administration is pushing for selection of an LNG site by next January. Up until recently; three onshore sites — Los Angeles, Oxnard and Point Concepcion — have gotten most of the attention.

But last week, Terry Goggin (D), San Bernardino, chairman of the Assembly's energy subcommittee, said he will seek — with or without Brown's backing — legislation to locate the terminal offshore.

If that is the case, the Santa Barbara Channel Islands or an offshore site nearby would be a prime location.

So far, Western LNG Terminals, Inc., representing the utility companies applying for the California site, has not sought an offshore project.

If it did, it would have to apply to the FPC because any pipelines to the mainland would have to be routed through federal waters.

Western has estimated that an environmental impact report (EIR) from the FPC could take as long as three years to complete. It has already waited four years for a decision on an onshore site.

Reynolds told the board yesterday that, if the state is going to push for an offshore site, then it would be to everyone's advantage to have all the environmental data on such a site as soon as possible.

This, he said, is where the county — which is now hiring consultants for a Point Concepcion EIR that will take touch on possible offshore sites as alternatives — can be of help.

Reynolds suggested that the county ask the FPC if it could "work legally" with his office in preparing the offshore EIR.

Reynolds thinks that if the FPC could build an expanded county EIR if and when Western applies for an offshore site, then the review process would be faster and guarantee local input into it.

His letter to the FPC making that request was what was before the board yesterday.

But speaking from the audi-

See Page B-2, Col. 4

Editor, News-Press: We are writing about the proposed building of a liquefied natural gas facility at Point Concepcion. We are writing out of desperation and fear that this site will be chosen. We are strongly against the Point Concepcion site. We hope that you have seen the point, its beauty and majesty. We cannot understand how anyone could be so wanton as to want to destroy and so alter this area.

Our California coastline is precious and beautiful and rare. Santa Barbara is so often looked to as an example of wise planning, an area of conservation and ecological consideration. We must help preserve this tradition. We have heard many objections based on economics, scientific research, safety etc., objections with great validity, but we must all somehow avert this tragedy.

Mr. and Mrs. David A. Kay
1564 W. Valerio St.

7 citizen units vow to fight LNG port 4/2/77

By Bob Sollen
News-Press Staff Writer

Seven Southern California citizens groups yesterday banded together to present a common front against any liquified natural gas (LNG) ports on or off the state's coast.

Three Santa Barbara organizations were among those that met in Oxnard to draft a preliminary policy statement that said that alternative sources of energy should and could be developed that would more than make up what LNG is expected to provide if coupled with an energy conservation program.

The statement adopted unanimously by the groups' representatives said that LNG technology is not acceptable on environmental, safety or economic grounds. It is dangerous, extremely costly and ecologically detrimental, the group agreed; and above all, unnecessary.

Among the group's major objectives, in addition to defeating any attempt to build a southern California LNG port, is to prepare a summary of the many studies that have concluded that LNG is not necessary if energy conservation and the development of alternative sources — primarily solar — are carried out.

The new association also will prepare a statement intended to show that more jobs would be created by developing solar and other energy sources than by building LNG ports.

Represented at the three-and-a-half-hour meeting were the Point Concepcion Preservation Committee, the Coalition Against Oil Pollution, and Hollister Ranch residents, all of the Santa Barbara area; the Ventura County Concerned Citi-

See Page A-12, Col. 1

Southland groups unite to fight LNG

Continued from Page A-1

zens Committee, the Point Fermin Homeowners Assn. of San Pedro, the Campaign Against Utility Service Exploitation, (CAUSE), of Los Angeles, and the California Public Policy Center, based in Los Angeles.

The new group did not adopt a name, but titles such as California Citizens for Alternative Energy Policies were discussed. The group will meet again April 23, probably in Los Angeles.

Western LNG Terminals has applied for permits for ports at Point Concepcion, Oxnard and Los Angeles. Legislation is being drafted that puts a high priority on an LNG port off the mainland, either on one of the Channel Islands or on a man-made island in the state waters near one of the islands.

Some persons came to yesterday's meeting in Oxnard tending to favor the offshore proposal. But the group decided that it would stand firm in opposition to LNG ports anywhere, at least until it becomes obvious that there definitely will be one built along the southern California coast. If that time arrives, they said, they will reassess their position.

Gov. Brown is pressing hard for a permit approval for a site somewhere, before the

ly committed as he professes to be.

The new coalition agreed that it would oppose any weakening of the LNG premit review process in the name of efficiency or expediency. It also opposed any move to take away local authority in site-selection decision, and agreed to press the Federal Power Commission for West Coast hearings on the port site applications.

The organization agreed to draw up common petitions against LNG ports for the entire state. The Ventura County group already has 11,000 signatures of persons opposing the LNG site in Oxnard. The coalition agreed that all the local groups would work together and not simply campaign to get any proposed LNG port moved from its area to another.

Among its research will be a study of possible conflict of interest among local and state officials involved in LNG port site selection. There were rumblings that some officials might stand to gain financially by the siting of such a port in California.

Attending the meeting from Santa Barbara were Phil Marking of the Point Concepcion group; Murray Lewis of the Coalition Against Oil Pollution;

OUR READERS' VIEWS

Disastrous site for LNG facility

Editor, News-Press: Open letter to public officials: This letter to you is to voice my outrage at the possibility that a massive industrial liquefied natural gas (LNG) facility will be built at Cojo Bay adjacent to Point Concepcion. I am a carpenter and live, work and own property on the Hollister Ranch. My property happens to be about one mile directly behind the proposed LNG site; from my land I look directly down on Cojo Bay.

This coastal region is a wild, pastoral area unspoiled by commercial or industrial development. I am certain that if this LNG facility receives governmental approval and is built, the pristine nature of this area will be destroyed forever.

Unique and abundant marine life, waterfoul and many wild mammals, including deer, bobcat, wild boar and mountain lion, habitate this region of the California coast. The California grey whales on their annual trek, first to the south then north again with their newborn offspring, pass within a few miles of Point Concepcion. While surfing in this area, I have seen grey whales within 150 yeards of the shoreline.

This LNG port, which will take three years to complete, includes a 40 foot high, one mile long pile support trestle pier with a "T" section at its end for berthing two giant LNG supertankers that will be arriving daily from Alaska. Included in the port facility will be a breakwater and small boat harbor for tanker tugs and a seawater intake system for the onshore plant. All of this construction will require large scale undersea dredging and coastal landscape alteration.

The onshore facilities will include large holding tanks for fuel oil and gasoline, regasification plants, industrial shop and warehouse facilities, and four 10-story high holding tankers for the regasified natural gas.

READERS' COMMENTS

We want them — we like them — we believe our readers like them. The editors will select letters for use on the basis of their merit on a subject of current interest. Keep them to 250 words or fewer so we can print as many as possible. Sign them, please. Letters will be printed only with signatures except in unusual circumstances. Be fair. Be factual. Disagree if you must, but try not to be disagreeable.

The regasification plants will use 200,000 gallons of seawater per minute during regasification processsing. This intake water will have a biocide added to it to kill microscopic marine organisms so they will not foul up the regasification machinery. Hundreds of millions of gallons of this water chilled seven or eight degrees below intake temperature and harboring a supposedly "neutralized" biocide will be discharged daily back into the sea.

This LNG project also includes a 150 mile pipeline from the port facility to Arvin. This pipeline, consisting of dual 48" diameter pipes, will cross much rural farmland, parts of Los Padres National Forest and cross or come close to some potential earthquake faults.

Can you foresee the devastation this horrendous project will render on the marine and coastal ecology and terrain? What of the disruptions to wildlife from the port and pipeline construction? The wild, untouched state of this coastal area will be gone.

If there must be a LNG port in Southern California and remote siting is of major importance due to fire and explosion hazards associated with LNG, an alternative site to the Pt. Concepcion facility must be found. San Clemente Island, Camp Pendelton, or Vandenberg Air Force Base could have possible sites. All of these places have miles of open space with very low population densities. LNG tankers routing outside the Channel Islands and, therefore, outside the Santa Barbara Channel to any of these alternative locations would greatly reduce the risk of a major LNG tanker accident due to ship collision.

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS:
COMMANDER (e)
ELEVENTH COAST GUARD DISTRICT
UNION BANK BLDG.
400 OCEANGATE
LONG BEACH, CA. 90822

5750
10 May 1977

RECEIVED
MAY 17 1977
Russ Pyros

Mr. R. Pyros
P.O. Box 98
Santa Barbara, CA 93102

Dear Mr. Pyros:

I am pleased to learn of your interest in nominating the light tower at Point Conception Light as a California historic civil engineering landmark. The construction of the present tower in 1880 was an achievement in construction considering the remoteness of the site and nomination by the American Society of Civil Engineers is an appropriate honor.

Several documents are enclosed which should be useful in supporting your nomination of the light tower. The construction drawings clearly show the craftsmanship and detail quality of the tower structure. The topographic plan, photographs and station description provide an overview of the station location, the associated station buildings and the aid-to-navigation equipment utilized in the light tower. The present tower is not the original Point Conception Light, but the replacement for one built in 1855. I have also included construction drawings for the original tower so you have a more complete record of Point Conception Light.

If you need any additional information about the light tower, please contact LT Jay Snyder (A.M. ASCE) of our Civil Engineering Branch at (213) 590-2250.

Sincerely,

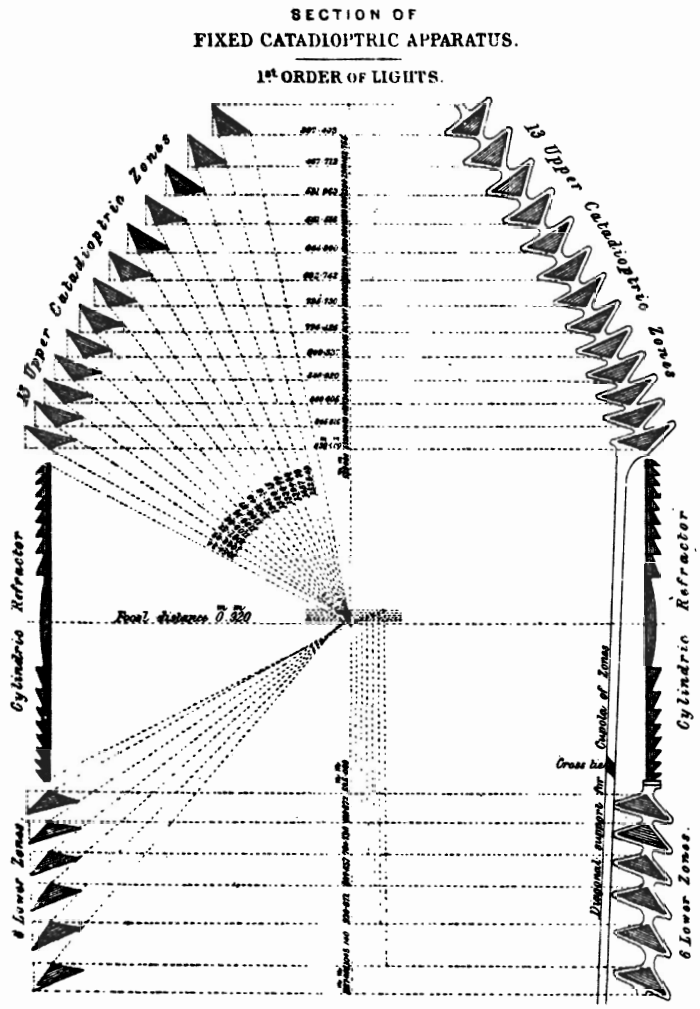
W. W. WHITE
Captain, U.S. Coast Guard
Chief, Engineering Division
By direction of the District Commander

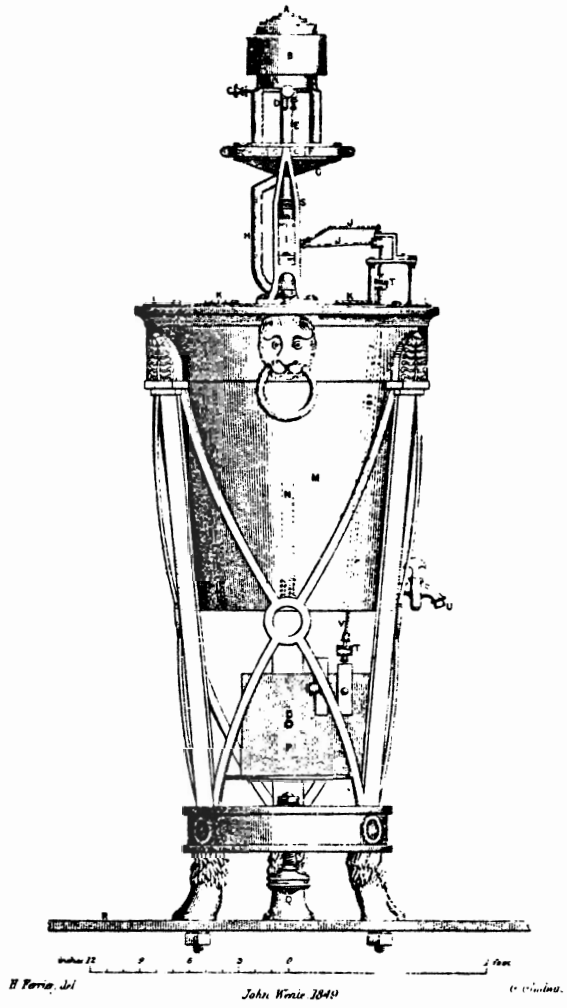
Encl:
(1) Description of Pt. Conception Light Station of 20 January 1912
(2) Photographs (six) of Pt. Conception Light Station taken January 1894 (two copies each)
(3) (SC) Pt. Conception Light House drawing dated 1855, sheets 1 to 3
(4) (SC) Pt. Conception Light House drawing dated 1880, plates A, B & C
(5) (SC) Topographic Plan, Pt. Conception Light Station, California dated 23 November 1904

Fresnel died of tuberculosis on July 14, 1827.

The undulatory theory of light enunciated by Hooke was extended to a large class of optical phenomena and permanently established by brilliant discoveries and mathematical deductions of Fresnel. In conjunction with Arago, he discovered that polarized rays when similarly polarized affect each other as do ordinary rays, yet when rectangularly polarized have no power of interference. He succeeded in obtaining circularly polarized light by means of a rhomb of glass, known as "Fresnel's rhomb," having acute angles of 54 degrees and obtuse angles of 126 degrees. His labors in the cause of optical science received little attention during his life, and many of his papers were not printed until after his death.

Through a long evolution of lighthouse optics, man finally reached the point of near perfection. But, by that time, the importance of the light took a back seat to new electronic navigation wonders of our space age.





Section of a fixed catadioptric apparatus, first order, and at right, a mechanical lamp for first order dioptric lights of British make.

Point Adams Light 1875-1899
Columbia River

Cape Disappointment Lighthouse (Hancock)

Fort Canby guns - 2.300lb Parrott Smoothbores

3-10 Inch Rodmans

(e)

5750
10 May 1977

Mr. R. Pyros
P.O. Box 98
Santa Barbara, CA 93102

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Encl:
(1) Description of Pt. Conception Light Station of 20 January 1912
(2) Photographs (six) of Pt. Conception Light Station taken January 1894 (two copies each)
(3) (SC) Pt. Conception Light House drawing dated 1855, sheets 1 to 3
(4) (SC) Pt. Conception Light House drawing dated 1880, plates A, B & C
(5) (SC) Topographic Plan, Pt. Conception Light Station, California dated 23 November 1904

Copy to: Commander, CG Group Santa Barbara (less encl)

1923 Capt. Holland 1923 p-1

Thi Sept 6, Pacific mail liner Cuba went ashore in a fog on sand bar west of Point Bennett San Miguel Island at 4 30 a m. Two boat loads of passengers and crew were picked up by the U. S. Torpedo boat, U. S. Rowe Ensign J. A Kelly Espied the two life boats with 22 and 24 passengers respectfully at 135 P M saturday and at 2 P M the wreck was located. The fog that caused the Cuba to strike the rocks or sand bar. Also saved the lives and passengers and crew was shown by the story related by Commander Barry of the U. S. Rowe, which picked up the survivors, they were scheduled to have passed down on the inside channel However the fog was so thick that I took the outer channel for safety. By what means the two life boats were sighted. The passengers were taken to San Pedro Calif No lives were lost.

The dangerous operation of transferring the passengers that landed on San Miguel Island to the U. S. Rowe was under the supervision of Commander Paterson as one of the first boats landed there from the Cuba. There was $ 2.500,000 bullion on the Cuba which was saved in the salvage operations.

1923.

Sat Sept 8

U. S. NAVY WRECK.

At Point Pedernales or Point Honda on Pacific coast Three miles north of Pt Arguello on saturday night sept 8-1923 Seven U. S. Destroyers were wrecked by running on the rocks at 9.07 P M all running aground at intervals of two and three minutes and at 920 P M the last of the seven were on the rocks, High seas and a heavy fog. Twenty two lives were lost Eleven hundred and seventy men including officers were on the ships The boats were the Delphy the Young, Chauncey, Woodbury, Nicholas, J. D. Lee, and Fuller The

Crew [illegible] of Capt Edward Watson. $10,000,000 loss P-2
600 men were brought ashore by the use of raft and buoy
In point of number of ships the seven destroyers
lost at Point Honda, marks one of the greatest
losses ever suffered by the navy in a single disaster.
There were five men saved by the keepers of Pt Arguello
Light Q. J. Olsen Keeper A. A Settles 1st Asst J. C. Mygrants 2nd Asst the
men came floating by on a raft about 1030 PM and keeper on
watch heard them shouting calls of distress, were with difficulty
hauled up over the steep rugged rocks, and cliffs, in the darkness
with only the light of a hand lantern. They were made comfortable
and given medical assistance being bruised and exhausted.
The Navy Department and Department of Commerce commended the three
keepers for the assistance rendered on this occasion.

1923

Mon Sept 10 Total eclipse of the sun at Point Conception
High fog the eclipse was visable at times
through the fog. But at the total eclipse the
corona was not visible and the thick high
fog covered the total eclipse it was very dark
for two minutes 50 seconds the eclipse started soon
after 11 a m and was over at 1 PM.

REGISTER of Visitors at Point-Conception Light-Station. 1893

DATE. 1893	NAME.	RESIDENCE.	ADDRESS IN—
March 18	L. Morton Nichols	Los Angeles	Ocean av.
March 18	Mrs. L. Nichols	San Francisco	47 Port. St.
" 31	Henry I. Sheldon	Chicago	363 Erie Street
April 3rd	Mrs. Meldrum Wife	Wrecked from a sailing ship "Henry James" of Glasgow	

from Newcastle N.S.W. with a cargo of coal bound for San Francisco wrecked 2 1/2 Miles from Point Conception left ship on the morning of March 31st at midnight and landed here at 9 a.m. on April 3rd 1893.

Charles H Cumming 3rd Mate of the above Ship (Relief St. Lazaire Office No. 83 Stores late learned that the boat commanded by the captain was caught in a high wind and was capsized and all fresh water and food lost. After boat was righted the men did not attempt or want out of their minds and promptly overboard until only the captain and two men left they drifted so close to the Santa Barbara Islands that one of the survivors could swim a short and was picked up by Chinese fishing sloop boarder who carried Brown to ranch house. But before [illegible]

April 3	David Kay	Steward	
" "	Adam Engus	"	
" "	Harry Kay	"	
" "	Thos Sinclair	"	
" "	Alex Brown	O B	
" "	William Smith	" "	
" "	Chas Lenfest	" "	
" "	Geo Conway	" "	
" "	John O'Neil	" "	
" "	Henry Ellis	" "	
" "	Chas Clark	" "	

POINT CONCEPTION, CALIF.

THE TEXT OF THE SHIPWRECK

From Newcastle _____ with a cargo of coal bound for San Francisco wrecked 218 miles from Point Conception left ship on the morning of March 31st at midnight and landed at 7 am here on April 5th 1893

Charles W, Cummings 3rd Mate of the above ship ---elvie St. Tayfront Ship M.B. It was later learned that the boat commanded by the Captain was caught on a high wind and was capsized and all fresh water and food lost After boat was righted the men died one at a time or went out of their minds and jumped overboard until only the captain and two were left. They drifted so close to the Santa Cruz islands that one of the survivors swam a shore and was picked up by a sheep herder who carried the news to the ranch house. But before they could get news to the mainland the boat was picked up off Ventura, California.

(apparently, Cummings was the survivor who swam ashore and must have been delivered to the mainland at Point Conception.)

(From rereading the first paragraph....the wreck occurred prior to March 31st...that's the date he left ship after they had been adrift for so many days)