The Delaware River was marked with more range lights over the next decade and by 1915 the last set were constructed forming an unbroken chain of ranges from Ship John Shoal to Philadelphia, the longest continuous set of dredged channels for ocean going vessels. One of the first set of range lights on the West Coast of the United States was that consisting of the Alcatraz and Fort Point Lighthouses. The lanternroom of Fort Point was located (on the parapets of the Fort) some 85 feet above the water. The Alcatraz light was displayed 168 feet above the water over 2¼ miles east of Fort Point. These two lighthouses, two of the first eight constructed on the west coast by the way, formed a range which guided the mariner through the dangerous San Francisco Bar Channel.

Today range lights are precisely established using a scientific formula. The lateral distance between the front and rear structure and the vertical distance between the front and rear lights (and dayboards) is predicated on the distance from the front structure to the channel edge, the length and width of the channel as well as the height of eye of the mariner. A range constructed for small fishing vessels is quite different than that built to assist ocean going cargo ships where the master is some 85 feet above the water. The candlepower of the lights must also be carefully calculated. Too much candlepower in the front range could cause the rear light to be lost in the glow.

Although most range lights have, over the years, been unattended aids to navigation, there have been important range lights watched over by keepers where the rear structure was in fact a large lighthouse displaying a directional beam. One such structure is Finns Rear Range Light in Pennsville, N.J.



FINNS POINT REAR RANGE LIGHTHOUSE

by Kim M. Ruth

Over two hundred people turned out recently at ceremonies commemorating the efforts of the "Save the Lighthouse Committee" for bringing about the restoration of the Finns Point Rear Range Lighthouse in Pennsville, N.J. A plaque was also unveiled marking the event at the 108 year old lighthouse.

Present at the ceremonies was Dick Nugent, who is the Tinicum National Environmental Center Refuge Manager, and under whose jurisdiction the lighthouse falls, Mayor James Gallagher of Pennsville, a strong supporter of the "Save the Lighthouse Committee," Congressman William J. Hughes, who is credited with seeking the Federal funds for the restoration project, and Mrs. Betty Husarik, a local businesswoman, who was the spearhead and motivation of the Committee.

The 115 foot tall lighthouse was built in 1876 of iron. The site was chosen to mark the river channel from Bombay Hook to Reedy Point. Thomas Dickinson, on whose land the lighthouse was to be built, had no desire to sell his land, but did express a desire to be a lighthouse keeper. He refused to sell the tract unless he was made the keeper of the light, and though at first his demand was refused, the Government later relented, and granted his request.

Sections of the lighthouse's tubular column were carted to the site by mules, and its construction was supervised by the U.S. Army Corps of Engineers. One hundred and twenty-seven steps had to be climbed to reach the base of the light, a kerosene vapor lamp which emitted a 150,000 candle-power fixed beam.

The property was divided by an Executive Order on February 4, 1935, part of the tract being given to the Department of Agriculture for biological surveys.

The light was tended until 1939 when it was made an automatic, after which it was serviced by the Deepwater front range lighthouse keeper.

On March 22, 1950, the light in the iron tower was discontinued. Later the next year, on June 18, 1951, the property was declared excess and was turned over to the General Services Administration for disposal. The property was delegated to the



Finns Point Rear Range Lighthouse is now the property of the U.S. Fish and Wildlife Service. The lighthouse guided ships through the Upper Delaware Bay from April 2, 1877 to March 22, 1950. It was through the efforts of private citizens that the 115-foot lighthouse tower was listed on the National Register of Historic Sites on August 30, 1978.

U.S. Department of the Interior, Fish and Wildlife Service, where it became part of the Killcohook National Wildlife Refuge.

In the years following its decommissioning the lighthouse and property was the subject of much vandalism. Vandals succeeding in burning down the keepers home in 1975, only a paint shed remains of the original buildings.

During the Bicentennial, interest was expressed in restoring the lighthouse. At that time, the thought was for the township to purchase the lighthouse and move it to nearby Riverview Brach Park. Interest in that idea waned however, but the lighthouse was not forgotten. In 1978, the Finns Point Rear Range Lighthouse was placed on the National Register of Historic Sites.

In 1981, the "Save the Lighthouse Committee' was formed, badges were made, petitions circulated, and the group got on a bus and went to Washington, where Congressman William Hughes was presented with a petition of more than 1100 names interested in the restoration of the lighthouse. Also present were representatives of the Department of the Interior. By 1983, funds for the restoration of the lighthouse were appropriated. The lighthouse, which cost only $1,200.00 to build in 1876 cost $33,199.00 to restore.

The contract for restoration of the light was awarded on August 3, 1983 to K & K Painting of Baltimore, Md. Sandblasting, painting, and masonry reconstruction began shortly thereafter and was completed in December.

The lighthouse was also given interpretive panels, as well as the plaque, at the ceremony. The future of the Finns Point Rear Range Light is still to be decided, as well as the amount of accessibility the public will have to the lighthouse. The possibility exists that it might become a museum, perhaps opening this summer.

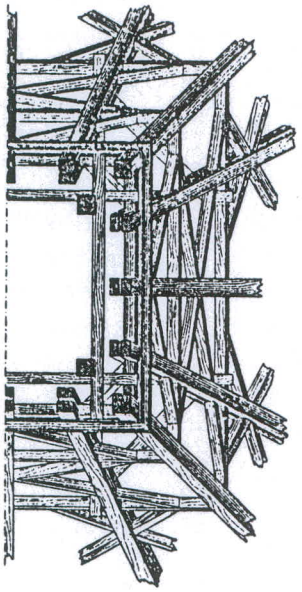


Fig. 4.

Fig. 2.

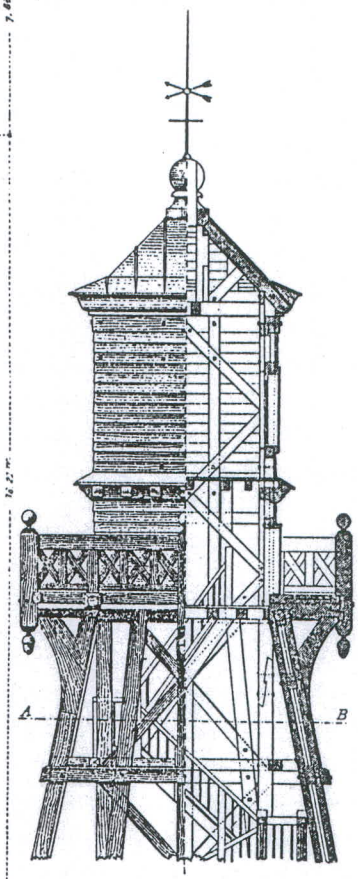


Fig. 3.

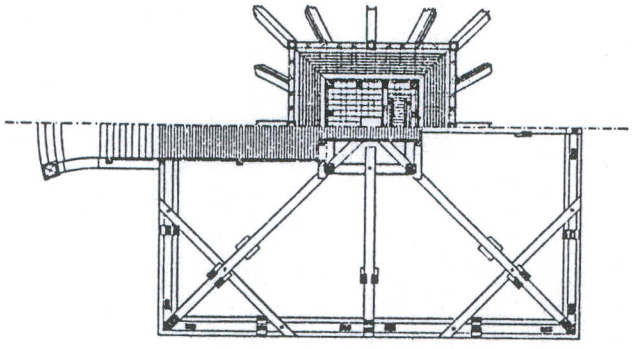
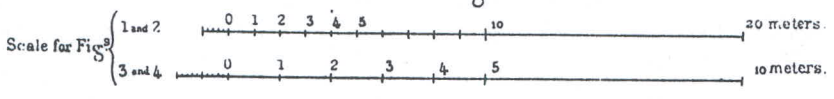


Fig. 1.



Wooden mid-19th Century French Range Light. This structure was constructed in such a manner that it could be disassembled and moved as the channel shifted due to shoaling.