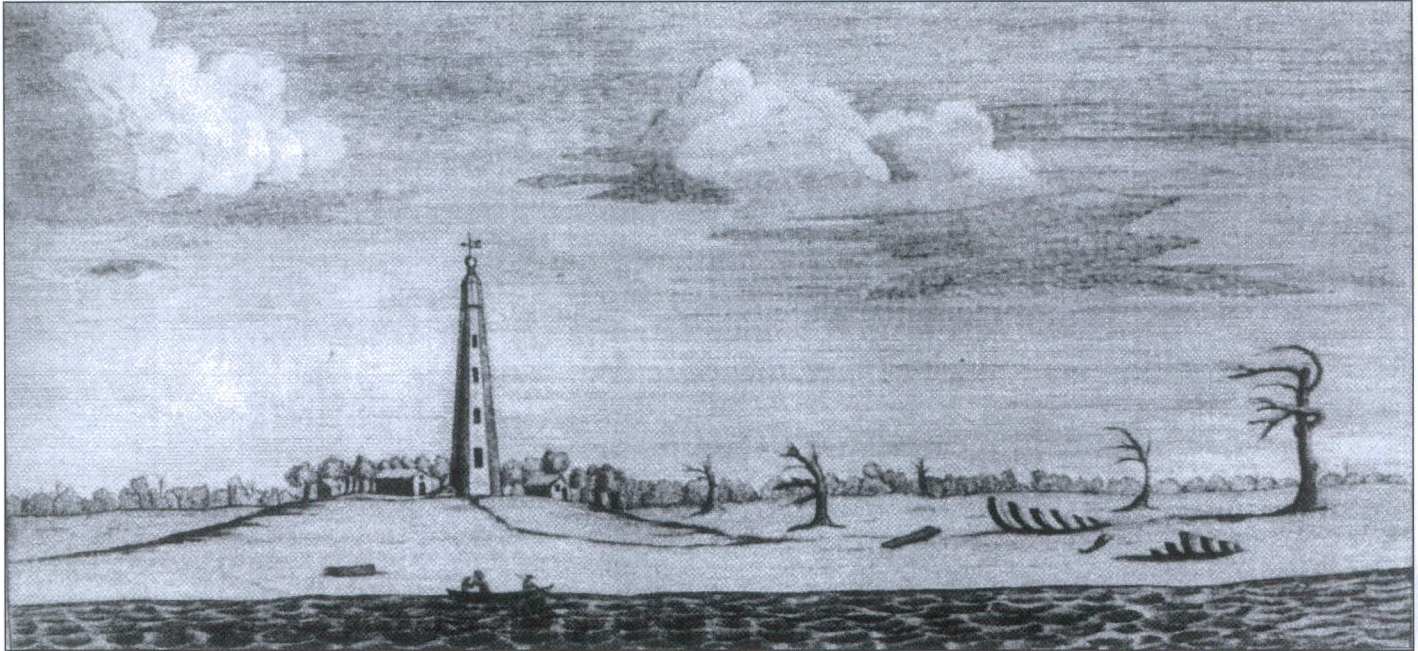


CAPE HENLOPEN LIGHTHOUSE - 1764

By Wayne Wheeler

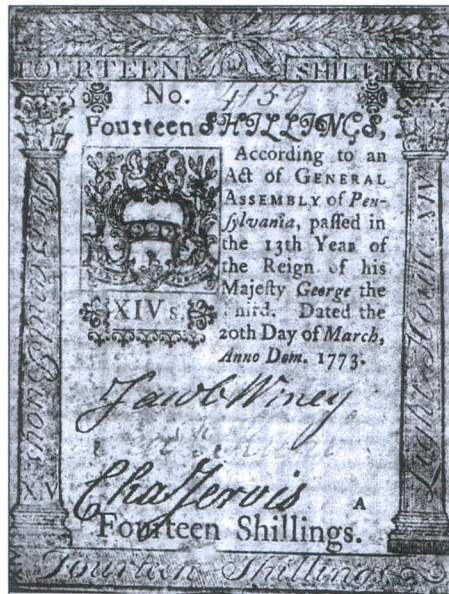


A view of the lighthouse on Cape Henlopen; taken from sea, August 1780. USLHS archives.

The Cape Henlopen Lighthouse was the fifth lighthouse constructed in the Colonies, completed in 1764, the same year as the Sandy Hook Lighthouse in New Jersey. The story of the Cape Henlopen Lighthouse is one of sand: eroding sand, accreting sand, shifting sand, sand seeping into the keepers' dwelling and the tower, and amassing sand. Sand amassed in such large amounts that at times it piled up against the dwelling to the extent that the keeper's children could exit via the upstairs windows and slide to the ground.

From the time of its construction in 1764, until it succumbed to the elements in 1926, the lighthouse was constantly bedeviled by sand. There is some evidence that during the early years of the lighthouse the situation was not as bad as in later years because of the vegetation (grasses, shrubs, and trees) that surrounded the lighthouse. However, like most rural properties in the 18th and 19th centuries, the families kept animals: cows, pigs, and a horse. At Cape Henlopen the animals eradicated the ground cover, which eventually caused the problems with the sand and contributed to the erosion of the bank.

In the 18th century, Boston, Philadelphia, and Charleston were the major seaports.



Copy of note issued by the state of Pennsylvania to pay for the construction of the Cape Henlopen Lighthouse. USLHS archives.

While Boston and Charleston are situated close to the Atlantic, Philadelphia is tucked far inland, up the Delaware Bay and River. But like the other two primary seaports, mariners needed a guide to the entrances of its ports. Boston obtained its light in 1716; Charleston (on Morris Island) in 1767; and

the Cape Henlopen Lighthouse, showing the entrance to Delaware Bay, in 1764.

The first mention of this lighthouse is in an advertisement in the *New York Mercury* of January 4, 1762, which announced, "A scheme of a lottery for raising £3,000s to be applied to erect a lighthouse on Cape Henlopen and otherwise to facilitate the Navigation of the Delaware." The balance consisted of a sum taken up on loan, paid by the proceeds from duty on tonnage from vessels calling at Philadelphia and other ports along Delaware Bay. The total cost was £11,395. There is also a record of a patent signed by John Penn granting 200 acres of land to the commissioners of the Province of Pennsylvania for erecting this lighthouse, even though it was situated in Delaware. The construction of the Sandy Hook Lighthouse (initially called the New York Light) was also partially funded by a lottery (conducted by the merchants of New York City) and, like Cape Henlopen, was located in another state, New Jersey.

The tower was constructed at the top of a bank, at the time some two-thirds of a mile from the end of the cape and the entrance to Delaware Bay. The octagon design (used for other Colonial lighthouses) was constructed of ashlar stone, laid in courses, and filled with rubble stone. The

original staircase and platforms were constructed of wood, the lantern was the old "bird cage" style with small windows and a hammered copper dome. The tower was 93 feet from the base to the top of the lantern. Eventually the interior was lined with brick.

In 1777, during the Revolutionary War, the British vessels were patrolling (blockading) the mouth of Delaware Bay. At some point they were in need of provisions and a number of cattle were spotted in the vicinity of the lighthouse. An officer from one of the vessels was rowed ashore and confronted the keeper about his cattle and the need for fresh provisions. Keeper Hedgecock rebuffed the officer saying, "If you don't get out of here, I'll give you some bullets."

According to the story, the officer returned to the ship, obtained reinforcements, and returned to the lighthouse only to find that the keeper had driven his livestock into the woods. The British, fearing there might be Colonials lying in ambush, decided not to pursue the matter. However, before departing they set fire to the lighthouse. The fire destroyed the wooden staircase, lantern, and reflector system.

The lighthouse and site were always a concern for their preservation. As far back



Keepers' house at the Cape Henlopen Lighthouse in 1895. The following note accompanies this photo in the USLHS archives: "This is the second house, built on top of the previous one. This is the great sand dune extending along the coast for three miles or more. It is like the drifting snow. The wind blows very hard at this point making the constant use of the shovel to get in and out doors. A new piece of glass put in the windows is ground by night." USLHS archives.



The Cape Henlopen Lighthouse as it appeared in 1906. Photo from the collection of Robert J. Lewis.

as 1788, a committee of wardens reported to Benjamin Franklin, president of the Pennsylvania Council, that the land in the vicinity of this lighthouse "... they observe to be so changeable from the strong currents of wind, that within these few years, where there have been deep ponds, there are now moles considerable high." Measures were taken from time to time to protect the building from the encroachment, or cutting away of the sand.

As we have reported in *The Keeper's Log* in the past, (see Volume 22, Issue 3) the Ninth Act of our first Congress transferred the existing 12 Colonial lighthouses from the states to the new federal government. However,

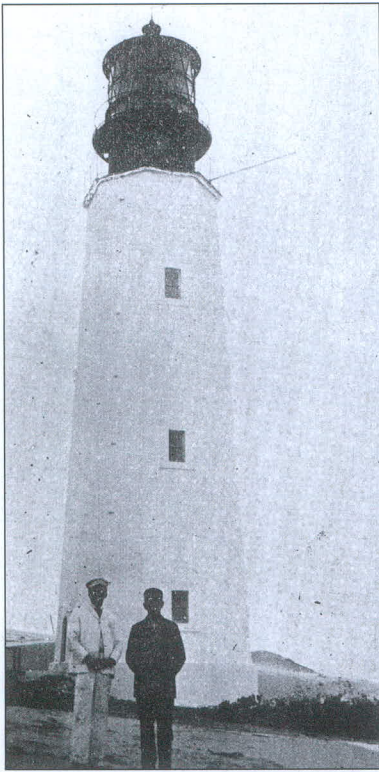
the states were reluctant to cede authority to the United States, much less any property. But slowly they came around and on April 13, 1792, Delaware officially transferred ownership of the Cape Henlopen Lighthouse to the federal government. Also in 1792, President Washington approved a contract (in the amount of \$278) to "erect, sink and build a well for water with the reservation that if all the materials in the schedule are not used in the work a proportional deduction shall be made."

In 1795 the keeper asked for an "augmentation of his salary" saying, "It is known that the Necessaries of Life are one third higher than they were two years ago."

The earliest recorded keeper was Abraham Hargin, who served from 1797 until he died in 1813. He was succeeded by John Ware, who also served until his death at the station in 1827.

During the ensuing years after construction, the cape continued to grow (accrete) to the north, moving the end of the cape farther and farther north. The sandy point that jutted outward became a hazard to ships sailing into and out of Delaware Bay. To better mark the southern side of the entrance, the government established a beacon at the point in 1825 (see following article).

The lighthouses and other aids to navigation of this country suffered greatly in the



Keepers in front of the Cape Henlopen tower circa 1907. The white "summer" uniform was authorized for southern states. Photo from the collection of Robert J. Lewis.

early years and fell behind the countries of Europe, especially after the introduction of the Fresnel lens in 1822. Because of improving international aids to navigation, our world-traveling sailors began registering complaints with the federal government about the inadequacy of our system. Congress authorized several inspections during the 1830s and 40s. One of the first comprehensive inspections took place in 1838 under the direction of Lieutenant William Porter, USN. The in-



spection of the Cape Henlopen Lighthouse noted that the walls and foundation of the tower were in good order, but that the woodwork was in poor condition, and many panes of glass in the lantern had been broken and were replaced by sheets of copper or wood.

In 1851 an inspection was made by an ad hoc committee called the Lighthouse Board, which would, in 1852, take charge of our system of navigational aids. The report on Cape Henlopen stated:

Seacoast light. Stone tower, built 1764, laid in courses and filled with rubble stone. Well built; stone rather small. Walls, at tower floor, six feet [thick], and at lantern four feet thick. Stairs of wood, clean and in good order.

William Elligood, principal and only keeper; took charge May 16, 1849, Farmer by vocation. Eighteen 21-inch parabolic reflectors, in good order. Lamps and burners not good; though better than usual. Numerous spots on reflectors without silver. No paint for two years, (since principal keeper took charge). Dome and sashes of lantern black inside for want of paint. Glass 16 by 24. Inspected June 1850, by Collector, and not since. Ventilation bad and no proper means for regulation of stove [lamp burner] under the flame, astragals vertical, lantern 11 feet in diameter ... [keeper] lights with care and seems to understand his duties. Lantern leaks and seems to keep the upper part damp ... has spare glass for lantern but no means of replacing glass at night. Keeper not satisfactorily furnished with supplies; particularly paint, glass, putty, etc. Oil cellar under tower not used.... Howland [captain of the supply ship at this point furnishing supplies to almost all our light stations] furnished two new tanks this year; empty, not required; three old ones condemned ... oil last year very bad.... Has no rule for delivery of oil, delivers what he pleases. He [Howland] says [the amount] is so much and he [keeper] has to receipt for any quantity he says he delivers. Writes his own receipts and requires the keepers to sign them. Makes regular returns

Left: Tower with lens removed, circa 1925. Photo from the collection of Robert J. Lewis.

to the Collector. Howland repairs what is necessary with his tinker. When bad oil is on hand is obliged to use it.

Keeper has charge of main light and beacon; \$400 salary for main light and \$250 for beacon light. Trims at midnight. No regular watch kept. No instructions framed and hung up. Impossible for one man to attend these duties alone. Howland comes once a year with supplies. Keeper makes repairs to lamps, etc. keeps an account of oil and supplies expended, including consumption of house. Two conductors [lightning] one without a point, and ought to be taken down. Wall cracked to the northwest. No curtains in lantern. Dwelling leaks about the eaves and windows. Foundation of house undermining, and requires looking after at once. Dwelling built in 1820. Paving around tower out of order, and requires to be looked after, to prevent rapid deterioration, and, possibly, dam-

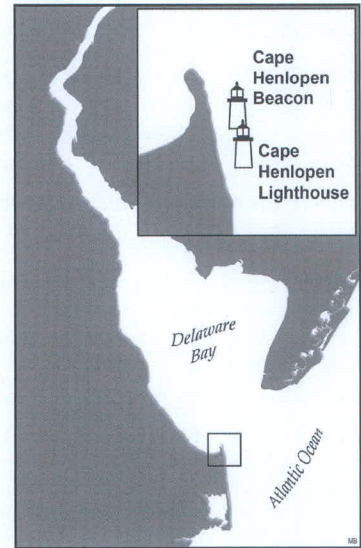


Chart shows the location of the Cape Henlopen Lighthouse and Beacon relative to the current coastline. Note that both sites are now underwater.

age to the building. Tower 84 feet from base, 164 feet above tides, built of ashlar granite, or gneiss, inside rubble masonry. Lightning rods of iron, mortar good. Iron band around the top of the tower, iron very much corroded. Flat brick arch to support the lantern. Soapstone floor. Arch leaks and appears to be yielding; requires immediate attention. Keeper's house leaks on the east side and in the eaves. Foundation undermined by rats on the west side. Walls cracking in consequence; foundation built of pretty good masonry originally. Fences settled and in a state of dilapidation. Sand advancing

toward tower and house. Pine tops generally laid annually, 200 to 300 loads at a cost of 50 cents per load, now decayed. Old building near tower ought to be removed, in bad condition, and adds to the movement of sand by creating eddy currents of air. Measures ought to be taken to regulate the movement of the sand.

In 1862 the keeper's dwelling had to be rebuilt as, "the old one at that place being threatened with speedy destruction by the steady progress in that direction of a remarkable sand hill, which has been moving inflexibly in a certain course at a constant rate for many years, presenting in its existence and movement a most singular natural phenomenon." The following year the Lighthouse Board reported that the new dwelling for the keepers had been ". . . completed in a position calculated to avoid the course of the large moving sand hill at that place." But the "sand hill" continued to plague the Cape Henlopen Lighthouse.

In 1868 the board reported that "examinations [were] conducted by the lighthouse engineer of the district. For a number of years, shows that the dune at this station called 'the big sand hill' situated at the north of the tower, and formed by drifting sand, had moved to the southward at a rate of eleven feet a year. The height of the hill in 1863 was 73 feet, since which it has lowered and widened at the base. At the period just referred to the old keepers' dwelling had to be abandoned, the sand having banked up to the second story windows. Fears were entertained that a similar drift would obstruct the tower."

By 1872 the "big sand hill" never increased its threat to the station, but it was always there, looming over the keeper's house. The district reported various repairs and changes over the next 12 years and occasionally mentioned the existence of the "large sand hill," but it remained fairly stable.

In 1875 the board reported, "The lantern is of the old style, and obscures a large quantity of light. It is the only one of this kind in the district. The light being a very important one, a lantern of the most modern construction should be supplied. An appropriation of \$8,000 is asked for that purpose." The request was repeated the following year, but it was not until 1888 that the district reported, "The metal work for the proposed alteration of the lantern was received and arrangements were made for prosecuting the work without disturbing the light. Upon attempting, however, to remove the lantern unforeseen difficulties



The lantern room of the Selkirk (New York) Lighthouse on Lake Ontario is one of the few old style "bird cage" lanterns remaining in the country. Photo from 1989 by Joel Lauterbach.

were encountered and it was found necessary to adapt another method and to postpone operations to a more suitable season."

There is no indication that the lantern was ever replaced or altered. In fact, photos of the lighthouse just before it collapsed shows the lantern with diagonal astragals and an old-fashioned vent on the dome.

In 1897 the board noted that "the high sand dune surrounding this station is steadily blowing away." And in 1905, "Several tons of brush were placed about the tower and the oil house to prevent the oil house foundation and brick walls from being undermined by the drifting away of the sand."

By 1914 the danger was so great that the Delaware Public Lands Commission was called into session at the State House to confer with the inspector of the Lighthouse District. The commission reported, "It was feared that should a severe northeast storm set in, such a deposit of sand would be made near the lighthouse so as to endanger the foundations and cause a dislodging of the structure." However, the district inspector was not willing to have protective jetties constructed north of the lighthouse unless the state ceded the necessary land to the government. Apparently this never happened as erosion continued until the fall of 1924 when it became evident that the tower could fall at any moment. The light was discontinued on October 1, 1924, and the lens removed. Then, 18 months later, on April 13, 1926, a northeast storm undermined the tower, causing it to fall to seaward.

The Bureau of Lighthouses Commissioner, George Putnam, stated, "Its value to shipping however, has been . . . superceded by the Delaware Breakwater Light and fog signal, lightship and buoys marking the entrance to Delaware Bay."

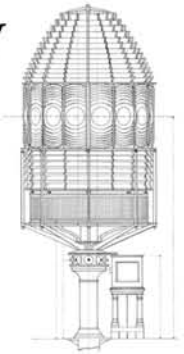
Still, an important part of our maritime heritage was destroyed in that storm of 1926. One of the country's 12 Colonial lighthouses was reduced to bricks on the beach. Local legend states that many of the bricks were recovered and used in construction of local fireplaces and other building projects.



Aftermath of the storm of 1926. The ruins of the wrecked tower are in the foreground. National Archives photo.



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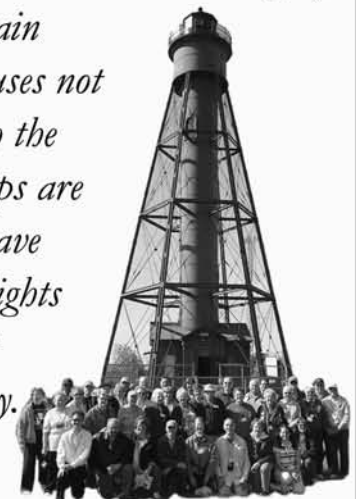
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