Authorized by act of Congress "for building & placing two lt-vessels in Delaware Bay," - - - Mar. 3, 1823, $20,000.

(Placed on Brandywine Shoal, & Upper Middle Shoal, NW. of Brandywine Shoal, Delaware Bay, 1823. Ri).

1842. "Brandywine shoal, in Delaware bay, near the entrance.
"Upper Middle shoal, in Delaware bay, N.W. of Brandywine shoals. Tonnage 120 each."
(From "List of Floating Lights 1842.")

1845. "Brandywine Shoal, on said shoal in Delaware Bay, near the entrance. Two lamps, 12 cylindrical wicks each, one on fore mast, 42 feet, the other on after mast, 45 feet elevation. Built in 1823."
"Upper Middle Shoal, near the middle of Delaware Bay, NW. of Brandywine Shoals. One lamp, 12 cylindrical wicks, about 45 feet elevation. Built in 1823."
(From "List of Floating Lights &c., 1845.")

1848. "Brandywine Shoal, No. 1, on said shoal, in Delaware Bay, near the entrance. Two lamps, 12 cylindrical wicks each, one on fore mast, 42 feet, the other on after mast, 45 feet elevation; Built in 1823. (Rebuilt in 1843.) Tonnage 129."
"Upper Middle Shoal, No. 2, near the middle of Delaware Bay, NW. of Brandywine Shoals. One lamp, 12 cylindrical wicks, about 45 feet elevation; Built in 1823. (Rebuilt in 1845.) Tonnage 131."
(From "List of Floating Lights, &c., 1848.")

1868. "Upper, Middle, or Cross Ledge lt-vessel, (No. 19.) West side of main ship channel, opposite lower ledge of Cross Ledge shoal in Delaware Bay. Fixed light, refitted in 1854. Vessel straw color, built in 1845. One reflector light. Name painted in large letters on each side of vessel." (39 ft. elevation.)
(From "List of Light-houses, &c., 1868.")

"Notice to Mariners. Upper Middle light-ship, Delaware Bay. This light-vessel has been replaced upon her station and will hereafter show a single fixed light from sunset until sunrise, at a height of 39 feet from the water, having been furnished with a new apparatus consisting of 8 lamps with parabolic reflectors arranged around the mainmast. She lies on the west side of the main ship channel off the south part of the Cross Ledge Shoal, in the position marked on the Coast Survey Chart as "Light Boat in 1843."

1854.

L.R.. Vol. 15, p. 256.

Egg Island light-house bearing by compass, E. by N. ½ N.
Fortes Culls Poplars " " " NE. by N.
Mahon light-house " " " W. by N. ¼ N.

The ship will be painted straw color.

By order of the Light House Board,
Jas. S. Biddle.
Inspector of Lights.

Philad'a, April 5th, 1854.
(Vol. 15, p.256.)

(Light-ship No. 19, was built for Cross Ledge Lt-station, N.J., but where built is unknown. She was rebuilt in 1845, and enlarged from 120 tons measurement to 131 tons measurement, She underwent "extensive repairs" in 1860, 1863, and 1868; in 1876 this vessel was rebuilt at a cost of $11,000., & enlarged to 150 tons measurement, at Wilmington, Del. Ri).

and again rebuilt in 1854.

Tonnage 150. Built for Cross Ledge lt-station, Del. Bay.

Where built, unknown; Rebuilt in 1845, and 1854; and again in 1876, at Wilmington, Del., for $11,000.
Material of frame, white oak. Fastenings, iron & copper.
Length 85 ft.; breadth 25 ft.; depth 12 ft.
Draft forward, loaded, 8ft.; draft aft loaded, 9 ft.
Illuminating apparatus:-
Illuminant, mineral oil.
No. of lanterns, 2.
No. of lamps in each, 8.
Fog-signal: Bell by hand, 900 lbs.

(Built in

1858 The two light-vessels in this district are in good order.

1859. "The light-vessels and relief light-vessels have been overhauled, and are now in good condition."

1860 The Cross Ledge light-vessel has undergone extensive repairs. The Five Fathom Bank and Relief light-vessels are both in excellent condition.

1863. "The Five-fathom Bank and Cross Ledge light-vessels have undergone extensive repairs, found to be necessary, and are now in good condition."

1867 The other light-vessel of this district, the Cross Ledge, has remained constantly on her station, except during the winter months, when she is withdrawn to avoid danger from ice.

1868 188. *Cross Ledge light-vessel No.* 19 has been thoroughly repaired and supplied.

1869 188. *Upper Middle or Cross Ledge light-vessel, Delaware Bay.*—No repairs have been made upon this vessel during the current year. This vessel was repaired during the previous year. The vessel, moorings, and illuminating apparatus are in good order and condition.

1871 219. *Upper Middle or Cross Ledge Light-vessel.*—No repairs have been made to this vessel since the last report. This vessel was compelled to leave her station in the Delaware Bay January 10, on account of heavy ice; was returned to it again on the 25th, and remained until the 27th, when the ice again coming down the bay very heavily she was driven from her station, and was picked up by the city ice-boat and towed to New Castle, Delaware, where she remained until March 4, when she was returned to her station. Such absences of light is a great injury to commerce, but it may be remedied by building a Light-house on the shoal.

1872 225. "*Cross Ledge,*" *on Cross Ledge Shoal, in Delaware Bay.*—No repairs have been made on this vessel since the last annual report, and she is in good condition. She was driven from her station by the ice during the month of December, 1871, and took refuge under the Delaware Breakwater, where she remained until February 28, 1872, when she was replaced on her station. March 6th she was driven again from her anchorage and took refuge in Maurice River Cove, and was replaced on her station a few days after. The erection of a light-house, to replace the light-ship on this dangerous shoal, is strongly recommended, as will be observed elsewhere in this report.

1873 236. "*Cross Ledge,*" *on Cross Ledge Shoal in Delaware Bay.*—This vessel, needing extensive repairs was removed from her station and "Relief No. 18" was substituted in October last. The latter was forced from her station by ice drifts, December 24, 1872, and could not be replaced till February 12. She was again driven away on the 26th of February, and was replaced on the 11th of March.

1874

239. *Upper Middle or Cross-Ledge light-vessel No.* 19.—This vessel has had no repairs made to her since the last annual report. On February 8, the ice coming down the bay in large quantities, the vessel was forced from her station and proceeded under sail to the Breakwater, where she remained until February 16, when she was returned to the station by the tender Violet. At 7 a. m., on the 29th of October, one of the boats, containing the mate and two men belonging to the vessel, left Little Creek Landing, Delaware, for the station. On the evening of the same day the schooner Marshall Perin found the boat bottom up, recovered it, and delivered it to the keeper of Delaware Breakwater light-house, since which time no tidings of the men have been received, and the impression is that the boat capsized, and they were all drowned.

1875.

244. *Upper Middle or Cross Ledge light-ship No.* 19, *Delaware Bay.*—Last August it was found that the mainmast of this vessel was very much decayed in the partners, and No. 18 was placed upon the station in her place. She was then brought to the depot and a new mast put in. Some repairs were made to her copper, and she resumed her station early in October. On January 14, 1875, she was driven from her station by heavy ice, and took refuge behind Delaware Breakwater. Notwithstanding the great importance of this vessel, she was unable to resume her station until March 26, having been off her station more than two months. On February 11 the ice in the breakwater broke up and dragged a large fleet of vessels at anchor there to sea, and among them the Cross Ledge light-ship. She was carried about five miles to sea, when she was taken in tow by one of the Reading Coal and Iron Company's steamers, and brought in. On the 25th of March, the lower part of the bay became clear of ice, and the master promptly left the breakwater, under sail, and reached his station before the steamer sent to tow him arrived. This vessel is in need of extensive repairs.

It is expected that a light will be shown from the light-house now being built at Cross Ledge this season, when the services of this vessel will no longer be required at this place.

1876.

Cross Ledge light-ship No. 19, *Delaware Bay.*—On December 8, 1875, the light-house on Cross Ledge Shoal was completed, and the light exhibited for the first time. By the terms of the law establishing this station, the light-ship station was discontinued, and on the 9th the light-ship was withdrawn. This vessel has been carefully surveyed, and is now undergoing repairs to fit her for service where needed. The repairs will make her one of the best ships of her class in the service, and will cost about $11,000.

1877.

244. *Fourteen-foot Bank light-ship No.* 19, *Delaware Bay.*—This station having been established by act of Congress approved July 31, 1876, light-ship No. 19 was placed in position and the light exhibited for the first time August 22, 1876. On December 20, No. 19 was forced from her station by heavy running ice. She was towed to Delaware City, and remained there until February 7, when she was taken to Wilmington, Del., for repairs. On February 17, as soon as the river and bay were sufficiently clear of ice, the vessel was replaced on her station and the light re-exhibited.

1878.

243. *Fourteen-Foot Bank light-ship No.* 19, *Delaware Bay.*—This vessel is in good repair, and is well adapted for the station. Last winter being very mild, she remained on her station throughout the year. With heavy ice running in the bay it is impossible to keep her in place, and in importance it is second to none in the bay and river. A light-house should be built on the lower end of Joe Flogger Shoal. This would enable the board to withdraw the light-ship. The estimated cost of the light-house is $150,000, but the cost of maintenance is much less than that of a light-ship.

1879

245. *Fourteen-Foot Bank Light-ship No.* 19, *Delaware Bay.*—This vessel is in good order and condition. With heavy ice running in the bay, it is impossible to keep her on her station. On the 27th of last December she was driven from her station by the ice, and took refuge at Delaware Breakwater, where she remained until February 13, being unable to resume her position. During this period a light was of the greatest necessity. The Board renews its recommendation of last year, to withdraw this light-ship and build a light-house on this shoal, or on the lower end of Joe Flogger Shoal.

1880

249. *Fourteen-Foot Bank Light-ship No.* 19, *Delaware Bay.*—This vessel is in good repair and well suited to the station. When the proposed light-house on or near the Fourteen-Foot Bank is built this vessel can be withdrawn. On account of the unusually mild winter she remained upon her station the whole year, the only year she has ever been able to do so.

1881.

252. *Fourteen-foot Bank Light-ship, No.* 19, 700 *yards east of Fourteen-foot Bank, Delaware Bay, New Jersey.*—On December 30, 1880, this vessel was driven from her station by the ice, and was towed into a safe position behind the Delaware Breakwater. On February 3, 1881, the

1881.

ice being very heavy in the harbor, the vessel was dragged outside and against the breakwater, where the ice piled up around her. She remained in this dangerous position until the morning of February 7, when she was hove off by the officers and crew into deep water. On February 8, she was towed to the ice harbor, at New Castle, Del., where she remained until February 14, when she was towed to Wilmington, Del., and taken out on the railway to examine bottom, repair metal where needed, and stop leak around hawse-pipe. The only damage sustained by the vessel, while on the stone pile, was the breaking of the bilge-keel on the starboard side, which was repaired. The hull was calked from metal up, new standing rigging, except fore-stay, of wire rope was fitted and other slight repairs were made. On the 5th of March the vessel resumed her station in the Delaware Bay.

1882.

255. *Fourteen-foot Bank Light-ship, No.* 19, *Delaware Bay, New Jersey.*—The vessel has been kept upon her station during the past year, and is in good condition.

1883.

255. *Fourteen-foot Bank Light-Ship, No.* 19, *east of Shoal called Fourteen-foot Bank, New Jersey.*—This vessel was withdrawn from her station on January 12, in anticipation of the running of heavy ice, which would have carried her adrift. She was towed to the Delaware breakwater, and remained there until February 20, when the tender Geranium replaced her on her station. She has received certain minor repairs, and is now in good condition.

1884.

260. *Fourteen-foot Bank light-ship, No.* 19, *Delaware Bay, New Jersey.*—Four inspections of this vessel were made during the year, and at each she was found clean and in good order On January 7, 1884, she was driven from her station by the ice and towed to Delaware Breakwater, where she remained until February 16, when she was again placed on the station. The vessel is in need of repairs, and she will be brought in to receive them at an early day. It is hoped that the construction of the light-house provided for by law at this point, at an early date, will do away with the necessity of a light-ship here, as it is impossible to keep her on her station during the ice season, and this is the time when it is most important to have this danger marked.

An. Rep. 1885.

271. *Fourteen-Foot Bank light-ship, No.* 19, *Delaware Bay, New Jersey.*—This ship was inspected three times during the year. On July 16, 1884, she was brought in for repairs and her place was taken by the relief light-ship. After being generally overhauled she was, on September 1, 1884, returned to her station. Again on June 19, 1885, she was brought in and docked, to repair the damage done to her metal by the ice during the past winter, and on June 25 she was returned to her station. On February 12, 1885, she was driven from her station by the ice and was towed to Delaware Breakwater, where she remained until March 7, when she was again placed on her station.

An. Rep. 1886.

273. *Fourteen-Foot Bank light-ship, No.* 19, *Delaware Bay, New Jersey.*—Four inspections of this station were made and the vessel was always found to be in good order. On January 12 she was driven from her station by the ice. After that she was taken to Wilmington, and hauled out, when her metal was repaired and she received other slight repairs

An. Rep. 1887.

—. *Fourteen-foot Bank light-ship, No.* 19, *Delaware Bay.*—Two inspections of this vessel were made; at one she was found in good, and at the last in only fair, condition. On December 1, 1886, she was removed from her station and towed to New York by the Light-House supply-steamer *Fern*, and thence to Ram Island Reef, Long Island Sound, where she is now regularly stationed.

An. Rep. 1887.

164. *Ram Island Reef light-ship, No.* 19, *off Ram Island Reef, Fisher's Island Sound, in Long Island Sound, New York.*—This vessel, formerly on Fourteen-foot Bank, Delaware Bay, was brought to the light-house depot, Staten Island, on December 3, 1886, and was thoroughly repaired and equipped for service, at a cost of $1,141.13. She was placed at Ram Island Reef on December 20, 1886, when she was in good condition.

An. Rep. 1888.

165. *Ram Island Reef light-ship, No.* 19, *Fisher's Island Sound, in Long Island Sound, New York.*—She received during the year ship-chandlery, paints, lumber, oars, and the like.

An. Rep. 1889.

170. *Ram Island Reef light-ship, No.* 19, *Fisher's Island Sound, in Long Island Sound, New York.*—She received during the year paints, stove-pipe, rope, cooking utensils, and the like.

1890

172. *Ram Island Reef light-vessel, No.* 19, *Fisher's Island Sound, in Long Island Sound, New York.*—This vessel is in good condition, and needs only larger and heavier pawls for the windlass and a few other small repairs. When the new light-ship for Sandy Hook is put on the station it is proposed to replace No. 19 by relief-ship No. 20, put her in thorough repair, and keep her as a relief-ship. During the year rope, paint, water barrels, lime, fog-horn, fuel, etc., were furnished. She is kept in good order.

1891

176. *Ram Island Reef Light-Vessel, No.* 19, *Fishers Island Sound, in Long Island Sound, New York.*—When this vessel is taken off station, which should be at an early date, expensive repairs will be required, as no important repairs on her have been made since 1876. The hawse pipe used for the mooring-chain is worn through. The rail on the starboard quarter is rotten in parts, and the repair of this will probably develop further defects. She received during the year rope, paints, sails, awnings, windlass-pawls, rations, fuel, and ship chandlery.

1892 *179. Ram Island Reef Light-Vessel, No. 19, Fishers Island Sound, in Long Island Sound, New York.*—This vessel was rebuilt at Wilmington, Del., in 1876, and since then has received no important repairs. The rail on the starboard quarter, the strongback of her riding-bitts on the starboard side, and the mainmast and trysail mast are rotten. The starboard hawse-pipe is worn through at the outside flange. The metal sheathing needs patching along the water line, and may need to be renewed on the whole of her bottom. The gig is old and needs repairs on the outside planking and the keel. The vessel will have to be taken off her station and docked for thorough examination before a correct estimate can be made of the repairs which she needs. The placing of the new light-ship, No. 51, on the station at Cornfield Point will make available a larger and better vessel for the station. If light-ship No. 19 could be thoroughly repaired she could be used as a relief ship. Whether it will be economical to do so can only be determined by having her docked and thoroughly examined. She received during the year rations, fuel, paint, ship chandlery, and fixtures for a stove.

1893 *179. Ram Island Reef light-vessel, No. 19, Fishers Island Sound, in Long Island Sound, New York.*—This vessel was rebuilt in 1876. Since then no repairs of importance have been made. A large expenditure would be required to make her efficient for service. She is kept clean and in good condition. She received during the year rope, paint, lime, and fuel.

1894 *180. Ram Island Reef light-vessel, No. 19, Fishers Island Sound, Long Island Sound, New York.*—This vessel received during the year ship chandlery, paint, hose, bedding, flags, and lime.

1895 —. *Relief light-vessel, No. 19.*—On December 8, 1894, she was permanently removed from her station at Ram Island Reef, Fishers Island Sound. She is now at the New London light-house depot ready for temporary service. Her timbers are rotten and she is so weak and worn in every part as to be unfit for economical repair.

1896 —. *Relief light-vessel, No. 19.*—This old and worn-out vessel could not be fitted for even temporary service except at a cost which it would be injudicious to incur. She is kept at the New London light-house depot, where she occupies needed space.

1897 *Relief light-vessel, No. 19.*—This vessel is kept at the New London light-house depot, where she is only in the way. She is worn out from age and decay, and could not be repaired for even temporary service except at an injudicious expense. It is proposed to dismantle her and sell her by auction, or, if needed, to turn her over for target practice to the Navy Department.

1898 *Relief light-vessel, No. 19.*—This wooden vessel is kept at the New London light-house depot. She was built in 1845, is of about 150 tons burden, and has a bell for a fog signal. She is nearly worn out from long service. In previous reports it was proposed to sell her by auction, or, if required for the purpose, to turn her over for target practice to the Navy Department. The hull was bored during the past year, and her timbers were found to be in such a condition that at an expenditure of $3,500, the vessel could be made available for further service as a relief ship on an inside station. The principal need in this direction, however, is for relief ships to take the place of vessels with steam fog signals and electric lights.

1899 *Relief light-vessel No. 19.*—This wooden vessel is kept at the New London light-house depot. She was built in 1845, is of 150 tons burden, and has a bell for a fog-signal. She has been off duty for several years, and is virtually condemned, as she is not worth repair.

1900 *Relief light-vessel No. 19.*—This wooden vessel is kept at the New London Light-House depot. She was built in 1845, is of 150 tons gross burden, and has a bell for a fog-signal. She was condemned several years ago and is not worth repair.

1901 —. *Relief light-vessel No. 19.*—Under the authority of the Department this wooden vessel was stripped of everything useful to the

Light-House Establishment, including spars and moorings, etc., and was then turned over to the Navy Department, October 31, 1900.