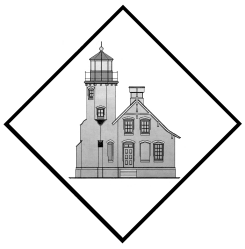
Cleveland Lights

By

Phyllis L. Tag

Published by:



Great Lakes Lighthouse Research

6262 Blossom Park Drive, Dayton, OH 45449 937- 435-1103

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By

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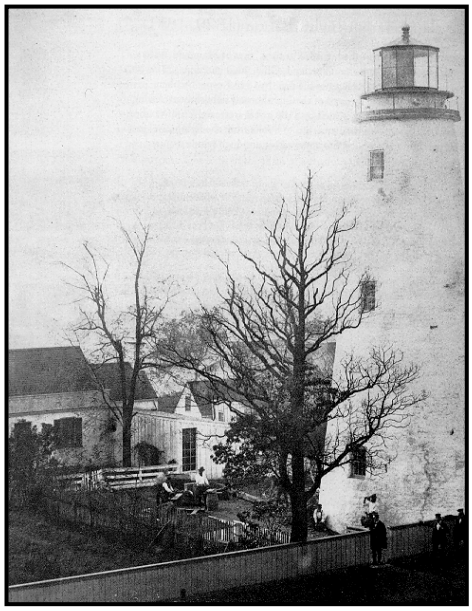
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Printed in the United States of America

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6262 Blossom Park Drive
Dayton, OH 45449

Cleveland Lighthouses through time

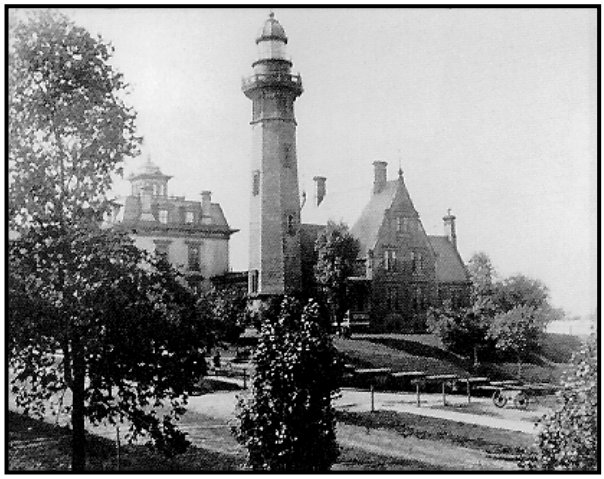
Cleveland Main Lighthouses

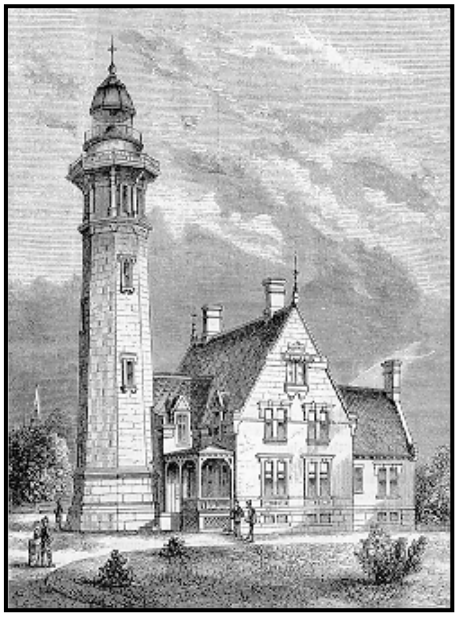


(Photo Courtesy Great Lakes Historical Society)
Cleveland Main Light 1859



(Photo Courtesy Great Lakes Historical Society)
Cleveland Main Keeper's House 1910

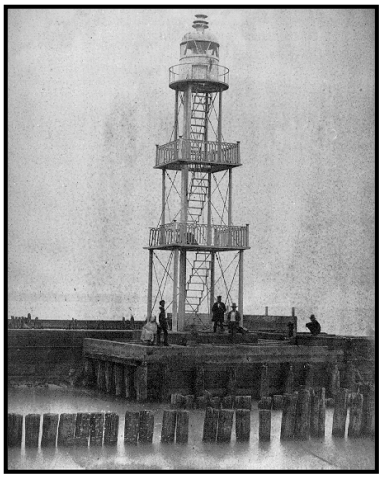




Cleveland Main 1885

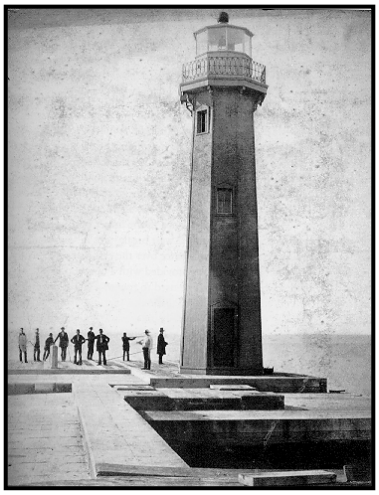
Cleveland Main 1885

Cleveland East Pier Lighthouses



(Photo Courtesy Great Lakes Historical Society)

Cleveland East Pier 1859



Cleveland East Pier 1860



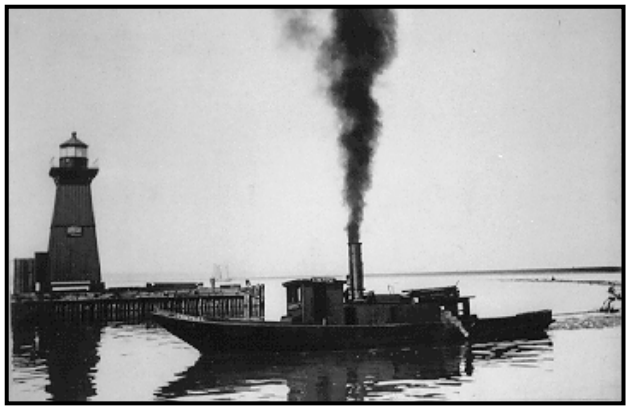
Cleveland East Pier ca. 1870



(Photo Courtesy Great Lakes Historical Society)

Cleveland East Pier 1885

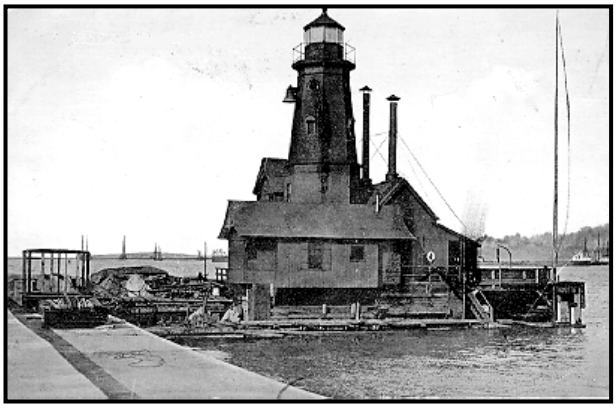
Cleveland West Breakwater East End and West Pier Lighthouses



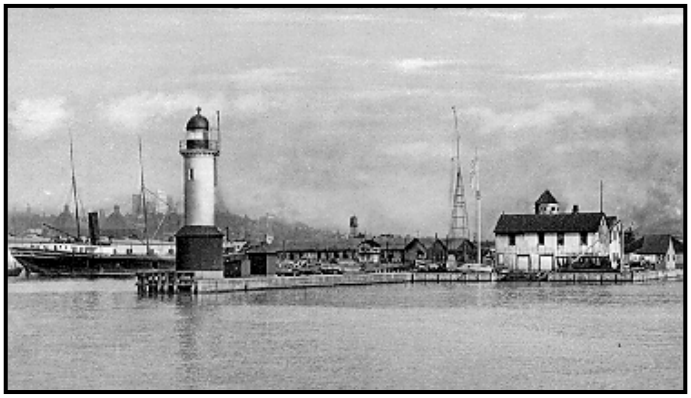
(Photo Courtesy Great Lakes Historical Society)
Cleveland West Breakwater East End1894



(Photo Courtesy Great Lakes Historical Society)
Cleveland West Breakwater East End1895



Cleveland West Breakwater East End 1910



Cleveland West Pier 1912

Cleveland Harbor Lighthouse

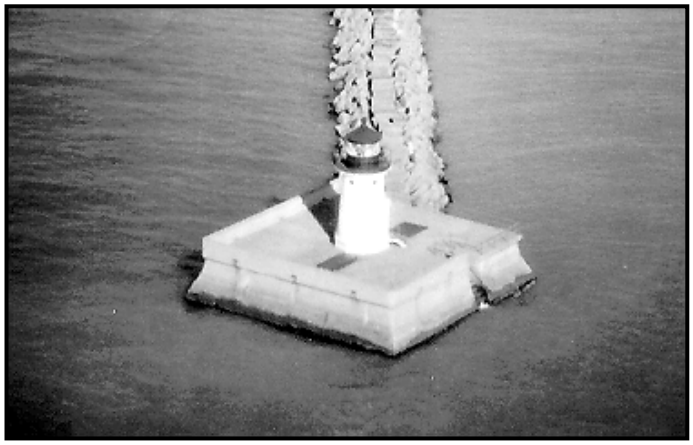


Cleveland Harbor 1936



Cleveland Harbor 4th Order Lens

Cleveland East Breakwater Lighthouse



(Photo Courtesy Great Lakes Historical Society)
Cleveland East Breakwater West End 1947

Light Information from Annual Reports of the Lighthouse Board and other sources

Clipping file - National Archives

Main Light Established in 1829
Discontinued in 1856, reestablished, 1859, & discontinued in 1892

Beacon on East Pier Established 1831

West Breakwater East end, 1885 West end, 1892

Appropriated by act of Congress for a pier at mouth of Cuyahoga River, in State of Ohio.
March 3, 1825, $5,000

Erecting a pier at the mouth of the Cuyahoga River, in Ohio, contractors Jedediah Hubbel and John A. Ackley,
June 25, 1825, $4,800

For a lighthouse at Cleveland, on Lake Erie
March 2, 1829, $8,000

Sec. 3. And be it further enacted, that the following named lights be discontinued, Cleveland, eastside of entrance on the hill
August 18, 1856

Sec. 7. And be it further enacted, that authority is hereby given for a light from the lighthouse tower on the hill at Cleveland, Ohio
March 3, 1859

Appropriated for protection of the piers & beacon light on pier at Cleveland
June 25, 1860 $8,000

For a lighthouse & pier of protection at Cleveland
March 3, 1869 $45,000

For rebuilding lighthouse at Cleveland, (reappropriated)
March 3, 1871 $50,000

For rebuilding beacon at the Cleveland Light station
June 23, 1874 $5,000

For establishing a steam fog signal on the breakwater at Cleveland
March 2, 1889 $5,200

State of Lighthouses - 1831

In conjunction with the Cleveland Lighthouse a Beacon light, having 4 lamps, like those in the lighthouse, has been lit up, from November 25th 1831, to 2nd December 1831.

Status during the year 1831			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse and Beacon	11 4	213	None

Letter July 25, 1834

Custom House District of Cuyahoga
Cleveland, Ohio July 25, 1834

Sir,

I have received your letter of the 9th inst. stating that an appropriation of $2000 was made for building a beacon light on a proper site for Huron River, and an appropriation of a like sum for a beacon at Ashtabula Creek. You observe that these appropriations are evidently too small to accomplish the objects intended, that beside the beacons, houses must be provided for the keepers, which will nearly absorb, the appropriations. You however request me to select and purchase the sights if they can be had at a reasonable rate, and furnish you with estimates of the cost of suitable buildings at both places.

I am in doubt, by your letter, weather you intended, that I should purchase sites and furnish estimates for both beacons and dwelling houses, or for dwelling houses alone.

The entrance to the harbors at the mouth of the Huron River, and Ashtabula Creek are formed by the projection of two parallel piers at each place running north-westerly into the lake, some 30 or 40 rods. At the termination of one of these piers, is the proper site, for the beacons in the same manner as beacons are located at Cleveland, and Grand River. The building of the beacons at these last places was transferred at my suggestion to the Engineer Department. As the Engineer Department is now engaged in completing the piers at Huron and Ashtabula I recommend, that, the building of the beacons at these places, be also transferred to the Engineer Department. The reasons assignable for the propriety of such a transfer are contained in my letter to you of 18 June 1831, and which consisted in the difficulty of procuring the work to be done faithfully, by contract, and because the foundations of the beacons are connected with, and must be made a part of the piers, and because pile-drivers, scows, and other apparatus, necessary for doing the work are all ready in the possession of the Engineer Service at these places.

The plans of the proposed beacons and the estimate of there costs, being at $2700 each have been furnished too, and are now in the office of the Chief Engineer at Washington. If the beacons should be built under my Superintendence, it would be necessary, that I should be furnished with these plans.

In order to select, proper sites for dwelling houses, to be furnished the, keepers, is it important to know, on the end of which of the parallel piers, at Huron and Ashtabula, beacons are to be erected, weather on the eastern or western piers for the houses should be erected on the sides of the river on which the beacon is. The sites of the beacons, in this particular, should be determined, before the purchase of the sites of the dwelling houses.

I can not too strongly recommend, and I know of nothing to prevent it, that the beacons at the end of the eastern pier, at Huron and at Ashtabula should be placed on the eastern piers. Beacons, are equally required, and will probably be soon built, at the mouth of Black River, Cunningham Creek, and Conneaut Creek. At these three places harbors have been constructed by the general government, by the projection of piers into the lake. If beacons are hereafter built, at these last named places, there will then be seven beacons, almost within the limits of this Revenue District.

At Cleveland and at the mouth of Grand River, beacons have already been located on the eastern piers to produce uniformity and to prevent the mistakes and confusion, which might otherwise ensue. It is very important, in my opinion, that the beacons, to be erected should also be placed on the eastern piers. If the beacons are all on the eastern piers, there can be no mistake, but if promiscuously located on the western and eastern piers, there will be danger of serious mistakes.

The selection of sites for dwelling houses for the keepers, will depend, on which pier the beacons are located. Because the site of the dwelling house, should be on the side of the river, where the beacon is established. I wish therefor, if the building of the beacons is transferred to the Engineer Department, that it may be understood, on which piers the beacons are to be located. When this is understood I will proceed in reference to the purchase of sites for houses, and will report to you a plan and estimate of the cost of houses.

With great respect,
your obedient servant
Samuel Starkweather
Collector Customs District Cuyahoga

Stephen Pleasonton Esq.
5th Auditor of the Treasury

Letter - September 3, 1835

Custom House District of Cuyahoga
Cleveland, Ohio September 3, 1835

Sir,

In compliance with your circular of April 16th, 1835 addressed to the Superintendent of Lighthouses, I submit the following remarks.

I am not advised of any change which could be advantageously introduced into the Lighthouse Establishment, as to the material used for burning or lighting, or the kind or quality of oil now used for burning or lighting, or as to the character, shape, disbursement, &c, of the lamps, lens, or reflectors.

The district lighthouses, of which I for the present have the superintendence, are in the State of Ohio, on Lake Erie, extending from the Pennsylvania line to the north cape of the Maumee Bay. I send you herewith a map of as much of Lake Erie, extending from the Pennsylvania line, to the western extremity, or head of the lake, on which is marked the locations of each lighthouse and beacon already existing, and on which also are noted, the points where lighthouses and beacons would be useful, and are needed.

Commencing at the Pennsylvania line on the east and proceeding westerly, the following named Lighthouses are useful and cannot be dispensed with vis: The Beacon at the pier, mouth of Conneaut River, the Beacon at Ashtabula Creek, the Lighthouse and Beacon at the mouth of the Grand River, the Beacon at Cleveland, the Beacon at the mouth of Huron River on the pier, the Sandusky Lighthouse, the Turtle Island Lighthouse.

Over the same extent of coast, I proceed to note those lighthouses and beacons, whose character of site should be changed, or which may entirely be dispensed with without injury to the public service.

The Beacon at Cunningham Harbor being a fixed light, is of doubtful utility, because there is no inlet there, there being a wharf only, parallel with the shore affording no refuge or shelter to vessels in a blow, and because the shore there is subject to all the incidents and perils of a sea shore, and because the Cunningham light, being a fixed light might easily be mistaken for the Ashtabula light or the Conneaut light, and the consequences of such a mistake would be dangerous in the extreme. If the Beacon at Cunningham Harbor, were a revolving light, it might be useful.

The Cleveland Lighthouse might be entirely dispensed with, if the Cleveland Beacon on the pier of the harbor adjacent was raised some 15 or 20 feet higher, and its lamps increased to the number of 10 or 11.

The lighthouse on the extremity of the pier at Buffalo has superseded the necessity of the Buffalo Lighthouse on the shore adjacent and caused it to be entirely dispensed with. In the same manner, a suitable light on the pier at Cleveland Harbor, would answer all purposes. The Cleveland Lighthouse is now but little, if any, use. There is really no necessity of two lighthouses at Cleveland. The Cleveland Lighthouse is located on the bank of the lake, and on account of the sliding or caving tendency of the bank, was placed about 25 rods from the pitch of the bank. Since the erection of the lighthouse the sliding or caving of the bank has ceased, and the land between the lighthouse and the lake is becoming occupied by private dwellings so that the lighthouse is becoming surrounded with them. The ground belonging to the lighthouse comprises nearly two acres, in the most active business part of town, and fronts about 700 feet on important business streets. All this land being occupied for the lighthouse, which leave a vacant and an idle bank, which is wanted and which is extremely valuable for business purposes. If sold by the government it would_____.

Status during the year 1835			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse and Beacon	11 4	231	None

Status during the year 1836			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse and Beacon	11 4	237	None

24th Congress 1st, Doc. 66 - 1836

pp. 14
Samuel Starkweather, Ohio, reports, “that Cleveland Lighthouse may be dispensed with, by raising Cleveland beacon, on the pier of the adjacent harbor, 15 or 20 feet higher.

*Note. -- Now of little use, if any; its premises, in the most active business part of the town, which cost less than $5,000, would if sold now, command $10,000. This sum would convert the beacon into a lighthouse like the one on Buffalo pier.

25th Congress 2nd, Doc. 15 - 1837

pp. 24
Cleveland Light
No. Of lamps 11

Cleveland Beacon Light
No. Of lamps 4

25th Congress 2nd, Doc. 41- 1837

pp. 87
This is a point of great commercial importance, and has already a good artificial harbor, a lighthouse, and beacon. A beacon is all that is necessary, and I beg leave to advise that the lighthouse be discontinued. It would be well to place reflectors behind the lamps, and, as a mark of distinction, there might be added a revolving shade. Twenty-eight miles west of Cleveland is Black River.

25th Congress, 3rd, Doc. 2 - 1838

pp. 97
This work, under the liberal appropriation of Congress has been rapidly and thoroughly advanced during the season. Piles have been driven (agreeably to the plan heretofore submitted) around the heads of both piers, at the proper distance, and then extending, parallel to the piers, towards the shore, four hundred and fifty in number; and the space between these piles and the old work filled with rough stone, of which eleven thousand six hundred and forth-six (11,646) perches have been thus far deposited. Seven hundred and twenty-nine (729) perches of rectangular blocks of stone are dressed, deposited on the old piers, and nearly ready to be laid in solid masonry. The rapid fall of the water of the lake renders it desirable that the placing these permanently should be postponed until next season. In addition to the foregoing, the west pier has been thoroughly repaired, so as to last until substituted by the durable work. Contracts have been entered into for the further delivery of stone blocks and rough stone to the amount of the entire appropriation by the last session of Congress. These contracts will be fulfilled in January 1839, at which time payment is to be made. It is confidently believed that, if the amount required be appropriated, this very important work may be nearly completed in 1839; which end I submit the estimate of the local agent, marked A No. 4, and respectfully recommend the entire appropriation.

25th Congress, 3rd, Doc. 24 - 1838

pp. 151-152
It is lighted with eleven lamps. The number of lamps, and the same number of reflectors. The beacon stands on the east pier, extending six hundred feet into the lake. The business that is transacted at this place gives the harbor a pre-

eminence in the estimation of all, which its own capriciousness and adaptation to an extensive commerce fully sustain. The piers are now undergoing rebuilding, with huge blocks of granite.

An addition of four lamps to the beacon will supply the mariner with all the necessary guidance for entering this harbor. After such an addition has been made to the number of lamps in the beacon, the light-house may be dispensed with.

It is true that the lighthouse could be seen to a greater distance than the beacon, but the height of the adjacent coast, and the entire want of shoals or hidden rocks near by, entirely obviate the necessity of a light conspicuous father than the beacon would be distinguishable.

Letter June 19, 1838

Respected friend
Stephen Pleasonton Esq.

Dear Sir,

As I am on a visit to the lighthouses on the lakes, you will excuse me for addressing you a confidential line, calling your attention to the keeping of the lighthouse and beacons of this place. These sir, I am sorry to say, I found in the most filthy condition. I think the keeper here, Stephen Woolverton is entirely above his calling. It was with much difficulty that I got into the lantern on account of the grease, where I found the deck covered and inch or more thick with sand, old burnt wicks, soot, oil, old rags saturated with filth, broken glass and apparently the accumulation of months, the most of the reflectors more like bronze than silver, and every lamp altered. Some had been suspended and tin boxes with holes pierced through the tops for the wicks which the keeper calls lamps substituted in their place. The whole care seems entrusted to a Negro, who had the keys of both the lighthouse and beacon, when I arrived, and had to be sent to before I could get admittance. This lighthouse is located in one of the pleasanter parts of this city and subject to the notice of everyone, and for that reason in my opinion, if no other should be kept in the neatest manor, for it is not necessary to go into the lantern to see whether it is clean, that can be clearly ascertained from the street, where the dirt can be seen in streaks upon the lantern glass where the rain has washed it partially off and there left it to bake on. Advice to this man is entirely useless as I understood from some of his friends. I think he should be made an example of and some poor worthy man placed in his stead that would pay his attention to this business. His excuse for altering the lamps and substituting others was for the interest of the contractors in as much as the box lamps consumed no tubes and the reflectors would last much longer as they did not want cleaning so often. But in either case he did not clean them. I think in using the box lamps he got clear of wicking the others which he could

not easily learn the Negro. I have after two days, with the help of two tinsmiths, nearly succeeded in restoring the lamps to there original shape, but entirely against the approbation of the keeper.

Yours respectfully
Edward Merrill

Status as of December 31, 1839			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse & Beacon	15	173	

Annual Report - 1839 Hand written

The conduct of the keepers of the lighthouses has been generally good. Some complaints have been made against the conduct of George S. Patterson, Keeper of the Beacon at Huron, charging him with neglect of duty, and of keeping his beacon in a dirty condition. Upon examination I found there was some ground for these charges, and have admonished him to a stricter attention to his duty. He has since done much better, and affords assurance that he will hereafter, do his whole duty.

Augustus Jones, Keeper of the Beacon at the mouth of Black River, does not attend personally to his duty. He employs an assistant, to whom he entrusts the keeping of the beacon. I have visited this beacon during the present year, and found it in a dirty condition. There appeared to be a waste of oil. I am of the opinion, that this Keeper should be removed.

I am able to speak of the other keepers of the lighthouses, in terms of praise, with the exception of J. Van Benschooter, Keeper of the Sandusky Lighthouse. I have had cause to charge him two or three times during the last summer, with neglect, and I did not deem it my duty to report the cases to you, because the most satisfactory assurances of reform, were given.

Gideon L. Kelsey, Keeper of the Turtle Island Lighthouse, A. Smith, Keeper of the Port Clinton Lighthouse, L. Beatty, Keeper of the Beacon on Cedar Point, deserve the greatest praise for the excellent lights, which they keep. The Cleveland Lighthouse and Beacon is also very well kept, as also the Beacons, at Cunningham Harbor and Ashtabula. The Grand River Lighthouse and Beacon, and the beacon on the pier at Conneaut River, might be better kept, than they are, but it may be said of them, that they are decently well kept.

The apparatus in the several lighthouses, and beacons, have not been repaired this year. They will all need some slight repairs, this ensuing summer, to do which it will be in my power to employ a competent mechanic from this place.

Tube glasses, are already furnished the lighthouses, in sufficient quantity, but they are not of the kind, required. A supply, of long tube glasses, is much wanted, and it is important for the superintendent to be informed, on whom, he is to depend for a supply, all of which is respectfully, submitted.

Custom House
Cleveland, Ohio

Feb. 11th 1840
Samuel Starkweather
Superintendent of Light-Houses
Cleveland, Ohio

27th Congress, 2nd, Doc. 811 - 1842

pp. 33
Lighthouse Cleveland, 2 lights - Year- 1839

Amount appropriated-	$8,000.00
Cost-	$5,099.90
Cost of land-	$1,000.00
Carried to surplus fund-	$2,900.10
Remarks	

pp. 59
Cleveland Harbor

Appropriations to 1835	$47,000
Appropriations for 1836	$15,000
Appropriations for 1837	$10,000
Appropriations for 1838	$51,586
Total	$123,356
Original estimate,	$10,000

Report of 1836: Injuries sustained by the works from gales of last year repaired

Report of 1837: The woodwork removed, and the stone work substituted.
Estimate for the year 1838, $51,856

Report of 1838: “The work, under the liberal appropriation of Congress, has been rapidly and thoroughly advanced during the season.”
Estimate in report for 1839, $49,300.
Transferred to topographical engineers, January, 1839.
Report of 1839 says: “The work has progressed so for that it would be inexpedient to propose and essential modification of it now.” An appropriation of $66,721 is asked, “ to complete Cleveland harbor.”

The account with the work may be stated as follows:

Total amount of appropriations	$123,000
Estimate to complete work	$ 66,000
Total	$189,000
Original estimate	10,000
Excess	$179,000

Showing an excess of actual expenditure over estimate by 110 percent, and of actual and prospective expenditure by 1,690 per cent.

pp. 71
Cleveland Harbor - 1842
List of public works, original estimate of cost, expenditure, and estimate to complete them.

Original estimate of cost-	$10,000
Expenditure -	$123,000
Estimate to complete work-	$66,000

Remarks-

28th Congress, 1st, Doc. 38 - 1843

The keeper here (Mr. Hussey) has but recently taken charge of these lights; and, so far as cleanliness is concerned, particularly in his own dwelling, has improved the appearance of things very much. I found the apparatus generally in good order. Some of the lamps in the main light required repairing, and one of those in the beacon renewing; all of which were done. The keeper is very anxious to have the lamps in the beacon of the kind used in the beacon at Grand River. As there is great difficulty experienced in managing this light with the present lamps, in consequence of the very small size the lantern, it would be well to adopt the change proposed. I have a letter before me, received this morning, stating the cost to be $12. Mr. Milford (the collector) also recommends the change. This fall will probably test the utility of lard oil for lighthouse purposes. As yet, I am not satisfied that it will answer for general use at all seasons.

Status as of December 31, 1843			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse & Beacon	15	333	None

Status as of December 31, 1844			
Location	**Number of**	**Gallons of Oil**	**Remarks**

	lamps in use	Consumed	
Cleveland Lighthouse & Beacon	11	377	None

Status as of December 31, 1845			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse & Beacon	11	360	None

Report by John Mc Reynolds - July 18, 1845

Cleveland Light & Beacon - May 24 - Have found everything in good order except 2 lamps which were unfit for use, and which I had substituted by 2 others which I had on hand. This light has 7 lamps - the same remarks will also apply to the beacon light at this place. The keeper L. Dibble, seems to be an efficient and capable officer.

Report by John Mc Reynolds - November 20, 1845

Cleveland Light & Beacon - The tower lamps and reflectors are in excellent condition, the keeper L. Dibble is faithful to his trust and gives general satisfaction. The fence around the premises where the main lighthouse stands is in a dilapidated condition and is the subject of complaint by the citizens of Cleveland residing in its vicinity. This light being in the midst of a settled and improved part of the city. The necessary repairs say 40 rods at 2 dollars per rod would require the expenditure of $80. The foundation of the dwelling is also impaired, which ought to be immediately repaired to avoid a greater expense, this will cost about $10 making in all $90 to be appropriated for this light.

Status as of December 31, 1847			
Location	**Number of lamps in use**	**Gallons of Oil Consumed**	**Remarks**
Cleveland Lighthouse & Beacon	11	348	

30th Congress 2nd, Doc. 2 - 1849

pp. 67
Lists of lighthouses, & c. As of Oct. 1, 1848
Cleveland, (and beacon)
Lights, 1
Keepers, 1
Salary, $450.00
Lamps, 7 + 4 = 11

31st Congress 2nd, Doc. 14 - 1850

pp. 87
June 22. I also ordered the tower of this light to be white-washed, deeming it necessary to have it done forthwith. The expense will be about $40. Conduct of keeper good.

pp. 91

Cleveland	Oil delivered	Winter - 42 gal. Spring - 41 gal Total - 83 gal.

Letter - 1852

Custom House Cleveland
March 4, 1852

Dear Sir,

I herewith send you reports of the condition of the lighthouses and beacons in this district. I should have made and sent this report last fall, but was informed by the superintendent of lighthouses on the lakes, that he had made a very full report and one would not be required of me. There is much information in regard to lighthouses that I am not able to furnish, but which may be found at present in the fifth auditors office.

Very respectfully,
Your Obedient servant
C. L. Russell
Superintendent of Lights

Letter - 1852 continued:

At Cleveland there is a lighthouse on the mainland and a beacon on the pier. The lighthouse is built of stone, and is 55 feet from base to center of light and about 150 feet above the level of the lake. It has seven gas burners with a like number of 15-inch reflectors. The lantern is made of iron, octagon in its shape, 7 feet in diameter and 8 feet high. The glasses are 12 by 14 inches. The tower and illuminating apparatus is good.

The beacon is built of iron and is 45 feet from base to center of light and 48 feet from level of lake to center of light. The lantern is iron and in shape round. This beacon was put in in Sept. last, and a plan of it can be seen at the office of the Honorable S. Pleasonton 5th Auditor. The lighting apparatus consists of 3 bucket lamps, no reflectors, light good. The lantern of the beacon is 5 feet in diameter and 6 feet 1/2 in height. Oil on hand 29 gallons of summer and 43 of winter, 71 tube glasses, and 800 wicks. The main light was built in 1829.

C. L. Russell
Superintendent of Lights

ARLB 1854

pp. 345
Cleveland West Beacon - A catadioptric apparatus of the fourth order, illuminating an Arc of 180º has been placed in this important pier-head lighthouse, giving a light exceeding in intensity that of the catoptric apparatus of Cleveland Light. The intensity of this light, by the use of gas, is not equal to that produced by the Argand burner, by the use of sperm oil; the latter producing a more steady body of flame than the gas, which is flickering or jumping, even with the use of chimneys.

The difficulty of distinguishing the pier-head light from the various lights on shore, viz.: lime-kiln, lamps of locomotive engines, and other lights, required an improved lighting apparatus at this locality.

The new light is deemed by most of the mariners to be adequate to all the wants of navigation; the Cleveland light on the hill having no bearing whatever as a range for entering the harbor.

The height of the focal plane of the pier-head light being 50 feet, the light is visible from the deck of a vessel 15 feet above the water at a distance of fifteen miles, or at a point midway between this and Grand River Light on the east, and midway between this and Black River Light on the west.

The Cleveland Light is but of slight importance, since the new apparatus of the fourth order has been introduced into the pier-head light.

The channel, marked by ten spar buoys, has a depth of 6 1/2 feet at the stage of water this autumn.

The lighthouse stands at the mouth of the river; the channel, thence, runs parallel with the shore about one mile; thence turns towards the lake.

ARLB 1855

pp. 390

Cleveland Light - Small expenditures for the preservation of the keeper's dwellings and grounds connected therewith have been made.

A new lantern with diagonal sash bars, fitted with French plate-glass was substituted for the former lantern at Cleveland Beacon at the time of refitting the light with the new apparatus of the fourth order, fixed, varied with flashes.

pp. 393
The light on the hill no longer serves any useful purpose, affording no range whatever for entering the harbor, the pier head light being now fitted with a fourth order lens for 360º, fixed, varied with flashes, fulfilling all the wants of navigation at this port.

pp. 393
At Cleveland Pier-head there were four gas burners without reflectors, for which there was substituted a lens of the fourth order of 360º, fixed, varied by flashes.

pp. 396
Placed some signal oil in the light, where the moderator lamps only are in use. Most favorable reports have been received from the keeper.

ARLB 1859

pp. 296
Cleveland beacon has been completely renovated.

In conformity to act of Congress, the hill light at Cleveland has been renovated and relighted.

ARLB 1867

pp. 230
Cleveland - The attention of the board has been called to the insecure condition of the main light at this place -- a consequence of the removal of earth from around its base in grading streets. No steps have been taken by the city authorities toward securing the foundations of this tower. No immediate danger is, however, apprehended, and no expenditure upon this station is contemplated during the ensuing season. The danger of the destruction of the tower is growing more and more imminent, and it is recommended that an "appropriation be made for a new tower with keeper's dwelling, to be constructed at the end of the East harbor pier, at this place, to take the place of both the present lights --- main and beacon. When this new light is completed, the two lights now in use may be discontinued.

ARLB 1868

pp. 60

For a lighthouse and pier of protection. $60,000

pp. 372
Station in order.

Cleveland Beacon - A change of light from a sixth order, white, fixed, to a fifth order, fixed, varied by red flashes, has been authorized and will be made as soon as the lens is received.

ARLB - 1869

pp. 466
Cleveland - Temporary repairs have been made to the dilapidated dwelling and outhouses to make them available for the winter; but it is proposed to use the appropriation of $45,000, made in March, 1869, in erecting new structures as soon as a proper site is selected, which will be at an early day.

Cleveland Beacon - The crib has been refilled with stone and planked over with oak, and the tower painted and sanded. The beacon is in good condition.

ARLB 1870

pp. 380
An appropriation was made March 3, 1869, of $45,000, for rebuilding the light-house tower and keeper's dwelling at this place. A temporary structure was erected and the light exhibited from it August 9, 1870, preparatory to the removal of the old and the commencement of the construction of the new tower. Directions were given August 16 to suspend further operations, in consequence of the available funds, which had been appropriated little over a year, having reverted to the treasury, under the operation of the fifth and sixth sections of the act of July 12, 1870, at which time the old lantern and a part of the masonry of the tower had been taken down. The engineer of the district, under authority from the board, had previously entered into a contract for the delivery of stone for a wall of enclosure on the east and north sides of the lighthouse site, and for all the necessary excavation. The delivery of the stone had not commenced, and the execution of the contract was suspended. By suspending the work, the station has been left in very bad condition. The widening of the street in front of the old tower by the city authorities, with the sanction of the Government, was at the same time suspended, although it had already made considerable progress. The old tower has been covered over and all tools and materials remaining on hand safely stored to await a reappropriation to recommence the work.

ARLB 1871

pp. 528

An appropriation was made March 3, 1871, for rebuilding the lighthouse at this station. Sealed proposals were publicly invited for the supply of the material necessary for the construction of a stone wall to enclose the grounds on the north and east sides, and for a third-order lantern complete, with stairs for the tower, and contracts have been made. The stone and cement were delivered early in June, and work was commenced on the 24th of June. It is recommended that the appropriation for this station be extended to June 30, 1873.

ARLB 1872

pp. 66 - 67
The work of building the stone wall enclosing the lot, in progress at date of last report, was completed in July. Proposals were publicly invited for the necessary building materials for the new tower and dwelling, and a contract was made for the stone. One bid was offered for the brick, but as the sample presented was of a very inferior kind, it was rejected. No bid was offered for lumber. The stones were delivered in November, and the winter was consumed in dressing them, and in preparing all the necessary carpentry. On account of the great fire in Chicago, it was found impossible to buy in Cleveland, at anything like a reasonable price, brick at all suitable for exterior work. The engineer, therefore, was compelled to make a contract with a firm at La Salle, New York, for the supply of the brick needed. This season has been most unfavorable for their manufacture. And the contractors have not supplied them at the time nor in the quantities expected. A small lot has been delivered, and the work of construction has advanced to 5 feet above the water-table. On the 15th of July it was expected that the full amount ordered would have been delivered, and that after that date the construction would advance without interruption.

ARLB 1873

pp. 359
The buildings were successfully completed, and the dwelling occupied by January 1873. The light has exhibited from the new tower since the opening of navigation of 1873. The station is now in fine order.

Cleveland West Pier, Beacon No. 1 - Being in a ruinous state, and having settled considerably to the east, should be rebuilt. Complaints have been made of the insufficiency of the pier lights at this place, and it has been suggested that a fixed red light of the fifth or sixth order should be placed at the pier-head in lieu of the pair of common lanterns, which are now there. The matter will have the attention of the board. An appropriation of $10,000 is required.

ARLB 1874

pp. 66

Cleveland West Pier, Beacon No. 1 - An appropriation of $5,000 was made at the last session of Congress for renewing this beacon. It will be erected shortly, on the head of the west pier to entrance of Cleveland Harbor, and it is hoped that the light can be exhibited before the close of navigation 1874.

Cleveland Beacon No. 2 - A substantial frame beacon is to be built at the head of east pier, provided with two sixth-order lenses in lieu of the present mast-head double light.

ARLB 1875

pp. 62
Cleveland West Pier, Beacon No. 1 - An appropriation of $5,000 was made June 23, 1874, for a new beacon on the west pier of entrance of Cleveland Harbor. It was built during last winter, and lighted shortly after the opening of navigation in 1875. In front of, and connected with the beacon, a frame structure has been erected containing a fog bell, which has also been in operation since the opening of navigation.

Cleveland Beacon No. 2 - The new beacon, with double lights, which is to be placed on the head of the east pier, in lieu of the present mast-head double lights, has not yet been erected, in consequence of the non-completion of the repairs of the pier. It has lately been commenced, however, and it is expected that it will be lighted on September 1, 1875, when the mast-head lights will be discontinued.

Cleveland Repairs

ARLB 1876

pp. 48
Cleveland Beacon No. 2 - This beacon was completed on September 1, 1875, and two fixed lights of the sixth order exhibited one above the other; the upper one white, the lower red. The mast-head lights heretofore used were removed. An elevated walk connects the beacon with the life-chain of east pier, Cleveland Harbor.

Cleveland Repairs

ARLB - 1880
Clipping file - National Archives

Cleveland Beacon (East) - The beacon was repainted and some slight repairs made. The fog-bell structure was repaired and repainted and the machinery was put in good order.

Cleveland Beacon (West) - The beacon was repainted and some slight repairs were made

ARLB 1881

pp. 59

Cleveland Main	Repairs
Cleveland Fog-bell Structure	Repairs

ARLB 1882
Clipping file - National Archives

Cleveland Main Light at Cleveland Harbor - Mineral-oil lamps were substituted for gas at the opening of navigation of 1882, and various minor repairs were made.

ARLB 1883
Clipping file - National Archives

Cleveland, (Main) on the hill at the east side of Cleveland Harbor - A drain of 6-inch tile pipe was laid on the main street for 356 feet, commencing in the rear of the keeper's dwelling. Another drain of tile, leading from running spring located near the center of the lot, was connected with this. The surplus land in the rear of the dwelling was sold on June 20, 1883, at public auction, for $9,492. Various minor repairs also were made.

ARLB - 1884
Clipping file - National Archives

Cleveland beacon (East), on outer end of east pier, entrance to Cleveland Harbor - A sign board was placed on the beacon, warning masters of vessels not to make fast within 200 feet of the pierhead light.

Cleveland beacon (West), on outer end of west pier, entrance to Cleveland Harbor - A sign board was placed on the beacon, warning masters of vessels not to make fast within 200 feet of the pierhead light.

Cleveland Breakwater (East end) - Proposals were received and opened on May 5, 1884, for building and putting in position a foundation crib for a lighthouse at this harbor. The contract was duly awarded and the contractor has at this date nearly completed his contract. Upon the completion of the crib, a temporary deck will be placed on it to prevent the washing out of the stone filling. It will be riprapped on two sides to prevent the sea from washing over the breakwater and undermining the crib, and also to prevent vibration. The erection of the superstructure upon this foundation crib is deferred until next spring, so that the crib can settle during the winter. When the superstructure is completed, the iron

tower now at Genesee Light Station will be removed to this site, and the fog bell on the west pier at Cleveland Harbor will be transferred to this tower.

ARLB 1885

pp. 70
Cleveland West Breakwater - The substructure for the foundation of the tower was completed in accordance with the contract. The building up of the foundation was deferred until July 1, 1885, to allow ample time for the settling of the crib. The cement, tie-rods, and 87 cords of crushed stone for the concrete foundation were bought, and arrangements were made for building the concrete super-structure and taking down the iron tower now at Genesee Light Station, New York, which will be removed to this site.

pp. 71

Cleveland (Main)	Repairs
Cleveland beacon (East)	Repairs
Cleveland beacon (West)	Repairs

ARLB 1886

pp. 8
Cleveland Breakwater (East end) - New lights established, October 20, 1885

The fog signal was established at Cleveland Breakwater (East end), October 20, 1885

pp. 9
The fog signal at the west beacon was discontinued on the establishment of the fog-signal at Cleveland Breakwater (East end), October 20, 1885

The lower light at the east beacon was discontinued at the opening of navigation, 1886.

The west beacon light was changed form fixed white varied by red flashes to fixed white October 20, 1885

pp. 10
Cleveland East Beacon - The fixed red light was discontinued and the fixed white light was changed to fixed red at the opening of navigation, 1886.

pp. 71

Cleveland - The part of the dwelling occupied by the assistant keeper was altered so as to make it suitable for occupancy by two families, to provide quarters for the principal keeper of the Cleveland Breakwater Light.

Cleveland Beacon (East) - The timber foundation of the beacon was renewed, and the lower halves of the corner-post of the beacon were spliced with new material. The entire elevated walk on the pier, 574 feet long, connecting the shore with the beacon, was rebuilt. On the opening of navigation in the spring of 1886 the characteristics of the light were changed. Instead of showing two lights, a fixed white above a fixed red, the white light was discontinued, and a fixed red light of the sixth order was shown from the upper lantern.

Cleveland Beacon (West) - New bed timbers placed under the beacon, the lower halves of the corner-posts were spliced with new material, and the cross ties were renewed in the superstructure of the crib supporting the beacon. The characteristic of this light was changed October 20, 1885, from a fixed white varied by red flashes to a fixed white. The fog-signal was discontinued, the bell was transferred to the Cleveland Breakwater, and the fog-bell house was torn down.

Cleveland Breakwater (East end) - The substructure, consisting of a timber crib, 40 feet square and 29 feet in height, filled with stone, for the foundation of the tower, was placed in position in the summer of 1884, and the work of building up the superstructure was deferred until July 1, 1885, to allow ample time for the settling of the crib. The necessary arrangements were made prior to July 1, 1885, for the crushing of the stone for the concrete foundation, the purchase of the cement, and transferring the iron tower formerly in use at Genesee, N. Y., Light Station. The work was resumed early in July 1885, and was completed in November. As the early lighting of the east end of this breakwater was necessary, the concrete superstructure was built by day labor, and the material was bought in open market. The iron tower which stood on the west pier at Charlotte, N. Y., was transferred to this crib, which was especially prepared for it, just inside and 24 feet south of the east end of the breakwater. The crib proper is 40 feet square, 36 feet in height, and 9 feet above low-water mark. The tower stands on a mass of concrete, formed inside of the crib, 38 feet square and 11 feet deep, resting upon the loose stones with which the crib is filled within 2 feet of mean water-level. An oil cellar, 8-feet in diameter and 6 feet and 10 inches deep octagonal in shape, was built in concrete foundation just under the tower. A 3 1/2-inch iron pipe leads from the floor in the cellar through the crib and drains into the lake. The cellar is ventilated by three 5-inch holes cut in the base of the tower and provided with ship dead-lights. The cellar has three rows of shelves 12 inches deep and 14 inches apart. A locker, cupboard, and bunk were built in the tower, and a boat-house, 10 by 28 1/2 feet in plan, is placed on the west side of the crib, beginning at the north corner. The boat house is provided with a stanchion boat-launching apparatus. A fog bell is suspended from a bracket attached to the north side of the tower, which can be struck at intervals of 10

seconds. The pier is enclosed with a railing of 2-inch wrought-iron pipe, and provided with landing ladders and the necessary hawse chocks for the convenience of the supply tender. The light is of the fourth-order, illuminating the entire horizon, showing alternate red and white flashes at intervals of 10 seconds. The focal plane is 27 feet above the base of the tower and 36 feet above the level of the lake. The structure is an octagonal iron tower, painted brown, surmounted by an iron lantern and railing, painted black.

ARLB 1887

pp. 85
Cleveland Breakwater, (East end) - The illuminating apparatus was provided with a Russia-iron smoke conductor. A wooden floor was placed over the iron one in the tower, and a storm house, with two doors, was built over the entrance. The pier pipe railing on the east side of the crib was replaced by a new one, and arranged so that it can be taken down at the close of navigation.

ARLB - 1888
Clipping file - National Archives

Cleveland Breakwater (East end) - The lantern was provided with four spare panes of glass, and the illumination apparatus with six ruby panes. The pier railing, which had been damaged by a colliding vessel, was put in order, and other minor repairs made. Orders have been given that a permanent light shall be erected on the west end of the east breakwater, and that it shall show a red light.

The smoke from the manufactories and fires of Cleveland, particularly when the wind is off shore, is so dense that it is almost impossible to see the city or the pier lights until nearly up with them. Fogs are infrequent on the lower lakes, but blinding snow storms often occur. Recommendation was therefore made that funds be provided for the establishment of a steam fog signal at this place, the estimated cost of which is placed at $5,200. An act has been passed authorizing the establishment of this aid to navigation, but no appropriation has been made for doing the work. The Board, therefore, renews its recommendation for this purpose.

ARLB - 1889
Clipping file - National Archives

Cleveland West Pier - On April 12, 1889, the schooner *Montgomery*, of Cleveland, in tow of a tug, while leaving the harbor and approaching the beacon, drifted, and came so close to the beacon that her rigging caught on the gallery railing and damaged it to the of $30.54, which was paid for by the schooner.

Cleveland West Breakwater - Twenty-one oak fenders, 4 inches by 6 inches by 8 feet, were secured to three faces of the crib for the protection of the keeper's boat from coming in contact with the ends of projection tie rods on faces of the crib. The crib, which supports the iron beacon, was found to be settling and was quite shaky during heavy gales. This was due to loss of stone from the interior, through some broken or defective timber under water. When large rafts of logs are towed into the harbor, the outside lines of logs frequently collide with the crib. During heavy blows, the crib shakes so violently and inclines from the vertical so much as almost to stop the revolving apparatus of the light. Extra weights are required, and on one or more occasions the keeper has been obliged to revolve the lens by man strength. To remedy in part these defects it was decided that a row of strong piles be driven along the east and south faces of the crib about 10 feet from the east face and 15 from the south face. The piles are to be driven about 3 feet from center to center and allowed to project about 6 feet above the surface of the water and connected with oak binders. These piles will act as fenders against rafts or vessels, and confine the additional riprap stone which is to be deposited between the faces of the crib and row of piles. Proposals were opened on June 20, 1889, for furnishing riprap stone, piles, oak timber, and plank for protecting the crib and repairing the breach in the crib, and contract therefor was made accordingly. Congress by act of March 2, 1889, appropriated $5,200 for establishing a steam fog signal on the breakwater at Cleveland.

Cleveland East Breakwater - When the west end of this breakwater was completed a temporary mast light was established 32 feet from the west end of the breakwater, projecting 24 feet above the crest of the parapet on the north half of the breakwater, or 37 feet above lake level. It is secured to the south face of the parapet of the breakwater. A small house for the use of the keeper, to enable him to trim his lamps, etc., 4 feet square and 6 feet in height, was erected, and is located 7 feet to the westward of the mast and just in the lee of the parapet upon the south face of the breakwater. The mast was provided with two galvanized sheet-iron lanterns fitted with 8 inch ruby lenses. The light is visible from all directions except between the bearing from the beacon, east 35 degrees north and east 20 degrees south, this being obscured by the mast. An oak ladder was secured to the top of the mast and the deck of the breakwater, to enable the keeper to care for the light and to steady the mast. The ladder on the south face of the breakwater was replaced by a new one and protected by oak fenders.

51st Congress, 1st, Doc. 56 - 1890

Cleveland Breakwater - For establishing complete a steam fog signal on the breakwater at Cleveland, Ohio, Five thousand two hundred dollars.

From time to time lighthouses near cities have been illumined with gas from the city gas works; it is now used in but three stations, namely, Cleveland, Ohio, Alexandria, Va., and Newburyport, Mass., and even at these three it has been found necessary to guard against the accident to gas pipes, most likely to

happen in very bad weather, by keeping a set of oil lamps ready to take the place of the gas burners at a moment's notice. But while the Board has not found the use of gas practicable thus far, it keeps itself informed as to the progress made in its manufacture and its combustion.

ARLB 1890

pp. 149
Cleveland Breakwater (East) - A pile protection to the crib was built along the east and south faces of the crib. The piles were driven 3 feet from center to center, and allowed to project 7 feet above the surface of the water and were connected with oak binders and secured against the crib with tie rods and oak braces. These piles act as fenders against rafts or vessels, and confine the rip-rap stone which was deposited between the faces of the crib and the row of piles and the space between the crib and the breakwater on the north side. The work was done under contract for the different classes of material, and the driving and securing of the piles. Since this work was completed the crib does not shake during heavy gales, as was formerly the case. A platform connects the pile protection with the crib on the south side, and at the west end for the convenience of the tender. A boom was placed across the open space at the west end between the pile protection and the crib. The machinery of the fog-bell striking apparatus was sent to the maker and was thoroughly overhauled. The clockwork of the revolving apparatus was found to be so badly worn out that a new one was substituted, which runs with less than one-half the weights of the former one, and is simplified in construction. Measures were taken towards the erection of a steam-fog signal, for which Congress, by act of March 2, 1889, appropriated $5,200. The beacon light on the west end of the east breakwater, which is cared for by the keepers of the west breakwater-light was provided with two new red tubular lanterns.

pp. 152

Cleveland	Repairs
Cleveland (East Pier)	Repairs

ARLB 1891

pp. 10
Cleveland Breakwater (East end) - A red light established June 13, 1891, (displayed from fog-signal building to warn life-saving crew of wrecks near the breakwater.)

138-139
Cleveland - The grade of the lawn, which measures 18 feet by 122 feet, in front of the lighthouse site, was lowered 10 inches, so as to be on a level with the stone walk, and the surplus soil was put on the lot adjoining the lighthouse. The

lawn around the dwelling was sown with grass seed, and various repairs were made.

Cleveland East Pier - A boathouse 18 feet long, 9 feet wide, and 7 feet high in front and 9 feet high in the rear, was built in front of the beacon, projecting 4 feet over the pier on the lake face, to shelter the keeper's boat, used to communicate with the west pier-head light. The interior of the boathouse was fitted with trap doors, covering the opening on the underside of the portion of the boathouse lapping over the pier, and rope and blocks for raising and lowering the boat were supplied.

Cleveland West Pier - A tight board fence, 10 feet high, was built across the pier 8 feet shoreward from the beacon, to exclude trespassers, etc.

Cleveland Breakwater (East end) - The light was provided with a spare red tubular lantern. This light is shown from a mast 25 feet high, on the west end of the east breakwater whenever the weather is such that it can be reached.

Cleveland West Breakwater (East end) - Congress, by act approved on March 2, 1889, appropriated $5,200 to establish a steam fog signal here to replace the fog bell. The work of erecting the signal was deferred until the summer of 1890, so as to allow the crib to be properly protected against the lake action, which caused the crib to vibrate. Contract was made in July 1890, for furnishing, delivering, and erecting on site, the boiler, machinery, etc., for a single steam fog whistle. Contract was also made for furnishing the material of all kinds necessary for the erection of the house for the fog signal; and the material was placed by hired labor. The fog-whistle machinery is a 30-horse power locomotive boiler, having a vertical engine, with 4-inch bore and a 9-inch stroke.

In front of the south face of the structure is a platform 25 feet by 28 feet in plan, which was built over the area between the light-house crib and the pile protection, for landing and storing fuel. A pair of davits, fitted with proper tackle, was secured to the outer end of the platform for raising and lowering material for the signal. Direct communication is had with the tower from the signal house.

pp. 143
Cleveland West Breakwater - This 10-inch steam fog whistle is in good condition. Since this signal was established on October 30, 1890, it has been in use 210 hours, with an expenditure of about 16 tons of bituminous coal.

ARLB 1892

pp. 1856-1857
Cleveland, on the hill at the east side of Cleveland Harbor - The work of erecting and lining the 360-gallon circular-iron oil house, furnished under contract, was completed. The house is placed within 5 feet of the west boundary line of the

reservation, and in the rear of the north half of the keeper's dwelling. The Water Street walk and some 539 square feet on Main Street were re-laid with Berea sandstone taken from the old walk on Water Street. The paving of the driveway from the lot to Water Street was re-laid, two new stone cross walks of extra thickness were put in, and the stone connections between the front gateway and sidewalk, and between the sidewalk and the street, were leveled, and one piece of flagging was renewed. The exhibition of this light will be unnecessary after this season. It is not needed as a coast light. The entrance to the harbor of Cleveland is well marked by three lights, one of the fourth order, flashing red and white, and two of the sixth order, one being white, the other red. In addition to these lights, the west end of the east breakwater is marked by a red tubular lantern, suspended from a mast.

Cleveland West Breakwater (on east end of the west breakwater, on the west side of the entrance to Cleveland, Harbor) - On May 12, 1892, the schooner *H. G. Cleveland* collided with the southeast corner of the pile protection of the beacon, doing damage, which is estimated it will cost $20 to repair. A request to repair the injury was sent the schooner's owners but they have not as yet taken any action in the matter, and the repairs have not been made. On June 7, 1892, the steamer *De Pere* of the Grummond Line of steamers, in getting out of the harbor, ran into the pile protection, at the east end of west breakwater, cutting through the timbers and disabling the boat cranes, doing damage which is estimated it will cost $200 to repair. Notice of the fact was sent to the steamer's agent at Detroit, but as yet no action has been taken by the company towards making the repairs. On October 30, 1891, the schooner *Southwest* in leaving this harbor was carried by the current in lee of the west end of the light-house crib, her jib boom came in contact with the cornice of the roof of the fog-signal house and raised a sheet of the metal roofing, breaking a hook of one of the guy rods attached to the smokestack of the signal. A bill for $5.45, covering the cost of the repairs, was sent to the schooner's owner. Various repairs were made.

Cleveland East Breakwater (West end) - A stanchion tower, 30 feet high, was put up by contract near the west end of the east breakwater, to take the place of the mast light now in use. The north face of the tower is protected by the timber parapet of the breakwater, which extends to half the width of the breakwater, and the west face was protected by building a bulkhead at the west end of the breakwater. The tower was to be provided with a Funk-Heap five-day lantern to take the place of the mast light now carrying a tubular lantern. The center of the tower is 21 1/4 feet from the west face of the breakwater and 9 2/3 feet form the west end of the superstructure. It was not found advisable to complete the preparation of the tower for exhibiting a light, as it was found that during the winter season of 1891-92 the ice formation was so great as to cause a deflection of about 20 inches from a vertical line, while the mast sustained no injury beyond the loss of guide ropes for the cage of the lantern. The mast was refitted with wire-rope guides for the lantern cage, and the light was exhibited from it as it was before.

pp. 163
Cleveland Breakwater - Fog signals operated by steam or hot-air engines.
This 10-inch steam whistle was in use during the year some 562 hours, and about 3 1/2 tons of bituminous coal were consumed.

ARLB 1893
Clipping file - National Archives

Cleveland, on the hill at the east side of Cleveland Harbor - The illuminating apparatus remains in the tower in the same position it occupied before the light was discontinued at the close of navigation on Sept. 15, 1893. The dwelling is, however, the only place at present provided for the keepers of the harbor lights and fog signal. The house is in the city, at the corner of Main and Water Streets, on the high level, and affords no view of either of the lights. The distance from the dwelling to the nearest of four lights is about two-thirds of a mile; and to the break water light, with revolving apparatus and fog signal, the distance is about a mile by the route which must be followed. The distance is a matter of great inconvenience to the keepers, and sometime of danger to the lights. The present dwelling though an excellent house, is entirely unsuited to the use of several keepers. It is recommended that a site be constructed for the dwelling and storehouse by filling in the water adjacent to the west pier. The storehouse is much needed. A suitable dwelling can then be built in a place convenient to the lights. It is proposed, when the new dwelling is completed, to sell the old site and buildings. Inquiry regarding value of real estate in the vicinity of the present lighthouse site and dwelling indicates that the old site may be sold for about $24,000 or $25,000. The expense of the new site, dwelling, and storehouse is estimated to be $25,000, and it is recommended that an appropriation of this amount be made therefor.

Cleveland East Pier - On the night of November 19, 1892, the steamer *Detroit* collided with a schooner and was forced against the east pier. The guards of the steamer, striking the foundation sills of the pierhead beacon, injured them and put the beacon itself in peril. The protection fence across the pier near the beacon was also damaged. The foundation of this beacon was repaired. The protection fence across the pier was restored to its former position, repaired and strengthened and with new joist and brace rods.

Cleveland Breakwater, on the east end of the west breakwater. - The damage to the timbers of the crib occupied by the fog signal and lighthouse, inflected by the steamer *De Pere*, in June, 1892, was repaired at the expense of the steamer. On May 18, 1893, the schooner *J. B. Kitchen*, while being towed into the harbor from the lake, collided with the east end of the west breakwater and did some damage.

ARLB 1894

pp. 158-159
Cleveland, on the hill at the east side of Cleveland Harbor - The following recommendation, made in the Board's last annual report is renewed: The illuminating apparatus remains in the tower in the same position it occupied before the light was discontinued at the close of navigation on Sept 15, 1893. The dwelling is, however, the only place at present provided for the keepers of the harbor lights and fog signal. The house is in the city, at the corner of Main and Water Streets, on the high level, and affords no view of either of the lights. The distance from the dwelling to the nearest of four lights is about two-thirds of a mile; and to the break water light, with revolving apparatus and fog signal, the distance is about a mile by the route which must be followed. The distance is a matter of great inconvenience to the keepers, and sometime of danger to the lights. The present dwelling though an excellent house, is entirely unsuited to the use of several keepers. It is recommended that a site be constructed for the dwelling and storehouse by filling in the water adjacent to the west pier. The storehouse is much needed. A suitable dwelling can then be built in a place convenient to the lights. It is proposed, when the new dwelling is completed, to sell the old site and buildings. Inquiry regarding value of real estate in the vicinity of the present lighthouse site and dwelling indicates that the old site may be sold for about $24,000 or $25,000. The expense of the new site, dwelling, and storehouse is estimated to be $25,000, and it is recommended that an appropriation of this amount be made therefor. Various repairs were made.

Cleveland West Pier - The elevated walk was so badly decayed and broken as to be unsafe; it has, therefore, been removed and replaced with 1,150 feet of new walk. Extensive repairs were made to the beacon.

Cleveland Breakwater - To prevent the vibration of the crib and beacon when struck by heavy seas, 269 cords of heavy rip-rap stone were placed on the east and south sides of the crib. A strong protection of timber work was built between the tower and the fog-signal house to shield the passageway from the heavy seas. The floor of the signal house was covered with Portland cement, to afford a drainage and to provide a better surface for cleaning. The station was broken into by unknown parties before the opening of navigation, 1894, and tools were stolen. The doors, locks, etc., which were injured were repaired. Various repairs were made.

pp. 165
Cleveland East Breakwater Repairs

pp. 166
Cleveland Breakwater (East end) - This 10-inch steam whistle was in operation about 536 hours, and consumed some 36 tons of coal.

ARLB 1895
Clipping file - National Archives

Cleveland on the hill, (discontinued.) - A fire in the vicinity of this station in December, 1894, damaged the keeper's dwelling and lighthouse lot, and cracked seven panes of glass in the tower lantern. This required quite extensive repairs to the dwelling. To insure the safety of the 3 1/2-order lens still remaining in the tower lantern, the lantern was enclosed with a sheathing of matched boards. The trees and shrubbery killed by the heat were removed; the lawn was re-seeded and otherwise improved by new sodding borders of walks and driveway. Some 42 feet of tight board fence and 20 feet of picket fence on the boundary line of the lot were repaired. Various repairs were made.

Cleveland Breakwater - About 225 tons of riprap stone were placed around the crib and inside of the pile protection to provide greater security to its structures and to reduce the vibration of the tower during high winds and seas which strike with great force. A fence 2 1/2 feet high by about 18 feet long was built on the west side of the platform to prevent coal from falling overboard. Various repairs were made.

Cleveland East Pier - Some 42 feet of the elevated walk on this pier were removed from the inner end, and 12 feet were rebuilt and provided with steps leading from the pier deck to the deck of the walk. The boathouse received general repairs and was moved back into place. The United States has leased this pier to the Pennsylvania Railroad Company, which is making improvements in the vicinity that will render further maintenance of an elevated walk on the pier within that limit unnecessary.

ARLB 1896

pp. 15
Cleveland West Breakwater (East end) - Changes in fog signals - Changed to sound blasts of 3 second's duration, separated by silent intervals of 57 seconds, and a sounding board erected to deflect the sound toward the lake, July 1, 1895

pp. 131 -132
Cleveland, on the hill at the east side of Cleveland Harbor - The lantern, iron stairway, iron window frames and sash, finished stone of the upper part of the tower, and the lens were removed from this discontinued light station and transferred to the Braddock Point (New York) Light Station for use in the establishment of that light. The remaining part of the tower was roofed and the window openings were boarded up; Damage was done to the grounds about the keeper's dwelling, necessitating considerable work upon them, such as regrading and seeding. The fence inside of the curb along the front of the lot was damaged by fires in the vicinity and the fence in the rear of the dwelling was thoroughly repaired. Iron pipes were put in to replace broken earthen pipes leading water

from down spouts of the dwelling to the sewer. The light at this station was discontinued on September 15, 1893.

Cleveland West Breakwater - Some 10 cords of riprap stone were delivered around the crib on which the beacon and fog-signal house stand. Little vibration is now noticed during the most severe storms. The fog-signal apparatus was repaired. On July 19, 1895, the smokestack of the boiler was blown away, and a new stack was purchased to replace it. The platform on the east space between the crib and the pile-protection work was rebuilt to facilitate the handling of coal. The characteristic of the signal was changed July 1, 1895, by lessening the number of its blasts. The fog-signal house was modified, and a circular concave sound reflector, with the whistle bell in the center, was built to lessen the volume of the sound in the direction of the shore. It proved effective as a deflector and added to the distinctness of the sound upon the water.

Cleveland East Pier - A ladder for the use of the keeper was built on the east face of the pier. The beacon having settled and tipped to one side, was repaired.

pp. 136
Cleveland West Pier Repairs

pp. 137
Cleveland West Breakwater (East end) - This 10-inch steam whistle was in operation some 766 hours, and consumed about 40 tons of coal. A sound reflector similar to the one at the Buffalo Breakwater Light Station is finished and gives satisfaction.

ARLB 1897
Clipping file - National Archives

Cleveland East Breakwater - This light was unreliable because it could not be lighted in very bad weather. To give it permanency and greater intensity, a 5-day lens lantern was placed on an improved beacon.

Note- the light was exhibited with the new lantern on August 20, 1897

Cleveland West Breakwater - The boathouse was converted into quarters for the keepers. Two comfortable rooms are thus provided. Various repairs were made.

Cleveland East Pier - On the completion of the concrete pier, this light was transferred from the old pier to the outer end of the new pier, about 121 feet southward of its former position. The focal plane of the light was lowered about 6 inches. The boathouse was transferred to the west pier. Small wooden ladders were provided on the east and west sides of the pier for the use of the light keepers.

Cleveland West Pier - Ladders on both sides of the pier were provided for the use of the light keepers in landing from their boat. Various repairs were made to the keeper's dwelling.

ARLB 1898

pp. 14
Cleveland East Breakwater (West end) - Changed from tubular to lens lantern and height of focal plane of light increased to 35 feet, August 20, 1897

pp. 47
Estimates for special appropriations
Establishing a new site, keeper's dwelling and storehouse. $25,000

pp. 161
Cleveland, on the hill at the east side of Cleveland Harbor - The following recommendation, made in the Board's annual report for 1894, is renewed: The illuminating apparatus remains in the tower in the same position it occupied before the light was discontinued at the close of navigation in 1892. The dwelling is, however, the only place at present provided for the keepers of the harbor lights and fog signal. The house is in the city, at the corner of Main and Water Streets, on the high level, and affords no view of either of the lights. The distance from the dwelling to the nearest of four lights is about two-thirds of a mile; and to the break water light, with revolving apparatus and fog signal, the distance is about a mile by the route which must be followed. The distance is a matter of great inconvenience to the keepers, and sometime of danger to the lights. The present dwelling though an excellent house, is entirely unsuited to the use of several keepers. It is recommended that a site be constructed for the dwelling and storehouse by filling in the water adjacent to the west pier. The storehouse is much needed. A suitable dwelling can then be built in a place convenient to the lights. It is proposed, when the new dwelling is completed, to sell the old site and buildings. Inquiry regarding value of real estate in the vicinity of the present light-house site and dwelling indicates that the old site may be sold for about $24,000 or $25,000. The expense of the new site, dwelling, and storehouse is estimated to be $25,000, and it is recommended that an appropriation of this amount be made therefor.

Cleveland East Breakwater - A new tower was built and a five-day lens lantern was substituted for the tubular-lantern. The light was first shown with the new lantern on August 20, 1897.

Cleveland West Breakwater (East end) - The fog-signal boiler was tested by the local United States inspector of boilers. Repairs were made.

ARLB 1899
Clipping file - National Archives

Cleveland Main - The following recommendation, made in the Board's annual report for 1894 and gain in 1898, is renewed.

Cleveland West Breakwater, East end - The old locomotive boiler and fog signal were replaced with duplicate apparatus throughout, consisting of steam boilers, pumps and Crosby automatic signals. During the progress of the work, from the opening of navigation until June 1, 1898, when steam signals were resumed, fog signals were made with a bell. A storeroom addition was built to the fog-signal house. Various repairs were made.

ARLB 1900
Clipping file - National Archives

Cleveland, on the hill at the east side of Cleveland Harbor - The old tower on the hill has been abandoned as a lighthouse. The dwelling attached to it is a substantial structure, but is insufficient in size for three keepers. The Board proposes to pull down the old tower, and, with the material and such other material as may be necessary, to build a small house on the lot and to put the present keeper's dwelling into good repair.

ARLB 1901

pp. 19
Cleveland (West Pier) - Changes in location.
Moved to outer end of new west pier November 29, 1900.

pp. 37
Oil houses for light stations. Under this appropriation oil houses have been completed during the year at the following-named stations. Cleveland.

Cleveland West Pier - Rebuilding the west pier beacon, taking down the brick tower and repairing the keeper's dwelling at Cleveland, Ohio.

pp. 168
The west pier beacon was rebuilt on the new concrete pier. During the progress of the work the fourth-order light was discontinued and the light was shown from a lens lantern. An iron oil house was built on the pier near this beacon. About 100 tons of large stone was placed on the north side of the west breakwater light to lessen the vibration of the beacon. Various repairs were made.

pp. 172
Cleveland – Fog bells operated by clockwork are in use at the following named stations; Cleveland, West Breakwater, East end, the bells are used only when the steam whistles are temporarily disabled or until steam can be raised in the fog-signal boilers when a fog comes on unexpectedly.

pp. 171
Cleveland (West Breakwater) - This 10-inch steam whistle in duplicate, was in operation some 968 hours, and consumed about 47 tons of coal.

ARLB 1902
Clipping File - National Archives

Two stone monuments were set on the boundary lines of the lighthouse lot on the corner of Water and Main Streets.

ARLB 1903

pp. 19
Cleveland West Breakwater Light Station - Repairing foundations etc. $5,000

pp. 66
There is pressing need of the repair and remodeling and making permanent of the foundation and surroundings of this light. Its foundation has been patched with piles inclosing rip-rap, and now that the piles have rotted at the water surface they are pushed over by the rip-rap and not only prevent landing, but are beginning to be an obstruction to the entrance of the harbor. The end of the breakwater just in front of the lighthouse will be completed soon in concrete, and the only economical way to repair the lighthouse tower is to remove the riprap, cut off the piles below water, and put on a permanent concrete structure similar to that of the breakwater itself. This is an extremely pressing necessity. It is estimated that this can be done at a cost of $5,000. The Board recommends that an appropriation of this amount be made therefor.

Clipping file 1903 - National Archives

The boathouse was rebuilt on the west side of the west pier, near the shore end, thus providing a landing place for the keeper's boat. A platform for boats, boat slip extending 10 feet, and a plank bulkhead 8 feet high were built. The small round oil house was removed to the Huron Light Station, Ohio. Various repairs were made.

ARLB 1904
Clipping file - National Archives

The iron covering of the enclosed part of the east breakwater beacon was replaced with painted canvas. A life line on five iron posts was put up, leading from the ladder on the face of the breakwater east of the beacon a distance of about 50 feet. Oak guards were put up on the face of the breakwater to protect the ladder. The beacon on the west breakwater, east end, was raised and set upon a timber substructure 20 feet high, octagonal in plan, with vertical sides.

The light was on August 24, 1903, first shown at the new elevation of focal plane. Various repairs were make. By the act approved an April 28, 1904, appropriating $5,000 for repairing, remodeling, and making permanent the foundation, etc., of the Cleveland, Ohio, West Breakwater Light Station, plans and specifications were made and bids were asked for doing the work.

ARLB 1905

pp. 129
The stone sidewalk along the Water Street front of the lot occupied by the light keeper's dwelling was taken up, the space was re-graded and a new walk was laid with concrete. The stone pavement of the driveway entrance was lowered to the sidewalk level. By the act approved on April 28, 1904, $5,000 was appropriated for repairing, remodeling, and making permanent the foundation, etc., of the Cleveland, Ohio, West Breakwater Light Station. The work has been completed.

ARLB 1907
Clipping file - National Archives

On April 30, 1907, the fixed white sixth-order light on the outer end of the west pier was discontinued and in its place a fourth-order flashing white light was established. At the main entrance to Cleveland Harbor an east and a west breakwater are under construction. The Board considers that two lights ought to be established on the pierheads at the outer ends when the breakwaters are completed. It is estimated that a suitable lighthouse for the east breakwater pierhead can be built for $12,000 and for the west breakwater pierhead for $38,000, or a total of $45,000 for both, which includes in each case raising the pierheads to 14 feet above mean lake level; and the Board recommends that an appropriation of this amount be made therefor.

ARLB 1909

pp. 633
Cleveland Harbor Breakwater - Appropriation by act, of May 27, 1908, $45,000.

pp. 634
Plans and specifications for a lighthouse and an iron beacon were prepared, and bids for the work of construction were opened March 30, 1909. The bids, being considered excessive, were rejected and the work was re-advertised, Bids were again opened May 28, 1909, and the contract was awarded to the lowest bidder in the sum of $39,397.

pp. 654

Cleveland East Breakwater Pierhead - Lights Established	Lens lantern
Cleveland West Breakwater Pierhead - Lights Established	Lens lantern

pp. 660
Cleveland Harbor Breakwater Light Station - Expenditures for fiscal year ending June 30, 1909, $255.55

Annual Report Lake Carriers Association – 1909

pp. 72
On March 25th there was established on the pier head at the northeasterly end of the rubble mound breakwater connecting with the old west breakwater on the westerly side of the main entrance to Cleveland Harbor a temporary fixed white lens lantern light, and on the northwesterly end of the rubble mound breakwater connecting with the old east breakwater on the easterly side of the harbor a temporary fixed red lens lantern light. Both of these lights were placed at an elevation of 20 feet above the water

Commissioners Report - 1910
Clipping File - National Archives

The act approved May 27, 1908, appropriated $45,000 for a light station at each of the east and west breakwater pierheads entrance to Cleveland Harbor, Ohio. Under a contract executed June 17, 1909, for construction a lighthouse on the west breakwater pierhead and an iron beacon on the east breakwater pierhead, entrance to the harbor, work began at the site for the iron beacon July 6, 1909, and was carried on continuously, when weather conditions permitted, until October 4, 1909, when operations were practically suspended at the pierheads for the season and have not been resumed. The pierheads were then complete and ready to receive the lighthouse and iron beacon. The amount expended on this project to June 30, 1910 was $12,650.11, and the unpaid outstanding obligations of contract amounted to $27,577.90. The station will probably be ready for operation by December 31, 1910

Annual Report Lake Carriers Association – 1910

pp. 65
The new iron towers on the East and West Breakwater Pierheads are nearing completion under special appropriation of $45,000. Permanent lights will be established in these towers at the opening of navigation, 1911.

Commissioners Report - 1911
Clipping file - National Archives

The act of May 27, 1908, appropriated $45,000 for a light station at each of the east and west breakwater pierheads, entrance to Cleveland Harbor. The two lighthouses, including the foundation pierheads from a plane 8 feet above lake level, were constructed under contract. Work was begun at the site on July 6, 1909, and was completed December 9, 1910. A fourth-order oil-vapor flashing

light was installed in the west breakwater tower and a fifth-order acetylene-flashing light in the east breakwater tower. Both of the lights were placed in commission on March 25, 1911. The total cost was $43,028, exclusive of $1,860 reserved for lenses and outstanding obligations.

Annual Report Lake Carriers Association – 1911

pp. 69, 70
The new permanent lights on the breakwater pierheads at Cleveland were established at the opening of navigation last season.

The light on the east breakwater pierhead is a fifth order white flash light, shown from a cylindrical iron tower 39 feet above the water and 25 feet above the pier, illuminating the entire horizon and visible about 13 miles. The illuminant is acetylene. A temporary fixed red lens lantern light was formerly shown in this location.

The light on the west breakwater pierhead is of a fourth order, flashing every five seconds, alternating white and red, and is shown from a white, cylindrical, iron tower 63 feet above the water and 49 feet above the pier, illuminating the entire horizon and visible about sixteen miles. The illuminant for this light is incandescent oil vapor. This pierhead was formerly marked temporarily by a fixed white lens lantern light, which has been discontinued.

The fourth-order flashing-white and red light formerly shown from the east end of the west breakwater was replaced by a sixth order light, showing a group of two red flashes every four seconds; acetylene being the illuminant used.

On May 25th the East Pier Light at Cleveland was changed from a fixed white to a flashing white light, and the illuminant changed to acetylene.

The west pier light was changed from a fixed red lens lantern light to a sixth order flashing red light, acetylene being the illuminant.

One June 27th the characteristic of the east breakwater west end light was changed from a fixed white to a flashing white light, and shown from a white, square, pyramidal skeleton steel tower 38 feet above the water and 25 feet above the base of the structure. Acetylene is also used as illuminant for this light.

Annual Report Lake Carriers Association – 1912

pp. 66
Cleveland Harbor Lights Improved – On May 1, 1912, the Cleveland East Breakwater Pierhead Light was changed from fifth to fourth order, increasing the luminous power from 530 to 710 candles, and the west breakwater, east end

light, and the west pier light were both changed from sixth to fifth order, increasing the luminous power from 90 to 150 candles.

Commissioners Report – 1913

pp. 340
Legislation Enacted Affecting the Lighthouse Service
Improvement of fog-signal station at Cleveland, Ohio - $17,600

Annual Report Lake Carriers Association – 1913

pp. 65
A 6-inch steam fog whistle, sounding one blast every 30 seconds, thus, blast 3 seconds, silent interval 27 seconds, was established on Cleveland West Intake City, Cleveland Harbor, on the opening of navigation.

The fixed-white light on Cleveland Waterworks Intake Crib was replaced by an intermittent white acetylene light of about 360 candlepower every 10 seconds, thus: light 5 seconds, eclipsed 5 seconds, on April 25, 1913.

This fog whistle and light are maintained by the City of Cleveland.

The act of October 22, 1913, appropriated $17,600 for improving the fog-signal at this port. Under this authority plans are being prepared for a fog-signal building in the west breakwater pierhead adjacent to the main light, and a modern compressed air fog-signal plant will be installed. When completed, this signal will replace the present steam whistle at the east end of the west breakwater.

Commissioners Report – 1914

pp. 484
Cleveland – Aids to navigation

pp. 495
Appropriations were made for the following special works by the act of October 22, 1913 – Improvement of fog-signal station at Cleveland, Ohio - $17,600

pp. 529
Cleveland Harbor - The act of October 22, 1913, appropriated $17,600 for the removal, reconstruction, and improvement of the fog-signal station at Cleveland, Ohio. The detailed plans for the fog-signal house have been approved. It is planned to complete the structure during the present year. Amount expended to June 30, 1914, $17.50.

Annual Report Lake Carriers Association – 1914

pp. 97
On July 21, 1914, Cleveland Harbor East Breakwater Extension Light was discontinued, and a gas-buoy numbered 2, showing an intermittent red light of about 35 candlepower every 20 seconds, thus, light 10 seconds, eclipsed 10 seconds, was established 4 miles 53 degrees form Cleveland East Breakwater West End Light.

The illuminating apparatus is a 200 millimeter lens-lantern burning oil gas.

The plans for the new fog-signal building on the west breakwater pierhead, adjacent to the main light, authorized by act of October 22, 1913, are practically completed. This improvement will probably be completed during 1915.

Commissioners Report – 1915

pp. 572
Engineering and construction – Cleveland, Ohio Light station

pp. 598
Lights established during the fiscal year 1915
Cleveland East Entrance, Ohio - Lens lantern (acetylene).

pp. 603
Fog signals which will probably be established during the fiscal year 1916
Cleveland East Entrance, Ohio – Siren
Cleveland West Pierhead, Ohio – Diaphone

pp. 615
Cleveland Harbor - The act of October 22, 1913, appropriated $17,600 for the removal, reconstruction, and improvement of the fog-signal station at Cleveland, Ohio. Metal work for the building is being constructed under formal contract and was practically completed at the shops on June 30, 1915. The work at the site will be commenced in the near future. It is planned to complete the structure during the present season. Diaphone fog-signal apparatus has been ordered. Amount expended to June 30, 1915, $221.42.

pp. 628
Expenditures during the fiscal year 1915
Cleveland Fog-Signal Station, Ohio - $203.92

pp. 657
Construction and repair work completed during fiscal year 1915
Cleveland East Breakwater East End Light, Ohio – Establishment of acetylene light on steel tower - $1,692

Annual Report Lake Carriers Association – 1915

pp. 85, 86
Cleveland Harbor, Ohio – Main Entrance – Under the special appropriation of $17,600 for improving the fog-signal at the main entrance to Cleveland Harbor, work has been in progress at the site during the year, 1915. At the close of navigation the steel work of the new fog-signal house was practically completed. It is expected to finish the interior of the structure during the winter and install the fog-signal apparatus so as to have the new signal in operation early in the season of 1916. The new signal will be located adjoining the west breakwater pierhead tower. It well be a diaphone operated by compressed air, and when it is placed in commission the present steam plant will be discontinued.

East Entrance – On June 30, 1915, a group flashing white light was established at the end of the extension of the east breakwater at Cleveland Harbor, known as Cleveland East Breakwater East End Light. The light is shown from a skeleton steel tower and is about 40 feet above the water. Plans are underway to improve this light by installing electricity as the illuminant, giving a much more powerful light, also to establish an electric-siren fog signal. The light and fog signal will be controlled from shore by means of an electric cable connecting the light to with the power station directly opposite. It is expected to have these improvements completed shortly after the opening of navigation 1916.

Commissioners Report – 1916

pp. 689
Acetylene or other lights changed from oil-wick lights during the fiscal year 1916
Cleveland East Entrance – (Electric from acetylene)

pp. 693
Fog signals established, improved, and discontinued during the fiscal year 1916
Cleveland East Entrance, Ohio – (Electric siren)

pp. 704
Cleveland Harbor - The act of October 22, 1913, appropriated $17,600 for removal reconstruction, and improvement of the fog-signal station at Cleveland, Ohio. On June 30, 1916, the structure was practically completed with the exception of plastering, miscellaneous interior work, and cleaning up. Work was in progress installing the fog-signal plant. It is expected the new fog signal will be in commission during the fall of 1916. Amount expended to June 30, 1916, $13,012.99.

pp. 717
Expenditures during the fiscal year 1916

Cleveland Fog-Signal Station, Ohio - $12,791.57

pp. 743
Important construction and repair work completed during fiscal year 1916
Cleveland East Entrance, Ohio – Installed electric light and fog signal - $4,096

Annual Report Lake Carriers Association – 1916

pp. 93, 94
The new fog-signal house built under a special appropriation of $17,600, was completed, and on August 18,1916, the new fog signal plant was placed in commission.

The new signal is a Type “F” diaphone, operated by compressed air, sounding a group of 2 short blasts every 30 seconds, thus, blast 1 second, silent 1 second, blast 1 second silent 27 seconds.

On the same date the old steam whistle and auxiliary bell at the West Breakwater Station were discontinued.

May 1, 1916, Cleveland East Entrance Light was changed to an occulting light every 10 seconds, light 8 seconds, eclipse 2 seconds, of 6,000 candlepower.

On May 15,1916, an electric siren was established at this point, sounding a blast of 4 seconds’ duration every 20 seconds.

The light and fog signal are operated by a submarine cable extending to shore.

Commissioners Report - 1917

pp. 704
Cleveland Harbor - The act of October 22, 1913, appropriated $17,600 for removal reconstruction, and improvement of the fog-signal station at Cleveland Harbor, Ohio. Fog-signal plant installed and signal in commission August 18, 1916. It is expected to complete interior finish of structure during present season. Amount expended to June 30, 1917, $17,310.97.

pp. 714
Damage by collisions
On June 7, 1917, the tower of Cleveland West Pier Light, Ohio, was destroyed by the steamer *J. C. Morse*, in tow of tugs *Frank W* and *Lorain*. The tower will be replaced by the owners of the tugs at an estimated cost of $850.

pp. 719
Expenditures during the fiscal year 1917

Cleveland Fog-Signal Station, Ohio - $4,300.13

Annual Report Lake Carriers Association – 1917

pp. 108
Cleveland Harbor Lighthouse – The wooden frame lighthouse tower located at the end of the west side pier at Cleveland Harbor, was wrecked early in 1917, and was replaced by a skeleton steel structure in a concrete base. No change was made in the characteristic of the light.

Cleveland West Pier Light Re-established – On July 24, 1917, Cleveland West Pier Light was re-established on a white-skeleton tower with enclosed base, 36 feet above water. The temporary fixed red light was discontinued same date.

New Fog Signal Station to be erected – Plans are under way for the improvement of the fog signal at East Entrance Light Station. A new steel tower will be constructed and an air diaphone installed. The light will also be shown from a higher elevation.

The steel for the tower has been contracted for, and it is expected to complete the project during the season of 1918.

Commissioners Report – 1918

pp. 570
Engineering and construction – Improvement of aids to navigation at Cleveland Harbor, Ohio, was completed.

pp. 599
Cleveland Harbor, Ohio – The act of October 22, 1913, appropriated $17,600 for removal, reconstruction, and improvement of the fog-signal station at Cleveland Harbor, Ohio. A fog-signal building has been constructed, the necessary plant installed, and the signal was placed in commission August 18, 1916. Amount expended to June 30, 1918, $17,312.82

pp. 634
Descriptions of new works completed since the end of the fiscal year 1917
Cleveland Harbor Fog signal, Ohio

Purpose – On the completion of the rubble-mound breakwater arms, and the establishment of the main light on the west arm, it became necessary to remove the fog signal to the same location in order to obtain the highest efficiency and concentrate the duties of the keepers. It went into commission August 18, 1916.

Site – The fog signal is located on the outer pierhead on the arm extending from the west breakwater, main entrance to Cleveland Harbor, Ohio.

Structure – A rectangular steel building 29 by 31 feet in plan and 24 feet high, connected with the tower by a passageway, was built. The roof is covered with asbestos shingles and a monitor for housing the fog signal was built on the ridge near the gable.

Fog signal – The apparatus consists of a type “F” diaphone, using compressed air. The power plant consists of a 25-horsepower direct-connected tandem engine and compressor unit, in duplicate, operating on kerosene or power distillate. The characteristic consists of 2 blasts every 30 seconds.

Cost – The fog signal was removed, reconstructed, and improved under the act of October 22, 1913, appropriating $17,600 for the work. Amount expended to June 30, 1918, $17,312.82. The metal work for the building was made under formal contract. Construction was made by hired labor and purchase of materials.

Annual Report Lake Carriers Association – 1918

pp. 97
Cleveland East Entrance Light – A new steel tower was constructed for this light with an enclosed house at the top for the fog-signal machinery. The focal plane of the light was increased and the new structure makes a much better day mark.

The fog signal was also improved on July 24, 1918, by substituting an air diaphone for the electric siren formerly in commission, and sounds a blast of 4 seconds duration, silent 16 seconds.

Commissioners Report – 1919

pp. 730
Fog signals established, improved, and discontinued during the fiscal year 1919
Cleveland East Entrance, Ohio – Improved – Electric siren, air diaphone.

pp.781
Cleveland east Entrance Light Station, Ohio – Providing new steel tower and installing diaphone in place of electric siren fog signal - $6,262

Cleveland West Pierhead Light Station, Ohio – Improvement to fog-signal building - $1,365

Commissioners Report 1923

pp. 33
Acetylene or other lights changed from oil-wick lights, etc.
Cleveland East Pier, to electric incandescent, from acetylene.

Annual Report Lake Carriers Association – 1923

pp. 90
Cleveland East Pier Light – On April 6, 1923, the intensity of this light was increased to 1,400 candlepower and the characteristic changed to fixed white. Electricity was installed as the illuminant.

Commissioners Report 1929

pp. 26
The act of July 3, 1926, appropriated $50,000 for providing new quarters for keepers at Cleveland Light Station, Ohio. Purchase of quarters for keepers has been completed. Plans for a new boathouse are now under way. Total cost to June 30, 1929, $41,794

Commissioners Report 1930

pp. 29
See report, 1929, page 26. A station boathouse has still to be constructed. Total cost to June 30, $41,794.

Commissioners Report 1931

pp. 24
Progress of Special Works Under Construction or Completed
See report, 1930, page 29.

Contracts for constructing concrete piers, steel protection piling, and boathouse for station boats have been awarded.
Cost to June 30, 1931, $41,800

Annual Report Lake Carriers Association – 1931

Cleveland Harbor – The introduction of electricity as the illuminant permitted the intensity of light on Cleveland West Pierhead to be increased to a white flash of 32,000 candlepower and red flash of 9,600 candlepower. The characteristic of Cleveland West Breakwater Light was changed to group flashing red, 10 seconds, 85 candlepower, the light being shown from a new structure on a white skeleton steel tower, 33 feet above the water.

Annual Report Lake Carriers Association – 1932

The characteristic of Cleveland West Pier Light was changed to fixed red of 540 candlepower by the installation of electricity as the illuminant.

Annual Report Lake Carriers Association – 1933

pp.112
Proposed Improvements – Cleveland West Pierhead – Establishing of radio beacon.

Commissioners Report 1934

pp. 114
Cleveland Ohio – Provide radio beacon at Cleveland.

Annual Report Lake Carriers Association – 1935

pp. 139
Cleveland East Entrance Light was changed to an occulting white light every 4 seconds, light 2 seconds, eclipse 2 seconds, at the opening of navigation 1935.

The color of Cleveland East Pierhead Light, Cleveland East Breakwater Light and Cleveland East Pier Light was changed to green.

Cleveland West Breakwater Light was re-established July 3, on the outer end of the breakwater, upon completion of removal of a portion of the breakwater.

A radio beacon will be established at the West Pierhead Station at the opening of navigation, 1936. The fog signal will be synchronized for distance finding.

Commissioners Report 1935

pp. 124
Cleveland, Ohio – Cleveland radio beacon equipment being assembled.

Commissioners Report 1936

pp. 119
Cleveland and Toledo, Ohio – See annual report 1935 page 124. Project completed. Cost, $20,415

Annual Report Lake Carriers Association – 1936

pp. 147
Cleveland West Pierhead Light Station – A radio beacon was established June 25 at this station and synchronized with the sound fog signal for distance finding. Radio beacon transmits groups of dash, dot, dash, dot (-.-.) on a frequency of 314 kilocycles.

Cleveland East Pier Light – On August 27, the former wooden tower was replaced by a white-skeleton steel tower.

Annual Report Lake Carriers Association – 1940

pp. 126
The intensity of Cleveland East Entrance Light was increased to 8,600 candlepower.

HAER Great Lakes Lighthouse Survey – May 1979

Cleveland West Pierhead Light
City, Cleveland – State, Ohio – County, Cuyahoga
Owner – Department of Transportation, U. S. Coast Guard Ninth District
1240 East 9th Street, Cleveland, Ohio 44199

Together with a small-metal beacon on the east breakwater, the Cleveland West Pierhead Light marks the main entrance to Cleveland Harbor. The arrowhead breakwaters were built 1904-1909 to protect the harbor from prevailing northerly winds. In 1908, $45,000 was appropriated for two "light stations" to mark the channel into the harbor. The West Pierhead Light, erected 1909-1910, consists of a 4-story brick tower sheathed with wood. The conical tower, painted white, features windows with ornamental architraves and an entrance vestibule with three-part entablature. There is a basement, work area on the first floor, and living quarters on the second, third, and fourth floors (no longer occupied.) Above this is a watchroom with a circular gallery supported on brackets. The circular lantern rises above the watchroom. Although the light was converted to electric-lens drive in 1960, it is still shone through a 4th-order Fresnel lens bearing the marking of "Barbier & Benard, Paris, 1884." The light, which has a focal plane height of 63 feet above mean lake level, shows an alternating white and red flash. On the north side of the light, a covered passage connects the tower to a 1½ story steel-framed fog-signal house, built in 1916. The gable-roofed building, 29 feet X 31 feet, is clad with ¼ inch steel plates. New fog-signal apparatus was installed in 1964.

Original Use – Harbor light & fog signal

Present use – Harbor light & log signal

Historical References, Personal Contacts, Other
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1843
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1845
1847
Annual Report 1839 - Hand written

Photos
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Cleveland Main Light - 1890 - Inland Seas Museum (3 copies)

Clippings
Cleveland Harbor Lighthouse - Lighthouse Model Creations - pp. 37-38
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Picture of Frederick Hatch, Keeper Cleveland light-station - Keepers Log - Spring 1997 pp. 21
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Letter - Helbig - 2 pp.
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Story - Lights of Cleveland November 25, 1900 - Cleveland Leader - 8 pp.

Drawings
Main lighthouse and keeper's dwelling front and rear elevations.
Main lighthouse and keeper's dwelling side elevations.
Drawing Cleveland Lighthouse

Letters
Letter - July 25, 1834
Letter - Sept. 3, 1835
Letter - June 19, 1838 - Regarding the Keeper
Report - John Mc Reynolds July 18, 1845
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Letter - March 4, 1852 - National Archives - 1 pp.
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Letter - From Katty Nemeth - To Thomas Tag - Nov. 22, 1998 - 1 pp.
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Cleveland East

File Contents

Photos
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Cleveland East - Thomas Tag - 2
Stereo view Cleveland east light ca. 1910

Clippings

Drawings
Proposed double light for east pier

Letters

Cleveland West

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Photos
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Cleveland West Breakwater - 1895 - Inland Seas Museum - (3)
Cleveland West Pier - Ca. 1894 - Inland Seas Museum - (1)
Cleveland Harbor - 1936 - Inland Seas Museum - (3)

Clippings
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Fog Horn Sings - Cleveland Plain Dealer - July 25, 1939
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Pictures and description - Great American Lighthouse - pp. 253
Picture of West Pierhead Light - A Pictorial History of the Great Lakes

Drawings
Proposed beacon on west pier

Letters