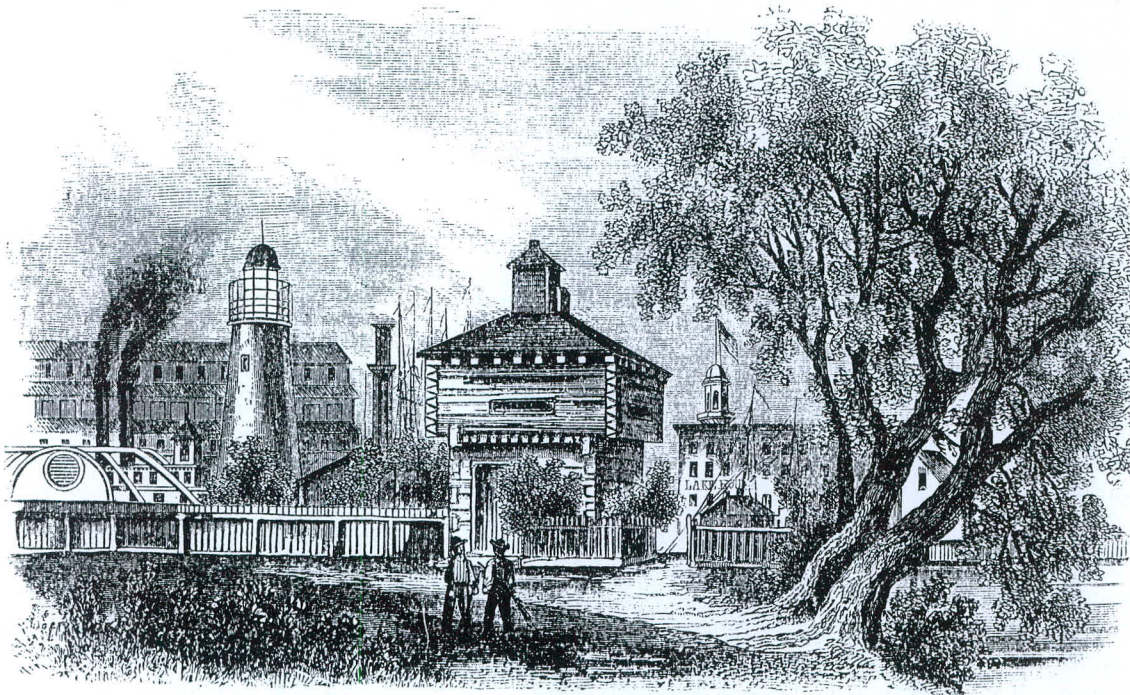


THE LIGHTHOUSES OF ILLINOIS

EDITED BY SCOTT T. SMITH



The Original Chicago Lighthouse at left, with Fort Dearborn at right. Engraving from *Harpers New Monthly Magazine*—1863

Contributions by Joanne Grossman and Rebecca Strand. Special thanks to Theodore J. Karamanski and the Loyola University Public History Program.



As land hungry American settlers moved west in the nineteenth century they found at their disposal the largest inland transportation system in the world: the Great Lakes. The 94,710 square miles of the Great Lakes contained nearly 20% of the world's fresh water, enough to cover the continental United States to a depth of ten feet. Some have called the Great Lakes the fresh water Mediterranean of the Western Hemisphere. Such fact and fancy was unimportant to the new settlers out to make their fortunes and con-

quer the wilderness; they found the 2,342 miles of connecting waterways indispensable to their dreams of riches.

But travel on the Great Lakes was not new. For nearly 200 years before the Constitution the lakes and their tributary rivers were used by explorers and traders to get to the interior of North America. Birchbark canoes and mackinaw boats loaded with furs or European finished goods for trade, plied the waters of the Great Lakes between upstart trading centers. In 1679 the first sailing vessel appeared on the Great Lakes. The "Griffon" was built by the explorer LaSalle who hoped to monopolize the fur trade in the western Great Lakes region, but it sank on the return from its maiden voyage.

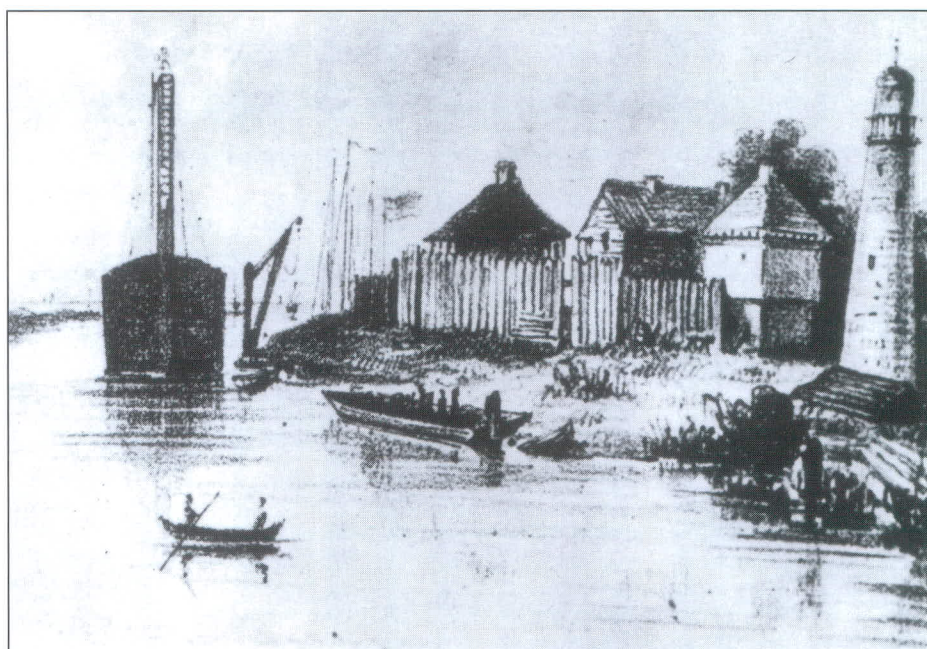
By the early nineteenth century the Great Lakes had become the main com-

mercial waterway and the most important transportation system in the United States. In 1825, the Erie Canal opened, cutting to a fraction the cost and time of shipping goods from the Middle West to the population centers on the Atlantic seaboard. Trade in grain, lumber, and coal increased dramatically and contributed to the explosive growth of the Middle West. When the St. Mary's Falls Ship Canal opened at Sault Ste. Marie in 1855, the rich iron and copper deposits around Lake Superior were opened for earnest exploitation. By the Civil War the Great Lakes region commanded a significant role in the nation's economy, supplying agricultural and natural resources to the industrialized east coast and the world beyond.

If the Great Lakes are the “Mediterranean of the West,” then Chicago is its Athens. The site of the city was of strategic economic importance. At the southwestern edge of Lake Michigan, the village was an important link in a transportation route that connected by portage the Chicago River with the Illinois River, and thus the Mississippi and the Gulf of Mexico. The portage later became unnecessary with the completion of the Illinois and Michigan Canal. In 1831, three ships docked at Chicago. Only ten years later, in 1841, the Chicago harbor was accommodating 150 ships a month during season, and in 1842 tallied 705 arrivals for the year. Chicago became the leader of Great Lakes trade which had swelled by the Civil War to 600 million dollars in value annually. The building of lighthouses and other aids to navigation along the shores of the Great Lakes coincided with the booming economy of the region: indeed, the lighthouses may be considered a necessary precondition for the boom.

The administration of the Chicago and Illinois lighthouses, as well as the others on the Great Lakes and in the nation, was the responsibility of the Fifth Auditor of the Treasury until 1852. Treasury's stewardship was characterized by unreasonable frugality, and a stubborn refusal to modernize. In 1822, Augustin Fresnel, a French physicist, developed a new lens design that dramatically changed the quality of lighting systems in lighthouses around the world. There were six “orders” of Fresnel lighthouse lenses. The greatest strength lenses are of the first order, which are strictly reserved for ocean lights. However, under the maladroit tutelage of the auditor, Stephen Pleasonton, the new technology was not incorporated into the United States system. Growing complaints about the upkeep and quality of the lighthouses forced the Congress to act, and in 1852 it created the Lighthouse Board to administer the lighthouses.

Professional management and diligent care of the lighthouses was needed as the Great Lakes and Chicago commerce continued to grow rapidly in the later half of the nineteenth century. The



Above—The 1831 Chicago Lighthouse next to the Chicago Canal, Fort Dearborn to the left.

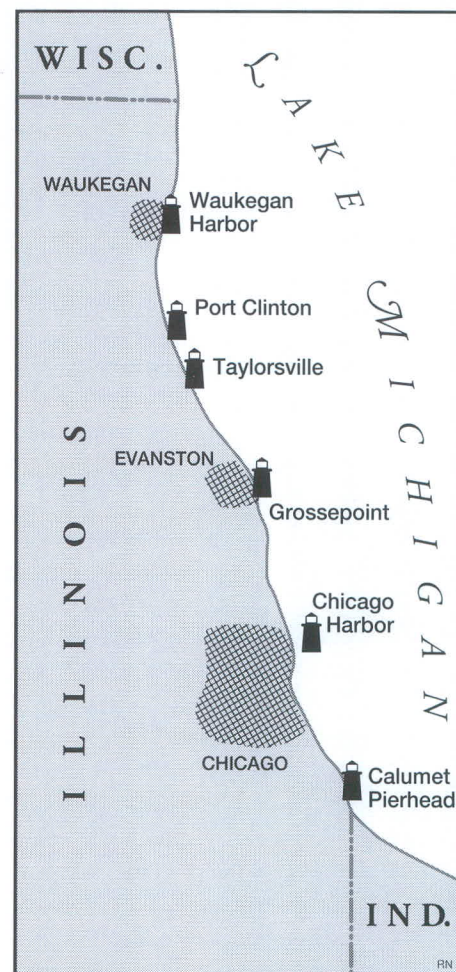
total shipments on the lakes swelled from four million tons in 1852 when the Lighthouse Board took over, to eighty million tons by the end of the century. In the eight month long 1888 navigation season, Chicago handled approximately 20,000 arrivals and departures of major vessels. This fact takes on even more significance when compared to the port of New York which handled 23,000 vessels over the entire length of the same year. New lighthouses were built around the Great Lakes, but the Lighthouse Board concentrated most of its resources on repairing and upgrading old facilities.

The Chicago Lighthouse

Long before such impressive economic activity the federal government had recognized the economic potential of Chicago. In 1829, coinciding with a nationwide agitation for federal aid to internal improvements, Illinois representatives in Congress were urged to press the claims of Chicago for channel improvements. Supporters of federal aid to internal improvements used the existence of the lighthouses to support the logic of their argument:

“this obligation [to support internal improvements] has ever been recognized from the foundation of the government, and has been fulfilled

Opposite page—The 1893 Chicago Lighthouse was moved to this location in 1910. Photo taken in 1989 by Keeper Roger Schultz.





partially, by erecting light-houses, building piers for harbors, breakwaters and sea walls, removing obstructions in rivers and providing similar facilities for 'commerce among the states'; and that principle has been most emphatically acknowledged to embrace the western lakes and rivers, by appropriations for numerous light-houses upon them, which appropriations have never been questioned in Congress, as wanting in Constitutional authority."

In March of 1831 Congress approved an appropriation of \$5,000 to build a lighthouse. Samuel Johnson was the contractor raising a structure 50 feet in height with walls three feet thick. But,

"Before it was fairly completed, . . . , on October 30 of that year, the structure fell. A few hours before it toppled over, so confident were many there was no danger of its falling, that several went upon the top of it, some of the visitors being women."

Mr. Johnson maintained that the lighthouse was over a deposit of quicksand which caused the structure to settle badly and fall. Others suspected the cause was of his own making, the result of inferior materials.

On September 4, 1832, Private Frederick Myers of Fort Dearborn wrote in his journal:

"The schooner *Marengo* of Detroit arrived bringing lighthouse builders, fur company stores, and some public stores. High winds from the North East."

The crew witnessed by Private Myers was in the employ of Mr. Jackson who rebuilt the erstwhile tower, but only to a height of forty feet. The new lighthouse was completed in 1832, and located on the south bank of the Chicago River, just to the north of Fort Dearborn. The lighting technology was unfortunately already dated at the time of installation, being three reflectors fourteen inches in diameter.

Under the watchful eye of the new sentinel, the federal government began a campaign of harbor improvements at Chicago. Before 1832, the Chicago River made a sharp bend southward only seventy yards or so before reaching the lake. The river then travelled southerly for approximately one half mile before emptying into the lake, and thus leaving a long sand bar which grew with each northeasterly gale. As early as 1817 Stephen H. Long noted in his survey that, if a channel were cut through the sandbar and flanked by piers, the shortcut would render the river, "a safe and commodious harbor for shipping." The garrison at Fort Dearborn tried to clear a channel several times, but to their frustration each new channel "choked up with sand" in short order.

In 1833 Congress appropriated \$25,000 for more permanent harbor improvements. Work began in 1834, and by 1835 two piers extended into the lake flanking a channel 200 feet wide. However despite additional Congressional appropriations and different pier designs, sandbars continued to form hampering navigation into the Chicago River. The solution was to extend the piers even further into the lake. In 1847 the north pier was extended to a length of 3900 feet with the last portion constructed in an arc extending north at an angle of about twenty-five degrees. At the eastern end of the new pier was placed a lighthouse made of pine timber to direct vessels to the new harbor entrance.

Federal support waned for river and harbor improvements in general, and at

Chicago in particular. Despite expenditures of large sums of money the channel continued to become blocked by sandbars. In 1846 the federal government ordered the dredging boat at Chicago sunk, and in the same year President Polk vetoed the "River and Harbor Bill."

In 1852 a more permanent lighthouse replaced the pine structure at the end of the north pier. It was constructed on timber piles "at a point about fifty feet further north."

In 1857 Congress authorized the construction of a lighthouse to replace the old structure built in 1832. A beacon was to replace the lighthouse near the end of the north pier. The new lighthouse was to be located at the southeast corner of the large pier on the north bank of the Chicago River. It was to be constructed of iron work contracted elsewhere, and transported to Chicago the following spring for assembly. In the meantime, engineers at the site worked on the foundation and construction of the keeper's dwelling. The Annual Report of the Lighthouse Board to the Congress assured the Members of Congress that all the necessary materials had been arranged for spring construction, and that the lighthouse should be completed by August of 1858. This light served as the main Chicago Harbor light.

By 1870 smoke from the surrounding factories and numerous steamships virtually obscured the light from view. The Lighthouse Board then recommended that Chicago's leading light be re-established at a "more eligible site." Thus, a lighthouse was built on a prominent bluff in Evanston, Grosse Point, and marked for mariners the approach to Chicago. The old lighthouse at Chicago was left standing but remained unlit until 1893 when a new lighthouse was built at the mouth of the Chicago River.

Chicago's port attracted millions of tons of commerce seasonally and by 1910 harbor improvements were much needed. Included among the funds for dredging and other improvements was funding for a concrete crib located 2300 feet from the outer end of the new Municipal (Navy) Pier. Congress then

appropriated \$88,000 to move the 1893 lighthouse out onto the new breakwater. The tower is six stories high from the concrete foundation, and includes a keeper's dwelling with enough space to accommodate four keepers whose duties then included servicing the harbor's other beacons as well.

Throughout the 1920's inspectors and the superintendent of the Lake Michigan District of the Lighthouse Bureau made sure the important Chicago light station remained technologically superior as a navigation aid. The fog signal received a new type-F diaphone in 1925, which produced sound almost an hour faster than its old steam-powered locomotive whistle. Navigators were impressed with the new fog signal's penetrating sound. Said one old master, "That's the gol-darned best old horn on Lake Michigan." Chicagoans who lived or worked nearby were less enthusiastic. One businessman complained, "That's the damn-est outrageous nuisance and someone ought to hang for it."

The Chicago Harbor Light Station was modernized in 1935 with the addition of electricity, and today remains both a landmark and an effective navigational aid.

The Waukegan Lighthouse

There was never really any one single, primary road to Chicago by which farm products and other potential exports travelled for trans-shipment. The reason for this lack of a central mercantile artery is that the southwestern shore of Lake Michigan is blessed with several commerce-friendly locations, much to the convenience of the local farmers. One of those early sites that serviced local trade and tried to compete with Chicago (only later to become a mere economic satellite) was at Waukegan, known then as Little Fort. Undocumented sources say the first pier at Little Fort was built in oak in 1841, and located just east of present day Water Street.

By 1845 the population of Little Fort had swelled to well over a thousand, and their increasing exports of wool and lumber gave the local denizens reason



The 1849 Waukegan Lighthouse after a new lantern room and large wooden frame addition were added. The flag shows 45 stars which places the photo after 1896 when Utah was admitted to the Union. Photo courtesy of the Lake County (IL) Museum/Regional History Archives.

for considerable pride and optimism. Commerce in Little Fort was growing rapidly. In 1847, one hundred and ninety-one steamboats stopped at the harbor, and farm products were not the only trade. Shipping manifests for 1847 listed a variety of goods in impressive quantities:

"[imports] Merchandise, 472 tons; lumber, 3,455,652 feet; 316,000 shingles, 150 cords of shingle bolts; 1,624 barrels of salt; 193 barrels of flour; 752 barrels of apples; 92 barrels of water lime; 31,386 pounds of machinery; 61 wagons.

The exports: 167,878 bushels of wheat; 7,634 bushels of oats; 1,278 bushels of corn; 106 bushels of beans; 1,134 bushels of barley; 7,282 pounds of butter; 43,556 pounds of merchandise; 73 barrels of pork; 784 hides and 5,458 cords of steamboat wood"

Further Little Fort was located at a point between Milwaukee and Chicago where it could provide refuge for vessels caught in the frequent, sudden, and fierce storms that could arrive without warning on Lake Michigan. Several vessels a season perished, resulting in loss of human life and property very near Waukegan.

By 1847 the Fifth Auditor of the

Treasury recognized the need for an illuminated navigational aid at Little Fort and on March 3rd of that year Congress approved the amount of \$4,000 for the construction of a lighthouse. The structure was cylindrical and constructed entirely of brick. It rested atop a two-room house that included a full basement. An addition accommodated a kitchen and a storeroom.

The brick tower was reconstructed in 1860, and a large frame addition was added to the keepers house. Expanded to accommodate two keepers, the new dwelling had six rooms on the ground floor and two on the second, and included such amenities as running water in the kitchen, lathed and plastered walls, and wall paper in most of the rooms.

In the late 1880's the Army Corps of Engineers built an artificial harbor at Waukegan to improve the rather limited natural harbor there. The result was a boom in commercial activity for the city. Many shippers preferred to transfer their loads from water to rails at Waukegan rather than battle the crowded Chicago Harbor.

With the increase in trade and commerce, there was a call for a more promi-

nent lighthouse, and in 1899 a 36 foot tall, white cast iron tower was erected at the end of a newly constructed pier stretching nearly 300 yards from the mainland. A fourth-order Fresnel lens was installed in its cupola providing navigators with a light visible for 13 miles. This new light rendered the old lighthouse obsolete, though the keepers continued to live in the dwelling.

Improvements were made periodically to the light station at Waukegan. In 1905, a beacon light was added to a newly constructed breakwater at the harbor entrance. In 1908 the Lighthouse Board constructed a new brick duplex keeper's dwelling nearer to the lighthouse and beacon.

Throughout the 1920's and 1930's the lighthouse continued to be manually operated requiring the keeper to wind the lamp every two and a half hours. In 1938 the tower was completely automated with electricity replacing the fourth-order Fresnel kerosene lamp. Today, the light continues to stand guard for the pleasure craft that has replaced the earlier commercial shipping.

The Calumet Lighthouse

Historians have often wondered why the Chicago River rose to commercial prominence more quickly than the more "commodious" prospects offered by the Calumet River only twelve miles to the south. It was not until 1851 that John Wentworth succeeded in getting a federal appropriation to build a lighthouse at the mouth of the Calumet River to guide commercial traffic. The lighthouse was located on the north bank of the river, and thirty or forty feet from the shore of the lake. A Mr. Irwin was the mason-contractor in charge who ordered the stone which was quarried near the neighboring village of Blue Island, and transported by pole barge to the lighthouse site. The structure was completed and the light lit in 1853.

The people of Calumet were optimistic about their future and the potential lake traffic they would attract. Unfortunately no other improvements, other than the lighthouse, were made to increase its allure to commercial inter-

to navigation. After some protests, the government decided to discontinue the Calumet lighthouse and sell the property. The new owner rented the lighthouse to a family of fishermen until 1870 when the federal government repurchased the property. It was repaired, a new cupola was added, and it returned to service as a lighthouse.

However, by 1879, the commercial traffic at Calumet Harbor had grown considerably. Lumber, coal, and steel were the main industries to be found there. Such bulky cargo demanded large vessels whose increased callings at the beginning of the twentieth century, made the tonnage handled by Calumet greater even than that of Chicago. The necessity of keeping Calumet a safe harbor was obvious.

Congress moved to improve the harbor at Calumet in 1870, and appropriated \$10,000 just for that purpose. Once the harbor was built the need for a lighthouse was clear, and in 1871 \$4000 was appropriated to re-establish the light originally built in 1853. After much confusion over who held title to the old lighthouse, the government acquired the property through condemnation proceedings. Although the Lighthouse Board had originally planned to build a new lighthouse, in 1873 it reversed itself and decided instead to refurbish the old one.

In 1875 a light was erected on a wooden structure at the end of the pier to the north of the mouth of the river. The Lighthouse Board concluded that this light made the old shore light redundant and moved the lens apparatus to the pier light, discontinuing the shore light. The keeper however remained to devise the new light which in 1884 was moved 300 feet closer to the end of the pier. In 1898, a metal tower was constructed to replace the deteriorating wooden light structure. This pierhead light survived until the mid 1970's when it was razed after it was struck by a ship. An elevated walk was also added to protect the keeper as he attended his duties in stormy weather.



The 1898 Calumet Pierhead Lighthouse looking like a freighter under steam. The metal tower at the front of the fog signal building replaced the earlier 1875 wooden tower after it deteriorated. National Archives photo circa 1924.

ests. Also, during inclement weather, captains had difficulty distinguishing between the Calumet and Chicago River lights, and thus the light at Calumet became more of a hindrance than an aid

By 1904, the Army Corps of Engineers had constructed a new breakwater providing a safe entrance for the Calumet River, and a new light was built at the end, 7,000 feet from shore placing it technically in Indiana. The base of the structure was 7 feet in height, and the tower itself is 44 feet high making the light 51 feet above lake level. The tower is steel, reinforced with brick, and covered with plaster. A fog signal with a steam driven whistle was included, and in 1911 the station was fitted with a fourth-order Fresnel lens with an oil vapor lamp.

In 1923 and 1924 repairs were made to the superstructure, but little has been done to keep up the lighthouse recently, and it thus stands in an advanced state of decay.

The Port Clinton and Taylorsport Lighthouses

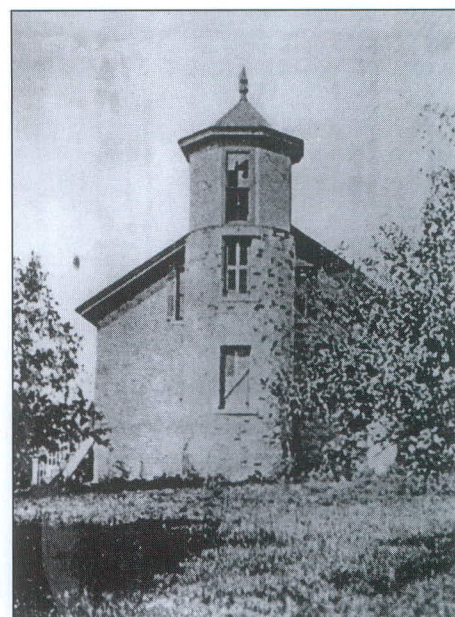
In 1850 entrepreneurs laid out the town of Port Clinton twelve miles south of Waukegon. A 620 foot pier was extended into the lake and, in the short space of a year, the town boasted of a steam powered saw mill, a lathe, skilled artisans, stores of various kinds, and over

a hundred residents. Where only a year earlier warblers sang in wilderness, there was a buzzing village of men on the move. Mr. Bloom, owner of the sawmill, had contracts for over 200,000 feet of plank destined for the plank roads of Chicago; and the Hubbard & Crawford brick yard had contracts for 300,000 bricks.

By 1855 Congress had approved the building of a lighthouse at Port Clinton, and in January of that year the Port Clinton Land Company transferred a portion of land northeast of the intersection of Broadway and Lake Streets to the United States.

The lighthouse at Port Clinton was made of brick and stood 21 feet high, with walls one foot five inches thick. The light tower was attached to a keeper's dwelling also made of brick, with six rooms in one and a half stories, comprising a total area of 22 square feet. A well, cistern, and fence rounded out the man-made changes to a landscape of two acres.

According to legend, from the top of the Port Clinton Light Station, Owen Monahan, keeper of the lighthouse in 1860, witnessed one of the more famous and tragic accidents in Great Lakes maritime history. On a stormy September



Either the Port Clinton or Taylorsport Lighthouse long after it was discontinued. Both structures were brick towers with an attached 1½ story brick keeper's dwelling. In this photo the lantern room has been replaced by a pointed roof. The top window of the tower appears to be a later adaptation and the glass is broken. Date unknown. Photo courtesy of the Chicago Historical Society.

night the *Lady Elgin*, a side-wheeler passenger vessel out of Milwaukee, was rammed by the lumber ship *Augusta*. Owen Monahan watched the lights of the *Lady Elgin* from the Port Clinton tower as she sank, unable to help or even signal the doomed vessel as the light at Port Clinton had been put out for economic reasons. For some weeks after the tragedy the bodies of victims washed up on to the shore near the lighthouse. According to the legend, a number of the victims were buried near the steps of the Port Clinton lighthouse.

Not far to the south of Port Clinton, in northern Cook County, Anson H. Taylor built a pier in 1836 and christened the village at its terminus, Taylorsport. The village thrived and by 1855 the Lighthouse Board decided to build a lighthouse at the Taylorsport site. On March 14, 1855 two acres of land were deeded for that purpose to the government in blocks one and two in the original survey of the town of Taylorsport.



The *Lady Elgin* tied up at Chicago. Photo courtesy of the Grosse Point Lighthouse, Evanston, IL.

The Taylorsport lighthouse was identical in all respects to the lighthouse at Port Clinton: a 21 foot brick tower attached to a brick keeper's house of 22 square feet.

In its annual report to Congress in 1859, the Light House Board noted that,

"Congress at its last session having empowered the department, upon the recommendation of the Light House Board, 'to discontinue from time to time such lights as may become useless by reason of mutations of commerce and changes of channels of harbors, and other causes.'"

By that authority the Board discontinued the services of the Port Clinton and Taylorsport lighthouses. No specific reasons were stated, but it is highly probable that competition from the new railroads caused a precipitous drop in the lake commerce of Port Clinton and Taylorsport, thus rendering the lighthouses

more "eligible site." The light was moved to Grosse Point in Evanston, thirteen miles north of Chicago, which was a more prominent point on the Illinois coast. This was the only lighthouse on the Illinois shore which did not serve as guidance to its own harbor. It was built on a 25 foot bluff on a point of land which juts out into Lake Michigan. This setting for the lighthouse was also important because of a dangerous series of shoals located just off the bluff which had been a hazard to mariners for years. Another indication of the importance placed on this new light was that it was to have a lens of the second order. This was to be the only second-order light on all of the Great Lakes, highlighting the singular importance of Chicago as a great harbor of commerce.

The property was purchased by the United States government for \$1200 in 1871. Construction on the acre and a

this put the light 122 feet above the level of the lake. A balcony surrounded the top of the tower which was reached by a spiral staircase inside. The keepers dwelling was attached to the tower by a covered walkway and was located just to the west of the tower. The dwelling was separated into two apartments to accommodate a keeper and his assistant.

The lantern of this lighthouse has an interesting history of its own. In the late 1850s Congress ordered three Fresnel lights from France for the sum of \$30,000. One of these lights was sent to Florida for use in a lighthouse there. With the onset of the Civil War, and impending abandonment of the lighthouse, the keepers conscientiously buried the light in the sand of the Florida beach to keep it from falling into Confederate hands. Long after the war's end the light was forwarded on to the newly constructed Grosse Point lighthouse, where it remains today.

The Grosse Point Light Station continued to serve under the auspices of the federal government until 1935 when the city of Evanston was granted a revocable license for use of the light station, except the tower. By 1941 the city received the tower as well, but the government extinguished the light as a war measure. In 1946 the station was turned over to the Evanston Historical Society to be preserved as a landmark.

The Grosse Point lighthouse was to be "the largest and most important lighthouse in this district." It even inspired a poem by Charles William Pearson:

*There is a sudden curve in the rising
shore
And dangerous headland sinking to a
shoal,
With every day some fifty ships or more
Pass closely with Chicago as their goal
A dreaded point when furious north
winds roar
And Michigan's soon-roused, fierce bil-
lows roll.
But Uncle Sam, with wise and prudent
care,
Has placed a far-seen light as signal
there.*



Grosse Point Light Station shortly after completion. The house is a duplex and the small structure immediately to the right of the tower is the fog signal building. Photo courtesy of the Grosse Point Lighthouse.

unnecessary.

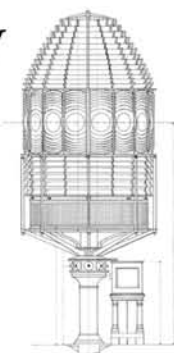
The Grosse Point Lighthouse

By 1870, Chicago lake trade had grown to such an extent that the Lighthouse Board recommended moving the leading Chicago light to a

quarter site began in 1873 with a 20 foot, circular, stone and concrete foundation. The tower, made of cream colored brick, was conical in shape, diminishing in size until at the top the diameter was only 15 feet. The tower itself stood 90 feet high, and the lantern 7 feet high. Since it stood on a 25 foot bluff,



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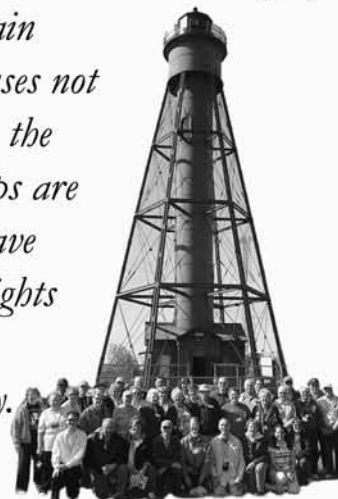
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The Society organizes domestic and international lighthouse tours. Many of our excursions gain access to lighthouses not normally open to the public. These trips are a great way to have fun, see lots of lights and learn about lighthouse history.



Tinicum Lighthouse, NJ