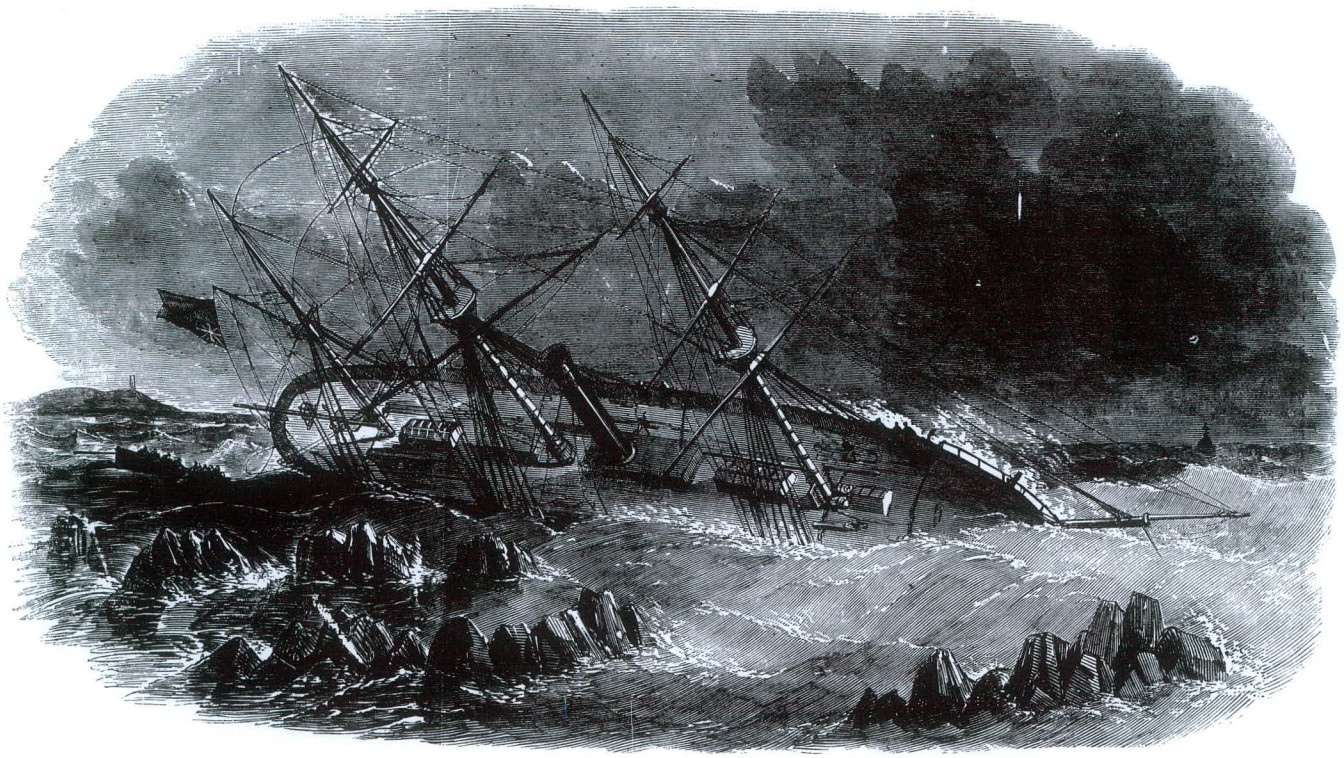
Minots Ledge

By Donald Eckels
& Robert Fraser



In 1955 Donald Eckels, a young Midshipman at the Naval Academy, submitted a comprehensive term paper to his English Department on the history of the two Minots Ledge lighthouses, off Cohasset, MA. The term paper, and accompanying visual material, was donated to the Society for our use about eight years ago. Because we had just published Dr. Robert Scheina's piece on the second Minots Ledge tower we shelved the material for the future.

About three years ago, member Robert Fraser, of Cohasset, MA, submitted a fine article on the first Minots Ledge Lighthouse.

We now feel it is time to repeat the story of the Minots Ledge lighthouses. We have combined Keeper Fraser's article with that of Midshipman Eckels to provide you with a two-part article on one of the most famous of all American lighthouses.

Hobomock, the Evil One according to the local Indians, lives under the ledges off the shores of Cohasset and the area north of Scituate, Massachusetts. In his fury, he creates the wild northeast gales that churn the seas into a dreaded maelstrom. To placate him, Indians left gifts on the rocks. The tidal currents in the area cause the rocks to seemingly reach out and grab passing vessels, dragging them to their doom. In the past 350 years, at least a thousand ships, often with entire crews and their cargos, have been lost here. To the settlers of the Bay Colony these ledges soon acquired a reputation equal to that of Cape Hatteras or the back (east) side of Cape Cod.

Minots Ledge is the outer most visible rock of the group, some 1 1/2 miles from shore. At low tide it shows three fangs: Outer Minot, Inner Minot, and the Breaker. Outer Minot at low water exposes an area about 40 feet square and three feet high. The ledge is named for George Minot, once owner of Boston's famed T-Wharf who, it is said but never proved, lost a ship on this rock in 1754.

The first marker on Minot's Ledge was a wooden spindle for which the government authorized $400. On one of his trips aboard a Boston to Provincetown steamboat, writer Henry Thoreau met a man who told of raising the 'mast' on Minot's Ledge. He stated it was a white oak pole 41 feet high, 15 inches in diameter, sunk four feet into the rock and supported by four guy wires. It was destroyed by seas within the year.

The second marker on Minot's Ledge was cobblestone. In 1831 Congress authorized $250 for this and directed that the funds remaining from the first effort be added to this amount. In 1834 the Appropriations Report stated " . . . for completing the erection of a spindle on Minot's Ledge, seven hundred and fifty dollars."

However, these early efforts were merely daymarks and of little use during darkness. Ships continued to be set down on the rocks off Cohasset.

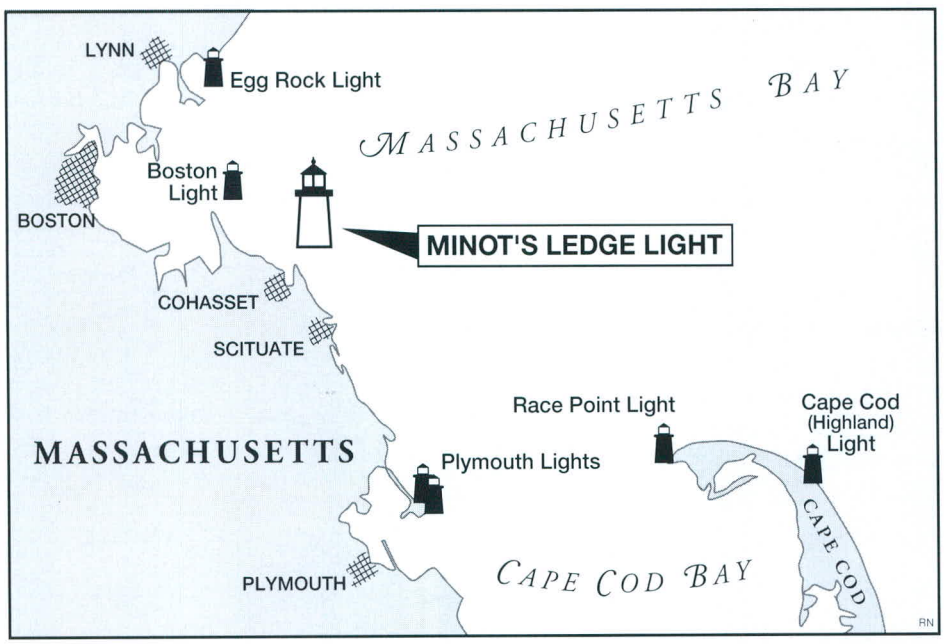
As Boston became more important as a port, with the result of more ships wrecked on Minot's Ledge and the surrounding rocks, local mariners decided something should be done about the situation. Through the medium of the Boston Marine Society, the matter was brought to the attention of Congress.

In 1843, I. W. P. Lewis, a civil engineer who was involved with lighthouse inspections for the government, submitted a report to the Secretary of the Treasury regarding the situation. He reported: "Ships entering with a northeast gale, if they fail of hitting the lighthouse channel (Boston Lighthouse) by drifting to the southward, are often wrecked on the lee shore of Cohasset, where a dangerous reef extends about two miles to the northward, and is annually the scene of the most heart-rendering disasters. For a long series of years petitions have been presented to Congress, from the citizens of Boston, for erecting a lighthouse on these dreadful rocks, but no action has yet been taken upon the subject. One of the causes of frequent ship wrecks on the rocks has been the light-house at Scituate, four miles to leeward of the reef, which has repeatedly been mistaken for Boston Light, and thus caused the death of many a brave seaman and the loss of large amounts of property. Not a winter passes without one or more of these fearful accidents occurring. Notwithstanding this fact of the mistaken location of Scituate Light (which is of no local importance whatever, standing at the entrance of an obscure harbor, which is dry at low water, and at high water, spring tides, only admits a draught of eight feet) had been notoriously public for years, and nine out of ten wrecks on Cohasset rocks attributed to its evil influence; still no report on this subject has ever been made to Congress by the Superintendent: . . . One of the most interesting objects of this inspection was to ascertain the feasibility of erecting a light-house on the extremity of the Cohasset Reef; and it was found that, though formidable difficulties would embarrass the undertaking, still they are not greater than such as were successfully triumphed over by a 'Smeaton' or 'Stevenson'!" [Ed. Smeaton engineered the construction of the third Eddystone and the Stevenson family of engineers constructed many Scottish lighthouses.]

In 1847 Captain W. H. Swift, Army Corps of Engineers, was sent to make a survey of the existing conditions. Later he was in charge of constructing the first Minots Ledge Lighthouse. He reported: "These rocks or ledges, with others in the immediate vicinity, are known as the 'Cohasset Rocks,' and have been the terror of mariners for a long period of years; they have been, probably, the cause of a greater number of wrecks than any other reefs or ledges upon the coast . . . The Minots are sunken, and bare only at one quarter flood, and the trend of the coast is that direction from Boston Bay being southeasterly. Vessels bound in, with the wind heavy at the north-east, are liable, if they fall to leeward of Boston Light, to be driven upon these rocks."

Captain Swift went on to say that there had been 43 wrecks within the last 30 years in the vicinity of Minot's Ledge. Of this number, 23 were total losses. Captain Daniel Lathrop, an underwriter's agent who listed the losses for Captain Swift, said that within the 30 year period (1817-1847) at least 40 lives were lost and that damages of $364,000 to ships and cargo were sustained.

In his report to his chief in 1848, Captain Swift pointed out that Boston was "the second city of the United States in point of tonnage." Here was a busy port flanked on the south by a collection of some of the most dangerous reefs and rocks in the world. Captain Swift also announced in his report that a rock in the immediate area had been selected as the site for a lighthouse. His choice was the Outer Minot.



In a brief description of the physical features of the rock, he revealed that a circle of bare rock about 30 feet in diameter was exposed at extreme low water, the highest point of the rock was 3 1/2 feet above low water, and, not least in importance, the fact that the rock was granite with vertical seams of trap rising through it.

Granite is familiar to almost everyone as the material from which state buildings and tombstones are made; trap, like granite, is an igneous rock. Trap is mainly quarried for mending roads where its long wearing qualities can be used to their greatest extent. With both granite and trap present, the outer Minot provided the toughest kind of solid rock foundation.

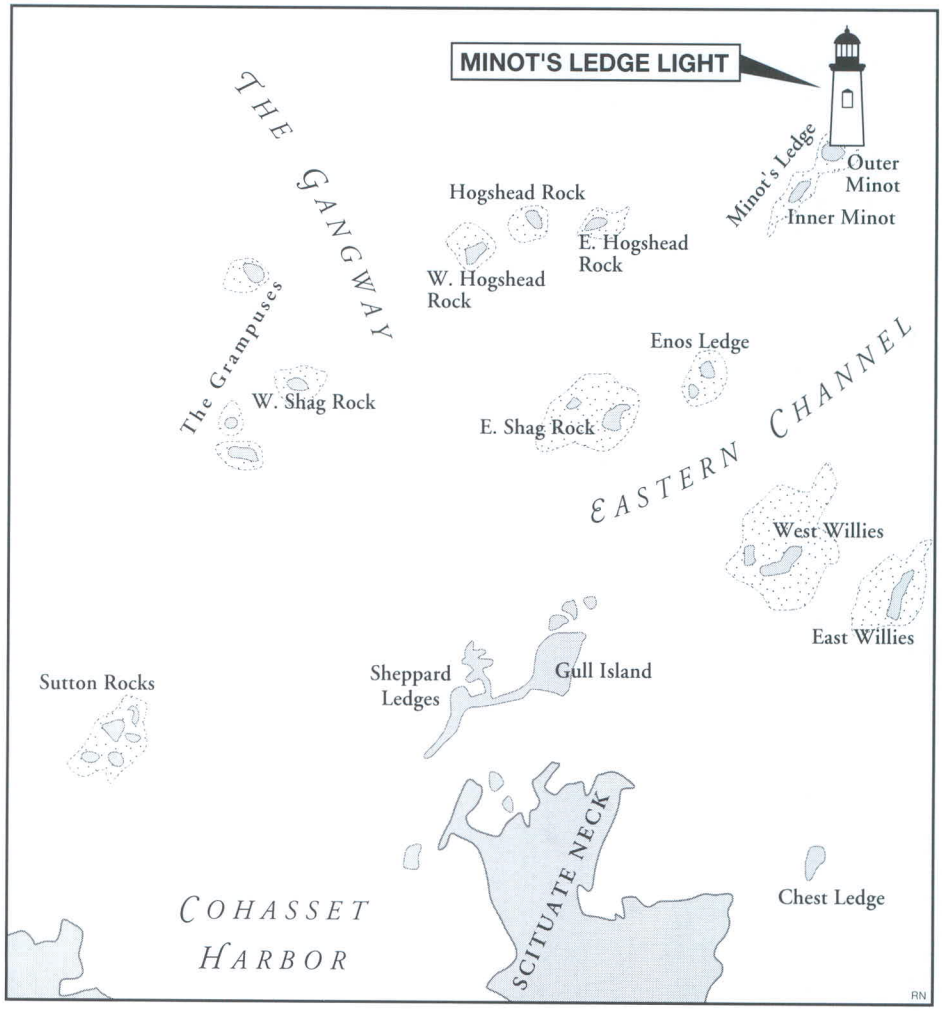
Captain Swift, during his travels in Europe, had inspected various styles of lighthouses. One style, the screw pile, captured his attention. This type of structure consisted of numerous piles with flat wide screws on the ends to help penetrate the soft bottoms of waterways. While the hard rock of the Minots would obviously not allow the screw principal to work, he did like the idea of a pile structure. Swift was a disciple of I.W. P. Lewis who believed the toughest and longest lasting material for a sea marker was wrought iron. Swift felt that the piles, once secured to the rock, would allow heavy seas to pass through and the piles would present a very small surface upon which the seas could work.

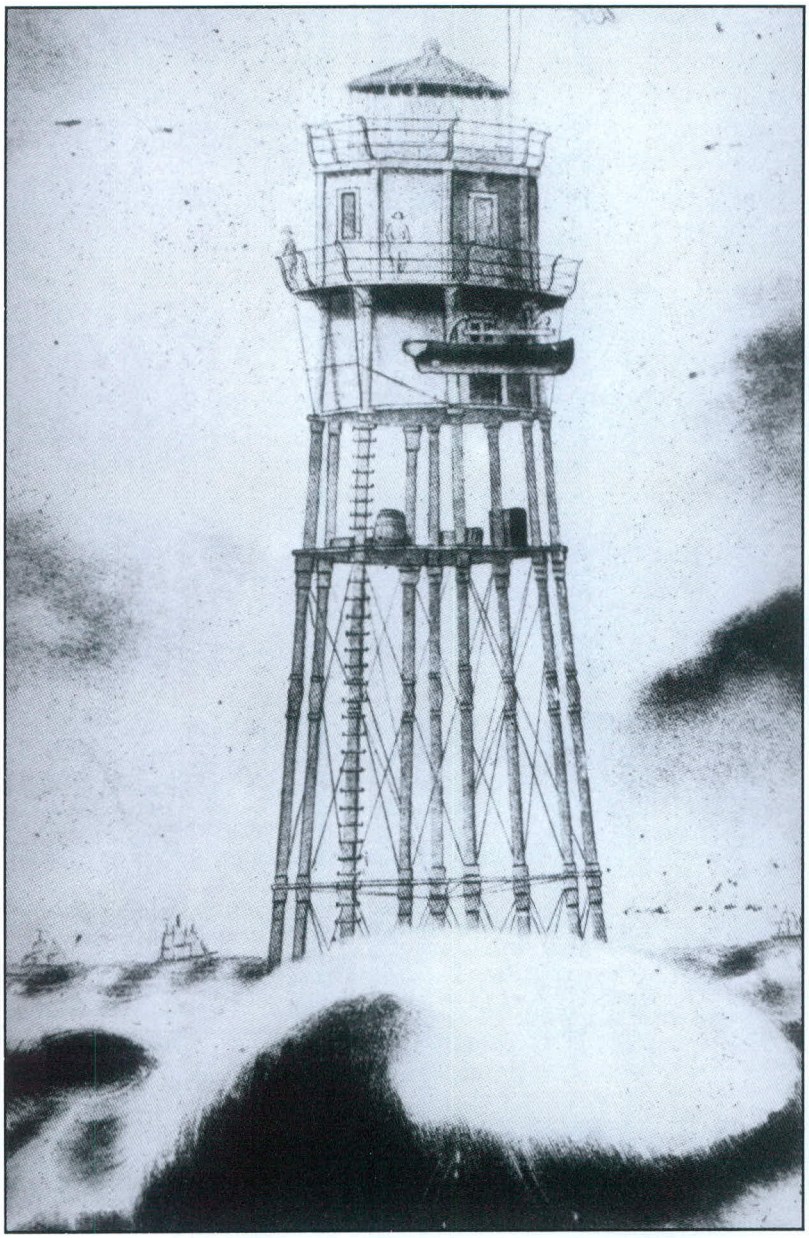
The locals, when learning of the proposed design, felt the structure would be too small and frail for the job. They proposed a granite tower identical to the Eddystone Lighthouse off the south coast of England. However, the parsimonious Lighthouse Service pointed out that such a structure would cost $150,000 to $200,000, while the iron tower would cost only $30,000 to $50,000.

Massachusetts ceded the Outer Minot Ledge to the U.S. Government on March 23, 1847 and work started a few weeks later. A giant hand-cranked drill bored nine holes into the rock up to 5 feet deep and 12 inches in diameter to hold the tower legs. Since the ledge could only be worked a few hours each day, at the lowest tide stage and when the seas were relatively calm, the 34 workmen lived aboard a barge anchored nearby. Occasionally seas roared over the ledge without warning. The drill was swept away twice. All the workmen wore life jackets when on the ledge and, despite several dunkings, not one man was killed or badly injured during the entire construction project. The first season of work ended on October 25, 1847 and resumed the following spring. The drilling was completed on August 16, 1848.

Meanwhile, the iron for the tower legs was being manufactured at Cyrus Alger's South Boston ironworks on the Fort Point Channel. Alger's was a well-known cannon maker and the largest iron manufacturer in the country. The lighthouse was designed with nine piles consisting of two sections. Each pile was 10 inches in diameter at the base, tapering to 4 1/2 inches at the top. The lower portions of the legs, or piles, varied in length from 35 to 38 feet because of the uneven ledge. The upper sections were all 25 feet long. The sections were joined by a gunmetal socket 3 feet high and weighing 800 pounds each. The legs were set into the holes drilled in the rock. Iron wedges and cement then secured the legs in place. Once in place, eight of the legs formed an octagon 25 feet in diameter tapering to 14 feet at the top. The ninth pile was positioned in the center. The legs were cross braced horizontally and vertically. The horizontal cross bracings, which were to be placed between the ledge and the lowest set of horizontal bracings, were not installed, as it was thought they would offer resistance to the seas.

Placed on top of, and joined to, the piles was a five-ton cast-iron cap, or spider. On top of this, a two story octagon dwelling was built. It was constructed of oak, 14 feet in diameter and weighed about 25 tons. The lower floor served as a storage area and the keeper's bedroom. The upper story served as the galley (kitchen) and watch room. On top of the dwelling was a 16 sided lantern measuring





11 1/2 feet in diameter and weighing another 4 1/2 tons. The structure was painted a bright red and to the delight of the government the total cost was $39,500—$500 less than allocated. It is not known if the cost included the homes constructed ashore, at Cohasset, for the keeper's families.

Completed early in the fall of 1849, there were so many rumors of its instability that even Swift was apprehensive. He asked his chief, Colonel J. J. Albert, to allow the lighthouse to stand over the winter unmanned to test it, Albert agreed.

Soon after the lighthouse was completed, but unlighted, one of the greatest shipwrecks in the Cohasset area occurred. The brig *St. John*, of Galway, Ireland, with immigrants bound for Boston, was caught off that port by a howling northeaster. The brig anchored off Cohasset to ride out the storm, but the anchors dragged. Then the cables snapped and the vessel was thrown onto the Grampuses ledges, just west of Minots. Of the 122 people aboard, only 20 survived, including the captain and mate. The dead were buried in a mass grave at Cohasset and a Celtic cross was later raised in their memory. Many believe that had Minots Light been in operation, more would have been saved. But the facts speak differently. The disaster took place during daylight and it was an impossible area to effect a rescue.

The lighthouse first displayed a trial light on December 13, 1849 and officially went into commission on January 1, 1850. The light of the Scituate Lighthouse was extinguished. Thoreau gave the best description of the Minot's Ledge Lighthouse: "Here was the new iron light-house, then unfinished, in the shape of an egg shell painted red, and placed high on iron pillars, like an ovum of a sea monster floating upon the waves, destined to be phosphorescent. As we passed it at half tide, we saw the spray tossed up nearly to the shell. A man was to live in that egg-shell day and night, a mile from shore. When I passed it the next summer it was finished and two men lived in it, and a light-house keeper said that they told him in a recent gale it had rocked so as to shake the plates off the table. Think of making your bed thus in the crest of a breaker! To have the waves, like a pack of hungry wolves, eyeing you always, day and night, and from time to time making a spring at you, almost sure to have you at last. And not one of all those voyagers can come to your relief, . . . but when your light goes out, it will be a sign that the light of your life has gone out also. What a place to compose a work on breakers!"

The first keeper was Isaac Dunham who was transferred from the Pemaquid Lighthouse in Maine. The light was a fixed white characteristic produced by 15 lamps with 21 inch reflectors. It was displayed 66 feet above the sea. The apparatus proved wanting and was soon replaced by 19 lamps with 21 inch parabolic reflectors of a different design. The lamps were arranged in two tiers and provided light over an arc of 220 degrees. The area to the southwest (toward land) was dark. It was said to be the brightest light in the western hemisphere at the time. In October of 1850, a hand-struck 640 pound fog bell was installed—suspended below the dwelling.

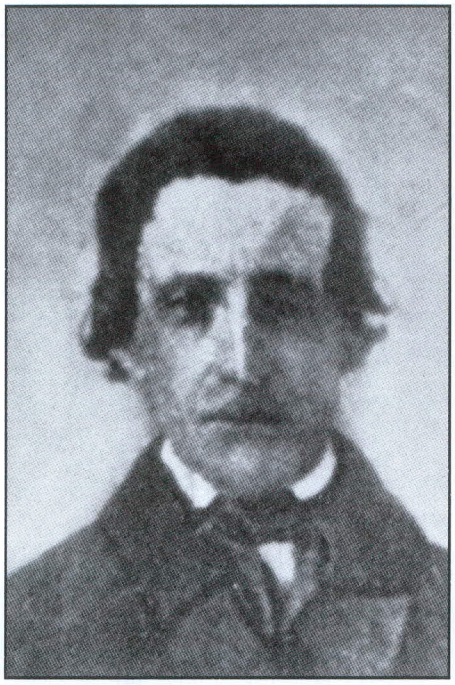
Keeper Dunham had two assistants with the arrangement that there would always be two men on watch and one ashore. They immediately found that the sleeping area was too crowded with supplies: lamp oil casks, drinking water barrels, etc.

Without authorization, they constructed a platform for the supplies on the topmost horizontal bracing. They also discovered that it was dangerous to get on or off the tower with the lighthouse boat when any kind of sea was running. To solve this problem, and again without authorization, the keepers ran a 5 1/2 inch hawser (rope) from the lantern deck to a boulder (estimated to weigh 7 tons) some 300 feet off the tower. They rigged an endless lanyard (much like a moving clothes line) to the hawser and attached a wicker basket to the lanyard. When the seas were too rough to lower their boat and the keepers wished to depart via basket, they displayed a special white flag with a red diamond from the tower. Seeing the flag, the Massachusetts Human Society's lifeboat at Cohasset Harbor rowed out to the lighthouse and helped the keeper leave the station via the wicker basket or chair.

The keepers quickly found out just how dangerously top-heavy the lighthouse was during the first gale. The men were tossed from their beds and shaken off ladders, water buckets would be half emptied, lamps and reflectors were knocked from their frames, and supplies thrown about. Some keepers even got seasick inside the tower. On January 8, 1850 Keeper Dunham wrote in his log: "Cleaned the lantern for liting in a tremendous gale of wind. It seems as though the Light House would go from the rock."

At about 4:30 a.m. on the morning of March 12 Keeper Dunham heard someone call 'Halloa' at the foot of the ladder. It was Captain Wilson, who had come to take Mr. Hemmenway back to the mainland. Since Assistant Higgins was on duty, Dunham decided to go back with Captain Wilson for some article he needed. While he was ashore the wind shifted to the east and Dunham felt a snowstorm was brewing. A light snow began to fall and the wind came up as he launched his boat for the long row back to the lighthouse. By the time he arrived at the rock, a thick snowstorm from the northeast had set in. Fortunately the seas had not had time to increase, and Dunham landed safely at the Ledge. In his log book he wrote: "It came on the blow five minutes after we got the boat hooked on so that I could not have got on alone.

"Sunday Mar. 31—Cleaned the lantern for liting up for this month ends. And I thank God that I am yet in the land of the living and that I have been preserved during the last winter and I hope and pray to be."



Keeper Isaac Dunham

March was the last month of winter, but April turned out to be as severe as any winter month. Dunham wrote: "Fri. April 5—This day and last night will long be remembered by me as one of the most trying that I have ever experienced during my life. The wind N.E. to E., blowing very hard with a sea running mountains high—it must be that we were in the hands of a merciful God for which I am thankful that we are yet spared.

"Sat. 6—The wind E. blowing hard with an ugly sea which makes the Light House reel like a drunken man. I hope God will in mercy still the raging sea or we must perish. We have made out to clean the lantern up, with fear and trembling. God only knows what the end will be. At 4 p.m. the gale continued with great fury. It appears to me that if the wind continued from east, and it now is, that we cannot survive the night—if it is to be so—O God receive my unworthy soul for Christ sake for in Him I put my trust.

"Sun. 7—The wind does blowing from the East which leaves a tremendous sea which seems as if it would destroy the Light House. I pray God to still the raging sea if it is his will.

"Mon. 8—The wind WNW blowing very fresh which will kill the ground swell—Thanks be to God for this blessed wind.

"Wed. 17—Wind does not blow hardly any. I have staid a good deal longer than I ought this time.

"July 2—Higgins come on to the Light House very rough and had to swing on a rope from the boat to the Light House. And my son had to swing from the Light House on a rope and drop into the boat. It would have frightened Daniel Webster."

Keeper Dunham requested that the tower be strengthened, but his words fell on deaf ears and on October 7, 1850 he resigned.

John W. Bennett, a former English sea captain, succeeded Dunham claiming nothing could scare him. He received several inquiries as to the safety of the tower. On October 9, 1850 he responded to an inquiry from the Boston Journal, "I desire to withhold my own opinion until I have snuffed a good strong northeaster . . . much remains to be done to secure it (the lighthouse) from accident.

It was not too long before Keeper Bennett 'snuffed' his first storm. He then realized that the tower was not as invulnerable to the elements as Captain Swift thought it to be. He communicated his thoughts to his Superintendent.

At one point Bennett suggested that additional rods be placed from the tower to nearby ledges. The government investigated—picking a rare, calm day. After watching the wavelets gently lap against the rock, they stated, "The great lighthouse was capable of weathering any storm without danger."

A short while later a writer from Boston spent a few days at the lighthouse and his experiences were published in the Boston Journal. The writer, who called himself 'A gentleman from Boston' went out to the Rock in December 1850, just in time to experience one of the worst storms of the year . . .

"Of the Light House I was coolly told

that it was very doubtful if it stood through this winter, as one of the iron supporters had split the rock, and when a sea struck the house it shook so as to take a man off his feet; and only a week before one of the assistants was thrown from his berth by the shock of the sea, and a barrel of water was emptied of 2/3 of its contents.

"But it was daybreak, when the gale was at its height, that I got my full reward for going there . . . At night, however, with every appearance of a return of the storm we felt for the first time the utter desolation of our position, A sea set in, to which that of the morning was nothing and shook the building so that it was difficult to stand, causing it to oscillate two feet each side of the center, and to make it quiver and jerk in such a manner as to make it impossible for the legs to sustain the thirty tons of weight which rested upon them."

Keeper Bennett was now so worried that he placed a letter in a bottle, hoping that if the lighthouse fell into the sea, the message would reach shore. In the letter he mentioned that the support rods in the lower part of the structure were twisted and bent. He stated: "The ice is so massive that there is no appearance of the ladder: the sea is now running at least twenty-five feet above the level . . . I feel as seasick as ever I did on board ship. Our lantern windows are all iced up outside, although we have a fire continually burning; and it is not without imminent peril that we can climb up outside, to scrape it off, which I have done several times already. I have a dread of some ship striking against us, although we have kept the bell constantly ringing all night. Our water is a solid mass of ice in the casks, which we have been obligated to cut to pieces with an axe before we could obtain any drink. Our situation is perilous. If anything happens before day dawns, we have no hope of escape. But I shall if it be God's will, die in the performance of my duty."

As more letters and articles appeared in the Boston newspapers concerning the safety of the lighthouse, Captain Swift, still believing in the strength of the tower, set about to refute the impressions the public was reading about. In a letter to the Boston Journal he wrote: "Within the last two weeks, several communications, letters, etc., have appeared in the newspapers relative to the Minots Rock Light-House, descriptive of the supposed dangers to which the structure and its inmates are exposed. But, in none of the statements as published, is there anything to be seen which is sufficiently intelligible to enable one to know what the Minot Rock Light really is, or how it has been constructed. If you will allow me the use of a column in your paper I will endeavor to supply this information.

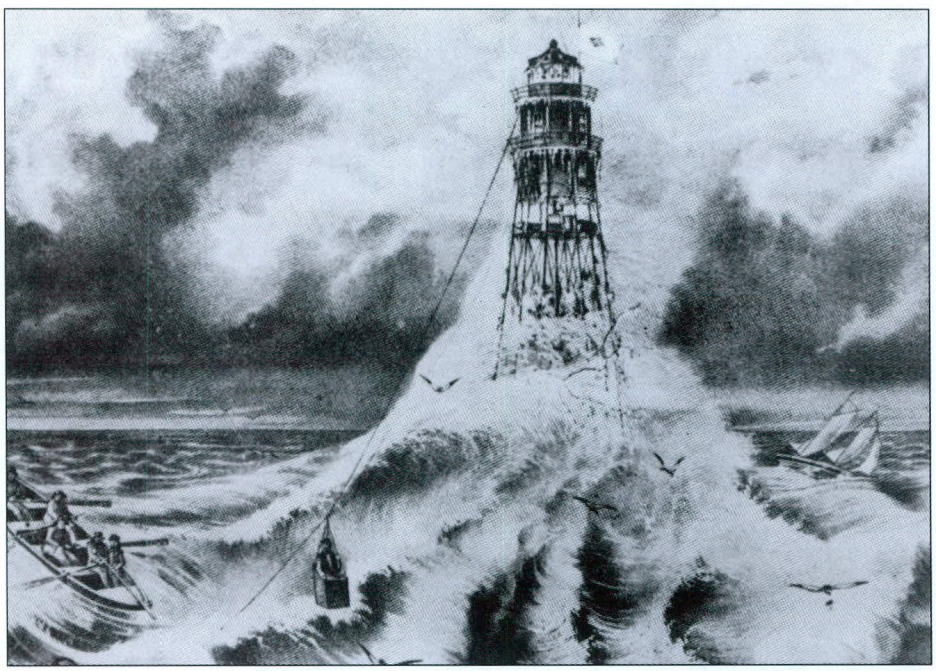
"The true question in the case is this: Is the Minot safe, if not, can it be made safe?

"The light is now in its third winter . . . and it may thence be inferred that it is safe.

"The statement made, that the rock is split, is one well calculated to create alarm, and a conviction follow, that, with a split in the rock, the building must necessarily fall. First, it will be remembered that the light stands on nine legs, each inserted in a hole 5 feet deep in a granite rock. Second, that by the latter, a slope given to the outer piles of 1 2/10 inches to the foot, and by the position of the horizontal braces of 3 1/2 inch iron, that the whole structure acts like a Lewis, and that it cannot be overthrown, unless the body of the structure (the house) be within the reach of the sea, the surface opposed by the piles alone being entirely too small in extent to offer a tithe of the obstruction necessary to produce such a result . . . " he went on to say that the pile would have to be broken out of the holes for the structure to be destroyed. He added the rock was not split but appears exactly as it did when first surveyed in 1847.

Captain Swift's letter to the newspaper is extremely interesting. While it proports to give defense of the Minot Lighthouse, it is actually a prophecy of the last moments of the tower's existence. In concluding his letter, the Captain refers to his main argument of the structure's safety. Because the lighthouse had stood the winters so far, it would continue to remain on the rock never yielding one mite to the waves.

He stated: " . . . the Minot Light has now been up two winters and the half of another. Since it has been built, there have been storms of as much violence, perhaps as in former years, still the work stands in its place. It had not, in November last, when examined, moved one inch from the position it originally occupied; not a joint had been started, not a brace broken, nor had the structure received



A keeper leaving Minots Ledge Lighthouse in a basket. The line (rope) from the tower to a boulder was thought to have been partially responsible for the tower's destruction.

the slightest injury from the storms and ice. Three of the rods, or ties, which were partially put in place because the collar to which they were attached slipped upon the pile, a matter of about as much importance, so far as the stability of the structure is concerned, as would be the stripping of half a dozen ratlines from the shrouds of a vessel. It is not said that a pile lighthouse is as rigid as a stone tower, nor . . . that if we had the choice at equal cost between the Eddystone and a pile, that we would not choose the former; the question in such a case would be this: If a light-house can be built on the Minot, would it be wiser to expend $200,000 or more for a stone tower? The answer, we think, is obvious. If it can be made safe, build the pile light[house]; If it cannot be made safe, build the tower. Time, the great expounder of the truth or the fallacy of the question, will decide for or against the Minot; but inasmuch as the light[house] has outlived three winters, there is some reason to hope that it may survive one or two more."

The lighthouse needed more than words to be strengthened. The very next spring the iron skeleton tower on the Outer Minot would plunge to its doom.

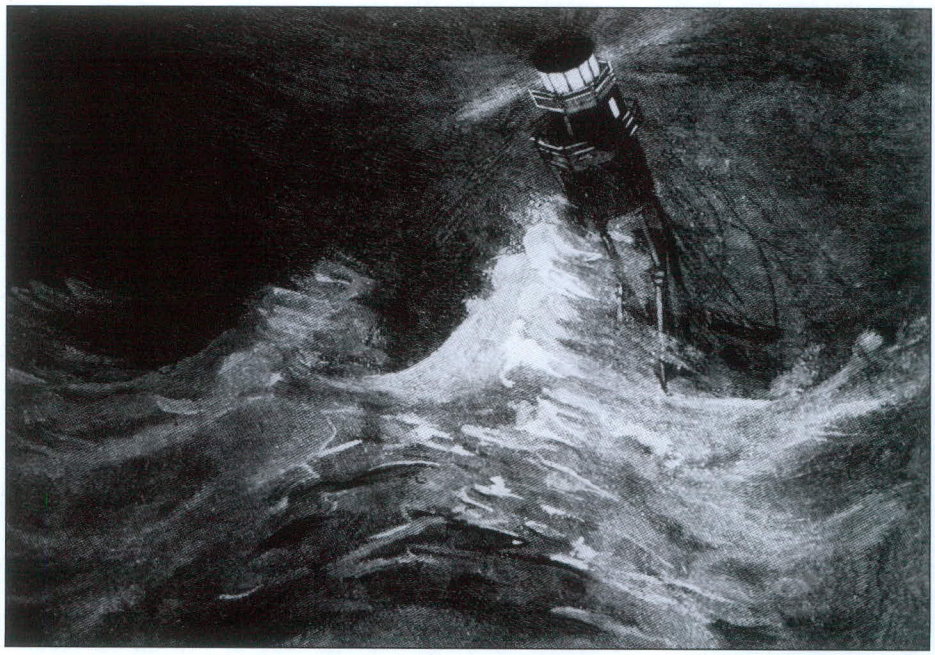
The English artist Ibbotson visited the lighthouse and left during heavy seas via the wicker basket, or chair. He wrote, "I, with Bennett's life preserver, was lowered down until a sea struck the chair. A moments glance told me the boat would not come alongside the chair. The whaleman in the stern sang out, "Hang over the side." I hung over the ice covered side and watched her come. Once, borne on a huge sea she was carried beyond me, but on one side "Stern all" was the word and she passed close . . . again she came up and the bow oarsman twitched her beneath me just as another sea was taking her back, when I let go and dropped ten feet into the center of her, where I was told to keep still until they got out of immediate danger . . . the men looked like images of frozen men . . . we shot passed Inner Minots. Mr. Bennett watched us and then we heard the deep toned bell ringing its merriest peal."

The tower bracing was designed to be removed for repair or replacement. The repairs were done at Amos Tilden's Ironworks at the head of Cohasset Cove. A parade of assistant keepers dropped off bent iron bars and swore that they'd never go back to that shaking tower. By now, even Swift was listening with great concern. After each storm he would write to the keeper asking how the tower fared. He had little tact and when he argued with the head keeper, he would write to the assistants. He also corresponded with Amos Tilden. Once after an argument with Tilden at his ironworks he started to stomp out when a worker called: "Hey thar, Capt'n Swift. Ye ought not get old Gimlet-eye mad at ye." "Gimlet-eye?" queried Swift. "Eyah," the man replied, "That's what we call Mr. Tilden. He's a crack shot." It is said that Swift glanced nervously about and quickened his step.

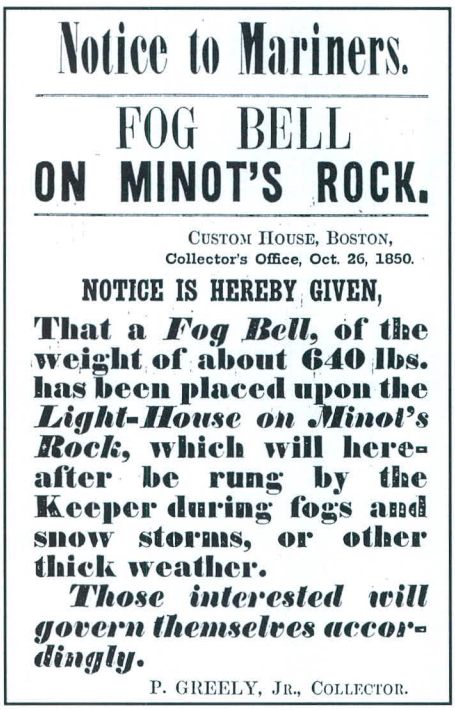
On March 16, 1851, a northeast gale struck the lighthouse tearing the boat from its davits some 50 feet above sea level. The weather moderated, then a greater gale struck on April 14. For three days it raged, doing fearful damage along the shore. By the afternoon of the 16th it had reached hurricane proportions. During the early evening the tower was observed leaning toward shore. At 10 p.m. on Wednesday the 16th, people at Hayden's Hotel, North Scituate, were awakened by a furious ringing of the lighthouse bell. At daybreak the next morning, the tower was gone.

"The mad waves leaped and tumbled wildly and in seeming exultation over its site," exclaimed the *Boston Daily Journal.* Bennett, ashore on leave, was the first to reach the beach and was horrified to see his own clothing in the surf.

Aboard the lighthouse in the storm were two young men of Cohasset, Joseph Antoine and Joseph Wilson. From evidence found, the following is theorized: Antoine, in a life vest, went down the hawser first into the raging sea. His life vest was torn off and he drowned. His body washed ashore at Nantasket beach. Wilson had better luck, at first. He swam for the lights of Hayden's Hotel, but ended up on Gull Island just off the hotel. The shock of not finding himself ashore, and exposure to the elements (hypothermia), soon killed him. His body was found on the rock far from the tide line. Just before he abandoned the lighthouse, Wilson penned a note; "Wednesday night, April 16. The lighthouse won't stand over tonight, she shakes 2 feet each way now. JW & JA." It was sealed in a bottle and found in the bay by a homeward bound Gloucester fisherman. Much of the wooden parts and equipment washed ashore and many relics can be seen today in the Cohasset Maritime Museum. The ironwork was recovered and sold as scrap to a Bridgewater nail factory, while the fog bell rings today from the steeple of the Bryants Pond Baptist Church in Maine.



A few days later Swift arrived and, with great disappointment, wrote his report. The piles were wrenched, broken off about ten feet above the rock. The tower was on its side nearby. Captain Swift blamed the keepers for the loss. He reasoned that the unauthorized storage platform caused resistance against the raging seas. Additionally, he also felt that the loose boulder, connected to the tower by the hawser, helped pull it over as it was worked toward shore by the heavy seas. Later, other engineers confirmed that theory. It is believed that waves went over the top of the tower during both those spring storms.



Notice to Mariners.

FOG BELL ON MINOT'S ROCK.

CUSTOM HOUSE, BOSTON,
Collector's Office, Oct. 26, 1850.

NOTICE IS HEREBY GIVEN,

That a *Fog Bell*, of the weight of about 640 lbs. has been placed upon the *Light-House on Minot's Rock*, which will hereafter be rung by the Keeper during fogs and snow storms, or other thick weather.

Those interested will govern themselves accordingly.

P. GREELY, JR., COLLECTOR.

General J. G. Barnard, Army Corps of Engineers and a member of the newly formed Lighthouse Board, commented: ". . . there can be little doubt that the engineer's conclusions are correct, the 'main body' keeper's house and storage platform) should never be attainable by waves . . .

"[It must be remembered that the lighthouse was] . . . built at a time when large grants of money necessary for great engineering works of light-house construction were with difficulty attainable from Congress, at a date, too, when the newly invented method of skeleton-iron construction for light-houses was still in its infancy . . . the real defect was want of magnitude . . . it should have had at least a forty-foot base, and a height of 100 feet . . . the enlarged tower . . . would have cost three times the sum at the command of the engineer . . . the limited sum [appropriated] forbade such dimensions."

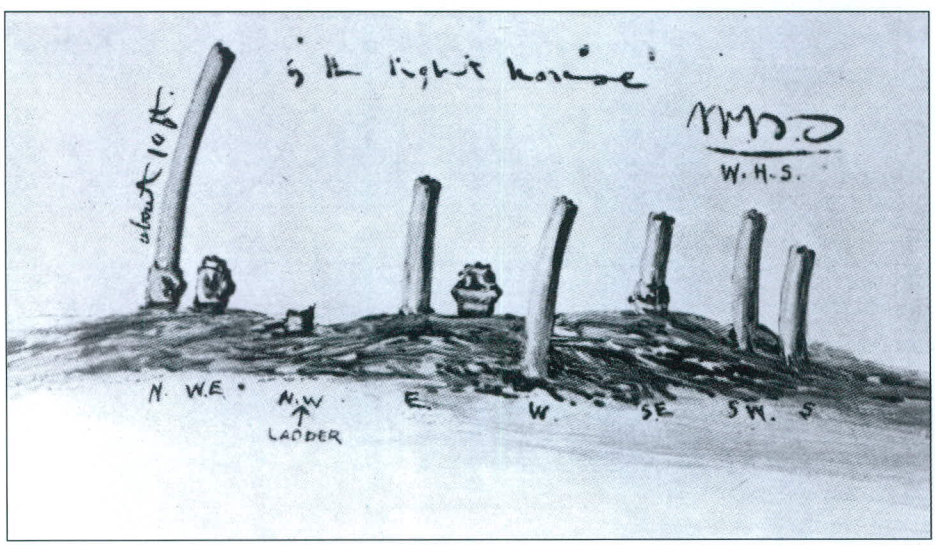
The entire structure had been only 75 feet high, the storage deck but 36 feet above high water, and its center of gravity was high.

Later an article recounting the disaster surmised "The waves, after leaving the lighthouse, would strike the hawser, and the effect of the blow was transmitted to the pyramid (tower) with very great leverage, causing a tendency to oscillate. Another cause was the ice that froze to the piles, and thus increased the extent of the surface exposed to the sea."

After the storm, which was from then on to be known as the Minots Light Storm of 1851, Captain Swift visited the rock again, made a few sketches of the stumps of the piles and the skeleton structure lying on its side. He later became the president of a railroad.

Plans were quickly drawn up for a larger tower and one of stone—the type locals originally suggested back in 1847. It was lighted in 1860 and still serves the mariner today.

Over the years, the Port of Boston has changed, and aids to navigation have improved. Yet Hobomock still exacts his toll—on average, a good sized boat every decade and a human life every year. Elderly Cohasset fishermen, of Portuguese descent, claim that just before a northeast gale, the ghost of Joseph Antoine is seen clutching the lowest rungs of the present lighthouse ladder crying, "Keep away! Keeper Away!"



SWIFT'S SKETCH OF THE BROKEN PILING

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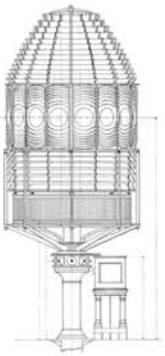

Restoration & Preservation

Thomas Point Shoal Lighthouse, MD

The U.S. Lighthouse Society has donated to many lighthouse preservation projects throughout the U.S. Most recently we were honored by being presented with the Preserve America Stewardship Award from The White House for our restoration work at Thomas Point Shoal Lighthouse.

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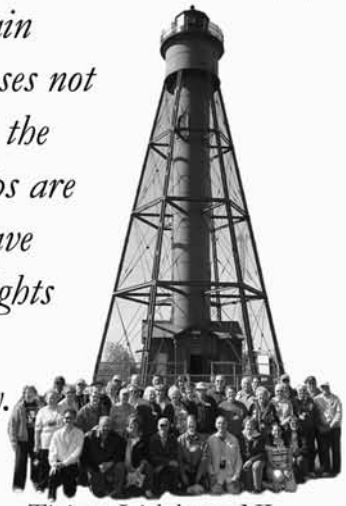
The Keeper's Log *magazine is the only one of it's kind and has been published quarterly since 1984. Receive this award-winning publication as a benefit of membership.*

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

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