

# Rock of Ages Light Station

By Wayne Wheeler



lighthouse to mark the dangerous rocks off the western end of Isle Royale was needed for some time. In December 1872, a representative of a shipping company wrote to the District Engineer of the 11th Lighthouse District recommending a lighthouse be

placed near Washington Harbor. His letter was answered by the engineer:

Sir:

*Your letter of the 12th [December] has been received, and in reply you are informed that I will transmit your letter to the Light House Board with a recommendation that the light at Rock Harbor be reestablished, and a light built at Washington Harbor. . . for the benefit of the through commerce in Lake Superior, which would certainly derive great benefit from these two harbors in case they were made available as harbors of refuge.*

*It is not probable that anything can be done next season, as all the estimates are now before Congress, and in the aggregate, amount to more than will probably be appropriated.*

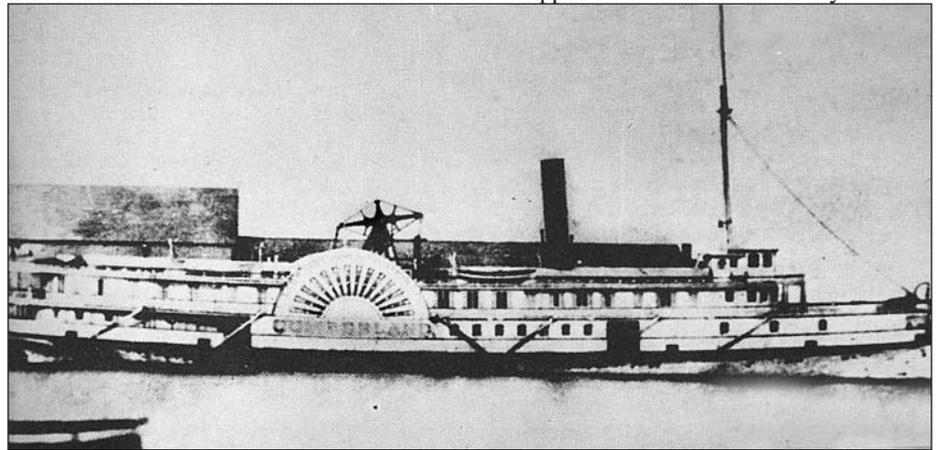
O. M. Poe  
Major of Engineers  
[11th District]

Not only was nothing done to establish a light near Washington Harbor, Isle Royale, [Rock of Ages is just off Washington Harbor] that next season, but 36 seasons passed before the lighthouse was completed. Although the Rock Harbor lighthouse was relighted when new copper mining activity resumed on Isle Royale.

Just three years later the dangerous Rock of Ages reef claimed the passenger vessel *Cumberland*. The *Cumberland* was constructed in Canada in 1872 for \$100,000 and was assigned to operate between Georgian Bay (Canada) and Duluth. The 200 foot long vessel was a side-wheel steamed powered by a one-cylinder engine. She was described as “fitted up in the most elegant style” to “meet the highest expectations of the traveling public.”

In July, 1877 she ran aground near Silver Inlet, Canada (north of Isle Royale) and limped into Port Arthur, Canada for repairs.

On the 24<sup>th</sup> she departed for Duluth and in clear weather ran onto the Rock of Ages Reef. Apparently the vessel was making good speed as half of the hull was driven onto the rocks. The Captain, James Parsons, blamed the American chart for the mishap, although he had been sailing the waters for some time. It



The side-wheel passenger vessel *Cumberland* which sank on the Rock of Ages Reef in 1877. Photo courtesy of the University of Wisconsin, Superior.

appears that, in fact, the Canadian chart was incorrect as to the depth of water in the area. In any event, several efforts to have tugs pull the steamer free failed and on August 6, 1877 the effort was abandoned and the vessel abandoned. By mid August she had broken in two and finally slipped off the rock and into the deep water, where she lies today.

In 1896, the Lighthouse Board finally sent the following recommendation to Congress:

*During the season of southerly and westerly winds many vessels bound to and from Duluth, by taking a course along the north shore of the lake and in lee of Isle Royale, are enabled to run when the lake is too rough for the more southerly course. A light and a fog signal on the dangerous rocks off the westerly end of Isle Royale would be a valuable aid to these vessels. It is therefore proposed to establish a light and fog signal on the Rock of Ages, off the western end of Isle Royal. This, it is estimated can be done for \$50,000, and it is recommended that an appropriation of that amount be made therefore.*

Congress did not appropriate the requested sum and the above statement appeared in the next three Annual Reports of the Lighthouse Board to Congress.

The need for a lighthouse at Rock of Ages was further stressed by the loss of the wooden steamer *Henry Chisholm* on October 20, 1898. Three other vessels were also wrecked in the area late in that year.

On October 16, 1898, the *Chisholm* finished loading a cargo of barley for Buffalo, picked up a tow, the schooner barge *John Martin*, loaded with 1,200,000 board feet of lumber and departed Duluth. By late afternoon a severe storm engulfed the two vessels somewhere north of Copper harbor and below Isle Royale.

In the interest of safety, the skipper of the vessel being towed decided to part the tow line and fend for himself. The two vessels separated and lost sight of each other. The *Chisholm* weathered the storm for two days before the weather cleared enough for Captain Smith to begin searching for his lost tow. He retraced the original route and found nothing. He then docked at Ashland, Wisconsin to refuel. Then the *Chisholm* headed north for Isle Royale hoping that the *John Martin* had sought shelter in Washington Harbor. Approaching Isle Royale the helm was given over to the 2<sup>nd</sup> mate while the Captain and 1<sup>st</sup> mate were below discussing their search efforts. The ship was steaming at about nine knots when she struck the Rock of Ages Reef and immediately assumed a list. There was 12 feet of water at the bow and 40 feet under the stern. Hull planking sprung loose causing water to enter the engine room and extinguish the boilers.

Captain Smith assessed the damage and concluded the situation was dire. He ordered the 1<sup>st</sup> mate and four crew members to take the 18-foot open yawl to the Canadian shore and report the grounding. The small vessel was picked up the next day by the steamer *Henry*

R. Dixon and taken ashore. After the first boat left, the captain and remaining crew of eight took another small boat to Washington Harbor to await word from their offices.

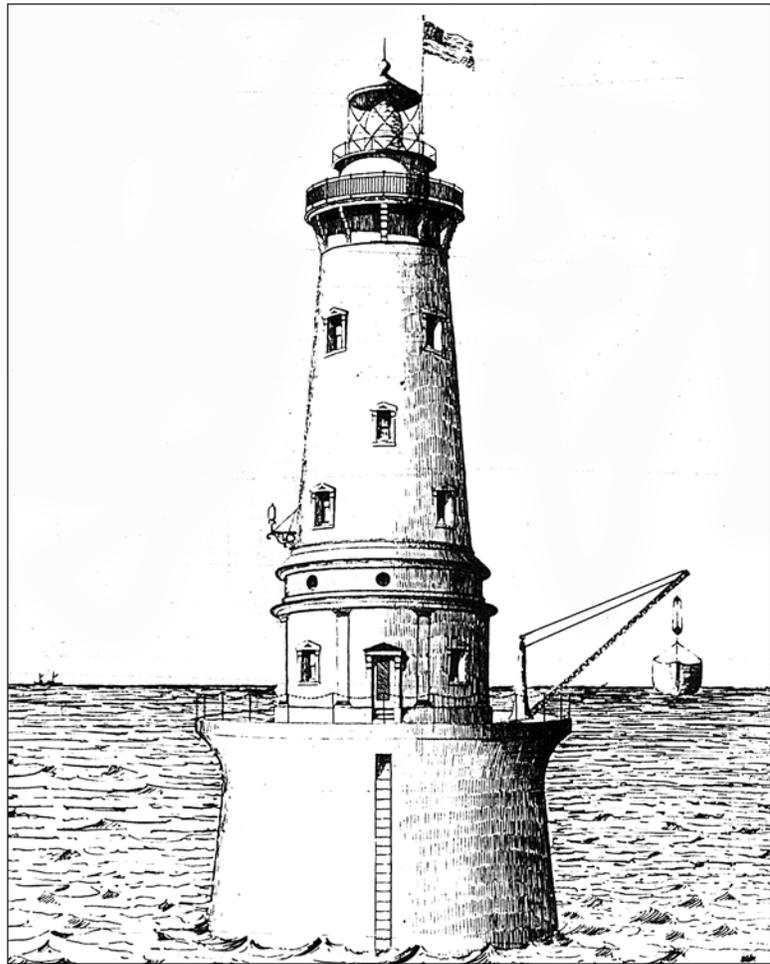
The *Chisholm* was constructed in Cleveland in 1880 and valued at \$70,000, the cargo at about \$45,000. Unfortunately the vessel was uninsured. Salvage vessels arrived on scene, but were unable to save the vessel. Heavy seas and strong winds on October 24 drove the salvagers from the scene and the two-day storm eventually broke up the *Chisholm*. She settled into deep water on top of the wreck of the *Cumberland*.

In 1899, the Lighthouse Board repeated their request for an appropriation for a Rock of Ages Lighthouse and added the following to the text: *It is now estimated that it will cost \$125,000 to establish this light and fog-signal, and the Board recommends that an appropriation of this amount be made therefore.*

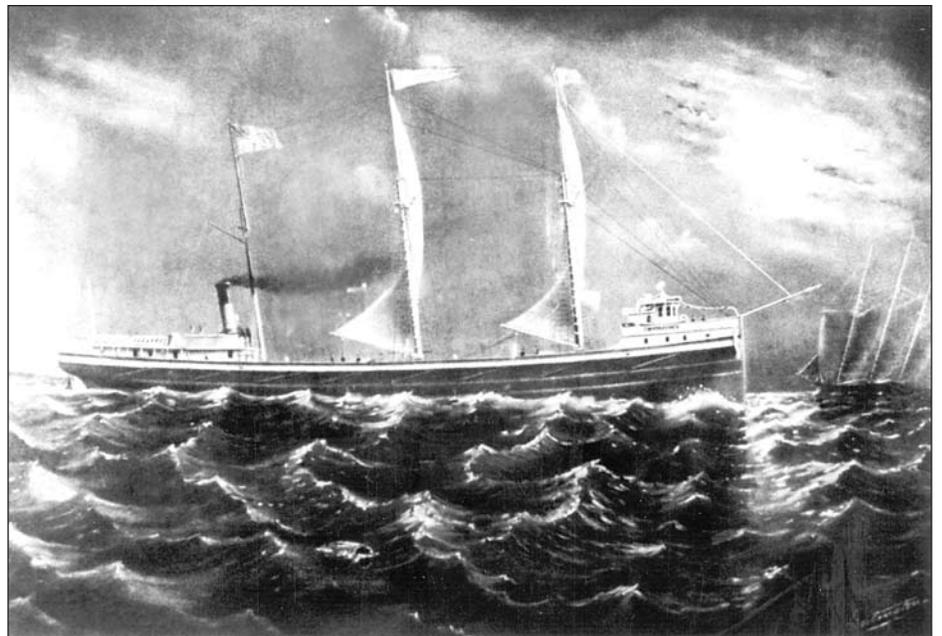
The requested amount was not approved. The Board kept submitting the request each year. Finally, in the 1903 Report the Board tagged on the following to the above paragraphs: "The Board now recommends in place of making an appropriation for establishing this station that an appropriation of \$25,000 be made for making a survey and examination of this site and preparing detailed plans and estimates and beginning the work of construction." Congress didn't approve the request in 1903 or 1904, but did in 1905. "The Act approved March 6, 1905, appropriated \$25,000 for making a survey and examination of the site, detailed plans and estimates, and beginning the work of construction of a light and fog-signal station on Rock of Ages ... It is expected to make this survey and examination as soon as weather conditions at the site will permit."

The next June Congress approved \$50,000 toward construction of the station with a caveat that the project, "...shall not exceed \$100,000, in addition to the sum of \$25,000 appropriated on March 6, 1905.

The 1907 Report to Congress states, "...Plans showing the general features of a design for the proposed light and fog-signal station, together with a detailed estimate of the cost of the completed work were prepared, and the building material and the steel work for the casting of the pier and the structural work of the tower, also the tools, plant, etc., were purchased.



Rock of Ages showing the crane used to bring the station boat up to the caisson deck.



The vessel *Chisholm* which grounded at Rock of Ages and sank in 1898. Image courtesy of University of Wisconsin, Superior.

On May 21, a chartered steam barge left Detroit loaded with building material, tools, plant, and the necessary working party, to build the station by day labor. The tender arrived at Washington Harbor on May 27, when the unloading of the steamer and the repairing of the Washington Club (a hunting lodge), which had been leased as the shore depot for the construction party, was begun. At the close of the year the preliminary work on shore had been completed, the repairing having been finished on the various structures for the accommodation of the working party and for the storage of building material, an extension made of two 16 foot cribs and one 14 foot crib to the landing wharf, and the tramway and trestle work build to facilitate the handling of materials, and leading from the grounds to the end of the wharf. At the station site the rock blasting was completed, and the dressing of the rock for the base of the foundation cylinder was in progress.”

The structural engineer selected for the project was Ralph Tinkham, who went on to design and construct lighthouses from the Great Lakes to Alaska to Hawaii. He eventually became the chief engineer of the Lighthouse Service and, later, Coast Guard. Following are his words (which appeared in more detail in Volume 7, #1 of the *The Keeper's Log*).

“My initial undertaking in lighthouse engineering was the structural design of Rock of Ages Lighthouse in Lake Superior. On loan from the structural steel division of the Russel Wheel & Foundry Company of Detroit, I was employed as designing engineer for their first

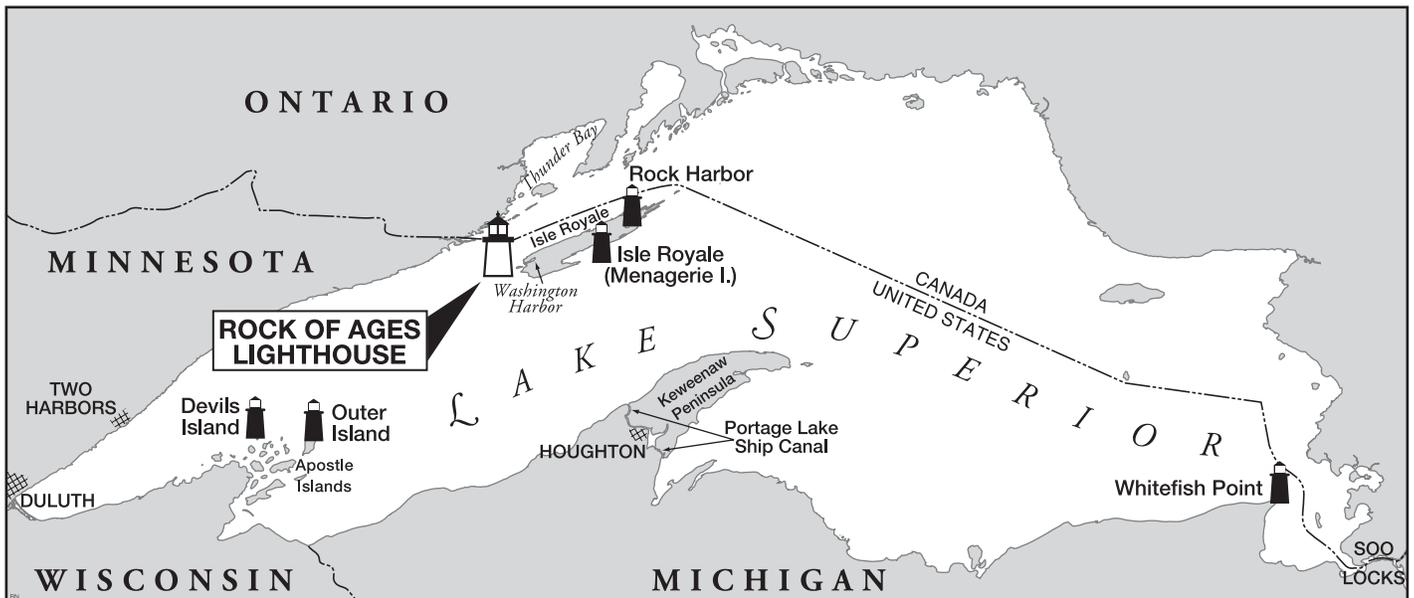
lighthouse... completed during the winter of 1907-08. During those few months, my initiation into the fascinating ramifications of lighthouses and their intricate lighting and fog signal equipment was acquired under [Lighthouse] Superintendent Todd (11th Lighthouse District).

Rock of Ages is the geographical name of a rock ridge jutting up from the floor of Lake Superior five miles from the southern extremity of Isle Royale. On this rock the lighthouse was built and from it, took its name. This lighthouse serves both as protection and a guide to shipping to and from north shore ports.

Isle Royale was a mysterious and isolated region. It is an island 45 miles long and seven miles wide, situated parallel to, and fourteen miles distant from the northwest shore of Lake Superior ... wholly within United States waters and part of the State of Michigan; the international boundary loops up and around its northern extremity. It is now a National Park, but [in 1913 it was largely] uninhabited; its only occupants were transient summer excursionists in a small lodge at the entrance to Washington Harbor, a narrow inlet extending five miles into the southwestern end of the island opposite Rock of Ages. [There were also at least a dozen families, primarily Norwegian and Swedish immigrants, who fished seasonally from several points on the island.] True, there were lighthouse keepers, but not on the island itself. Standing like offshore sentinels were Rock of Ages Lighthouse (1907-08) at the south end,

Isle Royale Lighthouse (1874) on an islet off the southeast shore, and Passage Island Lighthouse (1881) on a small island... off the north end. At the time, much of Isle Royale was owned by copper mining companies... they had prospected Isle Royale extensively and constructed a mining camp at the upper end of Washington Harbor, but mining operations ceased and the camp was abandoned.

To facilitate the construction of the Rock of Ages Lighthouse, the buildings of the abandoned mining camp at the head of Washington Harbor were leased from the mining company... to be used as living quarters for the workmen, and for the storage of supplies, tools and construction materials. One exception to the lease, was a large residential structure built of hewn logs. Formally the domicile of the mining superintendent, this building stood off to one side of the group of camp buildings, at a higher elevation above the harbor. From the shore fronting the premises leased by the Lighthouse Service, a wharf extended into the harbor... for mooring lighthouse tenders when delivering materials and supplies, and to which the steam launch and barges used for the construction of the lighthouse were tied up. From camp, it was five miles to the mouth of the harbor, a narrow rock bound fjord, and from there to the Rock of Ages, another five miles over open water of Lake Superior. These ten miles were traversed each morning after breakfast in camp, transporting workmen and materials to the Rock, and again at the close of the day, returning men to the camp for supper and the night.



One of the camp buildings was a five room house... formally the foreman's dwelling. Here were the quarters of the superintendent in charge of the construction of the lighthouse, the assistant superintendent (myself), and the timekeeper-clerk. The two main floor rooms on the left of the entrance hall were used as headquarter offices: the one room on the opposite side of the hall was the sleeping quarters of the superintendent, when present, which was seldom. On the second floor... were two large rooms, one on the left the bedroom of the timekeeper-clerk and the one on the right used by myself as a sleeping room and drafting room. It was here, on weekends and on days when weather conditions prevented work at the Rock, that I worked out details of this project as it progressed, and began the preliminary design of Split Rock Light Station which was to be built the following year on the north shore of Lake Superior in northern Minnesota.

The superintendent... was absent most of the time on the mainland directing the procurement and shipping of construction materials, recruiting and dispatching the skilled labor required, and attending to other business details. Consequently it fell to me, as assistant superintendent, to direct and supervise the construction work at the Rock during those periods. When construction bids were called for, the bids submitted were excessive – far above the amount of appropriated funds available for the project. This was due to the isolation and exposure of the site, with a high degree of risk to the contractor... consequently the Lighthouse Engineer rejected all bids, and directed the organization for force-account construction by his own staff. We succeeded in completing the project within funds available.

The construction force varied from thirty to fifty men, and changed in composition from time to time as the work progressed, depending on the character of construction underway. This force included... quarrymen, structural steel workers, concrete workers, brick masons, carpenters, painters and various tradesmen, as well as common labor, cooks and kitchen help. The installation of the fog signal machinery and lenticular apparatus (Fresnel lens) was performed by lighthouse technicians from the Detroit shop [11<sup>th</sup> District Lighthouse Depot]. These were brought [to Isle Royale] by the tender *Amaranth*, a cargo and passenger vessel operated by the Service for construction and maintenance work in the 11th District. It was

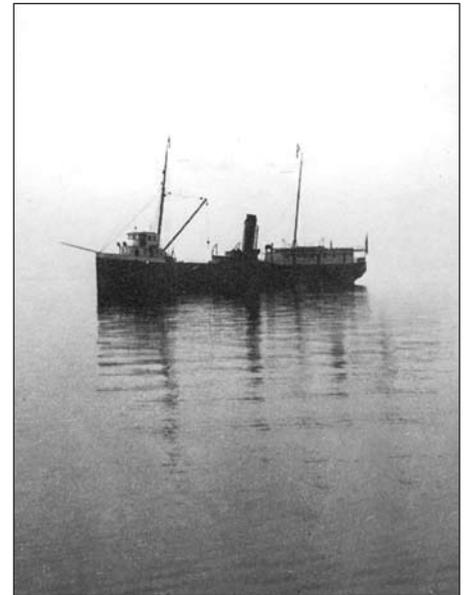
commanded by a veteran shipmaster, Captain L. M. Stoddard, incidentally, a highly educated man who later became Superintendent of the 12th District (Lake Michigan)...

My first trip to Isle Royale was ... aboard the *Amaranth* from Detroit early in the spring of 1908. I had resigned my position with the Russel Wheel and Foundry Co. to accept appointment as Superintendent of Construction in the Lighthouse Service. The first voyage to and across Lake Superior was memorable in the annals of my career on several accounts. It was my initiation to shipboard travel, it carried me through a terrific spring storm on Lake Superior, and assailed me with my first, my last, and only experience with seasickness. During the forty years that followed, much of it spent aboard ships or small craft, not only on the Great Lakes, but also in the Atlantic, the Gulf of Mexico and the Pacific Ocean, never again was I seasick. However, the one bout with it on Lake Superior remained a poignant memory, such as to elicit my sympathy ever after for others so afflicted.

The spring and fall storms on the Great Lakes become a grave danger to shipping and are truly awesome. Many have been the tragedies of shipwrecks and loss of life in these storms over the years, even to the foundering of some of the great ore carriers... the freshwater of the Lakes is much lighter of weight than the saltwater of the oceans... because

of this light weight... storm seas on the Great Lakes are much higher and [and the distance between waves] shorter than with saltwater. A contributing factor is the relative shallowness in most of the Lakes [but not Lake Superior].

So severe did that storm in the spring of 1908 become, that for the safety of his ship, the captain changed his course and took the *Amaranth*, then well out [in the middle of]...



Lighthouse Tender *Amaranth* called a 'barge.' It was said that in rough weather "She rolled like a beast." U.S. Lighthouse Society photo.



The buildings used as a residence and office for engineer Tinkham and his crew are at far right. The large building in the foreground is a private men's hunting and fishing club, and formerly the offices of a copper mining company. Photo courtesy of Isle Royale National Park.

Lake Superior, directly south into the harbor of refuge at Grand Marais, Michigan, which was reached at midnight. So great were the seas that the ship actually touched bottom in the trough of one as it entered the harbor between the jetties. On going ashore the next morning I experienced for the first time, with stumbling gait, that phenomenon of undulating streets and sidewalks, induced by the sensory carry-over of the violent motions of the ship on the night before.

To construct the foundation of the Rock of Ages Lighthouse it was necessary first to blast off a section of rock, which was a jagged ridge of basalt a hundred yards in length and twenty yards wide at the waterline, rising fifteen feet above water to a sharp crest like a giant coxcomb. Quarrymen drilled and blasted a section sixty feet wide out of the center of this ridge down to a roughly level floor just above water level. On this level section was erected a cylindrical wall built up of heavy steel plates riveted together, anchored to the rock, and the cylinder then filled with mass [of] concrete, forming a pier fifty feet in diameter and 25 feet high. On this pier was then erected the structural steel, skeleton framework of the lighthouse tower, designed not only to carry the load of its walls, floors, and surmounted lantern room, but to resist hurricane winds, breaking seas, and the stresses imposed by the enormous quantity

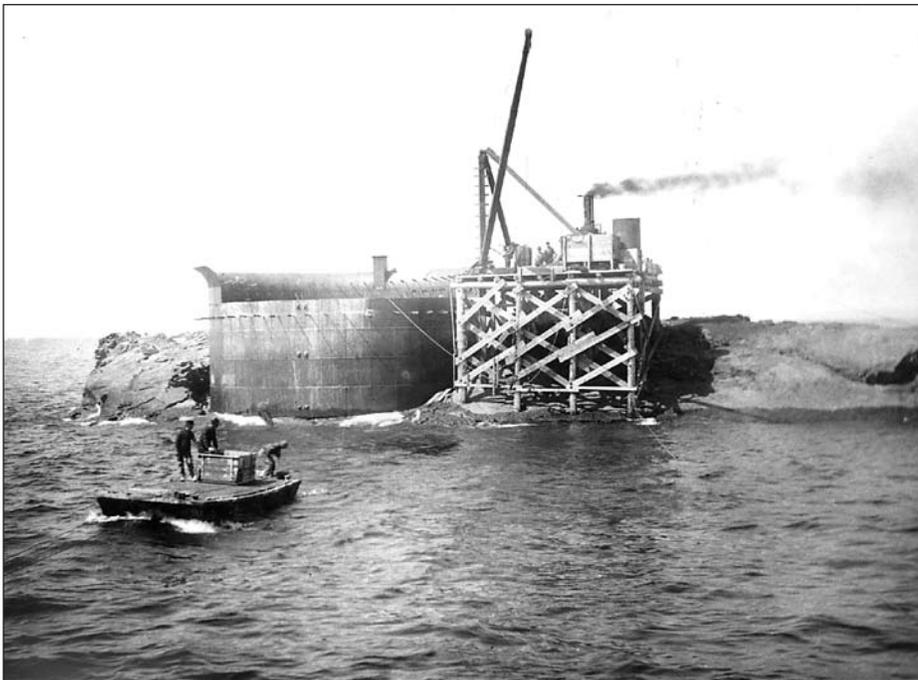
of ice that piles up over the pier and around the tower during the winter months. Supported by this steel structure, the outer and inner walls of the tower were built of brick masonry, with architectural trim of molded cut limestone, and the multistoried floors of terra cotta tile finished with cement, supported on radial steel beams. Spiral stairs, fabricated from cast iron sections, connected successive floors. The overall height of the lighthouse was 130 feet above lake level.

Until the tower was enclosed, all workmen, tools and materials were housed at the base camp at the upper end of Washington Harbor and transported to the site by barge and steam launch. . . as soon as the tower was enclosed, a timber platform was built as the level of the pier deck, extending out over the rock ridge, on which was erected a combined bunkhouse mess hall and galley. . . to accommodate thirty men with separate quarters for the assistant superintendent and timekeeper. The platform was wide enough to provide a gallery entirely around the building and connecting with the pier, protected by an outside wooden railing. These accommodations became available in early fall, at a time when stormy weather was more frequent and prolonged, so the work was greatly expedited by having the main working party living on the Rock and not subject to protracted delays because of inability to reach and land on the Rock in bad weather.

The base camp at Washington Harbor continued to be maintained by a skeleton crew for the storage of materials and mooring the launch and supply vessels. During the fall there was much stormy weather, and there were frequent occasions when the launch was unable even to approach the Rock because of heavy seas. In such weather, seas would break clear over the rock ridge, surging beneath the deck of the platform, water spurting through the cracks in the floor of the quarters. This temporary structure was sturdily built, however, with heavy wooden framing securely anchored to the rock, so it withstood this battering even though it would shake with vibrations from impact of the seas; the Rock itself would vibrate at times when breaking seas thundered against its jagged side. . . although effort was made to maintain sufficient supplies on the Rock to meet emergencies, storage space was extremely limited, and on more than one occasion subsistence supplies got so low before the launch could make contact, that the men were on short rations for days. On some of those occasions the crew of the launch took desperate chances to land badly needed supplies in canvas wrapped boxes attached to heavy lines.

Fortunately the status of the work permitted the completion of the lighthouse to proceed without interruption due to weather. After moving to the Rock from the base camp, neither the timekeeper nor I left it until the lighthouse had been completed in late October, and we were then taken off for transportation to Detroit. Life on the Rock was extremely restricted, of course, but it was far from monotonous. During daylight hours there was the business of construction progress, and the countless details of interior finish and installation of equipment. It was then many years before the introduction of radio broadcasting, which subsequently was to relieve the isolation and loneliness of offshore lighthouses, so our evening relaxation consisted of writing up the log, reading magazines, and playing cribbage; the timekeeper and I, sole executives on the Rock, played so much cribbage that it seemed we could peg with our eyes shut.

From day to day there were incidents to enliven the tedium and appeal to one's sense of humor. In a gang of thirty construction men and mechanics there are invariably a few exceptional characters that make life interesting and often hilarious. One day while busy



The construction crew's steam launch departing Rock of Ages with the construction of the base of the lighthouse well underway.



board, he brought out a .22 rifle. Asked how he expected to shoot blackbirds with a rifle, and why he didn't use a shotgun, he explained that a shotgun would fill these small birds with so much lead they would be useless for a pie, and he proposed to shoot their heads off with a rifle. Incredulous, I accompanied him on this foray. Sure enough, resting the rifle on the top of an occasional fence post, and drawing a bead on an unsuspecting blackbird, he shot its head off. Repeating the performance, the captain, a crack shot with any gun, and a dedicated hunter whenever the opportunity invited, proceeded to bag over two dozen blackbirds, shooting off a head at least four out of five shots; the birds were so

numerous and indifferent that they provided endless targets. The camp cook stared, hardly believing his eyes, when this bag was brought in, but he was game [so to speak]. How he plucked and dressed those small birds was not observed, but he subsequently set before us at the officer's table... a most delectable blackbird pie, a welcome diversion from the usual camp fare.

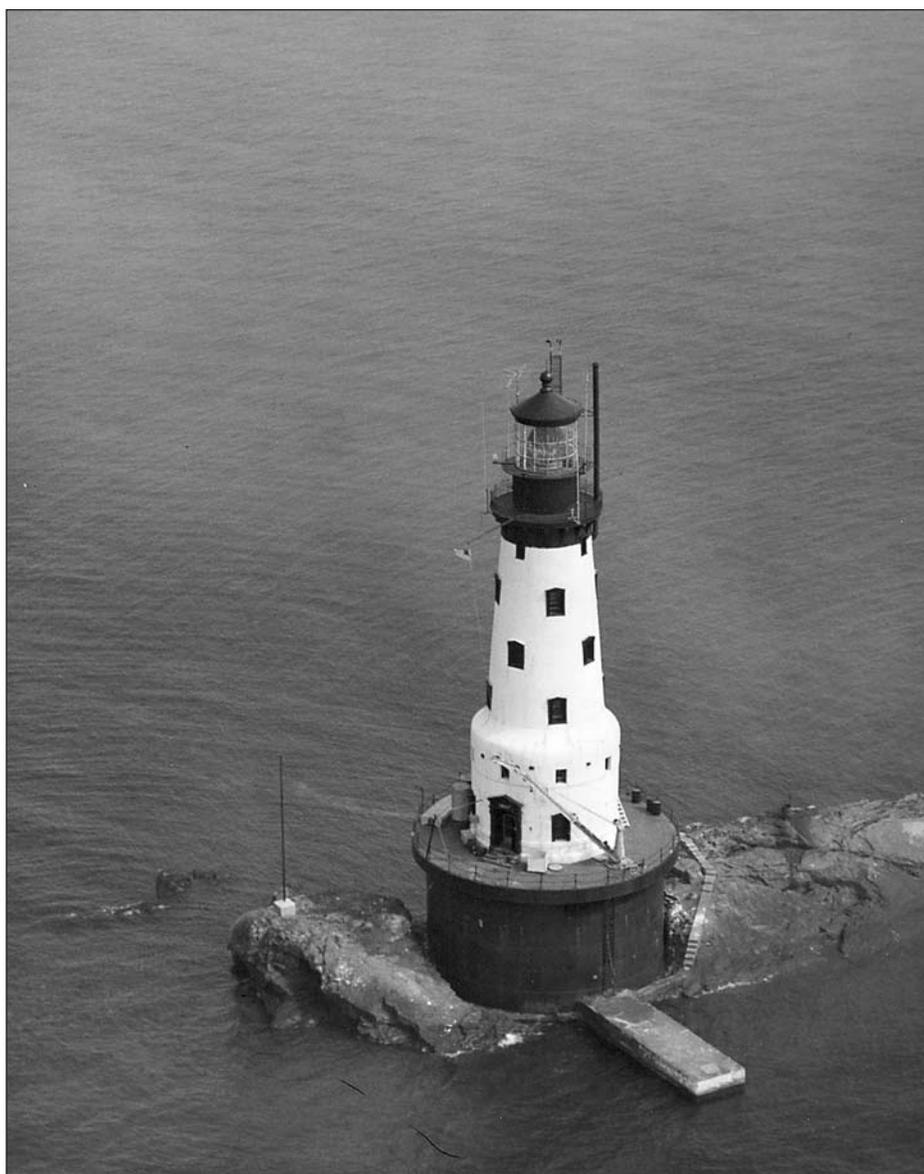
If Rock of Ages Lighthouse was a striking landmark, fifty [92] years later, it still is. Its appearance at a distance resembles the imposing structure of the world famous Corduan lighthouse on the coast of France, rising 130 feet above the water, the plate glass panels of the iron lantern at the top enclosed the

powerful revolving Fresnel lens that projects brilliant beams of light at night, in successive flashes [two flashing white lights every ten seconds] of 400,000 candlepower [2nd order lens], visible as far away as Keweenaw Point. Within the spacious room in the base of the tower at pier level are the machinery and the regulating apparatus for operating sonorous fog signal trumpets whenever fog or snow obscures the lighthouse. Below this deck within the mass concrete pier are storage tanks. On the several floors, one above the other within the tower, are storage rooms, living and sleeping rooms for the keepers, and, beneath the lantern, a watch room where the keepers in rotation, standing watch, maintain uninterrupted vigilance twenty four hours a day, seven days a week, observing the weather and regulating the proper operation and timing of the light and signals.

In those times keepers were relieved periodically for shore liberty due them, and new keepers were installed and others transferred from time to time, but the signals displayed by the lighthouse were never interrupted from the opening of navigation in the spring, when the first crew might have to chop its way through a mountain of ice to gain entrance to the tower until the close of navigation in early winter, when the crew was taken off and transported to the mainland. During the winter months a minor [optic] of 300 candlepower was displayed automatically operated by compressed acetylene gas... as a warning to craft that might be out on the lake during those months. Some twenty-five years after the completion of this station, a radio beacon was installed. Through scores of years to come, perhaps centuries, this lighthouse will exemplify the timelessness of its name, Rock of Ages."

## Epilogue

Rock of Ages Lighthouse was completed in 1908. The initial estimate to construct the lighthouse was \$50,000. It was found to be hopelessly inadequate, and in March 1905 Congress funded \$25,000 just to study the feasibility, and followed up with an appropriation of \$100,000 the next year. After completion, \$15,000 was authorized to purchase a 2nd order Fresnel lens. The lighthouse became operational in September 1910. The lighthouse was automated in 1978. The lens was subsequently removed during a Coast Guard solarization project, and transferred to Isle Royale



Rock of Ages Lighthouse circa 1975. Note the 2nd order Fresnel lens is still in the lantern room. Small antenna at left is probably for the radio beacon. Photo courtesy of the U.S. Coast Guard.

National Park, a unit of the National Park Service in 1985. It is now on display in the Windigo Visitor Center in Rock Harbor, near the site of the construction crew's Isle Royale base camp. Perhaps, as Ralph Tinkham predicted, Rock of Ages will shine forth over the western waters of Lake Superior for centuries, but it will do so as an automated light, the keepers having served for only 68 years.

Rock of Ages was a remote and arduous manned station. Some years, winter set in unexpectedly early, making removal of the keepers for the season a difficult task. 1919 was one such early winter, when the Lighthouse Service tender *Marigold* risked severe weather conditions to remove the keepers of several Lake Superior light stations. The ship finally arrived at Rock of Ages on December 16 at a point when the food supply was down to a single can of tomatoes.

The presence of a lighthouse has not always ensured that a vessel was safe from the obstruction it was warning of. In May



**Above – Lighthouse Service Tender *Marigold*, one of the tenders which serviced the Rock of Ages Light Station. U.S. Lighthouse Society photo, date unknown.**



**Left – The steamer *George M. Cox* tied up at Chicago just prior to her fatal voyage. Photo courtesy of the University of Wisconsin, Superior.**

1933, the passenger ship *George M. Cox*, on its maiden voyage, ran aground on a nearby reef. Keeper John Soldenski helped rescue all 125 passengers, who spent the night crammed in the tower until a vessel arrived the next day to take them from the isolated lighthouse.

The *George M. Cox* was constructed in Toledo, Ohio in 1901 and christened the *Puritan*. Her early career was spent as a passenger and freight vessel plying the waters of lower Lake Michigan with occasional trips to Mackinaw Island at the north end. In 1908

the vessel was lengthened from 235 feet to 270 feet overall.

In early 1930, with the onset of the Depression, a New Orleans entrepreneur named George Cox, learned of the *Puritan's* availability and purchased the vessel. She was renamed the *George M. Cox* in 1933. Shortly afterward the vessel sailed for her first trip to Lake Superior stopping briefly at the Keweenaw Peninsula. From there she sailed to Thunder Bay skirting Isle Royale. She was carrying the crew and a special con-

tingent of invited guests, personal friends of George Cox and some business associates. The vessel left the Portage Ship Canal of the Keweenaw Peninsula on May 27 under fair skies. Late in the day the officer of the deck, 1st mate Arthur Kronk, called Captain Johnson back to the bridge as the ship was entering a low fog bank. They could see the top of the Rock of Ages lighthouse above the fog bank and at 5:20 p.m. and they clearly heard the fog signal sounding. They continued on course until 6:10 p.m. when the signal became louder. Captain Johnson later recounted, “Discovering that we were near abreast of the light, owing to a greater speed than I had anticipated, we received an alarm signal from the Rock of Ages lighthouse and immediately I put the wheel hard to starboard [right] and steered west for eight minutes. At 6:18 p.m., feeling assured that we were at least 2 1/2 miles westward of the lighthouse I hauled slowly to the northwest in order to get a bearing on the Rock of Ages Light. We struck the reef at 6:20 p.m. Immediately we gave signals to stop the engine

and ordered the boats manned and lowered. All lifeboats on the portside were lowered in ten minutes. The [ship] being so badly listed to port it was impossible to lower the starboard boats. When the boats were well clear of the steamer, we unlashed the rafts from the starboard [side] and slipped them across to the port side. All ladies and children, about 30 in number, were placed in the first two boats. When the life-boats were filled and underway, the motor boat

#### RADIOTELEPHONE AT ROCK OF AGES LIGHT STATION OF ASSISTANCE IN CONNECTION WITH MARINER DISASTER.

On May 27 the passenger steamer *George M. Cox* with 127 persons on board... stranded in fog on a reef a short distance from Rock of Ages Light Station. The sea was calm so that the passengers and crew were able to reach the light station in safety.

There was not room for all the people inside the light tower, so the crew and passengers spent a chilly and uncomfortable night; they took turns inside to warm themselves spending the rest of the time huddled on the bare rocks outside. On the following day all persons were removed to the shore, except certain representatives of the owner of the vessel. All signals at Rock of Ages Light Station were operating at the time of the disaster ... the radiotelephone ... was used to send out a general call reporting the accident. A former call sent from the ship itself had been successful, however, in giving information as to the disaster. The radiotelephone at the station was used to very good advantage in informing the district office of the accident, and to the fact that the aids to navigation were in no way involved, also in handling a number of messages for the vessel's owners in connection with the disaster.

Messages from the Rock of Ages Light Station, a remote point in Lake Superior, are transmitted either directly to the Marquette Light Station on shore or through other intervening light stations equipped with radiotelephone. Messages so transmitted are then placed on commercial wires by the keeper of the Marquette Light Station. Mail delivery to the district office in Detroit generally requires nearly a week.

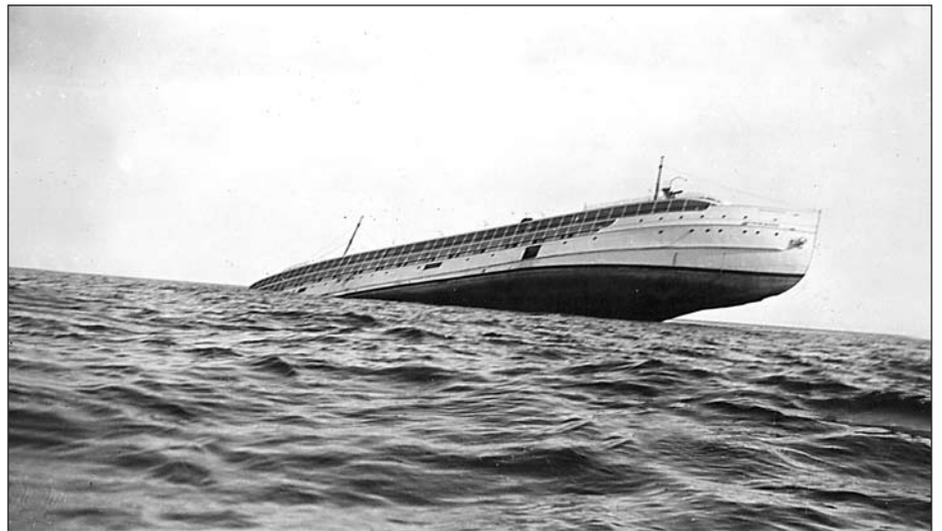
Keeper Soldenski was in charge of the Rock of Ages Lighthouse from 1931 to 1935 when he was transferred to Point Iroquois Light Station. The vacancy at Rock of Ages occurred when the head keeper, Emil Mueller, had a heart attack and plunged down the tower stairs



The reef off of the Rock of Ages which the vessel *George M. Cox* struck. Note the lens has been removed from the lantern room. 2002 photo courtesy of Darrell Camp.

from the lighthouse took some of the boats in tow, and in doing so made good progress in landing the passengers at the lighthouse. At 7:30 p.m. all passengers and crew were off the steamer.”

An SOS was issued from the *Cox* before the vessel was abandoned. The passing vessel *Morris B. Tremaine* responded and took the few injured passengers aboard and transported them to shore. Local Coast Guard stations also responded to the Mayday, but didn't reach the lighthouse until the next day. Thus some 127 passengers and crew from the *Cox* became the guests of Lighthouse Keeper John Soldenski and spent the night on the spiral stairs of the tower, a few taking turns standing outside the tower due to the crowded condition of the tower. The Lighthouse Service Bulletin dated July 1, 1933 mentioned the event:



The vessel *George M. Cox* on a reef off of Rock of Ages in 1933. Photo courtesy of the University of Wisconsin, Superior.

and fell dead on the bed where assistant keeper C. A. McKay was sleeping. McKay explained, "Too many steps, one room on top of another, clear to the top. His heart gave out at last." Soldenski left the service in 1939 when the Coast Guard assumed control.

Professional action of the crew of the *Cox* combined with the assistance of the light station crew facilitated the largest mass rescue of a shipwreck on Lake Superior, and was accomplished with only minor injuries and no loss of life.

Eventually salvage crews surveyed the wreck and found that the bottom was literally torn out. Being unsalvageable, she was abandoned on the ledge and remained there until an October storm broke her up and she slipped below the water coming to rest on the two earlier wrecks, also with names beginning with the letter C (*Cumberland* and *Chisholm*).

When Rock of Ages went operational it displayed a group flashing white light every ten seconds (from a 2nd order Fresnel lens) vis-

ible for 19 miles. A diaphone horn produced a 2 second blast every 28 seconds and in later years a Radiobeacon was installed.

Rock of Ages was an "unaccompanied station", but more of a hardship station than other stations of this type. Some unaccompanied stations were close enough to civilization to allow the keepers to take turns spending time ashore with their families. But for most of its manned existence, Rock of Ages was too far from a community to allow family visits.

Keeper Soldenski remarked to a newspaper reporter who visited his station, "eight months on a rock five miles out in Lake Superior, what a life. Nowhere to go on shore leave but Isle Royale. It's a wonderful life we lead out here on this rock, and doing my own cooking. I miss my wife's good meals.

When we get a real storm you can't see anything but water; hear anything but its roar. See that pier around the tower? It looks pretty high up and safe. Well, in a real storm, heavy, green water sweeps over it. You can't even see

it. You can't get away from the water, even at the top of the tower, spray sweeps across the tower windows, when its very cold it freezes on the storm panes [windows].

Another keeper remarked that if you live on a lighthouse like Rock of Ages for very long you begin to see mermaids.

The tour of duty on Rock of Ages is about eight months. The district buoy tender lands the men on the station when the shipping season is about to open, usually in April, and takes them off with the close of the season in November, or perhaps, early December. During the year the tender brings the crew food, supplies and mail a few times."

In 1985 the station was automated and the 2nd order Fresnel lens removed. It is on display at the National Park Service's Windigo Ranger Station on Isle Royale. A modern, solar powered, beacon replaced the original and provides the same characteristic.



The Rock of Ages 2nd order Fresnel lens in the Windigo Visitor Center at Isle Royale National Park. The lens produced two flashes (group flashing white) every 10 seconds. 2002 photo by Eric Maul.