

**From Behind Masks: Underwater Archaeological Investigations
from the 2020-2022 Field Seasons**



Included: Abiah, Advance, Peoria, Sidney O. Neff, and Sunshine

**State Archaeology and Maritime Preservation
Technical Report Series #23-001**



Tamara L. Thomsen and Caitlin N. Zant

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Note:

At the time of publication, *Advance*, *Peoria*, and *Sunshine* are pending listing on the State and National Registers of Historic Places. Nomination packets for these shipwreck sites have been prepared and submitted to the Wisconsin State Historic Preservation Office. The *Abiah* and *Sidney O. Neff* sites have been listed on the State and National Register of Historic Places.

Cover photo: Volunteer diver Chris Spoo surveys the schooner *Sunshine*.

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TABLE OF CONTENTS

ILLUSTRATIONS AND IMAGES _____	iii
ACKNOWLEDGEMENTS	vii
INTRODUCTION	1
Research Design and Methodology _____	4
TOPSAIL SCHOONER <i>ABIAH</i>	7
Site Description _____	13
SCHOONER <i>ADVANCE</i>	23
Site Description _____	38
SCHOONER <i>PEORIA</i>	49
Site Description _____	72
STEAMBARGE <i>SIDNEY O. NEFF</i>	81
<i>Site Description</i> _____	104
SCOW SCHOONER <i>SUNSHINE</i>	117
Site Description _____	122
CONCLUSIONS AND RECOMMENDATIONS	133
<i>ABIAH</i> _____	133
<i>ADVANCE</i> _____	134
<i>PEORIA</i> _____	135
<i>SIDNEY O. NEFF</i> _____	136
<i>SUNSHINE</i> _____	136
REFERENCES.....	139
Chapter 1: Introduction _____	139
Chapter 2: <i>ABIAH</i> _____	139
Chapter 3: <i>ADVANCE</i> _____	142
Chapter 4: <i>PEORIA</i> _____	155
Chapter 5: <i>SIDNEY O. NEFF</i> _____	173
Chapter 6: <i>SUNSHINE</i> _____	183

ILLUSTRATIONS AND IMAGES

Figure	Page
Figure 1. Israel T. Hatch, 1857 Congressional Portrait (Library of Congress)	7
Figure 2. Milwaukee & Mississippi Rail Road Engine No. 1. Photo taken in 1880 when the locomotive carried the name C.M. & St. P. Railway locomotive No. 71 (WHS Image 62849)	9
Figure 3. Railroads in operation December 1850 (Atlas of the Historical Geography of the United States 1932)	10
Figure 4. Location of the <i>Abiah</i> site	13
Figure 5. Bow of the <i>Abiah</i> (Wisconsin Historical Society)	14
Figure 6. <i>Abiah</i> 's port side and centerboard trunk (Wisconsin Historical Society)	17
Figure 7. <i>Abiah</i> 's stern looking aft (Wisconsin Historical Society)	18
Figure 8. Photogrammetry model of <i>Abiah</i> looking aft (Marine Imaging Technologies)	20
Figure 9. Photogrammetry model of starboard side of <i>Abiah</i> (Marine Imaging Technologies)	21
Figure 10. Headline Milwaukee Sentinel September 9, 1885	36
Figure 11. Location of the <i>Advance</i> site	38
Figure 12. A diver measures <i>Advance</i> 's bulwark stanchions (Wisconsin Historical Society)	40
Figure 13. Bowsprit and head rigging of <i>Advance</i> (Wisconsin Historical Society)	41
Figure 14. <i>Advance</i> 's windlass, Samson post and deck planking (Wisconsin Historical Society)	42
Figure 15. <i>Advance</i> 's standing centerboard trunk (Wisconsin Historical Society)	44
Figure 16. <i>Advance</i> 's stern and stern post (Wisconsin Historical Society)	45
Figure 17. Photogrammetry model of <i>Advance</i> site (Ken Merryman)	46
Figure 18. Site plan of <i>Advance</i> (Wisconsin Historical Society)	47
Figure 19. Dr. Timothy Eastman (Evening Tribune)	52
Figure 20. Historical image of <i>Peoria</i> in Chicago, Illinois from the Rush Street bridge, circa 1885 (C. Patrick Labadie Collection)	65
Figure 21. Historical image of <i>Peoria</i> at dock in Boyne City, Michigan, circa 1888 – 1895 (D.S. Way Collection, Bowling Green State University)	68
Figure 22. Location of the <i>Peoria</i> shipwreck site	72
Figure 23. <i>Peoria</i> 's bow section, looking aft (Wisconsin Historical Society)	73
Figure 24. <i>Peoria</i> at midships, looking from starboard to port (Wisconsin Historical Society)	74
Figure 25. <i>Peoria</i> 's portside foremast chainplates (Wisconsin Historical Society)	75
Figure 26. <i>Peoria</i> 's portside deck shelf and two deck beams (Wisconsin Historical Society)	76
Figure 27. <i>Peoria</i> 's centerboard trunk with centerboard chain (Wisconsin Historical Society)	78
Figure 28. Site plan of <i>Peoria</i> (Wisconsin Historical Society)	79
Figure 29. Captain Samuel Neff (John S. Neff)	81
Figure 30. Sidney Neff (John S. Neff)	82

Figure 31. Charles Neff (John S. Neff)	82
Figure 32. <i>Sidney O. Neff</i> , as a schooner-barge, being towed into the port of Manistee, Michigan, circa 1896 (Manistee County Museum)	85
Figure 33. <i>Sidney O. Neff</i> as a steambarge, carrying a cargo of lumber (Smithsonian Institution)	89
Figure 34. A colorized postcard of <i>Sidney O. Neff</i> traveling under the Jack Knife Bridge in Chicago (Leonard J. Barr II Collection)	90
Figure 35. <i>Sidney O. Neff</i> as the <i>M.C. & M.C. No. 2</i> stuck in ice, 1920 (Leonard J. Barr II Collection)	95
Figure 36. <i>Sidney O. Neff</i> in dry dock (Milwaukee Public Museum)	98
Figure 37. <i>Sidney O. Neff</i> in the Chicago River, 1930 (Edward J. Dowling Collection, University of Detroit-Mercy)	100
Figure 38. <i>Sidney O. Neff</i> 's main deck, looking forward, photographed after its abandonment, during its survey for the Historic American Merchant Marine Survey 1937 (Smithsonian Institution)	101
Figure 39. <i>Sidney O. Neff</i> where it was abandoned in Marinette harbor, 1937 (Smithsonian Institution)	102
Figure 40. Plan view schematic of <i>Sidney O. Neff</i> , surveyed as part of the Historic American Merchant Marine Survey after its abandonment in 1937 (Smithsonian Institution)	103
Figure 41. Profile view schematic of <i>Sidney O. Neff</i> , surveyed as part of the Historic American Merchant Marine Survey after its abandonment in 1937 (Smithsonian Institution)	103
Figure 42. Location of <i>Sidney O. Neff</i>	104
Figure 43. Stem post of <i>Sidney O. Neff</i> , looking aft (Wisconsin Historical Society)	105
Figure 44. <i>Sidney O. Neff</i> 's frames, split at the turn of the bilge (Wisconsin Historical Society)	106
Figure 45. An archaeologist documents the remains of <i>Sidney O. Neff</i> 's engine surface condenser (Wisconsin Historical Society)	107
Figure 46. Flywheel from <i>Sidney O. Neff</i> 's compound engine (Wisconsin Historical Society)	108
Figure 47. <i>Sidney O. Neff</i> 's disarticulated rudder, located in the debris field off the starboard side (Wisconsin Historical Society)	111
Figure 48. One of <i>Sidney O. Neff</i> 's hawsepipes (Wisconsin Historical Society)	112
Figure 49. A section of <i>Sidney O. Neff</i> 's upper hull structure, located in the debris field off the starboard side (Wisconsin Historical Society)	113
Figure 50. <i>Sidney O. Neff</i> site plan (Wisconsin Historical Society)	115
Figure 51. Augustus H. Moss (Sandusky Library Archives Research Center)	119
Figure 52. Location of the <i>Sunshine</i> shipwreck site.	123
Figure 53. An archaeologist records <i>Sunshine</i> 's port side hull and deck shelf (Wisconsin Historical Society)	124
Figure 54. <i>Sunshine</i> 's centerboard trunk and broken centerboard (Wisconsin Historical Society)	125

Figure 55. <i>Sunshine</i> 's port side hull with deck shelf, and tie-rod (Wisconsin Historical Society)	126
Figure 56. One of <i>Sunshine</i> 's remaining port side mainmast chainplates (Wisconsin Historical Society)	127
Figure 57. <i>Sunshine</i> 's centerboard trunk, broken centerboard, and centerboard winch chain (Wisconsin Historical Society)	129
Figure 58. A diver records <i>Sunshine</i> 's stern ramp (Wisconsin Historical Society)	130
Figure 59. <i>Sunshine</i> site plan (Wisconsin Historical Society)	131

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Under various restrictions and ever-changing protocols set in response to the Covid 19 pandemic, the Wisconsin Historical Society's Maritime Preservation and Archaeology Program managed to conduct Phase II archaeological survey projects within this report during the 2020, 2021, and 2022 field seasons. The successful completion of this research relied heavily upon the patience, understanding and dedication of many as well as hundreds of hours donated by individuals, volunteers, institutions, collaborators, and partners.

Preliminary historical research of all five shipwrecks examined in this report (*Abiah*, *Advance*, *Peoria*, *Sidney O. Neff*, and *Sunshine*) was collected by Russel Leitz through a search of national newspaper databases. A special thank you should be given to Brendon Bailod for allowing access to his collection of port documents and vessel insurance documents, information, and knowledge that was inaccessible to us while National Archives was closed to researchers during Covid restrictions. Access to this information allowed us to continue our research and work somewhat seamlessly.

Through a generous donation from Doug Hamilton and the Hamilton Family Foundation, the *Abiah* and the *Advance* survey projects were successfully completed. We would like to thank Steve Radovan for kindly sharing knowledge of the *Abiah* shortly after discovery so that we could affect additional protections to this valuable resource. The survey of *Abiah* was conducted in September 2020 and May 2021. Thanks to Tom Crossmon of Crossmon Consulting LLC, for conducting an ROV and multi-beam sonar survey of the wreck site. Evan Kovacs of Marine Imaging Technologies created a highly detailed and scaled photogrammetry model of *Abiah* and its associated debris field, and volunteer diver Chris Spoo assisted with site visits. The data and imagery collected by their assistance played an integral part in the wreck's nomination to the National Register of Historic Places. For the July 2021 *Advance* survey project, in addition to Chris Spoo, we would like to thank Carolyn Rock, Randy Wallander, and Steve Radovan for their assistance above and below water.

In June 2021, through grant funding from the University of Wisconsin Sea Grant Institute, Society maritime archaeologists and volunteers surveyed the wreck of the steambarge *Sidney O. Neff*. Although the survey was initially planned as a full 10-person field school, with Covid 19 restrictions still in place, we were unable to hold the event as planned. State regulations at the time allowed for a maximum of four persons for safe distancing on our research vessel. As a result, the massive *Sidney O. Neff* wreck site was surveyed with the help of only two volunteers, Tim Pranke and Russel Leitz, representing two avocational archaeological organizations: Great Lakes Shipwreck Preservation Society (GLSPS) and the Wisconsin Underwater Archaeology Association (WUAA).

The location of the scow schooner *Sunshine* was brought to our attention in 2021 by Matt Olson of Door County Adventure Rafting. After wrapping up a weeklong project on double centerboard schooners in Door County early, funded through University of Wisconsin Sea Grant Institute, we were able to tack on the survey of the *Sunshine* in early June 2022. Thank you to our volunteer Chris Spoo for accompanying us on this survey. It should be noted that the work on the double centerboard schooners *Boaz* and *Emeline* will be addressed in a subsequent report.

The schooner *Peoria* was also added on to the end of another weeklong double centerboard schooner project in July 2022 which paralleled work that was being conducted in Baileys Harbor by WUAA. We would like to thank Tim Pranke, Bob LaViolette, Bob Jaeck, and Russel Leitz for their assistance in this survey.

Special recognition goes to our long-time volunteer, Tom Villand, who stuck with us through Covid. He continued to dedicate time toward updating and organizing the ship files of the over 780 historic vessel losses in Wisconsin waters. Despite the Headquarters building being closed to all but essential employees and the Maritime staff being reassigned to work for the Department of Health Services for much of 2020 and 2021, and even after a partial reopening the Headquarters building when it remained closed to volunteers, Tom continued historical research to update entries in the shipwreck database. Along this vein, we would like to again acknowledge the University of Wisconsin Sea Grant Institute for extended outreach opportunities through social media postings, press releases, and by hosting our website www.WisconsinShipwrecks.org.

Although the project is not covered in this report, we would also like to thank the volunteers that help with the recovery of two dugout canoes from Lake Mendota in November 2021 and September 2022. Those that donated time and expertise were Randy Wallander, Chris Spoo, Russel Leitz, Bob LaViolette, Zach Whitrock, Tim Pranke, and divers of the Dane County Sheriff Department's Dive Team, Deputies Josh Coyne, Jacob Orth, Cole Blakley, Mike Hennel, Sean Fitzpatrick, Derek Eoff, Jay Ceithamer, and Lt. Eric Stacey.

And lastly, thank you to Michele Hagerman for volunteering to read and edit this field report.

CHAPTER ONE INTRODUCTION

Underwater archaeological surveys conducted by the Wisconsin Historical Society are a joint effort of several organizations and many individuals. The surveys conducted in this report are the result of a cooperative effort between the Wisconsin Historical Society, the Wisconsin Coastal Management Program, and the University of Wisconsin Sea Grant Institute. Project funding was provided by grants from the University of Wisconsin Sea Grant Institute and from the Hamilton Family Foundation. The surveys were organized and staffed by the Society's Maritime Preservation and Archaeology program archaeologists and volunteers, and were conducted over the 2020, 2021, and 2022 field seasons.

The Wisconsin Historical Society is the State of Wisconsin's principle historic preservation agency and charged under state statutes (44.02 and 44.30-44.31) with the research, protection, restoration, and rehabilitation of historic properties within Wisconsin. Under Wisconsin statute 44.47, the Society is also charged with the identification, evaluation, and preservation of Wisconsin's underwater archaeological resources, including submerged prehistoric sites, historic shipwrecks, and aircraft on state-owned bottomlands. Recognizing the multiple-use value of underwater archaeological sites to scientists, historians, and recreationalists, these underwater remnants of our past are broadly termed "submerged cultural resources." Submerged cultural resource management goes beyond the scope of traditional historic preservation programs, encountering diverse multiple-use concerns such as recreation and commercial salvage.

The State of Wisconsin has additional management responsibilities for submerged cultural resources under federal law, including the National Historic Preservation Act of 1966 and the Abandoned Shipwreck Act of 1987 (Public Law 100-298). State legislation (1991 Wisconsin Act 269) and modifications to state law in adherence with federal guidelines issued under the Abandoned Shipwreck Act has provided Wisconsin with a more formalized and rational framework for underwater archaeological resource management. This legislation also authorizes the Society and the Wisconsin Department of Natural Resources to designate underwater preserves for the preservation and recreational development of underwater archaeological sites.

Created in 1988, the Society's Maritime Preservation and Archaeology Program works to survey, inventory, and evaluate Wisconsin's underwater archaeological resources, develop preservation strategies, administer field management practices, and enhance public appreciation and stewardship for Wisconsin's precious and fragile maritime heritage (Cooper 1992; 1993). The program is housed within the Society's State Historic Preservation Office.

Any initiative aimed at identifying, managing, and interpreting Wisconsin's coastal cultural resources must consider these resources at both a local and a regional level. The sheer length (approximately 860 miles) and geographical, social, and cultural diversity of Wisconsin's Great Lakes coastline makes this essential. Established in 2001, the Wisconsin's Maritime Trails Educational Initiative divides the state into five regions, the boundaries of each selected to encompass common resources within that area, and merges regional diversity into a statewide educational context.

Wisconsin's Maritime Trails Educational Initiative encourages the public to consider each of these unique properties within the broader context of Wisconsin's rich maritime history. Winding above and below the waves, the Wisconsin's Maritime Trails Education Initiative forms a trail linking historic shipwrecks, lighthouses, historic waterfronts, historic vessels, museums, and shore-side historical markers and attractions. Through the WisconsinShipwrecks.org website, interpretive materials, and public presentations the program integrates archaeological research and public education to encourage divers, snorkelers, boaters, and with this grant paddlers, to responsibly visit Wisconsin's impressive collection of maritime cultural resources. Some of the major elements of the Wisconsin's Maritime Trails include:

Archaeological Research. The documentation of Wisconsin's submerged cultural resources, primarily historic shipwrecks, is the foundation of the Maritime Trails Education Initiative. Beyond academic and resource management applications, the result of this research forms the basis of most interpretation and outreach projects.

Shipwreck Moorings. With volunteer assistance, the Society maintains permanent moorings on 28 historic shipwrecks statewide. These moorings facilitate recreational access, provide a means of interpreting the wreck sites for visitors, provide a safe point of ascent and descent for divers, and eliminate anchor damage from recreational boaters anchoring into the site.

Waterproof Guides. Designed with divers and paddlers in mind, these rugged, waterproof guides contain information that places each site in its historical context, and describes the site highlighting unique features that might otherwise go unnoticed. In partnership with the University of Wisconsin Sea Grant Institute, the Society has produced guides to 48 Wisconsin shipwrecks or submerged cultural sites.

Public Presentations. Given at a variety of venues, public presentations provide a direct, personal connection between the Society and the general public. Society underwater archaeologists and volunteers have reached approximately 56,173 people via public presentations since the Wisconsin's Maritime Trails Education Initiative's inception in July 2001 and have reached over 4,000,000 viewers through media such as talk radio and public television

Interpretive Signage. As of January 2020, the Society has created shore-side informational markers for 43 historic shipwrecks and waterfronts. Utilizing an identical template that unifies the signs as attractions and information points within the statewide Maritime Trails program, the markers emphasize the broader connection between Wisconsin’s many coastal historic resources.

Interpretive kiosks. Four interactive touch-screen kiosks highlighting Wisconsin’s historic shipwrecks are installed at Wisconsin Historical Museum, Wisconsin Maritime Museum, both the Door County Maritime Museum at Gills Rock, and the Society’s Madeline Island Museum. The kiosks reach an estimated 450,000 museum visitors annually and make archaeological research results available in a fun, interactive format while educating visitors on the importance of Wisconsin’s coastal cultural resources.

Maritime History Geocaches. Taking participants on self-guided tours of local maritime heritage sites, or modern commercial use of the Great Lakes and their tributaries, 39 Maritime History Geocaches have been placed in the communities of Superior, Two Rivers, Manitowoc, Sheboygan, Port Washington, Milwaukee, and throughout Door County. A full listing of available geocaches under the name “WiscMaritime” can be found at www.geocaching.com.

Website. The wisconsinshipwrecks.org website, dedicated to Wisconsin’s historic shipwrecks, underwater archaeology, and maritime history, ensures that the general public has access to timely and useful information. The site serves as a unified “maritime resource” information point for Wisconsin residents, state visitors, and the public at large. Unveiled in 1996 and updated in 2014, this website features a searchable database of maritime resources and Wisconsin shipwrecks. A collaborative effort between the Society and the University of Wisconsin Sea Grant Institute, the site makes underwater archaeological research results accessible to the public, and features detailed information on historically and recreationally significant shipwrecks in Wisconsin waters of Lakes Michigan and Superior.

Partnerships. The Society partners with federal, state, and local agencies, chambers of commerce, private businesses, non-profits, and individuals. With core partners, dozens of volunteers, and a growing list of project-specific partners, this aspect of the initiative ensures that all of those with a stake in Wisconsin’s maritime cultural resources share in their management and interpretation.

Research Design and Methodology

Nineteenth-century Great Lakes wooden ship construction and operation is poorly understood. Little is known about how vessels were built and operated during this time. As a result, much of what we know about Great Lakes merchant vessels has come from the archaeological record of vessels that now lay on the Great Lakes bottomlands. The archaeological surveys within this report were designed to provide a better understanding of historic Great Lakes commercial vessel construction and use.

Field data collection methods included traditional baseline surveys aided by digital photo and video documentation. Data from deep wreck sites was collected by a remotely operated vehicle (ROV) equipped with video and multi-beam sonar. Archaeological documentation was conducted along guidelines established by the National Park Service for submerged cultural resource survey and evaluation in determining site eligibility for the National Register of Historic Places. Research designs were directed toward formulating site descriptions and archaeological assessments with a package of management questions, some specific to the site itself (i.e., location, environmental parameters, integrity, extant features, and artifacts), as well as more general questions that place the site within its broader historical context (i.e., historical significance, archaeological potential, recreational potential, and management requirements).

Research objectives and methods included:

1. Determine the site location, environment, and parameters through visual survey of extant elements, features, artifacts and documentation and mapping of exposed remains using trilaterated survey points, and an onsite (submerged) datum. Additionally, document the site using photographs, video, and measured sketches of those architectural and archaeological elements that are diagnostic of a) vessel type, b) vessel age, c) vessel construction style and method, d) vessel propulsion, e) vessel use, f) vessel identification, g) vessel cargo, and h) shipboard human activity broadly indicative of occupation, status, ethnicity, subsistence, or other questions allied with the study of maritime anthropology and Great Lakes social and economic history.
2. Provide assessment of a site's environmental and cultural context for determining its historic significance and archaeological potential according to the National Register of Historic Places criteria, recreational potential, and management requirements.

Site evaluation and documentation was conducted using traditional and closed-circuit scuba technology as well as ROV. Documentation included digital photo mosaics, photogrammetry, measured sketches, construction schematics, digital still and video imagery, and scaled site plans for National Register-level documentation. Analysis was conducted using comparative evidence obtained from archaeological surveys of similar sites, and augmented by historical

documentation relating to individual sites and general Great Lakes maritime history. Where artifacts were encountered, material culture was interpreted in the context of its relevance to shipboard activities, shipboard hierarchy, shipboard activity/use areas, and other aspects of maritime anthropology.

This submerged cultural resource survey report serves as a source document for site descriptions, analysis, interpretation, and management recommendations used in cultural resource management planning, recreational development, and public education. It also serves as the source document for eligibility determination and nomination for listing on the National Register of Historic Places. Inclusion of these sites on the National Register and state resources management plans is an important step in achieving long-term site preservation. Suggested plans for management include mooring buoys to facilitate recreational access (where appropriate) and alleviate damage caused by on-site boat anchoring. Other possibilities include site interpretation for visitors through self-guided site maps and web-based pages. Site preservation ensures availability both as a future recreational resource and as an important and nonrenewable source of scientific data relating to Great Lakes underwater archaeology, maritime history, marine architecture, and maritime anthropology.

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CHAPTER TWO TOPSAIL SCHOONER *ABIAH*

The schooner *Abiah* was launched in the late summer of 1847 into the deep waters of Cattaraugus Creek upstream from its confluence with Lake Erie at the hinterland shipyard of Charles Stevens in Irving, Chautauqua County, New York. It was only the second vessel built at the newly founded C. Stevens yard, which operated from 1847 to 1856 in the small hamlet about 20 miles west of Buffalo (*Monthly Nautical Magazine and Quarterly Review* 1855).

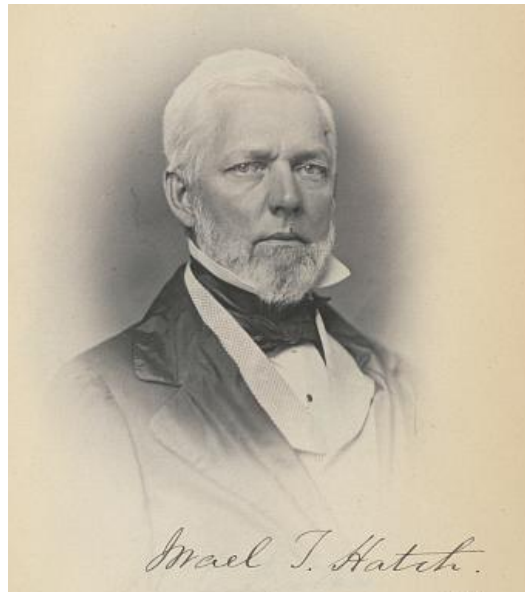


Figure 1. Israel T. Hatch, 1857 Congressional Portrait (Library of Congress)

Abiah was built for Israel Thompson Hatch. At the time, Hatch was a lawyer and grain merchant owning a grain elevator and docking facility in Buffalo and was President of the Oliver Lee & Co. Bank. In 1857, Hatch was elected to the U.S. House of Representatives where he served until 1859. His new ship was named for his mother, Abiah Throop Hatch (nee Thompson), who had passed away the year prior to its launch. The beautiful topsail schooner measured 134 feet long by 27 feet 2 inches in beam with 10 feet 6 inches depth of hold. The vessel was calculated at 353 39/95 tons and described as having one deck, two masts and a scroll head. Although the ship's certificate was filed by the builder on 25 July 1848 and its enrollment was entered at Buffalo Creek on 22 September 1848, the vessel sailed prior to these dates (Bureau of Navigation 1848; United States Congress Joint Committee on Printing 1903).

Abiah's earliest arrival at Buffalo was 29 November 1847 from Port Maitland, Ontario carrying 135 cords of wood consigned to Buffalo grocer, Daniel Beard. At the helm was Captain Avery. On 12 April 1848, the ship departed Chicago under Captain Avery's command, so it is likely *Abiah* spent its first winter in Chicago's inner harbor. *Abiah* departed Chicago again on 24 May

1848 and was in port loading at Buffalo on 29 May (*Buffalo Daily Courier* 1847, 1848a, 1848b 1848c).

On 17 June 1848, the ship cleared Buffalo bound for Gibraltar, Michigan; however, on this trip it was under the command of Captain James Butler. *Abiah* cleared Buffalo again on 22 July bound for Chicago with 2,000 barrels of salt (*Buffalo Daily Republic* 1848a, *Buffalo Morning Express* 1848). On 2 September, the ship left Chicago with 16,000 bushels of wheat bound for Buffalo. Before departing Buffalo again, the vessel was enrolled at the Buffalo Creek Customs House. Captain James Butler was listed as the vessel's Master and Buffalo its homeport. Captain Avery's service was not included nor mentioned on the vessel's enrollment document. *Abiah* cleared on 22 September for Chicago with 1,000 sacks and 300 barrels of salt. It arrived back at Buffalo on 14 October (*Buffalo Commercial Advertiser* 1848a, 1848b, *Buffalo Daily Republic* 1848b).

On 11 April 1849, *Abiah* cleared Buffalo for Erie, Pennsylvania for the first trip of the 1849 season. Captain John Wiley was at the helm. This change in Master was not expressed on the vessel's enrollment document. On 3 May, *Abiah* arrived at Chicago. The vessel cleared the port a month later with what was reported as 1,000 bushels of wheat bound for Buffalo. Upon arrival at Buffalo on 22 June, the cargo was more accurately recorded as 8,000 bushels of wheat, and 9,000 bushels of corn shipped for the vessel's owner. *Abiah* was unloaded and cleared two days later for Chicago. Cargo information for trips sailing west out of Buffalo went largely unreported (*Buffalo Daily Courier* 1849a, 1849b, 1849c; *Buffalo Morning Express* 1849a, 1849b, 1849c). In route, *Abiah* grounded on a shoal near the Niagara River in Lake Erie. The vessel was removed in short order; however, damage to the vessel totaled \$4,000 (*Buffalo Commercial Advertiser* 1850a).

Abiah disappeared from the historic record for much of the summer months presumably due to repairs ensuing from its grounding. On 8 September 1849, the ship cleared Chicago with 18,000 bushels of corn bound for Buffalo shipped for I.T. Hatch, the vessel's owner, and arrived at the city on 21 September. The vessel cleared Buffalo on 2 October bound for Chicago with 530 barrels of salt. It is likely it spent the 1849-50 winter at Chicago (*Buffalo Commercial Advertiser* 1849a, 1849b, 1849c; *Buffalo Daily Courier* 1849d, 1849e).

The vessel's first arrival at Buffalo for the 1850 season was recorded on 18 May, arriving with 14,000 bushels of corn for the vessel owner. At the helm was yet another new Master, Captain Anderson. Captain Anderson's service was similarly unrecorded on the vessel's enrollment document. Two days later, on 20 May the ship departed for Chicago (*Buffalo Commercial Advertiser* 1850b; *Buffalo Daily Courier* 1850a; *Buffalo Daily Republic* 1850a). On 6 July, *Abiah* returned to Buffalo with 15,000 bushels of corn onboard and cleared for Erie on 10 July (*Buffalo Commercial Advertiser* 1850c, 1850d).

In early September, *Abiah* and the schooner *Patrick Henry* departed Buffalo together with the first locomotives, rails, and hardware for the newly organized Milwaukee & Waukesha (later

named Milwaukee & Mississippi) Rail Road. They sailed together over the length of Lake Erie and passed Detroit. On Lake Huron, they encountered a storm and *Patrick Henry* was struck by lightning, forcing the ship into Mackinac for repairs. *Abiah* sailed on and on the morning of 12 September 1850, the vessel arrived in Milwaukee. *Abiah* made its way 1.25 miles up the Milwaukee River to the lumberyard dock near the railway station grounds. *Abiah* was so heavily laden that the river required dredging near the shore to bring the ship in for unloading (*Daily Democrat* 1850; Lorenzsonn 2009; *Syracuse Daily Star* 1850).

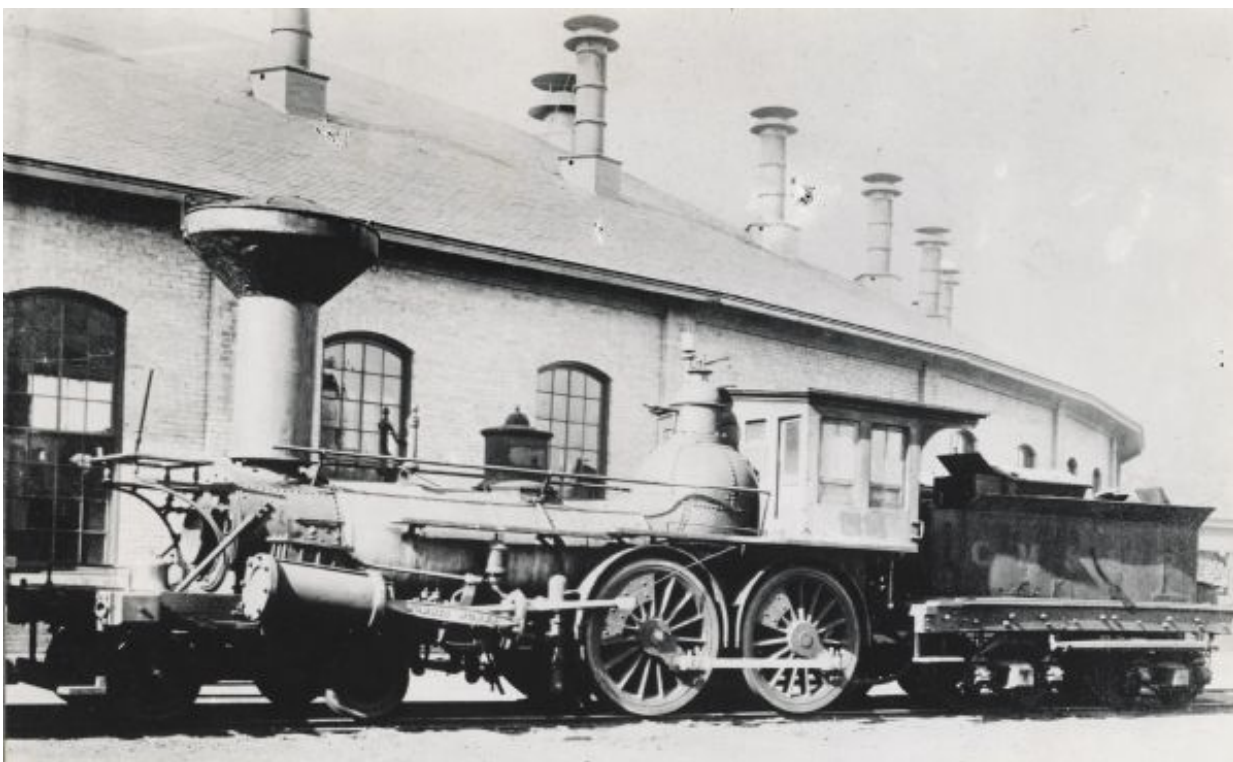


Figure 2. Milwaukee & Mississippi Rail Road Engine No. 1. Photo taken in 1880 when the locomotive carried the name C.M. & St. P. Railway locomotive No. 71 (WHS Image 62849)

The locomotive had eight wheels – four driving wheels aft and four pilot wheels on a truck forward. It was built two years earlier by Norris & Co. at their newly established Schenectady Locomotive Works and weighed 46,000 pounds (23 tons). It could pull fully loaded train cars at a rate of 40 miles per hour. The rails were considered of the best quality T-rails and weighed 60 lbs. per yard. The rails were unloaded from *Abiah* first and the first spike was driven by Mr. Robert Shields. The engine was unloaded around 10 AM (*Daily Democrat* 1850; Lorenzsonn 2009; *Syracuse Daily Star* 1850; *Buffalo Commercial Advertiser* 1850e).

The rail track was laid down west as far as Waukesha within a month's time and by 1 December they reached the Fox River. The passenger cars were constructed in Milwaukee and Waukesha, and the car wheels were brought in from Rochester, New York (*Daily Democrat* 1850;

Lorenzson 2009; *Syracuse Daily Star* 1850; *Buffalo Commercial Advertiser* 1850e; *Boston Daily Atlas* 1850; *Davenport Gazette* 1850).

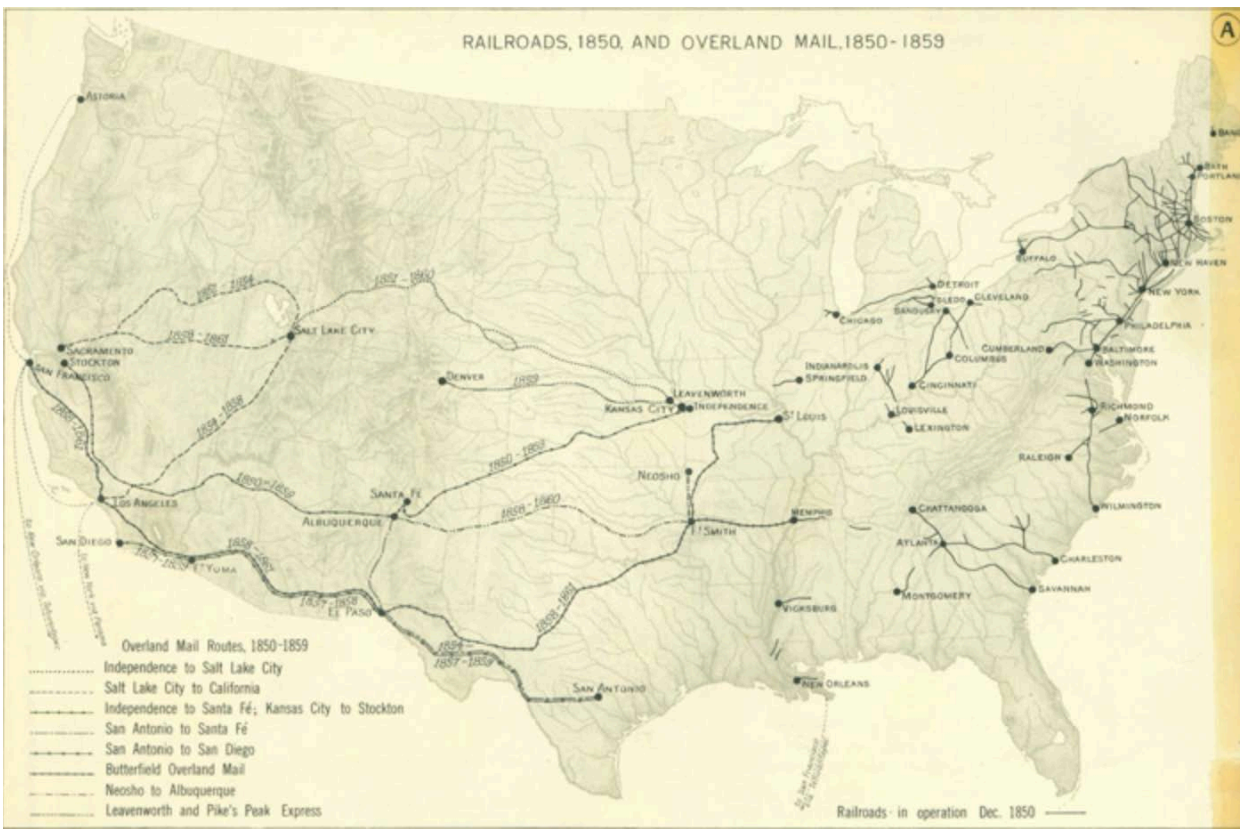


Figure 3. Railroads in operation December 1850 (Atlas of the Historical Geography of the United States 1932)

Abiah returned to the grain trade for the fall months. It arrived at Buffalo on 21 October 1850 with 11,357 bushels of wheat and 2,076 bushels of corn from Chicago for the ship's owner. At the helm was yet another new Master, Captain Enos. Captain Enos' service was also unrecorded on the vessel's enrollment document. Another arrival was recorded at Buffalo on 6 November with 14,992 bushels of wheat for commission merchant, Lucius H. Pratt. When *Abiah* cleared port later that same day, Captain Anderson had returned to command.

Abiah departed for Toledo with 2,000 bags of salt. The vessel's last arrival at Buffalo for the season was recorded on 19 November when it arrived from Toledo. The trip took only twenty-seven hours, and brought in 3,366 bushels of wheat and 6,600 bushels of corn for the vessel's owner, 463 barrels of flour for produce commission merchant, Henry Daw, and 20 barrels for commission merchant, Merwin S. Hawley, and 404 bushels of wheat for forwarder and commission merchants, Elias Weed & Co. (*Buffalo Commercial Advertiser* 1850f; *Buffalo Daily Courier* 1850b; *Buffalo Daily Republic* 1850b; *Buffalo Morning Express* 1850).

Abiah was listed among vessels wintering over 1850-51 at the port of Buffalo Creek, New York. It departed Buffalo on 3 April for its first trip of the 1851-season, bound for Chicago with

Captain Enos back at the helm (*Buffalo Daily Courier* 1851a *Buffalo Commercial Advertiser* 1851). On 1 May 1851, *Abiah* lost its foremast in a gale on Lake Michigan and required a tow into Milwaukee where repairs were undertaken at the shipyard. A new mast was refitted in short order, but the cost of repairs totaled \$1,500 (*Buffalo Daily Courier* 1852a).

On 5 June 1851, *Abiah* arrived at Buffalo with 14,425 bushels of wheat from Southport (Kenosha), Wisconsin for forwarder and commission merchant, William O. Brown. The ship made a swift turn around and arrived back at Chicago on 12 June where it picked up a contract to carry corn to Buffalo at 5 ½ cents per bushel. They loaded and cleared the city on the same day with 11,000 bushels of corn onboard (*Buffalo Commercial Advertiser* 1851b; *Buffalo Daily Republic* 1851a, 1851b; *Buffalo Morning Express* 1851).

Abiah disappeared from the historic record for the summer months. On 21 October, the ship departed Buffalo for Chicago. At the helm was a new Master, Captain Evans. Captain Evans' service was similarly unnoted on the vessel's enrollment. On 24 November the schooners *Abiah*, *David Smart*, and *Giddings* loaded beef at the Chicago wharves and departed the same day – these were noted as the last vessels to ship product from Chicago bound for the lower lakes during the 1851 season (*Buffalo Daily Courier* 1851b; *Illinois Daily Journal* 1851).

Abiah left Buffalo on 30 April 1852 bound for Chicago on its first trip of the season. Captain Sam Wood was in command; Wood's service also did not appear on the vessel's enrollment. *Abiah* waited at Chicago for a cargo for nearly a month. On 7 June the vessel was chartered to carry oats to Buffalo at 5 ½ cents per bushel for the remainder of the season. It cleared Chicago on 11 June and arrived at Buffalo on 18 June with 10,697 bushels of oats for commission merchant Phineas S. Marsh and 10,007 bushels of oats for Jason Parker, produce commission merchant of the firm Churchill & Parker. *Abiah* cleared Chicago again on 22 July with 10,108 bushels of oats for Sands H. Fish of the firm Fish & Avery, and 9,704 bushels of oats for Jason Parker. When the vessel arrived at Buffalo on 2 August it also had onboard the boilers and a locomotive from the wreck of the steamer *A.D. Patchin*. *A.D. Patchin* had wrecked 17 September 1850 on Skillagallee Reef near Beaver Island in Lake Michigan (*Buffalo Daily Republic* 1852a, 1852b, 1852c 1852d 1852e; *Buffalo Morning Express* 1852a, 1852b, 1852c, 1852d).

Abiah departed Buffalo on 6 August 1852 for Chicago and returned to Buffalo 10 September with 10,000 bushels of oats for forwarding and commission merchant James Evans, 10,609 bushels of oats for J. Parker, 48 cords of wood for the vessel's owner, I.T. Hatch, and 3 cords of wood for Captain Wood (*Buffalo Daily Courier* 1852b). *Abiah* cleared Buffalo for Chicago on 18 September and arrived back in Buffalo on 19 October with 15,225 bushels of oats for Phineas Marsh and 5,578 bushels of oats for shipping agent Sheder J. Buell. They tried to make one more run for the season. However, on 12 November while upbound with a load of iron for the railroads, *Abiah* grounded under St. Helena Island in the Straits of Mackinac during a gale. The vessel was able to get off the reef with little damage and made its way to Chicago. The accident resulted in only \$500 in property loss. At Chicago *Abiah* loaded oats and departed

during the first week of December. A storm on the northern part of Lake Michigan on 7 December forced *Abiah* to turn back and on 10 December it returned to Chicago's harbor where it wintered over (*Buffalo Commercial Advertiser* 1852; *Buffalo Daily Republic* 1852f, 1852g, 1852h; *Buffalo Morning Express* 1852e 1853f; *Daily Democrat* 1852).

Abiah came out of winter quarters and began fitting out for spring service during the last week of March 1853. The vessel arrived in Buffalo on 15 April with 21,000 bushels of oats for produce dealers, Walker & Clarke and 182 pigs of lead for Thompson & Co., manufacturers of white lead (*Chicago Daily Tribune* 1853a; *Buffalo Morning Express* 1853a, 1853b). In May, *Abiah* was chartered to carry oats from Chicago to Buffalo at 3 ½ cents per bushels but it appears that it only carried one shipment. In June, Wells & Hill, a Milwaukee dealer in barrel staves, arranged for *Abiah* to carry the port's first cargo of staves to Buffalo. The vessel arrived in Buffalo on 28 June with 114,573 staves shipped for D. Wells, Jr., one barrel of potatoes and one barrel of whisky for John Allen, a cow for Jane Jamison Millfield, and 155,249 board feet lumber and 24,000 lath for boat builder, Van Slyke & Co. *Abiah* cleared Buffalo bound for Chicago on 8 July with 500 tons of iron and a railroad locomotive (the locomotive was later named "Rock River" and ran for many years for the Rock River Valley Rail Road). *Abiah* sprung a leak just as it entered Lake Huron and was forced to return to the St. Clair River where it was towed to Ives' Dry Dock at Detroit for repairs (*Buffalo Commercial Advertiser* 1853; *Buffalo Daily Republic* 1853a, 1853b, 1853c, 1853d; Mansfield 1899; *Milwaukee Daily Sentinel* 1853).

Abiah disappeared from the newspapers for the later part of July and into August while repairs were underway. On 5 September, the ship arrived in Buffalo from Chicago with 7,000 bushels of corn for Jason Parker and 3,000 bushels of rye for Phineas Marsh. It departed Buffalo for a return west two days later. A month more and the vessel arrived back in Buffalo from Chicago with 9,808 bushels of corn for Jason Parker, 835 bushels of corn for Sands H. Fish, 4,975 bushels of corn for Walker & Clarke, and 4 ½ barrels of cranberries and 1 of keg butter for the captain (*Buffalo Daily Courier* 1853; *Buffalo Daily Republic* 1853e, 1853f, 1853g; *Chicago Tribune* 1853b). It is not known where the vessel was put up for the winter.

On 19 May 1854 at the port of Chicago, *Abiah*'s enrollment document was surrendered for a change in owner and districts. Tarleton Jones of Chicago purchased the vessel and became the sole owner. Jones was a lumber merchant and dealer in green lumber; his business was located at the foot of Clark Street at the bridge in Chicago. *Abiah*'s homeport was changed to Chicago and James D. Sinclair became its new captain (Bureau of Navigation 1848, 1854; Norris 1844). No records were located for *Abiah*'s 1854-season leading up to its sinking.

At 7 PM, on 4 September 1854, the schooner *Abiah* was on its way to Oconto to fetch a load of lumber. When off Sheboygan, Wisconsin, it was struck by a sudden squall from southeast (northeast was reported by the *Milwaukee Daily Sentinel*) accompanied by heavy rain and wind. *Abiah* was sailing in ballast (light and without cargo) and immediately capsized. The captain, crew of seven, and two passengers took to the small work boat. The schooner *Lewis Ludington*

was in the vicinity, sailing from Buffalo, and took the shipwreck victims aboard, landing them at Sheboygan (*Democracy* 1854; Henderson 1855; Hunt 1854; *Manitowoc Herald* 1854; *Milwaukee Daily Sentinel* 1854a; *Sheboygan Journal* 1854; *Sheboygan Lake Journal* 1854; *Weekly Wisconsin* 1854).

The schooner *Charlotte* and the steam tug *Eclipse* went out on Lake Michigan the next day in heavily rolling seas in search of *Abiah* which had been left turtled and floating in the lake. In this state, the vessel was considered a hazard to navigation. *Eclipse* located the abandoned hulk and managed to tow it to within fifteen miles of port before *Abiah* was damaged further and was allowed to sink. The loss was reported at \$9,000 (Hunt 1855; *Milwaukee Daily Sentinel* 1854b).

Site Description



Figure 4. Location of the *Abiah* site

The remains of the schooner *Abiah* (47SB-0471) lie mostly intact on an even keel in 220 feet of water, 13.1 miles northeast of the Sheboygan harbor entrance in the waters of Lake Michigan, in the town of Haven, Sheboygan County, Wisconsin. The vessel sits on a heading of 220-degrees, with its bow facing southwest toward Sheboygan, on a slight list to starboard. The vessel remains largely intact, except for a missing section of the port side hull and deck planking. A portion of the broken port side hull remains on the site, while the stern section of it is not extant. All the vessel's construction components and artifacts remain within its hull. No impact crater was discernible around the wreck indicating that the ship hit the lake bottom with little force. The site was discovered in 2019 by shipwreck hunter Steve Radovan. The wreckage rises

approximately 10.0 feet off the lakebed measured from the sand to the top of the broken sternpost.

A Phase II archaeological survey of *Abiah* was initiated in August 2019 by maritime archaeologists and volunteers from the Wisconsin Historical Society. Through a generous gift from the Hamilton Family Foundation and a partnership with Crossmon Consulting, LLC, archaeologists used a VideoRay ROV outfit with multi-beam sonar to collect video and sonar data in May 2020. All measurements for the survey were taken from the collected multi-beam sonar data. Additional documentation and data recording took place in September 2020 through a partnership with Marine Imaging Technologies and videographer Evan Kovacs. Images of the site were gathered to create a scaled photogrammetry (3D) model of the site.

The overall length of the wreckage, measured from the stempost to the sternpost, is 134.2 feet, and the width of the hull measures 23.2 feet at the widest point of intact wreckage (23.7 feet aft of the stempost). The vessel was reported to measure 134.0 feet long, with a beam of 27.2 feet. Given the wreck dimensions and location, the remains were determined to be that of the schooner *Abiah*. Although covered in a thick coat of invasive quagga mussels, the cold, deep waters of Lake Michigan have kept the vessel remarkably well-preserved and intact, allowing for detailed observations of its construction and artifacts contained inside.



Figure 5. Bow of the *Abiah* (Wisconsin Historical Society)

Abiah's hull is constructed of double wooden frames and hull planking, and measures 1.5 feet in overall width. The frames can be seen at the break in the vessel's port side hull. The frame sets have a sided measurement of 0.9 feet (with each futtock measuring 0.45 feet wide), and are spaced 1.2 feet apart. The hull remains largely intact, except for on the port side. Here, a 34.7-foot section of the port side hull is broken at the turn of the bilge, beginning 27.1 feet aft along the centerline. At this point, the port side hull has fallen inward and slightly to the port side of the vessel. The remaining 72.4 feet of the hull side is not extant on the site or in the surrounding area.

The bow of *Abiah* remains remarkably intact. The vessel is equipped with a rounded, spoon bow. Unlike many later-built Great Lakes schooners, *Abiah* does not have a plumb bow, instead having a stempost that is raked forward, similar to oceangoing clipper ships. *Abiah* measures 14.1 feet wide at 3.5 feet aft of the bow. Most of *Abiah*'s rigging and machinery remain on the bow. The vessel's windlass remains in place, located 6.9 feet aft of the stempost. It measures 15.1 feet in width and has a diameter of 2.0 feet measured at its center. The windlass' gypsy heads each measure 1.7 feet long and 1.0 feet in diameter. The carrick bitts are spaced 10.5 feet apart, and measure 0.8 feet wide and 0.5 feet thick. The knees supporting the carrick bitts measure 0.5 feet thick and extend 1.5 feet forward of the windlass, along the deck.

Just aft of the windlass and 10.0 feet aft of the stempost, the vessel's forecastle hatch remains intact. It measures 2.0 feet wide and 2.1 feet long and sits along the centerline of the ship. The hatch's combing measures 0.3 feet wide. Two strands of the anchor chain extend through the hatch. One length of chain wraps around the port side whelp of the windlass while the other length of chain leads aft, over the fallen foremast and over starboard side bulwarks to the lake bottom. From here, it extends further aft before disappearing into the silt approximately 25.1 feet off the starboard side of the ship's stern and 92.7 feet aft of the stempost. An additional length of anchor chain is wrapped around the starboard side whelp of the windlass, passes through the starboard side hawsehole and connects to the starboard side anchor. No anchor chain extends from the windlass through the port side hawsehole, and the port side anchor was not located during the survey.

While the starboard side anchor remains attached to the anchor chain, it has detached from the starboard side cathead, and sits upright on the lake bottom at the ship's bow. The anchor is a traditional wooden stock anchor. The vessel's catheads remain in place on both the port and starboard sides of the bow. Since *Abiah* does not have a large forecastle deck, the catheads are L-shaped and attached to the bulwarks 4.5 feet aft of the stempost, measured along the vessel's centerline, and 7.5 feet from the stempost, measured along the railing. The catheads measure 0.45 feet wide and extend 1.5 feet out past the vessel's bulwarks.

Situated just forward of the windlass, the vessel's Samson post is located 7.5 feet aft of the stempost and measures 1.0 feet square. *Abiah*'s small forecastle deck is triangular in size, extending outward from the forward face of the Samson post, just above the bowsprit and forward to just beneath the vessel's breasthook. The breasthook and rail cap at the bow remain

intact. The rail cap measures 0.35 feet wide. *Abiah*'s knightheads are also extant, located on either side of the bowsprit.

Abiah's bowsprit and jibboom remain intact and in place, with some of its stays attached. The bowsprit is stepped into the Samson post, and is square in shape until it passes beneath the forward bow railing. This section of the bowsprit, called the heading, measures 7.5 feet in length, and 1.2 feet square. The remainder of the bowsprit is rounded and measures 1.0 feet in diameter, measured 16.1 feet forward of the stempost. The bowsprit is intact to the cap, where the jibboom continues its full length, measuring 0.7 feet in diameter. The bowsprit/jibboom assembly measures 38.3 feet in length, measured from the forward edge of the bow railing to its terminus. The bowsprit guys remain attached to the bowsprit cap and extend to the outer hull of the vessel. These measure 0.25 feet in diameter. The vessel's bobstay plate remains attached to the stempost just above the silt. This bobstay plate is made of metal and was the attachment point for the bobstay. Although the bobstay is no longer attached to the martingale, and the martingale itself is not extant, a portion of the martingale bobstay can still be seen on the site. It remains attached to the bobstay plate and extends into the clay bottom just below the bowsprit.

The vessel's keelson measures 1.5 feet square. A 41.7-foot-long section of the keelson is visible above the silt inside the hull, beginning at 68.5 feet aft of the stempost. Two sister keelsons are extant, running along the keelson at the centerboard trunk. Aft of the centerboard, the limber board, the board that sat between the keelsons and the first ceiling planking is missing for the remaining length of the ship. A limber board was common in early wooden sailing vessels and would have allowed water in the hull to drain into the bilge (limber) and keep the cargo dry. It also would have allowed access to chains to keep the bilge free of debris. The vessel's foremast step is obscured by silt built up in the hull; however, the mainmast step is located at 74.3 feet aft of the stempost. The step measures 3.5 feet in overall length and 2.5 feet wide. The mortise, where the tenon on the bottom of the mast would have been stepped, measures 1.5 feet long and 0.9 feet wide. The mainmast is not extant on the site.

As evidence of its early build and the extensive weight of cargoes carried, *Abiah* was equipped with a wooden hogging arch. This wooden hogging arch is made up of four separate planks running the length of the hull down both port and starboard sides of the ship. The arch is located between the ceiling planking and the vessel's hanging knees. The hanging knees are all installed at 45-degree angles, instead of perpendicular, to the ceiling planking. The knees in the forward half of the vessel are canted forward, while the knees in the aft half of the vessel are canted toward the aft end of the ship. The top arm of the knees measure 2.9 feet in length, and 0.6 feet wide.

Abiah was equipped with a single centerboard. The centerboard trunk remains upright and in place, located along the vessel's keelson, located 43.4 feet aft of the stempost and extends 16.5 feet aft. The centerboard trunk measures 1.5 feet in overall width. Metal strapping can be seen in two places on the outside of the centerboard trunk. It is not known if the centerboard was deployed at the time of the sinking since the vessel is sitting upright. The vessel's centerboard

winch remains in place on deck, just above the aft end of the centerboard. This measures 2.2 feet in height and 2.5 feet wide.

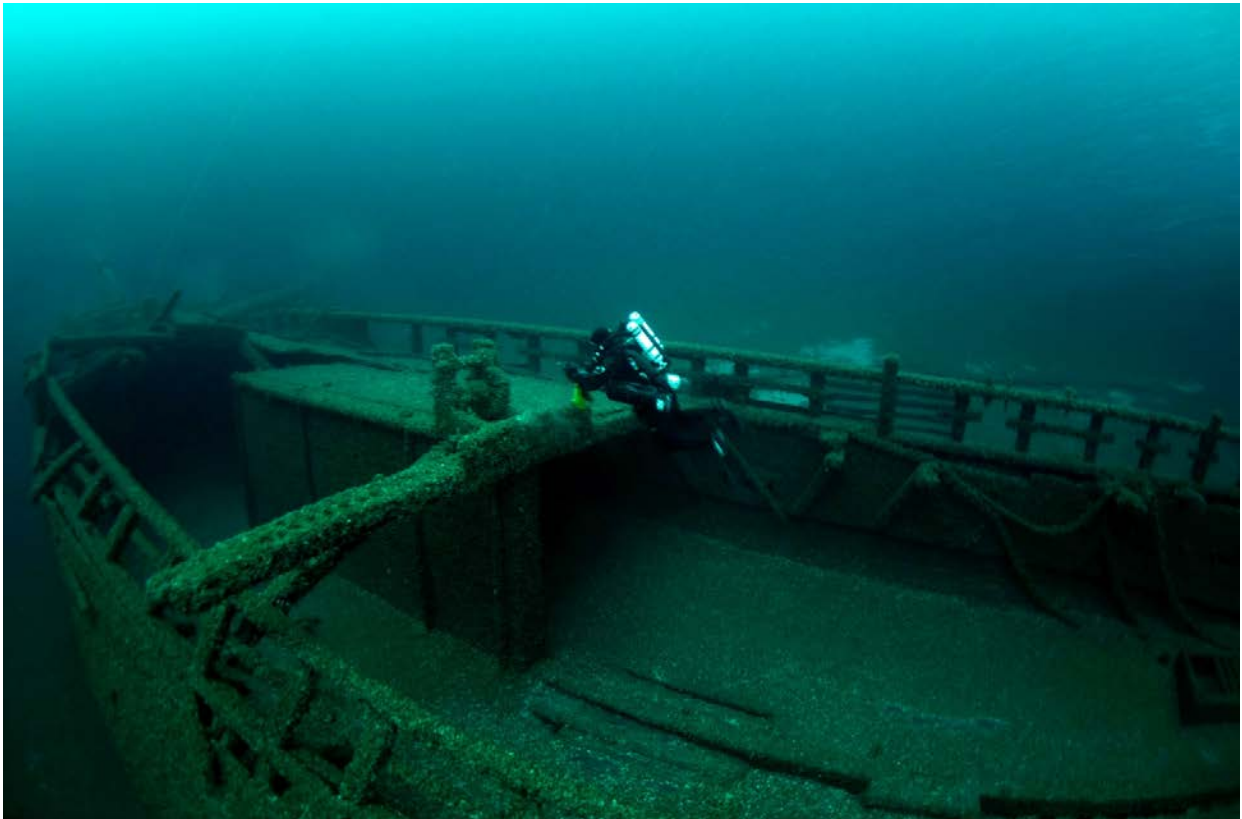


Figure 6. *Abiah*'s port side and centerboard trunk (Wisconsin Historical Society)

The vessel's deck planking remains extant only in the bow and amidships on the starboard side. The bow deck planking is splintered and raised at the mainmast, which now lays unstepped and fallen over the starboard side of the vessel. The deck beam just aft of the mainmast remains in place 32.1 feet aft of the stempost, though detached from the starboard side hull. Forward of this, the deck planking remains in place on both the port and starboard sides of the vessel. Aft of this deck beam, the deck planking only remains on the starboard side of the vessel, extending another 28.5 feet aft of the stempost. A section of deck planking sits upside down in the silt on the starboard side of the vessel, 60.9 feet aft of the stempost and 5.5 feet to the starboard side of the ship's hull. This section of deck planking measures 25.1 feet in overall length, 11.8 feet in width, and has nine deck beams attached. This is believed to be the missing section of deck planking from the port side of the vessel, near the centerboard, as a corner of the hatch opening was identified in the section of planking. From 59.9 feet aft of the stempost to the sternpost, the deck planking is missing.

Two different sizes of deck beams were identified on the vessel. Three larger deck beams span the width of the vessel, measuring 1.2 feet square, located 32.1 feet, 60.6 feet, and 115.5 feet aft of the stempost. Each of these deck beams correspond with two of the vessel's three hatches,

and the vessel's cabin. The forward and starboard side combing of the forward hatch remain in place, with the aft and port side combing remaining attached to the section of deck planking located in the silt on the starboard side of the vessel. This combing measures 0.3 feet wide. The hatch itself measures 5.2 feet long and 6.0 feet wide. The middle hatch's forward combing also remains extant, located just aft of the centerboard trunk. This combing also measures 0.3 feet wide. No evidence of the aft hatch remains on the site, but the location of the third deck beam, at 115.5 feet aft of the stempost, corresponds to the location of the vessel's cabin, which is no longer on the site. The rest of the deck beams measure 0.8 feet square, and are spaced 1.5 feet apart. These can be seen on the overturned section of deck planking laying in the silt on the starboard side of the vessel. The deck planking, deck beams, and cabin were all likely lost during the initial capsizing of the vessel, tow attempts, and subsequent sinking.

Abiah's bulwarks are intact around the entire vessel, except for the missing hull section on the port side. The bulwark stanchions measure 0.45 feet wide and are spaced 2.0 feet apart. They stand 2.25 feet in height above the deck planking. The deck railing also remains intact, and measures 0.6 feet wide and 0.3 feet thick. A total of seven bits were identified along the bulwarks. These would have been used to secure lines and tie the ship alongside docks.



Figure 7. *Abiah's* stern looking aft (Wisconsin Historical Society)

The vessel measures 16.5 feet wide at the stern. Only one of *Abiah*'s two stern davits remains in place on the vessel's starboard side. The davit measures 2.5 feet in length and 0.45 feet wide and extends past the vessel's transom. The port side davit was not located during the survey.

Abiah's transom no longer remains on the site. During the attempt to tow the vessel into shore, it was reported that the vessel was being towed by the stern before it sank. This action likely ripped off the vessel's transom. The vessel's rudder is no longer in place and was not located during the survey, but the concave cut into the sternpost, where the rudder post would have fit, can be readily observed. The stempost remains intact, measuring 1.0 feet square. The stempost is buried in the silt of the lake bottom, so the vessel's gudgeon cannot be seen, but it likely extant.

Abiah's foremast lays across the starboard side bow railing at 6.1 feet aft of the stempost, measured along the vessel's centerline. The mast measures 70.5 feet in overall length, from the exposed tenon to the mast cap, and 2.0 feet in diameter, measured near its base. The mast is unstepped from the foremast step and has splintered the deck planking around the mast's base at the mast hole, where it passes through the deck. The mast table remains in place; however, it lays crushed on the deck, splintered by the fallen mast. The foremast's wooden top remains complete and attached, located 57.4 feet from the mast's base. It is semi-circular in shape, and the crosstrees measure 10.5 feet in overall length (its widest measurement). The hounds, or supports for the wooden top remain in place, measuring 3.5 feet long, measured from the mast to the edge of the crosstrees, and measure 0.55 feet square. The decking also remains in place atop the wooden top.

The fore-topmast does not extend past the mast cap. It is not known if this was broken during the sinking event, or if it had been cut down prior to *Abiah*'s sinking. The foremast, and the remaining section of the fore-topmast, extend 10.6 feet above the wooden top. *Abiah*'s lower topsail yard remains attached to the mast 3.0 feet below the wooden top. *Abiah* was constructed as a topsail schooner, meaning it had a single square sail on its foremast, above the fore-and-aft rigged sail. The lower topsail yard measures 23.6 feet in overall length, and measures 0.5 feet in diameter, measured near its center. The yard tapers at both ends. *Abiah*'s foremast would have originally had two yards attached, the upper and lower topsail yards. Since most of *Abiah*'s fore-topmast is not extant, the upper topsail yard was not located on the site during the survey.

All four sets of chainplates are attached to the outer hull; however, none of the mast stays remain. Early vessels like *Abiah* were rigged with fiber lines which now likely have disintegrated over time. Each of *Abiah*'s two masts had four associated chainplates and deadeyes on the port and starboard sides of the vessel. The foremast chainplates remain upright, with the deadeyes still in place. The starboard side mainmast chainplates have all detached from the outer hull near the railing, and hang upside down, only attached to the hull at their lower extents. The mainmast chainplates on the port side of the vessel are located at the break in the port side hull and are partially covered by the fallen hull section.

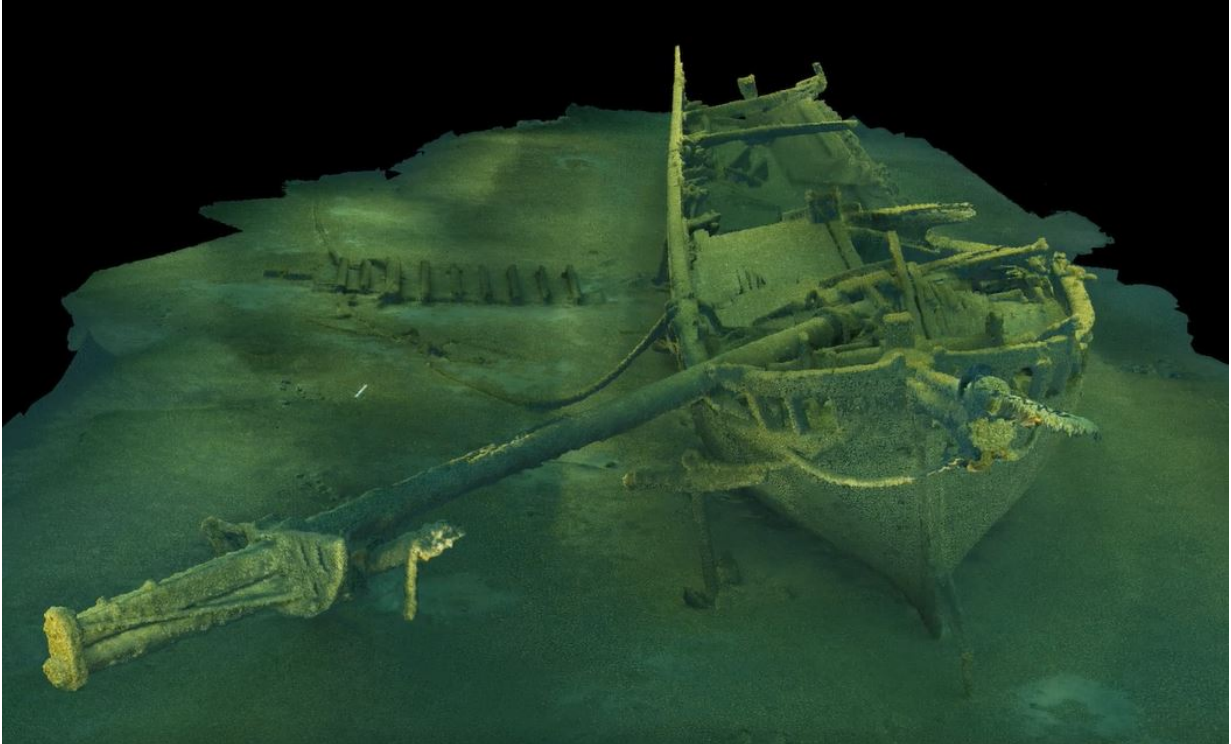


Figure 8. Photogrammetry model of *Abiah* looking aft (Marine Imaging Technologies)

Although *Abiah* was not carrying any cargo at the time of its sinking, some additional artifacts remain in the starboard stern corner of the vessel, just below the missing cabin structure. Most of these artifacts appear to be from the cabin and the vessel's steering mechanism. A single small stove is located against the ceiling planking and measures 2.9 feet tall and 3.5 feet wide and sits upright at an angle, partially buried in the silt that has accumulated inside the hull. Near the stove various pieces of crockery and porcelain can be seen mostly buried in silt and obscured by a layer of quagga mussels inside the hull. It is likely that more artifacts associated with the cabin are buried beneath the silt.

The vessel's wooden ship wheel's base sits inside the hull, just to the starboard of the keelson. It measures 3.3 feet in overall height, and 2.25 feet from standard (stanchion) to standard. The standards themselves measure 0.45 feet thick. This base is where the steering mechanism would have attached to the rudder post, and it would have supported the wheel, along with the worm gear. The ship wheel's spindle now sits along the bulwarks on the starboard side of the vessel, approximately 80.0 feet aft of the stempost. This spindle is cylinder in shape and has spiral grooves along its length. When the wheel was turned, the gear would drive the associated steering mechanisms and turn the rudder.

Additionally, the trestletree that supported the mainmast wooden top remains on the site 88.9 feet aft of the bow and 2.0 feet inside the hull, just to the starboard side of the keelson. Most of the crosstrees and planking of the wooden top are no longer attached to the trestletree, and all that remains is the rectangular shape of the trestletree itself. It measures 7.2 feet in overall

length and 3.8 feet in width. The timbers of the trestletree measure 0.45 feet thick. The cross timbers of the trestletree are located 1.7 feet in from the ends and are spaced 1.0 feet apart. The longitudinal members of the trestletree measure 2.8 feet spaced.

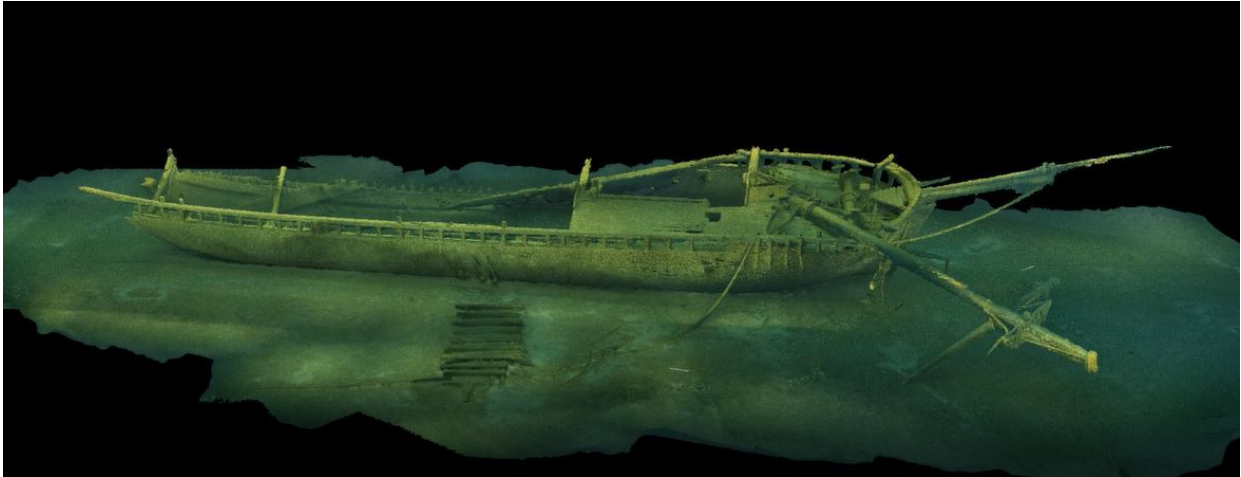


Figure 9. Photogrammetry model of starboard side of *Abiah* (Marine Imaging Technologies)

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CHAPTER THREE SCHOONER *ADVANCE*

The schooner *Advance* was built at the shipyard of J.M. Jones in 1853 in Milwaukee, Wisconsin. During the ship's service career (1853-1885) six other vessels on the Great Lakes bore the same name:

- *Advance* 1854-1870, a barge built at Garden Island, Ontario, and out of service after 1870.
- *Advance* 1856-1873, a schooner built at Dexter, New York and wrecked 1873 in Lake Ontario.
- *Advance* 1861- 1869, a tugboat built at Bedford Mills, Ontario and out of service after 1869.
- *Advance* 1862- 1873, a barkentine built at Port Dalhousie, Ontario and out of service after 1873.
- *Advance* 1867-1871, a scow schooner built at Fairport, Ohio and wrecked 12 July 1871 near Put-In-Bay on S. Bass Island, Lake Erie.
- *Advance* 1871-1921, a schooner converted to a barge, built at Trenton, Michigan and wrecked 19 October 1921 at Sand Bay, Door County, Wisconsin.

Every effort has been made in writing this text to follow the trail of owners, Masters and ports frequented in order to separate out the schooner *Advance* (1853-1885) and not confuse its service history with those of the others.

The schooner *Advance* (Official Number U.S. 365) was launched on 27 March 1853 from the South Menomonee River shipyard of J.M. Jones in Milwaukee, Wisconsin (*Manitowoc County Herald* 1853). James Monroe "J.M." Jones was the fifth and youngest son of Great Lakes pioneer shipwright Augustus Jones, born on 17 March 1824 at Black River (Lorain), Ohio. As an infant, J.M. rode 30 miles in an open boat on his mother's lap, when Augustus relocated his family and his shipbuilding business in 1824 from Black River to Sandusky, Ohio. As a young man, J.M. worked aboard and captained vessels. He learned the shipbuilding trade from his brother George Washington "G.W." Jones (Augustus' third son). In 1840, J.M. joined his brother Benjamin Buel "B.B." Jones (Augustus' second son) at Milwaukee and worked as a shipwright at the B.B. Jones' shipyard. Soon after, he established his own small yard along the South Menominee River. *Advance* was one of the last ships built at this primitive yard (Jones, Shorf, and Weisman). Large-scale operations for J.M. Jones began in 1854 on the northern end of a nearby island that he named Jones Island. When a financial depression struck in 1857, J.M. Jones was forced to close shop. He relocated to Detroit, Michigan, and commenced ship construction and a brokerage operation there from 1865 to 1873 (Jones, Shorf and Weisman).

The *Advance* was built for use in the lumber and grain trades and measured 118 feet 9 inches x 25 feet 6 inches x 9 feet 8 inches feet. Its tonnage was calculated at 268 40/95 gross tons. The vessel was described as a fore-and-aft rigged schooner with two masts, one deck, a gallery, and no figurehead. It was built for Richard Meadowcroft of Chicago and Captain William Summerville was its first Master (Bureau of Navigation 1853; *Buffalo Daily Courier* 1853; *Chicago Democrat Press* 1853). Nearing the end of its first season, on 7 September 1853, the ship arrived at Chicago with a cargo of lumber from Green Bay. The ship was leaking so badly on the trip up the lake that two men were assigned to the pumps to keep up with the water. After unloading, the ship was taken to the dry dock to have its bottom examined (*Chicago Tribune* 1853).

A new enrollment was entered for the ship at the port of Chicago on 10 April 1854 for a change in districts. Richard Meadowcroft was recorded as *Advance*'s sole owner, Captain Summerville remained Master, and Chicago became *Advance*'s homeport (Bureau of Navigation 1854). On 23 November 1854, while sailing in a blinding snowstorm near Presque Isle, Michigan on Lake Huron, the *Advance* collided with the schooner *Grand Turk*. *Grand Turk* had been loaded with apples and railroad iron bound for Chicago. *Grand Turk* lost both masts, its stern was stove in and began leaking so badly that the captain brought the ship into shallow water, where it sunk immediately. Its helmsman, Hugh Canton of Canada, had his head severed from his body and his body was washed overboard. The extent of damages to the *Advance* are unknown. Following the collision, *Advance* sailed to Detroit arriving at the U.S. Customs House on 25 November 1854, where the captain entered a protest (*Buffalo Daily Courier* 1854; *Buffalo Daily Republic* 1854; *Daily Free Democrat* 1854a, 1854b).

The ship was recorded departing Buffalo with a mixed cargo of salt and railroad iron bound to Chicago on 12 July 1855. At its helm was Captain Henry R. Faith (Bureau of Navigation 1855). On the morning of 9 December 1855, *Advance* was laden with pig iron, posts and lumber and anchored off Chicago waiting for a tow inside the harbor when a northwest gale blew up that caused the ship to part its chains, losing both anchors. The vessel was blown into the lake and driven ashore that evening at City West, Indiana, ten miles above Michigan City. As the gale raged on, on the evening of 10 December 1855, the schooner *Lewis Irwin* was blown ashore so close to where the schooner *Advance* lay on the beach, that it carried away the *Advance*'s bowsprit (*Chicago Tribune* 1855, 1856a; *Detroit Free Press* 1855a, 1855b). *Advance* was left on the beach over the winter. On 12 April 1856, the stream tug *Follet* was sent from Chicago to assist the wrecked schooner. While out, the wind increased to a severe gale and the *Follet* was unable to make it back inside the safety of the harbor. The ship lost its pilothouse and was driven up on beach where it filled with water. Both the *Follet* and the *Advance* were recovered and repaired in late April 1856. The repair to *Advance* cost its owner \$5,000 (*Chicago Tribune* 1855, 1856a, 1856b; *Detroit Free Press* 1855a, 1855b).

By 12 May 1856, *Advance* was recorded clearing Chicago with 5 tons of merchandise, 2 tons of

hay, 100 bushels of oats, and 1 ton of hams. At the ship's helm was a new Master, Captain Hall (*Chicago Tribune* 1856c). The ship remained in service throughout the season and wintered in Chicago (*Chicago Tribune* 1856d; *Daily Milwaukee News* 1856; *Detroit Free Press* 1856).

Over the winter months, Richard Meadowcroft sold the craft and on 12 January 1857, a new enrollment was entered for *Advance* at the port of Milwaukee, indicating a change in owner, Master, homeport, and districts. The document listed David Dall of Racine, Wisconsin as owner and Master, and Racine became the ship's new homeport (Bureau of Navigation 1857). The schooner primarily engaged in the grain and lumber trades for the next two seasons. Arrivals with lumber were recorded at Chicago from Lake Port and Manistee, Michigan and wheat cargoes were shipped from Racine and Milwaukee to Port Hope, Canada West (Ontario) (*Chicago Tribune* 1857a, 1857b).

At the opening of the 1859 season, David Dall sold the vessel to James Higgie of Racine. A new enrollment was entered at the port of Milwaukee on 28 March 1859 to reflect the change in ownership. The ship's homeport remained Racine, and Captain David Dall remained Master (Bureau of Navigation 1859). *Advance's* first arrival at Chicago from Racine, where the vessel wintered over, was recorded on 31 March 1859 with 230,000 board feet of lumber, 880 pine doors, and 1800 sashes. The ship brought to Chicago dimensional lumber from Manistee, cordwood from Manitowoc and Centerville, and mixed lumber products from Green Bay during the season (*Chicago Tribune* 1859a, 1859b, 1859c, 1859d, 1859e, 1859f, 1859g). On its last run from Manistee at the end of November, *Advance* was caught out in the lake during a storm and lost its deck load of lumber and shingles, split its mainsail and jib, and sprang its jibboom. Damages totaled \$550 for repairs (BLU 1859).

Richard Meadowcroft bought the ship back and returned operations to Chicago. Following this move, *Advance's* homeport was changed to Chicago, and a new enrollment was entered at the port on 10 April 1860, recording David Dall (misspelled Dale in the Master Abstract for the port) as Master. The Bureau of Lake Underwriters valued the ship at \$6,000 with a B1 rating for the season (BLU 1860; Bureau of Navigation 1860). It should be noted that newspapers refer to Captain Dall interchangeably as Captain Ball, Doll, Dole, and Dale, but it is without a doubt the same person.

Advance first cleared Chicago on 2 April 1860 for a run to Sheboygan. By the end of the month, the ship was chartered to bring 11,000 bushels of corn from Chicago to Kingston, Canada West (Ontario). The vessel arrived at Kingston on 7 May. On the return trip up the lakes on 9 May, the schooner stranded outside Detroit and was delayed for two days while the tug *Red Eric* worked to pull it free. *Advance* came out of the stranding damage free and made trips to Buffalo in June, July and August to collect railroad iron that was delivered for construction of the Amboy, Lansing and Traverse Bay Railroad. The ship carried wheat from Chicago to Buffalo in late August, from Milwaukee to Oswego in September, and from Racine to Buffalo in October

(*Chicago Tribune* 1860a, 1860b; *Daily Milwaukee News* 1860a, 1860b; *Detroit Free Press* 1860a, 1860b, 1860c, 1860d, 1860e, 1860f, 1860g; *Racine Daily Journal* 1860a, 1860b).

The vessel wintered over at Detroit and during this time, *Advance* received major repairs at Campbell & Owen shipyard, where it was fitted with a new deck as well as other minor work. On 2 March 1861, a new enrollment was entered at the port of Chicago for a change in owners. Captain David Dall became owner and Master, and *Advance*'s homeport remained Chicago (*Buffalo Commercial Advertiser* 1861; BLU 1861; Bureau of Navigation 1861). On 11 April 1861, *Advance* was chartered for four trips from Detroit to Buffalo with 10,100 bushels of corn each trip at 4 cents per bushel (*Racine Daily Journal* 1861). In July, the ship ran lumber from Sturgeon Bay to Chicago before returning to carrying wheat to Oswego. Five trips with wheat were completed July through September. On its return to Chicago in September, the ship arrived with 200 barrels of salt and 120 cords of wood. *Advance* was chartered in October for one trip with corn at 20 cents per bushel to Sarnia, Canada West (Ontario) and hauled 11,000 bushels to that city (*Chicago Tribune* 1861a, 1861b, 1861c, 1861d, 1861e, 1861f, 1861g, 1861h, 1861i, 1861j, 1861k).

The ship fitted out in early April 1862 and cleared Chicago on 21 April for Oswego with 12,100 bushels of barley. The vessel returned from Oswego on 26 May with 120,000 board feet of lumber. On its next trip out, with a cargo of corn, the ship sprung a leak on Lake Michigan and had to put back into Chicago for repairs before continuing on to Buffalo (*Buffalo Commercial Advertiser* 1863; *Chicago Tribune* 1862a, 1862b, 1862c). On 7 July 1862, *Advance* arrived at Chicago with 125,000 board feet of lumber from Buffalo. After it loaded with 11,000 bushels corn, it departed again for Buffalo the same afternoon. Another trip to Buffalo was completed in August with corn (*Chicago Tribune* 1862d, 1862e, 1862e, 1862f, 1862g, 1862h, 1862i).

At 11 AM on 7 September 1862, Captain Dall was a passenger aboard the tug *Union* in Chicago harbor along with Chicago Harbor Master Captain Thomas Boyd, lumber merchant and vessel owner Captain John Prindiville, and Charles Harding of the firm of Harding & Hall, when the tug blew up abreast of the South Pier. Three lives were lost including that of the harbormaster, and four others were injured including Captain Dall who was severely wounded on his back and chest (*Detroit Free Press* 1862). Despite the injury, Captain Dall took little time off the lake in his recovery and was next recorded arriving at Chicago on 17 September with lumber from Goderich, Canada West. Following this trip however, Captain Daniel Stalker took over the helm for two more trips with grain to Buffalo (*Chicago Tribune* 1862j, 1862k, 1862l, 1862m).

On the morning of 16 April 1863, *Advance* departed Oswego with Captain Stalker at its helm and without cargo but ballasted with sand. Sailing west on Lake Ontario, a storm sprung up during the night of 17 April 1863 that drove the *Advance* broadside and high up on the shore seven miles above the Genesee River near Rochester, New York. The Northwest Insurance Company's tug *Hector* was sent from Oswego to free the vessel but was unsuccessful. Over the

next nine days, the ship was jacked up with screws and a combination of pulling with two chains and wave action removed it from the beach. Once removed, the tug *J.H. Bloore* towed the ship to Oswego for inspection and repairs (BLU 1863; *Buffalo Commercial Advertiser* 1864; *Buffalo Daily Courier* 1863a, 1863b, 1863c, 1863d; *Chicago Tribune* 1861a, 1863b, 1863c; *Detroit Free Press* 1863a, 1863b). When the ship was restored for service, Captain Dall returned as Master and completed monthly trips between Chicago and Buffalo taking grain east and lumber west for the remainder of the season (*Chicago Tribune* 1863d, 1863e, 1863f, 1863g, 1863h, 1863i).

In 1864, Captain Patrick Linn took command of the schooner. The ship was evaluated at a B1 insurance rating with a \$5,550 value by the Board of Lake Underwriters (BLU 1864). *Advance* called on Pentwater, Grand Haven and Manistee, Michigan, and Port Washington, Wisconsin for lumber bound to Chicago throughout the season. Cargoes varied from dimensional lumber to strips, coarse timber, and joists. The ship's last entry at Chicago was recorded on 22 November before being put up in winter quarters (*Chicago Tribune* 1864a, 1864b, 1864c, 1864d, 1864e, 1864f, 1864g, 1864h, 1864i).

At the start of the 1865 season, *Advance* had a new Master at its helm, Captain John Miller. The ship was fitted out the first week of April to bring sundries from Pentwater to Chicago (*Chicago Tribune* 1865a). In April and May, the ship hauled lumber from Pentwater and Manistee to Chicago (*Chicago Tribune* 1865b, 1865c). On July 14, 1865, the ship was remeasured in conformity with the Congressional Act of 6 May 1864. *Advance*'s new measurements were calculated at 117 feet 3 inches x 25 feet 7 inches x 8 feet 9 inches and its tonnage was calculated at 179 92/100 tons with a capacity under tonnage deck of 166.85 tons and a capacity of enclosures on upper deck totaling 13.07 tons. Interestingly, the new enrollment document recorded the addition of a figurehead to the vessel (Bureau of Navigation 1865).

Advance cleared Chicago later that afternoon for Buffalo with 10,975 bushels of corn (*Chicago Tribune* 1865d). On 29 July 1865, *Advance* collided with the schooner *J.W. Nichols* near the mouth of the Detroit River resulting in \$600 damages to *Advance*. *Advance* was taken in a crippled condition to the Campbell & Owen's shipyard for repairs (*Buffalo Daily Courier* 1865a, 1865b). The ship carried another cargo of corn to Buffalo in September before returning to the Lake Michigan lumber trade in October. Shingles and lumber were carried to Chicago from Grand Haven, Hamlin, and Manistee for the rest of the season (*Chicago Tribune* 1865e, 1865f, 1865g, 1865h).

Following the repairs required in 1865, the Board of Lake Underwriters decreased the schooner's value to \$5000 (BLU 1866). For the first run of the season in April 1866, *Advance* carried corn from Chicago to Oswego. Grain shipments were made to the lower lakes through September returning to Chicago with coal on each occasion (*Chicago Tribune* 1866a, 1866b; *Detroit Free Press* 1866). In October and November, the ship returned to service solely on Lake

Michigan carrying lumber, joists, and scantling from Manistee and Muskegon to Chicago. One cargo of oats was shipped from Chicago to Manistee in late October (*Chicago Tribune* 1866c, 1866d, 1866e; *Chicago Post* 1866).

Over the winter months, *Advance* received new ceiling planking at the shipyard at Milwaukee at a cost of \$1500 (*Semi-Weekly Wisconsin* 1867). The ship was to remain in the Lake Michigan lumber trade for the season. It cleared Chicago light for Pentwater, Michigan the first week of April with a new Master, Captain E. Evers. The ship called on Duck Lake, Manistee, and Pentwater for cargoes of lumber that spring and on each trip, after unloading, it departed Chicago light (*Chicago Evening Post* 1867a, 1867b, 1867c, 1867d; *Chicago Tribune* 1867a, 1867b). On 23 May 1867 while fifteen miles off Muskegon a boy known only by the name “Henry,” was lost overboard from his vessel. His surname was unknown to the captain or crew; however, he was known to have been sixteen years old and British, and to have previously worked in at hotel in Detroit (*Chicago Tribune* 1867b).

On 6 July 1867, the *Advance* was in tow of the tug *Oriole* when the schooner struck the Wells Street Bridge in the Chicago River. The collision swung the vessel sideways so that *Advance*’s bowsprit broke through the window of a nearby warehouse. Only minor damage occurred to the schooner (*Chicago Tribune* 1867c). Then on 31 July, the ship went ashore at Hamlin, Michigan while bound for Chicago with a cargo of lumber. The vessel was released in short order and returned to service (*Chicago Tribune* 1867d).

For the remainder of the summer and fall the *Advance* brought various lumber cargoes to Chicago including cordwood, shingles, lath, strips, pickets, and dimensional lumber from Grand River and Muskegon (*Chicago Evening Post* 1867e, 1867f, 1867g; *Chicago Tribune* 1867e, 1867f, 1867g, 1867h). On 23 October, *Advance* was sold to Captain Robert Strachaw (sp.) of Chicago. He became the ship’s new owner and Master, and a new enrollment was taken out at the Port of Chicago (Bureau of Navigation 1867).

On 23 January 1868, new enrollment papers were again filed at the Port of Chicago for a change in owner and Master. The ship was sold back to David Dall. Captain Hugh Doran was appointed as Master (Bureau of Navigation 1868). Due of the replacement of the ceiling planking the previous year, the Board of Lake Underwriters valued the ship at B1 insurance rating for \$8,000 (BLU 1868).

Shipments of dimensional lumber and lumber products including lath, joists and scantlings were shipped throughout the season to Chicago from Muskegon, Duck Lake, Pentwater, Manistee, and Point Sable, Michigan and Portage and Oconto, Wisconsin (*Chicago Evening Post* 1868a, 1868b, 1868c, 1868d, 1868e; *Chicago Tribune* 1868a, 1868b, 1868c; *Daily Milwaukee News* 1868; *Semi-Weekly Wisconsin* 1868a, 1868b). On 12 October 1868, *Advance* went ashore at Grand Haven. The ship was soon released, but it sustained \$1,000 in damages from the

grounding (*Chicago Evening Post* 1868f; *Chicago Tribune* 1868d; *Detroit Free Press* 1868). *Advance*'s last arrival for the season was recorded on 11 November bringing 150,000 board feet of lumber to Chicago from Oconto before putting up in winter quarters (*Chicago Tribune* 1868e).

With the opening of navigation, the ship came out in early April 1869 and began calling on Manistee and Muskegon for cargoes of lumber. With each delivery at Chicago, the schooner cleared light for a return trip across the lake (*Chicago Evening Post* 1869; *Chicago Tribune* 1869a, 1869b). While clearing Chicago on an early June departure, the *Advance* collided with the bark *J.F. Joy*. The accident cost *Advance* its jibboom and six stanchions. Repairs to the vessel totaled \$375 (Hall 1869). By 20 June 1869, the ship was returned to service and an arrival was recorded at Chicago with lumber products from Muskegon (*Detroit Free Press* 1869a). For the remainder of the season, the ship called on Ludington, Pier Marquette, and Manistee, Michigan for lumber and engaged in one trip to Erie, Pennsylvania with wheat (*Chicago Evening Post* 1869b, 1869c; *Chicago Tribune* 1869c; *Detroit Free Press* 1869b). On 2 November 1869, while in port at Michigan City, Indiana, John McGehan, a Chicago-based sailor from *Advance*'s crew drowned. Additional circumstances of the accident are not known (*Chicago Evening Post* 1869d).

The schooner was fitted out for service in mid-April 1870 and called on Manistee for lumber products throughout April and May with one trip to Oconto in early June (*Chicago Tribune* 1870a, 1870b, 1870c, 1870d). On 10 June 1870, *Advance* departed Kenosha with a shipment of grain for Oswego, New York and made the distance to Detroit in only four days under favorable winds. The ship returned light to Chicago by the end of the month (*Chicago Tribune* 1870e, 1870f). The *Advance* sailed through the end of October bringing lumber to Chicago from Cheboygan, Pentwater, Manistee, and Oconto (*Chicago Tribune* 1870g, 1870h, 1870i, 1870j, 1870k).

The series of small accidents in prior years reduced *Advance*'s insurance value to \$7,000 for the 1871-season (BLU 1871). On 3 April 1871, Captain Reuben Cassady was appointed Master of the vessel at the Port of Chicago (Bureau of Navigation 1868). The ship recorded weekly arrivals at Chicago with between 150,000 - 170,000 board feet of lumber from Muskegon in May, June, and July (*Chicago Tribune* 1871a, 1871b, 1871c, 1871d, 1871e, 1871f, 1871g, 1871h, 1871i). On 9 August 1871, *Advance* arrived at Muskegon in a waterlogged condition. It was towed back across the lake to Chicago the next day by the propeller *New Era* to undergo repairs at the shipyard. The leak was repaired, and vessel was returned to service bringing a load of lumber into Chicago from Muskegon on 14 August (*Chicago Tribune* 1871, 1871k, 1871l; Hall 1871). The schooner continued with weekly lumber shipments from Muskegon through the beginning of October (*Chicago Tribune* 1871l, 1871m, 1871n, 1871o). On 3 October, the ship was chartered to haul corn from Chicago to Buffalo (*Chicago Tribune* 1871p). While out, it stranded on Nicholson Island in Lake Ontario. The vessel was released, but damages totaled

\$900 (*Chicago Tribune* 1871q; Hall 1871). On 31 October the ship was chartered to carry wheat from Chicago to Buffalo, but while enroute on 20 November, *Advance* sprung a leak during a violent storm on Lake Erie. The situation aboard during the gale became so dire that the ship's masts were cut away. The vessel with its water-damaged cargo was taken in tow to Port Colbourne, Ontario (*British Whig* 1871; *Chicago Tribune* 1871r; *Detroit Free Press* 1871; Hall 1871).

Over the winter months, *Advance* received new frames and ceiling planking and was back in service in May 1872 (*Chicago Tribune* 1872a, 1872b, 1872c). Weekly shipments of lumber and lath from Muskegon were landed at Chicago from May through July (*Chicago Evening Post* 1872a, 1872b, 1872c, 1872d; *Chicago Tribune* 1872d, 1872e 1872f, 1872g, 1872h, 1872i, 1872j). A downturn in the lumber market kept the ship tied at the pier for August. Only one shipment of lumber was carried from Muskegon to Chicago in September and another in October. In November, *Advance* made three trips before navigation closed for the season (*Chicago Evening Post* 1872e; *Chicago Tribune* 1872k, 1872l, 1872m, 1872n).

Entering the 1873 season, the Board of Lake Underwriters increased *Advance*'s valuation to \$7,500, largely due to the repairs the prior season (BLU 1873). On 8 April 1873, Captain J.A. Shannon took command of *Advance* in lieu of Captain Cassady (Bureau of Navigation 1868). The ship cleared Chicago for Buffalo with corn on 1 May for its first run of the season. While crossing the lake to sail along the eastern shore, bilge pump became clogged with grain and the vessel put in at Grand Haven, Michigan to make things right before proceeding on (*Chicago Evening Post* 1873a; *Chicago Tribune* 1873a, 1873b).

In June, the ship carried a cargo of cedar strips from Oconto to Chicago for Blanchard, Borland & Co. (*Chicago Evening Post* 1873b). Outside of this singular shipment, *Advance* was kept busy carrying dimensional lumber from Muskegon to Chicago. *Advance* made multiple trips each week, as many as three under favorable winds and good weather and cleared Chicago light each time for the return across the lake. Cargo sizes varied from 100,000 to 160,000 board feet depending on the availability at the mill (*Chicago Evening Mail* 1873a, 1873b, 1873c, 1873d, 1873e, 1873f, 1873g, 1873h, 1873i, 1873j, 1873k; *Chicago Evening Post* 1873c, 1873d, 1873e, 1873f, 1873g; *Chicago Tribune* 1873c, 1873d, 1873e, 1873f, 1873g, 1873h, 1873i, 1873j; *Inter Ocean* 1873). Two incidents were reported late in the season. In late September, *Advance* was forced to come into the shipyard at Milwaukee to stem a leak that started during a storm, and in October, the ship arrived at Chicago missing canvas lost during a big blow (*Buffalo Commercial Advertiser* 1873; *Detroit Free Press* 1873). The vessel was reduced in value to \$6,500 for the 1874-season (BLU 1874, 1875).

Advance came out of winter quarters during the first week of April 1874 and continued calling on Muskegon for dimensional lumber. Shipments were made through the first week of June (*Chicago Tribune* 1874a, 1874b; *Inter Ocean* 1874a). Three cargoes of 140,000 cedar strips

were brought from Oconto on June 11, 17 and 28 for Blanchard, Borland & Co. (*Chicago Tribune* 1874c; *Door County Advocate* 1874a; *Inter Ocean* 1874a, 1874b). Over the remainder of the season the schooner delivered lumber to Chicago from Muskegon on June 18, 27 and 28, July 4, 5 and 23, August 2, 8, 9 and 14, September 3 and 11, October 18 and November 16 (*Chicago Tribune* 1874d, 1874e, 1874f, 1874h; *Inter Ocean* 1874c, 1874d, 1874e, 1874f, 1874g, 1874h, 1874j, 1874k). Additional shipments were received from Sturgeon Bay, Wisconsin in July, and White Lake, Michigan in September (*Chicago Tribune* 1874g; *Door County Advocate* 1874b; *Inter Ocean* 1874i). After dropping off lumber on 4 September, the ship loaded 50 cords of stone at Chicago and departed the same day for Muskegon (*Chicago Tribune* 1874f). In October *Advance* was chartered away from the cross-lake lumber trade to bring one shipment of coal to Chicago from Toledo at \$0.25 per ton (*Detroit Free Press* 1874)

On 4 April 1875, Captain A. Anderson took over *Advance*'s helm from Captain Shannon (Bureau of Navigation 1868). A significant downturn in the lumber market occurred during the 1875 season which resulted in the delivery of only eight loads of dimensional lumber by *Advance* to Chicago from Muskegon. These cargoes were delivered on 14 and 25 May, 15 and 26 July, 27 August, 26 and 27 September, and 20 October (*Chicago Tribune* 1875a, 1875b, 1875c, 1875d, 1875e; *Inter Ocean* 1875a, 1875b). Only a handful of additional deliveries were made from White Lake, Michigan on 3 September and 2 November, from Grand Haven, Michigan on 19 September and Dead Lake, Michigan on 8 November (*Chicago Tribune* 1875f, 1875g; *Inter Ocean* 1875c, 1875d, 1875e).

Likely with difficulties caused by the decreased demand for lumber the previous year, much of the necessary maintenance to the ship was put off, avoiding cuts into Captain Dall's already thin profit margins and the Board of Lake Underwriters again devalued *Advance* to \$5,000 at a B2 insurance rating (BLU 1876). Before fitting out for the season, on 5 May 1876 David Dall's son, David Dall, Jr. of Michigan City, Indiana, entered into ownership as equal partner and managing owner of the vessel, and Captain Rueben Cassady returned to *Advance*'s helm. A new enrollment, entered in the port of Chicago showed a changed in base of operation to Michigan City, Indiana, and *Advance*'s homeport was also changed to that city (Bureau of Navigation 1876).

Advance's first two lumber deliveries at Chicago for the 1876-season came from White Lake, Michigan on 31 May and 5 June (*Chicago Tribune* 1876a, 1876b). On 12 June, the ship hauled 60 cords of stone from Chicago to Michigan City, Indiana (*Chicago Tribune* 1876c, 1876d). Lumber arrivals from White Lake, and Muskegon were recorded at Chicago in July and August (*Chicago Tribune* 1876e, 1876f, 1876g, 1876h, 1876i, 1876j; 1876k; *Inter Ocean* 1876l). The next trip out, *Advance* headed to Grand Haven to fetch lumber, but on 5 September, just as it started back for Chicago the ship began taking on water and was forced to put back into Grand Haven where repairs were made. The cargo was finally landed at Chicago on 11 September (*Inter Ocean* 1876b, 1876c; *Cleveland Herald* 1876). On its next trip, the ship lost its flying jib

in a gale (*Inter Ocean* 1876d, 1876e; *Chicago Tribune* 1876o). For the months of September, October and until the end of its season in November, *Advance* collected lumber from White Lake and Muskegon (*Chicago Tribune* 1876l, 1876m, 1876n, 1876p, 1876q, 1876r).

Over the winter months, David Dall arranged for new decks and an overhauling for the schooner at a cost of \$1,000. Dall also had repairs made to four other ships of his fleet. On 2 April 1877 when the schooner *Margaret Dall*, also owned by David Dall, was being towed in the Chicago River from the Clark Street bridge to a point near State Street, the ship broke away and swung into the bow of the *Advance*, causing damage to *Advance*'s headgear. As a result, the Board of Lake Underwriters again devalued *Advance* to \$4,000 at a B2 insurance rating for the 1877-season (BLU 1876; *Chicago Tribune* 1877a; *Inter Ocean* 1877a). On 14 April 1877, Captain Cassady was replaced by Captain John H. Dall (Bureau of Navigation 1876).

Advance made two runs to Muskegon in May for lumber, landing cargoes at Chicago on 4 and 16 May 1877 (*Chicago Tribune* 1877b, 1877c, 1877d, 1877e). As the ship was entering the port of Chicago on 16 August *Advance*'s foremast boom was carried away in a gale. The spar was replaced in short order as the ship was chartered to bring in a cargo of lumber from Muskegon at \$1.12 ½ per board foot. It cleared light on 20 August (*Chicago Tribune* 1877f; *Inter Ocean* 1877b). Cargoes remained scarce in September, but the ship was chartered for two trips to White Lake, Michigan in October by J.M. Loomis & Co. and brought in 162,000 board feet and 157,000 board feet on 1 and 11 October (*Chicago Tribune* 1877g; *Inter Ocean* 1877c). A late season trip to Muskegon was arranged November. The crew was able to make the trip over and back to Chicago in three and a half days and each man was rewarded with \$15 pay for the trip (*Inter Ocean* 1877d).

Before the opening of the 1878 season, *Advance* was sold. A new enrollment was entered at the port of Chicago for change of owners. John H. Dall and Captain Mons Paulsen of Chicago were listed as equal owners. Captain Paulsen became the ship's new Master, and its homeport was returned to Chicago (Bureau of Navigation 1878). The *Inter Ocean* (1878a) reported that David Dall, Sr. and David Dall, Jr. sold the vessel to John H. Dall for \$2,000. Then in a separate transaction, John H. Dall sold one-half of the ship to Captain Paulsen for \$1070. The Board of Lake Underwriters valued the ship at \$3,500 with a B2 insurance rating (BLU 1878).

Advance was fitted out early and reportedly anchored in the bay at Racine on 28 March 1878 waiting for ice to come off many of Lake Michigan's harbors. Lumber was delivered to Chicago from Pentwater, Muskegon and Manistee throughout April and May (*Chicago Tribune* 1878a, 1878b, 1878c; *Inter Ocean* 1878b). In June and July, a series of accidents occurred. On 4 June 1878, while in tow, the ship struck the State Street bridge in Chicago and tore away a portion of the railing. *Advance* was taken to the dry dock to repair damages and to work on stopping a persistent leak. Then on 1 July, the schooner collided with the tug that had it in tow while leaving the Chicago Lumber Market dock that knocked a small hold in the schooner's stern.

And on 6 July, while in tow on the Chicago River, the *Advance* struck the schooner *Skylark*, which had just left the Lumber Market's "C" slip under tow. The impact was so great that shattered pieces of ship were shot high into the air. Both craft were said to be damaged equally (*Inter Ocean* 1878c, 1878d; *Chicago Tribune* 1878d, 1878e). After additional delays at the shipyard for repairs, *Advance* was placed back into service in August. It fetched lumber from Frankfort, and Muskegon through the middle of November. Most departures from Chicago were light (*Chicago Tribune* 1878f, 1878g, 1878h, 1878i; *Inter Ocean* 1878e, 1878f).

In 1879, the Board of Lake Underwriters again devalued *Advance* to \$3,000 with a B2 insurance rating (BLU 1879). The ship was fitted out for service in early May and brought not only dimensional lumber to Chicago, but also cordwood, bark, slabs, poles, and posts. These wood products were picked up from Muskegon, Ludington, Manistee, Grand Haven, Menominee and Jacksonport with regular and frequent deliveries May through November. In 1879, the *Chicago Tribune* added information to include the docks to which deliveries were made at Chicago. These docks included Rush Street, India Street, Main Street, Mason Slip, the Chicago Lumber Market, and to the Rock Island Railroad (*Chicago Tribune* 1879a, 1879b, 1879c, 1879d, 1879e, 1879f, 1879g, 1879h, 1879i, 1879j, 1879k, 1879l, 1879m, 1879n, 1879o, 1879p, 1879q, 1879r, 1879s, 1879t, 1879u, 1879v, 1879w, 1879x, 1879y, 1879z). *Advance* was laid up for the winter at Chicago during the first week of December (*Detroit Post and Tribune* 1879).

Advance was out early in 1880, delivering two cargoes of slab wood at Chicago from Grand Haven in March and bringing ties from Grand River to Milwaukee (*Chicago Tribune* 1880a, 1880b, 1880c). The schooner called on Grand Haven, Grand River, Muskegon, Manistee, Ludington, Whitefish Bay and Black Rock for lumber products for the Chicago market throughout the season (*Chicago Tribune* 1880a, 1880b, 1880c, 1880d, 1880e, 1880f, 1880g, 1880h, 1880i, 1880j, 1880k, 1880l, 1880m, 1880n, 1880o, 1880p, 1880q, 1880r, 1880s, 1880t, 1880u, 1880v, 1880x, 1880y, 1880z, 1880aa, 1880ab, 1880ac, 1880ad, 1880ae, 1880af, 1880ag, 1880ah, 1880ai, 1880aj, 1880ak, 1880al, 1880am). The ship was required to seek shelter from a storm at Milwaukee on the morning of 27 March, and on 17 April, *Advance* cleared the harbor entrance at Chicago but was forced back inside to wait out a storm (*Chicago Tribune* 1880c, 1880f). General maintenance was performed on 30 July 1880 when the ship received a thorough recaulking at the Chicago dry dock (*Chicago Tribune* 1880w).

The schooner came into Sturgeon Bay during the third week in November 1880 to load cedar from the mill in the upper part of the bay. While there, the temperature dropped rapidly, and the ship became iced in. Captain Paulsen hoped for a break in the weather to free the vessel, but it did not come, and on 23 November 1880, the crew was discharged for the season. *Advance* was left frozen in place near the old Warren's dock at the head of the bay until spring. *Advance* was not the only vessel forced to winter over in Door County. There were also the schooners *Midge* and *Gertie Wing*, and the *Elida* was frozen in at Egg Harbor (*Door County Advocate* 1880; *Chicago Tribune* 1880am).

Captain Paulsen returned from Chicago, arriving in Sturgeon Bay on 7 March 1881. Minor repairs were made to the vessel before fitting out the ship for service. On 15 April, the remainder of the cargo of cedar was loaded aboard and within the week, *Advance* departed for Chicago (*Chicago Tribune* 1881a; *Door County Advocate* 1881a, 1881b; *Weekly Expositor Independent* 1881a). The ship returned to Sturgeon Bay to collect a load of railroad ties, landing them at Chicago on 3 May and then departed for Manistee (*Inter Ocean* 1881a).

After collecting shingles at Manistee and clearing the port, on 11 May 1881 at 6PM and 7 miles out into the lake, *Advance* was sailing in a fog when it was struck by the schooner *Fleetwing*. *Fleetwing* was loaded with grain bound for Buffalo. The accident caused *Fleetwing* to lose its head rigging. It was taken in tow into Manistee by the tug *Caroline William* and later taken to Milwaukee for repair. *Advance* became so waterlogged following the collision that it became necessary for the crew to abandon the ship. The crew made Manistee the following morning in the yawl and the tug *Wheeler* was sent out in search of the drifting vessel. *Advance* floated north for two days, and it was found off the shores of Frankfort, Michigan. It was towed into that port for evaluation. Damage was reported to the port side forward of the fore-rigging, its hull crushed in and cut down to the waterline, the deck was buckled, seventeen stanchions broken, and the cutwater, bulwarks and jibboom gone. Its deck load of shingles was lost overboard. The shingles in the hold were removed at Manistee before the vessel was towed across the lake to Milwaukee for repair. *Fleetwing* was libeled for the cost of damages by the owners of *Advance* (*Detroit Free Press* 1881a, 1881b; *Door County Advocate* 1881c, 1881d, 1881e; *Chicago Tribune* 1881b, 1881c, 1881d; *Cleveland Herald* 1881a, 1881b; *Inter Ocean* 1881b, 1881c).

Having also received a new foremast, *Advance* was returned to service on 9 June 1881. Following repairs at the Milwaukee shipyard, on 22 June, a new enrollment document was issued at the port of Chicago after the ship's papers had been lost during the accident (Bureau of Navigation 1881; *Chicago Tribune* 1881f, 1881g; *Inter Ocean* 1881d, 1881e). For the remainder of the season *Advance* called at Sturgeon Bay, Manistee, Muskegon, Grand Haven, St. Joseph, and Traverse City. Most loads were delivered at Chicago, but one cargo of lumber was delivered to Racine in October (*Chicago Tribune* 1881h, 1881i, 1881j, 1881k; *Inter Ocean* 1881f, 1881g, 1881h, 1881i; *Weekly Expositor Independent* 1881b). On 18 October, the ship sailed for the eastern shore of Lake Michigan, but retreated to Milwaukee harbor to wait for more favorable weather. On 5 November, the ship was laid up for the winter at Chicago (*Chicago Tribune* 1881l, 1881m).

The Board of Lake Underwriters declared *Advance* uninsurable starting in 1882 and the vessel was not listed in their ledgers afterwards (BLU 1882). The ship came out the last week in April and loaded cedar ties at Sturgeon Bay for M. Cochems of Chicago (*Door County Advocate* 1882). On 23 May 1882, a new enrollment document was entered at the port of Chicago for change in owners. James L. Dall took over John H. Dall's share in the vessel as half owner.

Captain Paulsen was the other half owner. Both men declared residency in Chicago (Bureau of Navigation 1882). Besides Sturgeon Bay, *Advance* called on Cedar River, Grand Haven, and Muskegon for various wood cargoes throughout the season including ties, bark, cordwood, and dimensional lumber (*Chicago Tribune* 1882a, 1882b, 1882c, 1882d, 1882e, 1882f, 1882g, 1882h, 1882i, 1882j, 1882k, 1882m). On 24 November *Advance*'s Mate, Martin Pearson was admitted to the Marine Hospital for medical treatment. The reason for the treatment is unknown (*Chicago Tribune* 1882).

On 18 April 1883, *Advance* cleared Chicago with a cargo of stone bound for Grand Haven, but the vessel was soon forced into Racine to seek shelter. The ship remained in port for two days before it could get underway under favorable conditions (*Journal Times* 1883a, 1883b). *Advance* called on Bay de Noc, Traverse City, Muskegon, Green Bay, Whitehall, White Lake, and Grand Haven for lumber products to bring back to the Chicago market throughout the season (*Chicago Tribune* 1883a, 1883b, 1883c, 1883d; *Inter Ocean* 1883a, 1883b, 1883c, 1883e, 1883f, 1883g, 1883h, 1883i). On the morning of 7 September, *Advance* departed Whitehall, Michigan, encountered a gale out on the lake, and sprung a leak. The tug *S.S. Coe* took the ship under tow to Chicago for repairs (*Inter Ocean* 1883d; *Marine Record* 1883). While in port late in the season, the ship was remeasured and deductions to tonnage of 8.49 tons was granted under the Congressional Act of 5 August 1882 and net tonnage was updated to 171.43 tons on the vessel's enrollment document. At this time, Captain James L. Dall took command from Captain Paulsen (Bureau of Navigation 1882).

On 19 April 1884, Captain Paulsen bought out James L. Dall's one-half interest in the schooner *Advance* for \$1,200. A new enrollment was entered at the port of Chicago for the change in owner and Master (Bureau of Navigation 1884; *Detroit Free Press* 1884; *Inter Ocean* 1884a). The ship headed to Grand Haven on its first trip of the season on 29 April 1884. The vessel made fifteen trips between Muskegon and Chicago with lumber between 22 May and 19 August (*Chicago Tribune* 1884a, 1884b, 1884c, 1884d, 1884e, 1884f, 1884g, 1884h, 1884i, 1884j, 1884k, 1884l; *Inter Ocean* 1884b, 1884c, 1884d, 1884e, 1884f). While being towed out of Chicago harbor on 28 July 1884, one of *Advance*'s crew fell overboard. He was successfully recovered from the water (*Chicago Tribune* 1884k).

On 11 September 1884, the *Advance* was bound from Hedgehog Harbor, Wisconsin to Racine with a cargo of wood when a northerly gale strained the vessel to the point that it sprung a leak. The crew took to the pumps and sailed for Sturgeon Bay to seek shelter in the canal. In Sturgeon Bay they could have the vessel inspected at the shipyard if necessary. Upon arrival at Sturgeon Bay, it was thought that their deckload would need to be removed for inspection, but the following morning after the storm abated it was found that with the crew working the pumps, they were able to keep the water down, so the vessel departed for Racine (*Chicago Tribune* 1884m, 1884n; *Door County Advocate* 1884). The ship remained tied to the dock at

Racine for rest of September waiting for freight and on 1 October, Captain Paulsen decided it would be better to put the ship up for the winter (*Journal Times* 1884a, 1884b).

If there was any question about whether Captain Paulsen would invest further in his uninsurable and leaky thirty-two-year-old vessel, the 26 January 1885 edition of Racine's *The Journal Times* (1885a) published the following statement: "The schooner *Advance* will not be rebuilt at this port, as was expected, the owners concluding it would not pay". A remembrance of sorts was then printed in the 29 April 1885 edition of the *Racine Daily Journal* (1885a) stating, *Advance* "was considered one of the "smartest" schooners that sailed out of Racine harbor" ... "during the palmy days of 1858 and 1859", suggesting that there was some question whether the ship would, or rather should, sail again. However, at the beginning of May 1885, Captain Paulsen readied his ship and sailed out across Lake Michigan to collect its first cargo of lumber from Grand Haven landing at Chicago on 12 May. *Advance* delivered lumber from Grand Haven, Spring Lake, Frankfort, and Muskegon to Chicago from May through the first week of July (*Chicago Tribune* 1885a, 1885b, 1885c, 1885d, 1885e, 1885f, 1885g; *Inter Ocean* 1885a). The ship was without freight for most of July and August.

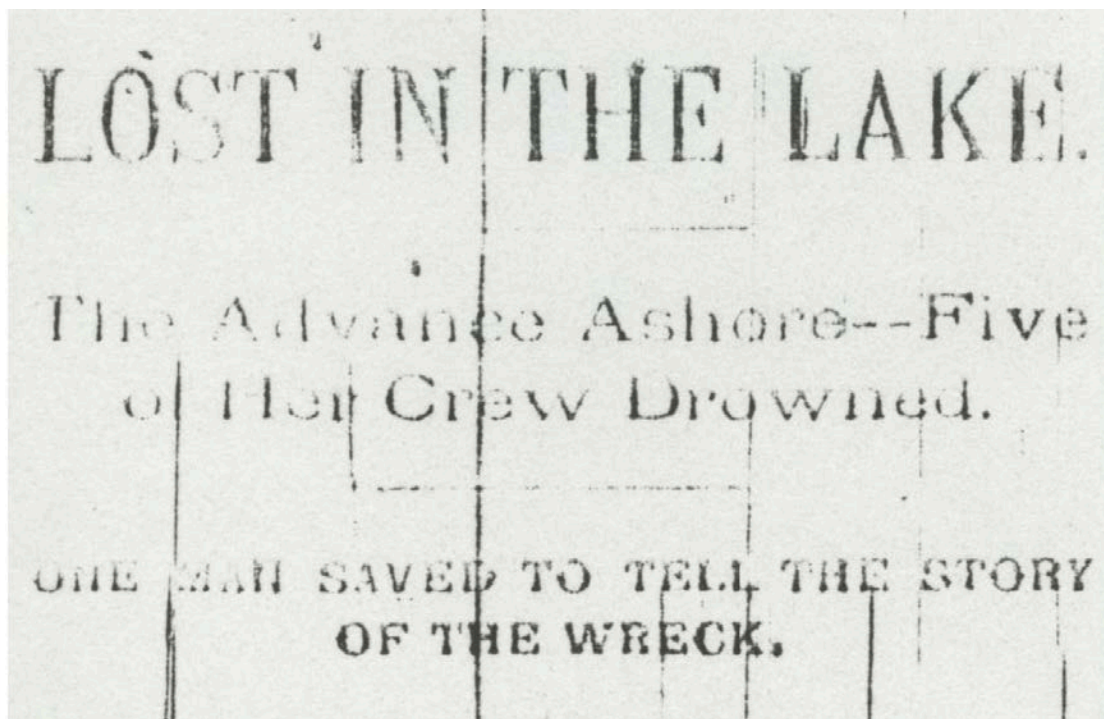


Figure 10. Headline *Milwaukee Sentinel* September 9, 1885

On 8 September 1885, *Advance* departed Pine Lake, Michigan, with a cargo of bark bound for Chicago. A heavy gale from the east southeast had been prevailing since the early morning hours creating tremendous seas along the western shore of the lake. On board *Advance* was Captain Mons Paulsen and six men, Mate Martin Pearson, three sailors Jacob Ramm (Raum), Charles Ingerbretson (Englebrentson) and Harry Holt, passenger John Edwards, and George Paulsen, the son of the captain. Nearing Sheboygan it was discovered that *Advance* had 3 feet of

water raising in its hold, but with the wind direction, they were unable to make the port. They continued south along the lakeshore until they were a short distance past Oostburg when conditions worsened. Captain Paulsen decided to set anchor.

During the three hours that the schooner was anchored, she displayed a signal of distress. An unknown barge came to their aid and then without apparent cause steamed away without rendering assistance. *Advance* continued to fill with water and eventually capsized. The seven men were able to escape the sinking vessel to the yawl. They used a blanket for a sail, and they had use of three oars. The men made it to within 75 yards from the beach, when the yawl overturned in the breakers and all but one, seaman Jacob Ramm, drowned in sight of fishermen and farmers that had gathered to watch but were powerless to provide aid (*Cleveland Leader* 1885; *Detroit Free Press* 1885a; *Detroit Tribune* 1885; *Inter Ocean*, 1885b; *Journal Times* 1885b; *Manitowoc Pilot* 1885a; *Port Huron Daily Times* 1885; *Weekly Expositor Independent* 1885a)

The sole survivor Jacob Ramm made the following statement:

“The schooner *Advance* of Chicago Capt. Paulson and crew of seven men left Pine Lake for Chicago with a cargo of tan bark and arrived off about 6 miles south of Sheboygan Harbor with about 3 ft of water in her hold wind blowing fresh with a double reef, wind east and south-east so that she could not reach Sheboygan as she would not bear the sails; the Capt. Paulson dropped the anchor due east of Oostburg about 1 ½ miles out at 12:30pm about the wind freshened and the sea raised, then the crew threw the deck load overboard; she was meantime filling, a heavy rain squall set in, the vessel turned over to the starboard side about 3:30 o’clock and the crew jumped into the yawl boat and using a bed quilt for a sail the boat went along all right in the heavy sea until she came to the second bar when she filled full of water about 200 feet from the shore. After the boat filled, all hands jumped overboard and tried to save their lives swimming to the beach several succeeded in getting quite near shore but all were carried back but one.”
(*Chicago Times* 1885)

In the following days, the lifesaving crew went out to the wreck of *Advance* and brought back the main boom and gaff and part of the foresail. The body of Harry Holt washed ashore at Port Washington on 10 September. Captain Paulsen’s body was found near Belgium on 11 September, and two additional bodies came ashore near there on 16 September. George Paulsen’s body was recovered on 3 October and the final man was recovered off Clay Banks on 15 October (*Chicago Tribune* 1885h, 1885i, 1885j; *Door County Advocate* 1885a, 1885b; *Detroit Free Press* 1885b; *Green Bay Weekly Gazette* 1885; *Journal Times* 1885c; *Manitowoc Pilot* 1885b; *Weekly Expositor Independent* 1885b; *Weekly Wisconsin* 1885).

A copy of *Advance*'s enrollment document was surrendered at the port of Chicago. The cause of surrender listed was "Vessel foundered & lost with everybody on board in Lake Michigan." The ship's hull was not insured, but the cargo of bark wood was insured for \$800 (Bureau of Navigation 1884; *Door County Advocate* 1885a).

The storm of 8 September 1885 was not without other victims. The *Inter Ocean* (1885b) made a noticeable statement about the gale and its apparent antipathy for old vessels:

"The old vessels were cut down by the loss of such veterans as the *Advance*, *Milton*, *Nellie Church*, *George Sherman*, *Cyclone*, *Susan Ward*, *Keepsake* and *Cecelia*. They were all crack vessels in their day, as the *Jewett*, *Tioga*, *Boston* and other well-known vessels are to-day, but for years they have been little better than mere floating shells. All things have their day, and those vessels have certainly had theirs, as their past accounts of earnings could testify could they be secured." (*Door County Advocate* 1885b; *Inter Ocean* 1885b).

Site Description

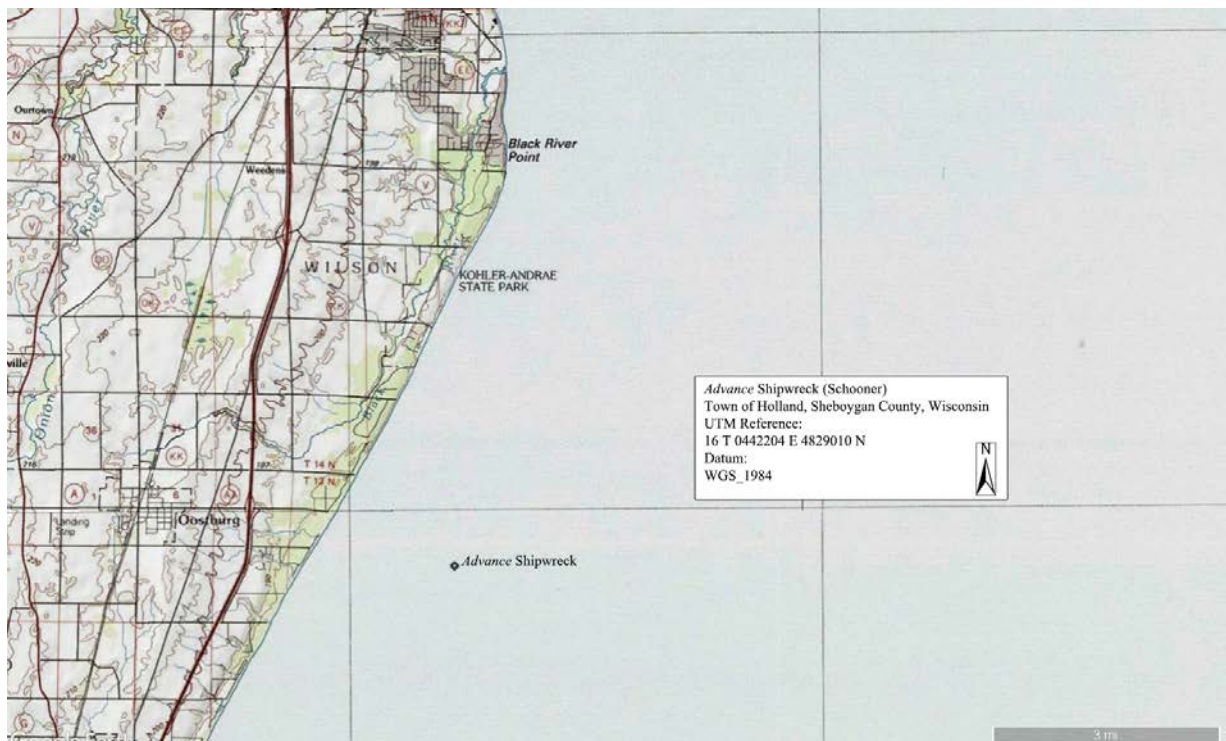


Figure 11. Location of the *Advance* site

The remains of the schooner *Advance* (47SB-0296) lie broken on an even keel in 85 feet of water, 9.5 miles southwest of the Sheboygan harbor entrance in the waters of Lake Michigan, off the town of Holland, Sheboygan County, Wisconsin. The vessel sits on a heading of 62-degrees, with its bow facing northeast. The ship remains broken on the lakebed though most of its construction features remain on site. Sections of its upper hull structure are no longer extant due to the vessel's method of sinking. The entire lower hull remains extant as well as much of

the vessel's machinery, and a portion of the deck planking. Many components of the vessel's construction and artifacts remain within its hull.

The site has been known since its discovery by sport fishermen in 1983 and remains a popular dive site for recreational divers. A Phase II archaeological survey of *Advance* was initiated in July 2021 by maritime archaeologists and volunteers from the Wisconsin Historical Society. A single baseline was extended down the length of the wreckage. All measurements for the survey were taken from this baseline.

The overall length of the wreckage, measured from the stempost to the sternpost, is 117.0 feet, and the width of the hull measures 32.3 feet at the widest point of wreckage (taken from the upper extent of the port and starboard hull sections). At its launch, the vessel was reported to measure 118.75 feet long, with a beam of 25.5 feet. Given the dimensions and location, the wreck site was determined to be that of the schooner *Advance*. The wreckage has a much wider beam due to the splayed out sides of the vessel's hull. Although colonized by invasive quagga mussels, the waters of Lake Michigan have kept the remains of the vessel well-preserved, allowing for detailed observations of its construction and artifacts.

Advance's hull is constructed of double wooden frames and hull planking, and measures 1.5 feet in overall hull thickness. The frames can be seen at the upper extent of the hull sections. The frame sets have a sided measurement of 0.9 feet (with each futtock measuring 0.45 feet wide), and are spaced 1.2 feet apart. Fasteners throughout the vessel measure 0.05 feet in diameter and are spaced at 1.2 feet apart. The roves around the fasteners measure 0.1 feet in diameter. The lower hull remains largely intact, largely buried in sand. Some of the upper sections of the hull and much of the aft decking are no longer extant on the site of the wreckage but have been damaged and moved by storms and currents over the years. Additionally, due to the nature of its sinking and capsizing, much of the upper deck structure was likely damaged in the original sinking event. Sections of this upper hull planking and bulwarks remain along the starboard aft quarter of the ship and at midships on the port side. *Advance*'s outer hull planking measures 0.7 feet wide and 0.2 feet thick, while the ceiling planking measures 0.5 feet wide and 0.3 feet thick.

Advance's hull is broken at the turn of the bilge in many sections of the vessel, but much of the vessel's hull remain extant, including sections of deck planking, the bowsprit and head rigging, and a section of the vessel's mainmast. The entire lower portion of the hull remains intact and in place beneath the sand. The vessel's side hull sections sit just outbound of the main hull wreckage, and are intact up to the deck stanchions and deck rail in places.



Figure 12. A diver measures *Advance*'s bulwark stanchions (Wisconsin Historical Society)

A portion of the port side bulwarks and railing can be seen extending from 20.3 feet to 61.3 feet along the baseline on the port side and from 6.9 to 12.5 feet and 69.3 to 103.2 feet on the starboard side. The rail cap measures 0.6 feet wide and 0.25 feet thick. The bulwark stanchions measure 0.5 feet thick and 0.7 feet wide, spaced 1.8 feet apart. A single bitt remains attached to the portside rail at 24.2 feet along the baseline. This bitt measures 0.9 feet square. A second bitt is located along a broken section of the starboard side railing at 6.8 feet along the baseline. This bitt also measures 0.9 feet square. Evidence of the vessel's foremast chainplates remain attached to the outer hull planking on the portside at 27.3 feet along the baseline. There are four chainplates, each measuring 0.4 feet wide and 0.15 feet thick, and they are spaced 1.4 feet apart. No evidence of the mainmast chainplates or the starboard foremast chainplates remain visible.

Large sections of *Advance*'s hull near the bow are broken and not visible above the sand, however, a small portion of the forward bow is located beneath the fallen bowsprit, at 2.0 feet along the baseline. This consists of the vessel's broken stempost and a single hawsepipe. The hawsepipe is oval, and measures 0.8 feet in width. A single scupper is also located just above the hawsepipe. The scupper measures 1.8 feet wide and 0.9 feet tall.



Figure 13. Bowsprit and head rigging of *Advance* (Wisconsin Historical Society)

Forward of this, the vessel's bowsprit and jibboom assembly sit broken and speared into the sandy lake bottom. The bowsprit extends 25.0 feet out of the sand, while only 14.3 feet of the jibboom is exposed. The bowsprit is squared and measures 1.5 feet on all sides, while the jibboom measures 0.7 feet wide and 0.6 feet thick. The bowsprit's tenon is located at the aft end of the bowsprit, and measures 1.2 feet long, 0.35 feet wide and 0.2 feet thick. This corresponds to the mortise cut into the Samson post, which located aft of the assembly. A conglomeration of wire head rigging remains tangled around the bowsprit and jibboom. The wire rigging measures 0.1 feet in diameter. An additional timber extends beneath the bowsprit/jibboom assembly and into the sand at a perpendicular angle. This timber measures 0.7 feet wide, matching the measurement of the jibboom.

Sticking out of the sand, along the centerline of the vessel, is the remains of the vessel's cutwater. It sits on an 8-degree tilt forward, and measures 0.35 feet sided, and 0.5 feet molded. The cutwater extends 3.2 feet above the sand and remains separate from the rest of the bow sections. It is likely that the stempost itself remains attached to the vessel's keelson and deadwood, but this was covered with sand during the survey. A portion of the vessel's bobstay remains attached to the stempost and extends into the sand. Like the other head rigging its end is likely wrapped around the disarticulated bowsprit/jibboom assembly.



Figure 14. *Advance's* windlass, Samson post and deck planking (Wisconsin Historical Society)

Much of the vessel's deck machinery remains extant on the site. Near the bow, the vessel's windlass, Samson post, bilge pump and forecabin combing can be seen along the centerline of the ship. The windlass sits 13.2 feet along the baseline, slightly askew, and sits at a 17-degree list to port. Overall, the windlass measures 9.5 feet wide and 1.2 feet in diameter at its middle section, with gypsies that measure 1.1 feet wide and have a 1.3-foot diameter. Four metal bands extend around the main body of the windlass, each measuring 0.3 feet wide. The windlass knees remain connected to the windlass. The knees are 0.6 feet wide, and measure 3.5 feet along the deck with a rise of 3.5 feet above the sand. At their thickest point, the knees measure 1.7 feet, and taper down to 0.3 feet thick near the ends. Chain remains wrapped around the starboard side whelp of the windlass, and is paid out aft, until it disappears beneath a section of deck planking and into the sand.

The Samson post sits askew on a 47-degree list to port, at 13.0 feet along the baseline. It leans over the port side of the wreckage. The Samson post measures 1.0 feet square and extends 3.8 feet above the sand. When the main deck collapsed during the vessel's collision with the lake bottom, the Samson post and bilge pump remained upright. The Samson post has a horizontal timber attached to its forward-facing side, measuring 1.6 feet by 1.0 feet. The mortise for the tenon at the end of the bowsprit extends through this timber and into the Samson post. This mortise measures 1.2 feet in height and 0.35 feet wide. Two smaller wood timbers are attached perpendicular to the aft facing side of the Samson post. These measure 1.2 in length and are

0.25 feet square. It is likely that these were used as bitts to attach lines to during sailing.

Aft of the windlass, at 20.7 feet along the baseline, are the remains of the forecastle combing. Only three of the four sides of the combing remain, each measuring 0.66 feet in height, 0.2 feet thick, and 2.2 feet long. Two iron deck pipes are located on either side of the forecastle combing, sticking up out of the sand. These iron pipes would have facilitated the movement of the anchor chain from the chain locker below, onto the deck. These measure 1.0 feet in diameter, have a thickness of 0.1 feet, and are 0.7 feet in width. The starboard-side deck pipe is sitting upright, while the port side pipe now rests on its side, no longer embedded in the deck planking. The vessel's bilge pump is aft of this, at 25.1 feet along the baseline. The pump is a simple, round, single-action bilge pump, and measures 1.0 feet in diameter. The pipe that extends from the bilge pump into the hold remains intact, and measures 0.3 feet in diameter. Although the pump is intact, the pipe is angled aft, extending to 28.7 feet along the baseline. The pump extends through a wide piece of deck planking, which measures 1.5 feet wide. A single square hole with rounded edges is cut into the timber, just forward of the bilge pump. It measures 0.8 feet wide and 0.9 feet long.

A large section of *Advance's* forward deck planking remains intact, extending from 6.9 feet to 38.9 feet along the baseline on the vessel's starboard side. The deck planking is covered by shifting sands at various points throughout the year, exposing different sections. The planks measure 0.4 feet wide, and several of the vessel's deck beams were observed during the survey. These deck beams measure 0.5 feet sided, with a spacing of 1.8 feet. On the port side of the centerboard, the partial remains *Advance's* forward hatch combing rests on the sand at 36.2 feet along the baseline. The combing measures 1.0 feet in height, and 0.25 feet thick. Only the portside edge of the combing is missing, although the starboard side and aft facing sides of the combing are no longer attached to the forward-facing combing. The hatch measures 7.0 feet wide overall. A single section of the forward hatch cover remains, laying near the hatch combing. This section of hatch cover consists of eight planks, each measuring 0.4 feet wide. Overall, the portion of hatch cover measures 3.2 feet wide, and 3.9 feet in length before it disappears beneath the sand.

Although largely covered by sand, the vessel's forward portside deck planking is extant and remains attached to the forward hatch combing. It appears that when the vessel collided with the lake bottom, the vessel's deck collapsed into the hold, and shifted to the port side. The upright centerboard trunk broke the deck planking as it collapsed, causing a section of the planking to invert, and come to rest balanced against the upright starboard side of the hull.



Figure 15. *Advance*'s standing centerboard trunk (Wisconsin Historical Society)

Sand covers most of the central and aft portions of *Advance*'s lower hull; however, the vessel's centerboard trunk and aft section of keelson can be seen above the sand. The keelson measures 1.0 feet wide, 2.0 feet thick, and extends from 69.0 feet to 105.1 feet along the baseline. A short section of the sister keelson can be seen above the sand, extending from 73.3 feet to 82.2 feet along the baseline. The vessel's mainmast step is located just aft of the centerboard, at 69.0 feet on the baseline, and measures 2.7 feet long and 2.5 feet wide overall. At 105.1 feet on the baseline, the keelson is topped by a single rider keelson, which extends aft to the vessel's deadwood, at 114.5 feet along the baseline. The rider keelson measures 1.1 feet wide.

A step is located at 98.1 feet along the baseline. It measures 0.9 feet wide and 0.9 feet long, and has a combing that measures 0.3 feet thick. *Advance* was not reported to have a mizzenmast, so it is possible this step was associated with another piece of deck machinery near the cabin. The foremast step remains hidden beneath the silt and sand.

The centerboard trunk remains completely intact at 42.1 feet along the baseline. It stands upright on a slight 21-degree list to starboard. The centerboard trunk measures 26.9 feet in overall length, 1.5 feet wide, and stands 8.5 feet above the sand. It is made up of nine boards, each measuring 0.9 feet in width and 0.4 feet thick. The centerboard trunk covering board remains in place along the length of the centerboard trunk, measuring 1.5 feet wide and 0.4 feet thick. Two oval holes are located 1.8 feet inward from the ends of the covering board which allowed the centerboard chain to be raised and lowered. These holes measure 1.8 feet long and 0.8 feet wide. None of the centerboard chain was located during the survey. Through these holes, the centerboard can be seen intact inside the trunk.



Figure 16. *Advance*'s stern and stern post (Wisconsin Historical Society)

The midships section of *Advance* contains multiple pieces of debris and other components from the deck of the vessel, along with remnants of the vessel's mainmast. A large section of deck planking sits overturned against the vessel's upright hull on the starboard side, just next to the centerboard trunk, extending from 48.2 feet to 61.3 feet along the baseline. The deck planks measure 0.4 feet wide and 3.5 feet thick, matching the measurements of the forward sections of deck planking. The deck beams are not uniform, and have an alternating pattern of a single beam, followed by a double beam. The single beams measure 0.5 feet wide and the double beams measure 0.5 feet and 0.6 feet wide, and are spaced 1.8 feet apart. This is a unique construction feature, as most schooners are constructed with single deck beams, spaced evenly apart. This pattern was not identified on the forward deck section near the bow.

A single piece of the *Advance*'s mainmast lies within the hold, partially covered by sand, just aft of the centerboard on the vessel's port side. It measures 12.2 feet in length and has a diameter of 1.1 feet. From the remaining wood and metal components still attached to this section of the mast, it is possible to identify this as the lower extent of the main topmast with its trestletree. A metal band measuring 0.15 feet thick and 0.3 feet wide is wrapped around the mast section, 3.9 feet along its length. Just before the section extends into the sand, remnants of the masts crosstrees and trestletrees remain attached. The crosstrees measure 0.4 feet wide and 0.2 feet thick, while the section of the trestletree measures 0.6 feet wide and 0.25 feet thick.

Several of *Advance*'s hanging knees can still be identified, attached to the starboard side hull, at 69.0 feet, 74.3 feet, and 103.5 feet on the baseline. The hanging knees are 0.55 feet wide and measure 2.5 feet along the ceiling planking, and extend 2.9 feet out from the hull. At their thickest point, the knees measure 1.3 feet, and taper down to 0.2 feet thick near the ends. Along this same section of starboard side hull, the vessel's wooden hogging arch can be seen. It is comprised of a single timber, which measures 1.1 feet wide.

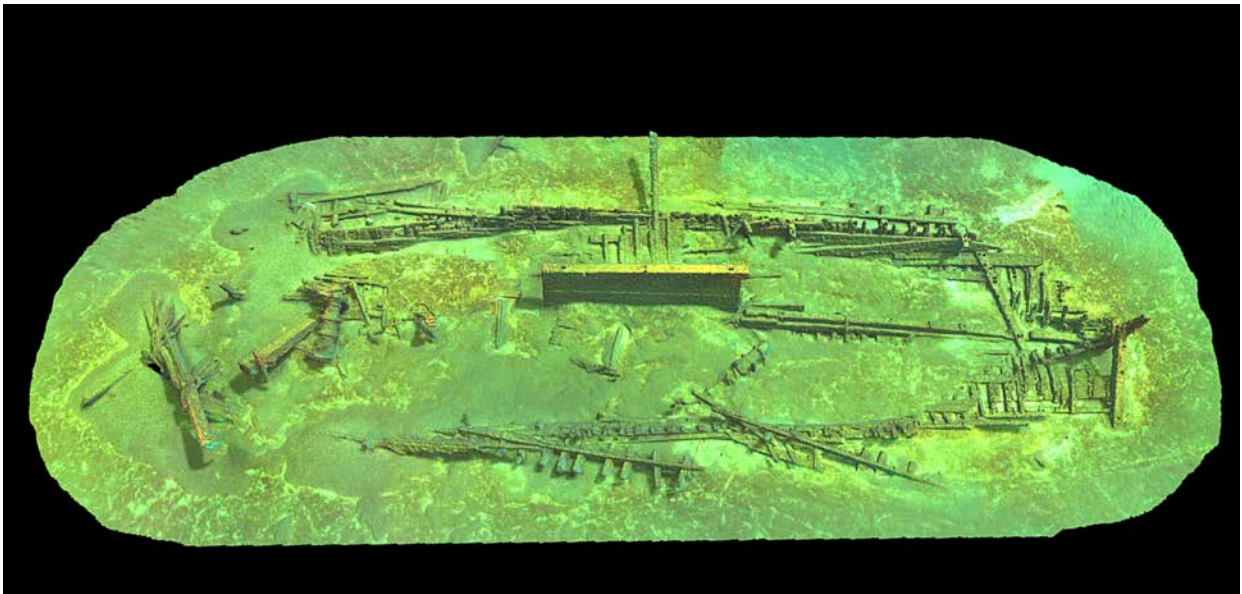


Figure 17. Photogrammetry model of *Advance* site (Ken Merryman)

The aft section of *Advance* remains intact, although the curve of the ship's buttocks has broken near the deadwood. The stern post stands upright 12.5 feet above the sand on a slight tilt aft, and measures 0.9 feet sided, and 0.8 feet molded. The vessel's rudder was not located during the survey; however, a gudgeon remains attached to the sternpost, 2.5 feet above the sand. Multiple gudgeons would have been attached to the sternpost, and the rudderpost would have had corresponding pintles attached to it, allowing the rudder to remain attached to the vessel and pivot freely.

Just forward of the sternpost, two riders sit atop the deadwood, each measuring 0.5 feet wide, and extending 3.9 feet forward of the stern post. The port side bottom transom timber has fallen, now sitting propped against the sternpost, and extending down into the sand. This timber measures 1.3 feet square, and 10.2 feet is exposed. At 105.2 feet along the baseline, a single large timber lays across the keelson and extends to the starboard side of the hull. It measures 1.0 feet wide and is 0.3 feet thick. This is likely a disarticulated section of ceiling planking.

Additional artifacts remain within *Advance*'s hull, visible above the moving sand. These include wire rigging measuring 0.1 in diameter, and other disarticulated timbers. Analysis of photos, videos, and 3D imaging of the *Advance* wreck site indicate that sand moves around the site quite often, and currents in the area remain relatively strong. Thus, at various points in the year, additional pieces of the vessel's hull and artifacts are covered and uncovered. Many more artifacts likely remain protected beneath the shifting sands. A search of the surrounding area did not locate any additional sections of *Advance*'s hull or artifacts.

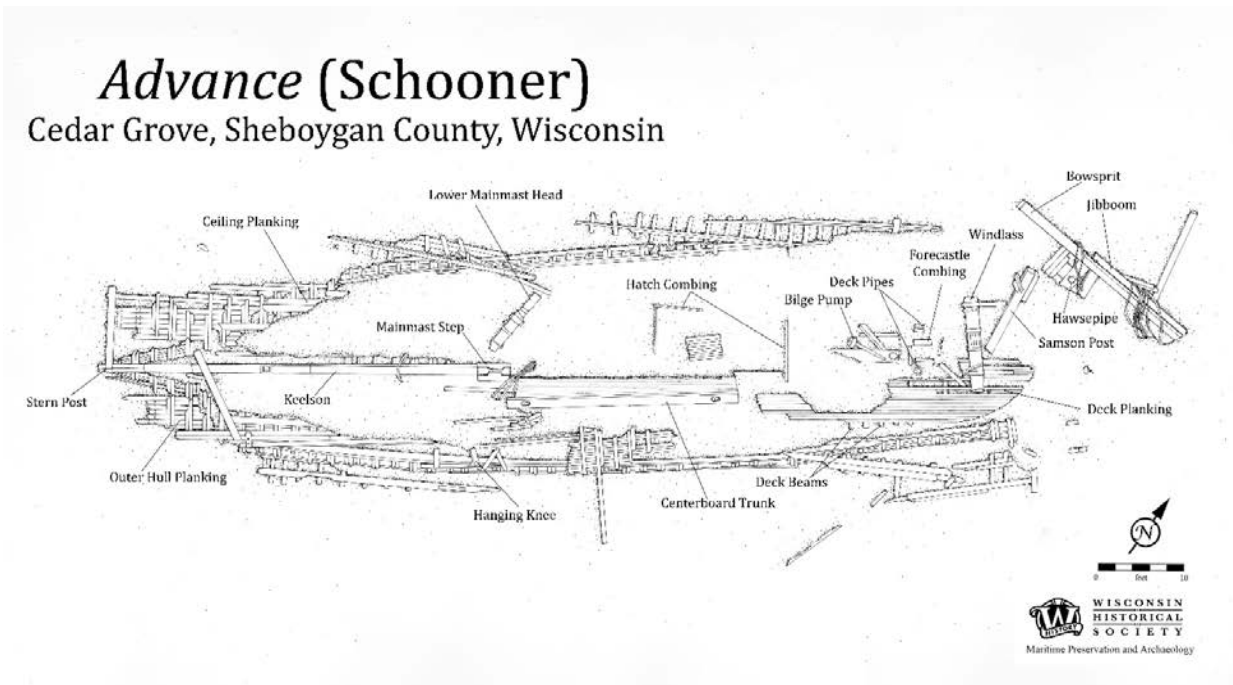


Figure 18. Site plan of *Advance* (Wisconsin Historical Society)

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CHAPTER FOUR SCHOONER *PEORIA*

The schooner *Peoria* was built by Master Carpenter, Alanson Gilmore at Black River, Ohio over the winter of 1853-54 for Charles H. Livingston, Lorain, Ohio's Postmaster, and Captain E.P. Frink (Bureau of Navigation 1854; U.S. Post Office Department). Its builder Alanson Gilmore was born 12 April 1805 in Chester, Massachusetts. He moved during his childhood to Lorain, Ohio where he became a skilled woodworker on his family's farm. As a young man he learned ship carpentering from pioneer shipbuilder, Captain Augustus Jones in Black River, Ohio, and worked for him on the construction of the sloop *William Tell* in 1828. For more than thirty-two years Gilmore practiced shipbuilding at various yards on Lake Erie (Weisman).

Peoria was registered on 18 May 1854 at the port of Cleveland. The ship was described as schooner-rigged with one deck, two masts, a square stern, and a scroll head. It measured 113 feet 7 inches long, 24 feet 4 inches breadth, 8 feet 11 inches depth, and was calculated at 226 4/95 tons. Its first Master was Captain W.W. Wells, and its homeport was listed as Black River, Ohio (Bureau of Navigation 1854).

The first sighting of the ship at Buffalo in June 1854 was acknowledged in the newspapers. The article indicated the intent of the ship's build was to trade at ports on the upper lakes (*Buffalo Daily Republic* 1854a). However, during its first season the ship brought various products from Lake Erie ports to Buffalo including corn from Toledo, and dimensional lumber, barrel staves, grindstones, corn, and oats from Black River (*Buffalo Commercial Advertiser* 1854a, 1854b, 1854c, 1854d, 1854e; *Buffalo Daily Republic* 1854a, 1854b, 1854c, 1854d, 1854e, 1854f, 1854g, 1854h; *Buffalo Morning Express and Illustrated Buffalo Express* 1854). At the end of November, the ship sailed to Milwaukee where it took aboard its first and only cargo from the upper lakes that season -- 10,000 bushels of wheat for Buffalo grain dealers Niles & Wheeler, as well as 75 barrels of flour for its owner, Charles Livingston (*Buffalo Commercial Advertiser* 1854f; *Buffalo Daily Republic* 1854i, 1854j).

In 1855, the ship was active from early May through mid-November. Only one cargo was fetched from the upper lakes; on 30 May, *Peoria* was chartered to carry wheat at 17 cents per bushel from Milwaukee to Oswego, New York (*Weekly Wisconsin* 1855). Other cargoes taken to Buffalo included staves from Toledo, Cleveland, Black River and Monroe, Michigan for several Buffalo lumber brokers, shipments of grindstones from Black River for Foot, Little & Co., and a split shipment of corn from Toledo for dealers, D.N. Tuttle and G.S. Hazard (*Buffalo Commercial Advertiser* 1855a, 1855b, 1855c; *Buffalo Daily Republic* 1855a, 1855b, 1855c, 1855d, 1855e, 1855f, 1855g, 1855h, 1855i; *Buffalo Morning Express and Illustrated Buffalo Express* 1855a, 1855b, 1855c, 1855d, 1855e). For one run in September Captain Wells was temporarily replaced at the helm by Captain Lucas (*Buffalo Morning Express and Illustrated Buffalo Express* 1855e).

Captain Frink was at *Peoria*'s helm for the first part of the 1856 season, but by August Captain Wells had returned. The ship brought staves to Buffalo from Monroe and Vermillion, oats from Vermillion, and corn and wheat from Toledo (*Buffalo Commercial Advertiser* 1856a, 1856b, *Buffalo Daily Republic* 1856a, 1856c; *Buffalo Morning Express and Illustrated Buffalo Express* 1856b, 1856c, 1856d, 1856e).

Two accidents occurred during the season. On the night of 17 July 1856, the *Peoria* and the schooner *North Carolina* were both light and up bound on Lake Erie when they collided. Although *North Carolina* sustained considerable damage and required a tow back to Buffalo for repair, the *Peoria* was only slightly injured and kept on her course for Erie (*Buffalo Morning Express and Illustrated Buffalo Express* 1856a). During a gale on 8 November, *Peoria* collided with the schooner *Wings of Wind* in the mouth of the Grand River, Port Maitland, Canada West. *Peoria* lost its rigging and had several stanchions carried away at a cost of \$100 in repairs (*Buffalo Commercial Advertiser* 1857a; *Buffalo Daily Republic* 1856b).

Because of a financial downturn in the markets following the Panic of 1857, *Peoria* was primarily active from June through the middle of September 1857. The vessel brought several shipments of staves to Buffalo from Black River and Monroe for dealers Dutton and Clark. In August it transported 300 tons of coal from Cleveland to Racine, Wisconsin, for the Racine Gas Light & Coke Company. When the ship returned to Lake Erie from Racine it carried 10,000 bushels of wheat to Buffalo. *Peoria* made a late season trip to Lake Michigan and took on a cargo of corn at Chicago, but inclement weather forced the ship into Milwaukee where it wintered over (*Buffalo Commercial Advertiser* 1857a, 1857b, 1857c; *Buffalo Courier* 1857a, 1857b; *Buffalo Daily Republic* 1857a, 1857b; *Buffalo Morning Express and Illustrated Buffalo Express* 1858; *Racine Journal* 1857).

With the Straits of Mackinac free from ice, *Peoria* cleared Chicago for Buffalo on 7 April 1858. Onboard was the 10,000 bushels of corn picked up at Chicago the previous fall and Captain Frink was at its helm (*Buffalo Morning Express and Illustrated Buffalo Express* 1858). Captain Frink remained in command throughout the season. The ship made monthly trips to Chicago to pick up its maximum capacity of 10,500 bushels of corn May through September with deliveries made to Buffalo and Oswego (*Buffalo Commercial Advertiser* 1858a, 1858b, 1858c; *Buffalo Daily Republic* 1858a, 1858b; *Chicago Tribune* 1858a, 1858b). On an up bound trip at the end of August, it hauled 2822 kegs of powder, 125,000 board feet of lumber, 60 barrels of lime, 39 barrels of turpentine, 18,000 bricks and 50 barrels of salt from Buffalo to Chicago (*Chicago Tribune* 1858a). During the season one delivery was made from Chicago to Buffalo with a cargo of red wheat, and one delivery from Oswego to Detroit with salt (*Buffalo Daily Republic* 1858c; *Detroit Free Press* 1858).

It is likely that *Peoria* wintered over at Chicago. On 10 April 1859 the ship cleared Chicago

light for Grand Haven, Michigan. At Grand Haven it picked up 140,000 board feet of lumber and 40,000 shingles for Chicago (*Chicago Tribune* 1859a, 1859b). On 21 May 1859 a new enrollment was entered at the port of Chicago for a change in owners and districts. Walter Lutt of Chicago became sole owner of the vessel. Chicago became *Peoria*'s new home port, but Captain Frink remained on as Master. It should be noted that the document erroneously records that *Peoria* was built in 1855, an error which was continued in entries through 1881 (Bureau of Navigation 1859).

Arrivals at Chicago were recorded 1 June with lath and lumber from Muskegon, 6 June with lumber from Grand River, 11 June with lath and lumber from Muskegon, 16 June with lumber from Green Bay, 8 July with lumber and pickets from Grand River, 15 July with lath and lumber from Muskegon and 21 July with lumber from Grand River. Lumber was delivered and unloaded on the same day, and the ship would typically clear Chicago light (*Chicago Tribune* 1859c, 1859d, 1859e, 1859f, 1859g, 1859h, 1859i). The vessel remained out of newsprint for the rest of July and throughout August. On 6 September 1859 *Peoria* landed another hull full of lumber from Grand River at Chicago and cleared for Muskegon light on the same day (*Chicago Tribune* 1859j). In October, the ship was chartered to carry wheat from Kenosha to Buffalo at 7 ½ cents per bushel. It returned to Lake Michigan and hauled lumber into the first week of December before laying up for the season (*Buffalo Courier* 1859; *Buffalo Morning Express and Illustrated Buffalo Express* 1859a, 1859b; *Chicago Tribune* 1859k).

Peoria eluded newsprint for the first part of the 1860 season. On 5 July the ship cleared Chicago with 10,500 bushels corn bound for Buffalo, arriving there only eleven days later (*Buffalo Courier* 1860a; *Buffalo Morning Express and Illustrated Buffalo Express* 1860a). The ship sailed light from Buffalo for Oconto, Wisconsin. There it picked up 130,000 feet of lumber, 6 cords of bolts, and 20,000 pickets for Buffalo. One more trip to Buffalo with wheat from Chicago was made before the end of August (*Racine Journal* 1860; *Buffalo Courier* 1860b; *Buffalo Morning Express and Illustrated Buffalo Express* 1860b; *Buffalo Daily Republic* 1860).

At the beginning of September, the ship was sold to lumber merchant Timothy Eastman of Chicago. On 11 September 1860, a new document was entered at the port of Chicago for this change in owner. Captain Frink remained in command of the schooner (Bureau of Navigation 1860). Eastman was one of the original white settlers on the Grand River in Michigan and founded the town of Eastmanville, Michigan, eventually leaving the day-to-day operations of the family lumber and milling businesses for his sons to operate while he handled the brokerage in Chicago (*Grand River Times* 1855; *Weekly Clarion* 1861).

Peoria made two trips from Chicago to Buffalo in September with corn and wheat, respectively, two trips in October and one trip in November with wheat (*Buffalo Commercial Advertiser* 1860a, 1860b; *Buffalo Courier* 1860c, 1860d, 1860e; *Buffalo Morning Express and Illustrated Buffalo Express* 1860c; *Chicago Tribune* 1860a, 1860b, 1860c; *Detroit Free Press* 1860). In

December *Peoria* delivered one shipment of lumber to Chicago from Green Bay. Captain Thompson was recorded at the helm upon entering Chicago. This change in Master was not entered into the ship's documents (*Chicago Tribune* 1860d).



Figure 19. Dr. Timothy Eastman (*Evening Tribune*)

A new enrollment was taken out at the port of Detroit on 11 March 1861. Timothy Eastman passed the ship on to his son, Galen Eastman of Eastmanville, who was entered on the document as sole owner and Master. Eastmanville became *Peoria*'s new homeport (Bureau of Navigation 1861). Galen Eastman was a general merchant and ran the sawmill at Eastmanville "doing a brisk business in supplying the excellent mill he owns at that place, with logs of pine and oak, and has teams engaged in other Townships in banking logs to be rafted to his mill, preparatory to manufacture, for Chicago and other Western markets" (*Grand Haven News* 1860).

Despite Galen Eastman being listed as Master, *Peoria* continued to be sailed under Captain Thompson at the beginning of the season, but he was replaced in May by Captain John Elsey. The ship cleared the port of Buffalo 13 April 1861 for its first trip west for the season. The vessel carried corn and wheat from Chicago to Oswego, Port Colborne, and Buffalo through the end of November (*Buffalo Commercial Advertiser* 1861a, 1861b, 1861c, 1861d, 1861e, 1861f, 1861g, 1861h, 1861i, 1861j; *Buffalo Courier* 1861; *Buffalo Morning Express and Illustrated Buffalo Express* 1861a, 1861b; *Chicago Tribune* 1861a, 1861b, 1861c, 1861d, 1861e, 1861f, 1861g, 1861h, 1861i, 1861k). It mostly returned light except on two occasions. When the ship arrived back at Chicago on 2 November, it was loaded with 90,000 feet of lumber from Sarnia, Canada West, and on 10 December it carried 100,000 feet of lumber and 175,000 pieces of lath from Buffalo (*Chicago Tribune* 1861j; 1861l).

On the morning of 17 December 1861, four men were in a small skiff taking in their fishing nets off the harbor at Grand Haven. *Peoria* was out bound when it ran over their boat, overturning and shattering it and caused three of the fishermen to drown. The fourth man survived by clinging to a piece wreckage. The lost fishermen, Peter D. Haus, Marion Verhulg, and Patrick Walker were recent immigrants from Holland living in Grand Haven. The Chicago police were waiting at the dock to intercept the *Peoria* on arrival and arrested the captain and seven crewmembers. *Peoria*'s crew was transported to Grand Haven for questioning, and the captain and mate were jailed and held over to appear in Circuit Court. The penalties are unknown (*Chicago Tribune* 1861m, 1861n; *Cleveland Daily Leader* 1861; *Detroit Free Press* 1861; *Evansville Daily Journal* 1861).

A new enrollment was entered in the port of Chicago on 6 March 1862. The partnership of Zacharias Peterson (1/4 share), Barent Tobiason (1/4 share), Isaac Nelson (1/6 share) and brothers, B. Olson (1/6 share) and J. Olson (1/6 share), purchased the ship. All parties lived in Chicago and Chicago was reinstated as *Peoria*'s homeport. Zacharia Peterson became Master but also served as managing owner for the vessel (Bureau of Navigation 1862).

Peoria started the season with a run to Buffalo with wheat on 26 April 1862. When it returned to Chicago it brought 235,000 feet of lumber from Muskegon. Another trip with wheat was conducted at the end of June and when the ship returned to Chicago it delivered 1,500 posts and 1,000 railroad ties from Buffalo. *Peoria* made trips with wheat to Buffalo in July, August and at the end of October (*Buffalo Commercial Advertiser* 1862a, 1862b, 1862c, 1862d, 1862e; *Buffalo Courier* 1862a; *Chicago Tribune* 1862a, 1862b, 1862c; *Evening Courier and Republic* 1862). During the October trip down the lakes, its main boom was carried away; a new one was procured at Detroit and the ship was back in service without much delay (*Buffalo Courier* 1862b). On the next entry at Chicago, 125,000 feet of lumber and 30,000 pieces of lath were delivered from St. Clair (*Chicago Tribune* 1862d). The schooner managed one more trip to Buffalo with wheat before the close of navigation for winter (*Buffalo Commercial Advertiser* 1862f; *Detroit Free Press* 1862).

As *Peoria* was clearing Buffalo on 4 April 1863, it was discovered by the Customs Office that its certificate had expired. A temporary enrollment was issued. A new ownership arrangement was expressed in the papers, Martin Olson bought out Zacharias Peterson (1/4 share), but the other partners remained the same: Barent Tobiason (1/4 share), Isaac Nelson (1/6 share), B. Olson (1/6 share) and J. Olson (1/6 share). The ship also had a new master, Captain Christian Brown at its helm. It should be noted that on this document the place of build was updated to Cleveland, and this is carried forward on all subsequent papers (Bureau of Navigation 1863a). A permanent enrollment was taken out at Chicago on 7 May 1863 when the ship returned home which indicated Martin Olson as managing owner (Bureau of Navigation 1863b).

Peoria sailed from Chicago to Buffalo in May and June 1863 with 10,000 bushels of wheat

each trip. In May the freight rate was 9 cents per bushel, and in June this increased to 10 ½ cents per bushel (*Buffalo Commercial Advertiser* 1863a, 1863b; *Buffalo Courier* 1863a; *Chicago Tribune* 1863a, 1863b, 1863c, 1863d). When the ship arrived at Chicago on 4 August, it brought 70,000 feet of lumber and 20,000 pieces of lath from Green Bay (*Chicago Tribune* 1863e). On 17 August 1863, *Peoria* cleared Chicago for Saginaw, Michigan with 6,000 bushels of corn, 2,000 bushels of oats and 200 barrels of flour, and returned from Saginaw with 145,000 feet of lumber (*Chicago Tribune* 1863f, 1863g). The ship was idle in September.

The next arrival recorded at Chicago was on 7 October with 125 cords of wood and a new captain at its wheel, Captain Newton. (*Chicago Tribune* 1863h). On the next arrival on 23 October with lumber and lath from Grand Haven, another new captain was in command, Captain Anderson (*Chicago Tribune* 1863i). Captain Anderson remained with the ship through its last run of the season where they carried 10,500 bushels of wheat from Milwaukee for Buffalo grain dealer F.L. Sheldon. *Peoria* departed Milwaukee on 29 October, arrived at Buffalo on 7 November and cleared the same day for Chicago where it took up winter quarters (*Buffalo Commercial Advertiser* 1863c, 1863d; *Buffalo Courier* 1863b; *Chicago Tribune* 1863j).

On 18 April 1864, a new enrollment was entered at the port of Chicago for a change in owners. Martin Olson remained with the vessel owning 2/8 share, but he took on Peter Jacobson and Captain Ole G. Christenson as partners, each with a 3/8 share. All men resided in Chicago and Chicago remained *Peoria's* homeport. Captain Christenson became the schooner's new Master (Bureau of Navigation 1864).

The ship's first departure from Chicago for the season was recorded on 7 May 1864 with wheat bound for Buffalo consigned to grain merchant A.W. Horton. *Peoria* returned to Chicago by way of Oconto and delivered 120,000 feet of lumber upon arrival. The schooner made another trip to Buffalo with wheat in June and returned with cordwood from Grand Traverse. Additional deliveries of cordwood from Grand Traverse were landed at Chicago on 17 October and 5 December. Sundries were also brought in with the 5 December shipment (*Buffalo Commercial Advertiser* 1864a, 1864b, 1864c, 1864d; *Buffalo Courier* 1864a, 1864b; *Chicago Tribune* 1864a, 1864b, 1864c, 1864d).

At the start of the 1865-season, *Peoria* again received new owners. Joseph Collatin (oftentimes spelled Culliton) and Peter Fortune both of Chicago became equal owners in the vessel and a new enrollment was entered at port of Chicago on 13 April 1865. At this time the ship was remeasured at 112.2 feet long, 24.7 feet breadth and 8.8 feet depth of hold. Tonnage was calculated at 172 37/100 ton, with 164.82 tons capacity under the tonnage deck and 7.55 tons capacity of enclosures on the upper deck, for a total tonnage of 172.37 tons. It should be noted that the vessel description largely remained the same, except with this document going forward the schooner was described as having a plain head (Bureau of Navigation 1865). The ship called

at Saginaw, Bay City, and Green Bay throughout the season and delivered dimensional lumber and staves to the Chicago lumber market (*Buffalo Commercial Advertiser* 1865a, 1865b; *Buffalo Morning Express and Illustrated Buffalo Express* 1865; *Chicago Tribune* 1865a). On 23 November 1865 Captain Joseph Collatin died at Chicago (*Detroit Free Press* 1865; *Chicago Tribune* 1865c). A final trip of the season brought 235 tons pig iron to Chicago from Kingston, Canada West, on 6 December. Captain Finn stood in for the passage (*Chicago Tribune* 1865b).

An advertisement was taken out in the *Chicago Tribune* on 12 January 1866 offering the schooner *Peoria* for sale and directing inquiries to 193 South Market Street, Chicago. By the middle of March 1866, James W. Lawrence and Anton Berg agreed to 1/3 share each, and a combined buy in of \$4,666.67, and by the end of March another 1/3 share was sold to James T. Young for \$1,500 (*Buffalo Courier* 1866a; *Chicago Tribune* 1866a, 1866b). On 2 April 1866, a new enrollment was entered at the port of Chicago listing James T. Young, James W. Lawrence, and Anton Berg of Chicago as equal 1/3 owners of the schooner *Peoria*. Chicago remained the vessel's homeport and Captain William Hamilton became its new Master (Bureau of Navigation 1866a). The ship visited Sandy Bay Dock (Kewaunee County), Dean & Taylor's Pier at Carlton, Grand Haven and Menomonee for lumber, cordwood, posts and ties, all delivered at Chicago (*Chicago Tribune* 1866c, 1866d, 1866e, 1866f, 1866g; *Kewaunee Enterprise* 1866). On 25 October, *Peoria* was sold to William Walsh of Chicago and a new enrollment was entered at the port of Chicago listing him as sole owner. Captain George F. Foss took over the helm (Bureau of Navigation 1866b).

Over the winter months William Walsh sold a ¼ share in the vessel to Captain Samuel Marshall of Chicago for \$2,000. A new enrollment was entered at the port of Chicago on 2 April 1867 for the change in ownership. Captain Marshall became *Peoria*'s new Master (Bureau of Navigation 1867; *Chicago Tribune* 1867b). The ship made a trip to Dean's Pier in Kewaunee County for ties in May. It remained out of the newsprint in June, July, and August. In September, it was chartered to take wheat from Milwaukee to Ogdensburg at 15 cents per bushel and 11,200 bushels of wheat were loaded aboard, departing on 7 September. When the ship returned to Chicago it brought 150,000 feet of lumber from Ogdensburg. For its last run of October 1867, the ship was chartered to carry pig iron from Milwaukee to Chicago at \$3.50 (*Chicago Tribune* 1867a, 1867c, 1867d, 1867e, 1867f; *Buffalo Commercial Advertiser* 1867).

In April 1868, *Peoria* was chartered to carry rye from Chicago to Buffalo at 10 cents per bushel for grain dealer R.R. Buck. The ship loaded 12,001 bushels of rye and departed Chicago on 23 April (*Buffalo Commercial Advertiser* 1868a, 1868b; *Buffalo Courier* 1868a; *Detroit Free Press* 1868). In May the schooner was chartered by Barton J. Jones to transport strips and balance boards at 60 cents and \$13.00, respectively, from Muskegon to the Chicago Lumber Market (*Chicago Tribune* 1868). *Peoria* was absent from newsprint June through August. In September it hauled corn for grain merchant Barclay, Bruce & Co. from Chicago to Buffalo (*Buffalo Commercial Advertiser* 1868c, 1868d; *Daily Milwaukee News* 1868). In November it delivered

65,228 ft. lumber from Harrisville to Buffalo for J.S. Noyes & Co. before returning to Chicago for winter lay up (*Buffalo Commercial Advertiser* 1868e; *Buffalo Courier* 1868b).

A new enrollment was entered at the port of Chicago on 18 February 1869. William Walsh bought out his partner to become sole owner and Master of the *Peoria* (Bureau of Navigation 1869). The ship was out of winter quarters in early April calling at Ahnapee for ties on its first trip of the 1869 season. *Peoria* made two more trips to Ahnapee in April and early May for cordwood consigned to S. Perry. Next, the ship collected lumber, strips, lath and pickets from Grand River for dealer J.P Hart to sell in the Chicago Lumber Market (*Chicago Tribune* 1869a, 1869b, 1869c; *Kewaunee Enterprise* 1869a, 1869b). On 17 June 1869, *Peoria* ran into the barge *Trader* at the Twelfth Street bridge in the Chicago River causing minor damage to both vessels (*Buffalo Commercial Advertiser* 1869). Through the middle of August, the schooner brought lumber to Chicago from Red River, Grand River, Wolf River, and Ford River. No information on its movements were located for the remainder of the season (*Chicago Tribune* 1869d, 1869e; *Detroit Free Press* 1869a, 1869b).

The ship travelled to Kewaunee, Muskegon, Jacksonport, Manistique, Grand Haven, Davis' Pier, Pere Marquette and Bay City to collect lumber cargoes from April through September 1870. All shipments were sent to Chicago, except for one cargo of Norway spruce boards and strips that was delivered to Milwaukee on 31 May (*Chicago Tribune* 1870a, 1870b, 1870c, 1870d, 1870e, 1870f, 1870g, 1870h, 1870i, 1870j, 1870k; *Daily Milwaukee News* 1870). On 27 June 1870 the schooner entered Chicago with Captain Belle at the helm. This change in Master was not indicated on the vessel's documents (*Chicago Tribune* 1870h). In October the ship was chartered to carry wheat and on 14 October it cleared Chicago for Goderich, Ontario with 11,027 bushels aboard. Before returning to Chicago the ship came into Grand Haven and loaded 6,000 feet of lumber and 60 cords of wood (*Buffalo Morning Express and Illustrated Buffalo Express* 1870; *Buffalo Commercial Advertiser* 1870; *Chicago Tribune* 1870l).

Peoria remained on Lake Michigan for the 1871-season. Lumber was collected at Manistee, Baileys Harbor, Muskegon, Ludwig Pier, but mostly from Ludington after mid-May. The early season shipments were sold by Blanchard, Borland & Co. but the shipments originating in Ludington were sold by R.K. Bickford & Co. in the Chicago Lumber Market (*Chicago Tribune* 1871a, 1871b, 1871c, 1871d, 1871e, 1871f, 1871g, 1871h, 1871i, 1871j, 1871k, 1871l, 1871m, 1871n, 1871o, 1871p; *Door County Advocate* 1871; *Green Bay Weekly Gazette* 1871a, 1871b)

The ship fitted out for service during the first week of April 1872. On 15 April it cleared Chicago light for Kewaunee where it took onboard 4150 railroad ties and sundries. *Peoria* arrived at Chicago on 22 April, unloaded, and cleared the same day with sundries for Ludington (*Chicago Tribune* 1872a; *Inter Ocean* 1872a). Additional trips to Ludington and Muskegon were made for lumber in April (*Inter Ocean* 1872b, 1872c). On 2 May the ship departed Chicago for Ford River with 300 bushels of oats, 60 barrels of beef, 30 barrels of pork, and 20

barrels of flour. When it returned to Chicago it brought sundries (*Inter Ocean* 1872d, 1872e).

Lumber was delivered at Chicago from Ford River, Wilmette City, Frankfort, and Manistique through July. Shipments of corn were taken to Collingwood, Ontario in early July, and again in August and September (*Buffalo Commercial Advertiser* 1871a; *Chicago Tribune* 1872b, 1872c, 1872d, 1872e, 1872f; *Detroit Free Press* 1872a, 1872b). Corn was shipped from Chicago to Buffalo in October and oats to Goderich, Ontario in November. Rough weather and heavy snow welcomed *Peoria* on its arrival at Goderich on 18 November 1871 and the ship sheltered in the harbor for several days. The schooner brought 1,700 barrels of salt from Goderich to Chicago on the return trip. After *Peoria* arrived at Chicago on 3 December it went into winter quarters (*Buffalo Commercial Advertiser* 1872b, 1872c; *Buffalo Morning Express and Illustrated Buffalo Express* 1872; *Chicago Tribune* 1872g, 1872h, 1872i).

A change in ownership occurred again in 1873. John Oliver and John Hanson purchased the ship from William Walsh for \$8,000 and became equal ½ owners of the schooner. A new enrollment was entered at the port of Chicago on 6 February 1873. Both men resided in Chicago and Chicago remained *Peoria*'s homeport. Captain John Oliver was listed as the ship's new Master (*Chicago Tribune* 1873a; Bureau of Navigation 1873). The schooner ran corn on its first trip of the year clearing Chicago on 30 April and arriving at Buffalo on 19 May (*Buffalo Commercial Advertiser* 1873a; *Buffalo Morning Express and Illustrated Buffalo Express* 1873a).

The next trip kept the ship on Lake Erie. It was chartered for salt from Buffalo to Cleveland at 6 cents per barrel. At Cleveland, it picked up coal to be taken to Detroit at 70 cents per ton and from Detroit pipe staves were brought to Buffalo at \$14 per thousand. For this trip Captain John Hanson was at the helm (*Buffalo Commercial Advertiser* 1873b, 1873c, 1873d; *Buffalo Morning Express and Illustrated Buffalo Express* 1873b; *Detroit Free Press* 1873). The ship returned to Lake Michigan in July and August bringing two loads of lumber from Manistee to Chicago (*Chicago Tribune* 1873b, 1873c). At the end of August, the ship carried 7,915 bushels of oats, 2,097 bushels of corn, 50 barrels of flour, 20 barrels of meal, and 488 bags bran from Chicago to Alpena, Michigan (*Chicago Tribune* 1873d). *Peoria* returned to lumber in October, bringing four shipments to Chicago from Muskegon, Manistee, and White Lake and was active until the end of November 1873 (*Chicago Tribune* 1873e, 1873f, 1873g, 1873h).

Peoria was kept on Lake Michigan in 1874 and engaged primarily in moving dimensional lumber from Muskegon to Chicago. Sixteen near-weekly shipments were recorded from Muskegon during the season, with as many as four landed in the months of April and May. In addition to Muskegon, one cargo was brought from Menominee in July and two cargoes from Ludington in November. On 9 June, its jibboom was lost during a blow which delayed the ship temporarily (*Chicago Tribune* 1874a, 1874b, 1874c, 1874d, 1874e; *Inter Ocean* 1874a, 1874b, 1874c, 1874d, 1874e, 1874f, 1874g, 1874h, 1874i, 1874j, 1874k, 1874l, 1874m, 1874n, 1874o).

Like the previous season, in 1875 *Peoria* focused its effort bringing lumber from Muskegon to Chicago. Eleven shipments of lumber were delivered from Muskegon. In most cases the vessel departed Chicago light, however on 6 July it cleared with 200 bushels of oats. In July the ship was taken to Miller Brothers' shipyard and placed in dry dock to repair a persistent leak. Two arrivals in November were recorded from Manistee, one with lumber, and one with 2,200 bushels of corn and 1,800 bushels of oats (*Chicago Tribune* 1875a, 1875b, 1875c, 1875d, 1875e, 1875f, 1875g; *Inter Ocean* 1875a, 1875b, 1875c, 1875d, 1875e, 1875f, 1875g, 1875h, 1875i, 1875j).

Nine deliveries were made to Chicago from Muskegon during the 1876 season, as well as one from White Lake and two from Manistee. One cargo of lumber from Muskegon was delivered to South Chicago rather than the typical Chicago Lumber Market docks (*Chicago Tribune* 1876b, 1876c, 1876d, 1876e, 1876f, 1876g, 1876h, 1876i, 1876j, 1876k, 1876l, 1876m; *Inter Ocean* 1876a, 1876b). On 1 June 1876 *Peoria* collided with the schooner *Bessie Boalt* when opposite the Chicago Lumber Market docks and lost its anchor stock (*Chicago Tribune* 1876a). Although repairs were not initially undertaken, on 14 September, *Peoria* began leaking badly while crossing the lake lumber laden and it was taken back to the dry dock (*Chicago Tribune* 1876h).

Peoria carried lumber and shingles to Chicago from Muskegon, Manistee, Ludington, Sturgeon Bay, and Little Sturgeon during the 1877-season (*Chicago Tribune* 1877a, 1877b; *Inter Ocean* 1877a, 1877b, 1877e, 1877h; *Weekly Expositor Independent* 1877). Although Captain Hanson was recorded at the schooner's helm in April at some point that spring, he was replaced by Captain Martin Sherry. This change in Master went unrecorded in the ship's papers. Captain Hanson returned to command on 6 August 1877 (Bureau of Navigation 1873; *Inter Ocean* 1877a, 1877d).

At the beginning of October 1877 sailors organized in Chicago to strike for an increase in wages from \$1.50 per day to \$2. On 3 October more than thirty sailors rampaged on the docks along the Chicago River. At 3PM they came to the schooner *Peoria* that was lying at the foot of North Franklin Street and ordered the crew off. As the crowd approached, Captain Hanson cut the ship's lines to avoid the conflict (*Buffalo Commercial Advertiser* 1877).

Several incidents resulting in minor damage occurred during the 1877 season. On 16 July, *Peoria* was tied near the Lake Street bridge in the Chicago River when the passing schooner *Avondale*, in tow of the tug *Monitor*, was swept against it and *Peoria*'s jibboom was carried away (*Chicago Tribune* 1877c; *Inter Ocean* 1877c). On 20 September when it entered the Burlington Slip to deliver lumber, *Peoria*'s cathead became hung up and was lost, and on 12 October the ship lost its staysail on the lake (*Inter Ocean* 1877f, 1877g). While approaching Chicago on the night of 16 October, the tugs *Monitor* and *American Eagle* began racing toward *Peoria*, fighting for the business of the schooner's requested tow into the harbor. The two tugs

collided and gave a “hard bump” to *Peoria* (*Chicago Tribune* 1877d).

During the spring of 1878, *Peoria* brought lumber from Manistee and posts from Cedar River to Chicago (*Chicago Tribune* 1878a, 1878b). In July the ship transported grain to Kingston, Ontario. When it returned to Chicago at the end of the month, it came in with a cargo of lumber and was said to be “leaking freely.” The crew were made to work the pumps through the night to keep up with the leak. Once the ship was unloaded, it was taken to the dry dock (*Gazette* 1878; *Inter Ocean* 1878a). *Peoria* returned to service in August and engaged in carrying lumber from Muskegon and Manistee to Chicago for the remainder of the season (*Chicago Tribune* 1878c, 1878d, 1878f, 1878g; *Detroit Free Press* 1878a, 1878b).

Several accidents occurred during the 1878 season. On 13 August, *Peoria* had her martingale carried away while entering the lumber market docks. On 29 October, its yawl was run over and shattered by a tug, and on 6 November the ship came into Chicago with a split mainsail (*Chicago Tribune* 1878e; *Detroit Free Press* 1878c; *Inter Ocean* 1878b).

A strong pull toward unionization of the sailors continued in Chicago into 1879. It was reported that at the beginning of the season the owners of the *Peoria* were holding out and employing non-union sailors at the rate of \$1.75 per day (*Chicago Tribune* 1879a). Whether the owners were able to hire a non-union crew or succumbed to the union’s demands, is not known, but the ship was delayed in starting its season and began sailing during the second week of May. Lumber and shingles were brought to Chicago from Manistee, Sturgeon Bay, Ludington, Red River, Muskegon, and White Lake during the season (*Chicago Tribune* 1879b, 1879c, 1879d, 1879e, 1879f, 1879g, 1879h, 1879i, 1879j, 1879k, 1879l, 1879n, 1879o, 1879p, 1879q, 1879r, 1879s, 1879t, 1879u; *Inter Ocean* 1879b). One cargo of lumber was delivered at Kenosha in May (*Inter Ocean* 1879a). While the *Peoria* was docking at the Chicago Lumber Market on 15 September, its spritsail yard was carried away and the line to the sail ran afoul in the propeller of the tug *Flossie Thielcke* (*Chicago Tribune* 1879m).

Lumber and ties were brought to Chicago from Muskegon, Baileys Harbor, Pine Lake, Grand Haven during the 1880-season (*Chicago Tribune* 1880a, 1880c, 1880d, 1880e, 1880f, 1880g, 1880h, 1880i, 1880j, 1880k, 1880l, 1880m, 1880n, 1880o, 1880p, 1880q, 1880r, 1880s, 1880u, 1880v, 1880w, 1880x, 1880y, 1880z, 1880aa; *Inter Ocean* 1880). One cargo of hardwood lumber was picked up at Traverse City and taken to Milwaukee in May (*Chicago Tribune* 1880b). The problem with leaking persisted. On 9 September, *Peoria* was returned to the Miller Brothers’ dry dock where it received a thorough re-caulking. The ship was returned to service on 13 September (*Chicago Tribune* 1880t; 1880u).

Just after dark on the night of 16 October 1880, the schooner *Peoria* ran aground in tremendous sea on an outer reef near the Bailey Harbor lighthouse. Captain Peter A. Hogan, who was not acknowledged in the vessel’s documents, was in command of the schooner. The ship was

loaded with lumber laden from Grand Haven when it went on the reef in six feet of water. After several fruitless attempts throughout the day of 17 October to rescue the crew, Captain Lewis Lawson of the schooner *Conway* with a picked crew consisting of Ernest Carrington, Paul Anderson, John Raymond and James Brooks, succeeded in taking the men off the wreck just before dusk (*Chicago Tribune* 1880ab; 1880ac; *Door County Advocate* 1880a, 1880b, 1880c; *Wisconsin State Journal* 1880). The storm that claimed *Peoria*, later became known as the “Great Storm of 1880,” “The Big Blow,” and the “Alpena Gale” due to the loss of the steamer *Alpena*. In the fifty miles between Kewaunee and Deaths Door Passage twenty vessels stranded, seven going ashore at Baileys Harbor alone including the schooner *Peoria* (*Door County Advocate* 1886c).

Captain John Hanson went to the wreck the following week. There was hope that the outfit could be saved but with respect to its hull, by the end of October the ship was reported in bad condition and was abandoned. Its enrollment was surrendered at the port of Chicago. There was no insurance on the vessel. Wreckers Scofield & Co. of Chicago were contracted to send at tug and lighter to Baileys Harbor to recover the lumber inside the schooner for John Mason Loomis & Co., consignee of the cargo. *Peoria*’s wreck was sold to Door County residents Captain George Bennett and Lincoln Erskine for \$100 for scrapping (Bureau of Navigation 1873; *Chicago Daily Tribune* 1880ad; *Door County Advocate* 1880c; *Weekly Expositor Independent* 1880).

In February 1881, Captain Bennett made his way out to the wreck and examined it discovering that it was sitting on a flat rock. He surmised that it could very likely be salvaged and sail again (*Door County Advocate* 1881a; *Chicago Daily Tribune* 1881a; *Green Bay Weekly Gazette* 1881a). On 7 April Erskine and Bennett sold *Peoria* to Scofield & Co. for \$600 with the anticipation that they would repair the ship and either sell or place the ship in commission (*Ahnapee Record* 1881a; *Chicago Tribune* 1881b, 1881c; *Door County Advocate* 1881b; *Weekly Expositor Independent* 1881a, 1881b). On 22 April the tug *John Leathem* went to Baileys Harbor to release the schooner, but the ship was found to be hard on. The tug *Tillson* was dispatched a day later with a steam pump (*Chicago Tribune* 1881d; *Green Bay Weekly Gazette* 1881b; *Weekly Expositor Independent* 1881c). Lighters were procured and a portion of the lumber cargo in its hold was removed. The wrecking tugs *Martin*, *John Gregory* and *Leviathan* came to the ship’s aid and attempts were made to lift the ship with jackscrews to no avail. Next, two scows were sunk on each side of the craft and tied to the vessel with the intention of pumping them out and raising the schooner. This too was unsuccessful. On 14 May with the force of the three tugs, the ship was spun around and pulled into deeper water. The tug *John Gregory* towed *Peoria* into Baileys Harbor. The cost to release *Peoria* was estimated at \$1,000 (*Ahnapee Record* 1881b, 1881c; *Chicago Tribune* 1881e, 1881f, 1881g, 1881i; *Door County Advocate* 1881c, 1881d, 1881e, 1881f, 1881k; *Green Bay Advocate* 1881a; *Inter Ocean* 1881a, 1881b, 1881c; *Manitowoc Pilot* 1881; *Weekly Expositor Independent* 1881d, 1881e).

The next day, 60,000 feet of lumber along with 300 ties were placed in *Peoria*'s hold to help float the schooner but *Peoria*'s decks remained about 1 1/2 feet under water. The tug *John Leatham* took *Peoria* in a hip tow, bound for Milwaukee. The tug and schooner departed Baileys Harbor at 2PM and arrived at Milwaukee at 9AM on 18 May *Peoria* sank upon arrival. A canvas jacket was added and a steam pump placed aboard, and the ship was raised again. The schooner was placed in the dry dock and a survey showed her bottom required significant repair. It was determined that the ship would require a new keel and other general repairs at a cost of \$1,200 (*Ahnapee Record* 1881c; *Chicago Tribune* 1881h; *Door County Advocate* 1881f).

On 2 June 1881, *Peoria* was launched following repairs and preparations for the ship to go into commission began. The vessel departed Milwaukee and passed through Sturgeon Bay on 10 June bound for Red River to fetch a cargo of lumber and shingles. The cargo was landed at Chicago on 17 June and at the helm was Captain William Morrow, who was reported to also be part owner. A second trip to Red River followed, but at the helm was Captain Alex Laurie (*Ahnapee Record* 1881d; *Chicago Tribune* 1881j, 1881k; *Door County Advocate* 1881g, 1881h, 1881i; *Inter Ocean* 1881d, 1881e).

A new enrollment was taken out at the port of Milwaukee on 25 June 1881. Charles Scofield, John Leatham and Thomas H. Smith of Sturgeon Bay were equal 1/3 owners. Milwaukee became the vessel's new homeport and John Leatham was listed as Master (Bureau of Navigation 1881a). The ship made two more trips to Red River in July (*Inter Ocean* 1881f, 1881g, 1881h). During the first trip, the ship received a new bowsprit at Green Bay (*Green Bay Advocate* 1881b).

While bound to Chicago with the second shipment of shingles on 22 July, *Peoria* was caught in a storm off Port Clinton, Illinois, 12 miles south of Waukegan, and forced to set anchor. At dark the chain parted, and as Captain Morrow was setting the auxiliary anchor, the deck load shifted, and the vessel began to leak. The seas were running high, bringing water onto the deck and into the hold, and the pumps were not keeping up. The steambarge *Francis Hinton* came to their aid, taking the ship in tow to Chicago where it was pumped out and repaired (*Door County Advocate* 1881j). In the following days, Captain Morrow resigned his command. He was replaced by William Armstrong of Ahnapee. Captain Armstrong was formerly the Mate of the schooner *Conquest*, and this was his first command (*Ahnapee Record* 1881e; *Buffalo Evening News* 1881). No information was found for the ship's movements in August.

On 3 September 1881, a temporary enrollment was entered at the port of Chicago. Captain William Armstrong surrendered the previous document as the vessel's owner arrangement had changed while away from its home district. The new paperwork indicated that Thomas H. Smith and John Leatham were equal 1/2 owners, having bought out Charles Scofield (Bureau of Navigation 1881b). It was not until 17 October that a permanent enrollment was entered at the port of Milwaukee (Bureau of Navigation 1881c).

The ship collected lumber products from White Lake, Sturgeon Bay, White River, Red River, and Muskegon for the Chicago market through the remainder of the year (*Chicago Tribune* 1881, 1881m, 1881n, 1881o, 1881p, 1881r; *Door County Advocate* 1881l, 1881m, 1881n; *Inter Ocean* 1881i, 1881j, 1881k, 1881l). A few incidents occurred during the season. On 16 September *Peoria* lost her flying-jib during a trip to Sturgeon Bay (*Weekly Expositor Independent* 1881f). The schooner was forced into Milwaukee to seek shelter on 14 October (*Chicago Tribune* 1881q). During the first week of December 1881, *Peoria* put up for the winter at Ahnapee (*Inter Ocean* 1881m; *Ahnapee Record* 1881f).

Over the winter months, *Peoria* received a fresh coat of black paint with red trim and a general overhaul. Joining Captain Armstrong on the ship for the season, was Peter Nelson of Ahnapee as Mate (*Ahnapee Record* 1882a, 1882b; *Door County Advocate* 1882a, 1882b; *Green Bay Press-Gazette* 1882). The ship cleared Ahnapee for its first outing of the 1882-season in late March with ties shipped to Chicago (*Ahnapee Record* 1882c; *Chicago Tribune* 1882a; *Door County Advocate* 1882c).

From April through July, *Peoria* was busy hauling cedar ties from Red River and cedar posts from Cedar River to Chicago for Leathem & Smith. Leathem & Smith had stockpiled 150,000 ties and posts on 6,400 acres in different sections of Menominee County on the west shores of Green Bay. Eight miles south of Cedar River the firm built a pier to ship the products from their cedar lands (later this landing took the name Leathem). Captain Armstrong's wife joined him aboard for much of June.

At the end of July, the company shut down their mill at Red River "for want of logs" and cedar cargo was picked up from the company mill at Sturgeon Bay (*Ahnapee Record* 1882d, 1882e; *Door County Advocate* 1882d, 1882e, 1882f, 1882g; *Chicago Tribune* 1882b, 1882c, 1882d, 1882e, 1882f; *Inter Ocean* 1882a; *Weekly Expositor Independent* 1882). With cedar cargoes becoming scarce, the ship began calling at Whitefish Bay and Rochereau Point in September and October (*Chicago Tribune* 1882g, 1882h, 1882i; *Inter Ocean* 1882b). *Peoria* was wind bound for several days in November at Racine and went into winter quarters shortly thereafter (*Journal Times* 1882; *Door County Advocate* 1882h).

On 15 February 1883, the steambarge *Thomas H. Smith* took *Peoria* in tow from Milwaukee to Sturgeon Bay. Captain Armstrong arrived at Sturgeon Bay on 15 April to begin fitting out the ship. The schooner cleared for this first trip of 1883 on 22 April for the Leathem pier to collect shingles for Chicago. It was said that the Leathem & Smith Co. had banked more than sixteen million shingles and two thousand cords of hemlock bark at Leathem over the winter for shipment that season (*Green Bay Advocate* 1883; *Door County Advocate* 1883a, 1883b, 1883c). The ship picked up lumber and wood products from Leathem, Jacksonport, Pierpont, Cedar River, Red River, Ford River, Sturgeon Bay, Manistee, Montague, Lathenport, and Green Bay

with all deliveries made to Chicago from April through November. The ship sailed both independently and occasionally as the consort to the steambarge *Thomas H. Smith* (*Chicago Tribune* 1883b, 1883c; *Door County Advocate* 1883c, *Inter Ocean* 1883a, 1883b 1883c, 1883d, 1883e, 1883f, 1883i, 1883j, 1883k, 1883m, 1883n, 1883o, 1883p, 1883q, 1883r, 1883t, 1883u; *Weekly Expositor Independent* 1883b).

Captain Armstrong started a friendly rivalry with Captain Clark, of the schooner *Westchester* both of which worked for the Leathem & Smith line, as to which man was the most successful navigator. *Peoria* sailed to Whitefish Bay and *Westchester* was in the Red River trade, which added an extra eighty miles. Captain Armstrong landed two cargoes of lumber in Chicago in twenty-two days, while his rival made two trips with the same kind of freight inside of eleven days -- the fastest time ever made. Captain Clark said of his victory, "I can't say whether it was luck or fortuitous winds, but good sailing has a great deal to do with quick time. If I were to say that our chances were equal, you might charge me with being guilty of self-praise, but the time was two trips in eleven days" (*Door County Advocate* 1883e).

Several incidents happened during the season. On 15 June 1883, while south of Evanston, Illinois, the crew of the *Peoria* discovered the body of an unknown man floating in the lake about one mile north of the Marine Hospital. The remains were brought aboard the vessel and Captain Armstrong hoisted a signal which brought the Evanston Life-Saving crew out to the *Peoria*. The body was taken to the station for identification (*Door County Advocate* 1883d; *Inter Ocean* 1883g, 1883h, 1883i). The ship was delayed by weather on three occasions.

On 26 June, *Peoria* ran into Milwaukee for shelter, and on 15 July a head wind and thick fog caused the schooner to anchor off Ahnapee. Captain Armstrong took the opportunity to come ashore and visit his family. *Peoria* sailed south on 17 July. The ship anchored off Ahnapee again on 5 August, but only for a few hours (*Chicago Tribune* 1883a; *Ahnapee Record* 1883b, 1883c). By September, it was determined that some maintenance was needed. *Peoria* received a new mainmast boom when the old boom was determined to be unsafe. At winter lay up the ship was brought to Sturgeon Bay to receive an overhauling from the waterline up (*Weekly Expositor Independent* 1883a; *Door County Advocate* 1883f).

Following repairs over the winter months Captain Armstrong declared *Peoria* to be "the banner craft of all Leathem & Smith's fleet" (*Weekly Expositor Independent* 1884a). The ship cleared Sturgeon Bay for Chicago on 22 April 1884 for its first run of the year (*Inter Ocean* 1884a). In 1884, the ship collected lumber from Sturgeon Bay, Leathem, Jacksonport, Green Bay, Menominee, and Whitefish Bay for the Chicago market (*Chicago Tribune* 1884a, 1884b, 1884c, 1884d, 1884e, 1884f, 1884g; *Door County Advocate* 1884b; *Green Bay Press-Gazette* 1884; *Inter Ocean* 1884b, 1884c, 1884d, 1884e; *Weekly Expositor Independent* 1884b). An article complimenting *Peoria*'s speed and efficiency appeared in the 10 July 1884 *Door County Advocate* (1884a):

“The schooner *Peoria*, of Milwaukee, running between this place and Chicago, has been making extraordinary good time this season, having made four round trips in twenty days, a distance of 276, or a total of 2,208 miles in eighty days. Allowing for time consumed in loading and unloading, this is acknowledged to be the fastest time ever made by any sailing vessel on Lake Michigan. The *Peoria* was built in Cleveland, Ohio, in 1853, and rebuilt in 1881; is 163.76 tons burden. She is sailed by Capt. Armstrong and owned by Leathem & Smith, of Sturgeon Bay, who may be proud of the record she has made.”

On 8 October 1884, the ship was lumber-laden and bound for Chicago when it was forced to seek shelter at Racine during a gale (*Journal Times* 1884). While at Jacksonport on 28 September to collect the last shipment of hardwood lumber sawed during the season at Hibbard’s mill for Clark Bros. & Co. of Chicago, *Peoria* was unable to load until 1-2 November due to the large seas from the southeast. The ship finished loading on 3 November and departed with a full and complete cargo of pine (*Door County Advocate* 1884c).

The ship sailed two cargoes of hay for its owners John Leatham and Thomas H. Smith from Voseville to Leathem to supply the company’s winter lumber camps in October (*Weekly Expositor Independent* 1884c; *Door County Advocate* 1884d). At the end of October, the ship was stripped and put in winter quarters at Sturgeon Bay. Although the schooner was laid up, Captain Armstrong continued service with the company and signed on for the winter as Mate on the steambarge *Thomas H. Smith* (*Door County Advocate* 1884e, 1884f; *Weekly Expositor Independent* 1884d).

Captain Armstrong returned to his command aboard *Peoria* for the 1885 season. The ship continued sailing both independently and as a consort to the steambarge *Thomas H. Smith*. The ship was fitted out and on 1 May, *Peoria* departed Sturgeon Bay on its first trip of the year in tow of *Thomas H. Smith* bound for Leathem (*Door County Advocate* 1885a, 1885b, 1885c). The ship brought lumber to Chicago from Leathem, Whitefish Bay, Lathamport, West Moran Bay, Ford River, and Sturgeon Bay throughout the season (*Chicago Tribune* 1885a, 1885b, 1885c, 1885d, 1885e, 1885f, 1885g, 1885h, 1885i, 1885j, 1885k; *Door County Advocate* 1885d; *Green Bay Weekly Gazette* 1885; *Inter Ocean* 1885a, 1885b, 1885c, 1885d, 1885e, 1885f, 1885g, 1885h, 1885i).

In August, Captain Armstrong took a few days off, leaving the vessel in charge of the Mate (*Ahnapee Record* 1885a). The ship sought refuge from storms on the lake at Ahnapee on 21 August and in early November at Milwaukee along with *Thomas H. Smith* (*Ahnapee Record* - 1885b; *Chicago Tribune* 1885l).



Figure 20. Historical image of *Peoria* in Chicago, Illinois from the Rush Street bridge, circa 1885 (C. Patrick Labadie Collection)

On 19 November, *Peoria* struck the outer breakwater at Chicago. It had been towed from Sturgeon Bay by *Thomas H. Smith*. Onboard were only two men -- the Captain and the Mate. Shortly before leaving Sturgeon Bay, the crew struck for higher wages but were refused so they deserted the vessel. The steambarge dropped *Peoria* at Grosse Point. While attempting to enter the harbor the ship was swept against breakwater. Its bowsprit, jibboom, and headgear were carried away and its bulwarks broken. The vessel's stern swung around in the wind and started pounding against the pier and leaking badly. A distress signal was displayed, and the Life-Saving crew went to the assistance of the ship. The tug *Shields* was hailed to pull the schooner clear of the pier, but there was no towline aboard and the tug had to steam upriver to procure one. A line was passed to *Peoria*, and it was pulled inside the harbor. Two lifesavers were left onboard *Peoria* to work the pumps as it was believed that the ship would sink (*Ahnapee Record* 1885c; *Chicago Daily Tribune* 1885k; *Inter Ocean* 1885i; *Weekly Expositor Independent* 1885).

On 27 November 1885, Captain Boyd of *Thomas H. Smith* made a statement to the newspapers refuting the above-described accident. He claimed that *Peoria* was uninjured, or at least the damage to the ship was minor and that not even a bundle of shingles was lost. The line parted and due to the gale conditions, the ship missed the piers and was compelled to drop anchor. This brought the ship to a standstill and prevented it from hitting the breakwater. It was discovered when lifting the anchor that it was hooked on another anchor which saved them from pounding on the pier (*Door County Advocate* 1885f; *Weekly Expositor Independent* 1885). The truth may be somewhere in the middle, but no evidence of repairs conducted on the vessel during the winter months was found in this research.

Peoria was fitted out the first week of May and began its season hauling lumber products to Chicago for Leathem & Smith (*Ahnapee Record* 1886; *Door County Advocate* 1886a, 1886b). Freights were light. Only nine entries were recorded at Chicago during the 1886 season from Sturgeon Bay, Kewaunee, Leatham, Sugar Creek and Red Cedar (*Chicago Tribune* 1886a, 1886b, 1886c; *Door County Advocate* 1886c, 1886d, 1886e; *Inter Ocean* 1886a, 1886c, 1886d).

The ship was windbound at Minorville on 4 September 1885 (*Inter Ocean* 1886b). On the night of 7 October while in tow of the *Thomas H. Smith*, the *Peoria* caught fire. Captain Armstrong was running along the deck when his foot became caught on a piece of timber. The big toe on his right foot was severely injured (*Door County Advocate* 1886d, 1886f). The Leathem & Smith sawmill at Sturgeon Bay shut down on 19 November 1886. The shingle machines were dismantled and placed onboard *Peoria* to be taken to Leatham and operated by the winter lumber camp crews (*Watertown News* 1886). The ship was stripped down to a barge on 21 November so it could be used to transfer horses, cattle, and additional machinery from Sturgeon Bay to Leatham, towed by the tug *John Leathem* (*Door County Advocate* 1886g). The ship was placed in winter quarters on 1 December anchored off Leathem & Smith's wharf. It was reported that the owners planned to abandon the old schooner and place its outfit on a new scow that was under construction (*Door County Advocate* 1886g, 1886h).

However, on 11 April 1887, Captain William Armstrong left his home in Ahnapee for Sturgeon Bay to begin fitting out *Peoria* for the season. Joining him was William Bie who came on as cook. *Peoria* received a new bowsprit and other minor repairs. On the night of 14 April, while lying at anchor in Sturgeon Bay a squall blew through from the west that caused *Peoria* to drag its anchor. The ship drifted close to the Michigan Street bridge, but a change in wind carried the schooner in the other direction avoiding any damage. *Peoria* cleared Sturgeon Bay under tow on 28 April with 9,000 shingles bound for Chicago (*Ahnapee Record* 1887a, 1887b; *Door County Advocate* 1887a, 1887b). While at Chicago, the ship was taken to the Chicago Dry Dock Co. for new planks on its bottom and caulking (*Marine Record* 1887).

On the night of 9 May 1887, while sailing on Green Bay, *Peoria* was run into by the one-year-

old steambarge *City of Nicollet*. The steambarge was bound to Green Bay from Horseshoe Bay. The captain and crew of the steambarge claimed that the schooner wasn't displaying navigational lights. Captain Armstrong asserted otherwise. *City of Nicollet* had her smokestack knocked down, its cabin swept overboard, and the captain came very near to losing his life. The steambarge put in at Sawyer Harbor where temporary repairs were made, and it reached De Pere the next day. *Peoria* suffered significant damage to its bow and headgear. It sailed light the next day for the dry dock in Chicago where \$1500 in repairs were required. Leathem & Smith had the owners of the steambarge served with a legal notice. A compromise was settled upon, and Leathem & Smith accepted \$150 for the damage to *Peoria* (*Ahnapee Record* 1887c; *Door County Advocate* 1887c 1887d, 1887g; *Inter Ocean* 1887a).

On the afternoon of 28 June 1887, while bound from Sturgeon Bay to Chicago with a cargo of lumber, *Peoria* came in to Ahnapee and anchored off. Captain Armstrong took a few hours to bring his family aboard. During the week of 17 July as the ship was unloading at Chicago, Captain Armstrong developed a severe headache accompanied by a prickling in his left side. The condition gradually worsened until on 25 July, while loading at Leathem, a physician, Dr. Bartran was called to come from Menominee to examine him. The captain's condition was diagnosed as paralysis resulting from thermic fever, or a severe case of sunstroke. William Bie was placed in temporary command and *Peoria* was towed directly to Ahnapee from Leathem so the captain could be taken home for bedrest (*Ahnapee Record* 1887d, 1887e, 1887f; *Door County Advocate* 1887e; *Independent* 1887a). Captain Armstrong made a partial recovery. After many weeks of rest his left arm remained disabled. Although the arm never recovered full function, in August 1888 Captain Armstrong took command of the steambarge *Mary Mills* of Sturgeon Bay (*Door County Advocate* 1887h, 1888; *Independent* 1888).

On 5 August 1887, a temporary enrollment was issued at the port of Chicago. Captain William Hulme of Charlevoix, Michigan acquired the vessel from Leathem & Smith for \$1,500 to become sole owner and Master of the schooner. *Peoria's* homeport was changed to Charlevoix, Michigan. Additional deductions were given under Section 4153, Revised Statutes as amended by the Congressional Act of 5 August 1882 of 8.61 tons adjusting the vessel's net tonnage to 163.76 tons (*Ahnapee Record* 1887g; Bureau of Navigation 1887; *Chicago Tribune* 1887b; *Door County Advocate* 1887i; *Independent* 1887b; *Inter Ocean* 1887c). The *Chicago Tribune* (1887b) expressed concern regarding the sale, "The *Peoria* is thirty-two years old and so rotten that it is a pity there is not a law to compel her retirement". In less than a week's time Captain J.P. Clark, of Sturgeon Bay was noted as taking command of the vessel (*Ahnapee Record* 1887f; *Chicago Tribune* 1887b; *Door County Advocate* 1887f). The ship collected lumber from Manitowoc and landed the cargo at Chicago on 11 August. While in port at Chicago, Captain John Wright took over as Master (*Chicago Tribune* 1887a; *Inter Ocean* 1887b).

On 3 October, *Peoria* arrived at Racine leaking badly (*Chicago Tribune* 1887c; *Journal Times* 1887). It is not known what means were undertaken to repair the vessel. For the remainder of the

season, the ship called at Charlevoix, Kenosha, and Frankfort to load lumber for Chicago with its last entry for the season recorded on 15 November 1887 (*Inter Ocean* 1887d, 1887e, 1887f).

Three trips from Charlevoix to Chicago with lumber were recorded in June 1888 and one trip in November (*Inter Ocean* 1888a, 1888b, 1888c, 1888d). No other information about the vessel's movements or cargoes was located for the season. On 12 October 1888, William Hulme registered the *Peoria* at the port of Grand Haven, surrendering the temporary enrollment as the vessel arrived back in its home district (Bureau of Navigation 1888).

The schooner was brought into the Chicago Dry Dock Company in mid-May for general overhauling. *Peoria* made three trips from Charlevoix to Chicago with lumber in May and June and one more in October (*Inter Ocean* 1889a, 1889b, 1889c; *Chicago Daily Tribune* 1889a, 1889b). In September and October, *Peoria* was kept busy moving shingles from Benton Harbor for the Grand Rapids Lumber Company (*News-Palladium* 1889).

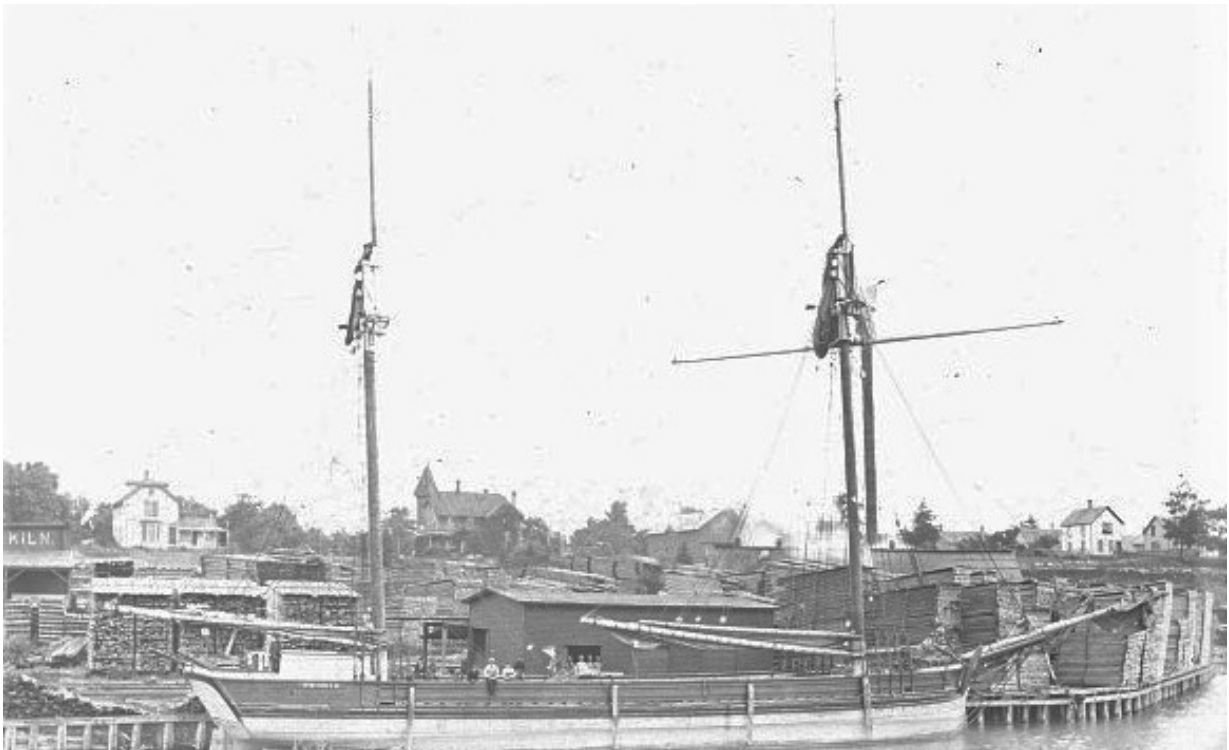


Figure 21. Historical image of *Peoria* at dock in Boyne City, Michigan, circa 1888 – 1895 (D.S. Way Collection, Bowling Green State University)

With ice free from the harbor at Charlevoix, on 7 April 1890 *Peoria* cleared for Michigan City, Indiana. Ten arrivals were recorded at Milwaukee during the season bringing ties, bark, cordwood, and lumber from Muskegon, Pine Lake, and Charlevoix (*Inter Ocean* 1890a, 1890b; *Milwaukee Daily Sentinel* 1890a, 1890b, 1890c, 1890d, 1890e, 1890f, 1890g, 1890h, 1890i).

Arrivals at Milwaukee were recorded with wood and bark from Charlevoix and Muskegon June

through December 1891 (*Milwaukee Daily Sentinel* 1891a, 1891b, 1891c, 1891d, 1891e, 1891f, 1891g, 1891h, 1891i, 1891j, 1891k). On 25 June 1891, William Hulme entered a new enrollment for the vessel at Grand Haven, having partnered with his son William Hulme, Jr. who took on ¼ share (Bureau of Navigation 1891). *Peoria* was taken to the lower yard of the Milwaukee Dry Dock Company on 27 November to have a leak stopped and while there, at 5AM on 1 December the ship caught fire from its stovepipe. Fortunately, only minor damage occurred (*Milwaukee Daily Sentinel* 1891l; *Milwaukee Journal* 1891). The ship made two more trips in December from Charlevoix to Milwaukee -- one in 27 hours loaded with wood and bark and the return trip was covered in 24 hours. It was then loaded with wood and bark, and the trip back to Milwaukee was covered in 24 hours (*Door County Advocate* 1891; *Milwaukee Daily Sentinel* 1891m).

Peoria put up for the winter on 4 January 1892 in Racine. Throughout February and March, the vessel received extensive repairs at the Joys Brothers & Co. yard which included a new cabin, deck, and a general overhauling (*Door County Advocate* 1891; 1892a; *Milwaukee Journal* 1892a). The ship was fitted out for service in April. In early June *Peoria* was reported ashore near Racine losing its deck load of lumber (*Inter Ocean* 1892; *Milwaukee Journal* 1892b, 1892c).

William Hulme, Sr. brought his younger son, Herbert Hulme into the partnership, and a new enrollment was entered at the port of Grand Haven on 14 June 1892. This document indicated that the father owned ½ of the vessel and each son, William, Jr., and Herbert, held ¼ shares (Bureau of Navigation 1892a). Curiously twelve days later another enrollment was entered removing Herbert Hulme and returning the ownership arrangement to William Hulme, Sr. ¾ share and William Hulme, Jr. ¼ share. The ship was remeasured at this time to 112.1 feet x 24.3 feet x 8.8 feet with a capacity under the tonnage deck of 166.97 tons and total deductions of 8.35 tons for a net tonnage of 158.62 tons (Bureau of Navigation 1892b).

On the night of 19 November 1892, while in tow of tug *Knights Templar* on the Milwaukee River, the wind caught *Peoria* and swung the schooner into the stern of steamer *R.P. Fitzgerald*. *R.P. Fitzgerald* had been making at U-turn in the river. *Peoria* was towed alongside of the Milwaukee Gas Company dock. Its bow was split open down the stem from the force of the collision which caused the ship to sink up to its deck. The steamer was taken to dry dock where a new propeller was fitted at the cost of \$1,000. The accident was blamed on the tug which tried to tow the schooner between the dock and the steamer's stern, when there was not enough room. It was too stormy to make progress on recovering the schooner for the next several days.

On 21 November, *Knights Templar* attempted to move the vessel to a dock where its deck load of lumber could be removed. When in the draw of the Broadway Street bridge, the tug's machinery became disabled, and schooner was abandoned. The tug *Simpson* moved *Peoria* back to the gas company dock to avoid blocking navigation on the river (*Door County Advocate*

1892b; *Manitowoc Pilot* 1892; *Milwaukee Daily Sentinel* 1892a, 1892b; *Milwaukee Journal* 1892d; *Oshkosh Daily Northwestern* 1892; *Republican* 1892). Although discussion was given to whether *Peoria* should be repaired or written off as a total loss, the ship was transferred to the dry dock in late November. Repairs continued throughout the month of December (*Door County Advocate* 1892b). Nothing is known of the ship's whereabouts in 1893 and 1894 at it disappeared from newsprint.

On 7 June 1895, *Peoria* delivered slabs to Milwaukee from Charlevoix. Additional arrivals at the port were recorded during the season from Pine Lake and Northport (*Buffalo Commercial Advertiser* 1895; *Milwaukee Journal* 1895a, 1895b, 1895c). It sheltered from a strong southerly wind at Ahnapee on 1 October (*Ahnapee Record* 1895). On 13 December, the ship set out from Charlevoix for Milwaukee with lumber but was forced back due to adverse winds and ice. The decision was then made to put the ship up for the winter (*Door County Advocate* 1895).

Only two entries at Milwaukee were record in 1896, on 14 May and 29 May bringing slabs from Charlevoix. No other information was located for the ship for the season (*Milwaukee Journal* 1896a, 1896b). On 17 November 1897, *Peoria* lost a square-sail yard in a collision off Cleveland, Wisconsin when it was arriving with a cargo of potatoes from Traverse City. No other information regarding the accident is known. *Peoria* carried coal to Beaver Island on 9 December and following delivery came into Charlevoix for winter lay-up (*Door County Advocate* 1897; 1898a).

On the first outing of 1898 season, *Peoria* was bound to Chicago with wood from Charlevoix, but was forced into Milwaukee on 22 April under bad weather conditions for a brief time, before resuming the trip. On 25 May, coal was loaded at Michigan Central docks in Bay City, Michigan bound for Marine City. This was the first shipment from Bay City mines to outside markets. The coal was brought direct from the Monitor Mine in Michigan Central railcars and transferred to the schooner.

The ship continued in the coal trade for the remainder of the year. *Peoria* was wind bound on Middle Island in the Straits for six days during the first week in December waiting for favorable sailing conditions to continue to Charlevoix with a cargo of coal. On 12 December, however, *Peoria* was towed from Middle Island to Alpena where it was put in winter quarters (*Buffalo Courier* 1898; *Door County Advocate* 1898b, 1898c; *Detroit Free Press* 1898; *Grand Rapids Herald* 1898).

After much consideration over the winter months, Captain Hulme decided to put *Peoria* up for sale. An advertisement was taken out in *Door County Advocate* on 8 April 1899:

“FOR SALE – I offer the hull of the schooner *Peoria* for sale cheap. She has a good rating and carries a good load. She at the present time having 309 tons of coal on a less

than 9 ft draft. She is a good sailer and would be just the craft for a person having an outfit for her. She would also make a good barge either for stone, logs or lumber. Over \$1,000 has been expended on her during the past four years in two rebuilds at Manitowoc and Manistee. For further particulars, write CAPT. WM. HULMES (sp), Charlevoix, Mich.” (*Door County Advocate* 1899a)

On 29 April 1899, with ice sufficiently off Thunder Bay, William Hulme, Jr. and three men travelled to Alpena to fit out *Peoria*. Its cargo of coal was discharged at Charlevoix and several trips to Sheboygan followed to move lumber to that port. *Peoria*'s outfit was then removed and placed on the larger schooner *Maize* also owned by William Hulme (*Door County Advocate* 1899a, 1899b). The *Door County Advocate* (1899c) reported at the end of September 1899 that Captain Hulme finally found a buyer for *Peoria* and the ship would go to parties in Elk River. However, the transfer of the ship didn't occur until 2 November and the vessel was sold to Manus J. Bonner of the Beaver Island Lumber Company of St. James, Michigan. The hull sold for \$600 (*Door County Advocate* 1899c; *Detroit Free Press* 1899). A new enrollment was entered at the port of Grand Haven listing Manus J. Bonner as sole owner and Master. Charlevoix remained the schooner's homeport (Bureau of Navigation 1899).

No information could be found about the ship's trips or cargoes during the 1900 season and most of 1901. On 10 November 1901, *Peoria* was bound from Charlevoix with a cargo of 140,000 feet of hardwood lumber, when it came into Baileys Harbor to wait out a storm. Captain Bonner dropped the ship's starboard anchor on the far east side of the bay. During the night, the anchor began to drag, so the port anchor was deployed. The wind and waves were so ferocious that the two hooks failed to hold the vessel and the ship went up on the beach near the range lights. Captain Bonner signaled the Life-Saving crew to stand by. Baileys Harbor Life-Saving Captain, Ingar Olson, and his crew went to the schooner's assistance and with great difficulty were able to remove the crew of six men.

Lives were saved, but the crew lost all their clothing and personal effects. The men were brought to the station for clothing, shelter, and food. Captain Olson furnished Captain Bonner with a horse and buggy and he patrolled the beach for portions of wreck and cargo coming ashore. The upper works of the vessel broke up rapidly, and the lumber on the deck was tossed on the beach. The ship from the waterline down, however remained held fast in the sediment and did not go to pieces (*Chicago Tribune* 1901; *Door County Advocate* 1901a; *Door County Democrat* 1901; *Inter Ocean* 1901).

On the morning of 12 November, Captain Bonner went to Sturgeon Bay to telephone the owners of the lumber cargo. The crew began stripping *Peoria* and prepared to ship the outfit to St. James. The ship was valued at \$2,000 but did not carry insurance. The crew threatened to libel the cargo and outfit for their lost property and unpaid wages. They were provided with an unknown amount to settle the dispute. Several men secured berths on other craft that were in

port and were short-handed. *Peoria's* papers were surrendered at the port of Grand Haven on 20 December 1901 stating the vessel was “Wrecked, total loss” (*Buffalo Courier* 1901; Bureau of Navigation 1899; *Door County Advocate* 1901a, 1901b; *Sandusky Star-Journal* 1901).

Site Description

The remains of the schooner *Peoria* (47DR-0515) lie mostly intact on an even keel in 7 feet of water, 0.15 miles northeast of the Baileys Harbor marina entrance in the waters of Lake Michigan, in the town of Baileys Harbor, Door County, Wisconsin. The vessel sits on a heading of 50-degrees, with its bow facing northeast. The hull of the vessel remains intact up to the deck shelf, with only the deck planking and some deck beams missing. At the time of the survey, the furthest extent of the vessel’s bow and stern were not visible above the shifting sands in the bay. All of the vessel’s construction components and artifacts remain within its hull.



Figure 22. Location of the *Peoria* shipwreck site

During the sinking, the vessel quickly settled deeply into the soft and shifting sands of the bay, rendering its removal impossible. Different portions of the vessel are visible at different times due to the shifting nature of the sand. The site has been known since its sinking, but the identity of the wreckage was not maintained. The wreckage is only exposed above the sand periodically. In 1994, archaeologists from the Wisconsin Historical Society visited the site, naming it the “Ridges Rangelight Wreck”, and in 2022, Society archaeologists labeled the site the “Baileys Harbor Beach Wreck” until the wreckage was positively identified as *Peoria*. The wreckage rises approximately 2.0 feet off the lakebed measured from the sand to the top of the futtocks.

A Phase II archaeological survey of *Peoria* was initiated in June 2022 by maritime archaeologists and volunteers from the Wisconsin Historical Society. Society maritime archaeologists documented the wreck while completing a site visit to the nearby double centerboard schooner, *Emeline*, for a grant funded by the University of Wisconsin Sea Grant Institutes. A single temporary baseline was established along the centerline of the ship, from near the stempost's original location, extending aft beyond the furthest extent of the port and starboard side hull sections. All measurements and documentation for the survey were taken from this baseline.

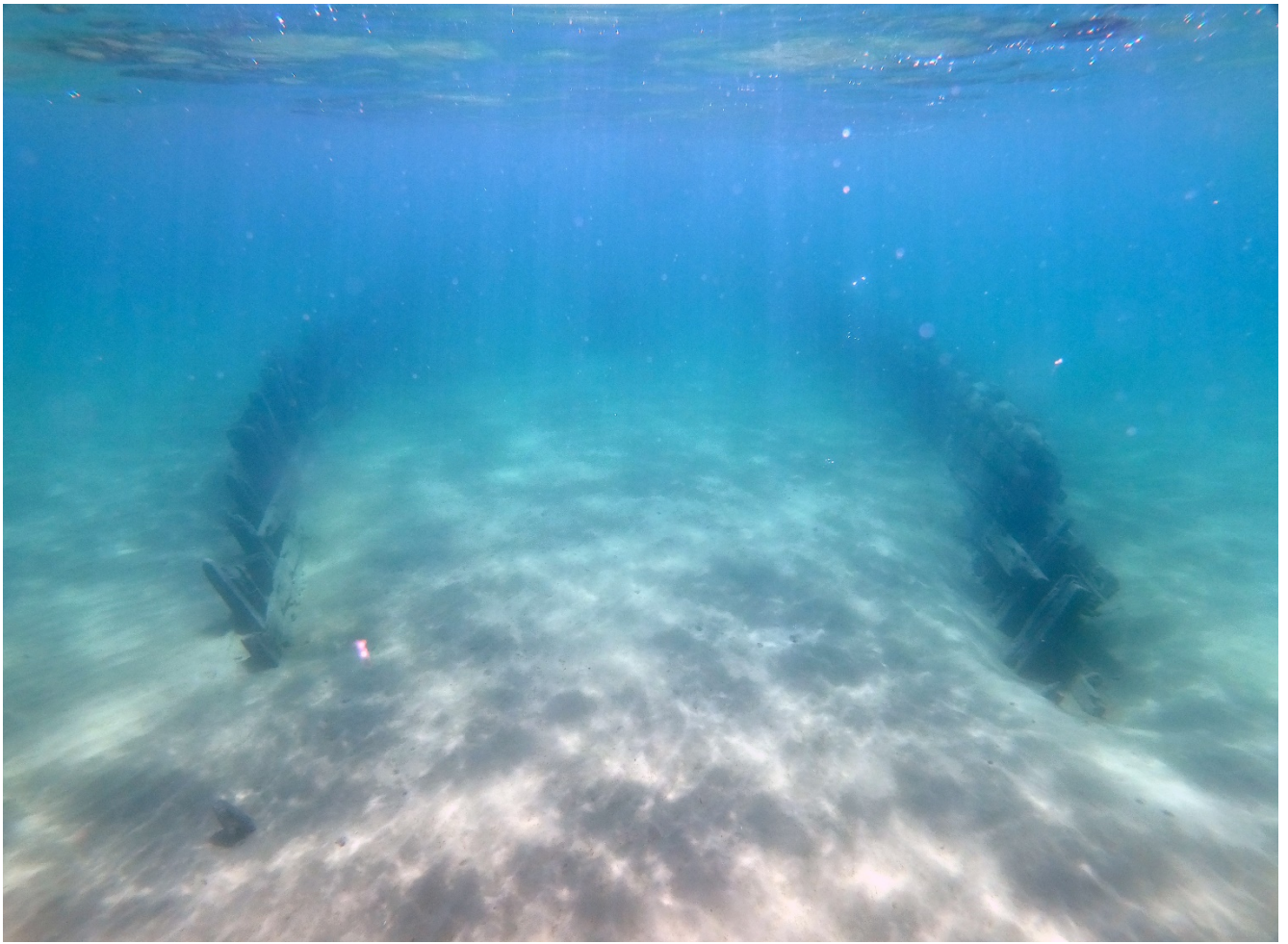


Figure 23. *Peoria*'s bow section, looking aft (Wisconsin Historical Society)

The overall length of the wreckage is 88.7 feet, and the width of the hull measures 22.5 feet at the widest point of intact wreckage. The vessel was reported to measure 113.6 feet long, with a beam of 24.2 feet. Given the wreck dimensions and location, and the vessel's construction, the remains were determined to be that of the schooner *Peoria*. Although in very shallow water, the sands of Baileys Harbor quickly covered up the wreckage and has kept the vessel remarkably well-preserved and intact, allowing for detailed observations of its construction and artifacts

contained inside.

Peoria's hull is constructed of double wooden frames and hull planking, and measures 1.5 feet in overall width. The wreckage rises approximately 1.9 feet off the lakebed measured from the sand to the top of the futtocks. The outside of the vessel is buried in sand, nearly up to the vessel's deck shelf, while inside, the sand has scoured out to a maximum depth of 3.5 feet, revealing the vessel's ceiling planking and centerboard trunk. The lowest extent of the vessel's hull remains buried in sand. The vessel's ceiling planking measures 0.75 feet in width and 0.35 feet in thickness, while its outer hull planking measures 0.55 feet in width and 0.25 feet in thickness.

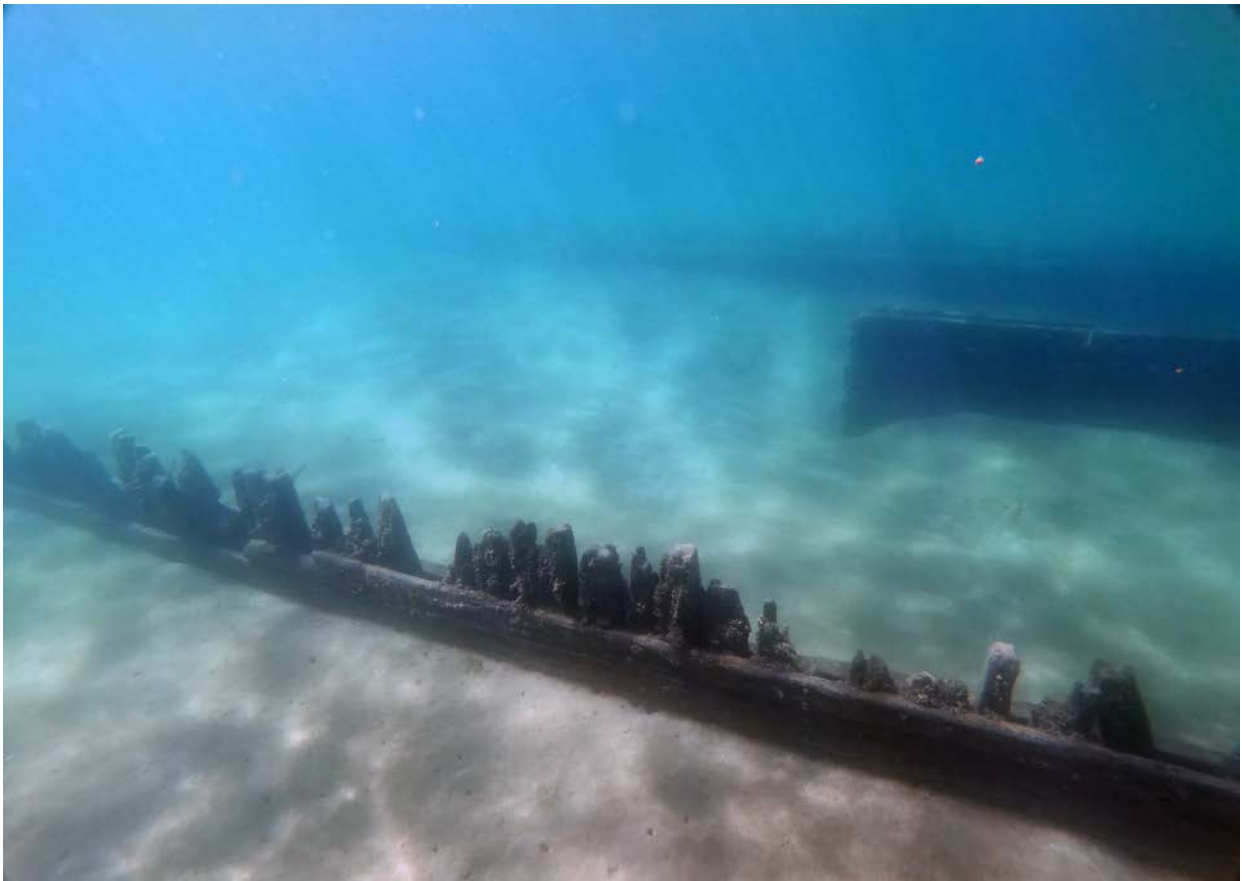


Figure 24. *Peoria* at midships, looking from starboard to port (Wisconsin Historical Society)

The vessel's frame sets can be seen at the upper extent of the intact hull, where the upper deck works have broken away. Each futtock has a sided measurement of 0.7 feet (with each futtock measuring 0.35 feet wide), 0.4 feet thick near the deck shelf, and are spaced 1.1 feet apart. Throughout its career, *Peoria* had a number of repairs completed on its hull following repeated accidents and groundings. Instead of replacing frame sets and futtocks, additional futtocks were added between the existing double frame sets, resulting in an irregular framing pattern by the end of the vessel's career. These repairs are largely located amidships, on both the port and

starboard sides of the vessel. In some areas, sets of three, five, and up to eight futtocks sit flush with one another. Most of these additional futtocks are located aft of the vessel's single centerboard on the port and starboard sides, where the mainmast was originally located. The additional futtocks all measure the same as the original frame sets, however, in many places, the additional futtocks change the frame spacing to 0.4 feet.

Overall, the hull remains incredibly intact, except for the most extreme ends of the bow and stern, as well as the upper deck structure. Approximately 10.0 to 12.0 feet of the bow, and 10.0 to 12.0 feet of the stern are currently covered by shifting sand. It is evident that the bow and stern sections were damaged and dragged away by wave and ice action as little evidence of these sections remains upright above the sand; however, it is likely that the vessel's keelson remains completely intact, from bow to stern, beneath the sand.



Figure 25. *Peoria's* portside foremast chainplates (Wisconsin Historical Society)

The vessel's port side hull begins 2.4 feet aft of where the starboard side extends out of the sand. Each side is tapered toward the original location of the stempost. At this point, the vessel's breadth measures 16.1 feet. At the stern, where the two hull sections extend into the sand, the vessel's breadth is 22.0 feet.

Peoria's starboard side midships hull extends 79.2 feet in length, before it disappears into the sand. No evidence of the vessel's starboard chainplates were located on the starboard outer hull and none of the deck shelf or deck beams remain. This indicates that more of the starboard side hull is missing than the port side hull.



Figure 26. *Peoria's* portside deck shelf and two deck beams (Wisconsin Historical Society)

Peoria's port side midships hull extends 85.8 feet in length, before it extends into the sand, and has significantly more vessel construction features extant. From 3.9 to 8.1 feet along the baseline, still attached to the outer hull planking, are the lower extent of the vessel's foremast chainplates. These four metal chainplates measure 0.3 feet wide, and 0.05 feet in thickness, and they are spaced 1.0 feet apart. Only the lower 0.4 feet of the chainplates remain. They are attached to the hull with large, rounded fasteners measuring 0.15 feet in diameter.

Further aft, at 82.9 and 85.4 feet along the baseline, two of the vessel's mainmast chainplates

extend from the sand, just aft of the furthest extent of the port hull structure, indicating where the vessel's aft mast was located at the time of sinking. These two chainplates are intact to where the vessel's deadeyes would have been attached, and both are bent inward, and slightly aft, over the remaining hull. They have the same width and thickness measurements as the forward chainplates.

While these chainplates are located much further aft than the location of a regularly rigged, two-masted vessel's mainmast. Historic photos indicate that sometime between 1885 and 1895, the vessel was re-rigged, with the mainmast moved aft, creating a "Grand Haven rig". A vessel with a Grand Haven rig characteristically had the mainmast removed, or moved further aft, to facilitate the loading and unloading of cargo more quickly and easily, adding to the vessel's profitability with less time spent in harbor, but with a significant decrease in speed.

From 40.1 to 71.0 feet along the baseline, the port side deck shelf remains extant. A second portion of the deck shelf has fallen and now lies in the sand forward of this, extending 5.2 feet before disappearing into the sand. The deck shelf measures 0.75 feet wide and 0.3 feet thick. The shelf is notched at intervals to fit the vessel's deck beams. These notches measure 0.7 feet wide and extend across the width of the deck shelf. They are spaced 1.2 feet, 2.6 feet and 7.1 feet apart. The wider spacing measurement corresponds to where the vessel's hatchways would have been located.

Only two of *Peoria's* deck beams remain, located at 63.4 and 70.6 feet along the baseline, and both no longer extend across the vessel's width, but instead extend at an angle from the port side deck shelf into the sand. They appear to have been weathered by the movement of sand, and currently measure 0.4 feet square. The original width of these deck beams would have matched the width of the notches cut into the deck shelf. Corresponding notches are found in the upper most ceiling plank along the port side hull. These notches continue to the furthest forward extent of the port side hull, indicating that the port hull is still intact up to the bulwarks.

A unique feature was located along *Peoria's* port side hull in two places along the baseline. At 13.1 and 26.9 feet along the baseline, two narrow, parallel cuts, or notches, were cut into each ceiling plank, extending along the entire inner hull, presumably to the turn of the bilge (this is currently obscured by sand). The notches measure only 0.05 feet wide, 0.1 feet deep, and are spaced 1.2 feet apart. It is unknown what these notches were made for, and if they were a part of the vessel's original construction, or if they were added later. One theory is that they indicate sections where the vessel's ceiling planking was repaired; however, the cuts/notches do not extend through the ceiling planks, they are only carved in 0.1 feet deep. These may have also occurred when the vessel was being stripped and salvaged just after its sinking; however, it is not known what would have made these marks, as they are very regular. To date, this feature has not been identified on any other shipwreck located in Wisconsin waters.

Peoria's centerboard trunk remains entirely intact and upright, on a 1-degree list to port, with only the centerboard trunk cap missing. The centerboard trunk extends 3.4 feet above the sand, and it measures 22.7 feet in overall length. Four boards are visible above the sand, each measuring 0.8 feet wide and 0.3 feet thick. The trunk's forward headledge measures 0.55 feet wide and 0.9 feet thick, while the aft headledge measures 0.55 feet wide and 0.4 feet thick. The boards of the centerboard trunk are held together by through bolts measuring 0.1 feet in diameter and spaced 0.8 feet apart. No evidence of the centerboard pivot pin was located during the 2022 survey, and it likely remains buried beneath the sand.

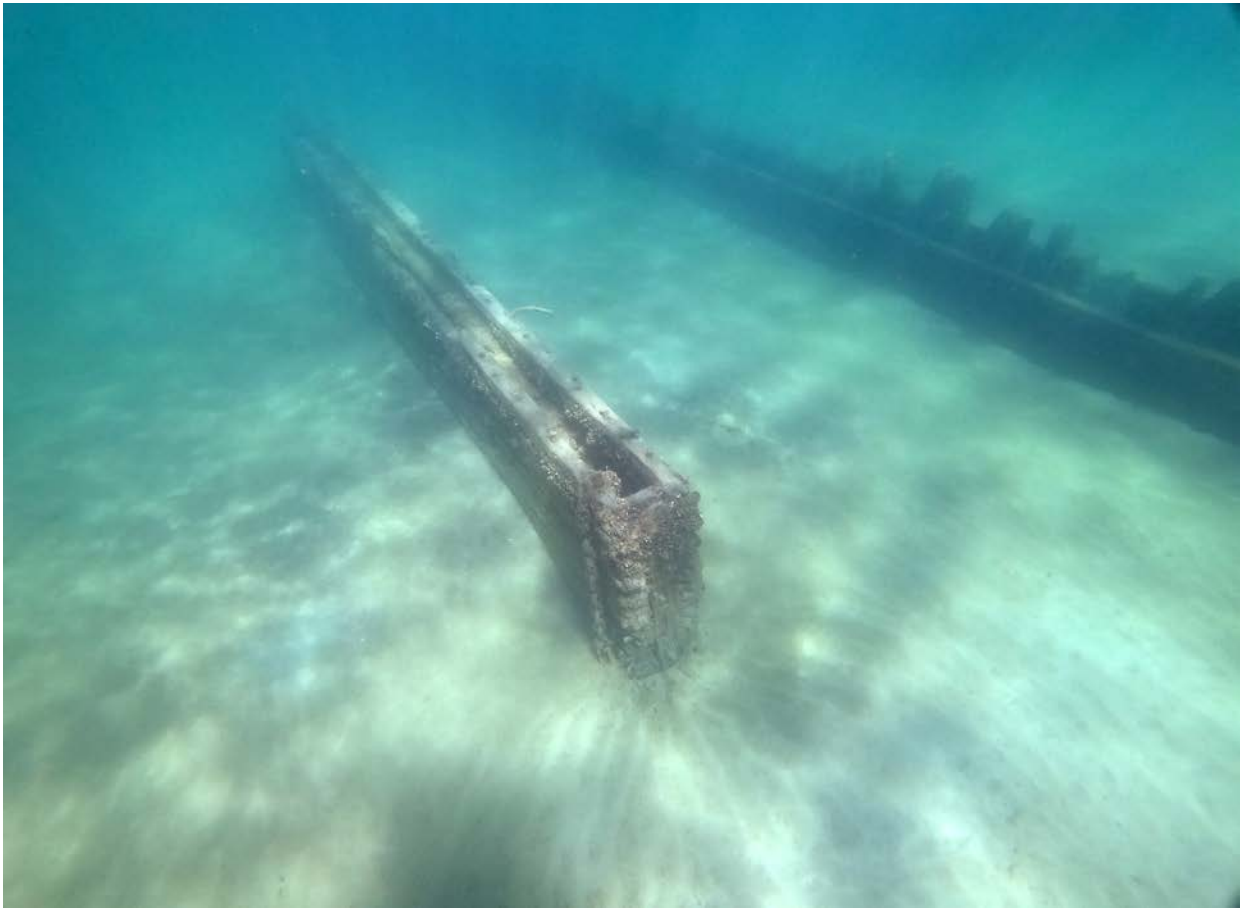


Figure 27. *Peoria's* centerboard trunk with centerboard chain (Wisconsin Historical Society)

The vessel's centerboard remains in place and intact within the trunk, measuring 22.1 feet long and 0.45 feet wide. The centerboard chain extends out of the aft end of the centerboard trunk, over the port side of the trunk, and down into the sand, 0.6 feet forward of the aft end of the centerboard trunk. The chain links measure 0.2 feet wide and 0.25 feet long overall, and are 0.05 feet thick.

Due to the amount of shifting sand located in the area, and the extent to which *Peoria's* hull is buried, it is very likely that additional pieces of the vessel remain nearby, covered by a thick layer of sand. The intact nature of the vessel indicates that the vessel quickly settled into the

sand following its sinking and that it has remained largely buried since then. The sand around the site is not hard packed, and has more of a gelatinous quality, similar to the “quicksand” off Rawley Point, and unlike the sand in many other portions of Baileys Harbor. It is likely that this quality is what has allowed *Peoria* to sink into the sand so quickly and is what made the vessel incapable of being recovered following its final sinking.

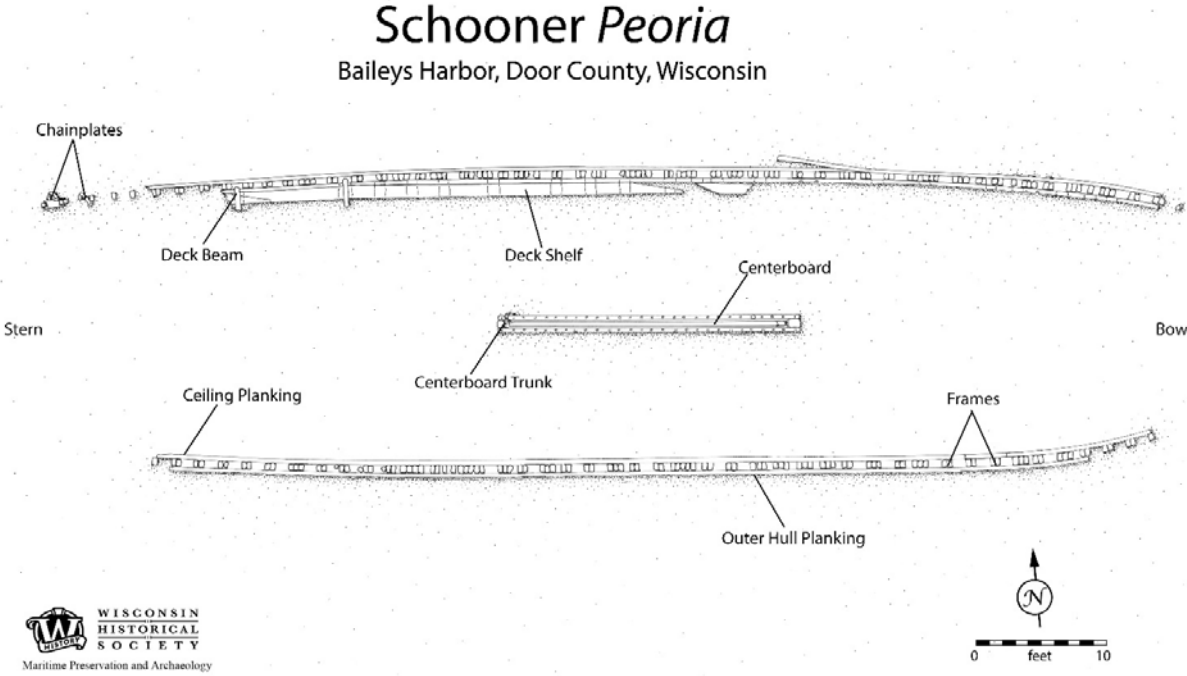


Figure 28. Site plan of *Peoria* (Wisconsin Historical Society)

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CHAPTER FIVE

STEAMBARGE *SIDNEY O. NEFF*

The schooner barge *Sidney O. Neff* (Official number U.S. 116377) was launched on 25 November 1890 from the Burger & Burger shipyard in Manitowoc, Wisconsin. Burger & Burger was a well-respected Great Lakes shipyard known for its fine workmanship in the construction of wooden vessels and steamers (*Appleton Post* 1890; *Manitowoc Citizen* 1902; *Milwaukee Journal* 1890).

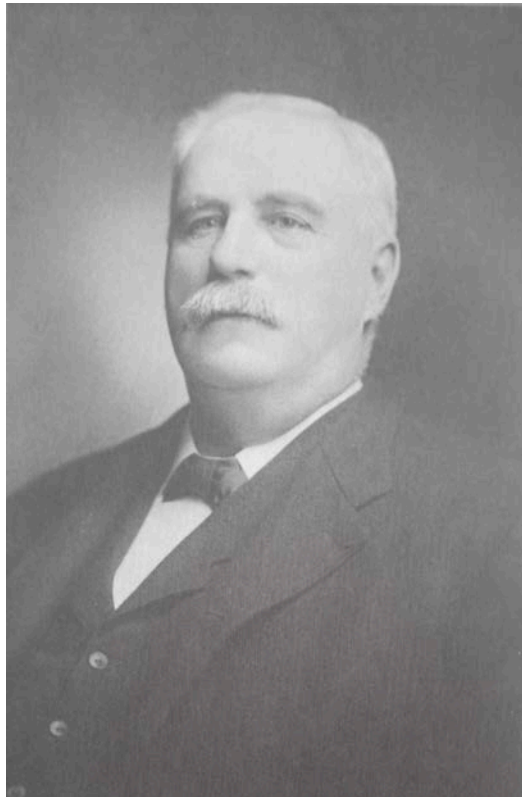


Figure 29. Capt. Samuel Neff (John S. Neff)

The ship was built for Captain Samuel Neff, of Milwaukee, for use in the lumber and general cargo freighting trade. Although many sources attribute the name *Sidney O. Neff* to Captain Neff's son, Sidney, who commanded the steamer *St. Joseph*, the primary tow vessel of the schooner barge, according to the Neff family history, "*By Paddle-wheel, Sail, and Steam*," the ship was named for Sam's uncle Sidney Ellenwood who was killed in the Civil War and for his father Orrin Neff (Fisher). The boat was constructed of oak with dimensions reported as 135 feet length of keel, 149.6 feet length overall, 30.2 feet breadth, with a 10.2 feet depth of hold. Its carrying capacity was calculated at 346.62 gross/329.29 net tons, capable of hauling 450,000 board feet of lumber. The ship cost \$18,000 to construct and was given an A1 insurance rating (*Appleton Post* 1890; *Milwaukee Daily Sentinel* 1890a; *Milwaukee Journal* 1890; USMV 1891).

In early December 1890 the steamer, *St. Joseph*, arrived at Manitowoc and took *Sidney O. Neff* to Menominee where both vessels loaded lumber bound for Milwaukee (*Milwaukee Daily Sentinel* 1890b). It is likely *Sidney O. Neff* spent its first winter among Milwaukee's winter fleet.

The vessel's first enrollment was issued at Milwaukee, Wisconsin, on 18 March 1891. On 23 June 1891, the ships were chartered by the Sanger Rockwell Company of Milwaukee to haul white pine lumber from the Gerard Co. in Menominee, Michigan to Milwaukee. The contract arranged for the shipment of 22,000,000 board feet of lumber. In June, July and August, Sam Neff received \$1.25 per 1,000 feet, and \$1.50 per 1,000 feet until navigation closed on the Lake Michigan (Fisher). With *Sidney O. Neff* as the regular consort of the steamer *St. Joseph*, the 1891 season is marked with near monthly arrivals of the two vessels at Milwaukee from Menominee with lumber. As the ships passed through Sturgeon Bay on 25 November 1891, the services of the tug *Nelson* were required to break ice through the bay for them. Their last arrival for the season at Milwaukee was recorded on 8 December before going into winter quarters (*Door County Advocate* 1891; *Milwaukee Daily Sentinel* 1891a, 1891b, 1891c, 1891d; *Milwaukee Journal* 1891a 1891b).



Figure 30. Capt. Sidney Neff (John S. Neff)



Figure 31. Charles Neff (John S. Neff)

During the 1892 season, Sam Neff and his sons, Sidney and Charles, renamed their firm Samuel Neff & Sons. Both Sam and Sidney remained captaining the firm's steamships, and Charles tended to the books (Fisher; Neff). The ships came out in early in April 1892. Their first arrival

was recorded on 20 April with *Sidney O. Neff* delivering 450,000 board feet of lumber to Milwaukee from Menominee. They unloaded and cleared the same day for Bull Dog River, light (without cargo) (*Milwaukee Journal* 1892). Lumber was collected from various ports on Michigan's Upper Peninsula during the season including West Epoufette, Sailors Point, Scotts Point, Brevort River, and Millecoquin Bay, delivering the lumber to Chicago. Each time after unloading they departed Chicago in ballast (*Chicago Tribune* 1892a, 1892b, 1892c; *Daily Inter Ocean* 1892a, 1892b, 1892c, 1892d). By October, the consort returned to calling on Menominee. The *Door County Advocate* (1892) remarked that their passage through Sturgeon Bay on 12 October 1892 was the first of the season. Captain John D. Campbell was reported in command of *Sidney O. Neff*. Six trips from Menominee to Chicago were completed before the pair laid up for the season in Chicago (*Chicago Tribune* 1892d, 1892e, 1892f, 1892g, 1892h, 1892i; *The Republican* 1892). Charles Neff's ledgers noted a profit for the work of *St. Joseph* and *Sidney O. Neff* for the season of \$7,511.28 (Fisher).

At the port of Menominee on the evening of 25 April 1893, while *St. Joseph* was backing *Sidney O. Neff*, its stern was forced against the dock at the Sawyer-Goodman Co. causing damage to her steering gear. A temporary fix was made to enable the vessel to reach the shipyard at Sturgeon Bay. Following repairs, *St. Joseph* and *Sidney O. Neff* were forced to lay in port at Sturgeon Bay for two days waiting on favorable winds on the lake before they could head to Chicago. The consort arrived in Chicago on 30 April and cleared the same day, light, for Scotts Point (*Chicago Tribune* 1893; *Door County Advocate* 1893b). A lull in the market waylaid the remainder of *Sidney O. Neff*'s season. On 9 September 1893, Captain Campbell and his wife, who had also been working aboard *Sidney O. Neff*, left the ship in Chicago for their home in Clay Banks, Wisconsin, to wait for improvements in the shipping business (*Door County Advocate* 1893c).

On 11 November 1893, *Sidney O. Neff* was in tow of *St. Joseph* heading out into the lake through the Sturgeon Bay Ship Canal when they passed the tug *Evenson* inbound with the schooner *F.W. Gifford* in tow. Both of the steamers passed safely; however, the schooners crashed into one another. *Sidney O. Neff* had its main rigging on the port side carried away and lost part of its deck load of lumber, which was crowned and raked off. *F.W. Gifford* lost about two feet of the end of its jibboom and one of its catheads. Foggy weather and a misunderstanding of signals was blamed for the accident. *St. Joseph* continued to Chicago with *Sidney O. Neff*. *Evenson* brought *F.W. Gifford* directly to the Sturgeon Bay shipyard, and lifesavers from the station set to work picking up the lumber flotsam (*Door County Advocate* 1893d).

Shipping remained slow into 1894 and the Samuel Neff & Sons fleet, the steamers *St. Joseph* and *Maggie Duncan* (a 164.5 ft steamer, built at the Holley shipyard at Fort Howard in 1890 and purchased on 15 March 1893 from Captain John Duncan for \$30,000), and the barges

Sidney O. Neff and *City of Toledo*, remained in ordinary in Milwaukee, awaiting demand for their services into May (*Door County Advocate* 1893a; Fisher; *Milwaukee Daily Sentinel* 1894). One incident was reported during the season. On the night of 19 June 1894, *Sidney O. Neff* broke away from the steamer *Maggie Duncan* and arrived alone off Chicago under sail. As the ship arrived after the hours of bridge operation, she was brought inside the breakwater to wait for daybreak. Captain Sam Neff inquired about the schooner barge by telegraph and Deputy Collector Nash notified Captain Neff that the vessel had arrived (*Daily Inter Ocean* 1894). Nothing else is known of the incident, where the vessels were bound, or returning from.

In 1895, Inland Lloyds Register reassessed the insured worth of the many Great Lakes vessels, which resulted in a substantial and crushing loss in valuation for *Sidney O. Neff*. The ship's worth was devalued from \$16,000 to \$2,580 (*Milwaukee Journal* 1895). On 7 March 1895, a contract was made with Richard F. Conway, a contractor for Chicago street pavement excavating, filling and grading, and dealer in cedar posts, ties and paving blocks, to haul 500,000 posts and 200,000 ties banked at Scotts Point, Michigan. The cargo was moved between 1 May and 1 September 1895, and the rate arranged was 3.44 cents per post and 6 cents per cedar tie, with the requirement of a minimum of 125,000 posts to be delivered each month to Chicago. In July 1895, *St. Joseph* plus \$10,000 was traded to F.W. Wheeler & Co. of Bay City, Michigan, for the 159 ft. steambarge *Edwin S. Tice* (built at Burger & Burger in Manitowoc in 1887). All four vessels were put to work on the contract. From 25 September to 10 December 1895, *Edwin S. Tice* and *Sidney O. Neff* were chartered for \$4,000 by the Calumet & Blue Island Railroad Co. of Chicago to be used "exclusively in [their] service" (Fisher).

In March 1896, Captain Sam Neff closed a deal with Superintendent James W. Martin of the Flint & Pere Marquette Steamship Line for delivery of 500,000 barrels of salt, in essence, all salt shipped from Manistee and Ludington, Michigan, to Chicago and Michigan City, Indiana for the season. In addition, Captain Neff arranged for the delivery at Ludington of iron and steel plates, and angle bars from the Illinois Steel Company, which were contracted by F.W. Wheeler & Co.'s West Bay City, Michigan, shipyard for use in steamer construction. Captain Neff employed the steambarge *Edwin S. Tice* and barges *Sidney O. Neff* and *City of Toledo* in the trade and had the ships outfitted with steam hoists for handling freight "with economy and speed." As the water in the channel at Manistee was only 11.5 feet deep, *Edwin S. Tice* could only take on a partial cargo of salt and was required to finish loading at Ludington. The barges, however, were able to take aboard full cargoes at Manistee (*Buffalo Courier* 1896; *Milwaukee Daily Sentinel* 1896).

On 6 November 1896, *Edwin S. Tice* departed Ludington with *Sidney O. Neff* and the scow *A.R. Kellogg* in tow. Fifteen miles out in the lake, the consort encountered a sudden storm from the northeast. In an immense sea state, *Edwin S. Tice* was forced to drop its line to *Sidney O. Neff* in order to tow the scow back into the harbor. The crew of *Sidney O. Neff* set canvas. With a light

crew of only five men, they could do little more than man the pumps and make a small boat ready as they drifted in the storm. Soon it became evident to Captain George Olson that *Sidney O. Neff* was overloaded with the 4,500 barrels of salt they were carrying, as the extra weight caused the ship to make little headway and was unmanageably pitching in the waves. Danger increased over time. Finally, Captain Olson ordered five hundred barrels of salt to be jettisoned. By the time *Edwin S. Tice* returned, *Sidney O. Neff* had disappeared from sight. The steambarge made a long search for the lost schooner barge before proceeding to Chicago. Three days later, and after the storm abated, *Sidney O. Neff* finally made the port of Milwaukee, arriving there at noon on 8 November (*Buffalo Commercial Advertiser* 1896a; *Chicago Chronicle* 1896; *Door County Advocate* 1896). *Sidney O. Neff* remained in Milwaukee where she was put up in winter quarters (*Advocate* 1896; *Buffalo Commercial Advertiser* 1896b; *Milwaukee Daily Sentinel* 1897a).



Figure 32. *Sidney O. Neff*, as a schooner-barge, being towed into the port of Manistee, Michigan, circa 1896 (Manistee County Museum)

On 6 November 1896, *Edwin S. Tice* departed Ludington with *Sidney O. Neff* and the scow *A.R Kellogg* in tow. Fifteen miles out in the lake, the consort encountered a sudden storm from the northeast. In an immense sea state, *Edwin S. Tice* was forced to drop its line to *Sidney O. Neff* in order to tow the scow back into the harbor. The crew of *Sidney O. Neff* set canvas. With a light crew of only five men, they could do little more than man the pumps and make a small boat ready as they drifted in the storm. Soon it became evident to Captain George Olson that *Sidney O. Neff* was overloaded with the 4,500 barrels of salt they were carrying, as the extra weight caused the ship to make little headway and was unmanageably pitching in the waves. Danger increased over time. Finally, Captain Olson ordered five hundred barrels of salt to be jettisoned. By the time *Edwin S. Tice* returned, *Sidney O. Neff* had disappeared from sight. The steambarge made a long search for the lost schooner barge before proceeding to Chicago. Three days later, and after the storm abated, *Sidney O. Neff* finally made the port of Milwaukee, arriving there at noon on 8 November (*Buffalo Commercial Advertiser* 1896a; *Chicago Chronicle* 1896; *Door County Advocate* 1896). *Sidney O. Neff* remained in Milwaukee where she was put up in winter quarters (*Advocate* 1896; *Buffalo Commercial Advertiser* 1896b; *Milwaukee Daily Sentinel* 1897a).

The ship's enrollment document was surrendered on 2 March 1897 for change of owner as the ship formally came under control of Samuel Neff & Sons company. Its home port remained Milwaukee. At the opening of the 1897 season, *Marine Review* (1897) published a list of officer assignments for Samuel Neff & Sons' growing fleet:

- Steamer *Edwin S. Tice*, Capt. Sidney Neff, Engineer S.R. Newnham
- Steamer *Adella Shores*, Capt. Samuel Neff, Engineer P. Kennan
- Schooner *Sidney O. Neff*, Capt. George Olson
- Schooner *Charles N. Ryan*, Capt. Joseph Gillard
- Schooner *City of Toledo*, captain unassigned
- Schooner *D.S. Austin*, Capt. H.J. Nelson

On the evening of 12 November 1897 wreckage of a yawl boat with the name *Sidney O. Neff* painted on the side, a partial cargo of cedar posts, shingles and lath, and a cabin door washed up on a beach two mile south of St. Joseph, Michigan. Great concern over the whereabouts of the ship followed until a search of ports around the lake resulted in the discovery that *Sidney O. Neff* had already been laid up for the winter for two weeks within Milwaukee's inner harbor. Charles Neff admitted that the yawl had been crushed when it was run into by *Charles Reich* and broken so badly that it was thrown overboard outside the harbor at St. Joseph. It turned out that the shingle and lath cargo had been washed from the deck of the barge *Fayette* in the storm, and the cedar posts and door were suspected to be from the steamer *Helen Taylor*, which had been recently lost in a gale (*Chicago Tribune* 1897; *Evening News* 1897; *Marine Record* 1897; *Milwaukee Daily Sentinel* 1897b, 1898a; *News-Palladium* 1897; *Owosso Times* 1897).

Over the winter months, Captain Sam Neff arranged the sale of *Sidney O. Neff* to Antony Greilick (also spelled Anthony Greillich) of Traverse City, Michigan. The new owner decided to have the ship converted at the west yard of the Milwaukee Dry Dock Company into a single screw steambarge. The shipyard added a fore-and-aft compound engine with cylinders of 15 and 30 inches by 28-inch stroke from the engine works of S.F. Hodge & Co. at Detroit. The engine was 380 hp with 140 rpm. Additional bedtimbers were required for the engine and the engine bedplate. The ship was then towed to Ferrysburg, Michigan, for the addition of a boiler. The boiler installed was 12 feet 6 inches x 11 feet, 150-pound Scotch boiler with three furnaces made by Johnston Brothers. The engine was set up in Ferrysburg and the necessary cabin work was also completed there. *Sidney O. Neff* received a new command with the sale. Captain George Robertson of Grand Haven became its new Master. The rebuild was completed in May and June 1898 and a new enrollment was issued for the vessel on 26 May 1898 (*Advocate* 1898; *Marine Review* 1898; *Milwaukee Journal* 1898). By mid-July 1898, the steambarge *Sidney O. Neff* was in service and plying the waters of Green Bay in route to Marinette. On the trip the crew spotted an overturned pleasure boat about a mile off Green Island. The boat had been caught in a gale on the night of 19 July and capsized (*Milwaukee Daily Sentinel* 1898b).

In 1899, *Sidney O. Neff* continued in the lumber trade taking cargoes primarily between Charlevoix, Michigan, and Chicago. On the night of 7 July, a northeast gale swept Lake Michigan that caused quite a few vessels to seek shelter. The steamers *Sidney O. Neff* and *Francis Hinton* waited out the storm in Racine (*Journal Times* 1899). On the night of 10 December, *Sidney O. Neff* was bound from Chicago to Charlevoix to fetch a cargo of lumber but was forced into Milwaukee after roaming the west shore of Lake Michigan in the fog. According to Captain George Robertson, because the wind was blowing so strongly offshore into the lake, it was nearly impossible to hear the fog whistle and determine how close the ship was to the piers (*Milwaukee Daily Sentinel* 1899).

In 1900, *Sidney O. Neff* brought lumber cargoes to Chicago from Cheboygan, Michigan and Menominee, always clearing Chicago light for its north-bound trip. Additional trips were noted with maple lumber delivered to the Simmons' Manufacturing Company in Kenosha, Wisconsin, for use in the construction of mattress frames (*Chicago Tribune* 1900a, 1900b, 1900c, 1900d, 1900e, 1900f, 1900g; *Kenosha Evening News* 1900a; *Inter Ocean* 1900). The ship was delayed due to weather on two occasions. First, on 16 October, the boat was forced into Kenosha while in route with lumber to Chicago to wait out a storm, and then on 12 December, *Sidney O. Neff* came into Sturgeon Bay while bound to Menominee for lumber. The tug *Algolah* was required to break a channel through the ice for it. After the trip, *Sidney O. Neff* went into winter quarters in Grand Haven, Michigan (*Advocate* 1900; *Kenosha Evening News* 1900b).

Little is known about *Sidney O. Neff*'s early season routes and cargoes in 1901. In October and November, the ship made regular trips between Traverse City or Boyne City (both in

Michigan), and Chicago bringing lumber and returning northbound light. Three round trips were completed each month. The final clearing of Chicago for the season was recorded on 3 December with the ship headed for Traverse City (*Chicago Tribune* 1901a, 1901b, 1901c, 1901d, 1901e, 1901f, 1901g, 1901h).

For the 1902 season, Captain George Robertson remained in command and its engineer was listed as Frank Greilick (*Advocate* 1902a; *Marine Review* 1902). On 29 April 1902 the boat stopped at the shipyard in Sturgeon Bay to have several planks replaced in its bow and a fender strake repaired. These repairs were the result of a collision with a scow in the Chicago River a few days prior (*Advocate* 1902b). *Sidney O. Neff* continued to bring lumber cargoes to Chicago, April through December, from the ports of Ludington, Traverse City, Rapid City, Frankfort, Cheboygan, and Glen Arbor, Michigan and always cleared Chicago light (*Advocate* 1902a; *Chicago Tribune* 1902a, 1902b, 1902c, 1902d; *Inter Ocean* 1902). By the end of December, *Sidney O. Neff* was listed among the winter fleet at Grand Haven and one of only two steamers wintering there (*Advocate* 1902c).

Freights were difficult to come by both in 1903 and 1904, which left *Sidney O. Neff* tied to the dock. Only one arrival at Chicago was recorded on 30 June 1903 with lumber from Menominee. No other information was available for 1903 or 1904 outside of a report that in mid-September 1904 the ship was placed in winter quarters at Grand Haven and the crew released due to the poor availability of freights (*Inter Ocean* 1903; *Advocate* 1904).

Captain Antony Greilick was announced as Master for the 1905 season. Frank Greilick remained engineer. On 25 March, the J.O. Nessen Lumber Co. of Manistee, Michigan chartered the steamers *Sidney O. Neff* and *R.C. Wente* to run lumber for the season. The lumber company purchased a large tract of land north of Muskegon and, at the time, was actively buying up any other available lumber land. Captain George Robertson acquired an interest in the vessel and returned to its helm by the opening of navigation (*Marine Review* 1905; *Advocate* 1905a). By 2 December, however, a Captain Franklin piloted the vessel into Sturgeon Bay to seek shelter. *Sidney O. Neff* was bound light for Traverse City to be placed in ordinary, as it was explained that the J.O. Nessen Lumber Co. discontinued the ship's charter in order to haul lumber exclusively with their own vessels for the remainder of the season (*Advocate* 1905b).

The 1906 *Great Lakes Register* provided a more thorough description of *Sidney O. Neff* as having one deck, a well deck, diagonal strapping on its frames, and steam pump wells. Captain George Robertson is listed as its managing owner. Surprisingly, however, in a description of the ship's systems, its engine was described as a fore-and-aft compound engine with two cylinders 14 and 14 with a 36-inch stroke, built at the Herreshoff Engine Works in Bristol, Rhode Island, and the boiler is listed as a Scotch boiler 10 feet 6 inches in diameter and 11 feet in length. The engine and boiler descriptions were repeated in the yearly registers until 1911, when the

information was updated to the S.F. Hodge & Co engine and Johnston Brothers boiler (described earlier in this text as added in 1898). However, both the engine and boiler were explained as being built in 1901. To note, the S.F. Hodge engine and Johnston Brothers boiler descriptions were continued in the registers through the 1931 *Great Lakes Register*, which was the last edition available to us upon writing this service history (*Great Lakes Register* 1906, 1908, 1911, 1924, 1931).

Little is known about *Sidney O. Neff*'s routes and cargoes in 1906, but the ship made newsprint when it was forced to seek shelter on three occasions during the season. On 13 September, *Sidney O. Neff* was one of a number of vessels that dropped anchor in the protected bay of South Manitou Island, Michigan to wait out a gale (*Detroit Free Press* 1906). On the morning of 21 November 1906, *Sidney O. Neff* with a crew of 14 men under the command of Captain Henry Lafley departed Chicago in ballast for East Jordan, Michigan. As they approached Grand Haven around 3p.m., a storm sprung up on the lake and they were unable to enter the harbor. The ship was forced to coast up and down the lake, throughout the night, in high seas. The vessel was so battered that its boiler shifted about two inches from its blocks. *Sidney O. Neff* was able to enter the port of Grand Haven at 7 AM the following morning (*Herald-Press* 1906; *Times Herald* 1906). Then on the night of 11 December, *Sidney O. Neff* was in route to Chicago with lumber when it was forced inside the Sturgeon Bay Ship Canal to shelter (*Advocate* 1906).



Figure 33. *Sidney O. Neff* as a steambarge, carrying a cargo of lumber (Smithsonian Institution)

In 1907, *Sidney O. Neff* received a new Master, Captain John Eble. In Eble's first season with the craft, *Sidney O. Neff* made "70 trips to Chicago, South Chicago, Indiana Harbor and Michigan City from ports on the east shore, from Manistee north to Cheboygan and from the foot of Lake Michigan and the lower end of Green Bay and Little Bay de Noc. *Sidney O. Neff* covered a distance of approximately 27,000 miles, equal to a trip around the world...and carried more than 18,000,000 feet of pine" (*Advocate* 1910e). The ship's exact movements in 1907 however, are marked only with limited information printed in the newspapers. On 15 September 1907, *Sidney O. Neff* passed through the Sturgeon Bay Ship Canal and on 22 October it was forced to shelter at South Manitou (*Advocate* 1907; *Detroit Free Press* 1907).



Figure 34. A colorized postcard of *Sidney O. Neff* traveling under the Jack Knife Bridge in Chicago (Leonard J. Barr II Collection)

With the opening of the 1908 shipping season, *Sidney O. Neff* came under the ownership of the Nessen Transit Company of Manistee and her homeport was changed to Michigan City. The company placed the vessel in their expanding ice transportation business, and it was used to haul ice from Onkama (Portage Lake) to Chicago, handling up to 560 tons per load (*Advocate* 1908a; *Great Lakes Register* 1908). On the morning of 1 April 1908, *Sidney O. Neff* departed Michigan City, light. With a heavy gale blowing around 8 p.m., a joint on the engine's main steam pipe ruptured. The sea state during the storm made the repair difficult, but the crew worked all night as the boat drifted. *Sidney O. Neff* arrived in South Haven, at 7:30 a.m. the next

morning (*The Advocate* 1908b; *Buffalo Courier* 1908). Beginning in May and through August, *Sidney O. Neff* began calling on Sheboygan, Wisconsin. Outside of its arrivals and clearings, their business in the city is unknown (*Inter Ocean* 1908; *Sheboygan Press* 1908a, 1908b, 1908c).

Captain Eble remained at *Sidney O. Neff*'s helm through 1909 but the crew was reduced to twelve men. In October 1909 *Sidney O. Neff* delivered two loads of 40,000 board feet of hemlock lumber and cedar shingles to the Nowlen Lumber Company in Benton Harbor, Michigan. Additionally, in early November *Sidney O. Neff* took a load of lumber from St. Joseph, for W.A. Preston in Benton Harbor. By late December, the steambarge had been moved to the shipyard in Sturgeon Bay to undergo repairs. Captain Eble returned to Manistee to celebrate Christmas with his family but came back to Sturgeon Bay immediately following to oversee the reconstruction efforts. *Sidney O. Neff* was torn down to its sheer so its bulwark stanchions could be replaced throughout. It also received new decks and deck beams in addition to a great deal of other smaller repair work (*Advocate* 1909; *News-Palladium* 1909; *St. Joseph Daily Press* 1909).

Work on *Sidney O. Neff* continued throughout the winter. Its steam whistle was replaced, and the old whistle was moved to the Sturgeon Bay Water Works. On 24 March 1910, the ship was lowered from the boxes and on 28 March and it departed Sturgeon Bay bound to Manistee to load lumber. The departure marked the first clearing from Sturgeon Bay of the year (*Advocate* 1910a, 1910b, 1910c, 1910d). According to a description of *Sidney O. Neff* published in *The Advocate* (1910e), the ship cruised at 10 $\frac{3}{4}$ miles per hour loaded (12 miles per hour when light) and burned about one-half ton of coal per hour. Her engine was so efficient that during an average "2,700 hours (of operation) each season...one-half as many tons of fuel are consumed." The article pronounced *Sidney O. Neff* one of the "handiest boats in the lumber trade" indicating that its boiler and coal bunkers were placed on deck, and no lumber was stowed in the ship's wings or pockets (*Advocate* 1910e).

1910 marked Captain John Eble's fourth year as *Sidney O. Neff*'s Master and as he departed Sturgeon Bay, he remarked that he expected to break all his previous freight-carrying records. However, on 7 May, U.S. Steamboat Inspectors Robert Reid and Charles C. Eckliff of Grand Haven suspended Captain Eble's license for 15 days in violation of the rules in navigating a steamer as his certificate of inspection had expired (*Advocate* 1910e, 1910g). As a result, *Sidney O. Neff* was brought in for inspection in July (*Great Lakes Register* 1911). The ship continued to deliver lumber from ports on Lake Michigan's eastern shore to Chicago throughout the season (*Advocate* 1910f, *St. Joseph Daily Press* 1910). A new contract was started in August 1910 to carry lumber from Arcadia, Michigan, to Chicago, however a sandbar restricted the entrance to the port to a depth of five feet. *Sidney O. Neff* used its propeller as a dredge and cut a channel to the harbor entrance (*Advocate* 1910h; *Buffalo Enquirer* 1910).

Captain John Eble remained in command of *Sidney O. Neff* for the 1911 season. The ship's engine and engine systems were inspected in July of that year. The vessel called on Menominee, North Manitou, Cheboygan, Boyne City and Sturgeon Bay to take on cargoes and delivered lumber to Chicago, clearing light on each occasion (*Advocate* 1911a, 1911b; *Buffalo Courier* 1911; *Detroit Free Press* 1911a, 1911b; Great Lakes Vessel Register 1911; *Times Herald* 1911). It kept to the same routes in 1912; however its crew was reduced to eleven men and its homeport was changed to Grand Haven (*Advocate* 1912a, 1912b; *Door County Democrat* 1912; USMV 1912, 1913, 1914, 1915, 1916, 1917). In April 1913, *Sidney O. Neff* was fitted with a new rudder at the Milwaukee shipyards (*Sturgeon Bay Advocate* 1913).

The ship spent the winter in Manistee and came out of winter quarters in late April 1914. On 19 August 1914, *Sidney O. Neff* cleared Chicago, light, for Detroit. The purpose of the trip is unknown. Otherwise, throughout the season, the ship brought lumber to Chicago from Manistee, Harbor Springs and Cheboygan. At 5 a.m. on 13 November, the ship was forced into Sheboygan to shelter from a storm before continuing on to Chicago (*Detroit Free Press* 1914a, 1914b; *Sheboygan Press* 1914; *Sturgeon Bay Advocate* 1914a, 1914b).

The steambarge again wintered over in Manistee and was fitted out for service on 1 May 1915. *Sidney O. Neff* received new officers for the season. Captain John Messner became her Master and Frank Winkler took over as Engineer. Its first cargo of the season was delivered to Milwaukee on 2 May and it cleared the next day, light, for Buffalo, New York. The purpose of the trip is unknown (*Detroit Free Press* 1915a, 1915; *Door County Democrat* 1915). The ship was back on Lake Michigan by June running lumber from Naubinway, Michigan and Cheboygan to Chicago (*Buffalo Courier* 1915a). In early July *Sidney O. Neff* made its first trip to Lake Superior. It picked up lumber in Sault Ste. Marie and brought it to Chicago on 19 July 1915 (*Detroit Free Press* 1915c). In August, September, and October, the ship remained on Lake Michigan, calling on the ports of Cheboygan, Naubinway, Big Bay, and Green Bay. In addition to the rough lumber delivered to Chicago, shipments of fine hardwoods were taken to Sheboygan for the Northern Furniture Co. (*Buffalo Courier* 1915b, 1915c, 1915d, 1915e; *Detroit Free Press* 1915d, 1915e, 1915f; *Door County News* 1915; *Sheboygan Press* 1915a; *Sturgeon Bay Advocate* 1915a, 1915b). On 24 October, *Sidney O. Neff* cleared Chicago for the Lake Superior ports of Sault Ste. Marie and Munising, Michigan, arriving back at Chicago on 6 November. During a trip from Cheboygan to Chicago, *Sidney O. Neff* was forced into Sheboygan harbor on the night of 9 November to wait out a storm. The ship continued running on Lake Michigan into mid-December before being put up in Manistee (*Buffalo Commercial Advertiser* 1916a; *Buffalo Courier* 1915f, 1915g; *Detroit Free Press* 1915g; *Sheboygan Press* 1915b, 1915c).

Sidney O. Neff came out of winter quarters during the last week of April 1916 and arrived in Chicago with lumber from Manistee. The ship made three round trips from Naubinway to Chicago during the month of May and made two trips to Sault Ste. Marie in June with another in July (*Buffalo Courier* 1916a, 1916b, 1916c; *Sturgeon Bay Advocate* 1916; *Detroit Free Press* 1916a 1916b, 1916d). It otherwise remained on standard routes on Lake Michigan for much of the season, calling Michigan ports at North Manitou, Manistee, Big Bay, Boyne City, Gladstone, Harbor Springs, Glen Haven, Traverse City and Cheboygan for lumber throughout the season (*Buffalo Commercial Advertiser* 1916b; *Buffalo Courier* 1916d, 1916e, 1916f, 1916g, 1916h, 1916i, 1916j, 1916k; *Detroit Free Press* 1916c, 1916e; *Times Herald* 1916). The Nessen Lumber Company declared 1916 one of their most successful seasons with their steambarge *Sidney O. Neff* and N.J. Nessen kept in constant motion. The company had bright prospects for 1917. By 15 December, both steamers were tied up for the winter in Manistee (*News-Palladium* 1916).

The steambarge came out of winter quarters during the second week of April 1917, and before the end of the month, it had already completed two round trips from Manistique, Michigan to Chicago with lumber (*Buffalo Courier* 1917a, 1917b). On 11 May 1917, *Sidney O. Neff* reported at the customs house at the port of Buffalo, arriving with 10,343 railroad ties from Rogers City, Michigan. The ship cleared the same day light for Chicago (*Buffalo Commercial Advertiser* 1917). Between June and October, the ship fetched lumber from the Michigan ports of Manistee, Cheboygan, Menominee, Marinette, Nahma, Johns Island, Wells, and Boyne City, delivering mostly to Chicago, but on occasion to Gary, Indiana and Milwaukee (*Buffalo Courier* 1917c, 1917d, 1917e, 1917f, 1917g, 1917h, 1917i; *Detroit Free Press* 1917a, 1917b; *Sturgeon Bay Advocate* 1917a, 1917b; *Times Herald* 1917a, 1917b, 1917c, 1917d, 1917e, 1917f). Trips to the Soo were completed in July and in October (*Buffalo Courier* 1917e, 1917g; *Times Herald* 1917e). *Sidney O. Neff* ran into Sturgeon Bay to wait out heavy seas on the evening of 7 October. It came in from the north along with the steambarge *T.S. Christie* and after laying to for a few hours, they got underway the next morning (*Sturgeon Bay Advocate* 1917c, 1917d). Late in November tragedy struck. While moored at the Schroeder Lumber Docks at the foot of Walnut Street in Milwaukee on 29 November 1917, Carl Standel, an 18-year-old seaman from Manistee, fell into the water while walking along the rail of the steamer and drowned (*Sturgeon Bay Advocate* 1917e).

Over the winter months, Nessen Lumber sold the ship to Finn & Olson Freighting Company (principals, Thomas Finn and Captain Ole C. Olson) in Marinette. The company had owned the steambarge *W.J. Carter* prior to acquiring the *Sidney O. Neff* (*Door County News* 1918; USMV 1918, 1919). On 24 April 1918, *Sidney O. Neff* stopped briefly at the Goodrich dock in Sturgeon Bay and then proceeded north with a cargo of salt. The ship passed through Sturgeon Bay a week later with lumber (*Door County News* 1918; *Sturgeon Bay Advocate* 1918a, 1918b, 1918c). During the season the ship called on the ports of Gladstone, Wells, Escanaba, Nahma,

Marinette, and Cheboygan to take on cargoes of lumber bound for Chicago (*Buffalo Enquirer* 1918a, 1918b; 1918c; *Buffalo Commercial Advertiser* 1918a, 1918b, 1918c, 1918d, 1918e, 1918f, 1918g; *Buffalo Courier* 1918; *Times Herald* 1918a 1918b; 1918c, 1918d, 1918e). On 4 August 1918, *Sidney O. Neff* brought the steamer *Wisconsin* (formerly named *F. & P.M. No. 1*), which had recently been acquired by Finn & Olson, from Marinette to the Sturgeon Bay shipyard for caulking of its lower hull. The next day, *Sidney O. Neff* picked up the barge *Advance*, which had been loaded with stone at the Leathem & Smith Quarry in Sturgeon Bay, and took it in tow to Manistee. When the steambarge returned from Manistee, it towed *Wisconsin*, repairs completed, back across Green Bay to Marinette (*Door County Advocate* 1918, 1918b).

Sidney O. Neff wintered over in Marinette and was the first ship out of the harbor for the season, on 29 March 1919, taking a cargo of lumber to Chicago; however, the ship was unable to break through the ice at the mouth of Sturgeon Bay. It then attempted to get through Green Bay by way of Deaths Door Passage, but it was met by thick ice at Chambers Island. At that point, Captain Ole C. Olson was forced to turn back. The ship did not arrive in Chicago until 25 April (*Buffalo Commercial Advertiser* 1919a; *Door County Advocate* 1919a; *Journal Times* 1919). *Sidney O. Neff* stopped at ports on Lake Huron during the season to procure lumber for Chicago with arrivals recorded as far south as Midland, Ontario (*Buffalo Commercial Advertiser* 1919b, 1919c; *Detroit Free Press* 1919a, 1919b; *Times Herald* 1919).

An announcement was made in July 1919 that a new steamship line was being organized in Milwaukee. The Milwaukee, Chicago and Michigan City Transportation Company chartered *Sidney O. Neff* and *Wisconsin* to its fleet to engage in freighting. The company was organized under the laws of the State of Wisconsin and headquartered in Milwaukee, where three of its five directors resided. Thomas Finn (also of Finn & Olson Freighting Company) was president. Dock space for the line was leased at Chicago, but the Milwaukee and Michigan City waterfront properties were owned by the company. Freight rates followed standard railroad rates (*News-Palladium* 1919, *Door County Advocate* 1920c). To accommodate the shift to the new line, at the end of the season, *Sidney O. Neff* was sent to the Universal Shipyard in Sturgeon Bay for an overhaul. When the ship came out of repairs, *Sidney O. Neff* was renamed the *M.C. & M.C. No. 2* and its crew was updated to eighteen men. Also added to the fleet was the *Pere Marquette No. 6*, which was also sent to Universal after having extensive repairs made above its water line at the Leathem D. Smith shipyard (*Door County Advocate* 1919, 1920a, 1920c).

On 19 January 1920, *M.C. & M.C. No. 2* was coming in ballast from Milwaukee to Chicago, to receive a cargo of foodstuffs for Michigan City when it became stuck in an ice floe six miles off Chicago. Prevailing winds from the northeast had caused the ice to pile up. The vessel was commanded by Captain Ferdinand Sutherland on his first trip, as the Captain Olson was away on vacation. The steamer *Illinois* and the tug *Racine* also became trapped in the ice floe. These

two ships, however, were released on 22 January when the steamer *Alabama* broke a channel through the ice to them. On the morning of 23 January, two of *M.C. & M.C. No. 2*'s crew walked two miles over the ice to the Parker H. Harrison Crib (four miles out in the lake) where they told the keeper of the crib, Fred Daggett, that an eight-foot wall of ice was threatening to crush their ship and that provisions were running low. Since there was no wireless aboard *M.C. & M.C. No. 2*, the two men returned to the ship and used a wigwag code to update Daggett on the ship's condition. An appeal was made to the Commander of the Great Lakes Naval Training Station to send a hydro-airplane to rescue the sailors. The Commander however, was unable to comply with the request stating that it was "impossible to fly out over the lake in the face of the northwest blizzard." On the afternoon of 24 January, four sailors (Paulus Hansen, lookout; Amund Strand, wheelman; George Duncan, lookout; and Con Carmody, fireman) from *M.C. & M.C. No. 2* managed to walk to shore over the ice fields to bring an urgent appeal for help and food. U.S. Coast Guard Captain John Anderson and his crew prepared a light lifeboat loaded with food and made four attempts to haul it over the ice. However, each time they failed to reach the vessel.



Figure 35. *Sidney O. Neff* as the *M.C. & M.C. No. 2* stuck in ice, 1920 (Leonard J. Barr II Collection)

William D. Stansifer, general freight agent of the Milwaukee, Chicago and Michigan City Transportation Line hired a man on skis to reach the ship with messages from the company, but

the man only made it a mile offshore before he encountered large stretches of open water. The company also chartered two tugs to attempted to buck the ice, but both failed. On the morning on 25 January, seven men, including the returning *M.C. & M.C. No. 2* crewmen and a newspaper photographer, Edward Williams, left Chicago to walk on the ice to the boat. Sometime during the late afternoon, the wind shifted to the southeast and the entire ice field moved out into the lake taking *M.C. & M.C. No. 2* with the ice pack. Coastguardsmen, lighthouse keepers with powerful searchlights, and airplanes failed to locate the men or the drifting vessel. On the morning of 28 January, the Goodrich steamer *Alabama* found *M.C. & M.C. No. 2* nine miles north of Evanston, Illinois, and after laboring for five hours, it was able to break the ice and set it free. A wireless message was sent from *Alabama* stating that the crew was safe, and that food and clothing were being transferred to the freighter, but there was no mention of the missing men. *M.C. & M.C. No. 2* was then towed three miles to open water, as it did not have sufficient power to break away. The ship made the Chicago River later that afternoon and onboard were the missing men and the photographer who had been feared dead.

Lookout Paulus Hanson said of the ordeal, “The old tub never did roll so bad before as a week ago Tuesday night. Every wave was rolling ice in toward shore, too. It took all of us to man the boat during that blow. Early in the morning, we struck much ice north of Chicago and then we got slower and slower. Finally, we just stopped outside the harbor here and let the ice pile up. We had plenty to eat but no variety. We were not afraid of being crushed in the ice and there was almost a panic one night when it froze hard and timbers began to crack” (*Chicago Tribune* 1920; *Door County Advocate* 1920b, 1920c; *Draugas* 1920; *Ironwood Daily Globe* 1920a, 1920b; *Lake County Times* 1920; *Rock Island Argus* 1920a, 1920b; *Sebewaing Blade* 1920; *Times Herald* 1920).

Ice damage to the ship’s hull resulted in the need for substantial repair work. The *M.C. & M.C. No. 2* came into the Leathem D. Smith shipyard in Sturgeon Bay in July 1920 to be siphoned out and to have a cabin that had been taken off the barge *Wisconsin* added as a deckhouse for use as extra sleeping quarters (*Door County Advocate* 1920d, *Door County News* 1920). However, after returning to Marinette, the U.S. Steamboat Inspectors condemned the boat and it was left tied to the dock essentially abandoned by its owners (*Door County Advocate* 1924d). In November 1922, the ship was taken back to Sturgeon Bay to have additional hull repairs conducted at the Wolter & O’Boyle Shipyard and boiler work at Leathem D. Smith (*Door County Advocate* 1922a, 1922b). Work on *M.C. & M.C. No. 2* was progressing until the Milwaukee, Chicago and Michigan City Transportation Line’s steamer *Norlund* foundered off Milwaukee 13 November 1922. The line immediately requested work to be stopped on *M.C. & M.C. No. 2* pending settlement of their legal affairs. Then on 29 January 1923 U.S. Marshal Richard White seized *M.C. & M.C. No. 2* along with the line’s two other boats, *Wisconsin* and *Pere Marquette No. 6*, as the bank foreclosed on the line’s \$75,000 mortgage (the mortgage had been executed on 21 April 1921) and the boats were placed in the hands of a receiver. Judge

F.A. Geiger of the U.S. District Court - Eastern District of Wisconsin in Milwaukee stated that the Line was insolvent as its liabilities were \$100,000 in excess of its assets. He sent Joseph Davidson and Captain Dan Sullivan of Milwaukee to Sturgeon Bay on 6 March 1923 to appraise the value of the boats (*Door County Advocate* 1923a, 1923b, 1923c; *Door County News* 1923a, 1923b; *Leader-Telegram* 1923).

On 11 May 1923, all three ships were sold at auction. First, the boats were offered for sale separately and gained \$1,025 for *Pere Marquette No. 6* going to Thomas E. Finn (the boats' former owner, now representing the Marinette Transit Company); \$5,100 for *Wisconsin* also went to Finn, and \$22,500 for *M.C. & M.C. No. 2* that went to John Souvic of Milwaukee. Marshal White then offered the three boats together for the sum of the individual bids (\$28,625) and Thomas E. Finn offered \$28,700 for the three with the condition that the sale would be confirmed by the court (*Door County Advocate* 1923d).

On 2 July 1923, after the shipbuilders were finished with their reconstruction, *M.C. & M.C. No. 2* cleared Sturgeon Bay for Marinette under the command of Captain Ole C. Olson (*Door County Advocate* 1923e; *Door County News* 1923c). *M.C. & M.C. No. 2* arrived back at Sturgeon Bay on 15 July with the steamer *Pere Marquette No. 4* under tow from Manistee to the Leathem D. Smith shipyard. On 3 August, *Sidney O. Neff* came into the Wolter & O'Boyle's shipyard for conversion from a package freighter to a lumber carrier as the boat had been chartered to the Wells Lumber Company (*Door County Advocate* 1923f, 1923g, 1923h). It is not known how long the conversion took, but the boat ran lumber into the third week of December (*Door County Advocate* 1923i).

The name *Sidney O. Neff* was returned to the ship in 1924. The registries described the boat as a wooden vessel with its bow sheathed for ice. It had one deck and a well deck, diagonal strapping on its frames, steam pump wells, an iron-lined boiler house, and an electric light plant. The S.F. Hodge & Co. engine, constructed in 1901 at Detroit, was inspected in July 1924 and found to produce 350hp. Its crew numbers were increased to twenty-four men (*Great Lakes Register* 1924; USMV 1924).

The ship began its season on 2 May 1924 with a passage through the Sturgeon Bay canal carrying lumber (*Door County Advocate* 1924 a, 1924b). In August, the ship called on Escanaba and Dollar Bay, Michigan (*Door County Advocate* 1924c; *Detroit Free Press* 1924). A new steward, R.F. McCluskey of Traverse City, was hired for the ship in mid-September (*Traverse City Record-Eagle* 1924). In October and November, the vessel returned to Chicago, running lumber into that city from Little Current and Thessalon, Ontario, as well as Manistee (*Buffalo Courier* 1924a, 1924b; *Times Herald* 1924). On 3 December, *Sidney O. Neff* arrived in Green Bay with 15,000 kegs of nails from Cleveland, Ohio, consigned to the Morley Murphy Company. Each of the kegs was said to weigh 106 pounds (*Green Bay Press-Gazette* 1924).

The U.S. Marshal office in Milwaukee seized the vessel again on 15 December 1924 and put it up for sale to satisfy debts owed to the Sturgeon Bay Shipbuilding & Dry Dock Company over its latest repairs. The highest bid however, received came in at only \$500, made by Orrin W. Angwall of Marinette. Because of the insufficient gain, the sale was not confirmed by the court, and a resale was ordered for 7 January 1925 (*Door County Advocate* 1924d).



Figure 36. *Sidney O. Neff* in dry dock (Milwaukee Public Museum)

It is not known whether the resale happened, or how Thomas Finn was able to satisfy his debts, but the ship remained under the flag of the Marinette Transit Company. In 1925, the ship was active from mid-April through September bringing lumber to Chicago and South Chicago from Michigan ports Boyne City, Sault Ste. Marie, Manistique, Nahma, Charlevoix, Detour, Escanaba, and Lake Linden (*Buffalo Courier* 1925a, 1925b, 1925c, 1925d, 1925e, 1925f; *Door*

County Advocate 1925b; *Times Herald* 1925a, 1925b). In May, *Sidney O. Neff* brought the schooner barge *C.E. Redfern* to Sturgeon Bay to have it converted to a self-unloading barge (*Door County Advocate* 1925a).

Sidney O. Neff hauled lumber to Chicago from Wells, Michigan, Little Current, Ontario, and Marinette during the month of May 1926 (*Buffalo Courier* 1926a, 1926b; *Detroit Free Press* 1926). In June 1926 when the ship passed through Sturgeon Bay, the *Door County Advocate* commented that the ship was “one of the large number of lumber barges which plied these waters in the good days of the lumber rush and is one of the few of these craft still in commission on the lake” (*Door County Advocate* 1926a). *Sidney O. Neff* came into the Sturgeon Bay shipyard during the last week in July to have a spar replaced and was noted passing through the city again in early December, lumber laden (*Door County Advocate* 1926b, 1926c). Other information about its routes or cargoes were not located. One up bound passage was recorded at Detroit on 19 September 1927, but no other entries were located for the season (*Detroit Free Press* 1927).

During this period, the Marinette Transit Company began to employ *Sidney O. Neff* in the pulpwood trade on Lake Superior. In early August 1928, the boat came into dry dock at the Sturgeon Bay shipyard for hull caulking and minor repairs, and to have some work done on its machinery (*Door County Advocate* 1928; *Great Lakes Register* 1929). Throughout the 1929 season, *Sidney O. Neff* was chartered to carry pulpwood for the Hoberg Paper and Fiber Company of Green Bay and brought cargoes to Green Bay in April, May, June, and July. Also chartered were the Marinette Transit Company boats, *Pere Marquette No. 6* and *Wotan*. On 3 May 1929, *Sidney O. Neff* was forced to seek shelter in the harbor at Manistique while in route from Green Bay to ports on Lake Superior (*Escanaba Daily Press* 1929; *Green Bay Press-Gazette* 1929a, 1929b, 1929c, 1929d). The ship continued with the pulpwood charter for Hoberg Paper through the 1930 season. Three cargoes were delivered at Green Bay in May and then once monthly through the end of September (*Green Bay Press-Gazette* 1930a, 1930b, 1930c, 1930d, 1930e, 1930f).

The ship lay by for much of the early part of the 1931 season, and during this time acquired a new Master, Captain James Mlarnik. It was eventually chartered by the Northern Paper Mills and placed on a route between Michipicoten, Ontario, and Green Bay in the pulpwood trade. Shipments on this route continued through September. The ship made a stop at Nahma in mid-August to arrange trade for October, and on 15 October, the boat arrived at Sheboygan with a cargo of lumber for the Grand Marais Lumber Company. It was unloaded at the company docks east of the Eighth Street bridge (*Escanaba Daily Press* 1931a, 1931b; *Great Lakes Register* 1931; *Green Bay Press-Gazette* 1931; *Sheboygan Press* 1931). *Sidney O. Neff* remained berthed at the Sawyer-Goodman dock in Marinette for 1932 season with no available cargoes (*Escanaba Daily Press* 1934).



Figure 37. *Sidney O. Neff* in the Chicago River, 1930 (Edward J. Dowling Collection, University of Detroit-Mercy)

Sidney O. Neff unloaded its first shipment of the 1933 season at the Northern Paper Mills dock on the evening of 18 May. Because *Wisconsin* had been abandoned some years earlier, burned and scuttled in 1932, *Wotan* was sold in 1930, and *Pere Marquette No. 6* was dismantled, sunk, and abandoned in the Menominee River, shipments of pulpwood to Green Bay aboard *Sidney O. Neff* were plentiful. Cargoes were delivered on 2 June, 3 July, 6 August, 18 August, 31 August, 7 September, 15 September, 23 September, 1 October, and 7 October (*Escanaba Daily Press* 1933; *Green Bay Press-Gazette* 1933a, 1933b, 1933c, 1933d, 1933e, 1933f, 1933g, 1933h, 1933i, 1933j, 1933k, 1933l). Over the second week of July 1933, the ship came into Sturgeon Bay to receive considerable repair work to stem persistent leaks. It had its bottom caulked, and hull painted (*Door County Advocate* 1933a, 1933b). On 12 October, a shipment of hardwood was delivered to Sheboygan, but the ship was forced to lay over for a day waiting on favorable weather before departing the port (*Sheboygan Press* 1933).

On 11 April 1934, the Sturgeon Bay Ship Building & Dry Dock Company filed a motion in federal court against the ship, claiming \$1,268 due and asked for a forced sale of *Sidney O. Neff*. Additionally, unpaid wages by three sailors were added by lawyers for a total claim of \$4,400. *Sidney O. Neff* remained tied up to the dock of the Sawyer-Goodman Company in Marinette throughout the season and was eventually again condemned by the U.S. Steamboat Inspectors as unseaworthy. U.S. Marshal Anton J. Lukaszewicz seized the ship and an auction date was scheduled for 17 December 1934. Thomas Finn's lawyer stated that "some time ago the federal court had worked out a schedule of claims against the vessel, but [Finn] was unaware the boat

was to be placed on the auction block until advised today by the Herald-Leader” (*Green Bay Press-Gazette* 1934a, 1934b, 1934c; *Escanaba Daily Press* 1934). The auction was postponed twice more to 7 January 1935 and 22 January 1935 because the highest bid for the ship received each time was only \$500. The successful bidder was Captain Orrin W. Angwall, owner of Marine Transit Company of Marinette, the same businessman that bid on the ship in 1925 (*Green Bay Press-Gazette* 1934c). In the end, Sturgeon Bay Ship Building & Dry Dock Company paid \$192 instead of receiving payment toward their bill for repairing the *Sidney O. Neff*. Since the shipbuilding company filed the first lien, they were responsible for the legal costs and U.S. Marshal’s expenses totaled \$692 (*La Crosse Tribune* 1935).



Figure 38. *Sidney O. Neff*'s main deck, looking forward, photographed after its abandonment, during its survey for the Historic American Merchant Marine Survey 1937 (Smithsonian Institution)

Captain Angwall stated plans were to have the boat rebuilt in the spring, install diesel engines, and continue its use in the pulpwood trade on Green Bay (*Door County Advocate* 1935a, 1935b). Although Captain Angwall resided in Marinette, the boat remained homeported in

Milwaukee (USMV 1936, 1937, 1939). Nothing, however, came of the promises to rebuild *Sidney O. Neff*.

The boat was beached in the Menominee River at the east end of the Marinette Fuel & Dock Company slip. In 1937, *Sidney O. Neff* was surveyed as part of a Works Progress Administration project known as HAMMS. The project was a nationwide survey of watercraft (primarily along the East Coast, Great Lakes and California) that was conducted to “document the design and technical evolution of vessel types significant in America’s commercial maritime history.” Two WPA surveyors, Chester Carsten and Frank Stephens created a series of six scaled line drawings of *Sidney O. Neff*, which were curated by the Smithsonian Institution to augment its National Watercraft Collection. Photos were taken of the ship in situ and a brief history of the vessel was researched (HAMMS Collection).

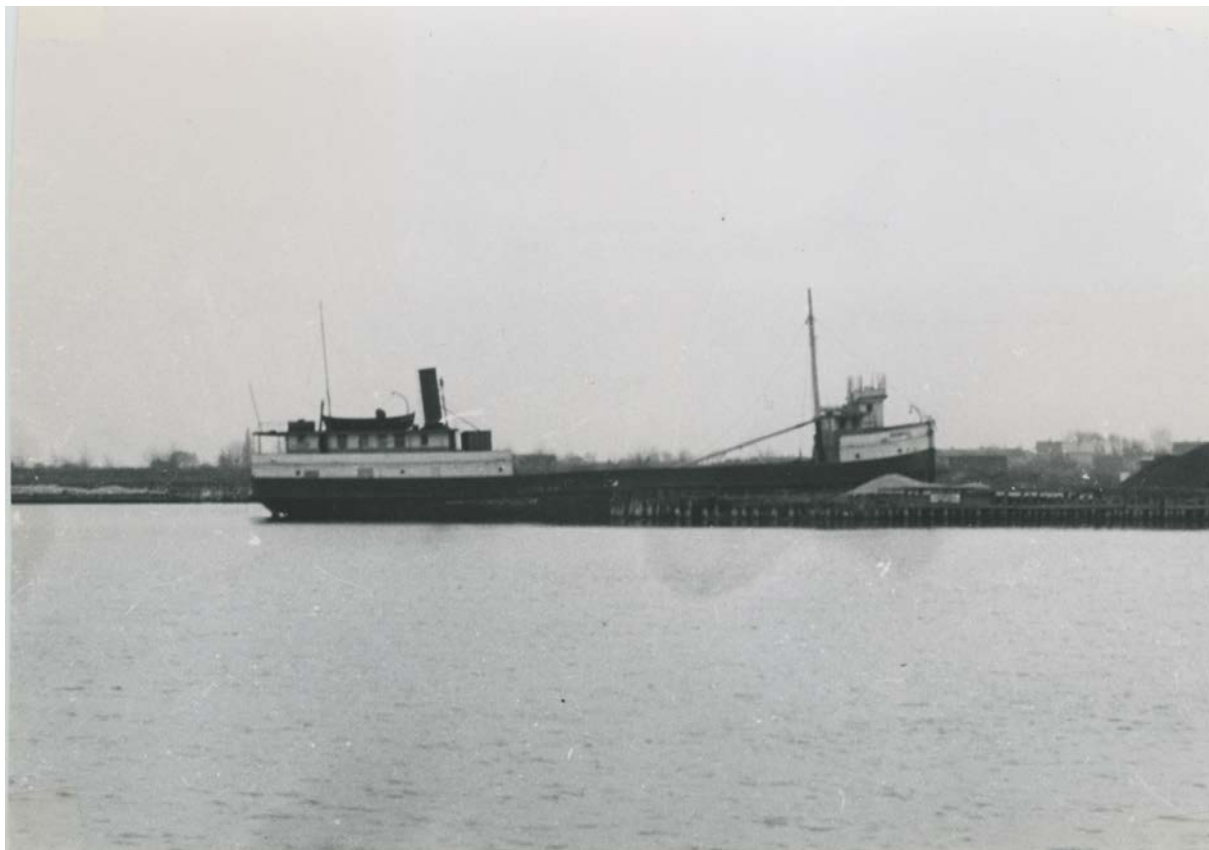


Figure 39. *Sidney O. Neff* where it was abandoned in Marinette, 1937 (Smithsonian Institution)

In April 1938, a town meeting sponsored by the Marinette Yacht Harbor Association was held in the Crystal Room of Hotel Marinette to discuss the feasibility of purchasing *Sidney O. Neff* as a community yacht, service building, and clubhouse, and over 50 people attended. However, this too, was not to be. The ship was moved during the summer of 1939 to make way for the Diamond Coal & Dock Company and at that time, *Sidney O. Neff*’s machinery was salvaged. Finally, on the morning of 31 October 1939, the *Sidney O. Neff* was unceremoniously towed out

of the Menominee River by the fishing tug *Four Brothers*. Captain Angwall was onboard and the vessel was scuttled in eight to ten feet of water, approximately 1,700 feet southeast of the south pier head at Menominee Harbor, outside of the course used by commercial vessels (*Escanaba Daily Press* 1938, 1939; *Green Bay Press-Gazette* 1940).

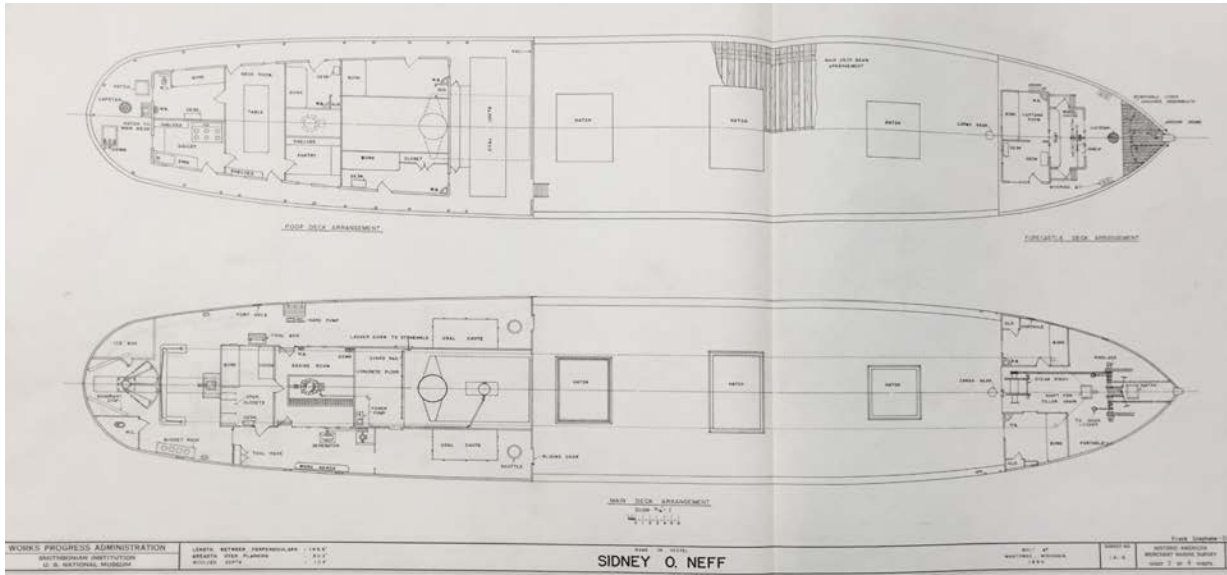


Figure 40. Plan view schematic of *Sidney O. Neff*, surveyed as part of the Historic American Merchant Marine Survey after its abandonment in 1937 (Smithsonian Institution)

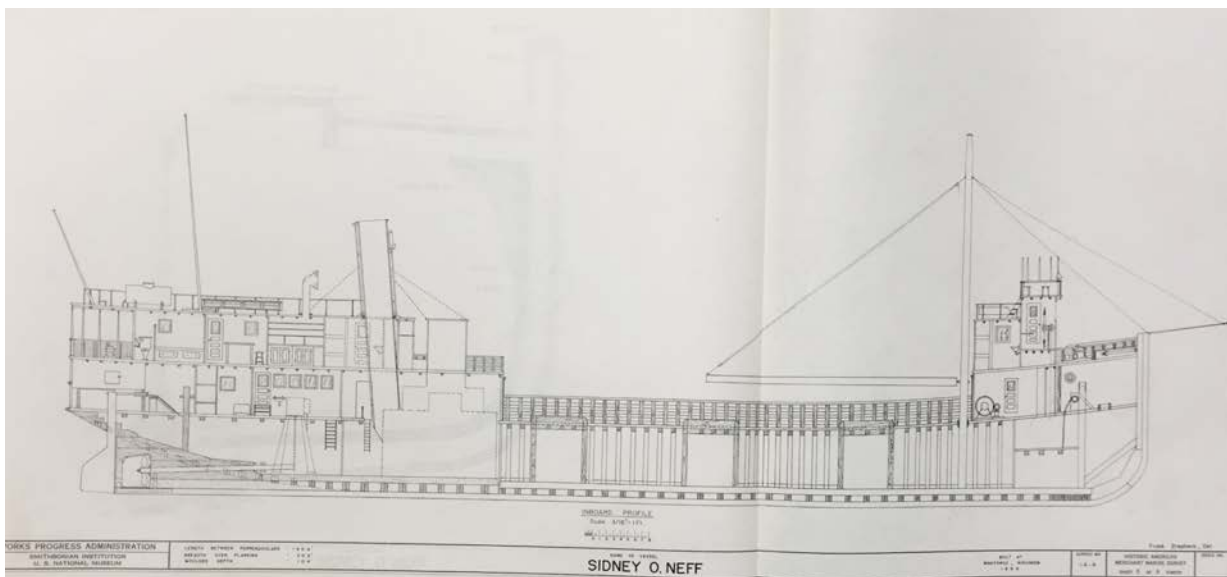


Figure 41. Profile view schematic of *Sidney O. Neff*, surveyed as part of the Historic American Merchant Marine Survey after its abandonment in 1937 (Smithsonian Institution)

Site Description

The remains of the steambarge *Sidney O. Neff* (47MT-0131) lie broken on an even keel in 10 to 15 feet of water, 0.35 miles southwest of the Marinette harbor entrance in the waters of Green Bay, near Marinette, Marinette County, Wisconsin. The vessel sits on a heading of 35-degrees, with its bow facing northwest toward Chambers Island. The ship remains broken on the lakebed due to years of wind, wave, and ice action. Large sections of its upper hull structure are not extant due to the vessel's method of abandonment, and years of wave and ice action; although, most of the lower hull remains. Many of the vessel's construction components and artifacts remain within its hull and large debris field to the southwest of the main wreckage.

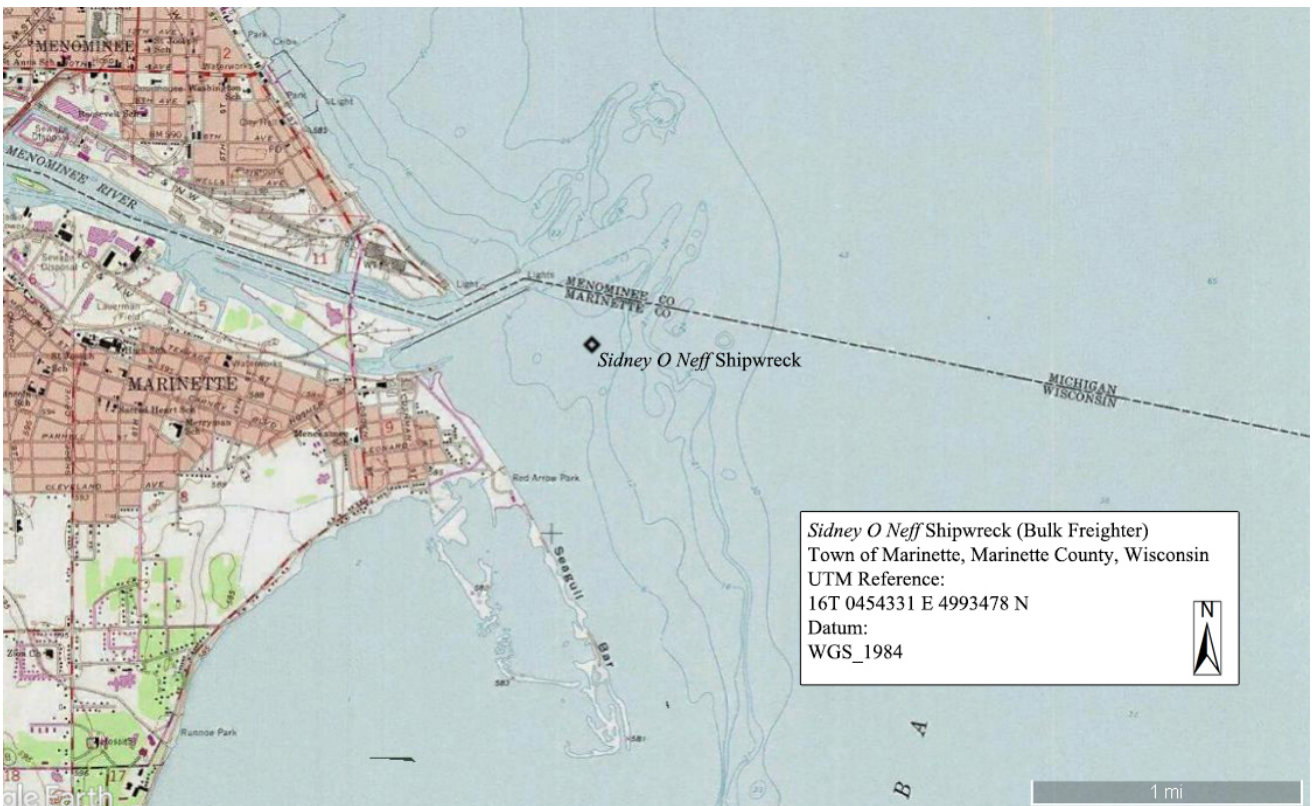


Figure 42. Location of *Sidney O. Neff*

The site has been known since its abandonment in 1939 and remains a popular dive site for local divers. A Phase II archaeological survey of *Sidney O. Neff* was initiated in June 2021 by maritime archaeologists and volunteers from the Wisconsin Historical Society. A single baseline was extended down the length of the wreckage, extending 150.0 feet. All measurements for the survey were taken from this baseline.

The overall length of the wreckage, measured from the stempost to the sternpost, is 152.1 feet, and the width of the hull measures 30.4 feet at the widest point of intact wreckage (taken from the port and starboard turn of the bilge). Overall, the width of the wreckage measures 36.8 feet

wide, and encompasses the fallen section of the upper hull. At its launch, the vessel was reported to measure 149.6 feet long with a beam of 30.2 feet. Given the wreck dimensions and location, the remains were determined to be that of the converted wooden steambarge *Sidney O. Neff*. Although in shallow water, covered in algae and a coat of invasive quagga mussels, the waters of Green Bay have kept the remains of the vessel well preserved, allowing for detailed observations of its construction and artifacts contained on the site.

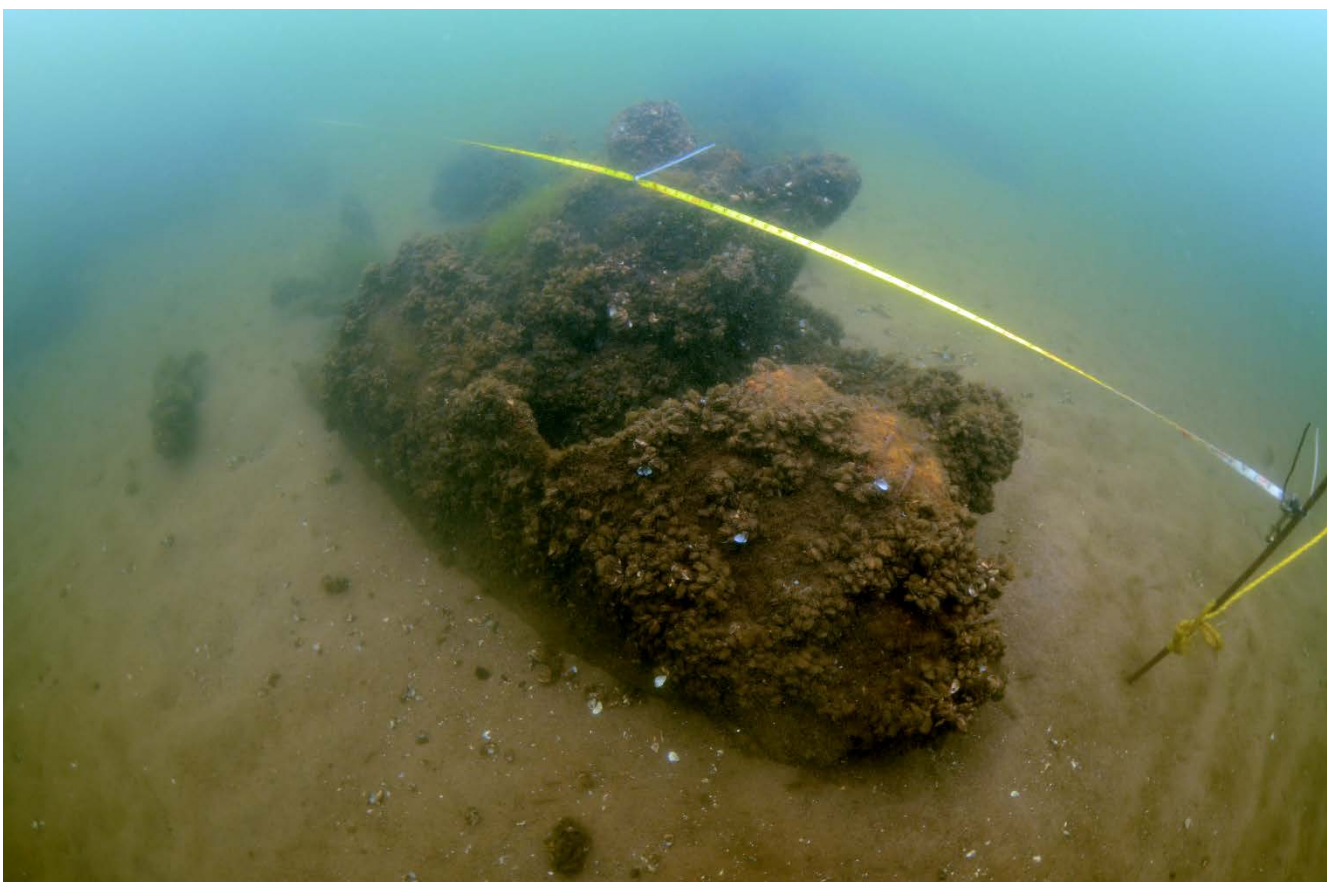


Figure 43. Stem post of *Sidney O. Neff*, looking aft (Wisconsin Historical Society)

Sidney O. Neff's hull is constructed of double wooden frames and hull planking, and measures 1.5 feet in overall width. The frames can be seen at the break at the turn of the bilge and near the vessel's stern. The frame sets have a sided measurement of 0.9 feet (with each futtock measuring 0.45 feet wide), and are spaced 1.2 feet apart. Fasteners throughout the vessel measure 0.05 feet in diameter and are spaced 1.2 feet apart. The roves around the fasteners measure 0.1 feet in diameter. The lower hull remains largely intact and largely buried in sand. The upper sections of the hull are no longer extant at the site of the main wreckage but have been damaged and moved by wave and ice action over the years. Sections of this upper hull planking are extant in the large debris field to the southeast of the main wreckage. *Sidney O. Neff*'s outer hull planking measures 0.7 feet wide and 0.2 feet thick, while the ceiling planking measures 0.5 feet wide and 0.3 feet thick.

Sidney O. Neff's hull is broken at the turn of the bilge. A small section of broken floor timbers is also visible on the starboard side of the keelson, extending from 12.6 feet to 60.5 feet along the baseline. This demonstrates evidence that *Sidney O. Neff*'s hull is broken in multiple places, although the entire lower section of the hull is in place beneath the sandy bottom of Green Bay. An additional section of floors can be seen on the port side of the keelson, from 29.9 feet to 41.2 feet along the baseline.

Although much of *Sidney O. Neff*'s upper hull sections are no longer extant, near the bow on the port side of the wreckage, there are the lower remnants of the vessel's bulwark stanchions. These would have extended up above the hull planking and supported the vessel's bulwarks at the bow. These bulwark stanchions measure 0.4 feet thick and 0.3 feet wide, and are spaced 1.8 feet apart. This is the only section of the wreckage where the bulwark stanchions remain extant.

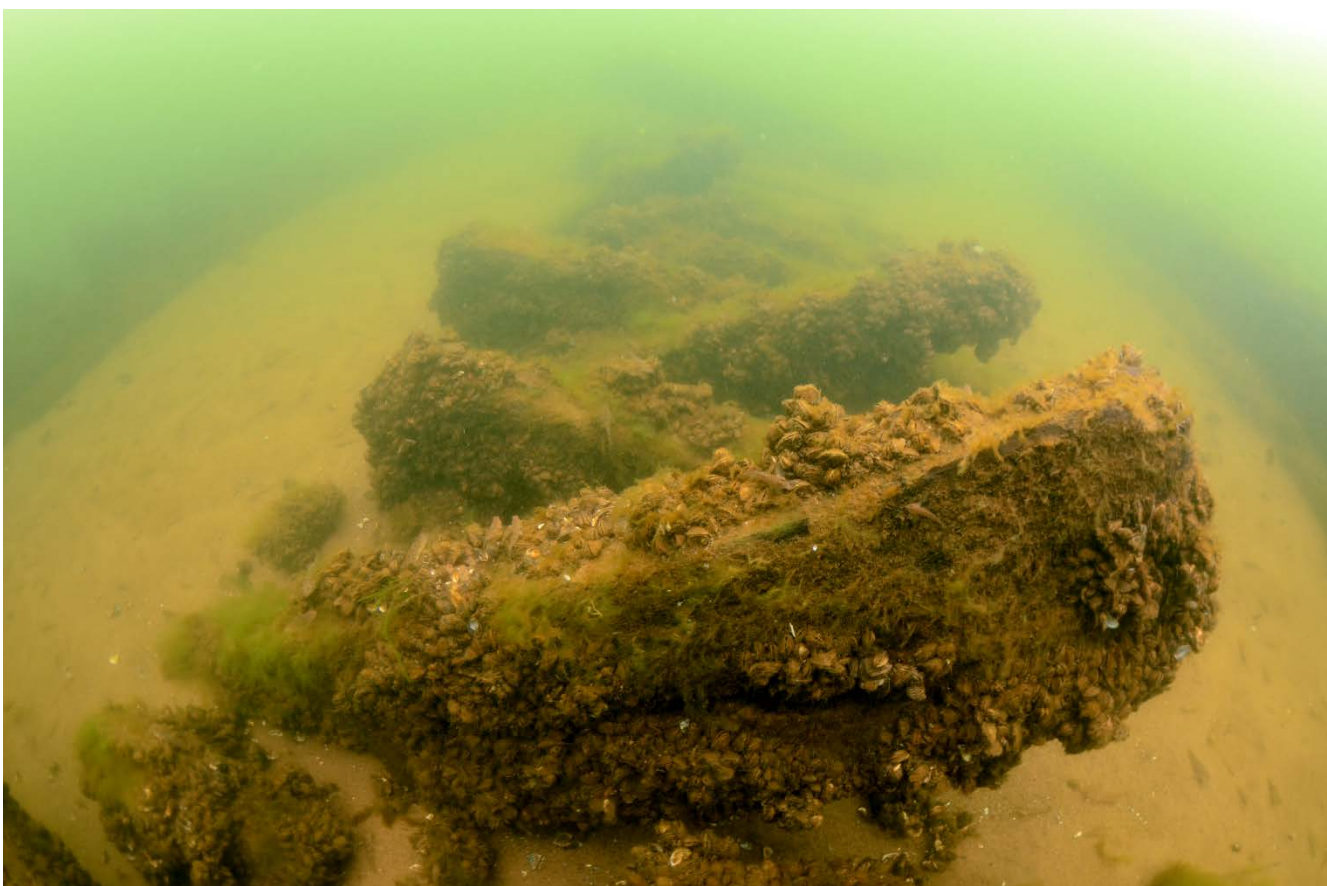


Figure 44. *Sidney O. Neff*'s frames, split at the turn of the bilge (Wisconsin Historical Society)

Sidney O. Neff was also equipped with a single metal hogging arch and cross planking. The hogging arch can be seen on the port side of the vessel, still attached to the hull near the bow. Another section of the hogging arch sits in the sand 5.2 feet off the port side of the vessel at 103.0 feet along the baseline, measuring 7.1 feet in length before extending beneath the sand. A

third section of this hogging arch is attached to a large hull section in the debris field off the starboard side aft quarter of the wreckage. The hogging arch measures 0.8 feet wide and 0.05 feet thick. Sections of the vessel's cross bracing can still be seen on the port side hull, between the frames and outer hull planking, as well as near the remains of the vessel's engine. This strapping measures 0.35 feet wide and 0.02 feet thick.



Figure 45. An archaeologist documents the remains of *Sidney O. Neff*'s engine surface condenser (Wisconsin Historical Society)

Although the vessel's stempost is broken, with the upper remains no longer extant in place, the remaining section measures 1.0 feet by 0.9 feet. At the bow, evidence of *Sidney O. Neff*'s metal sheathing remains extant in place. This sheathing measures 0.02 feet thick. This sheathing was used to protect *Sidney O. Neff*'s bow so it could break through ice when working during the cold winter months.

Sidney O. Neff's keelson structure remains visible above the sand along the entire length of the wreckage, except near the bow. The stempost extends into the sand and sand covers the first 21.6 feet of the keelson. The keelson itself measures 1.2 feet wide by 0.8 feet thick. For most of the length of the vessel, the keelson is covered by two rider keelsons, each measuring 0.5 feet thick and 0.6 feet wide. *Sidney O. Neff* also has two sister keelsons on either side of the keelson itself. These sister keelsons measure 0.7 feet wide and 0.8 feet thick. The starboard side sister keelson is visible from 26.5 feet to 108.9 feet along the baseline, where it extends beneath the sand. The port side sister keelson is only visible beginning at 79.9 feet along the baseline and extends to 108.8 feet along the baseline.



Figure 46. Flywheel from *Sidney O. Neff*'s compound engine (Wisconsin Historical Society)

Sand covers most of the central portion of *Sidney O. Neff*'s lower hull. The aft section of *Sidney O. Neff* contains multiple pieces of debris and other components from the upper decks of the vessel, along with the remnants of the vessel's engine components. Extending from 81.0 feet to 124.0 feet along the baseline, multiple timbers remain inside the vessel's hull, all likely from the upper hull structure, which is no longer extant in place. This debris field also contains components from *Sidney O. Neff*'s unique coalbunker. Following its conversion in 1898, *Sidney O. Neff* was outfit with a double hopper coalbunker located on the vessel's aft deck, just

forward of the steam funnel. This coalbunker was made of metal and funneled the coal from the deck to the boiler room located below. Three large pieces of this coalbunker remain inside the wreckage at 90.0 to 114.0 feet along the baseline. Each piece measures around 3.5 feet by 7.5 feet and has a thickness of 0.05 feet.

An additional large metal piece sits at 47.6 feet along the baseline, just outside the port side hull. It measures 19.4 feet in length, 3.4 feet wide, and is made up of metal measuring 0.05 feet thick, the same thickness as the other metal coalbunker pieces in the hull. This is likely the remains of part of one of the hoppers from inside the coalbunker. The forward most end of this hopper is bent, likely damaged by the movement of wave and ice action since the vessel's abandonment.

Although the vessel's machinery was listed as being salvaged and removed in 1939, prior to the vessel's ultimate abandonment outside the Marinette harbor, multiple engine components remain on site in *Sidney O. Neff's* hold. The largest and most visible engine components still in the hold consist of the engine's flywheel, the thrust bearing, the coupling from the prop shaft to the engine, the steam reversing gear, the engine bed, the engine's air and water pump, and the base of the condenser. The engine flywheel measures 3.7 feet in diameter, and 0.4 feet thick, and contains large teeth all along its circumference. This would have fit into an additional gear that rotated the wheel, and in turn, rotated the propeller shaft and the propeller. The thrust bearing is located just aft of the engine bed, along the propeller shaft, and is partially obscured by one of the remaining engine supports. The coupling for the propeller shaft is located at 137.7 feet along the baseline, on the propeller shaft, and measures 1.2 feet by 0.9 feet.

The engine bed itself sits at 128.9 feet along the baseline, measuring 5.6 feet by 5.3 feet. It is partially obscured by sand that has built up in this section of the hull. The engine air and water pump, and base of the condenser are located just to port of the engine bed, where they would have originally sat just next to the engine. *Sidney O. Neff's* engine likely had a stacked air pump and water pump. What can be seen on the site today is likely the base of the water pump, due to the large port in the cylinder wall. The air pump is likely located below this, buried in the sand and other loose engine debris. The water pump measures 3.8 feet by 2.5 feet overall, and contains a cylinder measuring 1.5 feet in diameter. The base of the condenser is located just aft of the water pump and measures 0.75 feet in diameter. The circular opening just to the port side of the water pump is the end of the discharge pipe.

A multitude of broken water and steam pipes remain in this area as well. These were likely left behind during the machinery salvage and were not considered valuable enough to remove. These pipes range in measurement from 0.2 feet to 0.6 feet in diameter. Additionally, the engine's supports were left behind in the hull. These remain on site, randomly placed where the engine originally stood. These supports are made of metal and measure 0.25 feet in thickness,

5.9 feet in length, and 1.0 feet in width. The steam-driven reversing gear is located on one of these supports, located at 124.6 feet along the baseline on the starboard side of the engine bed. This steam reversing gear would have been used to reverse the spin direction of the propeller and would have been used to put *Sidney O. Neff* in reverse. The placement of this gear on one of the engine supports was very common.

Just aft of the remains of *Sidney O. Neff*'s engine, the propeller shaft extends aft to the shaft log, and stern deadwood. The propeller shaft itself measures 0.8 feet in diameter. The shaft log measures 1.2 feet wide and 8.0 feet long. The deadwood is made up of multiple timbers, all measuring 1.2 feet wide. The propeller shaft extends through the shaft log, and terminates just aft of the shaft log, where the vessel's propeller remains extant in place. The propeller is a four-blade propeller, with two of its four blades still extant. The propeller measures 8.6 feet across from tip to tip. The two broken propeller blades are located at the top of the propeller (in its current configuration), and broke near the blade roots. The blades themselves no longer remain. This damage was likely caused by ice action over the years since *Sidney O. Neff*'s abandonment. The two extant blades measure 3.1 feet from root to tip, and 3.4 feet wide at their widest section, near the tip. The blades measure 2.7 feet wide closer to the blade root.

Sidney O. Neff was originally constructed with a rounded, fantail stern, and the vessel maintained that stern configuration during its 1898 conversion to a steambarge. The vessel's rounded stern is no longer extant on site, but evidence of this construction can still be seen near the stern of the wreckage. The butt of the ship remains, with its frames still in place. Unlike with a square transom and stern, the vessel's butt remains largely flat. This is evidenced on the port side of the vessel, near the stern. The starboard side aft section of the ship is partially contained in the large debris field to the southeast of the main section of wreckage. The vessel's rudder and rudderpost no longer remain in place, and the vessel's sternpost is no longer extant. The stern of the vessel rises nearly 6.0 feet off the bottom of the bay, where the sand has been scoured out around the propeller.

Three non-contributing artifacts remain extant within *Sidney O. Neff*'s hull. Two anchors and one windlass sit within the remains of the hull; they are not original to the vessel. The two anchors are too small to have been located on this size of vessel, and they do not match the anchors *Sidney O. Neff* would have been carrying. Historic images of *Sidney O. Neff* show the vessel equipped with a single mushroom anchor, and two admiralty anchors, which would have measured much larger than the admiralty anchors currently located at the wreck site. According to local divers, these anchors were located on a nearby reef in Michigan waters and were moved to this location in the 1970s/1980s to make it a "more interesting" dive site. The anchors were not associated with any nearby wrecks and were likely left on the reef when vessels cut their anchor lines and were not recovered. No additional historic information about these anchors is available.

The third artifact within *Sidney O. Neff*'s hull that is likely not associated with the vessel is a single windlass, located on the port side of the keelson, sitting parallel to it, extends from 92.4 feet to 104.2 feet along the baseline. The windlass is made of wood and measures 11.8 in overall width and has a diameter of 1.2 feet measured at its center. The windlass' gypsy heads each measure 1.4 feet long and 0.9 feet in diameter. Initially, this windlass was thought to be of an older design than what would have been associated with *Sidney O. Neff*. Local divers have reported that this windlass was actually salvaged from the nearby wreck, *Wisconsin*, by diver Frank Hoffman, of *Alvin Clark* fame, in the 1970s. While initially intending to recover the windlass, Hoffman left it at the site of *Sidney O. Neff* and was never recovered.

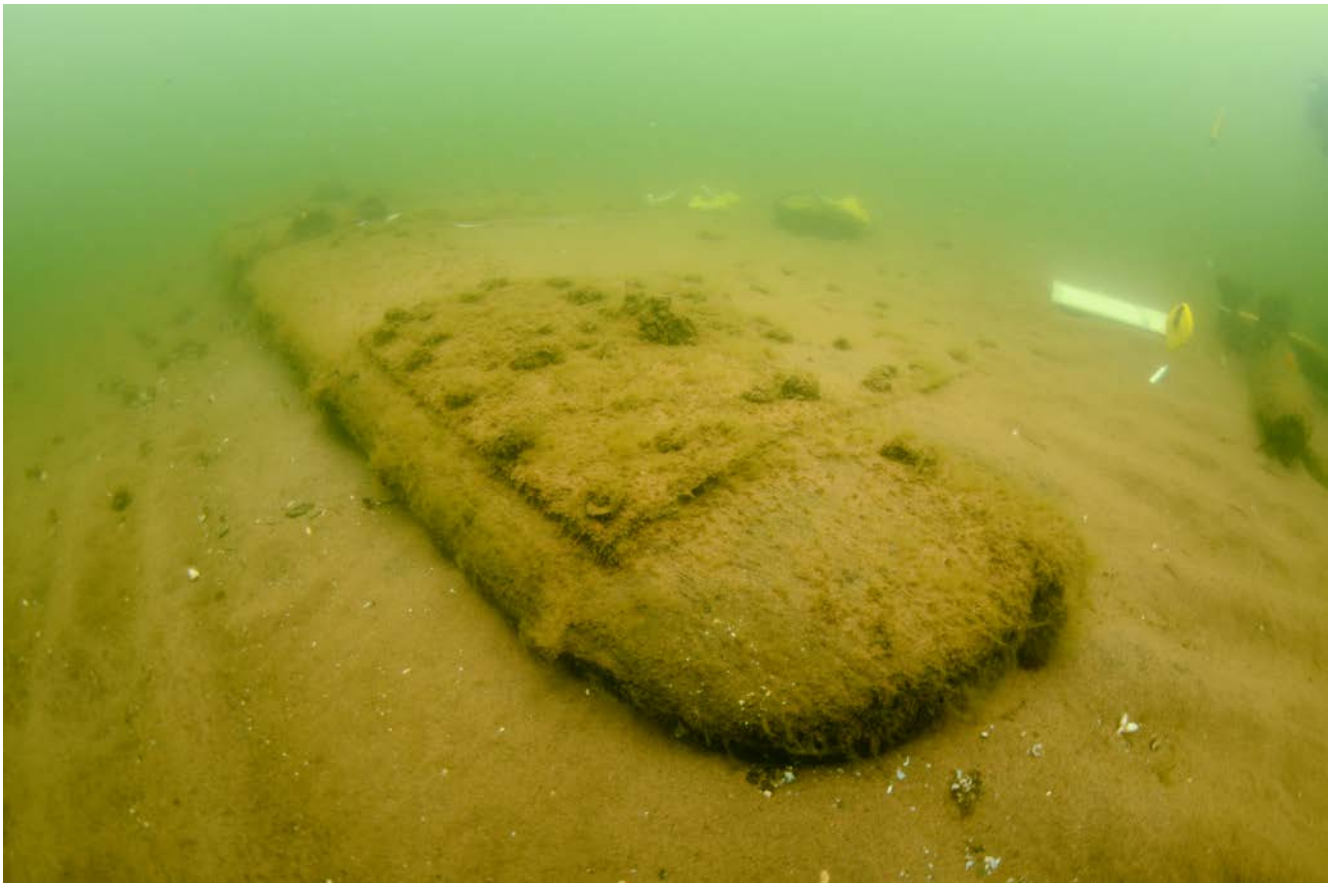


Figure 47. *Sidney O. Neff*'s disarticulated rudder, located in the debris field off the starboard side (Wisconsin Historical Society)

The size and style of this windlass potentially matches the age of *Wisconsin* (which was originally built as the steamer *F. & P.M. No. 1* in 1882, converted into a tow barge in 1899, and was abandoned in Green Bay in 1935). However, *Wisconsin* was burned to the waterline during its abandonment and remains a burned out hull in 85 feet of water on the bottom of Green Bay. The windlass at the *Sidney O. Neff* site shows no indication of being burned or that it would have been near a fire as a vessel burned to the waterline.

Upon analyzing the scale drawings of *Sidney O. Neff* created during the Historic American Merchant Marine Survey (HAMMS) survey in 1937, the windlass depicted on *Sidney O. Neff* bears a striking resemblance to the windlass currently located on the site. The windlass is longer (wider) and narrower in diameter than many other windlasses. Although no measurements accompany the HAMMS survey report, the drawing depicts a very long (wide) and narrow in diameter windlass. At the time of the survey, it was not possible to identify the provenience of this windlass.

An additional artifact located within the hull of *Sidney O. Neff* is a single hawsepipe, located 18.3 feet aft of the stempost along the baseline. The hawsepipe sits just to the starboard side of the keelson, and remains partially obscured by sand, and heavily covered in quagga mussels. It measures 2.9 feet long, 1.2 feet wide, and has an opening measuring 1.8 feet long and 1.1 feet wide. This hawsepipe likely ended up in this location during the breakup of the upper sections of *Sidney O. Neff*'s bow due to wave and ice action. Although it is not confirmed, this is likely the vessel's starboard-side hawsepipe. The portside hawsepipe was not located at the time of the survey.



Figure 48. One of *Sidney O. Neff*'s hawsepipes (Wisconsin Historical Society)

Outside of the main wreckage, a large debris field, measuring 68.5 feet by 68.0 feet, is located 22.1 feet to the southeast of *Sidney O. Neff*'s starboard hull structure. This debris field contains four large pieces of hull planking and frame sets, along with three additional wooden hull components. Although it is not possible to discern where exactly most of these pieces came from on the main wreckage, it is likely they are parts of the missing upper hull sections and starboard butt section of the vessel, near its aft end. Although side scan sonar was used to search around the entire wreck site, this is the only debris field located during the 2021 survey.



Figure 49. A section of *Sidney O. Neff*'s upper hull structure, located in the debris field off the starboard side (Wisconsin Historical Society)

The first piece of wreckage, located nearest *Sidney O. Neff*'s hull, is a large section of outer hull planking and frame sets. This piece is located 22.1 feet from the vessel's outer hull at 132.2 feet along the main baseline, and measures 5.9 in overall width and 22.8 in overall length. The piece consists of eight outer hull planks and five frame sets, along with a section of the metal hogging arch, measuring 44.2 feet in length. Located 18.5 feet to the southeast from this first piece of wreckage, is an additional section of wooden timbers, measuring 16.6 feet in length and 0.9 feet in overall width. This section is made up of two large timbers, measuring 0.8 feet by 1.0 feet. A single notch, located 13.1 feet along the length of these timbers, is 0.3 feet deep, and measures

1.0 feet across. It is difficult to ascertain where these timbers originated, but it is possible that they are additional pieces from near the stern of the vessel.

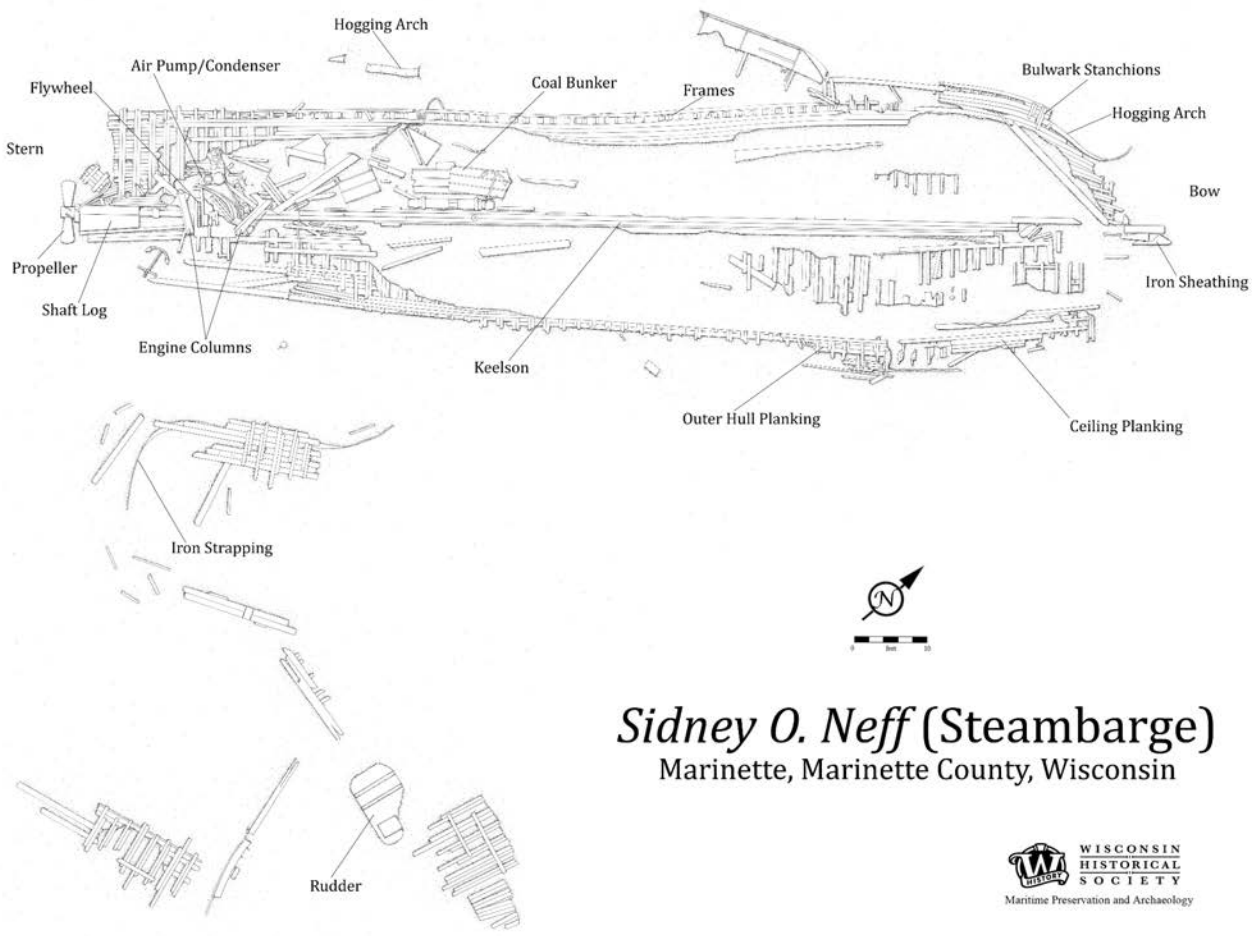
The second large piece of hull planking sits 51.6 feet from the hull of the main wreckage, and measures 14.8 feet by 2.6 feet. It consists of two planks and five single futtocks. With these single futtocks, it is likely that this piece of hull came from near the bow of *Sidney O. Neff*. The third piece of hull planking sits 77.2 feet from the main wreckage, and measures 10.7 feet by 27.6 feet in overall size. It is made up of four outer hull planks and eight frame sets. The frame sets have the same room and space measurements as the main hull sections. One ceiling planking is also still attached to three of the frame sets. This plank measures 0.5 feet wide and 3.3 feet long.

Located 58.9 feet from the main wreckage, in the center of the debris field, is a single timber, lying next to a thick timber with two large fasteners sticking out of one side of it. The single timber measures 11.7 feet in length, 0.7 feet wide and 0.2 feet thick. These fasteners are holding an additional, small, and worn-down timber. The large timber measures 0.9 feet by 0.7 feet, and 8.7 feet long. The small worn-down timber measures only 0.4 feet by 0.5 feet and 1.5 feet long. The two fasteners measure 0.05 feet in diameter and are spaced 1.5 feet apart. Attached to the large timber, on the side opposite of the fasteners, is a thin metal strap that measures 13.4 feet long and 0.1 feet thick. While it is not known where these timbers originated on the main wreckage, it is possible that this is an upper section of the missing stempost. *Sidney O. Neff* was equipped with metal sheathing on its bow and a metal cutwater, to protect it from ice and allow it to continue operating in winter months.

The final large piece of hull planking in the debris field is the northern most piece, and it measures 10.5 feet by 12.3 feet overall. The piece consists of six frame sets and two ceiling planks. One of the frame sets consists of three futtocks, as opposed to two. Most of the frame sets on the main wreckage consist of two futtocks, except at 90.1 feet along the baseline on the port side of the vessel near midships; here a triple frame set is seen. It is likely that this hull section came from the port side of the vessel near midships. Next to this large piece of wreckage is a smaller piece of wreckage, measuring 6.3 feet by 5.5 feet overall. Though covered by a thin layer of sand, nine futtocks sit close together, not matching the spacing seen throughout the rest of the vessel. These either are cant frames from near the vessel's bow or a small section of the frames from the vessel's missing rounded fantail stern.

The final item located in the *Sidney O. Neff*'s debris field is the vessel's rudder. The rudder measures 10.3 feet tall, and 6.3 feet wide and is made of wood. A single metal plate is located on the rudder's side, located near the rudder's top and measuring 2.0 feet by 2.8 feet. Two additional metal straps are located near the bottom of the rudder, each measuring 0.4 feet in width, and extending around the width of the rudder. These are located 1.4 feet apart, and are

4.0 feet and 1.9 feet from the bottom of the rudder. The rudderpost was not attached to the rudder, and was not extant at the site during the 2021 survey.



Sidney O. Neff (Steambarge)
 Marinette, Marinette County, Wisconsin



Figure 50. *Sidney O. Neff* site plan (Wisconsin Historical Society)

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CHAPTER SIX

SCOW SCHOONER *SUNSHINE*

The scow schooner *Sunshine* was built at Detroit, Michigan in 1856 under the supervision of Captain Jerry Duprey. The vessel was described as having one deck, two masts, a square stern, and no figurehead. It measured at 94 feet 8 inches in length, 23 feet 7 inches in breadth, with a 5 feet 1 inch depth of hold, and its capacity was calculated at 101 68/95 tons. The ship was enrolled at the port of Detroit on 15 August 1856. Captain Duprey was not only the ship's builder, but also its sole owner and Master (Bureau of Navigation 1856). A seasoned mariner, in 1855 Duprey captained the steamer *Swan* and was ½ owner of that vessel until turning his attention to the newly built *Sunshine* the following season. *Sunshine* hauled barrel staves on Lake Erie between Detroit and Buffalo during its first season. On 29 September while entering the harbor at Cleveland to shelter from a storm that was raging on the lake, *Sunshine* ran into the scow *Nebraska* damaging its stern (*Buffalo Daily Republic* 1856; *Buffalo Morning Express* 1856; *Cleveland Herald* 1856).

A new enrollment was entered for the vessel at the port of Detroit on 12 February 1857 for a change in owner. Captain Noah Dibble and William Penfield purchased the scow from Captain Duprey, each holding ½ interest in the vessel. Detroit remained the ship's homeport, and Captain Dibble became *Sunshine*'s new Master (Bureau of Navigation 1857). In 1858, Captain Thomas Dyer replaced Dibble at the helm but the change in Master was not recorded in the ship's papers. Between 1857 and 1859, the ship primarily carried gypsum between Sandusky and Detroit (*Detroit Free Press* 1858, 1859a, 1859b, 1859c, 1859d, 1859e, 1859f).

On 9 May 1860, *Sunshine* delivered a cargo of plaster from Sandusky to Cleveland. It loaded with 135 tons of coal for Toledo and cleared the same day. The ship made one run between Sandusky and Detroit in June. In July and August 1860, the scow carried barrel staves from Fremont, Ohio to Buffalo. It returned to the Sandusky to Detroit shipments through October (*Buffalo Courier* 1860; *Buffalo Morning Express* 1860; *Detroit Free Press* 1860a, 1860b; *Cleveland Daily Leader* 1860).

On the evening 5 June 1861 after loading gypsum at Sandusky, as the scow was exiting the port, it struck a bridge. It was not initially thought that there was damage to the vessel, and Captain Dyer sailed on. The crew noticed that the ship was filling with water and reported it. Captain Dyer seemed to pay no attention to the report but shortly afterwards he left the wheel, went into the cabin, and locked the hatch. The crew frantically attempted to break into the cabin, but the scow sank in twelve feet of water and Captain Dyer drowned inside the ship. He left a wife and several young children in Sandusky (*Buffalo Commercial Advertiser* 1862; *Chicago Tribune* 1861).

Following Captain Dyer's death, *Sunshine* was raised and sold in August 1861. G.B. Smith of

Sandusky, Ohio, acted as agent for B.F. Smith of Albany, New York, and entered a new enrollment in the port of Sandusky for the change in owner. B.F. Smith became sole owner, Captain V.V. Hinman was appointed Master, and Plaster Bed, Ohio, on the north shore of Sandusky Bay became the vessel's new homeport (Bureau of Navigation 1861). The ship reportedly carried upwards of 125 3/4 tons of plaster per shipment from Sandusky to Cleveland. Plaster came from a newly discovered plaster bed and all cargoes were sold through merchant William Wellhouse (*Cleveland Daily Leader* 1861).

Over the winter months, *Sunshine* was rebuilt at Plaster Bed, Ohio (Bureau of Navigation 1862). On 28 April 1862, a new enrollment was entered at the port of Sandusky for the scow. B.F. Smith sold 1/3 share in the vessel to Captain Charles W. Nichols of Ottawa, Canada West. Captain Nichols became managing owner and Master of the ship. Plaster Bed remained the scow schooner's homeport. Following the rebuild, the ship was remeasured at 97 feet 4 inches length, 24 feet 3 inches beam with a 6 feet 5 inches depth of hold. Its capacity was calculated at 135 64/95 tons (Bureau of Navigation 1862).

Sunshine was kept busy during the 1862 season running between Lake Erie ports. On 3 May, the ship entered the port of Cleveland from Sandusky on its first trip of the season. The vessel cleared Buffalo on 14 June with 300 barrels of salt for Sandusky; once unloaded, 36,000 staves were taken aboard for Buffalo. The ship arrived at Buffalo on 21 June, unloaded and cleared the next day for Fremont with Captain Wheeler at the helm for one trip. This change in Master went unrecorded in the ship's papers. *Sunshine* collected 28,000-barrel staves from Fremont, arriving at Buffalo on 2 July. The ship cleared Buffalo on 7 July for a return trip to Fremont.

At Fremont, it took aboard 100,000 feet of lumber and sailed for Buffalo, arriving on 29 July. The trip and cargo were repeated with arrivals at Buffalo recorded on 12 August and 25 August. The ship unloaded and cleared on 24 August for Sandusky. The next recorded entry at Buffalo was on 5 September with 6,000 bushels of wheat from Fremont. Captain Titus was the helm for this one trip. This change in Master also went unrecorded in the ship's papers. The 25 September arrival at Buffalo brought 35,000-barrel staves from Toledo, and the 20 October entry was recorded from Port Clinton with 25,000-barrel staves and 50 barrels of flour. *Sunshine* departed Buffalo on 25 October light bound for Erie (*Buffalo Commercial Advertiser* 1862a, 1862b, 1862c, 1862d, 1862e, 1862f, 1862g; *Buffalo Courier* 1862a, 1862b, 1862c, 1862d; *Buffalo Morning Express* 1862a, 1862b; *Cleveland Daily Leader* 1862).

At Sandusky on 1 June 1863, the scow took on an assorted cargo for Tawas City, Michigan consisting of hay, cattle, and provisions (*Detroit Free Press* 1863a). Otherwise, during the season the ship moved cargo between Sandusky, Detroit, and Buffalo (*Buffalo Commercial Advertiser* 1863; *Buffalo Courier* 1863; *Detroit Free Press* 1863b). On the evening of 21 September 1863, the schooner *D.R. Martin* and *Sunshine* collided in the Detroit River between

Detroit and Malden, Canada West. *Sunshine's* hull was damaged, and the ship was taken to Detroit for repairs (*Buffalo Courier* 1863; *Detroit Free Press* 1863c).

On 1 April 1864, a new enrollment was entered at the port of Sandusky for change in owners. G.B. Smith, acting as agent of the owner, listed B.T. Smith of Ottawa, Canada as sole owner of *Sunshine*. Plaster Bed remained its homeport and Captain William B. Large, Jr. was appointed its new Master (Bureau of Navigation 1864). While bound from Sandusky to Detroit with a cargo of plaster on the night of 14 April 1864, *Sunshine* struck Stony Island in the Detroit River. Captain Large made his way to Detroit to seek the assistance of a tug. The ship was towed into the shipyard at Detroit where it received repairs (*Buffalo Commercial Advertiser* 1864a, 1864b). *Sunshine* carried dimensional lumber to Buffalo from Detroit and Saginaw in July and August 1864 (*Buffalo Commercial Advertiser* 1864c; *Buffalo Courier* 1864a, 1864b, 1864c).



Figure 51. Augustus H. Moss (Sandusky Library Archives Research Center)

A new enrollment was entered at the port of Sandusky on 2 April 1865 for a change in owners. B.T. Smith sold the ship to Augustus H. Moss, Horace O. Moss and Truman Moss. Augustus H. Moss had married his second cousin, Mary Esther Moss in 1837, and Horace O. and Truman were his brothers-in-law. The Moss's were prominent businessmen in Sandusky and primaries in the Moss Brothers Bank, Moss Brothers & Merry Shipyard, and Moss Brothers Lumber Company amongst others. Each man held equal 1/3 interest in the vessel. Captain J.W. Farwell

also of Sandusky took command. The ship was remeasured at the time of registration at 97.0 feet in length, 24.0 feet in breadth and 6.2 feet depth. It was calculated to have a capacity under the tonnage deck of 106.35 tons and the capacity of enclosures on the upper deck of 9.21 tons, for a total tonnage of 115.56 tons. The document was entered at the port by three men A.H. Moss managing owner, John W. Farwell Master, and H.F. Merry Secretary, all sworn by oath that the information on the form was correct (Bureau of Navigation 1865).

Two accidents occurred in 1865. While moored in the Detroit River on the night of 29 October the scow sustained damage when it was struck by a tug with a string of several vessels (*Buffalo Commercial Advertiser* 1865). Information on the name of the tug and cost of damages were not located. On 22 November *Sunshine* was loading lumber at Lexington, Michigan on Lake Huron, when it was driven against the pier, and sunk shortly afterwards. The tug *Prindiville* was sent from Detroit with a steam pump and succeeded in raising the vessel. It was brought to Detroit for repairs. Cost to the owners was \$1,200 (*Buffalo Commercial Advertiser* 1866; *Cleveland Daily Leader* 1865; *Chicago Tribune* 1865). Information on the ship's travels and cargoes for 1866 were not located.

On 4 March 1867, Captain John W. Farwell purchased the vessel and registered *Sunshine* at the port of Sandusky. He was listed as sole owner and Master. In this document, the ship was described as having one deck, two masts, a scow stern, and a scow head (Bureau of Navigation 1867). *Sunshine* engaged in carrying lumber and lath to Toledo and Sandusky from East Saginaw during the season (*Buffalo Commercial Advertiser* 1867a, 1867b).

A new enrollment was entered at the port of Milwaukee on 8 April 1868. Captain Henry M. Haussauer of Milwaukee and ship carpenter, David Donaldson of Cleveland became equal $\frac{1}{2}$ owners. Captain Haussauer took over command and Milwaukee became *Sunshine*'s new homeport. On 16 July, the ship's official number, U.S. 23057, was assigned by Deputy Collector of Customs at Milwaukee, F.J. Crosby (Bureau of Navigation 1868; *Cleveland Leader* 1869). The ship carried as much as 115,000 board feet of lumber per trip and brought lumber to Milwaukee and Chicago from Manistee throughout the season (*Chicago Tribune* 1868a, 1868b; *Daily Milwaukee News* 1868, 1869).

On 6 April 1869, David Donaldson filed a libel suit in the "Courts of Law and Equity" against the scow *Sunshine* and Henry M. Haussauer for the sale of the scow. The particulars of the suit were not located, and neither was any information regarding the outcome or settlement of the case (*Chicago Tribune* 1869a). Likely before the case was heard, on 17 July, David Donaldson sold his $\frac{1}{2}$ share of scow to John Durbin of Milwaukee for \$1,625 (*Buffalo Courier* 1869a). A new enrollment was entered at the port of Milwaukee for the change in owners. Milwaukee merchant John Durbin and Henry M. Haussauer became equal $\frac{1}{2}$ owners. Milwaukee remained the ship's homeport and Captain Phillip W. Smith took over the helm (Bureau of Navigation

1869). The vessel was recorded delivering three shipments of 2,200 ties each to Chicago from St. Joseph, Michigan in April. In July and August, the ship brought lumber and lath to Chicago and Milwaukee from Muskegon and Pier Marquette, Michigan (*Chicago Evening Post* 1869a, 1869b; *Chicago Tribune* 1869b, 1869c, 1869d; *Semi-Weekly Wisconsin* 1869).

In a heavy sea from a southeast gale, on the evening of 29 September 1869, the scow *Sunshine* stranded at North Bay. The ship was bound to Chicago from White Lake, Michigan with a cargo of lumber when it started to take on water. The captain headed for shore and when he reached North Bay, the scow was sitting low in the water. The crew was ordered to jettison the deck load of lumber to get the ship to sit higher in the water. *Sunshine* was beached on the north point of North Bay. The crew left the ship sitting on the rock ledge, but the vessel took a pounding in the surf. The propeller *Lady Franklin* passed the scow at an early hour the next day and reported, “A heavy sea was constantly breaking over her, which increased in violence as the day advanced, and must have shaken her up badly.” The tug *O.B. Green* in Baileys Harbor went to the aid of *Sunshine* a few days after the stranding, but it was the tug captain’s opinion that the ship would be a total loss. The scow’s outfit was removed and shipped to Milwaukee on the schooner *Yankee Trader* (*Buffalo Courier* 1869b, 1869c; *Chicago Tribune* 1869e, 1869f; Creviere 1997; *Detroit Free Press* 1869; Hall 1869).

Months after *Sunshine* was stripped and abandoned on the point, on 26 November and 9 December 1869, it was reported that the scow schooner surprisingly was gotten off by the recent strong gales in the region. The ship was lifted by the high water, and drifted into the sanctity of the harbor where it was secured inside North Bay. After examination, it was discovered that the hull was badly broken, and the bottom was loosened from the sides. Questions remained as to whether the ship was beyond repair or if it was worth nothing more than recovering the lumber in its hold (*Chicago Tribune* 1869g, 1896h). As such, the tug *Kitty Smoke* was engaged in August 1870 to work on the vessel but was unsuccessful in raising it (*Door County Advocate* 1870; *Manitowoc Tribune* 1870). With questions of recovery still looming, the owners never surrendered *Sunshine*’s enrollment document at the port of Milwaukee as a total loss.

Given *Sunshine*’s years of service operating from the port of Sandusky, Ohio in the years leading up to and during the American Civil War, it should be taken into consideration that beginning in the 1840s Sandusky was an important terminus on the Underground Railroad. The city was included in Harriet Beecher Stowe’s *Uncle Tom’s Cabin* (1852), where fugitive slaves, piloted by railroad conductors, arrived at Sandusky to flee to Canada via lake boats. These boats that provided escape to freedom became known as “abolition boats”. The Fugitive Slave Bill of 1850 made it more dangerous for runaway slaves to remain in the northern United States than to continue onward to Canada. Many of Sandusky’s officials, lawyers, socialites, businessmen, vessel masters, as well as many quiet, lower-profile people were involved in the city’s anti-slavery movement. Lake boats like the *Arrow*, *United States*, *Mayflower*, and *Bay City* were

known to help escaped slaves reach Canada, but these vessels are known to be associated with the Underground Railroad because of their failed attempts to transport runaways northward. It is impossible to confirm those who were successful and associated with the Underground Railroad simply because they were successful, or in other words – never caught (Firelands Historical Society 1876; Peeke 1916; Siebert 1951).

It is known that several of *Sunshine*'s owners and captains were U.S. Citizens residing in Canada yet owned and/or operated this U.S. flagged commercial vessel, landing it for cargo purposes on both sides of the international border. Other individuals associated with *Sunshine* were stalwart abolitionists. H.F. Merry, co-signer as Secretary of Moss' shipping line was a registered member of the Liberty Party, and it has been written that after the year 1836 there was hardly a time that he did not employ one or more fugitives. Oftentimes, runaway slaves lived with him. Many of the merchants that consigned shipments aboard *Sunshine* were also known anti-slavery sympathizers (Firelands Historical Society 1876; Peeke 1916; Siebert 1951).

Could an unassuming plaster scow like *Sunshine* have been involved in the Underground Railroad in some capacity? Would the involvement in transportation of fugitives explain the unusual death of Captain Dyer? Because the vessel was never caught with runaways aboard, we cannot confirm that the scow schooner *Sunshine* was involved in this movement. It fits the profile of an "abolition boat" that would have been involved in the Underground Railroad and circumstantial evidence points to its involvement. The history of this ship should be reviewed in future years as more resources and information becomes available on the topic.

Site Description

The scow schooner *Sunshine* (47DR-0514) lies on an even keel, in 6 feet of water on a heading of 46-degrees, 1.1 miles southeast of the entrance to North Bay, Door County, Wisconsin. The wreck lies on a bottom of shifting sand, which covers and reveals sections of the wreckage from year to year. The remains of the vessel rest upright and broken on the lakebed with a large portion of the bilge covered by sand. The sand moves about the site from year to year, covering and uncovering different hull structures, and construction features. Overall, the site exhibits excellent preservation with major hull sections intact, including the centerboard and centerboard trunk with its centerboard chain intact, stern rise and transom, and the port side hull, up to the deck beams. None of the deck structure remains extant, and the majority of the vessel's floor remains covered by sand. The wreck rises approximately 2.0 to 3.0 feet above the lakebed. Very few quagga mussels cover the exposed surfaces of the wreck due to the sand movement across the site. The vessel's integrity offers a wealth of information for archaeologists and researchers.

The site was reported to the Wisconsin Historical Society in 2021 by Matt Olson of Door County Adventure Rafting. A Phase II archaeological survey of *Sunshine* was completed by

Wisconsin Historical Society maritime archaeologists and volunteers in May 2022, while completing a site visit to the nearby double centerboard schooner, *Boaz*, for a project funded by the University of Wisconsin Sea Grant Institute. The site remains covered by shifting sands and weed growth throughout most of the year. No excavation of the sand was conducted during the survey. A single temporary baseline was established along the centerline of the ship, from near the vessel's fallen stempost to the vessel's sternpost. All measurements and documentation for the survey were taken from this baseline.



Figure 52. Location of the *Sunshine* shipwreck site.

The *Sunshine* wreck site measures 114.6 feet in overall length, and 42.3 feet in overall width, measured from the edge of the port side hull to extent of wreckage on the starboard side of the vessel. All components of the vessel remain on the bottom of Lake Michigan, although broken and covered by shifting sands and weeds. The vessel's single deck no longer remains, and the sides have fallen outward; however, the keel and keelson also appear to remain intact. The vessel's centerboard trunk and centerboard are also extant, although broken. The vessel's keel does appear to be broken near the vessel's bow, as the stempost sits far to the starboard side of the wreckage. The starboard side hull is almost completely covered by sand, as is the vessel's lower hull. The vessel's port side is covered in sand up to the vessel's deck shelf.

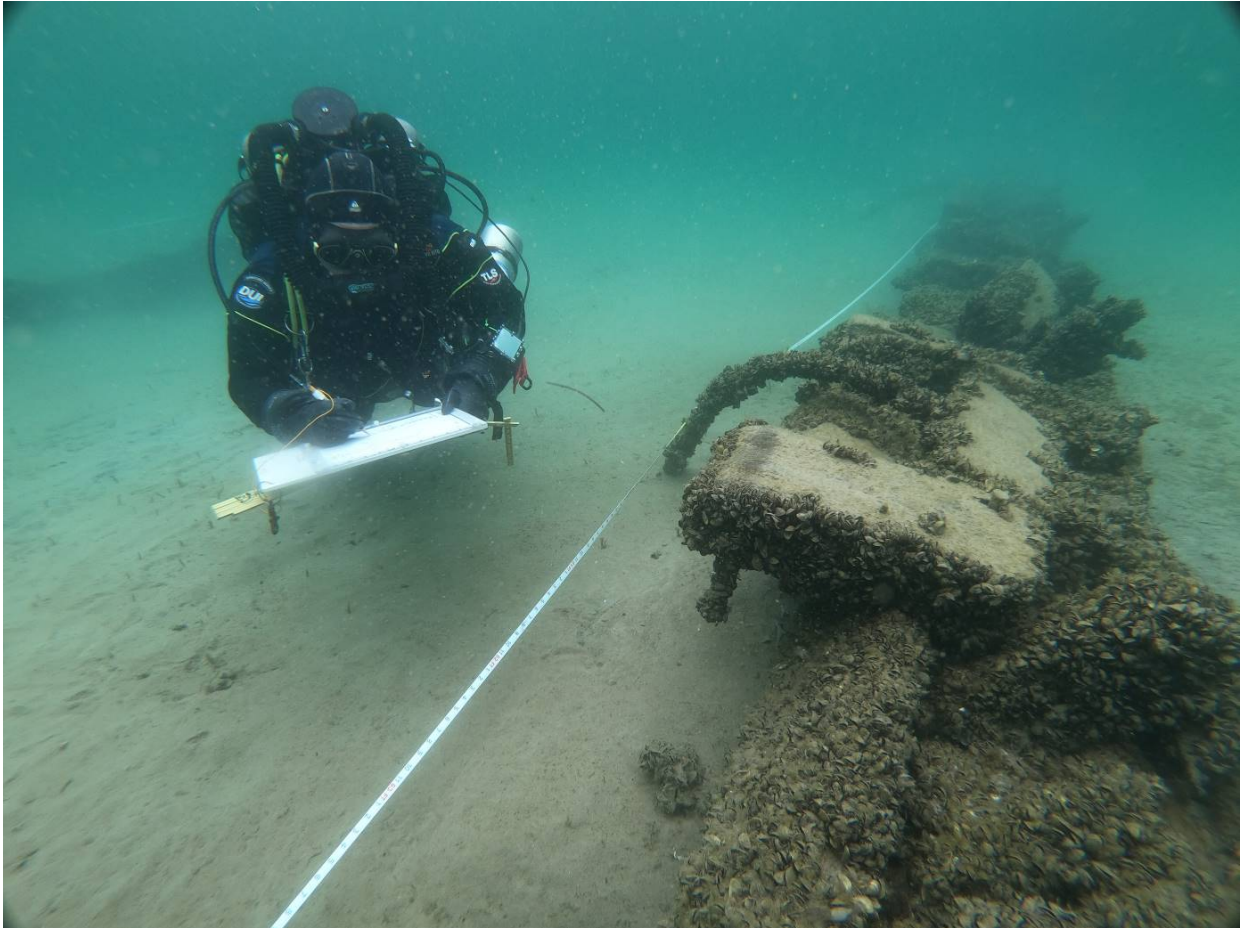


Figure 53. An archaeologist records *Sunshine*'s port side hull and deck shelf (Wisconsin Historical Society)

Sunshine's stempost measures 0.5 feet molded and 1.2 feet sided and lies on its side on the starboard side of the vessel, 22.3 feet from the centerline of the ship. This is the only extant part of *Sunshine*'s bow remaining exposed above the sand. The stempost extends 0.8 feet before disappearing beneath the sand. This indicates the forward section of the hull of *Sunshine*'s is broken, and that the lower hull has been greatly damaged. Without removing sand, it is not possible to know the full extent of the vessel's broken lower hull. The only other parts of the bow section visible above the sand are six disarticulated king posts, located at 5.1 feet along the baseline, near the vessel's centerline. These are likely components of the vessel's forwardmost portside hull section, or are from the remains of the vessel's bow ramp. Without conducting excavation, this was not able to be determined at the time of the survey. *Sunshine*'s keelson also remains entirely covered by sand. Only the centerboard trunk could be seen above the sand during the 2022 survey.

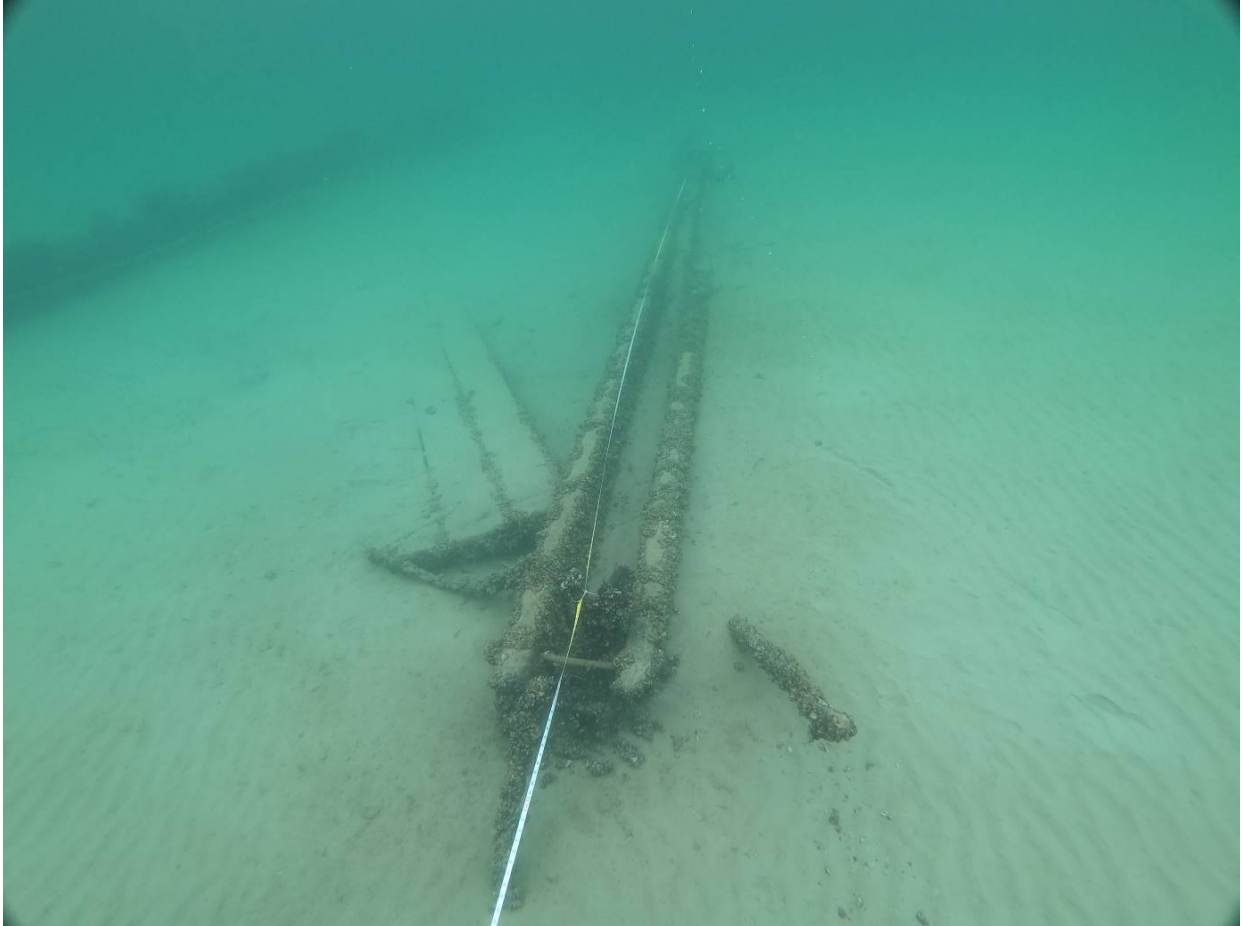


Figure 54. *Sunshine*'s centerboard trunk and broken centerboard (Wisconsin Historical Society)

The largest section of *Sunshine* visible above the sand during the 2022 survey was the port side hull. This hull section extends from 5.1 to 88.2 feet along the baseline and is intact up to the deck shelf and bulwarks, though it has fallen outward. In overall length, this section measures 83.1 feet. *Sunshine*'s ceiling planking measures 1.1 feet wide and 0.4 feet thick, while its outer hull planking measures 0.6 feet wide and 0.2 feet thick. Like many other scow schooners, the vessel is constructed with king posts, which are arranged in sets, like traditional schooners. The frame sets have an overall sided (width) measurement of 0.9 feet, and a molded (thick) measurement of 0.7 feet. Each individual futtock measures 0.45 feet wide. The portside hull structure has fallen outward and lies resting on the outer hull planking. About 2.7 feet of the upper extent of the side hull remained visible above the sand at the time of the survey.

A section of the vessel's deck shelf remains attached to the portside hull structure, extending from 27.0 feet to 42.7 feet along the baseline, where it has broken away from the hull structure and extends another 2.3 feet to where it is broken. The deck shelf measures 1.0 feet wide and 0.4 feet thick. The deck shelf remains largely intact, and continues along the port side, extending beneath the sand. Additional timbers spaced 0.4 feet apart and ranging in length from 0.6 feet to 1.2 feet in length, remain atop the upper most plank of the ceiling planking. These

timbers match the deck shelf in thickness (0.4 feet) and are located between the vessel's frames and bulwark stanchions. These are likely part of the deck shelf, and the spaces are where the deck beams would have been located. A few of the vessel's deck beams remain extant, extending from the port side hull into the sand. These measure 0.4 feet wide and 0.4 feet thick.

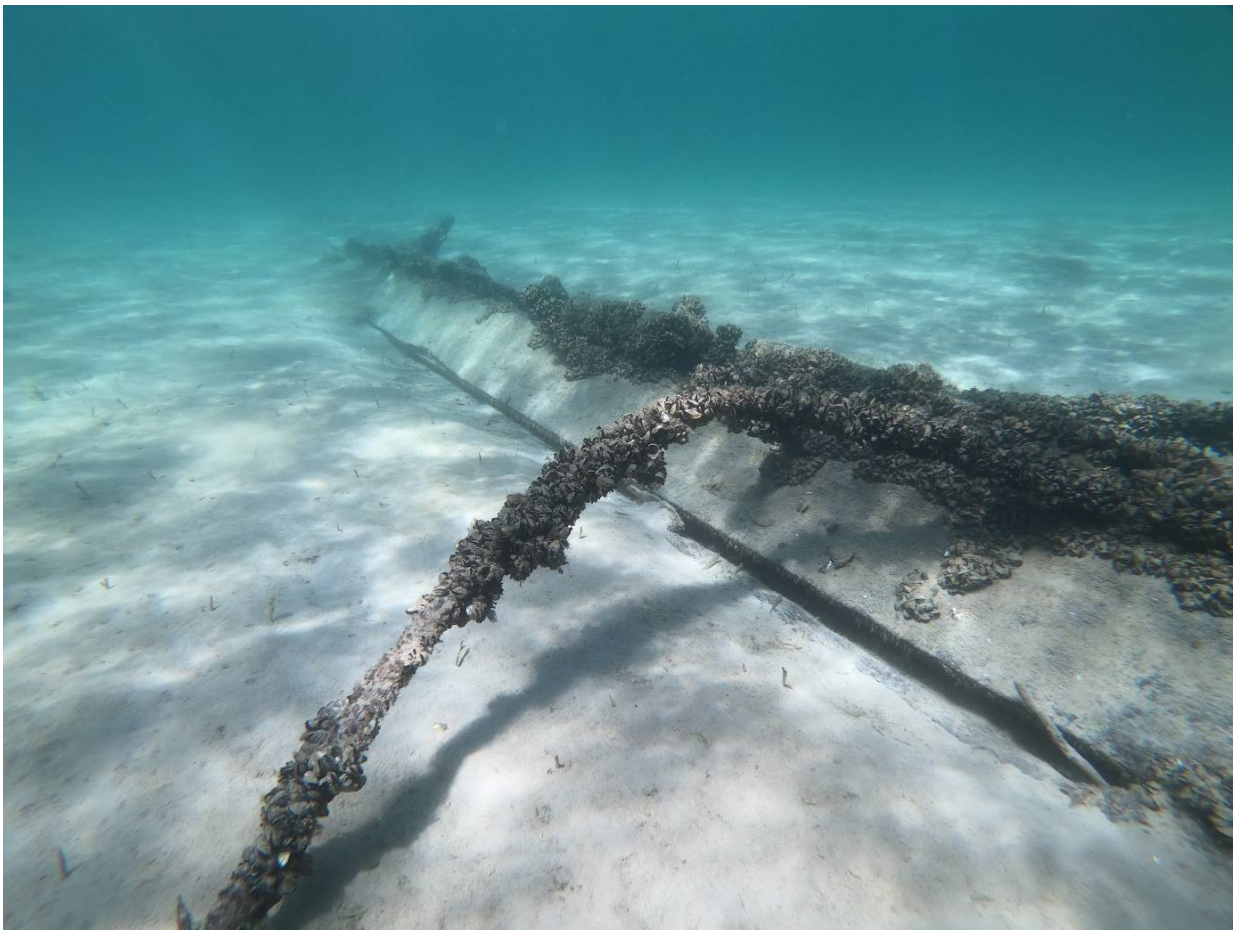


Figure 55. *Sunshine*'s port side hull with deck shelf, and tie-rod (Wisconsin Historical Society)

The lower extent of a few of the vessel's bulwark stanchions remain on the site, extending above the deck shelf 0.3 feet to 1.2 feet. The bulwark stanchions are attached to the king posts, just below the deck shelf, and measure 0.4 feet square with spacing of 1.2 feet. Additionally, two tie-rods remain extant on the site, extending 1.3 feet out from the port side hull, where they continue beneath the sand. These tie-rods have a diameter of 0.15 feet and they are located at 27.4 feet and 53.3 feet along the baseline.

The starboard side hull is almost entirely covered by the sand, but it does remain extant. The starboard side hull lays flat beneath the sand, having fully broken from the vessel's bottom at the chine log. The only remaining artifact located above the sand on the starboard side is a single metal pipe with a diameter of 0.2 feet. It extends 1.5 feet in length and is located at 34.7 feet along the baseline. Although buried in the sand, it appears that the hull's sides and bottom

are joined with a chine log, which is mortised to accept the king posts. Only a small section of the chine log remains could be seen above the sand, located from 13.8 to 14.9 feet along the baseline on the vessel's port side. An accurate measurement of the chine log could not be taken at the time of the survey due to its coverage by sand.



Figure 56. One of *Sunshine*'s remaining port side mainmast chainplates (Wisconsin Historical Society)

Four chainplates remain on the port side hull of the vessel, corresponding with the location of the foremast and the mainmast. The remaining mainmast chainplates are located at 87.2 feet and 86.1 feet along the baseline, while the foremast chainplates are located at 31.5 feet and 35.6 feet along the baseline. The aft most mainmast chainplate is only visible above the sand extending 1.0 feet before disappearing. The forwardmost mainmast chainplate extends upright above the sand. The mainmast chainplates both extend above the port side hull 0.5 feet and 0.9 feet. All four chainplates measure 0.2 feet wide and are 0.1 feet thick and are spaced 1.1 feet apart.

The iron strap that would have secured the lower deadeye in place remains on the forwardmost mainmast chainplate. It measures 0.45 feet in diameter, and the metal strap measures 0.1 feet

thick. This is the only chainplate with this component intact. All three other chainplates appear to have been dismantled. The lower deadeye that would have originally been located within this strap is not extant on the site. It is possible that these were damaged or removed during the original grounding, the subsequent move into North Bay, or the salvage attempts on the site.

The upper portion of the vessel's centerboard trunk remains visible above the sand, and measures 1.25 feet in overall width and extends 25.2 feet in length. The trunk is located 32.4 feet to 57.6 feet along the baseline. The inner slot for the centerboard measures 0.55 feet wide. The aft headledge is no longer extant; however, the forward headledge is, and it measures 0.55 feet wide and 0.9 feet in length. A single 0.1 diameter fastener extends above the sand just aft of the centerboard trunk, at 57.8 feet along the baseline.

One remaining plank makes up the side of the centerboard trunk, extending from the sand on each side; these measures 0.35 feet thick and 0.55 feet wide. Almost the entire centerboard remains on site, although it has broken into at least two pieces. One section of the centerboard remains within the centerboard trunk, while the uppermost section of the centerboard lies next to the broken centerboard trunk. The portion of the centerboard remaining inside the trunk measures 0.5 feet thick. The centerboard appears to have broken cleanly along the joint between two of its timbers. With this, the current position of the remaining section of the centerboard within the centerboard trunk, allows for an understanding of the position the centerboard was in during the sinking. From its current position, angled downward, into the sand beneath the hull, it was likely that the centerboard was deployed at the time of the vessel's sinking.

The remainder of the broken centerboard remains on site, lying in the sand just to the port side of the centerboard trunk's aft end. The visible section of the centerboard includes three boards, each measuring 1.0 feet wide and 0.5 feet thick. They extend 8.5 feet before disappearing beneath the sand. It is likely that the remainder of the centerboard remains preserved and intact beneath the sand. The end of the centerboard extending above the sand is the upper aft end of the centerboard. This was determined by the location of the vessel's centerboard chain and its attachment to the centerboard.

A 4.0-foot-long section of the centerboard chain remains connected to the centerboard with a metal strap that measures 1.5 feet in length, and measures 0.25 feet wide. The links of the centerboard chain measure 0.2 feet wide and 0.15 feet long overall and are made of metal measuring 0.05 feet thick. This strap and chain would have been connected to the centerboard winch on the deck of the vessel and would have allowed for the raising and lowering of the centerboard.



Figure 57. *Sunshine*'s centerboard trunk, broken centerboard, and centerboard winch chain (Wisconsin Historical Society)

Just forward of the vessel's centerboard are two metal pump shafts, one on either side of the buried keelson. The port side pump shaft extends approximately 1.5 feet above the sand, while the starboard side pump shaft only extends 0.9 feet above the sand. These pump shafts are associated with the vessel's bilge pump and would have helped transport water out of the bilge. Two pump shafts indicate that *Sunshine* likely had a dual action bilge pump, located just aft of the foremast.

Aft of the centerboard trunk, sand covers most of the bilge section of the vessel. At 108.4 feet on the baseline, the vessel's stern ramp remains, lying flat on the sand. The stern ramp remains largely intact, measuring 18.1 feet in overall width, and extending 9.5 feet in length before disappearing into the sand. No evidence of the vessel's transom was located during the survey, but it is likely that it remains beneath the sand nearby. Additionally, the vessel's sternpost was not located during the survey.

The bottom hull planking of *Sunshine* is visible at the stern on both the port and starboard sides. Unlike many other scow schooners, the planks run longitudinally. Only one other scow schooner located in Wisconsin waters has longitudinal bottom hull planking: the scow schooner *Success*. These bottom hull planks measure 0.2 feet thick and are of two different widths. The planks closer to the centerline of the vessel measure 0.9 feet wide, while the planks closer to the vessel's outer hull measure 0.5 feet wide. Again, unlike most other Great Lakes scow schooners, the vessel did not have longitudinal floor keelsons running parallel to the keelson athwartship floors and frame sets, but instead, had athwartship cross keelsons extending across the width of the floor ramp. These were made up of two timbers, each measuring 0.4 feet wide, with a spacing of 0.45 feet and 0.55 feet.



Figure 58. A diver records *Sunshine*'s stern ramp (Wisconsin Historical Society)

Many longitudinal ceiling planks are visible above the sand on the stern ramp. The ceiling planking on the port side of the stern ramp remains almost entirely intact, while only three ceiling planks remain on the starboard side of the stern ramp. These planks all measure 0.3 feet thick, and vary in width measurements, from 0.6 to 1.0 feet in width. These ceiling planks sit directly atop of the athwartship cross keelsons. One lodging knee remains in place at the vessel's stern, on the port side. This knee measures 2.0 feet wide, and 3.4 feet long. The

transom also remains in place on the port side of the stern ramp. This measures 8.3 feet in overall length, and measures 1.0 feet wide. An additional timber is located just aft of this, which measures 7.7 feet in overall length, and 0.5 feet wide. The upper section of the vessel's transom would have been located atop these timbers. Because the starboard side of the vessel's transom timber no longer remains intact, it is evident that this section of the vessel was heavily damaged by the initial grounding at the entrance of North Bay, and subsequent refloating and re-grounding at its current location.

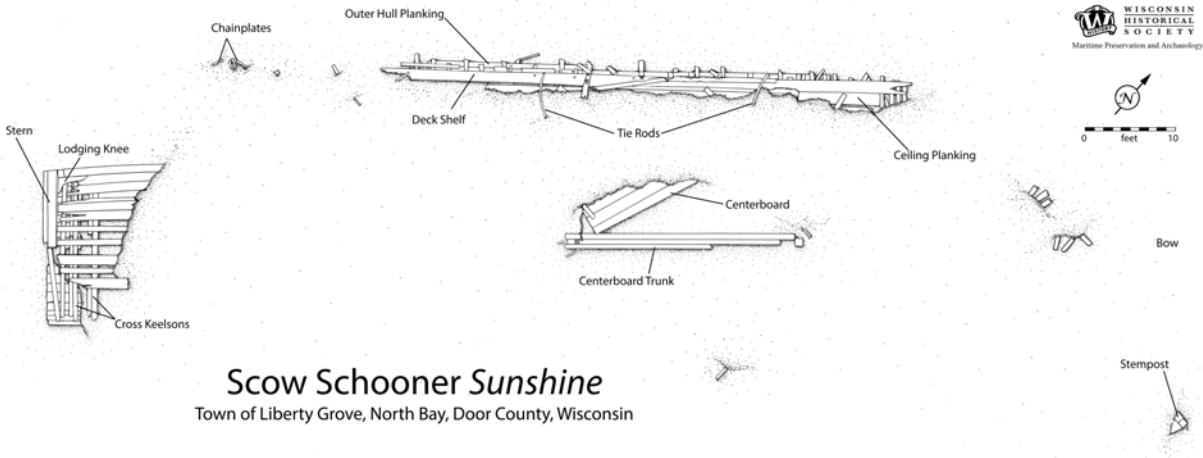


Figure 59. *Sunshine* site plan (Wisconsin Historical Society)

No evidence of the vessel's rudder or stern post were located during the survey. It is likely that these were damaged during the initial grounding, or subsequent grounding in its final location, and that they remain nearby, buried beneath the sand. No other artifacts were located on the site during the 2022 survey. It is highly likely that many additional artifacts remain buried and protected beneath the shifting sands.

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CHAPTER SEVEN CONCLUSIONS AND RECOMMENDATIONS

This field report is a component of the ongoing research conducted by Wisconsin Historical Society's maritime archaeologists and contributes to the ever-increasing body of knowledge collected about historic shipwrecks and submerged cultural sites. Archaeological surveys conducted by the program are also designed to follow the standards and guidelines established by the National Park Service for submerged cultural resources. As such, the goals of the surveys are to positively identify the site through unique marks or artifacts, to analyze the site for its significance in Wisconsin's history as well as a more overarching view of its regional and national importance, to determine its eligibility for listing to the National Register of Historic Places, and to recommend best management and visitation through buoys, signage, interpretation, and outreach.

ABIAH

As an early wooden, topsail schooner, the *Abiah* survey was designed to provide positive vessel identification through identifying marks or artifacts and to document features of early sailing vessels of the Great Lakes bulk cargo trades.

The first objective, to provide positive vessel identification through identifying marks or artifacts, was not achieved. The ship's nameboards were not present, and painted areas and identifying marks were covered with quagga mussels. Although the length, beam, location and evidence of the wrecking event match, a complete archaeological documentation of *Abiah* site will be a continuing process for years to come. The information gathered during the 2020 and 2021 surveys should serve as a baseline for monitoring the *Abiah* site for changes caused by environmental affects as well as increased visitation by divers.

The *Abiah* site one of the earliest built shipwreck sites in Wisconsin waters and retains a high degree of hull integrity. In most cases it is easier to document the structural components integral to vessel construction when a shipwreck is broken in pieces. When intact there is slower process of discovery and evaluation of the resource that is required. Additionally, as more of these early schooners are documented by the Society, a greater understanding of the features and nuances of this vessel type can be achieved and the greater the necessity to return to sites for comparative analysis.

The second objective was achieved. *Abiah* has been listed on both the State and National Registers of Historic Places. The *Abiah* site retains excellent archaeological integrity with only a small section of the vessel broken. Sites such as *Abiah* present a rare opportunity under pristine, undisturbed conditions to study and learn about early Great Lakes schooners, their construction, and their use. As one of the earliest wooden schooners documented in Wisconsin waters, the *Abiah* site has added a significant amount of information about early wooden schooner construction in the Great Lakes.

The *Abiah* site is deep and considered well beyond recreational diving depths. As technical diving increases in popularity, as charter boats establish in the region, and as the National Marine Sanctuary draws in more visitation, the site will only become more accessible to an increasing number of divers. The site lies 13 miles offshore, although easily reached by boat, diving the wreck should only be attempted in the best of conditions without risk of being caught out in weather that can blow up on the lake during the summer months. Because of the depth and the long distance from shore, it is not recommended for a mooring buoy.

Advances in Remotely Operated Vehicle technology have made access to this technology easier and given people of various experience and skill means and incentive to visit some of these sites. With that in mind, intact sites such as *Abiah* are fragile sites and can easily be damaged by anchor drag and grappling hooks. They also contain many features that could cause hang-ups to ROV tethers potentially causing damage to the site. Information gathered during the survey will be used for website updates, public outreach, and educational materials.

ADVANCE

The *Advance* survey was designed to provide positive vessel identification through identifying marks or artifacts, and to document early Great Lakes schooner construction and use in the bulk cargo trades.

The first objective, to provide positive vessel identification through identifying marks or artifacts, was not achieved. The vessel's size and location, construction details, and details of its loss all support the identification as *Advance*. However, from the current breadth of archaeological material on the site, precise positive identification of the wreck was not possible. A complete archaeological documentation of the *Advance* site will also be a continuing process. Much of *Advance*'s remaining hull structure is buried in sand. As the sediment continues to move, there is potential for previously undocumented hull structure and artifacts to be uncovered and exposed. For this reason, the site should be monitored, and any newly exposed structure or artifacts should be documented and added to the site plan.

The second objective was achieved. The *Advance* site was evaluated under the standards of the National Park Service for listing on the National Register of Historic Places. A nomination packet has been submitted to the Wisconsin State Historic Preservation Office and will be reviewed at the 24 February 2023 meeting of the State Historic Preservation Review Board for listing in the State Register of Historic Places. From there, it will be passed to the National Park Service for another round of review before listing on the National Register of Historic Places.

Although the *Advance* site is not as heavily visited as other Wisconsin shipwreck sites, many artifacts were recovered by recreational divers following her discovery. Cultural artifacts that were not removed from the site are now hidden by invasive mussel colonization. The vessel's

size, location, construction, and collision evidence all support the identification as the *Advance*, however.

Due to its distance from other shipwreck sites, as well as the broken nature of its hull, the *Advance* is infrequently visited by divers. This is unfortunate, as the *Advance* is an excellent location to study and observe the construction techniques used to build nineteenth-century Great Lakes schooners. Although the hull is broken up, nearly all of *Advance*'s hull components and rigging are extant. To many divers, a broken hull such as the *Advance* holds less appeal compared to more intact vessels - even vessels that are entirely stripped of rigging, gear, and artifacts. To an analytical eye, however, the *Advance* site presents a prime opportunity to study and learn about wooden vessel construction. The advantage of broken hulls like the *Advance*'s is that they offer a view of many construction details that are hidden in more intact vessels. For this reason, the *Advance* site is the best of both worlds – it is intact enough to have nearly all hull sections represented but is opened enough to allow a thorough examination of the many intricate details that would be hidden were the *Advance* completely intact, such as stem and stern construction, inner framing techniques, and more hidden workings such as the construction and operation of the centerboard.

As the *Advance* site is somewhat remote and lightly visited by divers, a state-sponsored mooring buoy is not planned for the site. As visitation by divers increases in future years with site promotion by the National Marine Sanctuary, the need for a mooring buoy should be revisited. If a mooring buoy is installed at the site, the anchor should be an offsite deadweight or helix-type screw anchor, as any mooring anchored to the wreck itself could cause significant damage to the site.

PEORIA

Like *Advance*, the *Peoria* survey was designed to document early Great Lakes schooner construction and use in the bulk cargo trades, and to provide positive vessel identification through identifying marks or artifacts.

The first objective, to provide positive vessel identification through identifying marks or artifacts, was not achieved. Although the vessel's size, location, historic photographic analysis, construction details, and details of her loss all support the identification as *Peoria*, a complete archaeological documentation of the *Peoria* site will be a continuing process. Much of *Peoria*'s remaining hull structure is believed to be buried in sand near the site. The soft, gelatinous substrate in the area allows tools and hull sections to disappear beneath its surface. As the sediment continues to move, there is potential for previously undocumented hull structure and artifacts to be uncovered and exposed. For this reason, the site should be monitored, and any newly exposed structure or artifacts should be documented and added to the site plan.

The second objective was achieved, and *Peoria* is under review for listing on the State Register of Historic Places. A nomination packet has been submitted to the Wisconsin State Historic Preservation Office. The nomination will be reviewed at the state level, then be forwarded to the National Park Service for consideration for listing on the National Register of Historic Places.

The *Peoria*'s site is easily accessible by boat or kayak from Baileys Harbor Ridges Park Beach and is located 0.15 miles northeast of the Baileys Harbor marina entrance. Due to its shallow nature, cladophora blooms, and soft sediment covering the wreck, visibility at the site is oftentimes poor. Only recently uncovered from the sands and reported in the spring of 2020, it remains lightly visited. Because of the site's shallow location and the changing nature of the site, it is recommended for a State-sponsored mooring buoy. As a way to mark a potential navigation hazard to passing boats and as an identifying marker for kayakers, snorkelers and divers, a mooring buoy would be a great asset to the visitation of this site. Information gathered during the survey will be used for website updates, public outreach, and educational materials for Door County and the surrounding community.

SIDNEY O. NEFF

The *Sidney O. Neff* survey was designed to document early Great Lakes schooner barge to steambarge conversion and to provide positive vessel identification through identifying marks or artifacts.

The first objective, to provide positive vessel identification through identifying marks or artifacts, was not achieved. A complete archaeological documentation of the *Sidney O. Neff* site will be a continuing process for years to come. Much of *Sidney O. Neff*'s remaining hull structure is buried in sand surrounding the site. Large quantities of sand move through the area despite its depth, and various sections of wreckage are exposed at different times. As the sand continues to move, there is potential for previously undocumented hull structure and artifacts to be uncovered and exposed. For this reason, the site should be monitored, and any newly exposed structure or artifacts should be documented and added to the site plan. The vessel's size, location and construction details, all support the identification as *Sidney O. Neff*.

The second objective, however, was achieved. The *Sidney O. Neff* has been listed on both the State and National Registers of Historic Places. The non-contributing anchors and other features that have been added to the wreck site over the years by well-intentioned divers "trying to make it more interesting" should be evaluated for removal or return to their original or an alternate location. The State of Michigan resource manager should be contacted for discussion about the return/removal of the added anchors specifically.

The *Sidney O. Neff* site is easily accessible by boat, 0.35 miles southwest of the Menominee River entrance in the waters of Green Bay. Due to its depth and location, visibility at the site

oftentimes depends on weather patterns, currents, and discharge from the Menominee River. The site is in 15 feet of water, which is a good depth for beginner divers and makes the wreck a popular dive site where it continues to be visited by recreational divers yearly. A State-sponsored mooring buoy on the wreck would greatly facilitate diving activities and protect the wreck from anchor damage. Information gathered during the survey will be used for website updates, public outreach, and educational materials for Marinette County and the surrounding communities.

SUNSHINE

The *Sunshine* represents a unique site, as it is one of only ten documented scow schooners in Wisconsin waters. The *Sunshine* survey was designed to record Great Lakes scow schooner construction and to provide positive vessel identification through identifying marks or artifacts.

The first objective, to provide positive vessel identification through identifying marks or artifacts, was not achieved. Although no nameboard was located, the vessel's size, location, construction, and description of the wrecking, and deposition events all support the identification as *Sunshine*. A complete archaeological documentation of the *Sunshine* site will be an ongoing process for years to come. Although quite intact for such a shallow wreck site, the several portions of *Sunshine*'s hull structure remain unknown. Due to the site's shallow nature, a large quantity of sediment moves through the area on a yearly basis, and it is probable that the missing sections of the vessel are buried beneath the sand. As the sand moves, previously undocumented hull structure and artifacts will continue to be uncovered and exposed. For this reason, the site will be closely monitored, and any newly exposed structure or artifacts will be documented and added to the site plan.

The second objective was achieved, and *Sunshine* is under review for listing on the State Register of Historic Places. A nomination packet has been submitted to the Wisconsin State Historic Preservation Office. It will be reviewed at the state level, then its nomination will be forwarded to the National Park Service for consideration for listing on the National Register of Historic Places.

The *Sunshine* site is easily accessible by boat or kayak and is located within the protected waters of North Bay, Door County, Wisconsin. Due to the site's shallow nature, visibility is poor at times and weed growth can cover the wreck obscuring the vessel remains. The site is best explored during prolonged periods of calm weather and in the early spring. As the wreck lies in shallow water, *Sunshine* can be easily viewed from the surface. Because of the site's location within the protection of North Bay, it is suggested for a State-sponsored mooring buoy as a buoy can serve as an aid for boaters, divers, kayakers, and snorkelers wishing to visit the wreck. Information gathered during the survey will be used for website updates, public outreach, and educational materials for Door County, and the surrounding community.

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1876k *Chicago Tribune*. 23 August.
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1877b *Chicago Tribune*. 4 May.
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1877d *Chicago Tribune*. 19 May.
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1879i *Chicago Tribune*. 25 July.
1879j *Chicago Tribune*. 29 July.
1879h *Chicago Tribune*. 4 August.
1879i *Chicago Tribune*. 15 August.
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1879o *Chicago Tribune*. 24 September.
1879p *Chicago Tribune*. 3 October.
1879q *Chicago Tribune*. 7 October.
1879r *Chicago Tribune*. 12 October.
1879s *Chicago Tribune*. 13 October.
1879t *Chicago Tribune*. 20 October.
1879u *Chicago Tribune*. 25 October.
1879v *Chicago Tribune*. 1 November.
1879w *Chicago Tribune*. 5 November.
1879x *Chicago Tribune*. 7 November.
1879y *Chicago Tribune*. 13 November.
1879z *Chicago Tribune*. 23 November.
1880a *Chicago Tribune*. 14 March.
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1880c *Chicago Tribune*. 28 March.
1880d *Chicago Tribune*. 7 April.
1880e *Chicago Tribune*. 8 April.
1880f *Chicago Tribune*. 17 April.
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1880k *Chicago Tribune*. 19 May.
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1880m *Chicago Tribune*. 7 June.
1880n *Chicago Tribune*. 11 June.
1880o *Chicago Tribune*. 12 June.
1880p *Chicago Tribune*. 13 June.
1880q *Chicago Tribune*. 16 June.
1880r *Chicago Tribune*. 20 June.
1880s *Chicago Tribune*. 2 July.
1880t *Chicago Tribune*. 6 July.
1880u *Chicago Tribune*. 14 July.

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1880w *Chicago Tribune*. 30 July.
1880x *Chicago Tribune*. 7 August.
1880y *Chicago Tribune*. 8 August.
1880z *Chicago Tribune*. 12 August.
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1885 *Weekly Wisconsin*. 10 October.

Chapter 4: PEORIA

Ahnapee Record (Ahnapee, Wisconsin)
1881a *Ahnapee Record*. 14 April.
1881b *Ahnapee Record*. 5 May.
1881c *Ahnapee Record*. 26 May.
1881d *Ahnapee Record*. 9 June.
1881e *Ahnapee Record*. 4 August.
1881f *Ahnapee Record*. 15 December.
1882a *Ahnapee Record*. 9 March.
1882b *Ahnapee Record*. 23 March.
1882c *Ahnapee Record*. 30 March.
1882d *Ahnapee Record*. 25 May.
1882e *Ahnapee Record*. 22 June.
1883a *Ahnapee Record*. 19 April.
1883b *Ahnapee Record*. 19 July.
1883c *Ahnapee Record*. 9 August.
1885a *Ahnapee Record*. 20 August.
1885b *Ahnapee Record*. 27 August.
1885c *Ahnapee Record*. 26 November.
1886 *Ahnapee Record*. 6 May.
1887a *Ahnapee Record*. 14 April.

1887b *Ahnapee Record*. 28 April.
1887c *Ahnapee Record*. 26 May.
1887d *Ahnapee Record*. 30 June.
1887e *Ahnapee Record*. 28 July.
1887f *Ahnapee Record*. 11 August.
1887g *Ahnapee Record*. 6 October.
1895 *Ahnapee Record*. 3 October.

Buffalo Commercial Advertiser (Buffalo, New York)

1854a *Buffalo Commercial Advertiser*. 29 June.
1854b *Buffalo Commercial Advertiser*. 12 July.
1854c *Buffalo Commercial Advertiser*. 21 July.
1854d *Buffalo Commercial Advertiser*. 17 August.
1854e *Buffalo Commercial Advertiser*. 29 August.
1854f *Buffalo Commercial Advertiser*. 1 December.
1855a *Buffalo Commercial Advertiser*. 13 July.
1855b *Buffalo Commercial Advertiser*. 14 August.
1855c *Buffalo Commercial Advertiser*. 29 August.
1856a *Buffalo Commercial Advertiser*. 15 July.
1856b *Buffalo Commercial Advertiser*. 9 September.
1857a *Buffalo Commercial Advertiser*. 31 January.
1857b *Buffalo Commercial Advertiser*. 15 June.
1857c *Buffalo Commercial Advertiser*. 28 July.
1858a *Buffalo Commercial Advertiser*. 29 May.
1858b *Buffalo Commercial Advertiser*. 23 July.
1858c *Buffalo Commercial Advertiser*. 17 September.
1860a *Buffalo Commercial Advertiser*. 21 September.
1860b *Buffalo Commercial Advertiser*. 3 December.
1861a *Buffalo Commercial Advertiser*. 13 April.
1861b *Buffalo Commercial Advertiser*. 17 May.
1861c *Buffalo Commercial Advertiser*. 28 May.
1861d *Buffalo Commercial Advertiser*. 11 June.
1861e *Buffalo Commercial Advertiser*. 19 June.
1861f *Buffalo Commercial Advertiser*. 22 July.
1861g *Buffalo Commercial Advertiser*. 17 August.
1861h *Buffalo Commercial Advertiser*. 20 September.
1861i *Buffalo Commercial Advertiser*. 8 November.
1861j *Buffalo Commercial Advertiser*. 16 November.
1862a *Buffalo Commercial Advertiser*. 23 June.
1862b *Buffalo Commercial Advertiser*. 11 July.
1862c *Buffalo Commercial Advertiser*. 11 Aug.
1862d *Buffalo Commercial Advertiser*. 25 Oct.
1862e *Buffalo Commercial Advertiser*. 27 Oct.
1862f *Buffalo Commercial Advertiser*. 2 Dec.
1863a *Buffalo Commercial Advertiser*. 20 May.
1863b *Buffalo Commercial Advertiser*. 30 June.
1863c *Buffalo Commercial Advertiser*. 2 Nov.

1863d *Buffalo Commercial Advertiser*. 7 Nov.
1864a *Buffalo Commercial Advertiser*. 7 May.
1864b *Buffalo Commercial Advertiser*. 31 May.
1864c *Buffalo Commercial Advertiser*. 16 June.
1864d *Buffalo Commercial Advertiser*. 16 November.
1865a *Buffalo Commercial Advertiser*. 19 May.
1865b *Buffalo Commercial Advertiser*. 28 June.
1867 *Buffalo Commercial Advertiser*. 7 September.
1868a *Buffalo Commercial Advertiser*. 7 May.
1868b *Buffalo Commercial Advertiser*. 8 May.
1868c *Buffalo Commercial Advertiser*. 9 September.
1868d *Buffalo Commercial Advertiser*. 10 September.
1868e *Buffalo Commercial Advertiser*. 6 November.
1869 *Buffalo Commercial Advertiser*. 22 June.
1870 *Buffalo Commercial Advertiser*. 17 October.
1872a *Buffalo Commercial Advertiser*. 5 September.
1872b *Buffalo Commercial Advertiser*. 15 October.
1872c *Buffalo Commercial Advertiser*. 12 November.
1873a *Buffalo Commercial Advertiser*. 19 May.
1873b *Buffalo Commercial Advertiser*. 21 May.
1873c *Buffalo Commercial Advertiser*. 22 May.
1873d *Buffalo Commercial Advertiser*. 5 June.
1877 *Buffalo Commercial Advertiser*. 4 October.
1895 *Buffalo Commercial Advertiser*. 27 September.

Buffalo Courier (Buffalo, New York)

1856 *Buffalo Courier*. 1 September.
1857a *Buffalo Courier*. 1 July.
1857b *Buffalo Courier*. 30 July.
1859 *Buffalo Courier*. 14 October.
1860a *Buffalo Courier*. 17 July.
1860b *Buffalo Courier*. 16 August.
1860c *Buffalo Courier*. 15 September.
1860d *Buffalo Courier*. 24 September.
1860e *Buffalo Courier*. 24 October.
1861 *Buffalo Courier*. 12 July.
1862a *Buffalo Courier*. 26 April
1862b *Buffalo Courier*. 24 Oct.
1863a *Buffalo Courier*. 11 May.
1863b *Buffalo Courier*. 9 November.
1864a *Buffalo Courier*. 3 June.
1864b *Buffalo Courier*. 14 June.
1866 *Buffalo Courier*. 26 March.
1868a *Buffalo Courier*. 27 April.
1868b *Buffalo Courier*. 5 November.
1901 *Buffalo Courier*. 15 December.

Buffalo Daily Republic (Buffalo, New York)

- 1854a *Buffalo Daily Republic*. 15 June.
- 1854b *Buffalo Daily Republic*. 27 June.
- 1854c *Buffalo Daily Republic*. 10 July.
- 1854d *Buffalo Daily Republic*. 3 August.
- 1854e *Buffalo Daily Republic*. 7 August.
- 1854f *Buffalo Daily Republic*. 14 August.
- 1854g *Buffalo Daily Republic*. 28 September.
- 1854h *Buffalo Daily Republic*. 13 October.
- 1854i *Buffalo Daily Republic*. 1 December.
- 1854j *Buffalo Daily Republic*. 4 December.
- 1855a *Buffalo Daily Republic*. 2 July.
- 1855b *Buffalo Daily Republic*. 27 July.
- 1855c *Buffalo Daily Republic*. 16 August.
- 1855d *Buffalo Daily Republic*. 10 September.
- 1855e *Buffalo Daily Republic*. 13 September.
- 1855f *Buffalo Daily Republic*. 26 September.
- 1855g *Buffalo Daily Republic*. 9 October.
- 1855h *Buffalo Daily Republic*. 10 October.
- 1855i *Buffalo Daily Republic*. 14 November.
- 1856a *Buffalo Daily Republic*. 17 July.
- 1856b *Buffalo Daily Republic*. 8 November.
- 1856c *Buffalo Daily Republic*. 2 December.
- 1857a *Buffalo Daily Republic*. 15 July.
- 1857b *Buffalo Daily Republic*. 15 September.
- 1858a *Buffalo Daily Republic*. 31 July.
- 1858b *Buffalo Daily Republic*. 7 August.
- 1858c *Buffalo Daily Republic*. 9 September.
- 1860 *Buffalo Daily Republic*. 28 August.

Buffalo Evening News (Buffalo, New York)

- 1881 *Buffalo Evening News*. 9 August.

Buffalo Morning Express and Illustrated Buffalo Express (Buffalo, New York)

- 1854 *Buffalo Morning Express and Illustrated Buffalo Express*. 25 July.
- 1855a *Buffalo Morning Express and Illustrated Buffalo Express*. 2 May.
- 1855b *Buffalo Morning Express and Illustrated Buffalo Express*. 29 June.
- 1855c *Buffalo Morning Express and Illustrated Buffalo Express*. 12 July.
- 1855d *Buffalo Morning Express and Illustrated Buffalo Express*. 15 August.
- 1855e *Buffalo Morning Express and Illustrated Buffalo Express*. 25 September.
- 1856a *Buffalo Morning Express and Illustrated Buffalo Express*. 19 July.
- 1856b *Buffalo Morning Express and Illustrated Buffalo Express*. 14 August.
- 1856c *Buffalo Morning Express and Illustrated Buffalo Express*. 2 September.
- 1856d *Buffalo Morning Express and Illustrated Buffalo Express*. 10 September.
- 1856e *Buffalo Morning Express and Illustrated Buffalo Express*. 20 November.
- 1858 *Buffalo Morning Express and Illustrated Buffalo Express*. 12 April.
- 1859a *Buffalo Morning Express and Illustrated Buffalo Express*. 5 October.

1859b *Buffalo Morning Express and Illustrated Buffalo Express*. 13 October.
1860a *Buffalo Morning Express and Illustrated Buffalo Express*. 9 July.
1860b *Buffalo Morning Express and Illustrated Buffalo Express*. 27 August.
1860c *Buffalo Morning Express and Illustrated Buffalo Express*. 15 October.
1861a *Buffalo Morning Express and Illustrated Buffalo Express*. 5 August.
1861b *Buffalo Morning Express and Illustrated Buffalo Express*. 19 August.
1865 *Buffalo Morning Express and Illustrated Buffalo Express*. 3 July.
1870 *Buffalo Morning Express and Illustrated Buffalo Express*. 15 October.
1872 *Buffalo Morning Express and Illustrated Buffalo Express*. 21 November.
1873a *Buffalo Morning Express and Illustrated Buffalo Express*. 3 May.
1873b *Buffalo Morning Express and Illustrated Buffalo Express*. 21 May.

Bureau of Navigation

1854 *Peoria* Permanent Enrollment No. 49. Port of Cleveland, Cleveland Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1859 *Peoria* Permanent Enrollment No. 24. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1860 *Peoria* Permanent Enrollment No. 73. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1861 *Peoria* Permanent Enrollment No. 4. Port of Detroit, Detroit Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1862 *Peoria* Permanent Enrollment No. 12. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1863a *Peoria* Permanent Enrollment No. 39. Port of Buffalo, Buffalo Creek Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1863b *Peoria* Permanent Enrollment No. 126. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1864 *Peoria* Permanent Enrollment No. 106. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1865 *Peoria* Permanent Enrollment No. 193. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1866a *Peoria* Permanent Enrollment No. 645. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1866b *Peoria* Permanent Enrollment No. 144. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1867 *Peoria* Permanent Enrollment No. 270. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1869 *Peoria* Permanent Enrollment No. 143. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1873 *Peoria* Permanent Enrollment No. 117. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1881a *Peoria* Permanent Enrollment No. 170. Port of Milwaukee, Milwaukee Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1881b *Peoria* Temporary Enrollment No. 18. Port of Milwaukee, Milwaukee Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1881c *Peoria* Permanent Enrollment No. 43. Port of Milwaukee, Milwaukee Customs District, Record Group 41. U.S. National Archives, Washington, D.C.

1887 *Peoria* Temporary Enrollment No. 41. Port of Chicago, Chicago Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1888 *Peoria* Permanent Enrollment No. 30. Port of Grand Haven, Michigan Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1891 *Peoria* Permanent Enrollment No. 111. Port of Grand Haven, Michigan Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1892a *Peoria* Permanent Enrollment No. 114. Port of Grand Haven, Michigan Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1892b *Peoria* Permanent Enrollment No. 64. Port of Grand Haven, Michigan Customs District, Record Group 41. U.S. National Archives, Washington, D.C.
1899 *Peoria* Permanent Enrollment No. 24. Port of Grand Haven, Michigan Customs District, Record Group 41. U.S. National Archives, Washington, D.C.

Cooper, David J. and Paul P. Kriesa

1992 Great Lakes Shipwrecks of Wisconsin. National Park Service National Register of Historic Places Multiple Property Documentation Form. Division of Historic Preservation—Public History. Wisconsin Historical Society. Madison, WI.

Chicago Tribune (Chicago, Illinois)

1858a *Chicago Tribune*. 31 August.
1858b *Chicago Tribune*. 24 September.
1859a *Chicago Tribune*. 20 April.
1859b *Chicago Tribune*. 5 May.
1859c *Chicago Tribune*. 2 June.
1859d *Chicago Tribune*. 7 June.
1859e *Chicago Tribune*. 13 June.
1859f *Chicago Tribune*. 17 June.
1859g *Chicago Tribune*. 9 July.
1859h *Chicago Tribune*. 16 July.
1859i *Chicago Tribune*. 22 July.
1859j *Chicago Tribune*. 7 September.
1859k *Chicago Tribune*. 7 December.
1860a *Chicago Tribune*. 13 September.
1860b *Chicago Tribune*. 13 November.
1860c *Chicago Tribune*. 16 November.
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1861g *Chicago Tribune*. 10 September.
1861h *Chicago Tribune*. 11 September.
1861i *Chicago Tribune*. 14 October.
1861j *Chicago Tribune*. 4 November.
1861k *Chicago Tribune*. 6 November.

1861l *Chicago Tribune*. 11 December.
1861m *Chicago Tribune*. 20 December.
1861n *Chicago Tribune*. 25 December.
1862a *Chicago Tribune*. 13 June.
1862b *Chicago Tribune*. 8 July.
1862c *Chicago Tribune*. 30 Oct.
1862d *Chicago Tribune*. 21 Nov.
1863a *Chicago Tribune*. 5 May.
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1867a *Chicago Tribune*. 29 May.
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1867e *Chicago Tribune*. 10 October.
1867f *Chicago Tribune*. 12 October.
1868 *Chicago Tribune*. 29 May.
1869a *Chicago Tribune*. 22 April.
1869b *Chicago Tribune*. 28 April.
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1869e *Chicago Tribune*. 8 July.
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1870k *Chicago Tribune*. 27 September.
1870l *Chicago Tribune*. 18 October.
1871a *Chicago Tribune*. 17 April.
1871b *Chicago Tribune*. 29 April.
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1871d *Chicago Tribune*. 16 May.
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1871f *Chicago Tribune*. 27 July.
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1871h *Chicago Tribune*. 4 August.
1871i *Chicago Tribune*. 22 August.
1871j *Chicago Tribune*. 4 September.
1871k *Chicago Tribune*. 8 September.
1871l *Chicago Tribune*. 11 September.
1871m *Chicago Tribune*. 12 September.
1871n *Chicago Tribune*. 19 September.
1871o *Chicago Tribune*. 6 October.
1871p *Chicago Tribune*. 13 November.
1872a *Chicago Tribune*. 16 April.
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1872c *Chicago Tribune*. 3 June.
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1872e *Chicago Tribune*. 5 August.
1872f *Chicago Tribune*. 16 August.
1872g *Chicago Tribune*. 9 November.
1872h *Chicago Tribune*. 12 November.
1872i *Chicago Tribune*. 4 December.
1873a *Chicago Tribune*. 10 Feb.
1873b *Chicago Tribune*. 9 July.
1873c *Chicago Tribune*. 4 August.
1873d *Chicago Tribune*. 28 August.
1873e *Chicago Tribune*. 3 October.
1873f *Chicago Tribune*. 13 October.
1873g *Chicago Tribune*. 8 November.
1873h *Chicago Tribune*. 22 November.
1874a *Chicago Tribune*. 10 April.
1874b *Chicago Tribune*. 16 May.
1874c *Chicago Tribune*. 24 August.
1874d *Chicago Tribune*. 4 September.
1874e *Chicago Tribune*. 14 September.
1875a *Chicago Tribune*. 15 May.

1875b *Chicago Tribune*. 7 July.
1875c *Chicago Tribune*. 19 July.
1875d *Chicago Tribune*. 19 September.
1875e *Chicago Tribune*. 4 October.
1875f *Chicago Tribune*. 8 November.
1875g *Chicago Tribune*. 16 November.
1876a *Chicago Tribune*. 1 June.
1876b *Chicago Tribune*. 26 June.
1876c *Chicago Tribune*. 18 July.
1876d *Chicago Tribune*. 24 July.
1876e *Chicago Tribune*. 31 July.
1876f *Chicago Tribune*. 15 August.
1876g *Chicago Tribune*. 24 August.
1876h *Chicago Tribune*. 14 September.
1876i *Chicago Tribune*. 21 September.
1876j *Chicago Tribune*. 30 September.
1876k *Chicago Tribune*. 19 October.
1876l *Chicago Tribune*. 3 November.
1876m *Chicago Tribune*. 10 November.
1877a *Chicago Tribune*. 23 April.
1877b *Chicago Tribune*. 19 May.
1877c *Chicago Tribune*. 17 July.
1877d *Chicago Tribune*. 18 October.
1878a *Chicago Tribune*. 10 May.
1878b *Chicago Tribune*. 2 July.
1878c *Chicago Tribune*. 5 August.
1878d *Chicago Tribune*. 8 August.
1878e *Chicago Tribune*. 14 August.
1878f *Chicago Tribune*. 14 October.
1878g *Chicago Tribune*. 16 November.
1879a *Chicago Tribune*. 21 April.
1879b *Chicago Tribune*. 9 May.
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1879e *Chicago Tribune*. 20 June.
1879f *Chicago Tribune*. 31 July.
1879g *Chicago Tribune*. 6 August.
1879h *Chicago Tribune*. 16 August.
1879i *Chicago Tribune*. 19 August.
1879j *Chicago Tribune*. 25 August.
1879k *Chicago Tribune*. 2 September.
1879l *Chicago Tribune*. 10 September.
1879m *Chicago Tribune*. 15 September.
1879n *Chicago Tribune*. 20 September.
1879o *Chicago Tribune*. 25 September.
1879p *Chicago Tribune*. 27 September.
1879q *Chicago Tribune*. 5 October.

1879r *Chicago Tribune*. 12 October.
1879s *Chicago Tribune*. 24 October.
1879t *Chicago Tribune*. 11 November.
1879u *Chicago Tribune*. 18 November.
1880a *Chicago Tribune*. 18 April.
1880b *Chicago Tribune*. 29 April.
1880c *Chicago Tribune*. 21 May.
1880d *Chicago Tribune*. 23 May.
1880e *Chicago Tribune*. 28 May.
1880f *Chicago Tribune*. 5 June.
1880g *Chicago Tribune*. 15 June.
1880h *Chicago Tribune*. 17 June.
1880i *Chicago Tribune*. 11 July.
1880j *Chicago Tribune*. 6 August.
1880k *Chicago Tribune*. 12 August.
1880l *Chicago Tribune*. 14 August.
1880m *Chicago Tribune*. 19 August.
1880n *Chicago Tribune*. 21 August.
1880o *Chicago Tribune*. 25 August.
1880p *Chicago Tribune*. 27 August.
1880q *Chicago Tribune*. 30 August.
1880r *Chicago Tribune*. 2 September.
1880s *Chicago Tribune*. 7 September.
1880t *Chicago Tribune*. 9 September.
1880u *Chicago Tribune*. 13 September.
1880v *Chicago Tribune*. 16 September.
1880w *Chicago Tribune*. 17 September.
1880x *Chicago Tribune*. 23 September.
1880y *Chicago Tribune*. 27 September.
1880z *Chicago Tribune*. 4 October.
1880aa *Chicago Tribune*. 14 October.
1880ab *Chicago Tribune*. 20 October.
1880ac *Chicago Tribune*. 24 October.
1880ad *Chicago Tribune*. 1 November.
1881a *Chicago Tribune*. 19 March.
1881b *Chicago Tribune*. 9 April.
1881c *Chicago Tribune*. 14 April.
1881d *Chicago Tribune*. 27 April.
1881e *Chicago Tribune*. 30 April.
1881f *Chicago Tribune*. 1 May.
1881g *Chicago Tribune*. 17 May.
1881h *Chicago Tribune*. 18 May.
1881i *Chicago Tribune*. 22 May.
1881j *Chicago Tribune*. 17 June.
1881k *Chicago Tribune*. 23 June.
1881l *Chicago Tribune*. 3 September.
1881m *Chicago Tribune*. 4 September.

1881n *Chicago Tribune*. 15 September.
1881o *Chicago Tribune*. 5 October.
1881p *Chicago Tribune*. 15 October.
1881q *Chicago Tribune*. 25 October
1881r *Chicago Tribune*. 29 November.
1882a *Chicago Tribune*. 29 March.
1882b *Chicago Tribune*. 7 May.
1882c *Chicago Tribune*. 3 July.
1882d *Chicago Tribune*. 14 July.
1882e *Chicago Tribune*. 16 July.
1882f *Chicago Tribune*. 26 July.
1882g *Chicago Tribune*. 19 August.
1882h *Chicago Tribune*. 9 September.
1882i *Chicago Tribune*. 14 October.
1883a *Chicago Tribune*. 26 June.
1883b *Chicago Tribune*. 14 October.
1883c *Chicago Tribune*. 18 November.
1884a *Chicago Tribune*. 5 May.
1884b *Chicago Tribune*. 6 May.
1884c *Chicago Tribune*. 10 June.
1884d *Chicago Tribune*. 29 July.
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1884f *Chicago Tribune*. 25 August.
1884g *Chicago Tribune*. 30 September.
1885a *Chicago Tribune*. 12 May.
1885b *Chicago Tribune*. 27 May.
1885c *Chicago Tribune*. 9 June.
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1885h *Chicago Tribune*. 7 September.
1885i *Chicago Tribune*. 20 September.
1885j *Chicago Tribune*. 30 October.
1885k *Chicago Tribune*. 20 November.
1885l *Chicago Tribune*. 23 November.
1886a *Chicago Tribune*. 29 June.
1886b *Chicago Tribune*. 12 Aug.
1886c *Chicago Tribune*. 9 Nov.
1887a *Chicago Tribune*. 15 August.
1887b *Chicago Tribune*. 29 September.
1887c *Chicago Tribune*. 4 October.
1889a *Chicago Tribune*. 9 July.
1889b *Chicago Tribune*. 23 October.
1901 *Chicago Tribune*. 13 November.

Cleveland Daily Leader (Cleveland, Ohio)

1861 *Cleveland Daily Leader*. 18 December.

Daily Milwaukee News (Milwaukee, Wisconsin)

1868 *Daily Milwaukee News*. 8 September.

1870 *Daily Milwaukee News*. 31 May.

Detroit Free Press (Detroit, Michigan)

1858 *Detroit Free Press*. 6 October.

1860 *Detroit Free Press*. 26 September.

1861 *Detroit Free Press*. 28 December.

1862 *Detroit Free Press*. 25 Nov.

1865 *Detroit Free Press*. 26 November.

1868 *Detroit Free Press*. 23 April.

1869a *Detroit Free Press*. 3 July.

1869b *Detroit Free Press*. 25 Aug.

1872a *Detroit Free Press*. 27 July.

1872b *Detroit Free Press*. 18 August.

1873 *Detroit Free Press*. 1 June.

1878a *Detroit Free Press*. 16 August.

1878b *Detroit Free Press*. 6 September.

1878c *Detroit Free Press*. 8 November.

1899 *Detroit Free Press*. 23 December.

Door County Advocate (Sturgeon Bay, Wisconsin).

1871 *Door County Advocate*. 27 April.

1880a *Door County Advocate*. 21 October.

1880b *Door County Advocate*, 28 October.

1880c *Door County Advocate*. 11 November.

1881a *Door County Advocate*. 3 February.

1881b *Door County Advocate*. 7 April.

1881c *Door County Advocate*. 5 May.

1881d *Door County Advocate*. 12 May.

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1881m *Door County Advocate*. 10 November.

1881n *Door County Advocate*. 24 November.

1881o *Door County Advocate*. 1 December.

1882a *Door County Advocate*. 2 March.

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1887g *Door County Advocate*. 27 August.
1887h *Door County Advocate*. 17 September.
1887i *Door County Advocate*. 1 October.
1888 *Door County Advocate*. 25 August
1891a *Door County Advocate*. 26 Dec.
1892a *Door County Advocate*. 13 February.
1892b *Door County Advocate*. 26 November.
1892c *Door County Advocate*. 17 December.
1895 *Door County Advocate*. 21 December.
1897 *Door County Advocate*. 20 November.
1899a *Door County Advocate*. 8 April.

1899b *Door County Advocate*. 29 April.
1899c *Door County Advocate*. 30 September.
1901a *Door County Advocate*. 16 November.
1901b *Door County Advocate*. 23 November.

Door County Democrat (Sturgeon Bay, Wisconsin)
1901 *Door County Democrat*. 16 November.

Evansville Daily Journal (Evansville, Indiana)
1861 *Evansville Daily Journal*. 18 December.

Evening Courier and Republic (Buffalo, New York)
1862 *Evening Courier and Republic*. 5 May.

Gazette (Montreal, Quebec)
1878 *Gazette*. 16 July.

Grand Haven News (Grand Haven, Michigan)
1860 *Grand Haven News*.

Grand River Times (Grand Haven, Michigan)
1855 *Grand River Times*. 6 June 1855

Green Bay Advocate (Green Bay, Wisconsin).
1881a *Green Bay Advocate*. 5 May.
1881b *Green Bay Advocate*. 28 July.
1883 *Green Bay Advocate*. 15 February.

Green Bay Weekly Gazette (Green Bay, Wisconsin)
1871a *Green Bay Weekly Gazette*. 9 September.
1871b *Green Bay Weekly Gazette*. 7 October.
1881a *Green Bay Weekly Gazette*. 26 March.
1881b *Green Bay Weekly Gazette*. 30 April.
1885 *Green Bay Weekly Gazette*. 25 July.

Green Bay Press-Gazette (Green Bay, Wisconsin)
1882 *Green Bay Press-Gazette*. 8 March
1884 *Green Bay Press-Gazette*. 21 July.

Independent, The (Sturgeon Bay, Wisconsin)
1887a *Independent*. 29 July.
1887b *Independent*. 30 September.
1888 *Independent*. 24 August.

Inter Ocean (Chicago, Illinois)
1872a *Inter Ocean*. 23 April.
1872b *Inter Ocean*. 29 April.

1872c *Inter Ocean*. 1 May.
1872d *Inter Ocean*. 3 May.
1872e *Inter Ocean*. 13 May.
1874a *Inter Ocean*. 17 April.
1874b *Inter Ocean*. 23 April.
1874c *Inter Ocean*. 29 April.
1874d *Inter Ocean*. 12 May.
1874e *Inter Ocean*. 16 May.
1874f *Inter Ocean*. 21 May.
1874g *Inter Ocean*. 27 May.
1874h *Inter Ocean*. 1 June.
1874i *Inter Ocean*. 8 June.
1874j *Inter Ocean*. 9 June.
1874k *Inter Ocean*. 24 June.
1874l *Inter Ocean*. 1 July.
1874m *Inter Ocean*. 8 July.
1874n *Inter Ocean*. 3 August.
1874o *Inter Ocean*. 11 August.
1875a *Inter Ocean*. 22 May.
1875b *Inter Ocean*. 31 May.
1875c *Inter Ocean*. 19 June.
1875d *Inter Ocean*. 27 July.
1875e *Inter Ocean*. 29 July.
1875f *Inter Ocean*. 30 August.
1875g *Inter Ocean*. 20 September.
1875h *Inter Ocean*. 3 November.
1875i *Inter Ocean*. 15 November.
1876a *Inter Ocean*. 30 August.
1876b *Inter Ocean*. 15 September.
1877a *Inter Ocean*. 17 April.
1877b *Inter Ocean*. 8 June.
1877c *Inter Ocean*. 20 July.
1877d *Inter Ocean*. 6 August.
1877e *Inter Ocean*. 12 September.
1877f *Inter Ocean*. 21 September.
1877g *Inter Ocean*. 12 October.
1877h *Inter Ocean*. 27 October.
1878a *Inter Ocean*. 27 July.
1878b *Inter Ocean*. 29 October.
1879a *Inter Ocean*. 16 May.
1879b *Inter Ocean*. 14 Oct.
1880 *Inter Ocean*. 29 May.
1881a *Inter Ocean*. 9 May.
1881b *Inter Ocean*. 16 May.
1881c *Inter Ocean*. 19 May.
1881d *Inter Ocean*. 16 June.
1881e *Inter Ocean*. 22 June.

1881f *Inter Ocean*. 2 July.
1881g *Inter Ocean*. 4 July.
1881h *Inter Ocean*. 7 July.
1881i *Inter Ocean*. 12 September.
1881j *Inter Ocean*. 23 September.
1881k *Inter Ocean*. 28 October.
1881l *Inter Ocean*. 4 November.
1881m *Inter Ocean*. 3 December.
1882a *Inter Ocean*. 17 August.
1882b *Inter Ocean*. 25 September.
1883a *Inter Ocean*. 10 May.
1883b *Inter Ocean*. 15 May.
1883c *Inter Ocean*. 22 May.
1883d *Inter Ocean*. 23 May.
1883e *Inter Ocean*. 1 June.
1883f *Inter Ocean*. 10 June.
1883g *Inter Ocean*. 15 June.
1883h *Inter Ocean*. 16 June.
1883i *Inter Ocean*. 22 June.
1883j *Inter Ocean*. 10 July.
1883k *Inter Ocean*. 19 July.
1883l *Inter Ocean*. 10 August.
1883m *Inter Ocean*. 20 August.
1883n *Inter Ocean*. 5 September.
1883o *Inter Ocean*. 6 September.
1883p *Inter Ocean*. 8 September.
1883q *Inter Ocean*. 20 September.
1883r *Inter Ocean*. 2 October.
1883s *Inter Ocean*. 14 November.
1883t *Inter Ocean*. 27 November.
1884a *Inter Ocean*. 23 April.
1884b *Inter Ocean*. 25 April.
1884c *Inter Ocean*. 28 May.
1884d *Inter Ocean*. 30 July.
1884e *Inter Ocean*. 25 August.
1885a *Inter Ocean*. 12 May.
1885b *Inter Ocean*. 5 July.
1885c *Inter Ocean*. 11 August.
1885d *Inter Ocean*. 25 August.
1885e *Inter Ocean*. 1 September.
1885f *Inter Ocean*. 8 September.
1885g *Inter Ocean*. 15 November.
1885h *Inter Ocean*. 18 November.
1885i *Inter Ocean*. 20 November.
1886a *Inter Ocean*. 18 July.
1886b *Inter Ocean*. 4 September.
1886c *Inter Ocean*. 29 September.

1886d *Inter Ocean*. 28 October.
1887a *Inter Ocean*. 24 May
1887b *Inter Ocean*. 11 August.
1887c *Inter Ocean*. 8 October.
1887d *Inter Ocean*. 28 October.
1887e *Inter Ocean*. 14 November.
1887f *Inter Ocean*. 16 November.
1888a *Inter Ocean*. 5 June.
1888b *Inter Ocean*. 9 June.
1888c *Inter Ocean*. 12 June.
1888d *Inter Ocean*. 17 November.
1889a *Inter Ocean*. 21 May.
1889b *Inter Ocean*. 30 May.
1889c *Inter Ocean*. 9 July.
1890a *Inter Ocean*. 8 April.
1890b *Inter Ocean*. 22 April.
1892 *Inter Ocean*. 23 April.
1901 *Inter Ocean*. 13 November.

Journal Times (Racine, Wisconsin)

1882 *Journal Times*. 25 November.
1884 *Journal Times*. 8 October
1887 *Journal Times*. 10 October.

Kewaunee Enterprise (Kewaunee, Wisconsin)

1866 *Kewaunee Enterprise*. 9 May.
1869a *Kewaunee Enterprise*. 21 April.
1869b *Kewaunee Enterprise*. 5 May.

Manitowoc Pilot (Manitowoc, Wisconsin)

1881 *Manitowoc Pilot*. 5 May.
1892 *Manitowoc Pilot*. 24 November.

Marine Record (Cleveland, Ohio)

1887 *Marine Record*. 5 May.

Milwaukee Daily Sentinel (Milwaukee, Wisconsin)

1890a *Milwaukee Daily Sentinel*. 26 April
1890b *Milwaukee Daily Sentinel*. 5 May
1890c *Milwaukee Daily Sentinel*. 30 June
1890d *Milwaukee Daily Sentinel*. 20 August.
1890e *Milwaukee Daily Sentinel*. 12 September.
1890f *Milwaukee Daily Sentinel*. 19 September.
1890g *Milwaukee Daily Sentinel*. 30 September.
1890h *Milwaukee Daily Sentinel*. 19 November.
1890i *Milwaukee Daily Sentinel*. 20 November.
1891a *Milwaukee Daily Sentinel*. 8 June

1891b *Milwaukee Daily Sentinel*. 21 June
1891c *Milwaukee Daily Sentinel*. 5 July
1891d *Milwaukee Daily Sentinel*. 31 July
1891e *Milwaukee Daily Sentinel*. 15 Aug.
1891f *Milwaukee Daily Sentinel*. 28 Aug.
1891g *Milwaukee Daily Sentinel*. 1 Sept.
1891h *Milwaukee Daily Sentinel*. 15 Sept.
1891i *Milwaukee Daily Sentinel*. 6 Oct
1891j *Milwaukee Daily Sentinel*. 11 Nov.
1891k *Milwaukee Daily Sentinel*. 25 Nov.
1891l *Milwaukee Daily Sentinel*. 28 Nov.
1891m *Milwaukee Daily Sentinel*. 27 Dec.
1892a *Milwaukee Daily Sentinel*. 20 November.
1892b *Milwaukee Daily Sentinel*. 21 November.

Milwaukee Journal (Milwaukee, Wisconsin)

1891 *Milwaukee Journal*. 1 Dec.
1892a *Milwaukee Journal*. 19 March.
1892b *Milwaukee Journal*. 7 June
1892c *Milwaukee Journal*. 11 August.
1892d *Milwaukee Journal*. 21 November.
1895a *Milwaukee Journal*. 7 June.
1895b *Milwaukee Journal*. 30 June.
1895c *Milwaukee Journal*. 31 July.
1895d *Milwaukee Journal*. 20 August.
1896a *Milwaukee Journal*. 14 May.
1896b *Milwaukee Journal*. 29 May.

News-Palladium (Benton Harbor, Michigan)

1889 *News-Palladium*. 14 October.

Oshkosh Daily Northwestern (Oshkosh, Wisconsin)

1892 *Oshkosh Daily Northwestern*. 21 November.

Racine Journal (Racine Wisconsin)

1857 *Racine Journal*. 29 August.
1860 *Racine Journal*. 8 August.

Republican, The (Sturgeon Bay, Wisconsin)

1892 *Republican*. 24 November.

Sandusky Star-Journal (Sandusky, Ohio)

1901 *Sandusky Star-Journal*. 16 December.

U.S. Post Office Department

1851 Table of Post Offices in the United States on the First Day of January 1851, Arranged in Alphabetical Order, and Exhibiting the States, Territories, and Counties in which They are

Situated, with the Names of the Post Masters. W. & J.C. Greer Printers, Washington, D.C.

Watertown News (Watertown, New York)

1886 *Watertown News*. 24 November

Weekly Expositor Independent (Sturgeon Bay, Wisconsin)

1877 *Weekly Expositor Independent*. 21 September.

1880 *Weekly Expositor Independent*. 29 October.

1881a *Weekly Expositor Independent*. 8 April.

1881b *Weekly Expositor Independent*. 22 April.

1881c *Weekly Expositor Independent*. 29 April.

1881d *Weekly Expositor Independent*. 17 May.

1881e *Weekly Expositor Independent*. 24 May.

1881f *Weekly Expositor Independent*. 16 September.

1882 *Weekly Expositor Independent*. 21 July

1883a *Weekly Expositor Independent*. 21 September.

1883b *Weekly Expositor Independent*. 23 November.

1885 *Weekly Expositor Independent*. 27 November.

Weekly Wisconsin (Milwaukee, Wisconsin)

1855 *Weekly Wisconsin*. 30 May.

1884a *Weekly Expositor Independent*. 18 April.

1884b *Weekly Expositor Independent*. 8 Aug.

1884c *Weekly Expositor Independent*. 17 October.

1884d *Weekly Expositor Independent*. 31 October.

Weisman, Matthew J.

2015 *Boats Built on the Black River, Lorain, Ohio 1818 to 1981*. Morris Publishing, Kearney, NE.

Weekly Clarion (Grand Haven, Michigan)

1861 *Weekly Clarion*. 6 August.

Wisconsin State Journal (Madison Wisconsin)

1880 *Wisconsin State Journal*. 20 October.

Chapter 5: SIDNEY O. NEFF

Advocate, The (Sturgeon Bay, Wisconsin)

1896 *Advocate*. 26 December.

1898 *Advocate*. 7 May.

1900 *Advocate*. 15 December.

1902a *Advocate*. 5 April.

1902b *Advocate*. 3 May.

1902c *Advocate*. 27 December.

1904 *Advocate*. 17 September.

1905a *Advocate*. 25 March.

1905b *Advocate*. 9 December.

1906 *Advocate*. 13 December.
1907 *Advocate*. 19 September.
1908a *Advocate*. 5 March.
1908b *Advocate*. 9 April.
1909 *Advocate*. 30 December.
1910a *Advocate*. 3 March.
1910b *Advocate*. 17 March.
1910c *Advocate*. 24 March.
1910d *Advocate*. 31 March.
1910e *Advocate*. 7 April.
1910f *Advocate*. 14 April.
1910g *Advocate*. 5 May.
1910h *Advocate*. 4 August.
1911a *Advocate*. 23 March.
1911b *Advocate*. 27 April.
1912a *Advocate*. 2 May.
1912b *Advocate*. 6 June.

Appleton Post (Appleton, Wisconsin)

1890 *Appleton Post*. 11 December.

Buffalo Commercial Advertiser (Buffalo, New York)

1896a *Buffalo Commercial Advertiser*. 11 November.
1896b *Buffalo Commercial Advertiser*. 14 December.
1916a *Buffalo Commercial Advertiser*. 15 January.
1916b *Buffalo Commercial Advertiser*. 29 November.
1917 *Buffalo Commercial Advertiser*. 11 May.
1918a *Buffalo Commercial Advertiser*. 14 May.
1918b *Buffalo Commercial Advertiser*. 5 June.
1918c *Buffalo Commercial Advertiser*. 3 July.
1918d *Buffalo Commercial Advertiser*. 17 July.
1918e *Buffalo Commercial Advertiser*. 1 October.
1918f *Buffalo Commercial Advertiser*. 11 October.
1918g *Buffalo Commercial Advertiser*. 1 November.
1919a *Buffalo Commercial Advertiser*. 26 April.
1919b *Buffalo Commercial Advertiser*. 22 August.
1919c *Buffalo Commercial Advertiser*. 10 September.

Buffalo Courier (Buffalo, New York)

1896 *Buffalo Courier*. 28 March.
1908 *Buffalo Courier*. 4 April.
1911 *Buffalo Courier*. 17 June.
1915a *Buffalo Courier*. 12 June.
1915b *Buffalo Courier*. 2 September.
1915c *Buffalo Courier*. 8 September.
1915d *Buffalo Courier*. 6 October.
1915e *Buffalo Courier*. 17 October.

1915f *Buffalo Courier*. 25 October.
1915g *Buffalo Courier*. 7 December.
1916a *Buffalo Courier*. 27 April.
1916b *Buffalo Courier*. 2 May.
1916c *Buffalo Courier*. 14 May.
1916d *Buffalo Courier*. 4 July.
1916e *Buffalo Courier*. 13 July.
1916f *Buffalo Courier*. 19 July.
1916g *Buffalo Courier*. 27 August.
1916h *Buffalo Courier*. 12 September.
1916i *Buffalo Courier*. 28 October.
1916j *Buffalo Courier*. 5 December.
1916k *Buffalo Courier*. 10 December.
1917a *Buffalo Courier*. 22 April.
1917b *Buffalo Courier*. 24 April.
1917c *Buffalo Courier*. 1 June.
1917d *Buffalo Courier*. 4 July.
1917e *Buffalo Courier*. 19 July.
1917f *Buffalo Courier*. 29 July.
1917g *Buffalo Courier*. 29 September.
1917h *Buffalo Courier*. 16 November.
1917i *Buffalo Courier*. 8 December.
1918 *Buffalo Courier*. 19 June.
1924a *Buffalo Courier*. 18 October.
1924b *Buffalo Courier*. 20 November.
1925a *Buffalo Courier*. 23 April.
1925b *Buffalo Courier*. 28 April.
1925c *Buffalo Courier*. 22 May.
1925d *Buffalo Courier*. 1 June.
1925e *Buffalo Courier*. 8 June.
1925f *Buffalo Courier*. 7 September.
1926a *Buffalo Courier*. 21 May.
1926b *Buffalo Courier*. 23 May.

Buffalo Enquirer, The (Buffalo, New York)

1910 *Buffalo Enquirer*. 9 August.
1918a *Buffalo Enquirer*. 16 July.
1918b *Buffalo Enquirer*. 29 August.
1918c *Buffalo Enquirer*. 26 November.

Chicago Chronicle, The (Chicago, Illinois)

1896 *Chicago Chronicle*. 9 November.

Chicago Tribune (Chicago, Illinois)

1892a *Chicago Tribune*. 16 July.
1892b *Chicago Tribune*. 14 August.
1892c *Chicago Tribune*. 23 September.

1892d *Chicago Tribune*. 18 October.
1892e *Chicago Tribune*. 3 November.
1892f *Chicago Tribune*. 12 November.
1892g *Chicago Tribune*. 19 November.
1892h *Chicago Tribune*. 25 November.
1892i *Chicago Tribune*. 27 November.
1893 *Chicago Tribune*. 30 April.
1897 *Chicago Tribune*. 13 November.
1900a *Chicago Tribune*. 7 October.
1900b *Chicago Tribune*. 6 November.
1900c *Chicago Tribune*. 13 November.
1900d *Chicago Tribune*. 20 November.
1900e *Chicago Tribune*. 5 December.
1900f *Chicago Tribune*. 6 December.
1900g *Chicago Tribune*. 13 December.
1901a *Chicago Tribune*. 1 October.
1901b *Chicago Tribune*. 16 October.
1901c *Chicago Tribune*. 26 October.
1901d *Chicago Tribune*. 7 November.
1901e *Chicago Tribune*. 11 November.
1901f *Chicago Tribune*. 19 November.
1901g *Chicago Tribune*. 20 November.
1901h *Chicago Tribune*. 3 December.
1902a *Chicago Tribune*. 2 April.
1902b *Chicago Tribune*. 6 April.
1902c *Chicago Tribune*. 17 April.
1902d *Chicago Tribune*. 19 October.
1920 *Chicago Tribune*. 24 January.

Daily Inter Ocean (Chicago, Illinois)

1892a *Daily Inter Ocean*. 4 August.
1892b *Daily Inter Ocean*. 13 August.
1892c *Daily Inter Ocean*. 14 August.
1892d *Daily Inter Ocean*. 23 August.
1894 *Daily Inter Ocean*. 20 May.

Draugas (Chicago, Illinois)

1920 *Draugas*. 30 January.

Detroit Free Press (Detroit, Michigan)

1906 *Detroit Free Press*. 14 September.
1907 *Detroit Free Press*. 23 October.
1911a *Detroit Free Press*. 26 May.
1911b *Detroit Free Press*. 29 August.
1914a *Detroit Free Press*. 19 August.
1914b *Detroit Free Press*. 20 September.
1915a *Detroit Free Press*. 2 May.

1915b *Detroit Free Press*. 3 May.
1915c *Detroit Free Press*. 20 July.
1915d *Detroit Free Press*. 5 August.
1915e *Detroit Free Press*. 10 August.
1915f *Detroit Free Press*. 21 September.
1915g *Detroit Free Press*. 7 November.
1916a *Detroit Free Press*. 8 June.
1916b *Detroit Free Press*. 13 June.
1916c *Detroit Free Press*. 23 June.
1916d *Detroit Free Press*. 30 July.
1916e *Detroit Free Press*. 5 October.
1917a *Detroit Free Press*. 17 October.
1917b *Detroit Free Press*. 18 October.
1919a *Detroit Free Press*. 14 June.
1919b *Detroit Free Press*. 3 August.
1924 *Detroit Free Press*. 22 August.
1926 *Detroit Free Press*. 31 May.
1927 *Detroit Free Press*. 20 September.

Door County Advocate (Sturgeon Bay, WI)

1891 *Door County Advocate*. 3 December.
1892 *Door County Advocate*. 15 October.
1893a *Door County Advocate*. 25 March.
1893b *Door County Advocate*. 29 April.
1893c *Door County Advocate*. 16 September.
1893d *Door County Advocate*. 11 November.
1896 *Door County Advocate*. 14 November.
1918a *Door County Advocate*. 9 August.
1918b *Door County Advocate*. 16 August.
1919 *Door County Advocate*. 28 November.
1920a *Door County Advocate*. 2 January.
1920b *Door County Advocate*. 30 January.
1920c *Door County Advocate*. 26 March.
1920d *Door County Advocate*. 16 July.
1922a *Door County Advocate*. 10 November.
1922b *Door County Advocate*. 24 November.
1923a *Door County Advocate*. 19 January.
1923b *Door County Advocate*. 6 April.
1923c *Door County Advocate*. 11 May.
1923d *Door County Advocate*. 18 May.
1923e *Door County Advocate*. 6 July.
1923f *Door County Advocate*. 20 July.
1923g *Door County Advocate*. 3 August.
1923h *Door County Advocate*. 17 August.
1923i *Door County Advocate*. 21 December.
1924a *Door County Advocate*. 2 May.
1924b *Door County Advocate*. 9 May.

1924c *Door County Advocate*. 15 August.
1924d *Door County Advocate*. 21 December.
1925a *Door County Advocate*. 1 May.
1925b *Door County Advocate*. 12 August.
1926a *Door County Advocate*. 11 June.
1926b *Door County Advocate*. 30 July.
1926c *Door County Advocate*. 3 December.
1928 *Door County Advocate*. 3 August.
1933a *Door County Advocate*. 7 July.
1933b *Door County Advocate*. 28 July.
1935a *Door County Advocate*. 25 January.
1935b *Door County Advocate*. 22 March.

Door County Democrat (Sturgeon Bay, Wisconsin)

1912 *Door County Democrat*. 3 May.
1915 *Door County Democrat*. 7 May.

Door County News (Sturgeon Bay, Wisconsin)

1915 *Door County News*. 8 September.
1918 *Door County News*. 2 May.
1920 *Door County News*. 15 July.
1923a *Door County News*. 18 January.
1923b *Door County News*. 8 March.
1923c *Door County News*. 7 July.

Escanaba Daily Press, The (Escanaba, Michigan)

1929 *Escanaba Daily Press*. 4 May.
1931a *Escanaba Daily Press*. 16 August.
1931b *Escanaba Daily Press*. 12 August.
1933 *Escanaba Daily Press*. 12 August.
1934 *Escanaba Daily Press*. 16 December.
1938 *Escanaba Daily Press*. 29 April.
1939 *Escanaba Daily Press*. 31 October.

Evening News, The (Benton Harbor, Michigan)

1897 *Evening News*. 13 November.

Fisher, Marcelia C. Neff

1991 *By Paddle-wheel, Sail and Steam*. Abel Neff and His Nephews Captains Ed, Will and Sam 1850-1969.

Great Lakes Register

1906 *Great Lakes Register*. H.N. Herriman – editor. Bureau Veritas International Register of Shipping. Cleveland, Ohio
1908 *Great Lakes Register*. F. D. Herriman – editor. Bureau Veritas International Register of Shipping. Cleveland, Ohio

1911 *Great Lakes Register*. H.N. Herriman – editor. Bureau Veritas International Register of Shipping. Cleveland, Ohio
1924 *Great Lakes Register*. F. D. Herriman – editor. Bureau Veritas International Register of Shipping. Cleveland, Ohio
1931 *Great Lakes Register*. F. D. Herriman – editor. Bureau Veritas International Register of Shipping. Cleveland, Ohio

Green Bay Press-Gazette (Green Bay, Wisconsin)

1924 *Green Bay Press-Gazette*. 3 December.
1929a *Green Bay Press-Gazette*. 29 April.
1929b *Green Bay Press-Gazette*. 22 June.
1929c *Green Bay Press-Gazette*. 31 July.
1929d *Green Bay Press-Gazette*. 6 September.
1930a *Green Bay Press-Gazette*. 8 May.
1930b *Green Bay Press-Gazette*. 20 May.
1930c *Green Bay Press-Gazette*. 27 May.
1930d *Green Bay Press-Gazette*. 14 June.
1930e *Green Bay Press-Gazette*. 1 August.
1930f *Green Bay Press-Gazette*. 29 September.
1931 *Green Bay Press-Gazette*. 14 September.
1933a *Green Bay Press-Gazette*. 19 May.
1933b *Green Bay Press-Gazette*. 25 May.
1933c *Green Bay Press-Gazette*. 2 June.
1933d *Green Bay Press-Gazette*. 5 July.
1933e *Green Bay Press-Gazette*. 7 August.
1933f *Green Bay Press-Gazette*. 19 August.
1933g *Green Bay Press-Gazette*. 1 September.
1933h *Green Bay Press-Gazette*. 8 September.
1933i *Green Bay Press-Gazette*. 15 September.
1933j *Green Bay Press-Gazette*. 25 September.
1933k *Green Bay Press-Gazette*. 2 October.
1933l *Green Bay Press-Gazette*. 9 October.
1934a *Green Bay Press-Gazette*. 12 April.
1934b *Green Bay Press-Gazette*. 15 December.
1934c *Green Bay Press-Gazette*. 21 December.
1940 *Green Bay Press-Gazette*. 1 June.

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Historic American Merchant Marine Survey Records, Archives Center, National Museum of American History, Smithsonian Institution.

Herald-Press, The (St. Joseph, Michigan)

1906 *Herald-Press*. 24 November.

Inter Ocean, The (Chicago, Illinois)

1900 *Inter Ocean*. 1 December.

1902 *Inter Ocean*. 4 October.

1903 *Inter Ocean*. 30 July.
1908 *Inter Ocean*. 1 May.

Ironwood Daily Globe (Ironwood, Michigan)
1920a *Ironwood Daily Globe*. 23 January.
1920b *Ironwood Daily Globe*. 28 January.

Journal Times, The (Racine, Wisconsin)
1899 *Journal Times*. 8 July.
1919 *Journal Times*. 27 March.

Kenosha Evening News (Kenosha, Wisconsin)
1900a *Kenosha Evening News*. 29 June.
1900b *Kenosha Evening News*. 16 October.

La Crosse Tribune, The (La Crosse, Wisconsin)
1935 *La Crosse Tribune*. 13 February.

Lake County Times, The (Hammond, IN)
1920 *Lake County Times*. 28 January.

Leader-Telegram (Eau Claire, Wisconsin)
1923 *Leader-Telegram*. 30 January.

Manitowoc Citizen (Manitowoc, Wisconsin)
1902 *Manitowoc Citizen*. July 17.

Marine Record (Cleveland, Ohio)
1897 *Marine Record*. 30 December.

Marine Review (Cleveland, Ohio)
1897 *Marine Review*. 15 April.
1898 *Marine Review*. 12 May.
1902 *Marine Review*. 27 February.
1905 *Marine Review*. 9 March.

Milwaukee Daily Sentinel (Milwaukee, WI)
1890a *Milwaukee Daily Sentinel*. 29 November.
1890b *Milwaukee Daily Sentinel*. 1 December.
1891a *Milwaukee Daily Sentinel*. 9 September.
1891b *Milwaukee Daily Sentinel*. 17 November.
1891c *Milwaukee Daily Sentinel*. 23 November.
1891d *Milwaukee Daily Sentinel*. 9 December.
1894 *Milwaukee Daily Sentinel*. 20 April.
1897a *Milwaukee Daily Sentinel*. 1 January.
1897b *Milwaukee Daily Sentinel*. 13 November.
1898a *Milwaukee Daily Sentinel*. 2 January.

1898b *Milwaukee Daily Sentinel*. 21 July.
1899 *Milwaukee Daily Sentinel*. 12 December.

Milwaukee Journal (Milwaukee, WI)
1890 *Milwaukee Journal*. 29 November.
1891a *Milwaukee Journal*. 8 July.
1891b *Milwaukee Journal*. 3 September.
1892 *Milwaukee Journal*. 20 April.
1895 *Milwaukee Journal*. 9 March.
1898 *Milwaukee Journal*. 18 May.

Neff, John

2020 *Images of Gone But Not Forgotten Wooden Commercial Ships*. Unpublished manuscript.

News-Palladium, The (Benton Harbor, Michigan)
1897 *News-Palladium*. 13 November.
1909 *News-Palladium*. 12 October.
1916 *News-Palladium*. 15 December.
1919 *News-Palladium*. 1 July.

Owosso Times, The (Owosso, Michigan)
1897 *Owosso Times*. 19 November.

Republican, The (Sturgeon Bay, Wisconsin)
1892 *Republican*. 20 October.

Rock Island Argus (Rock Island, Illinois)
1920a *Rock Island Argus*. 24 January.
1920b *Rock Island Argus*. 26 January.

Sebewaing Blade (Sebewaing, Michigan)
1920 *Sebewaing Blade*. 19 February.

Sheboygan Press, The (Sheboygan, Wisconsin)
1908a *Sheboygan Press*. 12 June.
1908b *Sheboygan Press*. 2 July.
1908c *Sheboygan Press*. 13 August.
1914 *Sheboygan Press*. 13 November.
1915a *Sheboygan Press*. 16 August.
1915b *Sheboygan Press*. 10 November.
1915c *Sheboygan Press*. 11 November.
1931 *Sheboygan Press*. 16 October.
1933 *Sheboygan Press*. 17 October.

St. Joseph Daily Press (Saint Joseph, Michigan)
1909 *St. Joseph Daily Press*. 6 November.
1910 *St. Joseph Daily Press*. 23 June.

Sturgeon Bay Advocate, The (Sturgeon Bay, Wisconsin)

- 1913 *Sturgeon Bay Advocate*. 10 April.
- 1914a *Sturgeon Bay Advocate*. 16 April.
- 1914b *Sturgeon Bay Advocate*. 14 May.
- 1915a *Sturgeon Bay Advocate*. 9 September.
- 1915b *Sturgeon Bay Advocate*. 21 October.
- 1916 *Sturgeon Bay Advocate*. 25 May.
- 1917a *Sturgeon Bay Advocate*. 5 July.
- 1917b *Sturgeon Bay Advocate*. 30 August.
- 1917c *Sturgeon Bay Advocate*. 11 October.
- 1917d *Sturgeon Bay Advocate*. 18 October.
- 1917e *Sturgeon Bay Advocate*. 29 November.
- 1918a *Sturgeon Bay Advocate*. 25 April.
- 1918b *Sturgeon Bay Advocate*. 2 May.
- 1918c *Sturgeon Bay Advocate*. 9 May.

Times Herald, The (Port Huron, Michigan)

- 1906 *Times Herald*. 22 November.
- 1911 *Times Herald*. 18 October.
- 1916 *Times Herald*. 10 October.
- 1917a *Times Herald*. 12 June.
- 1917b *Times Herald*. 1 September.
- 1917c *Times Herald*. 12 September.
- 1917d *Times Herald*. 18 September.
- 1917e *Times Herald*. 5 October.
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