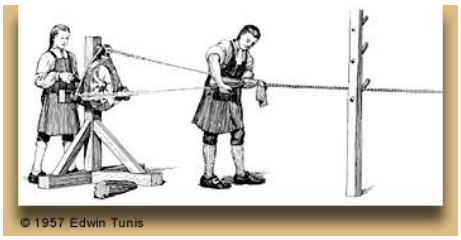


While one man cranks the spinner, the one holding the "top" walks backwards as the rope is twisted. From Edwin Tunis, *The Young United States, 1783 to 1830* (New York: World Publishing Co., 1969). Used by permission of the estate of Edwin Tunis.

Ropewalk

The Newsletter for
Shipwrights of Ohio – March 2023

Next Meeting: April 15, 2023;
"Rudder" by Bill Nyberg

Table of Contents

March

Good turnout for our meeting Saturday. Great presentation on "Getting Started in RC Boats by Alan Phelps.

But first, a welcome to Julie Holloway, from Dublin. Julie is building the Swift – 1805 as her first ship model. You can view her progress in the Ships on Deck section. Welcome Julie, and we look forward to your contributions.

I own an apology to those who attended the zoom meeting on Saturday. In my attempt to join the NRG workshop on paper ship modeling, I discovered, to my chagrin, that when you attempt to connect from within an open zoom session to a new zoom session, so that those who are participating in the initial session can share in the second, zoom disconnected me from the first session. Sorry for the abrupt disconnect and I hope you received my notice with the new zoom argument. I did notice that Julie Holloway, Lee Kimmins and Mort Stoll were on the workshop participants. There was also a Philip Mains in that list and I wondered if that was you, Bob Mains, or a relative.

Alan Phelps presentation on "Getting Started in RC Boats" was very informative. I have a copy of his pdf format presentation and it appears that it will also be made available to be downloaded, including his build log and photos.

Take care of yourself and your families, look to those you know who may need help, are lonely and may be in need of human contact. Till next month.

Your editor.

Business

2023 Last Notice for Dues Payment

If you still haven't paid your 2023 dues, send a check made out to "Shipwrights of Ohio" for the amount of $20, to:

Shipwrights of Ohio – Treasurer
5298 Timberlake Circle
Orient, OH 43146-9249

Lee can also handle payments via Venmo to our Chase account: Contact Lee at the phone number found on page 7 of this newsletter.

March 31st is the deadline. If you are not current, you will be dropped from the distribution list.

Hybrid Meeting Planning

The April meeting is scheduled to be a hybrid format, with an in-person meeting at the

Westerville Public Library, classroom D (Media Room – in the CD/Tape portion of the Library). The May and June meetings will be hybrid and held in the libraries conference room. I will bring the chocolate-chip cookies.

The May 20th and June 17th meeting will be in Meeting Room C (conference room).

2023 Presentation Schedule

The presentation schedule and presenters, at this time, are:

01/21 - ~~The Principles of Rigging - Nyberg~~
02/18 - ~~Research: Internet, Historical Info - Boeck~~
03/18 - ~~Getting Started with RC Boats - Phelps~~
04/15 - Fixtures: Rudders - Nyberg
05/20 - Masts, Yards, & Spar Making - Markijohn
06/17 - Standing Rigging & deadeyes - Keller
07/15 - Running: Block & Tackle, Belaying - Mains
08/19 - Making Sails - Nyberg
09/16 - Fixtures: Capstans & Windlasses - Nyberg
10/21 - Finishing: Natural & Paint - Mitchell
11/18 - Displaying & mounting ship models - Ross
12/16 - Soldering - Phelps

Announcements

Midwestern Model Ships & Boats Contest

Ever wonder how good of a shipwright you are? The *46th Midwestern Model Ships & Boats Competition* is your chance to find out. Held at the Wisconsin Maritime Museum, Manitowoc, WI, which is located at the mouth of the Manitowoc River where it empties into Lake Michigan, on May 19 – 21, 2023.

There are three builder level of entry: Novice, Intermediate, and Advanced; Six categories of model: Scratch, Kit, Paper, Operational, Diorama, Nautical Craft. Competition is against a set of standards, with every entry starting at 100 points. Awards are: Bronze, Silver, Gold.

If you are interested, go to: https://www.wisconsinmaritime.org/programs-and-events/midwestern-model-ship-contest/ Information, registration, schedule, and hotels are all listed. It is 531 miles from Columbus to the museum and can be driven, transporting your model, in 10 hours.

Key deadline dates are:

April 13th – cut off date for hotel registration at the "Maritime Inn & Suites, Manitowoc (a short walk to the museum)

May 1st – Cutoff date for registration of your ship models entry into the competition.

Lakeside Wooden Boat Society

The Lakeside Wooden Boat Society, sponsors for the 20th Annual Lakeside Wooden Boat Show, organized and held at Lakeside, Ohio. Lakeside is a summer Chautauqua on the shore of Lake Erie, opposite Kelllys island. This year's show will be held on Sunday, July 16th, from 12-4pm. Once again, Lakeside will be pairing the show with the Plein Air Art Festival, which runs from Friday–Sunday.

This year, the Maritime Museum of Sandusky will be joining the show at Lakeside from Friday–Sunday. The Maritime Museum's display will include pop-up exhibits sharing the maritime heritage of the area, including: the Golden Age of Steamboats, Johnson's Island, Commercial Shipping, Prohibition, and the local boatbuilding industry.

There are cottage and hotel rentals available and, as always, a discount is offered at the historic Hotel Lakeside if you mention that you are there for the Boat Show.

For more information please contact Mame Drackett at mame@drackett.cc

Paper Ship Modeling

On March 18th, at 11:30 EST, the NRG held a workshop on Paper Ship Modeling. This was zoom broadcast.

The above left cover page of the NRJ, summer 202, Vol. 65, #2, and on the right, the cover page of the NRJ, spring 2023, Vol. 68, #1 are paper ship models of *HMS Wolf*, the paddle steamer *Alexander Arbuthnot* built by David Sakrison. David, along with Chris Cooke of "Marcle Models", both from the UK, with Paul Fontenoy from the U.S., introduced the zoom audience (100) to paper ship modeling. They discussed the tools, paper, glue and kits that are available and history of card modeling.

There will be a second workshop, scheduled for April 15th at 11:30 AM, EST. That session will

outline the building of four very different card models and the painting of paper and card surfaces.

Presentation

Getting Started in RC Boats

This presentation was by Alan Phelps, and he shared his knowledge and experience in radio control ship modeling. His presentation was based on developing an intro kit and workshop for the family that wants to get into ship modeling and radio control power. The kit "*Moonglow*" is from RBC Kits, an online site in the UK. (www.rbckits.com)

Alan covered an overview of radio equipment and controls, RC terms and definitions, the building sequence for the *Moonglow,* power management. Cooling considerations, fine tuning, and handling the first run of your RC boat. His presentation included photos of RC parts, tables on motor power and drawings of circuits.

He them took us through the build process with a series of photos of the model build process and the placement of the electronic circuits in the boat.

The cost of the *Moonglow* kit is $99, with the motor, servo and onboard circuit costing another $119. The RC radio transmitter, batteries and charger are a one-time charge of $110. His total build time of the boat and installing the circuits and the initial first run totaled 19.2 hours.

This could be an intro workshop held in any community as a way to attract young people and their parents to RC Boats and ship modeling. We are working on adding the presentation, build log, manufacturer's diagrams, list of parts and where sourced, plus photos of various building steps to the club web site.

Ships on Deck

Swift 1805

Julie Holloway

The Swift is Julie's first ship model. She has finished the framing and planking of the hull.

In the photo above, those are small brass nails fastening the planks to the frames.

Julie is using toothpicks for treenail to fasten the deck to the frames. Nice work Julie.

Bluenose

Cliff Mitchell

Cliff is rigging the boom.

He has installed the two flying Backstays which run from the main top mast down to the deck. It involves a system of blocks, hooks and lines that makes the backstays adjustable.

Work began on the Main Boom. First, he added the footropes. (Above)

Then added the boom tackle

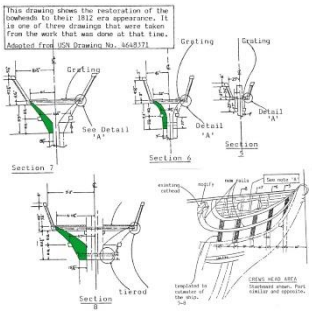
.

Then added two identical boom crutch tackles, one on either side of the boom, that keep the boom from moving side to side.

Lastly, Cliff worked on the Main Boom Sheet which holds the boom down towards the deck. It consists of a large triple block, a double block and a single block.

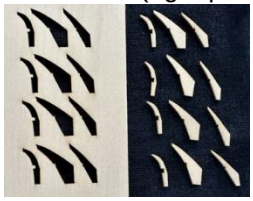
U.S.S. Constitution

Steven Keller



After much thought, Steven came up with an idea on how to solve one of the difficult tasks of building the bowhead for the “Connie”. He was bothered by the difficulty of carving the channel in the head timbers that would produce clean white striping. (see left photo)

Profiles were traced from the 1973-76 restoration drawings onto a computer and sized to the exact 1:96 scale. (right photo)



His solution was to build three layers and offset the outer two to produce a recess in the center Basswood pieces were cutout using a Dremel Digilab LC-40 laser cutter. The two outer pieces were cut from 1/32” stock and the inner pieces from 1/16” stock. (photo above)

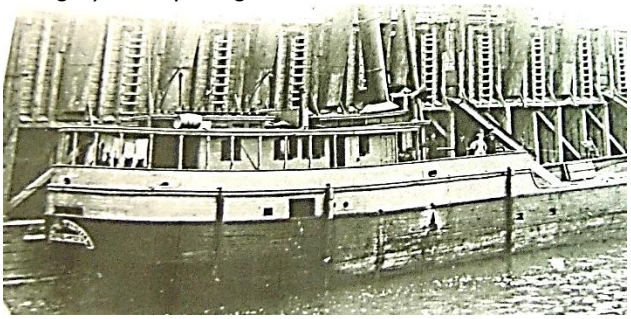
Pieces where then lightly sanded to attain the scaled 10” thickness of the original timbers. The results are shown in the photo on the right..

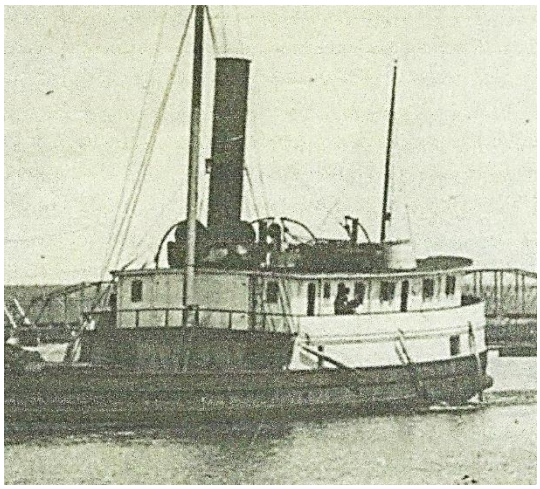
Margaret Olwill

William Nyberg

Started the build of the stern cabin. This is a foam block simulating the stern cabin, with upper deck and skylight. The sideview shows the coal chute and stack also simulated.

The builder, Henry Root, built seven steam barges, the two largest were Margaret Olwill & D. Leuty. Leuty was built at Black River, Ohio (Lorain) in 1882 (178.4’ x 33.8’ x 12.2’; 646 grt); the Olwill was built (Cleveland) in 1887 (175.5’ x 35’ x 10.2’; 542 grt.). Comparing the two stern cabins:





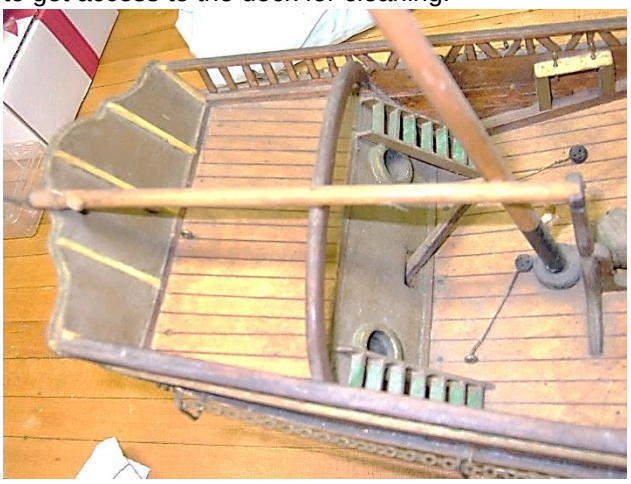
Root was using a similar plan, with a extension forward on the cabin for coal delivery and two doors, one for access to the engine room and the other to the rear cabins. On the Olwill there is a single door for both,

Below are photos pf the stern cabin and roof.

Restoration Project: Xebec

Bill Nyberg.

Above: all the rigging and yards have been stripped to get access to the deck for cleaning.



. Started cleaning deck with Q-tip and water. The model has not covered and has been displayed at a cottage in north western Michigan. The dirt is imbedded in the deck timbers so I am searching for a better product to use to clean the exposed deck and fixtures.

Other Notes: “Stuff”, Tugs & Things

Nautical Terms

anchor winch: A horizontal capstan in the bow used for weighing anchor.

anchorage: Any place suitable for a ship to anchor, often an area of a port or harbor.

anchor's aweigh: Said of an anchor to indicate that it is just clear of the bottom and that the ship is therefore no longer anchored.

anemometer: An instrument used to measure wind speed.

aneroid barometer: An instrument used to measure air pressure, often with the aim of predicting changes in weather.

angle of attack: The angle between the apparent wind and the chord line of the sail.

angle on the bow: A naval submariner's term for the angle between a target's course and the line of sight to the submarine. It is expressed as port or starboard, so never exceeds 180 degrees. This is one of the figures entered into the Torpedo Data Computer that makes all the calculations necessary for a torpedo attack on the target.

anti-rolling tanks: A pair of fluid-filled tanks mounted on opposite sides of a ship below the waterline. The tanks are cross-linked by piping or ducts to allow water to flow between them and at the top by vents or air pipes. The piping is sized so that as the fluid flows from side to side it damps the amount of roll.

apeak: More or less vertical. Having the anchor rode or chain as nearly vertical as possible without freeing the anchor.]

apparent wind: The combination of the true wind and the headwind caused by the boat's forward motion. For example, it causes a light side wind to appear to come from well ahead of the beam.

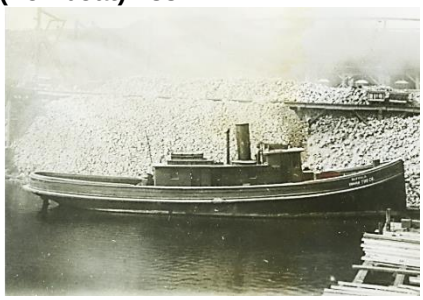
Tugs: Great Lakes

Bruce, B. F. (Towboat) 1873

The *B.F. Bruce* a wooden propeller tug, was built by E. Haight for J. Byrnes, both from Buffalo and had measures of: 58.2’ x 15.1’ x 7.7’; tonnage – 35 grt, 17 net. In 1889 her ownership was changed to Thomas Nester, Baraga, MI, to be used for towing log rafts on Keweenaw Bay, Lake Superior. She stayed in ownership with the Nester Family through 1916 when she was sold to Edward Lutz, Michigan City, IN. In 1921 she was purchased by the Illinois Stone Co. Chicago. Final disposition is unknown.

BGSU University Libraries; Historical Collections of the Lakes & Alpena County George N. Fletcher Public Library; C. Patrick Labadie Collection

Buffalo (Towboat) 1887



Shipwrights, O’Grady & Maher built a wooden, propeller towboat for their own use at Buffalo. Her measures were 68’ x 17’ x 10’; tonnage – 60 grt, 30 net. She was powered by a high pressure non-condensing engine, built by Donaldson & Whitman, with 20” bore x 22” stroke and rated for 320 hp @ 120 rpm. Steam was generated by a firebox boiler, 7’ x 13’.

In 1890 her ownership was changed to A. W. Comstock and she was enrolled at Port Huron and issued official number 3367. In September of that year, she towed a raft containing 6,000,000 feet of logs from French River to Tawas. In 1891 her ownership was changed to Inman Tug Lines, Duluth. As Great Lakes Towing grew, they acquired her in 1900. On April 29, 1907, on the Portage River, MI, Lake Superior, she was cut by ice and foundered. In 1914, Jas. Whalen, Port Arthur, bought the wreck, but she was never recovered.

BGSU University Libraries; Historical Collections of the Great Lakes & Alpena County George N. Fletcher: Public Library; C. Patrick Labadie Collection

Presentation Schedule:

2023- Tentative
Jan 21 – ~~Principles of Rigging~~
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Jun 17 – Standing Rigging & Deadeyes
Jul 15 – Running Rigging, Blocks, Belaying
Aug 19 – Making Sails
Sep 16 – Capstans & Windlasses
Oct 21 - Finishing: Natural & Paint
Nov 18 – Displaying & Mounting ship models
Dec 16 - Soldering

Events & Dates to Note:

2023 Tentative Schedule

Columbus Woodworking Show
Ohio Expo Center
January 20-23, 2023

IPMS Columbus
BLIZZCON 2023
Makoy Center, Hilliard, OH
Saturday, February 18, 2023

Miami Valley Woodcarving Show
Christ United Methodist Church
Middletown, OH
March 4 & 5, 2023

46th Midwestern Model & Boat Show,
Wisconsin Maritime Museum, Manitowoc, WI
May 19 - 21, 2023

Lakeside Antique & Classic Wooden Boat
Lakeside Hotel, Lakeside, OH
July 16, 2023

NRG Conference
?
Oct. 2023

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Cargo Hold

www.shipwrightsofohio.com/cargo hold/

Here you will find how to order Challenge Coins, as shown above, on left, that have been used historically for Identification within an organization, Recognition of achievements, Appreciation of services and Trading/Collecting. Our Shipwrights of Ohio coin contains both the Club Logo and the Club Coat-of-Arms.

You can also order Logo shirts from "Lands End". They offer an on-line link for direct, personal purchases of many of their products without Shipwrights of Ohio logo.

There are currently two logo styles available**:**

- **Full Club logo – with Motto, for digital print use on the backside of T-shirts. 10" or 12" round.**
- **Small Club logo – without Motto for embroidered or digital print on the front of items. 4" round.**

Wooden Steamers on the Great Lakes

Written by William E. Nyberg

1866-77, Reconstruction

With the end of the Civil War, the period of years between 1866 – 1877 are called the Reconstruction Years. Before his assassination in April 1865, President Abraham Lincoln had announced moderate plans for reconstruction to re-integrate the former Confederate states as fast as possible. Lincoln set up the Freedmen's Bureau in March 1865, to aid former enslaved people in finding education, health care, and employment. The final abolition of slavery was achieved by the Thirteenth Amendment, ratified in December 1865.

Reconstruction ended at different times in each state, the last in 1877. The end of Reconstruction marked the end of the brief period of civil rights and civil liberties for African Americans in the South, where most lived. Reconstruction caused permanent resentment, distrust, and cynicism among white Southerners toward the federal government, and helped create the "Solid South," which typically voted for the (then-) socially conservative Democrats for all local, state, and national offices.

if we see Reconstruction's purpose as making sure that the main goals of the war would be filled, of a Union held together forever, of a North and South able to work together, of slavery extirpated, and sectional rivalries confined, of a permanent banishment of the fear of vaunting appeals to state sovereignty, backed by armed force, then Reconstruction looks like what in that respect it was, a lasting and unappreciated success.

Reconstruction coincided with the end of the War Between the States and the beginning of a new era of increased settlement, industry and commercial growth in the Great Lakes region. During the next quarter century, her captains and crews would set sail many times in answer to the demands of a dynamic and expanding American economy. She would be used by her owners to transport agricultural, mineral, and forest resources within a vast network of rivers, lakes, canals, and harbors characterized by one 19th century author as, "the most magnificent system of internal communication to be found on the surface of the earth".

1866-a

Alexandria: This vessels history started back in the year 1853, when Augustin Cantin built a wooden, sidewheel steamer for Lake Saint Francis Navigation and named her *Castor*. Her measures were: 149' x 24'; tonnage (old style) 76. *Lake Saint Francis* is a lake which borders southeastern Ontario, southwestern Quebec and northern New York State. It is located on the Saint Lawrence River. She was built as a passenger, package freight ferry for the Lachine to Caughnawaga (Kahnawake), Ont., crossing the St. Lawrence River.

In1855, ownership of the sidewheel steamer *Castor* was changed to C. Lajoie, Trois Rivieres, Que. The steamer *Castor* operated from 1855-1861 as a Montreal to Quebec "market boat" (makes all stops) on the Saint Lawrence River. The *Castor* was wrecked at Sorel, Que. in April 1862 by ice.

November 1862, the sidewheel steamer *Castor* was rebuilt as a steambarge by Dan & John McCarthy, Sorel, Que. and enrolled as the *Alexandria, with measures:* 153.6' x 25.9' x 8.6'; 153 grt. In 1863 her ownership was changed to the Bay of Quinte & St. Lawrence Navigation Co., Picton, Ont. Her master of the steamer *Alexander* for the 1863 season was Captain J. N. Backus. She operated as Lake Ontario lumber tug for the 1863 – 64 seasons. In October 1864, the steamer *Alexandra* caught fire and burnt to her waterline in the Beauharnois Canal, Saint Lawrence River. Final enrollment for the steambarge *Alexandra* was surrendered December 7, 1864 and endorsed "burnt".

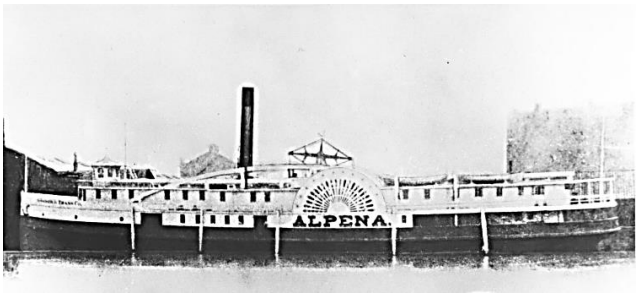
In October 1866, Augustin Canton, enrolled, at Montreal, a wooden sidewheel towboat, built on the recovered hull of the *Alexandria* (C-1864). She was named *Alexandra,* and her measures were: 161.58' x 25.17' x 8.83' with a tonnage 94.63 grt and was assigned official number 85768. Owned by the "Ottawa River Navigation Co.", she would be used for the towing barges on the Ottawa River, between Montreal and Ottawa.

In 1873, ownership of the steamer *Alexandra* was changed to Arthur W. Hepburn, Picton, Ont. (Ontario & Quebec Navigation Co.) and her master for the 1873 – 74 seasons was Captain W. H. Morden. In 1877, she received some large repairs so that she could be used as a river towboat. She was remeasured according to 40th Victoria, Chapter 19; 161.58' x 25.17' x 8.83'; 940.60 grt, 549.83 net. In November 1880, the steamer *Alexandra* wrecked off the highlands at Scarborough near Toronto, Ont.

The sidewheel steamer *Alexandra* was rebuilt for passenger service and double decked, at A. Cantin Shipyard, Montreal, Ont.; 173.7' x 31.0' x 8.4'; 863 grt, 508 net tons. She was powered by a low pressure, 33" bore x 120" stroke, 50 HP engine, built by W. Imre, Montreal and originally installed in the *Speed* (1846) and the *Phoenix* (1849). [No record was found for either the *Speed* or *Phoenix*]. In May 1890, she ran on a shoal at the Jack Straw lighthouse near Gananoque, ONT. Her master for the 1899 season was Captain E. B. Smith with Charles McWilliams as chief engineer. May 1901, she was renamed from *Alexandra* to *Alexandria,* C85768 and registered at Picton, Ont. as owned by Arthur W. Hepburn with measurements: 173.7 x 30.6 x 8.6; 863.15 grt, 507.99 net.

March 1905, her ownership was transferred to Bernard R. and James D. Hepburn. The following month her ownership was transferred to the Ontario and Quebec Navigation Co. Ltd. Her master for the 1906-07 season was Captain E. B. Smith; for the 1909-10 season, Captain Joseph Rinfret; and for the 1912 season, Captain Linnard Hicks; with Thomas J. S. Milne as chief engineer from 1906 through 1912.

In 1912, ownership of the steamer *Alexandria* was changed to Canada Steamship Lines. Her master for the 1914 season was Captain Joseph Rinfret and for the 1915 season Captain William Bloomfield with Thomas J. S. Milne as chief engineer. August 1915, bound up from Port Hope, Ont. for Toronto, Ont., laden with foodstuffs and furniture, she beached on a bar during a storm and fog, at Scarborough Bluffs, Ontario, Lake Ontario and the vessel broke up due to wave action. She was later stripped by souvenir hunters. No lives lost.



Alpena: David Gallagher, Marine City, MI, built a wooden, sidewheel steamer for S. Gardner, Detroit, to be used in the passenger, package freight trade. Enrolled at Detroit, her measures were: one deck, one mast, 197.0' x 26.66' x 12.0'; tonnage – 653.0 grt. She was powered by a vertical beam engine, 44" X 132" stroke built by Detroit Locomotive Works, Detroit. Her side-wheel was 24 feet radial. At enrollment. She was issued official number 404.

In 1867, S. Gardiner, sold shares in the *Alpena* taking on partners: E.B. Ward; Lyman A. Zerkes; and David Gallagher all from Detroit. The steamer *Alpena* operated out of Detroit on runs to ports & landing along the shores of Lake St. Clair, Lake Huron and Saginaw Bay, MI.

Ownership shares in the *Alpena* were transferred to Capt. Albert E. Goodrich, Chicago in 1868. Later, in 1868, he purchased all shares and transferred ownership of the steamer *Alpena* to Goodrich Transportation Co., Chicago. She was home ported out of Chicago and placed on the cross-lake services between Chicago and Muskegon & Grand Haven, MI. Master of the steamer *Alpena* for the 1869-71 seasons was Captain J.W. Hall. In June 1869, she had her wheelhouse damaged by the schooner *Pilgrim* in Chicago. In April 1871, the steamer *Alpena* collided with the schooner *Two Charles* in Lake Michigan. September 1874, she collided with the schooner *Transit* off Sheboygan, MI. During the winter layup 1875/76, the steamer *Alpena* was laid up at Manitowoc ship-yard, Manitowoc, and underwent a complete overhaul and recondition. Her master for the 1880 season was Captain Nelson Napier. Bound from Grand Haven to Chicago with passengers, the steamer *Alpena* foundered in a gale, on October 16, 1880, twenty miles off Kenosha, WI, Lake Michigan. 73 lives lost.

George W. Bissell*,* In 1866, David McDole, Marine City, MI, with J. Kelsey as Master Carpenter, built a wooden propeller for Aloney & David W. Rust, et al., East Saginaw, MI. Her initial enrollment at Detroit, May 29, 1866, recorded measures of:152.0' x 26.16' x 10.25'; 278.30 grt, 264.41 net. She was issued official number 10665. She was powered by a high-

pressure engine, 22” bore x 24” stroke and was intended as a steambarge for the bulk freight trade on the Toledo to Saginaw, MI run. Her master for the 1866 – 68 seasons was Captain George Pringle. June 1866, bound Cleveland to Detroit, laden with a cargo of lumber, the steambarge *G. W. Bissell* collided with an unknown steamer at the mouth of the Detroit River and sank. No lives lost. She was raised later that month and brought into Clark's Shipyard, Detroit for repairs. In June of 1867, down bound for Cleveland with a load of lumber, the *G. W. Bissell* collided with the propeller *Acme* (US297) opposite the Clay Banks on Lake Erie. The *G.W. Bissell* received $2,000 damage while damage estimated for the *Acme* was set at $100. December 1870, the steambarge *G.W. Bissell* was stripped of her engines and would be refitted as a tow barge at Port Huron. In March of 1871, the barge *G.W. Bissell* was enrolled at Port Huron: 1 deck, 2 masts.

April 1872, ownership of the barge *G.W. Bissell* was changed to Charles E. Bak, Cleveland.

In April of the following year, ownership of the barge was changed to Lewis C. Butts & D. K. Clint, Cleveland.

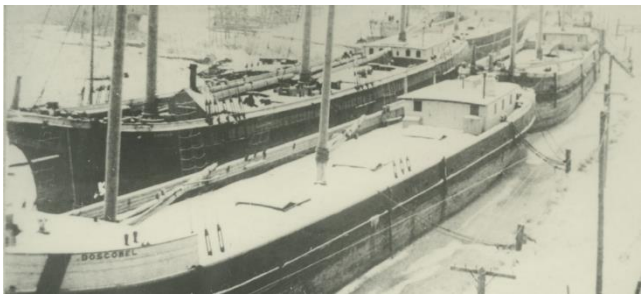
In April 1881, her ownership was changed to E.E. Stover & A. S. Pierson, Bay City, and enrolled as: 150’ x 26.2’ x 10.3’.

In May 1883, her ownership was changed to H. G. Blanchard, Detroit.

In April 1892, her ownership was changed to John Stevenson, Detroit, and Paul H. Hoeft, Presque Isle County. In 1895, the barge *G.W. Bissell* was damaged by incendiary fires while moored near Solvay Process Co's. Works, Saginaw.

In February 1896, her ownership was changed to Rose D. Brown, Detroit.

Enrollment for the barge *G.W. Bissell* was surrendered January 29, 1900, and endorsed as "abandoned".



Boscobel: Launched in December 1866, S. V. D. Philbrook, Peshtigo, WI, built a wooden propeller for the Peshtigo Co., Thomas H. Beebe, president, to be used in the bulk freight trade to freight lumber from Green Bay to Chicago. Her initial enrollment was issued at Chicago on April 19, 1867 with measures: 206.5’ x 32.0’ x 10.66’; tonnage – 503.89 grt. She was issued official number 2147, and she was powered by a high-pressure engine, 48" bore x 36" stroke, built by Shepard Iron Works, Buffalo. Her master for the 1868 season was Captain Finefield. Captain Hodges was her master for the 1869 season. In April 1869, the *Boscobel* was chartered to the New York Central Line as a passenger, package freighter. In the same month, her machinery was disabled while at Milwaukee. In May she was chartered by Union Steamboat Company. In July, the propeller *Boscobel* went aground on the St. Clair flats. Later that month, she went aground on Spectacle Reef, Lake Huron. In September 1869, bound for Chicago with crew & ten passengers, the propeller *Boscobel* caught fire three miles below St. Clair, MI. and ran aground in the St. Clair River, on the Canadian shore, burning to waterline. Three lives lost.

In 1873, ownership of the remains of the *Boscobel* was changed to Thomas Craig. The burnt hull of the bulk freighter *Boscobel* was raised from her resting place on the Canadian side of the St. Clair River, and was rebuilt as a tow barge by Abram Smith, at Algonac, MI, and re-enrolled as *Boscobel,* US31430 with measurements: 166.66’ x 32’ x 10.66’; 503.89 grt, 478.7 net. Her owners were listed as Come Allen & John K. Harrow, Algonac, MI in July 1876. In October 1876, while in tow of the tug *Bay State* (US3480), the tow barge *Boscobel* broke loose and went ashore on Rondeau Point, Lake Erie. Released.

In 1883, ownership of the tow barge *Boscobel* was changed to L. B. Parker, Marine City, MI. In 1886, the tow barge *Boscobel* had her rig changed to schooner at Port Huron and registered as a three-mast schooner: 168.5’ x 30.6’ x 17.3’; 570 grt. During a late severe fall storm on Lake Huron, in November 1890, while under tow of *D. F. Rose* (US35149), the schooner barge *Boscobel* was brought into Buffalo waterlogged with her cabin and part of the deck load lost. In December 1895, the schooner *Boscobel* was sunk by ice near Turtle Light, Maumee Bay, Lake Erie, after stranding on the bar.

Ownership of the schooner *Boscobel* was changed to Captain C.W. Blodger, Bay City, MI, in 1898. In September 1900, laden with coal for the

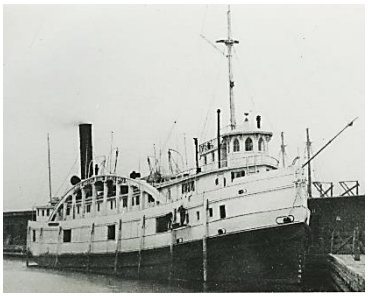
Soo, the schooner *Boscobel* sprang a leak during a storm, reaching the harbor at Alpena, MI, Lake Huron, before she sank at the dock.

In May 1903, the final enrollment for the schooner *Boscobel* was surrendered at Port Huron, and endorsed "Sold Foreign". August 1909, in tow of the steambarge *D. F. Rose* (US35149), the schooner barge *Boscobel* foundered in a moderate gale due to massive hull failure, mid-lake, Lake Huron.

Brooklyn: Ira Lafrinier, Cleveland, built a wooden propeller for the Northern Transportation Co., Cleveland, to be used for the passenger, package freight trade, running Ogdensburg – Detroit & Lake Michigan ports with the capability to carry 200 passengers. She was enrolled at Cleveland on April 16, 1866, with measures recorded as: 136.60’ x 25.83’ x 12.0’; tonnage 466.38 grt. She was powered by a high-pressure engine, 26” bore x 36” stroke, 311 nominal horsepower, built by Cuyahoga Steam Furnace Co., Cleveland. Her official number was 2151. Her master for the 1866 season was Captain A. W. Rosman with James Delany as engineer. In May 1866, she was damaged in a collision with the Canadian bark *Arabian* (C-1853) at Port Colborne, Ont. Her property loss was set at. $1,800. In June 1869, she went aground on the St. Clair Flats. The following month she broke her cylinder-head while on Lake Michigan. For the 1872-73 season, her master was Captain D. H. Davis. September 1874, bound down, laden with grain the propeller *Brooklyn* sprang a leak while on Lake Michigan. Property loss was set at: Hull $600, Cargo $800. The following month, bound up, Ogdensburg to Chicago, the propeller *Brooklyn,* laden with general merchandise, while attempting to pass the steamer *Cuba,* and had been pouring on too much steam when her boiler exploded, blowing off her stern and tearing out her bottom. She sank off Fighting Island, Detroit River. The cause of the explosion was low water in her boiler. 22 lives were lost. In November of that year, her hull was raised to be moved from the channel. She broke loss and drifted from the Canadian shore down and across the Detroit River, ending off Grassy Island.

City of Detroit: A consortium of investor, including C.C. Blodgett, (5/8 shares), S.C. Blodgett (1/8 share), and Hodge & Christie (2/8 shares) all from Detroit, had the Lester Ship Building Co. (David Lester), Marine City, build a wooden propeller. The *City of Detroit,* when enrolled, was issued official number 4378, and her measures were: 167.0’ x 27.58’ x 12.1’; 652 grt. She was powered by a high-pressure engine, 26" bore x 36" stroke, built by Hodge & Christie. She was built for the passenger, package freight trade in connection with the New York & Erie Railroad and ran between Buffalo, and Detroit. In July 1868, downbound from Milwaukee for Buffalo, laden with 22,900 bushels of corn, the propeller *City of Detroit* sank at Peche Island near the entrance to the Detroit River, after striking the sunken wreck of the propeller *Nile* (1852). In July of that same year, she was raised and repaired. Her cargo was insured for $20,000. In the year 1869, her master was Captain Austin with James Rocket as chief engineer. In June 1871, the *City of Detroit* went ashore at Point Au Sable, Lake Huron. She was released by the propeller *Messenger* (U16654) in the same month. In September of the same year, the *City of Detroit* arrived at Detroit after suffering a broken wheel on Lake Huron. She was dry docked for repairs.

Ownership of the *City of Detroit* was changed to John Pridgeon, Detroit in May 1872. Her master for the 1872 season was Captain Ryder. In December 1873, while bound down, laden with a cargo of wheat, flour, and merchandise, from Chicago for Sarnia, with the schooner barge *Guiding Star* (U85006) in tow, the propeller *City of Detroit* foundered during a storm on Saginaw, Bay, Lake Huron, with all hands. Twenty lives lost.



City of Fremont: Quayle & Martin, Cleveland, built a wooden propeller for the Fremont Transportation Co., Fremont, OH to be used in the passenger, package freight trade and would run between Fremont and Buffalo. She was enrolled at Cleveland, May 8, 1866 and issued official number 4379. Her measures at enrollment were: 153.66' x 27.6' x 11.33'; 598.81 grt. She was powered by a high-pressure engine, 30" bore x 30" stroke, 300 horsepower, built by Cuyahoga Iron Works, who also built her firebox boiler, 8'6" x 20', 50 pounds steam. Her master for the 1866 season was Captain B. Flint.

Ownership of the *City of Fremont* was changed in April 1867, to John Pridgeon, Detroit, and she ran between Sarnia, Ont. and Chicago for the Grand Trunk Line. In October of that year, bound from Chicago to Port Huron, laden with flour, the she had her machinery disabled and her engine demolished off Presque Isle, Lake Huron. She was towed to Sheboygan for repairs. In December 1868, while in Milwaukee harbor, the *City of Fremont* broke her wheel and required repairs. In November of 1869, the *City of Fremont* collided with the schooner *Illinois* in the harbor at Kenosha, WI. The City of *Fremont* received damage to her bulwarks and was repaired. The schooner lost her jib-boom and became waterlogged. During winter layup, 1869/70, the *City of Fremont* was lengthened 35' 8" at Detroit. In May 1870 her enrollment measures were updated to: 190.75' x 27.33' x 10.58'; 705 grt, 557 net. Her chief engineer for the 1870-71 season was Alexander Morrison.

In 1872, ownership of the *City of Fremont* was changed to Engelmann Transportation Co., Milwaukee.

The following year, ownership of *City of Fremont* was changed to Eber B. Ward, Detroit. Her chief engineer for the 1876 season was Andrew J. Wilcox.

In 1881, ownership of the *City of Fremont* was changed to C.F.A. Stancer, Detroit. For the 1887 season her master was Captain Alexander Clark. In September 1887, laden with bricks, the *City of Fremont,* went aground at the entrance to the Portage Canal, Lake Superior. She released herself by jettisoning 20,000 bricks before assistance arrived.

In 1891, ownership of the *City of Fremont* was changed to: Lake Superior Transportation Co; Ellicot T. Evans & Co., Buffalo, NY. They in turn had the Milwaukee and Eastern Company operate the *City of Fremont* and the *Fountain City* (U9680).

In 1892, ownership of the *City of Fremont* was changed to A.E. Smith & Co., Milwaukee.

In 1895, ownership of the *City of Fremont* was changed to: George Hurson, Milwaukee. Her master for the next few years for the *City of Fremont* were Captain Alfred A. Green (1895), Captain M. F. Morgan (1895 - 97), and Captain Edward Evans (1898 - 1902) with Charles Grobben (1900 - 05) as chief engineer.

In 1901, ownership of the *City of Fremont* was changed to Miles Barry.

In April 1905, ownership of the *City of Fremont* was transferred to the Barry Line. Her masters were Captain Thomas Barry (1905), Captain William Disher (1906) with Henry Baldwin (1906) as chief engineer. In September 1906, the *City of Fremont* was converted to a lumber carrier at Chicago. Her new measures were: 191.42' x 27.33' x 10.5'; 651 grt, 265 net.

In 1907, ownership of the *City of Fremont* was changed to W.F. Horn, Chicago. He had her converted to a carrier of coarse freight, and her measured tonnage was changed at Chicago to: 565 grt, 275 net, in June of that year. Her master for the 1907 season was Captain Edward Fitch with Edward Halley as chief engineer. In July of 1907, she was renamed at Chicago to *Adiramled* (U4379) with measures: 191.5' x 27.4' x 10.6'; 565 grt, 375 net. She was homeported at Marquette, MI and she had a crew of 12. For the 1908 season, her master was Captain Jacob E. Jacobson with James Ash as chief engineer.

In 1911, ownership of the *Adiramled* was changed to Harrison & Baker, Detroit. They in turn sold her in April 1912, Canadian to M.J. Morris (Lachine Transportation and Coal Co.) Montreal, and she was registered as *Adiramled,* (C130922) with measures: 198' x 26' x 11'; 630 grt. In June 1912, bound from Erie, PA to Montreal, the propeller *Adiramled,* laden with coal and railroad rails, had her seams open under the weight of her heavy cargo,

and she foundered six miles east of Stony Island, Dutch John Bay, Lake Ontario. No lives lost.

City of Sandusky: Launched at George Fordham's Shipyard at Sandusky, on May 5, 1866, the wooden sidewheel steamer *City of Sandusky* had measures of 177.0' x 27.0' x 10.8'; tonnage 364.0 grt. Her official number was 5062. She was owned by Lawson & Bound, Sandusky, and ran for the River & Lake Shore Line, Sandusky. She was powered by a vertical beam, low pressure engine, 40" bore x 84" stroke, 185 horsepower, built by Silas Battell of Buffalo in 1833 for the steamer *Michigan* (1833) and later installed in the *R. R. Elliott* (1854). The *City of Sandusky* was built for the passenger, package freight trade and ran between Sandusky and Detroit in connection with the *Philo Parsons* (U19678). This was a daily line between the two ports. In August 1866, she went ashore on Middle Bass Island, Lake Erie. Loss to the hull - $3,900; cargo - $700. The following month she damaged her upper works on Lake Erie. For the 1867 season, the steamer *City of Sandusky* ran in the Toledo, Detroit & Saginaw Line. In September 1867, she collided with the propeller *Roanoke* (US21145) and sank near the Clay Banks, (near Port Stanley, Ont.) Lake Erie. For the 1868 season, she ran in the Detroit, Saginaw & Lake Huron Shore Line. Her master for that season was Captain Henry Fall with Robert McClure as first engineer.

In September 1868, ownership of the steamer *City of Sandusky* was changed to Solomon Gardner, Detroit. In April 1869, the *City of Sandusky* collided with the sidewheel steamer *Susan Ward* (US22402) on St. Clair Flats, St. Clair River. In November of that same year, the *City of Sandusky* went ashore in Sarnia Bay.

January 1873, the steamer was sold foreign to Isaac May, Keswick, Ont. and enrolled at Montreal. She was given Canadian official number C61158 and her measurements recorded as: 171.0' x 24.5' x 9.0'; 605.94 grt, 463.06 net. She was used between Cleveland and Port Stanley, Ont. June 1874, the *City of Sandusky* broke a wheel on Lake Erie. In April 1875, the *City of Sandusky* collided with the schooner *C. H. Johnson* (5833), which was under tow down the Cuyahoga River, Cleveland, inflicting slight damage to both vessels. In November of that same year, the steamer *City of Sandusky* was thoroughly overhauled and repainted and was placed on the Collingwood, Ont. to Sault Ste, Marie route for 1876 season. February 1876, due to heavy rains, the ice on Kettle Creek, Port Stanley broke loss and tore the propeller *Alma Munroe* (C71239) and the schooner *Dundee* (C103819) from their moorings. The steamer *City of Sandusky* was outward bound when the snubbing post she had been fast to broke off. She was stopped when her port paddles caught on a jetty, causing her to collided with the tug *Colin Munroe* (C – 1873), before being stopped. One month later. In March 1876, the steamer *City of Sandusky* and the schooner *William Elgin* caught fire while at their dock at Port Stanley. The *City of Sandusky* burned to her waterline and then sank. The fires were believed to been arson. Her machinery was salvaged in June of that year and sold as old iron. The following month, the hulk of the steamer *City of Sandusky* was raised, towed into Lake Erie and scuttled.

Her enrollment was surrendered at Port Stanley in August 1876 and endorsed "burnt".

W. R. Clinton: David Lester, Marine City (Newport), MI, built for the Flower Brothers, Detroit, a wooden sidewheel steamer to be used for the bulk freight trade. The steamer *W. R. Clinton* was enrolled at Detroit, June 22, 1866, and her measures recorded as: 160.0' x 24.0' x 9.0': tonnage – 563 grt, 519 net. Her assigned official number was 26250. Her master for the 1866 – 68 seasons was Captain Keith. May 1867, bound up for Goderich, Ont, the steamer *W. R. Clinton* broke a cross-head (connects the piston head with the walking beam) a short distance out from Bay City, MI. She was towed back to Bay City for repairs. In 1868. the sidewheel steamer *W. R. Clinton* ran between Detroit and Goderich, Ont. in connection with the Grand Trunk Railway. During the winter layup of 1879, the steamer *W. R. Clinton* was dismantled and converted into a 3 masted schooner. Her enrollment measures were: 160.8' x 24.7' x 9.7'; 259.55 grt, 236.58 net.

In 1893, her ownership was changed to Elizabeth Currie, Port Huron.

In 1895, her ownership was changed to Thompson Towing & Wrecking Co., Port Huron and

she was converted into an unrigged barge to be used as a wrecking lighter often stationed at the Soo.

In 1901, ownership of the barge *W. R. Clinton* was changed to Union Towing Co., Duluth, MN. In 1905, she was abandoned at Sault Ste. Marie, MI.

Dagmar: A wooden sidewheel steamer, built by Augustin Cantin, Montreal, was enrolled on September 14, 1866. Her measures were: 126.17’ x 22.75’ x 6.83’: unit tons 55.81. Owned by the Ottawa River Navigation Co. she had been built for passenger, package trade as an Ottawa River (lower reach) market boat (makes all stops). She had originally been launched as the steamer *Fairy* but renamed *Dagmar* (the daughter of Queen Victoria) immediately.

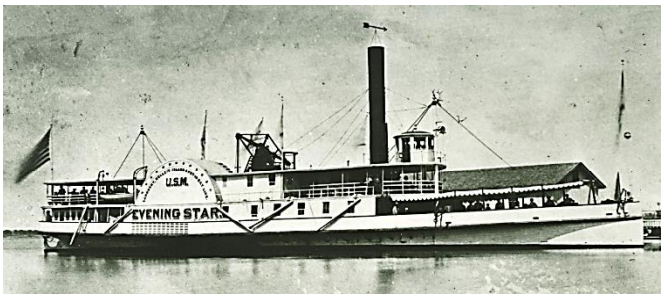
In 1877, ownership of the steamer *Dagmar* was changed to Montreal & Ottawa Forwarding Co. She was remeasured in June 1877, by the “Re-Measured, Act in 1877”, and her recorded tonnage: 405.01 grt, 245.06 net.

Ownership of the steamer *Dagmar* was changed, in 1881, to Victoria Park Co., Toronto, and she was home ported at Toronto. In 1886, her passenger license was changed to be able to hold 400 passengers. In June 1888, the steamer *Dagmar* collided with the schooner *Benhope* in the canal basin between Rigaud and Montreal on the Ottawa River. No damage reported. During winter layup, March 1890, the steamer *Dagmar*, while being repainted at Como, Que., caught fire and was totally destroyed.

East Saginaw: Enrolled at Port Huron, May 1866, the wooden steambarge, built by D. McDole, Marine City, for A. & D. W. Rust, E. Saginaw, was issued official number 8106, and her measures recorded as: 135.0’ x 26.16’ x 10.0’; tonnage 235.4 grt. She was powered by a high-pressure engine, 26” bore x 24" stroke and had a tubular boiler, 6'8" x 17'6", 86 pounds steam, built by Excelsior Iron Works, Chicago.

In June 1869, her ownership was changed to William O. Walker, Chicago. That same month, she broke her wheel at Chicago. In October of that year, the *East Saginaw* had to be lightered after going aground at St. Clair Flats, Lake St. Clair. Her master of the steambarge *East Saginaw* was Captain Harry Richardson for the 1871 – 75 seasons.

In March of 1875, her ownership was changed to Frank W. Gilchrist & Co., Alpena, MI. Captain Harry Richardson continued a master of the steambarge through 1883. During the spring of 1879, the steambarge *East Saginaw* was rebuilt at Vermilion, OH. They kept only enough of her old timbers on her hull to retain her name and official number, and she received new cabins to accommodate several passengers. Her barge consorts *S.H. Athrop, Light Guard* (U14711), and *Russian* were also overhauled and repainted. Her enrollment measures were: 139.33’ x 26.16’ x 11.33’; 350.97 grt. September 1882, up bound, with four barges in tow, the *East Saginaw* struck a reef off Sand Beach, MI, during a northwest gale, and went aground. She was pounded by the storm, drifted off the reef then filled and sank in thirty-five feet of water. No lives lost. Her loss was set at $24,000. Her enrollment was surrender, September 25, 1883 and declared a total loss.



Evening Star: Stephen J. Tripp & A. M. Kirby, East Saginaw built a wooden sidewheel steamer for R. M. Montgomery & F. A. Curtis, Saginaw. She was first enrolled at Detroit with measures: 168.58’ x 24.0’ x 7.42’; tonnage - 341.55 grt. She was issued official number 7936. She was powered by a vertical beam engine, with a 34” bore x 96” stroke, built by Detroit Locomotive Works in 1851. The engine was originally installed in Captain Ward’s sidewheel steamer *Ruby* launched in 1851. The steamer *Evening Star* was built as a passenger day boat for the Toledo – Detroit – Toledo run, daily. In July

1873, she was readmeasured at Detroit: 168’ x 24’ x 7.42’; 381.81 grt, 312.04 net.

In 1874, her ownership was changed to the Kelly's Island Line and she ran between Kelly’s Island and Sandusky. Her chief engineer for the 1874 season was Jeremiah Havelick

In 1879, her ownership was changed to Star Line, Detroit.

In 1881, her ownership was changed to W. K. Muir et al, Detroit. She would provide downriver service from Detroit; than Detroit – Port Huron. During winter layup, 1881-82, she was rebuilt. August 1883, the *Evening Star*, running between Detroit and Port Huron, broke her shaft at St; Clair. She was towed to Detroit for repairs. Her master for the 1884 season was Captain William McKay.

In 1886, ownership of the steamer *Evening Star* was changed to the Presque Isle Park Co. Detroit and she ran from the park to Toledo. In August 1887, the *Evening Star* collided with the steamer *Idlewild* near Turtle Island Light, Lake Erie. In 1895, the steamer was abandoned at a bone yard east of Gilmore's Dry Dock, Toledo. In 1898 the vessel was dismantled.

1899, her enrollment shows that her owner was George M. Vogel, Toledo and her measures were: 168’ x 24’ x 7’6”; 381 grt, 312 net. Final enrollment was surrendered at Toledo, June 1899 and endorsed “abandoned”.

Some Notes:

Black River, Ohio: Drains Medina County, emptying into Lake Erie at Lorain, OH.

Cargo-carrying capacity in cubic feet, another method of volumetric measurement. The capacity in cubic feet is then divided by 100 cubic feet of capacity per gross ton, resulting in a tonnage expressed in tons.

Freshet: a great rise or overflowing of a stream caused by heavy rains or melted snow.

Mail Steamer: Chartered by the Canadian government to carry the mail between ports.

Navigation: The reader may wonder what, with so few vessels on the lakes, why steamers could not avoid each other. Two main reasons, the visibility during storms and the vessels did not carry any lights so you came upon a vessel you could not determine if the vessel was approaching or departing from you.

Old Style Tonnage: The formula is: Tonnage= ((length - (beam x 3/5)) x Beam x Beam/2)/94

where: *Length* is the length, in feet, from the stem to the sternpost; Beam is the maximum beam, in feet.

The Builder's Old Measurement formula remained in effect until the advent of steam propulsion. Steamships required a different method of estimating tonnage, because the ratio of length to beam was larger and a significant volume of internal space was used for boilers and machinery.

In 1849, the Moorsom System was created in Great Britain. The Moorsom system calculates the tonnage or cargo capacity of sailing ships as a basis for assessing harbour and other vessel fees.

Up to 1848, most freight was shipped, on steamers or propellers, as package freight. This meant that coal, grain, apples, and produce had been placed in a container or sack and carried aboard on the back of a laborer. Bulk freight in the form of lumber would have been loaded on barges and schooners and towed by a steam driven ship. In 1848, Joseph Arnold built at Port Huron, MI, a the steambarge *Petrel* (found in the third section) for the bulk freight trade answering a need to move bulk coal to the northern communities and iron ore, lumber, and grain south to the growing cities in the East.

By 1848, some ships built in that year, continued to operate beyond the "War of Rebellion" and may be listed with two different tonnage ratings. Most ships built on the Great Lakes were rated as Tonnage (Old Style). This dates back to the 1600's and comes to the U.S. from our cousins.

Tonnage (Old Style): The British took the length measurement from the outside of the stem to the outside of the sternpost; the Americans measured from inside the posts. The British measured breadth from outside the planks, whereas the American measured the breadth from inside the planks. Lastly, the British divided by 94, whereas the Americans divided by 95. The upshot was that American calculations gave a lower number than the British. For instance, when the British measured the captured *USS President* (a three-masted heavy frigate), their calculations gave her a burthen of $1533\frac{7}{94}$ tons, whereas the American calculations gave the burthen as 1444 tons. The British measure yields values about 6% greater than the American. The US system was in use from 1789 until 1864, when a modified version of the Moorsom System was adopted (see below).

Unit Ton - The unit of measure often used in specifying the size of a ship. There are three completely unrelated definitions for the word. One of them refers to weight, while the others refer to volume.

Measurement Ton (M/T) or ***Ship Ton*** Calculated as 40 cubic feet of cargo space. Example, a vessel having capacity of 10,000 M/T has a bale cubic of 400,000 cubic ft.

Register Ton - A measurement of cargo carrying capacity in cubic feet. One register ton is equivalent to 100 cubic feet of cargo space.

Weight Ton (W/T) - Calculated as a long ton (2,240 pounds)

In 1849, a Royal Commission was formed in England with the secretary of the commission as George Moorsom, and the resulting tonnage admeasurement system was called the "Moorsom System". The idea of this system is that the fees charged to vessels should be directly proportional to their potential earning capacity, i.e., the space occupied by passengers or cargo. A vessel is measured at a series of sections throughout its length, the transverse area determined at each section, and the areas integrated to determine the volume. The total internal volume was then divided by 100 to determine the vessel's "tonnage", since at that time, 100 cubic feet was determined to be the appropriate factor so that vessels would maintain approximately equal tonnages under the new and old regulations. There were two tonnages determined under the Moorsom System: "gross" and "net" tonnage. Gross tonnage reflected the entire measured volume of the vessel less certain "exempted" spaces, initially spaces used only for the crew or for navigation of the vessel, and spaces in the superstructure not used for cargo. Net tonnage was equal to gross tonnage less a deduction for the machinery space, reflecting the earning capability of the vessel.

A measurement of the cargo-carrying capacity of merchant vessels depends not on weight, but on the volume available for carrying cargo. The basic units of measure are the *Register Ton*, equivalent to 100 cubic feet, and the *Measurement Ton*, equivalent to 40 cubic feet. The calculation of tonnage is complicated by many technical factors.

The current system of measurement for ships includes:

Gross Tons (**GRT**) - The entire internal cubic capacity of the ship expressed in tons of 100 cubic feet to the ton, except certain spaces which are exempted such as: peak and other tanks for water ballast, open forecastle bridge and poop, access of hatchways, certain light and air spaces, domes of skylights, condenser, anchor gear, steering gear, wheel house, galley and cabin for passengers.

Net Tons (**NT**)- Obtained from the gross tonnage by deducting crew and navigating spaces and allowances for propulsion machinery.

P.Q.: Province of Quebec

Packet Freight: almost every imaginable item of merchandise – bags of onions, grain, etc., processed foods, bags of coal, stoves, furniture, which can be packed and moved by manpower from dock to hold and reverse.

Patriot War: A conflict along the Canada – U.S. border where bands of raiders attacked the British colony of Upper Canada more than a dozen times between December 1837 and December 1838. This so-called war was not a conflict between nations; it was a war of ideas fought by like-minded people against British forces

Ship Inventory: Will include the names of wooden steamers that will not be identified in the manuscript. The research project that the information was gathered for included all wooden steamers built on the Great Lakes or St. Lawrence River and operated on the Great Lakes with a gross tonnage at or over 100 tons.

Up-bound: Going against the current – St. Lawrence River to Lake Superior. (Lake Michigan – steaming north)

Down-bound: Going with the current – Lake Superior to the Saint Lawrence River. (Lake Michigan – steaming south)

(Original Source: "Wooden Steamers on the Great Lakes" – Great Lakes Historical Society; Bowling Green State University – Historical Collection; Thunder Bay National Marine Sanctuary Collection; Maritime History of the Great Lakes; and the scanned newspaper collection of the Marine Museum of the Great Lakes, Kingston, Ont. and 746 additional documented sources.)