

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—February 2025

Our Next Meeting: March 15, 2025;
Hybrid –
Fixtures: “Anchors”
by Julia Holloway

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February

When things go wrong, it appears that everything goes wrong. Welcome to February 2025?

Saturday morning: woke up to freezing rain, and said to self, self the roads will be slippery so we will do a Zoom only meeting. Bob was in California, but that is another story – later, so I called Cliff and the phone went directly to voice mail. Past experience told me that some members would make it to the library, so I gathered my materials, jumped in the car and drove to Westerville. Made it and found Julie in Classroom C and Ric shortly after.

It was after nine, so quickly, I set up the laptop and connected to the smart screen. To my surprise, I saw that my laptop operating system had decided to update itself. 20 minutes later, it was a little after the normal start of the meeting, before I could access the libraries WIFI and the zoom access code, which didn't work. My phone was beeping, receiving messages from the remote members, stating they could not access zoom either. Received a call from our skipper who informed me to open the meeting and provided the ID & password. It didn't work, seems the meeting was scheduled to start after 12 and we were 3 hours early. Cliff showed up and we decided to cancel the meeting and reschedule Cliffs presentation for later.

Since we now had four present, we covered the announcements (see below) and the “Ships of Deck” (also below) and had some good conversations, closing the meeting after 11:30 AM. In person meetings always seem more spontaneous. I would guess that it supports the “return to the office” push, we now see in businesses and government announcements.

Now for the rest of the story: Our club skipper, after a two-week cruise through the Panama Canal, had laid over in Sacramento, CA to visit family. Bob experienced some upper gastrointestinal stomach pain. Went to the doctor and was admitted to UC Davis Hospital for a ERDC surgery (Endoscopic retrograde Cholangiopancreatography). [You get a gold star if you can pronounce the last word the first time without hesitation]. The surgery was 10 AM on Friday morning, and Bob called Saturday morning trying to help get the zoom operational, meanwhile the nursing staff (this was around 7 AM PST) were checking on gas and providing meds. Surgery one morning and stress the next. Not good. If recovery goes well, we may have Bob back in Ohio for the March meeting. Keep him in your thoughts and prayers.

With all this frigid weather, that warm shop and the model on the work bench should draw you back to your present or to a new build.

As always, take care of yourself and your families, look to those you know who may need help or are lonely or may be in need of human contact.

If you have not gotten your Covid, Flu and/or RSV shots, please do. Stay safe.

Till next month. Your editor.

Reminders & Announcements

Dues:

For the two, who have not yet submitted their 2025 dues (\$20), let us know if you plan to renew or drop your membership.

Checks should be made out to "Shipwrights of Ohio" and either delivered to Lee at the March meeting or mailed to Shipwrights of Ohio, at: 5298 Timberlake Circle, Orient, OH 43146-9249.

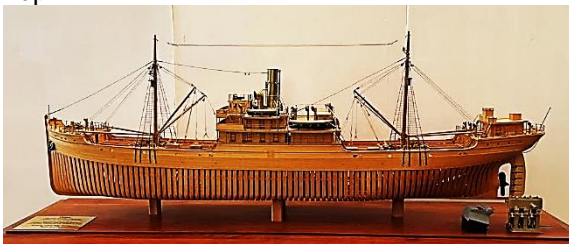
Notice of no longer wanting to attend meetings, receive notices/announcements or the "Ropewalk", should be sent to:

rmains1@columbus.rr.com.

Modeling Events

The following, may be of interest to you:

- **Feb, 22nd**, 9 am – 4 pm, Central Ohio IPMS (International Plastics Modeling Society) Competition will be held Saturday at the Makoy Center, 5462 Center Street, Hilliard, Ohio.
- **Feb, 22nd**, 10:30 CDT (9:30 AM, EST) part 2, Building *Okesa*, by Dr Bob Jenkins. The *Okesa* was a wooden steamer, built for WW I. This is an NRG Virtual workshop.
 - Part 1 was last month and is available on the NRG web site. It covers the research and building of the hull and machinery spaces.
 - Part 2, will cover the details of building and detailing the model from the weather deck and up.



Model of the *Okesa*

- **March 1st & 2nd**, the Miami Valley Woodcarving Show, will be held at Christ United Methodist Church. 700 Marshall Road, South, Middletown, Ohio.

Rigging Class

Struggling with or new to rigging a ship model, here is a possible solution, and it is in beautiful Maine, on the shores of the Atlantic.

Bluejacket Ship Crafters: will be holding a rigging class, May 18-22, 2025. IT IS A CLASS FOR NOVICES. They don't assume you know anything about rigging a ship model. All tools and materials are provided with the class fee of \$500. You get a hull to work on, all the sticks and dowels, glue, blocks, deadeyes, threads, wire, beeswax, sandpaper and the following tools:

Excel hobby knife and blades, 2 Pin Vises, Assortment of drill bits, tweezers, needle nose pliers, flush cutters, clamps, cuticle scissors (best for clipping rigging), and probably some other things Nic may have forgot.

Classes will be at the Fireside Inn in Belfast, ME, 4 miles from BlueJacket on Route 1, tel# 207-338-2090. You can ask for the BlueJacket corporate rate. There is a pool, sauna and Jacuzzi, plus all rooms have an excellent view of Penobscot Bay. If you are the camping type, Searsport Shores is nearby.

Contact them at

<https://www.bluejacketinc.com/contact-us/>

2025 Photographic Ship Model Competition

The Nautical Research Guild has announced the 2025 *Photographic Ship Model Competition*. The last NRG model photo competition was in 2021, where your editor won a Gold for his model of a skipjack.

All photos and supporting documentation requested will be submitted on-line. Entrants will also receive a written review of their model. Gold, Silver and Bronze medals will be awarded for the First, Second and Third place models in three categories: Novice, Apprentice and Master. A "Best of Show" medal will be awarded to the best Gold medal winner.

The competition is open to regular members in good standing of the Nautical Research Guild. If you are not currently a member, join the Guild and enter the Competition.

Entry fee will be \$30 per model entered.

Entries can be submitted starting on Monday June 16, 2025. Entries must be submitted before or by Thursday, July 31.

Winners will be announced at the Annual Member's Meeting. Details for how to enter will be available soon.

48th Annual Midwestern Model Ships & Boat

The Wisconsin Maritime Museum will host, a Nautical Research Guild Associated Competition, May 16 – 18, 2025 at the museum located at Manitowoc, Wis, on the shores of Lake Michigan.

Be part of the Midwest's longest-running model contest and showcase your work alongside talented modelers from east of the Rockies!

Model receipt and setup will be Friday May 16 and early Saturday morning. Models will be on display to the public on Saturday and Sunday, May 17 & 18.

New this year, they are bringing back the Friday afternoon field trip to Rogers Street Fishing Village and Washington House at Two Rivers, WI. On Saturday, May 17, enjoy a special dinner and program on "Vanishing Vessels: Recent Shipwreck Discoveries in Lake Michigan."

Award presentation will be Sunday.

Registration is open through May 1, 2025.

<https://www.wisconsinmaritime.org/explore/midwestern-model-ship-contest/>

If you are interested in attending, I suggest carpooling. It is an 8+ hour trip through Chicago and Milwaukee, unless you take the ferry, *Badger*, from Muskegon to Manitowoc, and then it is longer.

A Model life

If you are not on the mailing list for SeaWatch Books, I would encourage you to do that -

<https://seawatchbooks.com/pages/subscribe>

In the latest note, dated Sat. February 15, 2025, they announced a new Podcast: "David Antscherl Journey in Ship Modeling". David is the author of the following:

- *Comet* of 1783
- The Hayling Hoy of 1759-60
- HMN Swan Class Sloops 1767-1780, 4 volumes.

SNR Winter Lecture Series

The following scheduled lecture series will be held before our next meeting in March, by the "Society for Nautical Research" (SNR).

- ✚ 26th February 2025: Dr. Michael Roberts (Univ. of Bangor), "Archaeological exploration of historical shipwrecks in the Irish Sea".
- ✚ 12th March 2025: Dr. Jo Stanley (Independent scholar), "Diversity at sea: How sharing historical research can make a difference to the present and future of the maritime industry and public understanding"

To receive the access code for the lectures, you need to be a member of the SNR. <https://snr.org.uk/become-a-member/>

Last but not least

Our leader has a question: In July, we have a "road trip" scheduled to the "Warther Carving Museum (ship models carved from ivory, including the rigging)"; and earlier that same month, the "Tall Ships Festival" is scheduled for Cleveland, July 4th – 7th, 2025.

Bob wants to know: if you had to choose of only one trip, which selection would you prefer?

Send your response to:

rmains1@columbus.rr.com

Presentation:

Due to our meeting and Zoom failure, our scheduled presentation "*History of Ships during the World War II*" by Cliff Mitchell will be rescheduled to a later date.

Ships on Deck

The intro photos for each ship shown after the title are for reference to what the model may look like when finished.

Swift

by Julie Holloway

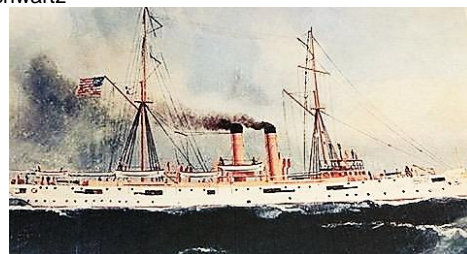


Julie, brought her model of the *Swift* for us to examine. She has finished tree nailing the hull and has started work on the cap rail.



U.S.S. Cleveland C-19

by Bill Schwartz



Bill, is back at building his model of the cruiser *U.S.S. Cleveland C-19*, and last month left us with a photo below:



Bow is finished and main deck sanded. The start of the super-structure is sitting on the deck in the photo above.

He has started to plan the rest of the deck fixtures, one piece of deck furniture at a time.



Above is a photo of her super structure, including her pilot house. Here are photos, during construction, of the pilot house and flying bridge.



The assembled pilot house and flying bridge, below.



HMS Flirt

By Rob Washburn



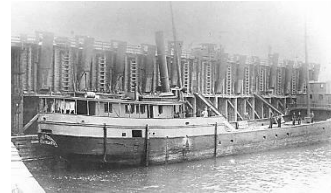
Rob has completed the work on his model of the *HMS Flirt*. Below, are the final photos:



Nice work Rob. What is next?

Margaret Olwill

By Bill Nyberg



The above photo, (only known photo) of the *Margaret Olwill*, a steam barge, was taken on the morning of June 28, 1899. She had left from Cleveland, OH at midnight and arrived at 8 am at the quarry loading dock at Kellys Island, Lake Erie. She would load stone during the day and at midnight, return to Cleveland, arriving the morning of June 29, 1899 to unload.

On her return trip, she ran into a nor-ester and in seeking shelter at Lorain, OH, she turned south, broke her steering chain and rolled over, sinking in 50 feet of water, 8 miles out from Lorain. Loss of lives were 9 out of a crew and passengers numbering 13.

The wreck was found in 2017 after 28 years of searching by Rob Ruetschle and members of CLUE (Cleveland Underwater Explorers).



The build is finished.

There are no known plans for the steambarge *Margaret Olwill*. The model was built from the lead-in photo shown above and using comparable plans from similar sized steambarges as a reference.

Below, the crew preparing to take on her cargo of stone,



While the captain prepares to escorts his family and friend on a tour of Kellys Island the day before she went down in a storm.



I shared the photos of the model with the Director of Underwater Archeology at the National Museum of the Great Lakes, She replied: "this is really beautiful!. Are you OK if I share this with the guy that discovered it? I think that he would be thrilled!"

The diver who found the wreck of the *Margaret Olwill*, in 50 feet of water, 8 miles north of Lorain, OH replied: "Rob - the guy who found it - was really exited to see these images and wanted me to say thanks for sharing them with him!"

Armed Virginia Sloop - 1768

by Bill Nyberg



This is a return build. Started in May 2019, but stopped in January 2020 due to pending surgery, COVID, a restoration project and work on the *Margaret Olwill*.

The kit, unopened, was purchased from a ship model builder moving to smaller quarters in South Carolina. She is: POF, 3/8 scale, and originally sold by Lauck Street Shipyard, Inwood WV – Bob Hunt, owner.
February 17, 2025

(Did you know there are model ship supplier across the Ohio River "Lauck Street Shipyard" as well as The Lumber Yard in Brecksville, and Bearco Marine in Madison, OH?)

The kit included a DVD with plans, drawings and instructions on building the hull. In my research, I found that Clayton Feldman included instructions, photos, and plans for the same ship, that were a part of his "College of Nautical Knowledge", printed in 1991. The difference between the two: Claytons included the rigging plans and instructions.

So far I have spent about 10 hours inventorying what I have, trying to recall where I was on this build in 2020 and how to restart.



Other Notes: "Stuff", Tugs & Things

Nautical Terms "C"

Nautical Terms Wikipedia

Corrector: A device used to correct the ship's compass, e.g. by counteracting errors due to the magnetic effects of a steel hull.

Corsair: A French privateer, especially one from the port of St. Malo; any privateer or pirate; a ship used by privateers or pirates, especially of French nationality; a class of 16-foot (4.9-metre) three-handed sailing dinghy.

Corvette: Also **corvette**: a flush-decked sailing warship of the 17th, 18th, and 19th centuries having a single tier of guns, ranked next below a frigate. In the US Navy, it is referred to as a sloop-of-war; a lightly armed and armored warship of the 20th and 21st centuries, smaller than a frigate and capable of transoceanic duty.

Cotchel: A partial load.

Cottonclad: A steam-powered wooden warship protected from enemy fire by bales of cotton lining its sides, most commonly associated with some of the warships employed by the Confederate States of America during the American Civil War. (1861–1865).

Counter: The part of the stern above the waterline that extends beyond the rudder stock culminating in a small transom. A long counter increases the waterline length when the boat is heeled, so increasing hull speed.

Counterflood: To deliberately flood compartments on the opposite side from already flooded ones. Usually done to reduce a list.

Country ship: A term used by the British East India Company from the seventeenth to the nineteenth century for a merchant ship owned by local owners east of the Cape of Good Hope which traded within

that area and gathered cargoes for shipment west of the Cape to England (later the United Kingdom) by the company's "chartered ships", "extra ships", and "regular ships". "Country ships" were strictly prohibited from trading west of the Cape, which would violate the company's strict monopoly on that trade. Country ships were also important in the opium trade from India into China until supplanted by the faster opium clipper.

Course: The direction in which a vessel is being steered, usually given in degrees; the lowest square sail on a square-rigged mast, except where that mast is the mizzen – in which case the name cross-jack (cross-jack) or mizzen-sail is used.

Cowl: A ship's ventilator with a bell-shaped top that can be swiveled to catch the wind and force it below; a vertical projection of a ship's funnel that directs the smoke away from the bridge.

Coxswain: also cockswain: The helmsman or crew member in command of a boat.

CPO country: The part of a naval vessel containing the residential quarters and wardroom for chief petty officers. *CPO country* is off-limits to more junior enlisted personnel unless they are there on official business.

Tugs: Great Lakes

Erie - 1887



The wooden tug *Escort*, was built at Sandusky, Ohio and enrolled at that location on April 26, 1887. She was the first boat on the Sandusky to Cedar Point run, towing a scow. Her measures were: 56' x 16' x 6', 21 grt, 10 net. Her official number was 135978.

Ownership of the tug *Erie*, was changed to W.E. Bense, Port Clinton, OH in 1899. In 1909, she was repowered with a 14" x 18", High Pressure, Non-Condensing engine from H.G. Trout, Buffalo, NY. She also received a scotch boiler, 9' 6" x 11', 175 lb. steam, built by Kung Boiler works, Toledo, OH.

Ownership of the tug *Erie* was changed, in 1930, to the R. Bell Fish Co., Port Clinton, OH.

In 1935, she was taken to Philadelphia, PA via the New York State Barge Canal. In April 1940, she was renamed *William J. Scott*; and was converted from steam power to diesel. She continued in service until March or April 1969, when she was listed as abandoned.

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

Escort – 1894



The wooden tug *Escort* was built by shipwright Ross at Port Colborne, Ont.

She was owned by the Carter Brothers, Port Colbourne in 1899. Her measures were: 44.8' x 15.5' x 9.7'; 40 grt, 27 net. Her assigned official number was C97010. She was powered by a high pressure engine, 130 hp, 130 rpm, built by Collingwood Steam Boat Co. Steam was generated by a firebox boiler, generating 134 pounds steam, and built by Waterous Co., Brantford Ont in 1905.

By November 1907, she appears to have changed her ownership to American. On November 23rd, 1907, the American tug *Escort*, was sunk after a collision with barge *Benjamin Harrison* at the mouth of the Niagara River. Three people lost their lives.

She was raised and rebuilt in 1908. In 1930, her ownership was changed to John J. Harrigan, Port Dalhousie, Ont.

She was removed from Canadian List of Shipping in 1938; and presumed dismantled.

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

Presentation Schedule:

2025 – Schedule Tentative

Jan 18 ~~Scale Comparison Thread to Actual Rope Lines~~
Feb 15 History of Ships WW 2 (to be rescheduled)
Mar 15 Fixtures: Anchors
Apr 19 Ships in a Bottle
May 17 Planking a Wooden-hulled Ship
June 21 Photo Etching Brass Parts
July 4-7 Tall Ships - Cleveland
July 19 Road Trip: Wharfer Carving Museum
Aug 16 Jigs & Fixtures – ship modeling
Sep 20 Bending Wood
Oct 18 Lofting & Reading Ships Plans
Nov 15 Power & Hand Tools in Ship Modeling
Dec 20 Card Modeling

Events & Dates to Note:

2025 Tentative Schedule

Columbus Woodworking Show
Ohio Expo Center
January 17-19, 2025

IPMS Columbus
BLIZZCON 2025
Makoy Center, Hilliard, OH
Saturday, February 22, 2025

Miami Valley Woodcarving Show
Christ United Methodist Church
Middletown, OH
March 1-2, 2025

46th Midwestern Model & Boat Show,
Wisconsin Maritime Museum, Manitowoc, WI
May 16-18, 2025

Great Lakes Tall Ship Festival,
Cleveland
July 4–7.2025

Lakeside Antique & Classic Wooden Boat
Lakeside Hotel, Lakeside, OH
July 20, 2025

Columbus Air Show
U.S. Navy "Blue Angles"
Rickenbacker International Airport
August 22-24, 2025

Ohio River Sternwheel Festival
Riverfront Park, Marietta, OH
September 5-7, 2025

"The Art of Wood" – woodcarvers show
Sauder Village, Archbold, OH
October 24 & 25, 2025

Miniature Society Show & Sale
St. John's Evangelical Lutheran Church
Grove City, Oh
November 15, 2025

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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

Researched & Written
By William E. Nyberg

The Gilded Age was a period in the United States from 1873 to the early 1890s, and was marked by rapid economic growth, political corruption, and social inequality:

- Economic growth: The US became the world's leading producer of coal, oil, steel, and food, and saw a huge increase in the importance of the factory system, railroads, mining, and finance.
- Political corruption: The Gilded Age was marked by widespread political corruption, with wealthy industrialists and bankers holding the most political power. Tammany politicians in New York used fraud, violence, and intimidation to win elections.
- Social inequality: The Gilded Age saw the rise of two distinct classes, separated by a gulf of wealth and circumstance. Women faced a sexual double standard and inequalities in marriage, with limited access to divorce and few long-term career options.
- The Gilded Age name: The term comes from the 1873 novel "The Gilded Age" by Mark Twain and Charles Dudley Warner, which satirically depicted the era's corruption and political figures.
- The Panic of 1873 was blamed for setting off the economic depression that lasted from 1873 to 1879. This period was called the Great Depression, until the even greater depression of 1893 received that label, which it held until the even greater contraction in the 1930s—now known as the Great Depression.
- Other events during the period were: The US seized the Philippines, Puerto Rico, and Cuba after the Spanish-American War.

Supporting the economic growth was the change from wooden vessels on the Great Lakes to larger iron and then steel vessels. To transfer the growing needs of the steel mills and the transfer of grain crops to populated areas, Great Lakes ships needed to be structurally stronger to support the increase cargo weight. Longer vessels were required to support the larger cargos and this required stronger hulls to prevent "hogging" which impacted wooden ships structural keels.

The first two iron hulled vessels were built on the Great Lakes in 1844, The *Colonel Albert* for the U.S. Army, at Buffalo, NY; and the *USS Michigan*, for the U.S. Navy, at Erie, PA. The first steel vessel was the propeller, *William Chisholm* built by Globe Iron Works at Cleveland, OH in 1884.

1874-B

Enterprise: Chisholm & Simpson, at Dresden, Ont., built a wooden steambarge in 1874. She was enrolled at Wallaceburg, Ont. June 05, 1875. Her owner was listed as: Alex Terice, Hug Currie et al, Wallaceburg, Ont. Her recorded measures were: 126' x 22' x 9'; 206.0 grt, 141.0 net. She was powered by a Vertical high-pressure engine, 20" bore x 22" stroke, 140 horse power, built by Windsor & Delgarno, Chatham, Ont. in 1874. The steambarge *Enterprise* was built for the bulk freight trade on the Detroit & Sydenham Rivers. At enrollment she was issued official number C71102.

The steambarge *Enterprise* was rebuilt: 120.0' x 25.0' x 9.4'; 197.22 grt, 136.85 net; and registered at Wallaceburg, Ont., June 15, 1875 (No reason found why she required a rebuilt. The vessel was given a new registration # C72983 June 05, 1875. Her original registration number was given to 48 foot tug *James G. Harper*.

Ownership of the steambarge *Enterprise* was changed in 1877, to H. Currie, Dresden, Ont. Her master for the 1880 & 1881 seasons was Captain George Morden.

Ownership of the steambarge *Enterprise* was changed to the Canada Pacific Railway Co. in 1881. During a storm on Georgian Bay, the steambarge *Enterprise* went ashore in May 1882, a few miles north of Presque Isle. She was released and entered Detroit Dry Docks for repairs in June.

Ownership of the steambarge *Enterprise* was changed to McLennan, Port Arthur, Ont; Her enrollment tonnage was listed as 303 grt in 1883. In November of 1883, bound from Sarnia, Ont. for Port Arthur, laden flour, pork and sugar, the steambarge *Enterprise* went aground on the head of Greene Island, east of Cockburn Island, Lake Huron. The wrecking outfit on the tug *Balize* (U2714) lightered the deck load and released the steambarge *Enterprise*. Taking the steambarge in tow for Detroit, and December 10, 1883, when off Point au Barque, MI, Lake Huron the *Enterprise* suddenly foundered, killing most of the wrecking crew and original crew that were still on the steambarge. Eight lives lost.



N. K. Fairbanks: W. Morley, at Marine City, MI, built, in 1874, a wooden propeller for Captain John J. Morley, of Rochester, NY who owned ¾ share with The

Dry Dock Engine Co. a ¼ share owner from Detroit, MI. The keel had been laid in 1873, but all work had been stopped due to the financial panic of 1873. She was launched in August 1874. The propeller *Fairbanks* was enrolled at Rochester NY, May 4, 1875 and her measures recorded were: 207.0' x 36.8' x 11/3'; 980.30grt, 834.27 net. The propeller was powered by two (2) Direct-acting Condensing engines, 34" bore x 30" stroke on one shaft. The engines were built by Dry Docks Engine Works, Detroit, MI. Steam was produced by a tubular marine boiler, 10' x 16', 40 pounds steam, built by Desotelle & Hutton. The *N. K. Fairbanks* was issued official number 130033. She was built for the bulk freight trade and was home ported at Cleveland, OH. Her master for the 1874 season was Captain Morley.

In March 1882, ownership shares of the propeller *N. K. Fairbanks* were transferred to: Captain John J. Morley, 6/16, Rochester, NY; C.T. Morley, 5/16, Cleveland, OH; and M.H. Morley, 5/16, Sodus Point, NY. In October 1885, the propeller *N.K. Fairbanks* with consort schooner *C.G. King* (U5847), both laden with coal for Chicago, arrived at port with heavy storm damage. Her bulwarks and foreboom had been carried away. Repaired.

April 1886, ownership of the propeller *N.K. Fairbanks* was changed to: John W. Moore, Sheffield, OH; Thomas Fitzpatrick, Mentor, OH; et al.

In April 1887, ownership of the propeller *N.K. Fairbanks* was changed to: A.S. Pierson, 1/3, San Jose, CA; John W. Moore, 1/4, Sheffield, OH; George Berriman, 1/4, Erie, PA; Richard Neville, 1/6, Cleveland, OH. In November of that year, the propeller *N.K. Fairbanks* and consort went aground on Grosse Pointe, Lake St. Clair. They were released by the ferry steamers *Sappho* (U115928), and *Excelsior* (U135209).

Ownership of the propeller *N.K. Fairbanks* was consolidated, in April 1888, to: A.S. Pierson, 1/2, San Jose, CA; John W. Moore, 1/4, Sheffield, OH; George Berriman, 1/4, Erie, PA. In November 1889, the propeller went aground at Two Harbors, MN. She was released and loaded the last cargo of ore for the 1889 season. Her master for the 1892 season was Captain J. H. Stoffer. In August 1893, the propeller *N.K. Fairbanks* went aground near Sault Ste. Marie, MI. The tug *Favorite* (U120371) put pumps aboard her to pump her out. Her cargo had to be removed to release the vessel.

Ownership of the propeller *N.K. Fairbanks* was transferred to: A.S. Pierson, 1/3, San Jose, CA; Frank H. Neff, 1/3, Cleveland, OH; Francis H. Wilkinson, 1/3, Cleveland, OH, in April 1894.

, ownership of the propeller *N.K. Fairbanks* was changed to: Commercial National Bank of Cleveland, 14/32, Cleveland, OH; John W. Moore, 9/32, Sheffield, OH; J.H. Bartow, 9/32. In May 1895, the propeller *N.K. Fairbanks*, bound from Chicago to Ogdensburg, NY, laden with a cargo of corn, ran ashore in thick weather

at Morgan's Point near Port Colborne, ONT, Lake Erie. The steamer caught fire and burned to her water's edge. The captain and crew made it into port in a small boat. The vessel and cargo were declared a total loss. Hull valued at \$30,000.

Final enrollment of propeller *N.K. Fairbanks* was surrendered at Cleveland, OH June 19, 1895, and endorsed "lost due to fire".

That same month, ownership of the hulk of the propeller *N.K. Fairbanks* was changed to Carter Brothers of Port Colborne and they raised her. The hull towed into Port Colbourne, ONT.

Ownership of the hull of the propeller *N.K. Fairbanks* was changed, in May 1899, to William Strong, Tonawanda, NY; et. al. The propeller *N.K. Fairbanks* was rebuilt at Tonawanda, NY and enrolled as *Eliza H. Strong*, (U136733) with measures: 205 x 36.58 x 11.25; 781 grt, 614 net.

In that same month, her ownership was transferred to: William H. Strong, 3/8, Tonawanda, NY; Dora Madden, 3/8, Tonawanda, NY; W.L. Misner, 1/4, Tonawanda NY. In June, the Sheriffs Manufacturing Co., Milwaukee supplied a new solid shaft coupling to the disabled steamer *Eliza H. Strong*.

In April 1900, ownership of the propeller *Eliza H. Strong* was transferred to Strong Transportation Co., 3/4, Grand Island, NY; W.L. Misner, 1/4, Tonawanda NY. Master of the propeller *Eliza H. Strong* was Captain William H. Strong, for the 1900 – 1904 seasons, with Albert E. Rhodes, 1901 & 02; John Elsey, 1903; and Henry Manion in 1904 as chief engineers. In 1901, the propeller *Eliza H. Strong* was overwhelmed by a gale and abandoned. Vessel was later found still afloat.

Ownership of the propeller *Eliza H. Strong* was transferred to William H. Strong, Tonawanda, NY in December 1901.

In December 1901, ownership of the propeller *Eliza H. Strong* was transferred to: Eliza H. Strong, Tonawanda, NY. In October 1904, down bound for Buffalo, NY, the propeller *Eliza H. Strong*, laden with lumber, caught fire and burned off Port Sanilac, MI, Lake Huron. No lives lost. The captain and crew abandoned the vessel in her yawl. The burning hull of the *Eliza H. Strong* was picked up by the steamer *City of Holland* (U126967) and towed to shallow water, while still ablaze, 1/2 mile south east of Lexington, MI harbor entrance, where she burned to the water's edge. The hull sank in 28 feet of water.

Final enrollment for the propeller *Eliza H. Strong* was surrendered November 06, 1904 at Buffalo, NY. In September 1905, the Reid Wrecking Co., Port Huron, MI removed the *Eliza H. Strong's* engines and boilers and then dynamited the hull.



T. S. Faxton: In 1874, on the south shore of the St. Lawrence River, at Clayton NY, Simon G. Johnson, built a wooden propeller to be used in the passenger, packet freight trade. Enrolled at Cape Vincent, NY, September 21, 1874, her recorded measures were: 120.0' x 23.5' x 8.0'; 153.99 grt, 91.68 net. She was assigned official number 145020. Her original owner is unknown. She was powered by a Steeple Compound engine, 19", 37" bore x 22" stroke, 300 horsepower, built in 1874. In June 1876, she was hauled out to have her wheel replaced.

Ownership of the *T. S. Faxton* was changed to Henry C. Root et al, in 1877. Her master for the 1879 season was Captain Fraser. In May 1879, the propeller *T. S. Faxton* was at the Detroit Dry Dock to have her engine repaired, before continuing on to Chicago, IL where she would be engaged in the excursion business.

Over the next twenty years the propeller *T. S. Faxton* would pass through a number of owners:

1881 – ownership was changed to Perry C. Hannah, Traverse City, MI.

1887 – ownership was changed to the Mackinaw Transportation Co.

1889 - ownership was changed to George T. Arnold, Mackinaw Island, MI.

1896 - ownership was changed to Richard Armstrong, Bay City, MI.

1900 – ownership was changed to Josephine McAllister, Detroit, MI. In October 1901, the propeller *T. S. Faxton* caught fire at the Stave Co. dock, Marine City, MI, River St. Clair, and burned to a total loss. The origin of the fire is unknown. No lives lost.

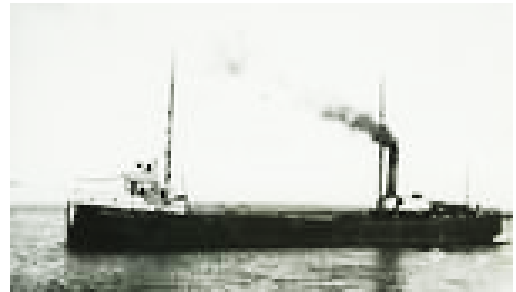
The final enrollment for the propeller *T. S. Faxton* was surrendered at Detroit, MI, November 01, 1901 and endorsed "lost by fire".

In December 1901, ownership of the burned hulk of the propeller *T. S. Faxton* was changed to E. Recor, St. Clair, MI. The burned propeller *T. S. Faxton* was raised and towed to Anderson's ship yard to be rebuilt as a steambarge for the bulk freight coal & lumber trade. She was launched as the steambarge *Edward P. Recor*, June 02, 1902, and assigned official number 136991, with measures: 123' x 30' x 9.9'; 368 grt, 232 net. Her master for the 1902 season was Captain Sylvester Moore, Algonac, MI with Charles Schunk as chief engineer.

Ownership of the steambarge *Edward P. Recor* was changed in 1905, to Kelly Island Lime & Transportation Co., Sandusky, OH. In May 1905, the

steambarge *Edward P. Recor*, with the schooner W. H. Rounds (U80530), both laden with coal, went aground on Black River Reef, Lake Huron. The *Recor* was released and repaired. The schooner broke up on the reef and sank. In 1930, the steambarge *Edward P. Recor* was abandoned at Sandusky, OH.

In 1931, the steambarge *Edward P. Recor* was towed to Toronto, Ont. to be dismantled. In 1931, the remaining hulk of the *Edward P. Recor* was towed into Lake Ontario and sunk.



E. B. Hale: Thomas Quayle & Sons, at Cleveland, OH, built a wooden propeller for the bulk freight, iron ore, coal and grain, trade. Enrolled at Cleveland, in June 1874, her recorded measures were: 217.58' x 34.66' x 17.75'; 1186.15 grt, 928.05 net. Alva Bradley, Cleveland, OH; et al, was recorded as her owner. She was powered by a two low pressure condensing engines, 36" bore x 36" stroke, built by Cleveland Globe Works. Steam was generated by a boiler, 11.6' x 18', 55 pounds steam, built by Globe Iron Works, Cleveland, OH. The *E. B. Hale* was built for the bulk freight, iron ore, coal and grain, trade. She was assigned official number 135012. Master of the *E. B. Hale*, for the 1874 season was Captain George Stone. J.D. Kirby as chief engineer for the 1881 & 1882 seasons. In May 1881, the engine for the propeller *E. B. Hale* broke down while leaving Cleveland harbor. Repaired.

In November 1881, down bound on Lake Erie, the *E. B. Hale*, with a cargo of ore, ran onto a reef off Middle Island due to the strong southwest wind and heavy seas running. The crew scuttled the vessel to save her. She was raised and released. In October 1882, the propeller *E. B. Hale* was damaged on the Sault River by grounding and a collision with her consort schooner barge *Escanaba* (U7319). Repaired.

In May 1883, ownership of the propeller *E. B. Hale* was transferred to Bradley Transportation Co., E. Cleveland, OH; et al. Masters of the propeller *E. B. Hale* for the 1885 season was Captain Holmes, and for the 1886 season Captain James Lawless was in command. In August 1886, the propeller *E. B. Hale*, laden with a cargo of ore, went ashore on Pancake Shoal, Lake Superior, fifteen miles northwest of Whitefish Point. 400 tons of ore were jettisoned to release the vessel.

Her chief engineer for the 1890 season was Fred M. Harmon.

Masters of the propeller *E. B. Hale* were: 1892 season: Captain L. Stough with Cassius M. Williams as chief engineers; Captain Warren E. Morris for the 1893 season; Captain Thomas De Largie for the 1894 season. In August of 1894, the propeller *E. B. Hale*, laden with a cargo of ore, went aground in the St. Mary's River. She was released after lightering 300 tons of ore.

Masters of the propeller *E. B. Hale* were: Captain Samuel C. Allen for the 1896 season; and Captain James Lawless for the 1897 season.

In October 1897, the propeller *E. B. Hale*, foundered 37 miles above Pointe aux Barque, MI, Saginaw Bay, Lake Huron with a cargo of 1,186 tons of steel billets. The feed pipes leading to the pumps had broken off close to the boiler, letting steam and water out of the boiler and incapacitated the pumps. The vessel then sprang a leak causing the vessel to sink due to the pumps unable to work. No lives lost. Vessel valued at \$27,000.

Final enrollment for the propeller *E. B. Hale* was surrendered at Cleveland, OH, December 31, 1897.



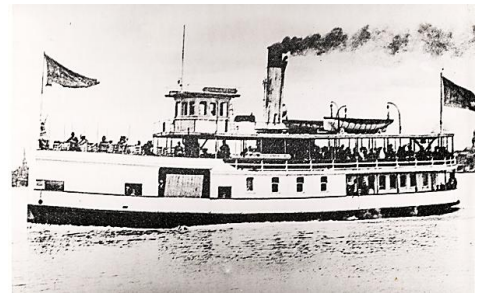
Havana: Radcliffe and Langell, at Cleveland OH, built a wooden, bulk freight propeller for the Cleveland Transportation Co. She was enrolled at Cleveland in May 1874 and her measures recorded as: 205.58' x 34.10' x 17.33', 1041.0 grt, 874.0 net. She was assigned official number 95278. She would be powered by dual engines, 32" bore x 36" stroke, 485 horse power, 86 rpm condensing engines, built by Globe Iron Works in 1874. Steam was generated by a tubular boiler, 10 1/2' x 18', 53-pound steam, built by Globe Iron Works. The bulk freighter was built for the bulk freight iron ore trade between Cleveland, and Marquette, MI. The *Havana's* consort was the schooner *Helena* (U95276) built by Quayle & Martin, Cleveland, OH. The *Havana* was one of four steamers built for Cleveland Transportation Co., operating in the iron ore trade. The other three were the *Geneva* (U85275) and *Vienna* (U25875) built in 1873 and the *Sparta* (U115242) built in 1874. The four ships were known as the "Black Boats". Her chief engineer for the 1882 – 84 seasons was C. Castle. In November 1884, the propeller *Havana* went aground on Lake Huron. Released. Hull loss \$600.

Ownership of the propeller *Havana* was changed in 1890, to Mills Transportation Co., Port

Huron, MI. Masters of the propeller *Havana* were Captain James B. Watts for the 1889 to 1890 season, and Captain H.W. Robertson for the 1893 season. In May 1873, the propeller *Havana* went ashore on Lake Ontario near Charlotte, NY. Released. In 1898, the propeller *Havana* received a new firebox boiler, 11' x 16', 65 pounds steam. In May 1898, while down bound on the Niagara River, the propeller *Havana*, laden with ore for Tonawanda, NY, went aground on Bird Island Reef. The vessel was released after being lightered. Masters of the propeller *Havana* were Captain Thomas Deringer, for the 1899-1902 seasons, and Captain William Henderson for the 1903 season with C. B. Keeler as chief engineer for the 1902 & 03 season. During winter layup, 1904-05, the propeller *Havana* was rebuilt at Marine City, MI. She received the machinery from the steamer *Sparta* (U115242). In September 1905, the propeller *Havana* came into the shipyard at Sault Ste. Marie after a collision on the Saint Mary's River. She went into lay up for the winter.

Ownership of the propeller *Havana* was changed in October 1906, to the Erie & Pittsburgh Railroad. Her master of the propeller *Havana* for the 1907-08 seasons was Captain James W. Kelly.

Final enrollment for the propeller *Havana* was surrendered at Erie, PA, in June 1912 and endorsed "abandoned".



Hiawatha: Henry Weston, Dresden, Ont., with master carpenter Joseph A. Jenkins, built a wooden propeller passenger boat. Enrolled at Wallaceburg, Ont., May 31, 1875, her measures were recorded as: 92.67' x 20.0' x 7.63'; 82.67 grt, 56.22 net. Assigned official number C72982. She was owned by the Wesson & Co., W. B. Clark president, Sarnia, Ont. She was powered by a vertical, high pressure, non-condensing engine, 20" bore x 24" stroke, 150 horsepower, built in 1874 by Farrar & Trefts, Buffalo, NY. The passenger boat *Hiawatha* was built as a river passenger ferry boat to run between Dresden, Ont. and Wallaceburg, Ont. on the Sydenham River. For the 1875 season, the ferry *Hiawatha* was assigned to run between Sarnia, Ont., on the St. Clair River, and Wallaceburg, Ont., on the Sydenham River, with the ferry *J. C. Clark* (C51669). In 1876, the ferry *Hiawatha* was rebuilt & enlarged: 92.67' x 20.00' x 7.63', 162.62 grt 110.58 net. Master of the ferry *Hiawatha* for the 1878 to 1882 seasons, was Captain Alexander McDougall with

Thomas B. Kelly as chief engineer during the 1881 season.

Ownership of the ferry *Hiawatha* was changed, in June 1881, to Sarnia Tug and Transportation Co. Ltd., Sarnia, Ont. and would provide ferry service between Sarnia, Ont. and Port Huron, MI across the St. Clair River. Her masters of the ferry *Hiawatha* were:

Captain B.B. Inman, 1882-83 seasons;
 Captain Alexander McDougal, 1883-84 seasons;
 Captain James Lowe, 1884 season;
 Captain J. McArthur, for the 1887-89 seasons,
 Captain Edward Anderson, 1890 season with Henry Odette as chief engineer., she

During the winter layup, the ferry *Hiawatha* received major repairs at Phoenix Iron Works, Port Huron, MI. In 1893, she received a new firebox boiler 6'6" x 12', 104 pounds steam, built by J. Inglis & Sons Boiler Works, Toronto, Ont. and installed by Wolverine Dry Dock, Port Huron, MI. In 1899, the ferry *Hiawatha* had her engine replaced with a high pressure, non-condensing, 18" bore x 20" stroke, 280 horsepower, built in 1874 by Farrar & Trefth, Buffalo, NY.

Master of the ferry *Hiawatha*, under management of the Port Huron & Sarnia Tug & Transit, was: Captain Edward M. Thomas for the 1903 to 1925 seasons with: John See – 1903; John Lee -1905-08; Thomas Horgan – 1909; Henry Meyers – 1910; Harvey Myers -1911; Harry Myers -1912; Harvey Myers – 1913; Harry Myers -1914-15; Harvey Myers -1917-21; Harry Myers -1922-23; Harvey Myers -1924; and Harry Myers -1925 - 26 as chief engineers.

In September 1906, the ferry *Hiawatha* went aground at Port Huron, MI, opposite Stag Island, St. Clair River. Released. In March 1922, the ferry *Hiawatha* was damaged when the boiler exploded in the ferry *Omar D. Conger* on the Black River, Port Huron, MI. Repaired. The ferry *Hiawatha* was placed into service as a ferry at Little Current, Manitoulin Island, Ont. in 1923. In 1924, The ferry *Hiawatha* was beached and abandoned off Low Island, North Channel, Lake Huron. She was laid up in reserve status.

Ownership of the ferry *Hiawatha* was changed, in 1930, to R. Trotter, Little Current, Ont. In 1932, she was drydocked at Gore Bay for hull repairs. Later that same year, the ferry *Hiawatha* was abandoned at Red Mill Point, Little Current, Ont.

Enrollment was surrendered in 1932 and endorsed as "abandoned".

Josephine: Allan, McClelland & Co.; with Robert Allan, master carpenter, built at Milwaukee in 1874, a sidewheel steamer for Hiram Bond, et al., Milwaukee, WI, to be a sand sucker. She was enrolled at Milwaukee, May 1875, and her measures were recorded as: 99.2' x 25.3' x 6.5'; 146.0 grt, 133.0 net.

She was assigned official number 75763. Her engine and boilers are unknown.

In April 1877, the steamer *Josephine* was damaged by fire at her dock in Milwaukee, WI. In August 1879, she went ashore on South Point, Milwaukee. In June 1882, she was ordered to be lay-up by steamboat inspectors for not having the proper boiler. In March 1887, the *Josephine* entered the dry dock at Wolf & Davidson's Shipyard, Milwaukee, for overhaul where they replaced deck beams and decks.

In April 1888, while hauling sand, the sidewheel steamer *Josephine* struck a rock, due to a navigational error, and sank north of Milwaukee at White Fish Bay, Lake Michigan.



Charles J. Kershaw: Ballentine's & Co., Bay City (Bangor), MI; with Theophiles Boston as master carpenter, built a wooden propeller, bulk freighter for the Ballentine's & Co., Bay City, MI. Enrolled at Port Huron, MI, May 1874, her measures were recorded as: 223.0' x 37.25' x 19.75'; 1323.95 grt, 1108.87 net. She was assigned official number 125251. She was powered by a low-pressure engine, 48" bore x 36" stroke, built by Detroit Dry Dock Company. Built as a double decked propeller intended for the bulk iron ore and grain trade. She had a capacity is 55,000 bu. of grain. Her cost to build was: \$60,000. Her master of the propeller *Charles J. Kershaw* for the 1874 season was Captain Madden.

In May 1874, ownership of the propeller *Charles J. Kershaw* was changed to H. B. Moore, Bay City, MI.

In 1875, ownership of the propeller *Charles J. Kershaw* reverted back to Ballentine's & Co., Bay City, MI.

In April 19, 1877, ownership of the propeller *Charles J. Kershaw* was changed to Phil D. Armour, et al., Chicago, IL.

Nine days later, in April 28, 1877, ownership of the propeller *Charles J. Kershaw* was changed to Richard P. Fitzgerald, Milwaukee, WI. Her master for the 1877 season was Captain W. O. Harrison. November 1877, her master, Captain W. O. Harrison was washed overboard during a storm on Saginaw Bay. March 1885, the engine of the propeller *Charles J. Kershaw* was compounded 26" x 48" bore x 36" stroke, by H. G. Trout. In October 1889, the propeller *Charles J. Kershaw* went aground at the entrance to Copper Harbor, MI, Lake Superior.

Repairs from grounding were made at Chicago, IL. Masters of the propeller *Charles J. Kershaw* were Captain William S. Mack, 1889-92; and Captain Joshua Bailey, 1891-93 seasons, with Thomas B. Kelly as chief engineer from 1879-80. In October 1893, the propeller *Charles J. Kershaw* went ashore at Waiska Bay, MI, Lake Superior. Released. In November of that same year, the propeller *Charles J. Kershaw* carried the first load of iron ore into Conneaut, OH, reopening that port. September 1894, the consort schooner-barge *Ironton* (US100122), for the propeller *Charles J. Kershaw*, collided with the propeller *Ohio* (US19438) and both sank 10 miles north of Presque Isle, Lake Huron. With schooners *Moonlight* (U90719) and *Henry A. Kent* (U95223) in tow, the *Charles J. Kershaw* burst a steam pipe one-half mile off Chocoday Reef, Marquette, MI, Lake Superior, in September 1895, and stranded on the reef and was pounded to a total loss. Schooners were later released. No lives lost.



V. H. Ketcham: David Lester, at Marine City, MI, built a wooden propeller for the Toledo & Saginaw Transportation Co., Toledo, OH. First enrollment was at Toledo, July 1874, and her measures were recorded as: 233.4' x 40.58' x 23.10'; 1660.49 grt, 1369.18 net. She was powered by a low-pressure engines, two on the same shaft, 36" bore x 32" stroke, built by Samuel F. Hodge, Detroit, MI in 1874. Steam was generated by a tubular boiler, 10' 5" x 21", 45 pounds steam, built by John Brennan Works, Detroit, MI. She was assigned official number 25908. The propeller *V.H. Ketchum* was built for the bulk freight trade with a capacity of 75,000 bushels. Her master for the 1874 season was Captain John McNeal. In June 1879, the propeller *V.H. Ketcham* broke her wheel chains and went aground on the middle ground at Point Edward, Saint Clair River. Released.

Ownership of the propeller *V.H. Ketchum* was changed, in march 1880, to H.H. Adams, ½ shares; and A. Delamater, ½ shares, both from Cleveland, OH. Master of the propeller *V.H. Ketchum*, for the 1880-89 seasons, was Captain George B. Mallory.

In March 1881, ownership of the propeller *V.H. Ketchum* was transferred to: H.H. Adams, 9/20; A.H. Delamater, 9/20; and G.B. Mallory, 2/20, all from Cleveland, OH.

April 1883, ownership of the propeller *V.H. Ketchum* was transferred to: Helen E. Adams, 9/20;

A.H. Delamater, 9/20; and G.B. Mallory, 2/20, all from Cleveland, OH.

April 1887, ownership of the propeller *V.H. Ketchum* was changed to James Pickands, 8/20, Cleveland; Samuel Mather, 7/20, Cleveland; et al.

May 1888, ownership of the propeller *V.H. Ketchum* was changed to Flora S. Mather, 20/80; James Pickands, 13/80; Samuel Mather, 13/80, all from Cleveland; with Joseph Sellwood, 13/80, Ishpeming, MI; J.C. Morse, 13/80, Chicago, IL: et al.

April 1889, ownership of the propeller *V.H. Ketchum* was changed to Interlake Transportation Co., 63/80, Ashtabula, OH; Joseph Sellwood, 13/80, Ishpeming, MI; and C.E. Benham, 4/80, Chicago, IL. In September 1890, the propeller *V.H. Ketchum* was rebuilt at Cleveland, OH, receiving two 18", 28", 36" bore x 32" stroke, 750 horsepower, triple expansion engines; two 10' 6" x 14' scotch boilers, 150 pounds steam, built by Erie Boilers Works in 1889. In September 1890, the propeller *V.H. Ketchum* burst a steam pipe near Waugoshance Point, MI, Lake Michigan and was repaired at Cheboygan, MI. Chief engineers of the propeller *V.H. Ketchum* were Charles A. Heisner for 1891; and Michael Heinkelmann for the 1892 season. In October 1892, during a gale, the propeller *V.H. Ketchum* sank in 20 feet of water at Cleveland, OH. Raised.

In April 1893, ownership of the *V.H. Ketcham* was changed to William S. Mack, 1/2, Lakewood, OH; et al.

Masters of the *V.H. Ketcham* were Captain William S. Mack, 1893 season; and Captain Alexander Robinson for the 1895 season. In The Fall 1893, the propeller *V.H. Ketchum* wrecked near Whitefish Point, MI, Lake Superior.

April 1896, ownership of the propeller *V.H. Ketchum* changed to Lakewood Transportation Co., Mentor, OH. In May 1896, the propeller *V.H. Ketchum* collided with a barge near Pointe aux Barques, MI, Lake Michigan. Master of the propeller *V.H. Ketchum* was Captain W. C. Butts for the 1899 season with George B. Milne as chief engineer.

In January 1900, ownership of the propeller *V.H. Ketchum* was changed to Frank Seither, Linndale, OH.

Masters of the propeller *V.H. Ketchum* were Captain Richard W. England for the 1900-01 seasons; Captain E.D. Gatfield for the 1902 season, Captain Matthew J. Yipe, Jr. for the 1903; Captain Dan Wilman for the 1904 season; and Captain Wilson as master for the 1904-05 seasons; with Emil Mercier, 1900-01; and John J. Booth, 1902-03 seasons as chief engineers. In April 1901, the propeller *V.H. Ketchum* was rebuilt and her engine removed; enrollment tonnage changed at Cleveland, OH: 1806 grt, 1291 net. With the removal of her engine, the *V.H. Ketchum* was converted to an unrigged barge at Algonac, MI in May 1904. Enrollment was updated to: 1699 grt, 1660 net.

September 1905, bound from Duluth, MN for Cleveland, OH, laden with iron ore, the barge *V. H. Ketchum*, in tow of propeller *William Nottingham* (US81804), caught fire off Parisienne Island, Ont., Lake Superior. She beached in 23 feet of water and burned to water's edge. Two lives lost.

Final enrollment for the barge *V. H. Ketchum* was surrendered at Cleveland, OH, September 23, 1905.



George King: George King, at Marine City, MI, built a wooden propeller for Gregory Francis et al, also from Marine City, for the bulk freight "lumber" trade. Enrolled at Port Huron on May 13, 1874, her measures were recorded as: 176.33' x 30.58' x 13.33'; 532.85 grt, 380.58 net. She was powered by a high-pressure engine, 28" bore x 32" stroke, built by Dry Dock Engine Works, Engine #51. The engine would be replaced with a steeple compound engine, 22", 40" bore x 32" stroke, 320 horsepower, built by Dry Dock Engine Works sometime before 1899. At enrollment she was issued official number 85313. Her master for the 1874 season was Captain Joseph Shackett. In October 1874, the propeller *George King* went ashore on Elk Island, Detroit, MI, St. Clair River. She was released and the property loss was set at \$300. In November of that same year, she lost her barges on Lake Erie. Property loss set at \$1,000. In 1888, the *George King* received a new firebox boiler, 9' x 16', built by Love & Schofield, Port Huron, MI. In November 1891, the *George King* damaged her bilge by striking a rock abreast of Sister Light on her passage up from Ogdensburg, NY.

Ownership of the propeller *George King* was changed to Mathew Sicken et al, Marine City, MI in April 1898. Her master for the 1899 to 1907 seasons was Captain William Burns with Michael Owen in 1899, Peter Britz – from 1900-02, William Sicken from 1903 to 1905 and H. Manion from 1906 through 1907, serving as chief engineers.

In April 1900, ownership of the propeller *George King* was transferred to Thomas F. Madden et al, Marine City, MI.

In June 1907, while down bound on the Niagara River, laden with lumber, the propeller *George King* caught fire while passing Tonawanda Island. With the assistance of the ferry tug *White Haven* the damage was limited to a loss of \$50.

Masters of the propeller *George King* for the 1908 & 1909 seasons was Captain Hector Brown, followed by

Captain H. Huyser for the 1910-11 seasons, with William Flannigan, from 11908-09 and John Conley in 1911 as chief engineers.

In May 1912, ownership of the propeller *George King* was changed to Sydney C. McLouth, Marine City, MI.

In August 1912, ownership of the *George King* was changed to William H. Sharp, ½ share, Bay City, MI; and the Saginaw Bay Transportation Co., ½ share, Cleveland, OH. Master of the propeller *George King* was Captain Wallace Smith for the 1912 to 1923 seasons, with Joseph De Mars in 1912, Andrew Tallifson from 1914-1919, Wallace Boyd for the 1921 season and John Hilton in 1922 serving as chief engineers.

In August 1918, ownership of the propeller *George King* was changed to Dorr E. Warner, E. Cleveland, OH.

In April 1919, ownership of the propeller *George King* was transferred to Dorr E. Warner, 79/80, E. Cleveland, OH; Victor Salkeld, 1/80, Mentor, OH. Masters of the propeller *George King* were Captain Thomas Hefferman in 1924, and Captain John Harboldt for the 1925-26 seasons, with Peter Petersen serving as chief engineer for the 1925 & 26 seasons. In September 1926, the propeller *George King* caught fire and burned to total loss while in the harbor at Buffalo, NY.

Final enrollment for propeller *George King* was surrendered at Cleveland, OH, March 16, 1927..



William Livingstone Jr. The Port Huron Dry Dock, Port Huron, MI, built a wooden towboat for William Livingstone, Jr., Detroit, MI. First enrollment for the towboat *William Livingstone, Jr.* was issued at Detroit, MI, May 09, 1874. Her measures were recorded as: 127.6' x 26.0' x 13.6'; 291.58 grt. She received her official number, 80411, at that time. Her engine was built by Philbrick & Christy, Detroit, MI. She was built for towing vessels on the Detroit & St. Clair Rivers. At her launch, the tug *William Livingston Jr.* was reported to be the largest tug in the world. In June of 1874, the *William Livingstone, Jr.* broke her wheel on the St. Clair River. Repaired.

In November 1878, her enrollment was transferred to Milwaukee, WI, when her ownership of the towboat *William Livingstone, Jr.* was changed to Peshtigo Lumber Co., Peshtigo, WI. The towboat was intended to be used to tow lumber barges from

Peshtigo and Chicago, IL. The towboat would tow the barge *Peshtigo* (US54218) and the schooner-barge Alert (US105101) between Peshtigo and Chicago. In October 1880, up bound from Chicago with barges in tow, the towboat *William Livingstone, Jr.* broke her shaft when her engine froze. The shaft slid out of its sleeve allowing water to enter the hull. She was taken in tow but sank off the mouth of Sturgeon Bay Canal, nears Bailey's Harbor, WI. No lives lost.



Music: Charles A. Ward, at New Jerusalem, OH, built a wooden tug, that would be used to in the lumber raft towing trade. She would ply between Mackinaw and Petoskey, MI in connection with the Grand Rapids and Indiana Railroad and had accommodations for 75 passengers. She was enrolled at Detroit in September 1874, and her measures recorded as: 124' x 24' 5" x 12'; 320.46 grt, 234.0 net. She was issued official number 90671. She was powered by a high- pressure engine, 24" bore x 24" stroke, 150 horse power, built by Houghton & Kneiser, Toledo, OH. She was equipped with two 14-foot boilers. Her master for the 1874 to 1876 seasons was Captain Riley M. Burrington. In August 1874, she went aground in the Detroit River. Released. In August of that same year, the tug *Music* broke her machinery on Lake Michigan. Loss set at \$600.

Ownership of the tug *Music* was changed, in 1875, to Mitchell & Boutell, Bay City, Michigan and was intended to tow on rivers.

Ownership of the tug *Music* was changed in February 1876, to William Mitchell, Bay City. Her enrollment measures were update to: 320.46 grt, 234.06 net.

Ownership of the tug *Music* was changed in April 1887, to W.G. Van Auken et al, Saginaw, Michigan.

In May 1888, ownership of the tug *Music* was changed to James Reid, Saint Ignace, Michigan. George B. Kelly was chief engineer for the tug *Music* during the 1888 season.

In April 1889, ownership of the tug *Music* was changed to R.A. Loveland, East Saginaw, MI. She would tow the barge *Wahnapiatae* in the Duluth, MN to Tonawanda, NY lumber trade. During winter layup, 1892, the tug *Music* was rebuilt at Wheelers Yard, West Bay City, MI. She received a new engine and boiler.

In July 1892, ownership of the tug *Music* was changed to Michigan Log Towing Company, Saginaw; MI. The enrollment records for the tug *Music* were changed to reflect the name change to *Acme* (U90671) at Port Huron, MI

Master of the tug *Acme* for the 1892 & 93 seasons was Captain Dorin Elliott with Loftus House as chief engineer.

In October 1893, while towing a raft of logs from French River, Ont., the tug *Acme* foundered in 225 feet of water. She was running for shelter at Thunder Bay, about twenty-five miles off Black River, MI, Lake Huron during a storm when she foundered. No lives lost.

Final enrollment for the tug *Acme* was surrendered at Port Huron, October 20, 1893.

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: $\text{Tonnage} = ((\text{length} - (\text{beam} \times 3/5)) \times \text{Beam} \times \text{Beam}/2)/94$

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 steam barge *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 $1533\frac{3}{4}$ 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 fore-castle 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.)