

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 – October 15, 2022

**Next Meeting: November 19, 2022;
"Flags; How to make" by M. Dowler**

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October

Saturday, October 15, on a sunny but cool day, we connected via Zoom, and had a very robust informative meeting. We covered wood for ship modelers, progress on our ship models and a discussion on how to grow membership ending with a proposal to develop a course on building an intro RC model.

If you tried to join and had trouble connecting to our zoom session, contact Bob Mains (contact info on page 6) for help. Also, our webmaster has added an access to the zoom session on the home page of our web site.

Cliff Mitchell had to cancel his planned presentation for this month due to a major medical need in his family. Keep Cliff and especially his wife Jackie in your prayers.

With the stress our communities are experiencing from Covid, isolation, and inflation, we are reminded that we should all be in service to others, so I repeat my monthly advice and urge all of you to take care of yourself and your families. Look to those you know who may need help, are lonely and need human contact. Till next month. Your editor.

Business

Election of Officers

The "Shipwrights of Ohio" Constitution and By-Laws states that the officers of the club will be elected at our annual meeting to be held in November.

As a reminder, both your present president and vice president have asked to be relieved. Our club needs volunteers to stand for those offices. The duties include running the monthly meetings and provide direction on special projects.

2023 Presentation Planning

The 2023 presentation schedule is complete. The focus for 2023 will be rigging with the focus for 2024 to be on all facets of building a hull. As of now the topics, schedule and presenters for 2023 are:

Jan	Principles of rigging	Nyberg
Feb	Research: Internet	Boeck
Mar	Getting Started with RC boats	Phelps
Apr	Fixtures: The Rudder	Nyberg
May	Mast, Yards & Spar Making	
Jun	Standing Rigging & deadeyes	Keller
Jul	Running Rigging & Blocks	
Aug	Making Sails	Nyberg
Sep	Fixtures: Capstans & Windlass	Nyberg
Oct	Finishing: Natural & Paint	Mitchell
Nov	Displaying & Mounting models	
Dec	Soldering	Phelps

We have two backup topics are: Adhesives; Ropewalk.

We need presenters for the May, July & Nov. topics.

There are existing PowerPoint presentations from the past that can be used as a base for the 2023 topics that need presenters.

2022 Meeting Schedule

The presentation subjects for the remainder of 2022 are:

November – Flags: How to Make, M. Dowler.

December – Open discussion forum

Presentation:

We had two presentations this month. The first was on "Woods for Ship Modeling". The topic was based upon an article by Merritt Edson, in the NRG published "Ship Modelers Note Book, and information from "The Lumberyard Catalog for model shipwrights located in Brecksville, OH (www.dlumberyard.com).

We started with the question: What is the primary characteristic of the wood you use in your ship modeling. The responses included: Straightness of the grain; Texture – suitability for carving and fineness of detail; and finally - availability.

Wood is rated using four categories:

Weight - average weights per cubic foot. The higher the number the denser/harder the wood.

Figure: pattern caused by color differences and different types of grain

Grain: direction of the fibers within the wood.

Texture: Suitability for carving and fineness of detail that can be achieved.

The following woods are shown with their Weight, Grain & Texture, from lowest weight to highest.

Basswood	26	Straight	Smooth
Popular	30	Straight	Fine
Red Maple	30	Straight	Fine
Alaskan Cedar	31	Straight	Fine
Cherry	35	Straight	Medium
Mahogany	40	Straight	Coarse-Med
Walnut	45	Straight	Course
Pear	46	Straight	Fine
Birch	47	Straight	Med - Brittle
Holly	47	Straight	Fine
Apple	48	Irregular	Fine
Birch	47	Straight	Med - Brittle
Boxwood	70	Straight	Ultra-fine

As we go through the following usages, note that basswood, boxwood, holly and pear appear mostly recommended in each category.

Limewood is the European name for our basswood and is recommended as the finest timber for ship modeling. It is a softwood and excellent for carving.

Listed below is the usage category and the recommended wood for that category:

Solid or Built-up hulls (fine grain-hardness, ease of carving): Sugar or White Pine; Basswood.

Framing timbers (fine grain, stable, easy to work): Apple, Basswood, Birch, Boxwood, Cherry, Elm, Holly, Maple.

Bent Frames (Where weight distribution needs to be controlled): Apple, Basswood, Boxwood, Holly, Maple, Pear.

Hull Planking (Ability to bend and twist and except fastening without splitting): Apple, Holly, Boxwood, Basswood, Pear.

Deck Planking: Apple, Holly, Boxwood, Basswood, Pear.

Mast & Spars (Straight, fine grain, ability to split without warping): Sitka Spruce, Boxwood, White Birch, Pear.

Blocks & Deadeyes (take a stain, good for turning, carving): Apple, Boxwood, Holly, Pear, Cherry.

Treenails Apple, bamboo, Birch, Boxwood, Cherry, Holly, Maple, Pear.

I found a similar list that included Alaskan Yellow Cedar as the wood recommended for all the categories listed above. I checked my original sources and could not find it listed. If interested, Yellow Cedar can be found at:

<http://www.modelerssawmill.com/wood-packages.php>

My other sources for information and where you can get a visual of the wood are:

www.keimlumber.com see Exotic Wood and the Domestic Wood libraries. Keim Lumber is located in Millersburg, Ohio.

www.dlumberyard.com is located in Brecksville, OH and is a source for the plans and wood kits for the Harold Hahn ships plans.

Ships on Deck:

Our second presentation was delayed until we reviewed progress in "Ships on Deck".

The following is an update on what your fellow shipwrights have been working on. As you can see, the progress covers from continuation of prior work, and new builds. Thanks to all who submitted their progress reports and photos.

Mary Powell

Lee Kimmins

Lee has been honored to have a photo of his sidewheel steamer *Mary Powell* featured on the NRG's 2023 calendar for the month of August.



Way to go Lee.

Sprague

Lee Kimmins

In his present build of the sternwheeler Sprague, he has painted the hull which is 40" long.



Main deck.



Bottom of the hull.

Red Jacket

Stan Ross

Stan started the Bluejacket kit for the clipper ship *Red Jacket* 1 1/2 years ago. He is finished. The case is ordered and he only needs a place to display it.



Note the figures of the crew on the main deck. Maritime figures at 1/8 scaled from Revell Europe.



Alva B

William Schwartz

On his way to a golf tournament, Bill sent me an update on his build of the tugboat *Alva B*. He is the process of planking the hull



POB, the Alva B is a Great Lakes tug that sank just off Bill's home city of Avon Lake, Ohio.

U.S.S. Ohio

Ric Stratton

The second USS Ohio was a ship of the line of the United States Navy, rated at 74 guns, although her total number of guns was 104. She was designed by Henry Eckford, laid down at Brooklyn Navy Yard in 1817, and launched on 30 May 1820.

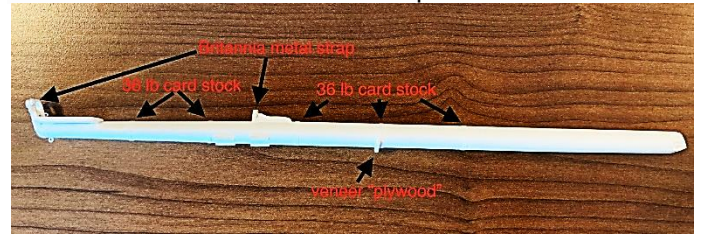
Ric's model is POF and he has been working on the model for a while. I am including his writeup of what he has accomplished, for your edification.

"I haven't done much work on the Ohio lately but I did take some time to turn a stick into a bowsprit. This was a fun distraction from all of the cannon work. Plus, completing the bowsprit is a necessary task before I can start on the spar deck (because it mounts in the upper gun deck). I also had to complete the jib boom to make sure the dimensions in the bowsprit cap and jib boom step/saddle bracket were correct.

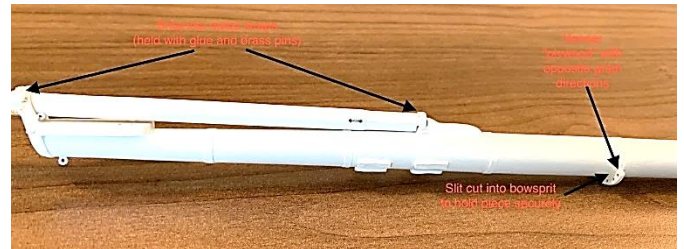
I started with a cherry dowel and tapered and then angle cut both ends. I constructed and added the outer end piece for bee blocks and the bowsprit cap. The cap was thoroughly coated with cyanoacrylate glue in hopes it will soak into the grain and give strength. I added the jib boom step/saddle and added a Britannia metal strap for the jib boom step/saddle as well as for the flying jib boom on the cap. Both are held with glue and brass

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pins. Simulating the iron hoops around the bowsprit, I used 36 lb. card stock cut into strips and glued to the bowsprit. I think the card stock adds just the right dimension to simulate the iron hoops.



One fun part was the piece under the bowsprit above the figurehead that gathers lines before sending them to the head area of the ship. I try to stay aware of items that may be under tension when rigging gets added, as well as when things get bumped. So, I didn't feel comfortable with a plain wooden piece shaped to a half moon and glued to the underside of the bowsprit. So, the piece itself was created from 2 pieces of maple veneer glued with the grain in opposite directions. Similar to the strength found in plywood. Instead of simply gluing that to the bottom of the bowsprit, I cut a slit in the bottom of the bowsprit that this piece slides into and once glued in, is very secure.



I'm very pleased with the end result and looking forward to mounting it in the ship and the associate gammoning. Here's the whole bowsprit and jib boom assembly. These fit tightly together and will not be glued together.



The bowsprit is 14" long and the boom is 7" long."

Presentation

How To Grow Our Membership

This was our second presentation and it was scheduled at the end of the meeting so that we had enough time to discuss and develop a rough plan to go forward with.

Background

Summarizing an article from the 2007 NRJ by Burton Reckles called "A Serious Proposal to Increase Public Perception, Appreciation, and Involvement in Ship Modeling" and bring up-to-date,

- The hobby, ship modeling, is online.
 - MSW & Ship of Scale are on-line and have an active group of participants.
 - Our vendors, Model Expo, Model Shipways, Syren, vanguard, Jim Byrnes, etc., all are available on-line.
 - The quality of the kits and plans" available, beginners to scratch builders, require a higher skill level.

Quoting a friend of mine, 'Ship Modeling is a hobby of hermits.'

At the same time, "How many ship modeling kits are purchased, open once and then placed on a closet shelf due to complicated and lack of a mentor, to later being an item in a garage sale or flea market?"

Burton Reckles included in his article an action plan to educate and grow the ship modeling audience. His list, 2007, included:

1. Find an audience to talk to:
 - a. Participate in local modeling shows:
 - b. Arrange a loan of models to a library for display.
 - c. Tie models and books from the library to the display.
 - d. Develop a ship model display illustrative to state history.
 - e. Speak to a classroom tying ship modeling to a period of history they are studying.
 - f. Work with local Boy Scout troops on the "Modeling" merit badge.
 - g. Speak at senior centers. Civic groups, etc.
 - h. Develop and teach a class at community evening schools.

In the 18 years since our founding, we have been trying to grow our audience.

- We left brochures telling about the Shipwrights of Central Ohio (old name), to be given when someone purchases a ship model kit.
- Since moving our meetings to the Westerville library, we have displayed our models up to COVID. Since COVID we displayed our model and tied them to books at the Sunbury Community Library.
- We have participated in the yearly IPMS show. Multiple wood carving shows, Franklin County

Senior Center shows, Franklin County Fair and the Ohio State Fair.

Since the formation of this club in 2004, we have had 84 ship modelers who have been members. Our membership now sits at 20 regular members, 6 associate members and 2 life members who reside in care facilities.

So where do we go from here?

Are you aware that Ohio can be classified as a maritime state? Bordered by Lake Erie in the north and the Ohio river in the south, this state has had a vibrant ship building history. At Cleveland, there was the Cleveland Ship Building Company, Globe Iron Works and the American Ship Building Corp. At Lorain we had a branch of the Cleveland Ship Building Corp. In Toledo, John Craig started building ship in 1888, followed by Craig & Linn, then John Craig and Sons, then Craig Ship Building Company, which merged into Toledo Ship Building and was finally absorbed by American ship Building Corp. Plus the ships built at Sandusky, Vermilion, Fairport Harbor and Ashtabula.

What surprised me, when I read David McCullough's book "The Pioneers", is that when the Ohio Territory was opened to settlement in 1788, the first settlers contained a shipwright. In their charter was the idea to build ships in the first settlement called Marietta. From 1800 to 1814, they built on the banks of the Hocking River, one sloop, 7 schooners, 1 bateau, 2-gun boats, 12 brigs, and 6 ships. All launched on the Hocking River at Marietta, sailed down the Ohio River, and then down the Mississippi River to New Orleans to new owners on the east coast and England. All this came to an end with the passing of the embargo act of 1807.

Between Lake Erie and the Ohio River, were built two canals; Ohio & Erie Canal and the Miami and Erie Canal. Connecting to these two canals were six feeder canals: "Penne & Ohio; Sandy & beaver; Walhonding; Hocking; Wabash and Erie; and the Cincinnati & Whitewater Canals.

The last three paragraphs should send you to your history books. I would put money on the fact that most of our state residents are not aware of that and it is not taught in our Ohio schools.

Reckles also suggests that we work with the BSA on the Modeling Merit Badge. That merit badge is now called "Model Design and Building". The requirements are:

Model Design and Building requirements:

- 1, personal safety using tools
- 2, Explain the use of models: architectural, structural, process, mechanical, industrial

3, Select a subject to build a model (No kits)

A, House to scale $\frac{1}{4}'' = 1'$

B, Structural model: building or house

C, Process model: model of the plumbing system in your house

D, mechanical model: the uses two of six simple machines (Does an R/C boat fit?)

E, **Industrial model: model of a passenger-carrying vehicle**

F, Special-effects model of fantasy spacecraft or a hand-held prop for science-fiction movie.

I would expect that subject E is the closest we could get to building a ship model to earn this badge.

The last two items are a possibility:

- Speak/advertise at senior centers or community centers
- Develop and teach a class at a community evening or weekend school

Proposal

This is the proposal we have before us.

Alan Phelps is willing to help in the development of a "RC build and run for youth and their parents. He has identified an r/c model called the *Moonglow*.



Alan was asking for the club to cover the financial outlay for the kit and the circuits required to make the *Moonglow* into a teaching moment and an outline for a community course. The club will pick up the cost.

Tentative Plan of Action

While Alan builds and document the build process, we have our tasks also to do. They are:

Need location – where to hold?

How long a class (# of weeks)?

Need build project plan – Who leads?

What age group are we focused on?

Father (mother)/son (daughter)?

Grandfather (grandmother)/ grandson (granddaughter)?

What will it cost for the participant?

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Need marketing plan

How do we reach the market?

Do we provide tools/glue?

What is the cost for the tool kits provided by Model Shipways with their intro-ship building kits?

What type of staffing required/ for the class session?

What is our Initial Investment by the club?

Post RC Build questions are:

Where can we hold the first sail run?

What is our FUP program and how often do we hold the class?

Can we do the same with a static build for potential retirees?

I am interested in your thoughts on this proposal.

Thanks.

Other Notes: "Stuff", Tugs & Things

Fall Lecture Series:

The National Museum of the Great Lakes, has announced their Fall Lecture Series. This is a hybrid event and if you plan to participate, you have to register. To register visit www.nmgl.eventbrite.com or call 419-214-5000.

The lecture series explores Great Lakes history, and the series will consist of:

Wed. Oct 26, 7 PM – Lake Erie Murder & Mayhem – Wendy Kole, Director of Teaching, Central Ohio Technical College. From robbers who held up the Ashtabula National Marine Bank to law-evading pirates like Joseph Kerwin, and more.

Wed. Nov. 9, 7 PM – Mail by the Pail: The history of the J.W. Westcott Co. The history of the on-going legacy serving the Great Lakes marine community – from mail to Amazon deliveries, to it's historic postal ZIP code.

Nautical Terms

Point: A unit of bearing equal to $\frac{1}{32}$ of a circle, i.e., 11.25 degrees. A turn of 32 points is a complete turn through 360 degrees.

point up: To change the direction of a sailboat so that it is more upwind. To bring the bow windward. Opposite of falling off.

Points: The course of a sailing vessel in relation to the direction of the wind, divided into six points:

in irons (pointed directly into the wind),

close hauled (sailing as close into the wind as possible),

close reach (between close hauled and beam reach),

beam reach (perpendicular to the wind),

broad reach (wind behind the vessel at an angle), and

running before the wind (wind directly behind the vessel).

polacca: Also, **polacre.** A 17th-century sailing vessel commonly seen in the Mediterranean, similar to a xebec with two or three masts; two-masted polaccas were known as *brig-polaccas* and three-masted polaccas as *ship-polaccas* or *polacca-settees*. Polacca-settees had a lateen sail on the foremast, a European-style the mizzenmast.

polacca-settee: A three-masted polacca.

polacre-xebec: A type of xebec with a square rig on her foremast, lateen sails on her other masts, a bowsprit, and two headsails. A polacre-xebec differed from a felucca in that a felucca had only lateen sails.

pontoon: A flat-bottomed vessel used as a ferry, barge, or car float, or a float moored alongside a jetty or a ship to facilitate boarding.

poop deck: A high deck on the aft superstructure of a ship.

port: The left side of a ship or vessel. Towards the left-hand side of the ship facing forward (formerly larboard). Denoted with a red light at night.^[2]

port of registry: The port listed in a vessel's registration documents and lettered on her stern. The port at which the vessel is based, but it may differ from the port of registry.

port tack: When sailing with the wind coming from the port side of the vessel. Vessels on port tack must give way to those on starboard tack.

porthole: An opening in a ship's side, especially a round one for admitting light and air, fitted with thick glass and, often, a hinged metal cover, used as a window.

portolan: An obsolete form of nautical chart used prior to the development of lines of latitude and longitude that indicated distances and bearing lines between ports.

post-captain: An obsolete alternative form of the rank of captain in the Royal Navy; once achieved, promotion thereafter was entirely due to seniority.

post ship: The British term used from the second half of the 18th century until 1817 for a sixth rate ship-rigged sailing warship armed with 20 to 26 guns, smaller than a frigate but large enough to require a post-captain as her commanding officer.

powder magazine: A small room/closet area in the hull of the ship used for storing gunpowder in barrels, or "kegs", usually located centrally so as to have easy access to the grated loading area.

Glossary of Nautical Terms – Wikipedia

Tugs: Great Lakes

Waldo A. Avery (Towboat)



Built at Bay City, MI by P.W. Hitchcock & Co. in 1880. She was made of wood and was steam powered. Her measures were 78.8' x 16.8' x 7.9', with tonnage rated at: 70 grt 58 net. She was owned by W. H. Bridges, Bay City, Enrolled at Port Huron, June 10, 1880, she was assigned official number 80765.

In September of 1887, she sprung a leak while on Lake Huron, but made it safely to Cheboygan, MI for repairs. Her ownership was changed to William Young in November 1890. The following month her ownership was listed as the Michigan Low Towing Co. In May 1896, her enrollment and ownership were changed to Duluth and Walter H. Singer, of the White Line Towing Co. In 1901, the tug *Waldo A. Avery* was listed as owned by the Great Lakes Towing Co., Duluth. She was listed as abandoned in 1909 and her enrollment closed.

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

Frank C. Barnes (towboat)



The 1863 built tug *J. C. Osgood* was abandoned in 1892. Her hull was used by Nelson Thorsen, Manistee, MI, to build the wooden tug, *Frank C. Barnes*, for A. O. Wheeler, Manistee. When enrolled she was given official number 120894, and her measures recorded as: 66.6' x 16.3' x 7.2', with a tonnage of 46 grt 29 net. She was powered by a high-pressure engine, 18" x 18", 240 hp and equipped with a 51/2' x 11', 95# firebox boiler. She was owned by Oscar Olsen, Duluth in 1904.

In 1906, her ownership was changed Canadian, to Thunder Bay Contracting and enrolled at Port Arthur, Ont, and assigned C116386. In 1913 she was owned by Canadian Towing & Wrecking and in 1915 by Canada Steamship Lines, Montreal. November 1915, she foundered with a loss of all hands near Oswego, NY, Lake Ontario.

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

Presentation Schedule:

2022

Nov 19 – Flags: How to Make
Dec 17 – Open forum

2023

Jan 21 – Principles of Rigging
Feb 18 – Research: internet, Historical
Mar 18 – Getting Started with RC Boats
Apr 15 – Fixtures: Rudders
May 20 – Mast, yard & Spar Making
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 - Ropewalk

Events & Dates to Note:

2023 Tentative Schedule

Columbus Woodworking Show
January 21-23, 2023

IPMS Columbus
BLIZZCON 2023
Saturday, February 18, 2023

Miami Valley Woodcarving Show
March

46th Midwestern Model & Boat Show,
Wisconsin Maritime Museum, Manitowoc, WI
May 13-15, 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, 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.**

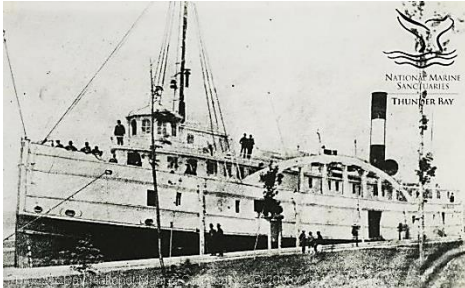


Wooden Steamers on the Great Lakes

Written by William E. Nyberg

1861-65, the War Years

1864-A



Arctic: Peck & Masters, Cleveland, with Elihu M. Peck, master carpenter, built a wooden propeller for the Buffalo & Cleveland Transportation Co., Buffalo, Dean Richmond, president. Launched April 20, 1864, she was enrolled at Buffalo, July 02, 1864, with measures: 190.38' x 28.46' x 11.91', and a tonnage (old style) of 618 32/95. Built for the passenger, package freight trade, she was operated by the New York Central Railroad and ran Cleveland, Buffalo, Lake Superior. Her engine size and type are unknown, but it was built by the Vulcan Iron Works, Buffalo.

September 1864, upbound, the *Arctic* collided with the down bound propeller *Sciota* (1848), owned by John W. Gardner, Buffalo, below Dunkirk, NY, Lake Erie. The *Sciota* sank with a cargo of 1,700 bu. oats, 12,000 by wheat and the loss of three passengers and six crewmen lives. The loss was set at \$25,000. The *Arctic* was remeasured and enrollment updated, May 29, 1865, to: 193.7' x 28.1' x 10.8'; 786,58 grt. She was issued official number 299. The *Arctic* ran Buffalo, Cleveland, Green Bay in 1866; Toledo to Buffalo, 1867.

November 1867, the propeller *Arctic*, along with 17 other propellers, were sold by the New York Central Railroad Co. Buffalo. She ran Buffalo, Cleveland, Chicago in the 1868 season; Buffalo – Lake Superior in the 1869 season. The *Arctic* was damaged in a collision at Cleveland in June 1869. She ran aground at the St. Clair Flats, Lake St. Clair, in July and had her upper works slightly damaged by a collision with the schooner *Billow* (1844) on Lake Huron in November 1869. June 1870, the *Arctic* was chartered by the Canadian Government to transport

troops and supplies from Sault Ste. Marie to Fort William, during the Red River expedition.

April 1871, T.D. Dole reorganized the New York Central Railroad and the *Arctic* would run under the Buffalo and Lake Superior Line of the Union Steamboat Co., Buffalo. In August 1872, the *Arctic* ran from Detroit for Sault Ste. Marie, Marquette, Portage Lake, Duluth and intermediate ports on Lake Superior through 1879. In June 1885, she went aground, during fog, at the St. Clair Flats. Her master for the 1886 season was Captain William Thorne. During the 1886-87 winter layup, she was rebuilt as a steambarge; 596 grt, 410 net.

April 1887, ownership of the *Arctic* was changed to George Hall & Co., Ogdensburg for \$18,000. She towed the schooner-barges *Hamilton J. Mills* (1881) and W.A. Sherman (US62858).

May 1888, ownership of the *Arctic* was changed to Captain Nelson Whipple and Frederick Roberts, Detroit. Master of the propeller *Arctic* was Captain Benjamin Cole. (03/1888)

March 1889, ownership of the *Arctic* was changed to C.W. Pardee & H.A. Crane, Buffalo, and A.M. Dodge, New York City. May 1890, she went ashore at Minorville and was repaired at Manitowoc.

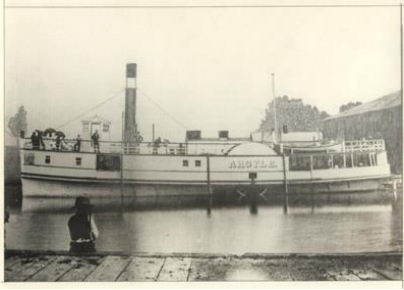
January 1891, ownership of the *Arctic* was changed to Penokee Lumber Co., Buffalo.

April 1892, ownership of the *Arctic* was changed to C. H. Woodruff, et al, Buffalo.

October 1892, ownership of the *Arctic* was changed to A.F. Underwood & John S. Cowen, Menominee, MI. September 1893, bound up, from Toledo for Escanaba, MI, laden with coal, the *Arctic*, disoriented by smoke and heavy seas, struck rocks off White Rock, MI, Lake Huron and foundered in deep water. No lives lost. Loss valued at \$25,000.

Her final enrollment records were surrendered at Marquette, MI, March 31, 1894.

The wreck of the propeller *Arctic* was located in 1987.



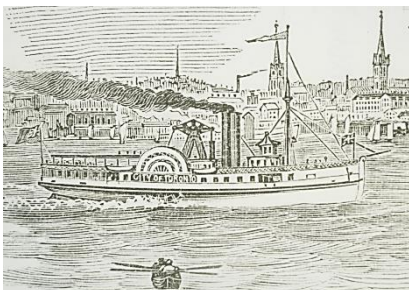
Argyle: A. M. Robinson, Hamilton, Ont. built a wooden sidewheel steamer for W. Ellis, Dundas, Ont. to be used as a tug but she had passenger accommodations. Her measures were 94.0' x 14.1' x 6.7', with a tonnage 121.0 grt, 82.0 net. Her power plant is unknown. Her master for the 1873-74 seasons was Captain Walter Hunter.

Ownership of the tug *Argyle* was changed to E. Winstanley, Monkton, Ont. in 1874

In 1877 her ownership was changed to Dennis Kief, Port Ryerse, Ont. August 1877, the *Argyle*, carrying passengers, received a large hole in her side and had to be bailed by hand to save her. This was due to the Canadian authorities who had made it illegal to use U.S. wrecking equipment in Canadian waters.

Later in 1877, her ownership changed to Edwin Stanley, Monkton, Ont.

In 1879, her ownership was changed to Tisdale et. al, Hamilton, Ont, and she was registered as a 50-ton riverboat. August 1887, the sidewheel tug *Argyle*, carrying passengers, sank near Port Burwell, Ont., Lake Erie



City Of Toronto: Louis Shickluna, Niagara, built for Captain Duncan Milloy, also of Niagara, a wooden, sidewheel steamer. Her measures were; 207' x 27.5' x 11'; 615-unit tons. She was powered by a two vertical beam, low pressure engines; 40.25" bore x 144" stroke, rated at 250 horse power. They were built by Macklem Iron Works, Chippewa, Ont and had been originally installed in the Canadian steamer *Zimmerman* (1854). The *City of Toronto* was built for the passenger, package freight trade between Toronto

and Niagara, Ont. Her master for the 1864 – 70 seasons was Captain Duncan Milloy with W. J. Meneilley as engineer .in 1870. In early August 1866, the steamer *City of Toronto* broke one of her shafts on Lake Ontario and had to leave an excursion party at Port Dalhousie, Ont. to their own resource to get home. September 1869, the steamer *City of Toronto* had her machinery disabled on Lake Ontario.

Ownership of the *City of Toronto* was changed to E. O'Keefe, Toronto, Captain D. Milloy passed away in 1871. Her master for the 1872 season was Captain Donaldson and in 1874, Captain James Dick.

Custom house measurements (pre-1877) changed the tonnage for the *City of Toronto* to 403 grt.

Her master for the 1879 season was Captain Milloy. In May 1879, she was chartered by the Canada Southern and New York Central railroads to run between Lewiston, NY, Niagara and Toronto in connection with trains from Buffalo, NY. In June of that year, the steamer went ashore in the eastern part of Toronto Harbor. Later that same month, the steamer *City of Toronto* collided with the steamer *Rothsay Castle* at Niagara. The *Rothsay* was much damaged. Captain Milloy, master of the *City of Toronto*, was arrested and held responsible for the accident. He was charged with maliciously injuring the *Rothsay Castle*. The damage award was \$550. In July, the *City of Toronto* went ashore on a bar at Niagara. She was released and towed to port to take on fuel and temporarily repaired and with a pump aboard, she went to Ogdensburg, NY to enter a dry dock for repairs. Loss was set at \$4,400. September of the same year, the steamer broke the connecting strap holding the connecting rod to the crank, which disconnected the engine, twisting the piston and knocked the crosshead to pieces. Repaired.

In August 1882, the ownership of the steamer *City of Toronto* was changed to James P. Fortier, Niagara. The steamer was also registered at St. Catharines, Ont. with measures: 207' x 27.5' x 11', 898.09 grt, 512.88 net; and was assigned official number C85414. In September of that year, the Department of Marine and Fisheries cancelled the certificate for the sidewheel steamer *Ci ty of Toronto* to carry passengers. The following day, while docked at her wharf at the foot of Young Street, Toronto, she received an officer of the customs house who removed certain necessary pieces of machinery to prevent her from navigating until she was completely overhauled.

Ownership of the sidewheel steamer *City of Toronto* was changed in 1883, to H. J. Dagget, Oswego, NY with Captain J. P. Forlier as her master.

The steamer *City of Toronto* had her side wheels removed to allow her to enter Muir Brothers shipyard. While in the shipyard, the *City of Toronto* caught fire and was totally destroyed.

Enrollment for the *City of Toronto* was surrendered at St. Catharines, Ont., January 11, 1884 and endorsed "destroyed by fire" in October 1883.

NOTE: The information from "Mill's List", Canadian Ship Registers and the newspaper accounts from the British Whig and other sources at the Maritime History of the Great Lakes database are conflicting. "Mills List" states the Shickluna Brothers rebuilt the *City of Toronto* at St. Catharines, Ont. in 1883 and this was the first rebuild. Canadian Ship Registration supports this. On September 12, 1883 the "British Whig" Kingston states that the *City of Toronto* is making arrangements to get into Muir's Brothers dry dock, Port Dalhousie, Ont. for general rebuild. The customs inspectors had refused her permission to carry passengers in Sept. 1892.

The British Whig reports on September 28, 1883 that the *City of Toronto* had her wheels and paddle house removed so that she could get to Muir Brothers for a rebuild. On October 31, 1883, the *City of Toronto* was destroyed by fire. The November 1, 1883 British Whig report implies that the she was to have been thoroughly rebuilt. Work had not started yet? Why rebuild the vessel by Shickluna in 1883 then rebuild her again later in the year?



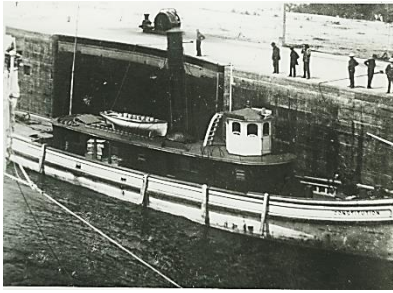
Commodore Perry: Wright & Whittaker, Black Rock (Buffalo), built for the U.S. Revenue Cutter Service, Washington, D.C., a wooden propeller with measures 162.5' x 25' x 10', 412.67 grt, 267 net. Named the *Commodore Perry*, she was powered by two, 1,500 horsepower, locomotive type engines built by Fletcher, Harrison & Co., New York, and designed by Captain Whittaker, Buffalo. She was built for the lake revenue service. Her master for 1865 was Captain Amos P. Foster with Mr. June as chief engineers, followed by Captain Ottinger for the 1866 – 68 seasons with October 16, 2022

Patrick Brennan as chief engineer from 1866 – 1871. In October 1877, the revenue cutter *Commodore Perry*, on her way to remove an obstruction off Point au Pelee, ONT, went ashore at Sturgeon Point, NY, Lake Erie. She was assisted in her release by the tugs *William R. Crowell* (U80531) and *Alfred P. Wright* (U105722) and sustained no material damage. In October 1878, she was dry docked at Mill's & Co., Buffalo for a thorough recalked and underwent general repairs.

In March 1884, the ownership of the *Commodore Perry* was changed to the Buffalo & Lake Erie Excursion Co, Buffalo. She was converted from a sidewheel steamer to a sternwheel steamer and with cabins and other conveniences fitted, she was converted to an excursion steamer. Enrolled at Buffalo in June 1884, she was renamed the excursion steamer *Periwinkle* (U150329) with measurements: 162.5' x 25.0' x 10.0'; 512.67 grt, 267.18 net. Her master for the 1884 – 87 seasons was Captain Albert B. Drake. She was placed on a schedule to run down the Niagara River stopping at Tonawanda in time for the trains to the falls. During winter 1885 layup, the excursion steamer *Periwinkle* was rebuilt at Union Drydock Co., and received a new upper deck and had her engines altered too low-pressure. She is permitted to carry 725 passengers.

In 1887, ownership of the steamer *Periwinkle* was transferred to Lake Erie Excursion Co. Her master for 1889 was Captain William H. Hazen. In September 1889, the sternwheel steamer *Periwinkle* ran aground on Horse-shoe Reef, Niagara River. She was released and then entered Union Dry-dock for a through examine. Her master for the 1890 season was Captain Alex McArthur. At the end of the 1891 season, the excursion steamer *Periwinkle* was laid up in the Erie Basin.

Ownership of the excursion steamer *Periwinkle* was changed to P.O. Day in early 1895 and then changed to Captain George P. Fletcher, Saginaw, MI, in June 1895. She was assigned to run Saginaw, Bay City and Wenona Beach, with her master as Captain Porter Stewart for the 1894 – 95 seasons. In August 1895, she was transferred to Toledo for the excursion business. June 1897, while being fitted out for the Lake Michigan passenger trade, the sternwheel steamer *Periwinkle* caught fire and burned at Gilmore's shipyard, Toledo. Her registration was surrendered and endorsed "burned, total loss". In June 1890, after lying for two years, partly burned and sunk, she was contracted to be raised and rebuilt, but there is no indication this ever happened.



Constitution: John Oades, Clayton NY, built for Foster & Armstrong, Clayton, a wooden propeller towboat. When enrolled at French Creek, NY on April 3, 1865, her measures were recorded as: 91.0' x 18.86' x 7.42'; with tonnage listed as 111.09 grt. She was assigned official number 4380. She was powered by a high-pressure engine, 22" bore x 24" stroke; and has a tubular marine boiler, 6'4" x 15', generating 75 lb. steam. The tug *Constitution* was built for towing on the Chicago River.

In April 1866, her ownership was changed to Robert J. Hackett, Detroit; and then to John Strachan, Detroit, in July of the same year. Her master for the 1867-68 seasons was Captain Joseph Shackett.

In April 1869, ownership of the tug *Constitution* was changed to Northwestern Transportation Co, Detroit.

In April 1870, ownership of the tug *Constitution* was changed to J.M. Lundy et al, Cleveland, OH. In September 1878, the tug *Constitution* collided with the canal boat *Chicago Board of Trade* at the Polk Street Bridge in the South Branch, Chicago River. During winter layup of 1880/81, the tug *Constitution* received general repairs. For the 1881 season, James V. Burke is listed as engineer. Readmeasured at Cleveland, in May 1882, her enrollment measures were changed: 89.5' x 18.66' x 8'; 96 grt, 48 net. Over the next ten years, her masters were Captain Robert W. Kerr, for the 1884 – 89 seasons and Captain John Lundy for the 1891-92 seasons.

In July 1899, ownership of the tug *Constitution* was changed to James Magee, Duluth. Her master was Captain William Holly for the 1899 – 1902 seasons.

In 1914, the enrollment for the tug *Constitution* was surrendered and endorsed "abandoned".

Crusader: In 1864, Willard A. Kitts & Andrew Miller, Oswego, NY, built for A. F. Smith & J. K. Post, also off
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Oswego, a wooden towboat for the Lake Ontario trade. She was enrolled at Oswego, in June 1864, with measures: 70.7' x 17.3' x 9.0'; and a tonnage (old style) of 107.31. The tug *Crusader* was powered by a high-pressure engine, 22" bore x 23" stroke, built by Ames Iron Works. She was readmeasured July 1865: 75.7' x 17.3' x 9.0', 64.89 grt. She was also issued official number 4935.

May 1866, after attempts to free the stranded schooner *Monticello* (US16339) from the Devil's Nose, New York, on Lake Ontario, by three other towboats, the steam tug *Crusader*, under the direction of Captain Seymour Keeler, had her towline hooked to the stranded schooner's mast head and hauled her over on her side and then slewed her off, taking up to ten hours. In December 1868, the Canadian steam barge *Dromedary* (C – 1868) after breaking her shaft, was towed into Kingston, Ont. by the steam tug *Crusader*. In November of the following year, the schooner *Volunteer* (US25669), which went ashore near Port Ontario with a loss of all hands, was towed off the beach by the steam tug *Crusader* and taken to Globe & Macfarlane's dry dock, Oswego, NY, for repairs.

Ownership of the steam tug *Crusader* was changed, in 1872, to John K. Post, Oswego, NY. In November of that year, while up bound on the Oswego River, the steam tug *Crusader* collided with the down bound steam tug *Maria Melvin* (US17032), striking her off the port bow forward of the wheel house punching a large hole in her side so that she started to sink. The *Melvin* was towed into Globes Yard and run aground. Master of the steam tug *Crusader* for the 1873 -78 seasons was Captain Manwarring.

In 1878, the ownership of the steam tug *Crusader* was changed to Thompson Smith, Oswego, NY. Lying to, off Cheboygan, MI, Lake Huron, in October 1878, the steam tug *Crusader* caught fire below the pilot house and burned, coming to rest on Graham shoals, where she burned to her waterline. The captain and crew of two made it to shore safely.

Final enrollment for the steam tug *Crusader* was surrendered at Oswego, NY, June 30, 1879, and endorsed 'papers and tug lost'.



Detroit: On May 7, 1864, the wooden, cross river sidewheel ferry, built by Zadok Pangborn at Detroit for P.W. Campbell, Detroit, was launched. The *Detroit* was the first municipally owned ship recorded in cross river service and cost \$16,000 to build. Enrolled at Detroit on August 19, 1864, her recorded measures were: 80.0' x 20.6' x 8.8'; with a tonnage (old style) of 126 58/95. The ferry *Detroit* ran between Sandwich (Windsor), Ont and Woodward Ave, Detroit, MI. In 1868, she ran between Sandwich (Windsor), Ont and Springwells, (Dearborn) MI.

The ferry *Detroit* was readmeasured in 1871 and her tonnage recorded as 92.68 grt. She was also issued official number 6150 at that time. A minor interest was sold to George King, Detroit in 1871. September 1871, the Canadian ferry steamer *George Jerome* was sunk in a collision with the ferry steamer *Detroit* at the Windsor dock. No lives were lost. She was rebuilt at Detroit dry dock in 1874. In September 1875, the ferry *Detroit*, while moored to her dock on the Detroit River at Sandwich, MI, caught fire. Her mooring lines were cut and she drifted down river, stranding on Fighting Island, where she burned to her water's edge. November 1875, her machinery was salvaged by the tug *Monitor*.

Dictator: Mason & Bidwell, Buffalo, with Charles L. Bidwell as master carpenter, built for A. C. Taylor, Buffalo, a wooden propeller for the passenger, package freight trade. Enrolled at Buffalo, April 12, 1865, her recorded measures were: 133.7' x 25.5' x 11.1'; with a tonnage (old style) of 500 95/100. Her engine is unknown. In September of 1865, the propeller *Dictator* went ashore on Bois Blanc Island, Lake Erie. Released.

In August 1866, the ownership of the propeller *Dictator* was changed to Albert G. Hartshorn, Racine, WI. And at enrollment she was assigned official number 6208. Master of the *Dictator* for the 1867 season was Captain Stoddard.

In April 1868, ownership of the *Dictator* was changed to Belle City Line, Racine. She ran between Buffalo and Racine with connections to the Western Union Railroad. In June of that year, she broke her wheel on Lake Michigan and was towed into Racine for repairs. In July of the following year, she went ashore near Sheboygan, WI, Released. In that same month, the propeller *Dictator* and the scow *Triumph* (US24590) collided on the St. Clair River near Algonac, MI. In September 1871, while moored at Manitou Island on Lake Huron, the *Dictator*, laden with grain, was run into by the propeller *Jay Gould* (US75117) and sank. She was raised and towed from Lake Huron to Buffalo for repairs.

In September 1872, ownership of the *Dictator* was changed to M. M. Drake, Buffalo. He had her converted to a barge, and her enrollment transferred to Buffalo; measures were: 133.7' x 25.5' x 11'; 300.6 grt. In July of the following year, the barge *Dictator*, laden with coal, went aground at the Neebish Rapids, Sault Ste Marie. Released. Master of the barge *Dictator* for the 1874 season was Captain O. V. Harding. November of that year, while light, the barge *Dictator* went ashore in Pigeon Bay, Lake Erie. In June 1876, laden with iron ore and under tow of the propeller *City of Port Huron* (US5392), the barge *Dictator* ran ashore in heavy fog at Point Au Sable, Lake Erie.

In November 1878, ownership of the barge was transferred to M. M. Drake et al, Buffalo. In March 1880, she went ashore on Gulf Island Reef. In November of that same year, the *Dictator*, laden with 21,000 bushels of wheat, under tow of the bulk freighter *Morley* (US91129) was abandoned by her crew, during a gale on Lake Erie, just prior to going down off Long Point, Ont. No lives lost.

Final enrollment for the *Dictator* was surrendered December 03, 1888 and endorsed "vessel lost at sea".



George L. Dunlap: William H. Wolf, Fort Howard (Green Bay), WI, built a wooden sidewheel steamer for the Green Bay Transit Co, Green Bay, WI. Enrolled at Green Bay, November 14, 1864, her measures were: 185.3' x 23.0' x 9.6'; tonnage 338. She was powered by a vertical beam engine 46 ½" x 120", built by Murphy Iron Works, New York. The steamer *George L. Dunlap* was built for the passenger, package freight trade and home ported at Milwaukee, WI. Her chief engineer for the 1864 season was William J. McClure.

The sidewheel steamer *George L. Dunlap* was chartered to the Northwestern Railroad Line in May 1866 and ran between Green Bay, WI and Escanaba, MI. Bound from Chicago to Green Bay in the first month, she broke her shaft in Green Bay. Vessel loss was set at \$1,000. The steamer *George L. Dunlap* was readmeasured at Milwaukee in June 1866: 188.0' x 25.25' x 9.5'; 338.19 grt. Assigned official number 10347. July of that same year, her engine was wrecked due to a loose connecting rod. She was towed to Green Bay and laid up. In April 1868, the steamer *George L. Dunlap* was remodeled, rebuilt and received a new boiler and engine: 46 ½" x 120", 500 hp at 25 rpm. She became the fourth lake ship with heated cabins with steam radiators.

Ownership of the sidewheel steamer *George L. Dunlap* was changed to Engelmann Transportation Co. in 1869.

The sidewheel steamer *George L. Dunlap* was rebuilt and enrollment update with new measurements: 188 x 25.3 x 9.6; 436 grt. In July 1872, the steamer *George L. Dunlap* was laid up for the remainder of the season.

April 1873, ownership of the steamer *George L. Dunlap* was changed to Darvis Cole et al, Detroit. She ran Detroit - Saginaw - Alpena. Her chief engineers for the steamer *George L. Dunlap* were Scott Pratt, 1876; and Joseph R. Blanchette. 1876-77.

Ownership of the steamer *George L. Dunlap* was changed to A. D. Tomlinson, Detroit in April 1877. In June of that year the steamer *George L. Dunlap* was damaged in a collision with the Saginaw Bridge, Saginaw River.

March 1878, ownership of the steamer *George L. Dunlap* was changed to Luther Westover, Bay City, MI. November 1880, while bound from Alpena for Bay City, heavily laden with freight, the steamer *George L. Dunlap* was cut by ice fourteen miles out from her destination. She made dock by throwing most of her cargo overboard. She sank at her dock and never ran again. After not being used for two years, the steamer *George L. Dunlap* was raised and
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it was found that her seams were sprung. Her engine and machinery were recovered.

Final enrollment was surrendered in March 1882, and endorsed as "abandoned"

East: Augustin Cantin, Montreal, built a wooden propeller for J. F. D. Black & I. Bonner. Enrolled at Montreal in May 1864, her measures were: 137.8' x 26.2' x 11.8'; tonnage - 218.9-unit tons. She was powered by the engine from the propeller *Oshawa* (1854). The propeller *East* was built for the passenger, package freight trade, Montreal - Upper Lakes. She was launched as *Cantin* but renamed before her first voyage and was valued at \$24,000. In August of 1864, she was towed into Kingston by a schooner after breaking her screw on Lake Ontario.

April 1865, her ownership was changed to J. McLennan & Company, Montreal, and then chartered to G. Chaffey & Brothers, Kingston, Ont. to operate between Montreal and Chicago. In June 1867, the propeller *East* damaged two pairs of canal gates on the Welland Canal. August of the same year, the propeller *Congress* (US4392), bound for Ogdensburg, NY, collided with the propeller *East* off Port Dalhousie, Lake Ontario. The *East* was repaired at Mr. Andrews shipyard in Kingston. Loss set at \$300. In May 1868, the propeller *East* arrived at Montreal from Chicago, laden with 12,800 bushels of corn, 500 barrels of flour and 104 bundles of broom corn.

In August 1868, ownership of the propeller *East* was changed to the Montreal Transportation Company. In November, while attempting to enter Port Stanley, Ont., during a gale on Lake Erie, the propeller *East* struck the bar and drifted off to the east of the pier. The captain, chose a spot with a soft and sandy bottom, and scuttled the vessel. She lay quiet in five feet of water. She had 3,000 bushels of dry wheat lightered to the schooner *S. Robinson* (U22347), and with steam pumps at work, was released and taken into Detroit for repairs. She was re-measured and tonnage changed to 347 grt and valued at \$15,000. Her master for the 1869 season was Captain Hayes. In July of that year, she broke her shaft while bound up Lake Erie. In December 1870, while bound up the Detroit River from Montreal, the propeller *East* broke two of her buckets. Repaired.

Ownership of the propeller *East* was transferred to the Dominion Transportation Co. in 1872. In July, she ran on a shoal in the middle of the St. Lawrence River channel, opposite Gananoque, Ont. She was lightered into the sloop *Gull* (C51684),

and released later that evening. The vessel was leaking, but damage is light.

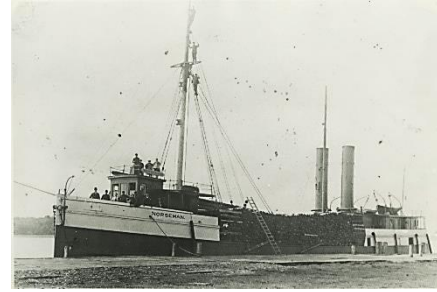
Ownership of the propeller *East* was changed to Craig & Co., Montreal in 1873. Her tonnage was changed to 319 grt; and her value changed to \$16,000.

At auction in February 1874, ownership of the propeller *East* was changed to Captain Waite, Bowmanville, Ont., for \$11,800. August 1875, bound up the St. Lawrence River, the propeller *East* fouled a towline and sank the tug *Joe Mac* (US13301) also bound up towing the schooner *Lyman Casey* (US14830) off Cole's Light. The *East* failed to stop and assist the crew of the tug. The owners, Seymour & Co., of the tug *Joe Mac* obtained a judgment against the owners of the *East* during the winter of 1875-76, but were not able to seize the vessel as the judgment is only affected in American waters. The propeller *East* was seized on Sunday November 7th, 1876. The steam tug *Seymour* (US85392), with a United States marshal and posse on board, lay in wait on the St. Lawrence River for the *East*, which about mid-day went up by the Crossover light channel in American waters. The *Seymour* ran out, and made the capture in fine style, and in the evening steamed up to Averill's wharf, Ogdensburg, NY, where the *EAST* now lies. It was stated that the seizure was an act of piracy, and the case taken into the United States District Court to secure the release of the vessel. It was decided by Judge Wallace, who holds that the seizure was legal, and the costs must follow the vessel.

Owned by the Seymour Brothers, Ogdensburg, the propeller *East* was converted into a coal barge and registered as *Kent* (US47123) with measures: 318.36 grt, 302.35 net. In October 1879, the barge *Kent*, laden with poles and under tow by the tug *William Gardner* (US80279), went ashore on Galloo Shoals, NY, St. Lawrence River.

Listed in Directory of the Marine Interests of the Great Lakes – 1884, as *Kent*, barge, 318 grt, owned by Ogdensburg Coal & Tow Company. Listed "Merchant Vessel List, U.S. – 1895 as barge *Kent*, US47123.

Final disposition unknown.



Enterprise: Louis Shickluna, St. Catharines, Ont., built a wooden propeller for the Welland Railway, also of St. recorded as: 177.2' x 28.4' x 12.2'; tonnage 914.92 grt, 586.5 net. She was powered by a two-cylinder Steeple Compound engine, 20' + 50" bore x 30" stroke, 785 horse power, built by Morrison Iron Works, Toronto, Ont. in 1864. She was equipped with two condensing boilers: 26' x 8' and had two propellers (wheels). The *Enterprise* was built for the bulk freight trade and usually used Montreal – Lake Ontario.

October 1865, bound Port Dalhousie, Ont. for Oswego, NY, the propeller *Enterprise* was battered by heavy seas during a gale on Lake Ontario, that broke her upper gangway as well as lights and her wheelhouse and she was forced to return to Port Dalhousie. During the 1866 season, she ran Oswego to Welland in the grain trade. She was inspected in 1868 and her tonnage recorded as 564 grt, 494 net. Her master for the 1868 – 72 seasons was Captain P. McGrath, with J. E. Bell as engineer in 1871 & 72. In November 1871, the *Enterprise* went ashore at South Bay, Lake Ontario. In September 1872, the *Enterprise* was damaged by fire off Rochester, NY. Due to the recession, the *Enterprise* was laid up between 1876 to 1880.

Ownership of the propeller *Enterprise* was changed to E. Winton, St. Catharines in 1877.

Ownership of the propeller *Enterprise* was changed to Muir Brothers, Port Dalhousie, Ont. in 1880. They rebuilt her at Port Dalhousie, Ont. as a steambarge. She was enrolled and issued official number C83143; with measures: 177.2 x 28.4 x 12.2; 914.92 gross / 586.53 net tons. She was powered by a low-pressure engine; 50' x 34"; 200hp, built by A. Gartshonne, Dundas, Ont. in 1864. The steambarge *Enterprise* had a capacity for 30,000 bushels grain. Bryce Muir, Grantham, Ont. was listed as owner.

April 1882, ownership of the steambarge *Enterprise* was changed to James Sutherland & Wesley McCausland, Owen Sound, Ont. for \$81,000. She would be engaged in the Chicago trade. June 1883, the steambarge *Enterprise* ran into the west end of Swift's wharf while entering the port of Kingston,

Ont. Damage was set at \$400. In June of 1884, the steambarge, laden with a cargo of wheat, sprang a leak in the Welland Canal. Cargo damage was set at \$900.

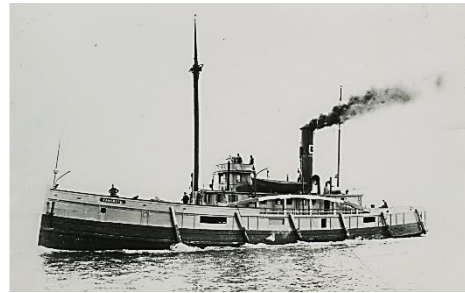
Ownership of the steambarge *Enterprise* was changed to D. R. Dobbie, Owen Sound, Ont. in 1886. In 1887, she ran Duluth to Kingston in the grain trade. In 1889, she was converted to a bulk freighter at Port Dalhousie, lengthened and rebuilt. Enrollment tonnage changed to: 620 grt, 400 net. In May 1890, the *Enterprise* went ashore near Garden Island, Ont., Lake Ontario. Released. Late in 1890, at Port Dalhousie, Ont., the *Enterprise* was cut down from a bulk freighter. and converted into a steambarge for the bulk freight grain trade and rebuilt: 177.0 x 28.0, 620 grt. Bound Fort Williams to Kingston, Ont. in September 1894, the steambarge *Enterprise*, laden with 27,000-bushel wheat, during a SE gale on Lake Michigan, struck bottom, broke in two and sank off North Point, north side of Thunder Bay, MI. No lives lost. Loss set at \$34,000.

In 1895, the hull of the steambarge *Enterprise* was purchase by F. W. Gilchrist, Alpena, MI and rebuilt by James Davidson, Bay City, MI: 172.0 x 32.0 x 12.5; 660.01 grt, 501.81 net, and registered as *Norseman* (130689) with home port at Port Huron. She was re-engine with a steeple compound, 22", 50" bore x 30" stroke, 785 horse power built by Morrison Iron Works, Toronto, Ont. and received two scotch boilers 9' x 12', 97 pounds steam by J. Hunter & Co, Toronto, Ont. in 1885. The Canadian enrollment was surrendered April 13, 1895 and endorsed "sold foreign".

In 1902, ownership of the steambarge *Norseman* was changed to N. & A. E. Dymont, Barrie, Ont. and she was registered Canadian at Goderich, Ont. under the same name and given her old official # 83143. In September 1910, the steambarge *Enterprise* was served papers by a U.S. Marshal for damages to the U.S. barge *Donaldson* when the captain of the *Enterprise*, while entering the Niagara River, swung his vessel westward of the channel running the barge aground on a rock bottom. Papers were for an action valued at \$1,200 damages to the barge.

Ownership of the steambarge *Enterprise* was changed to Edward C. Kelsey, Tonawanda, NY in October 1910. In 1911, the enrollment for the steambarge *Norseman* was surrendered and endorsed "abandoned". In 1912, the steambarge was scuttled, due to age, in Collins Bay, Lake Ontario. In 1917, the remains of the steambarge *Norseman* were raised and then broken up.

October 16, 2022



Favorite: William H. Wolf, Fort Howard (Green Bay), WI, built a wooden propeller for the Michigan Transportation Co., Chicago, to be used in the package freight trade and as a tow boat. She was enrolled at Chicago in July 1864 and her measures recorded as: 143.25' x 28.16' x 8.58'; tonnage (old style) 326 32/95. She was powered by two, high pressure engines, 24.5" bore x 22" stroke, builder unknown. She was equipped with a firebox boiler 19' x 18'8". In April 1865, the *Favorite* was readmeasured at Chicago: 139.75' x 28.58' x 8.42'; 409.5 grt, 351.0 net. She was issued official number 9201. Master of the propeller *Favorite* was Captain Lew Horn during the 1867 season and Henry Odette served as engineer during the 1868 season.

In 1869, ownership of the propeller *Favorite* was changed to J. E. Stevens, St. Joseph, MI. She would run: Chicago – St. Joseph & Muskegon, MI. The propeller *Favorite* experienced a number of problems in 1869: April, she went aground at St. Joseph's, MI.; June she broke her wheel at Chicago; August, she was damaged by a collision on the Detroit River; September, she broke her machinery at St. Clair Flats, she also broke her wheel at Benton Harbor, MI.

December 1870, the ownership of the *Favorite* was changed to C. Kirby & Co., Menominee, MI. He had her cut down to a rafting & wrecking tug and she ran Chicago, Milwaukee & Menominee. During winter layup, her cabins were removed and she was repaired. She ran, in 1871, Chicago – East Shore ports towing the bark *Sonora* (22364) & schooner barge *Ellen Williams* (7308) both owned by the Northwest Railroad Co. She collided with the Canadian steamer *Dominion* (C – 1868) on the Detroit River in March and broke her machinery at Traverse Bay, MI in September.

Late in 1871, ownership of the *Favorite* was changed to I. W. Stephenson, et al, Menominee, MI. In August 1872, the propeller *Favorite* collided with the schooner *Josephine Lawrence* (12976) on Lake Michigan. In May 1874, she broke her wheel on Lake Michigan, and in July of that year she was damaged

by fire on the Detroit River, and in November she arrived at Chicago, leaking badly. In August 1877, the schooner *Grace A. Shannon* collided with the propeller *Favorite* off Racine, WI before sinking.

Ownership of the propeller *Favorite* was changed in March 1878 to Kirby-Carpenter, et al, Menominee. For the next ten years, she towed schooner barges between Chicago, Menominee and other ports on Lake Michigan. Her master for the 1887 season was Captain Alfred C. Smith.

Ownership of the propeller *Favorite* was changed in 1888 to Marquette, MI and with the railroad arriving at Muskegon, the vessel was overhauled for passenger and freight traffic between Muskegon and Milwaukee.

In 1889, her ownership was changed to Pillow et al, Muskegon and the *Favorite* was converted to a single screw. In 1889-1890 she was rebuilt by Milwaukee Shipyard Co, as a wrecking tug. In 1890 the tug enrollment was changed to Detroit. Her master in 1890 was Captain James E. Brown.

In 1891, ownership of the *Favorite* was changed to Parker & Millen Co., Detroit, managers for Swain Wrecking Co. Her master in 1892 - 1893 was Captain James E. Brown. In September 1892, she released the freighter *Neshota* from Keweenaw Point. Her master of the *Favorite* was Captain L. Sinclair, 1899-1906 with George L. Simmons 1898-1901 as chief engineer.

In February 1902, she was enrolled at Duluth, MN and listed as owned by Great Lakes Towing Co., Cleveland, OH. In January 1907, the propeller *Favorite* caught fire at her winter berth and burned to a total loss, sinking at the lay-up dock, St. Ignace, MI, Lake Huron.

March 26, 1908, her enrollment documents were surrendered at Duluth and endorsed as "Total Loss". Her machinery was salvaged and her engine installed in the tug *Gary* in 1908.

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

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 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 forecabin 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.)