

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 – June 2022

**July 9, 2022 Road Trip,  
Tall Ships, Cleveland.**

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## June

Saturday, June 18, 2022, we tried again with a hybrid meeting and had four at the Westerville Public Library and eight on Zoom. With the members spread all over the state and a few in other parts of the country, this may be the new norm. Before the meeting I surveyed the membership (30) about whether the members would be in-person, Zoom, or not participating. Received responses: five in-person and 12 Zoom, the rest, all but one, responded with a no.

After some discussion at the meeting between all members present, we decided to continue the survey a week before each meeting and if we had 3 or less in-person attendees, we would hold a zoom only meeting, if more, a hybrid. We also had a short discussion about a quarterly or twice a year in-person luncheon. I will investigate that option.

The July club meeting will be a road trip on Saturday, July 9<sup>th</sup>, to the "Tall Ships Festival" on the lakefront at Cleveland. We have 7 scheduled to attend with 4 additional possibilities. Bob Mains will be there on Thursday to survey the festival site. Since those attending will be coming from different parts of the state, he will communicate the gathering location on Friday, July 8<sup>th</sup>. Check your email accounts before hitting the road.

I am also looking into holding a zoom only session in July & August for the viewing of the Wellington Trust presentations "Shipwrecks in The Thames" and the earlier one on the ship models at Greenwich.

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 or are lonely and need human contact. Till next month.

Your editor.

## Welcome

### Announcement

Paul Fontenoy, editor of the Nautical Research Journal, sent a note, asking that I inform the membership that he (and the Nautical Research Guild) is looking for book reviewers. Paul needs additional book reviewers that he could send new publications to be reviewed. The reviewer would submit a written review of the book that would be included in a future issue of the NRJ. Your compensation would be the book after you submit your review. If interested, Paul asks that you contact him at [nrjeditor@gmail.com](mailto:nrjeditor@gmail.com), indicating the areas and eras in which you are interested in. (i.e.: fishing schooners, late 1800's)

### Library Display

We have responded to a request from the Sunbury Community Library for a repeat exhibition of our ship models.

Our initial display in February contained the work by Alan Phelps of his R/C craft plus Bob Mains model of a Viking ship.



The month (June) the library was interested in a display of our models to support their theme "Oceans of Possibilities" and requested that the models to be tall ships.



On display for the first half of June were the 1775 topsail schooner *Hannah* and a working model of a Chesapeake Bay skipjack.



The second half of June we displayed a model of the 1865 Hudson River Sloop *Victorine* and bob Mains model of the brigantine *Swift*.

Thank you, Alan for coordinating this display. If you have a local library that is open to a display of ship models, contact Alan at [arphelps44@gmail.com](mailto:arphelps44@gmail.com).

If you have the chance, stop by the library, before the end of June, at 44 Burrer Drive, Sunbury, Ohio, just south of State Route 37, East of I-71, and north of Columbus.

### Presentation:

The June meeting topic was a sharing of the photos, taken by Lee Kimmins, at the 45<sup>th</sup> Midwestern Model Ship and Boat Competition, held at the Wisconsin Maritime Museum, Manitowoc, WI, May 13-15, 2022. Rather than share the 100+ photos taken, the photos below are of those that earned "Best Of..." awards.

The entry categories were:

- Cat. I Scratch-Built Models
  - Class A: models at  $3/32"$  = 1 foot or smaller
  - Class B: models larger than  $3/32"$  = 1'
- Cat. II Kit Models
  - Class A: Wood of any scale
  - Class B: Plastic any scale
- Cat. III Operational (R/C)
- Cat. IV Dioramas
- Cat. V Nautical Craft

Within each Category/Class, the modeler is designated as a:

- Novice
- Intermediate
- Advanced

Cat. I, Scratch-Built, Class A;



*HMS Sussex*, built by Gus Agustin, Chicago IL, Advanced, Gold award + Best Miniatures Award

Cat. I, Scratch-Built, Class B



*Wanda III*, Built by R. A. Deery, Mono, Ont. Advanced, Gold award + Modelers Choice + Best Paint Finish award



*Bosleys Rowboat*, built by Paul Wilson, Hessel, MI, Advanced, Gold award + Best Great Lakes award

Cat. II, Wood Kit Built, Class A



*Lowell Grand Banks Dory*, built by John Pocius, Hillsboro, OR, Advanced, Gold award & Best of Show

Cat. II, Plastic Kit Built, Class B



*Antarctica Observation* by Elizabeth Simon, Jackson, WI, Novice – Gold & Steve Wheeler Best Novice Award

Cat. III, Operational



*Morning Star* – by Tom Swille, Green Bay, WI, - Bronze & People's Choice Award

### Cat. V, Nautical Craft



Pelican, by R. Buckwalter, Lakewood, CO, Advanced, Gold Award & Best Maritime Carving Award

If you are interested in reviewing all the ship models who earned awards, contact me, and I can send you the PowerPoint file.

### **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 finishing prior work, restoration, to new builds. Thanks to all who submitted their progress reports and photos.

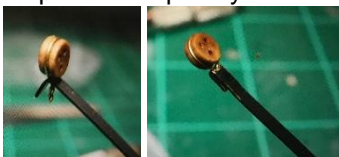
#### **Bluenose - Restoration**

Cliff Mitchell

Fabrication of the chain plates was very challenging, especially their installation. Unlike Bluejacket which provides them, I had to make them from the 1/16 inch brass strips. I want to give credit to the Suburban Ship Modeler whose build I have been following. His photos detailed everything in minute steps. Strips were mounted in the drill press, holes were drilled and cut to proper length. At one end where a hole was drilled, the strip was bent.

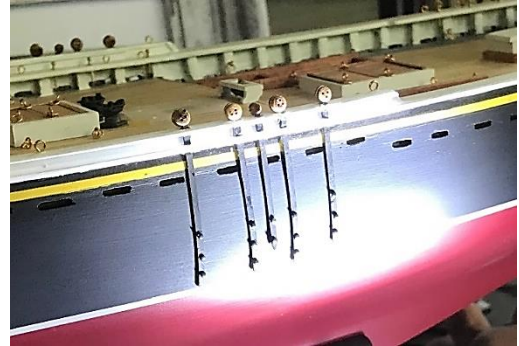


A thin brass wire was wrapped around a deadeye and the ends twisted and then inserted into the hole. CA glue was applied around the wire and the brass strip was completely bent securing the deadeye.



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Installation involved cutting slits in the main rail and the monkey rail. In some cases the holes had to be enlarged to accommodate the end of the brass strip that was folded over. There were places where the rails had split and had to be repaired. I waited after installation to paint the strips. Pins were inserted to secure the chain plates.



*Bluenose Dories:* Using templates, frames were cut out and mounted to the floor of the 4 dories. The next step led me to abandon these as the frames split upon applying the planking. I tried cutting out thicker wood as much as 3/32 thick with no luck. So I switched my efforts for now and began working on the bowsprit which I will update you next month.



#### **Red Jacket**

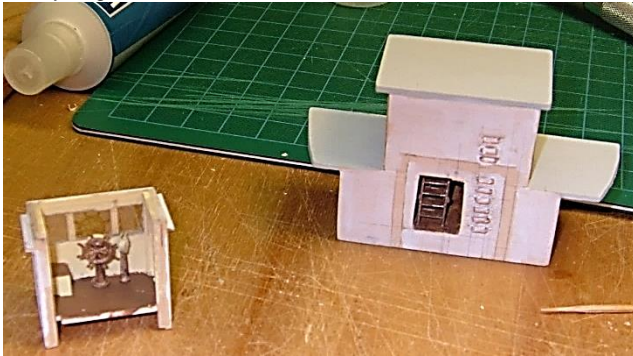
Stan Ross



Main & Mizzen mast stern rigging complete, braces lifts etc.,

## Margaret Olwill

Bill Nyberg



Pilot house almost finished. - Stanchions and railings on side decks and to flying bridge to be added.



## Other Notes: "Stuff", Tugs & Things

### Nautical Terms

**Glass:** A marine barometer. Older barometers used mercury-filled glass tubes to measure and indicate barometric pressure. A marine sandglass.

**Go-fast-boat:** A small, fast boat designed with a long narrow platform and a planning hull to enable it to reach high speeds. Colloquially equivalent to a "rum-runner" or a "cigarette boat".

**Going about:** Changing from one tack to another by going through the wind.

**Gondola:** A traditional, flat-bottomed Venetian rowing boat.

**Gooseneck:** A fitting that attaches a boom to a mast yet allows it to move freely.

**Goosewinged:** (of a fore-and-aft-rigged vessel) Sailing directly away from the wind, with the sails set on opposite sides of the vessel (e.g., with the mainsail to port and the jib to starboard) so as to maximize the amount of canvas exposed to the wind.

**Grapeshot** Small balls of lead fired from a cannon, analogous to shotgun shot but on a larger scale; similar to canister shot but with larger individual shot. Intended specifically to injure personnel and damage rigging more than to cause structural damage.

**Grave:** To clean a ship's bottom.

**Graving Dock:** A narrow basin, usually made of earthen berms and concrete, closed by gates or by a

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caisson into which a vessel may be floated and the water pumped out, leaving the vessel supported on blocks; the classic form of drydock.

**Green-to-green:** A passage of two vessels moving in the opposite direction on their starboard sides, so called because the green navigation light on one of the vessels faces the green light on the other vessel.

**Gripe:** A temporary eye in a line (rope).

**Gripping:** The tendency of a ship to turn into the wind despite the efforts of the helmsman, usually due to either the design of a ship or more commonly the incorrect distribution of weight on and within the hull.

## Tugs: Great Lakes

### Andy



Built at Benton Harbor, MI, by E. W. Heath for the Graham & Norton Transportation Co. in 1896. She had a wooden hull, powered by a HPNC engine rated at 270 hp. Her measures were: 68.8' x 17.2' x 8.6' with a tonnage of 53 grt. On December 28, 1917, the tug *Andy* was crushed by ice and sank in the Sanitary District Canal, Lockport, IL. No lives lost.

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

### Artic



The wooden tug *Artic* was built in 1881 by Rand & Burger, Manitowoc, WI, for the Goodrich Transit Co. as a tug and ice breaker. Her measures were: 64.5' x 18.1' x 9.1' with a tonnage of 56 grt. Powered by a high-pressure engine: 16 1/8" x 18", she was rated at 285 hp. She was lengthened at Burger & Burger shipyard in 1898 to 76.5" length. In 1930, the *Arctic* was abandoned and dismantled at Manitowoc.

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

## **Presentation Schedule:**

### **2022**

Jan 15 — Canceled  
Feb 19 — Planking a deck  
Mar 19 — Deck house from scratch  
Apr 16 — Mast and Yard Making  
May 21 — Jigs & Fixtures — discussion  
Jun 18 — Midwestern Ship Model Comp.  
Jul 9 — Tall Ships: Cleveland  
Aug 20 — Cannons and Accessories  
Sep 17 — History: Marietta, ship building  
Oct 15 — Finishing: natural & paint  
Nov 19 — Rigging: Standing  
Dec 17 — Rigging: Running

## **Events & Dates to Note:**

### **2022 Tentative Schedule**

**Columbus Woodworking Show**  
January 21-23, 2022

**IPMS-Columbus**  
**BLIZZCON 2022**  
Saturday, February 19, 2022

**Miami Valley Woodcarving Show**  
March 6 & 7, 2022

**45<sup>th</sup> Midwestern Model & Boat Show,**  
Wisconsin Maritime Museum, Manitowoc, WI  
**May 13-15, 2022**

**Tall Ships - Cleveland**  
Cleveland lake front.  
**July 7 – 10, 2022**

**Lakeside Antique & Classic Wooden Boat**  
Lakeside Hotel, Lakeside, OH  
**July 17, 2022**

**Tall Ships - Erie**  
Erie, PA lake front.  
**August 25-28, 2022**

**NRG Conference**  
Oct. 2022

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## **Cargo Hold**

[www.shipwrightsofohio.com/cargo\\_hold/](http://www.shipwrightsofohio.com/cargo_hold/)

Here you will find how to order Challenge Coins, as shown above, and 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

In 1861, at the opening of navigation, there were in commission on the northern lakes (the Great Lakes) 1,452 vessels: 147 sidewheel steamers, 203 propellers, 62 barks, 36 brigs, 989 schooners, and 15 sloops. The total tonnage (Old Style) was 383,309 tons; total valuation \$11,862,450.

There were 12 wooden steamers built in 1861 with a tonnage (old style) over 100 tons. In that same year, the total loss of steam and sail vessels was valued at \$867,347, with a loss of 116 lives.

The following year, 1862, there were 29 wooden steamers built with a tonnage over 100 tons. In August of that year, the first iron merchant ship manufactured & built on Great Lakes was enrolled as the *Merchant*. She was also the first cargo boat made to burn coal. There were 300 ship disasters during the 1862 season, with a total loss on hull and cargo amounting to \$1,162,173, and 154 lives lost.

Again in 1863, there were 29 wooden steamers built with a tonnage over 100 tons. The total number of vessels employed on the lakes in 1863 totaled 1,770: 135 sidewheel steamers, 258 propellers & tugs, 195 barks, 80 brigs, 1,040 schooners, and 62 sloops and barges. There were 310 ship disasters during the 1863 season, with a total loss on hull and cargo amounting to \$2,600,517 and 123 lives lost.

In 1864, the Civil War came to Lake Erie with the Johnson Island Conspiracy and the capture of the steamers *Philo Parsons* and the *Island Queen* by Confederates in a failed attempt to liberate 3,200 Confederate officers imprisoned on Johnson Island in Sandusky Bay. There were 46 wooden steamers, with a tonnage over 100 tons, built that year. 1864 also saw improvements in lake freight rates over the previous season, with an average ruling of 9 cents on wheat, and the highest rates on that cereal at 18 cents. The gradual improvements in freights occasioned the construction of quite a number of lake carriers. In 1864 there were 599 marine casualties involving a loss on hull and cargo amounting to \$654,100. Of that number, eight were caused by explosion, seven capsized, 123 went ashore, 151 sprung a leak, 4 suffered by fire, 202 damaged in hull and outfit, nine foundered, 47 collided and 45 were scrapped.

1865 saw the end to the "War between the States" and the return of those who so valiantly fought. There were also 421 disasters during the 1865 season. With freight rulings at good figures throughout the season, but with limited new tonnage. There were only 12 wooden steamers built with a tonnage over 100 tons.

In the industrial development of the country from 1861 to 1865 no phase is more remarkable than the growth and prosperity of the canals and railroads. During four years of war there was a steady increase in traffic on these lines, and a surprisingly widespread public interest in transportation questions. At the close of the year 1861 the American Railroad Journal declared, "The year has on the whole been a very favorable one for the Northern railroads. Their earnings for the present season greatly exceeded those of 1860. Their traffics have immensely increased to supply the foreign demand for breadstuffs. It is consequently a somewhat remarkable fact that in a period of civil war the value of railroad property should have improved while that of all other kinds has greatly deteriorated. In the middle of the war, reviewing the year 1863, the same journal said, "The railway system has greatly flourished the past year. The companies have got out of debt or largely diminished their indebtedness, their earnings are increasing, their dividends have become regular and inviting. The past year has been, therefore, the most prosperous ever known to American railways."

Concrete illustrations of this growth are to be seen in the rapid increase in freight cars and in tonnage. The Pennsylvania Railroad, the Pittsburgh, Fort Wayne and Chicago, the Erie, the New York Central, the Cleveland and Toledo, the Michigan Southern, the Chicago, Burlington and Quincy, the Illinois Central, and the Cleveland, Columbus and Cincinnati doubled their number of freight cars. The growth in freight carried was proportionate in almost every case.

The movement of the enormous harvests was one cause of this usual activity, especially to provide for exportation to Great Britain, where the harvests were poor in each of the successive years, 1860, 1861, and 1862. Up to 1860 the largest annual shipment of grain from Chicago had been 31,000,000 bushels, but in each year of the war Chicago shipped on an average 50,000,000 bushels. There were large shipments also from Milwaukee and the other lake ports, and from Cincinnati. In 1863 Chicago sent eastward 95,000,000 pounds of provisions and cut

meats, as against a previous maximum of 13,000,000 pounds. Petroleum was listed as a Pennsylvania output for the first time in 1859, and rose to 128,000,000 gallons by the year 1862. Her anthracite coal mines produced 10,000,000 tons in 1864, as against 8,000,000 tons in 1860. The mines of all the States raised their production of pig-iron from 800,000 tons in 1860 to over 1,000,000 tons in 1864, and this rapid increase of fuel and iron meant a corresponding swelling of manufacturing. To distribute these growing products of the farms, the mines, and the factories, was the task of the railroads and water routes. In addition, all lines had to respond to new demands for transportation of soldiers and their supplies.

Of the various roads, those in Pennsylvania prospered with the growing output of iron, coal, and petroleum which they carried; those in the West and Northwest, built in the previous decade far in advance of immediate needs, were now for the first time used to their utmost capacity in carrying the crops, which, but for them, could not easily have reached a market after the closing of the Mississippi; the North and South lines, such as the Illinois Central and the Cleveland, Columbus and Cincinnati, which had the previous record of never making money, thrived on army business. The most prominent, if not the most important lines, were the three East and West trunk lines, the Pennsylvania, the Erie, and the New York Central, which were continued westward by the Pittsburgh, Fort Wayne and Chicago, the Michigan Central, and the five lines later consolidated into the Lake Shore and Michigan Southern. Farther north the Grand Trunk reached the lakes in Canada, while to the south was the Baltimore and Ohio, largely within the war zone.

The various meat products sent eastward from Chicago commonly went over the railroads, especially the Pittsburgh, Fort Wayne and Chicago, but in the middle of the war 99 per cent of the wheat, 95 per cent of the corn and 81 per cent of the flour from Chicago took the lake route to Buffalo and other eastern lake ports, to be forwarded thence by rail and canal to New York and Boston. These lake routes secured much more traffic than the competing land routes. In 1862, 2,500 more vessels entered and cleared the port of Buffalo than in any previous year. Although the Erie and the New York Central had their own boats plying the lakes and supplying their steam lines at Buffalo and other lake terminal points, the Erie Canal took twice as much of this lake traffic as

the two great railroads together. The boats on its waters rose from 3,000 in 1860 to 6,000 in 1863.

The resulting activity in boat building was very great. Not since 1847, the year of heavy exportations of grain to famine-stricken Ireland, were so many vessels built on these canals of the Empire State as in 1862. In this year vessel building in every lake port also was greater than in any previous year. The commerce of the western rivers, where government transport service filled the gap made by the disappearance of the old southern trade, was comparable to that of the lakes. In the last part of the war more vessels were built on these rivers than for many years.

The most characteristic and important feature of transportation during the war, the one that accomplished most toward solving practical transportation problems, — the gradual improvement of the facilities of the existing roads. The consolidation of small roads into larger roads was widespread. The Erie gained control of certain small lines in northwestern New York and changed its northern terminus from Dunkirk to Buffalo. The Pennsylvania took over the Philadelphia and Erie, the Oil Creek Road, both leading to the oil fields, the Pittsburgh, Fort Wayne and Chicago, and the Cleveland and Pittsburgh. The four lines forming the Lake Shore route from Buffalo to Toledo, partly under the extending influence of the New York Central, united and eventually included in the agreement the Cleveland, Columbus and Cincinnati. In Canada the Grand Trunk and the Great Western were united.

An obstacle to all traffic was the different gauges on the railroads in different parts of the country. On the New York and New England roads the rails were •four feet and eight- and one-half inches apart; in Ohio, the West, and south of Philadelphia, four feet eight- and one-half inches, and •four feet and ten inches; in Canada and in some parts of Maine, •five feet and six inches; and in some special cases in the West •six feet. In no direction could cars run long distances without changes and delays. The Hudson River and New York Central cars passed from New York to Buffalo without change, but could not run to Chicago over the Lake Shore route without changes on the five lines west from Buffalo; they could not go through Canada and strike the Michigan Central without similar changes, and if they proceeded over the Ohio roads to Cincinnati there was a change; the Pennsylvania could not send its cars west from Pittsburgh without changes; there were

changes between New York and Washington; Grand Trunk trains, suited to the Canadian gauge, could not reach Boston from Portland, nor Chicago from Detroit, without the delay. In the opening of the war, when government officials made requisitions on the roads for cars, the response could not be immediate, and after the cars were once delivered there was the delay of fitting them to the Southern tracks. In many cases there was no possible adjustment and the contents of trains had to be transferred to other cars. But although no standard gauge was adopted, there was progress in doing away with the evil. The Atlantic and Great Western established a uniform broad gauge from New York to St. Louis, an unusually long distance for one gauge. The completion of the new road between Steubenville and Pittsburg made another uniform gauge between two such distant points as Philadelphia and Cincinnati. The gauge of the Oil Creek Road was made similar to that of the Pennsylvania. The Atlantic and Great Western entered Cleveland from Leavittsburg by a third rail on the Cleveland and Mahoning, and Cincinnati in the same way over the Cincinnati, Hamilton and Dayton. Some roads, like the Pennsylvania for a part of its western traffic, availed themselves of a new patent wheel, extra wide, designed to accommodate different gauges, while others, like the New York Central in its eagerness to reach Cincinnati, built cars of an adjustable axle, cars of a "compromise gauge." There were few roads which did not have to deal in some way with this universal problem. It is not, then, surprising that the railroad traffic on the Lake Shore route between Chicago and Buffalo was so much lighter than that on the Pittsburg, Fort Wayne and Chicago, and on the lake steamers.

Another obstacle quite as the existence of different gauges was the absence of bridges over the wide rivers; "the chief miseries of travelling are changing cars and crossing ferries," said a contemporary. But desirable as were improvements in this direction, and anxious as the railroads were to make them, there was strong opposition from the established ferry companies and from rival commercial cities. The ferry companies successfully blocked all Mississippi River bridge projects at St. Louis, although there was an old charter for such a bridge, and the whole city united in fighting a new bridge over the river farther north which would be to the advantage of Chicago. Chicago won and the bridge, the second over the Mississippi, was built in 1864 by the Chicago and Northwestern Railroad at Clinton, Iowa. A suspension bridge over the Ohio at

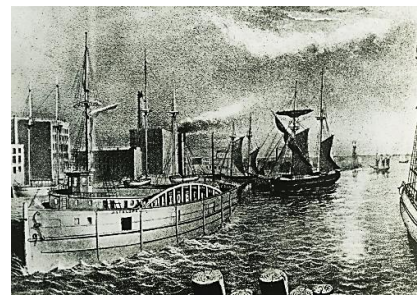
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Cincinnati was begun in 1864. The same river was bridged at Steubenville, thus connecting Pittsburg and Philadelphia with Columbus. A new bridge was erected over the Monongahela at Pittsburg. Most of these great new structures were of iron, and many smaller iron bridges were appearing throughout the country.

The building of new grain elevators was extensive. Chicago and Buffalo were the great centers of grain elevators. Nothing better illustrates the growth of lake commerce in grain than the erection in Buffalo of nine new elevators during the war, doubling the capacity of the elevators of that city in four years.

Thus, throughout the war Northern transportation lines enjoyed remarkable growth and prosperity. Their traffic was extraordinarily heavy, while numerous improvements were made in equipment and in methods of operation on the existing roads, though only a few roads were built in contrast to the great building activity of the preceding decade. It was an era of great interest in transportation questions, of keen competition between rival commercial cities to secure new routes. Far from checking their development, the war undoubtedly worked to the advantage of canals, railroads and lake transportation. (Article by EMERSON D. FITE.)

## 1861



**Antelope:** Built at Newport, MI, now Marine City, by Joseph L. Wolverton, and believed to have been originally laid down as a sidewheel steamer, but completed as a wooden propeller. Her first enrollment at Detroit, MI, in August of that year, her measures were recorded as 186.0' x 31.0' x 11.0', with a tonnage (old style) of 600 83/95. She was powered by a low-pressure engine, 50" bore X 40" stroke, built by C. Kellogg & Co., Detroit, MI and rated at 600 HP with two = 9.5' diameter Philadelphia wheels (propellers). Her original owner was Eber W. Owens, St. Clair, MI and was intended to run Buffalo –

Chicago. On August 22<sup>nd</sup>, her maiden voyage, Detroit to Chicago and back to Buffalo with a cargo of 19,400 bushels wheat and 450 barrels of flour. Her master for the 1861-64 seasons was Captain Thomas Butlin, with the following ships officers: First Mate, John Robinson; Second Mate, Mr. Trambull; First Engineer, William Fitch; Second Engineer, William Grace; Clerk, Eber Owen. The propeller *Antelope* was readmeasured in 1864: 201.6' x 31.7' x 12', 797 grt; issued official number 571.

In August 1866, ownership of the *Antelope* was changed to Albert G. Shonn, Racine, WI. The following month, she collided with the propeller *Omar Pasha* in the St. Clair River. November 1867, while unloading 17,000 bushels of wheat and 600 barrels flour at Reed's Elevator, Buffalo, the *Antelope* caught fire and burned to water's edge. The fire had originated near her boilers.

August 1868, Ballentine & Crawford purchased the burned-out hull, raised and towed her to Clark's Drydock, Detroit, where she was rebuilt as a steam lumber barge. She was readmeasured in May 1869 and her enrollment tonnage updated to: 915 grt, 478 net. In August 1868, the steambarge *Antelope* with 6 lumber barges in tow left Buffalo but had to return due to disabled machinery. During the 1874-79 seasons, F.H. Doyle was engineer and then chief engineer on the steambarge. During the 1875 pre-season, the *Antelope* was rebuilt and re-measured at Port Huron. Her tonnage updated to 750 grt. In November of that year, she struck a rock in the Niagara River and sprung a leak. She was drydocked at Mill's & Co. for repairs.

Ownership of the steambarge *Antelope* was changed to W.T. Baker & Co., Chicago, in March 1878.

Ownership of the steambarge was changed to C. Curtis & John Lindsay, South Bay City in March 1880. In September 1881, bound up, with a cargo of coal, the steambarge *Antelope* stranded on Colchester Reef, Lake Erie. Her captain, Captain Bowie, scuttled her to prevent her from being pounded to pieces. The vessel was patched, refloated and released 5 days later. The steambarge *Antelope*, towing the barge *Manitowoc* laden with coal, bound up, was caught in a storm, receiving structural damage to her arches, smoke stack and galley.

She was rebuilt as a schooner barge and her ownership was changed to McGraw & Co., Bay City, MI in 1882. Her enrollment was updated to: 186.8' x 32' x 12', 523.48 grt, 496.6 net

Ownership was changed back to C. B. Curtis, Bay City in April 1882. The schooner barge caught fire in August 1885 while at Saginaw.

Her ownership was changed in April 1893, to L.S. Boutell, Fred E. Boutell, and William H. Boutell, all from Bay City, MI. In August of that year, the steambarge *Antelope* laden with coal crashed into Culver's dock, Duluth, MN.

In 1896, her ownership was transferred to Fred E. Boutell, and William H. Boutell, Bay City. October 1897, bound up from Sandusky, OH for Ashland, WI, laden with a cargo of coal and in tow of propeller *Hiram W. Sibley*, the barge *Antelope* sprang a leak and foundered in heavy seas, sinking off Michigan Island, Apostle Islands, Lake Superior. No lives lost.



**Detroit:** It was noted at her enrollment at Cleveland, September 2, 1861, that her original owner was S. L. McKnight et al, Detroit, and that her builder was Peck & Masters, Cleveland. She was a wooden propeller with measures of: 139.7' x 25.4' x 11.3' and a tonnage (old style) of 398.0. She was powered by a 500 HP engine, builder unknown. The *Detroit* was a canal-built boat handling the packet freight trade on the Dunkirk Line. Dunkirk, NY was the western terminus of the Erie railroad.

With the start of the Civil War and the need for vessels for transport of man and supplies, blockading southern ports, and as gunships, ownership of the *Detroit* was changed to William Williams, New York, NY in January 1863. The following month, her ownership was changed to W. H. Loper et al, New York, NY. She was rebuilt in 1863, adding a second deck and two masts. Her measurements were: 107' 9" x 26' x 13'; 445 25/95 tons (old style). She was chartered to the U.S. Quartermaster Dept., U.S. Army from February 2 to March 3, 1863 and from April 1, 1863 to July 1864. The propeller *Detroit* was reported near Piney Point, MD, Chesapeake Bay, July 20, 1863, having on board 100 Union deserters considered troublesome and near revolt that were delivered to the Union Army at Aquia Creek, VA. She continued to deliver supplies to the Army of Potomac through the end of her charter.

July 31, 1864, the *Detroit* was purchased by the U. S. Army for \$40,000. She was enrolled at New York City and was used to deliver supplies to the Army of Potomac at City Point, VA. On January 26, 1865, the propeller *Detroit* left City Point, VA with carpenters, trackman, tools, camp equipage and material for New Berne, NC to repair the railroad running inland to Winton, NC. She returned to City Point on February 12, 1865.

With the end of the war and the reduced need to transfer troops and supplies, ownership of the *Detroit* was changed in November 1865 to A. C. Hall, Baltimore, MD and she was renamed *Congress* with measurements recorded as: 2 decks, 3 masts, 137.85 x 25.25 x 11.8; 452.86 grt and assigned official number 4392. She was copper bottomed and had been running between New York City and Charleston, NC.

May 1866, ownership of the propeller *Congress* was changed to R. G. Reiman et al, Baltimore, MD.

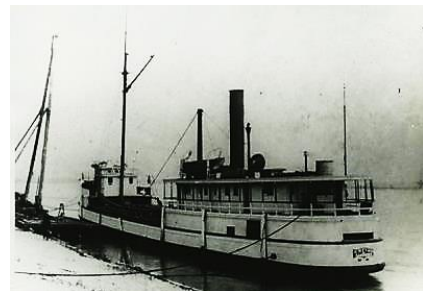
Later in 1866, ownership of the propeller *Congress* was changed to Captain Frederick G. Hentig, Detroit who also was her master, through 1868. The *Congress* arrived at Buffalo, NY in September 1866, via the Saint Lawrence River from New York City. She would be engaged in lake trade between Buffalo and Detroit. The *Congress* had been detained at Montreal, Que. to serve as a privateer war vessel in the Canadian Fenian rebellion

The *Congress* along with the screw steamers *Dictator* (US-1864) and *Neptune* (US-1856), in April 1868, formed the Belle City Propeller Line and ran tri-weekly between Buffalo and Racine, WI connecting with the Western Union Junction Railroad. In August of that year, the *Congress* had her boiler changed to burn crude oil to generate steam. This was an experiment and the apparatus was removed. October 1868. Bound up from Buffalo for Chicago with a mixed cargo of salt, apples, railroad iron and stoves, the *Congress*, with a heavy sea running, stranded on a reef three miles west of Thunder Bay Light, MI, Lake Huron. She was abandoned by her crew and shortly after caught fire and burned to her waterline.

**Dragon:** Van Slyke & Notter, Buffalo, built a wooden propeller towboat to be used in the towing trade for the Western Transportation Co. Buffalo. She was enrolled at Buffalo in 1861 and her measures as recorded were: 101.0' x 20.0' x 7.5' with a tonnage (old style) of 118. She was powered by a high-pressure engine, 24" bore x 26" stroke, builder unknown

December 1861, ownership of the towboat *Dragon* was changed to the U. S. Navy. She was renamed to U.S.S. *Dragon* and her measures recorded, March 1862, as 118' x 17' x 7.5'. She carried a crew of 42 and armament of a 30-pounder rifle Parrett forward and a 24-pounder smooth bore aft. Master of the screw steamer U.S.S. *Dragon*, from 1861 – 1862, was Acting Master W. Watson. The U.S.S. *Dragon* was assigned in December 1861, to the North Atlantic Blockading Squadron at Hampton Roads, VA, and was assigned to the James River Flotilla. The U.S.S. *Dragon* participated in the engagement at Hampton Roads between United States and Confederate naval forces during which both the *Cumberland* and *Congress* were sunk by the ironclad *Virginia* on March 8, 1862. The following day the U.S.S. *Dragon* endeavored to get the *Minnesota* afloat but was halted when a shot from one of *Virginia*'s rifled guns entered her boiler, exploding and causing severe damage. Three of the crew were severely injured. She was towed to Baltimore, MD for repairs. April 22, 1862, she returned to Hampton Roads and was assigned to duty with the James River Flotilla. On August 29, 1862, the U.S.S. *Dragon* was transferred to the Potomac Flotilla where she patrolled the Potomac and Rappahannock Rivers enforcing the blockade between Maryland and Virginia until April 25, 1865. Her master during this assignment was Acting Master George E. Hill.

The U.S.S. *Dragon* was decommissioned May 13, 1865 and sold at public auction, July 20, 1865, for \$6,750 to a Mr. Brandt, Wilmington, NC and renamed *Brandt*, assigned official # 2428. The screw steamer *Brandt* was abandoned in 1880.



**Empire:** First enrolled at Cleveland in April 1861 by her builder, Quayle & Martin, Cleveland, the wooden propeller had measures: 136.0' x 25.8' x 12.0' and tonnage (old style) of 393 15/95. She was powered by a high-pressure engine, 24" bore x 36" stroke, built by Cuyahoga Furnace Co., Cleveland, OH in 1857 and originally installed in propeller *City of Superior* (US-1857). Her owner, Northern Transportation Co.

Ogdensburg, NY planned to use her in the passenger, package freight trade. In October 1862, downbound on Lake Huron, laden with barrels of flour, the *Empire* went ashore at Presque Isle, MI. To release her, the crew jettisoned 600 barrels to lighten her. In May 1864, she was readmeasured and her enrollment updated to 135' x 25.7' x 10.8'; 479.73 grt. She was issued official number 7325.

The *Empire* ran for the 1866 season, Ogdensburg to Detroit and other Lake Michigan ports. In September of that year, she broke her crank pin and drifted to near Pultneyville, NY on the south shore of Lake Ontario where she anchored. Fearing the loss of her upper works from the heavy rolling of the vessel, 200 barrels of flour were jettisoned. The property loss to hull was set at \$1,500 and to the cargo at \$2,000. For the 1869 season, she ran in the daily line between Ogdensburg and Chicago. In May of that year, she again had machinery problems while on the Detroit River and received repairs at Detroit. For the 1870 season, she ran in the Lake Michigan line. In 1871, the *Empire* made 10 round trips to Lake Superior. In October 1871, her machinery again gave her problems while steaming on Lake Huron. She was towed to Detroit for repairs. Her master for the 1873 season was Captain E. McCrory. The propeller *Empire*, bound from Ogdensburg, NY for Chicago, struck a shoal and leaking badly, beached near Gananoque on the St. Lawrence River.

In 1876, The Northern Transportation Co. was renamed the Northern Transit Co. and the propeller *Empire* was transferred to the new company.

In May 1881, the *Empire* changed ownership to John Hurly, Detroit. He had her rebuilt as a steambarge for the lumber trade and her enrollment measures were updated to: 1 deck, 1 mast; 136.6 x 25.7 x 10.8; 265.32 grt, 188.08 net. The steambarge *Empire* towed several barges for the next 10 years in the lumber trade. In 1882, the steambarge *Empire* had her boiler rebuilt. In October 1887, she went aground on the White Shoals, at the entrance to Lake Michigan from the Straits of Mackinac. Released.

In May 1888, ownership of the steambarge *Empire* was changed to L. P. Mason et al, E. Saginaw, MI.

In March 1889, her ownership was changed to John Homegardner et al, Sandusky, OH. Her enrollment was surrendered at Sandusky, OH, May 15, 1897 and endorsed "abandoned, unfit for service".

***Lady Franklin:*** Built by Jacob W. Banta, Chicago, the wooden propeller was enrolled at Chicago, May 27, 1861, with the following measures: 139' 8" x 25' 6" x 10' 2"; tonnage (old style) 341.17. Her original owner was John T. Edwards and the *Lady Franklin* was intended for the passenger, package freight trade. She was equipped with a double engine "two-wheel propeller", reportedly from the *Montezuma*, an 1848 propeller. Her master for the 1861 season was Captain Hickey. In May 1861, the propeller *Lady Franklin* collided with the barge *Montezuma* at St. Joseph, MI.

In March 1862, her ownership shares were transferred to Edward M. Edwards, Chicago and William Edwards, Fox Lake, MI. In December of 1862, her ownership was recorded as John T. Edwards and Edward M. Edwards, both from Chicago.

April 1863, her ownership was changed to A. E. Goodrich, Chicago. The *Lady Franklin* was chartered by the Grand Trunk Railway Co. to run Sarnia, Ont. to Green Bay, WI for the 1863 season. July 1863, down bound from Chicago, the *Lady Franklin* broke her shaft while on Lake Michigan. She was towed to Detroit for repairs. Her master for the 1864 season was Captain G. H. Pleasance. In March 1865, the *Lady Franklin* was readmeasured: 138.6 x 25.5 x 9.5; 249.54 grt and assigned official number 14827.

June 1865, ownership of the *Lady Franklin* was changed to Eber Ward, Detroit. November 1865, the *Lady Franklin* sank in Waika Bay, MI, Lake Superior at the entrance to the Saint Mary's River. While attempting to leave the harbor, the *Lady Franklin* was driven back into the harbor by a fierce gale. She dragged her anchor, colliding with a schooner that was anchored astern of her. They were both driven together several times, when it was found that the propeller was taking on water. She made the wharf before sinking in twelve feet of water. No lives were lost. She was raised and repaired.

May 1866, ownership of the *Lady Franklin* was changed to James C. Stevens, St. Joseph, MI.

April 1868, her ownership was changed to the Lake Michigan Transportation Co., St. Joseph, MI.

January 1869, her ownership was changed to Redmond Prendiville et al, Chicago. The following month, her ownership was changed to Charles Child et al, Chicago. In April of that year, she broke her wheel (propeller) at Centreville, WI, Lake Michigan. The following month, she again broke her wheel at Green Bay, WI, Lake Michigan. In October of that same year, she again broke her wheel at Death's Door, WI (entrance to Green Bay), Lake Michigan.

December 1869, her ownership was changed to W. L. Parson & Albert Latta, Chicago. In that same month her ownership was changed to William L. Parson, Chicago.

April 1870, her ownership was changed to A. M. Kinzie, Chicago. Her master was Captain Cornelius B. Chatterton.

Two months later, her ownership was changed to E. Cohen et al, Cleveland. Captain John McGiffin was master of the *Lady Franklin* for the 1871 season.

January 1872, ownership was changed to J. H. Palmer & Thomas Burk, Cleveland. Her engineer for the 1872 season was Daniel Conway. May of that year, the *Lady Franklin* was converted into a steam barge to be engaged in the lumber trade between Saginaw, MI and Ohio ports. In September of 1872, the steambarge *Lady Franklin*, with the schooner *A. H. Moss* (US1025) and the scow *Moses Gage* (US50563) in tow, grounded on Nebbish Island, Saint Mary's River. Released. In November, the steambarge grounded on Kelly's Island Reef, Lake Erie.

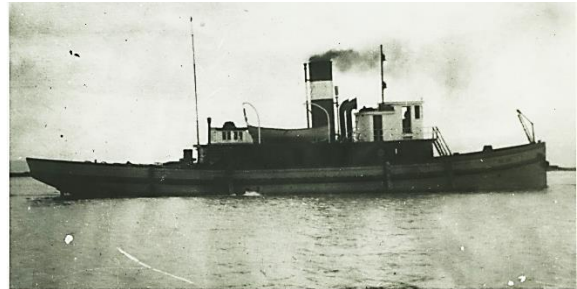
March 1874, ownership of the steambarge *Lady Franklin* was changed to D. G. Steele et al, Cleveland.

June 1875, her ownership was changed to J. D. Rothwell, Cleveland.

March 1876, her ownership was changed to James White & W. J. Baxter, Bay City, MI. Master of the steambarge for the 1876 season was Captain George Tucker. In September 1876, the steambarge *Lady Franklin* caught fire while lying at the Clark's dock at Amherstburg, Ont. and burned to the water's edge. One life lost. Her final enrollment for the steambarge *Lady Franklin* was surrendered at Port Huron, MI, November 7, 1877 and endorsed "vessel burned".

In 1882, Charles Hinman, Algonac, MI. rebuilt the *Lady Franklin* hulk as a barge. The barge *Lady Franklin* was redocumented at Port Huron, MI. and assigned official number US13487, with measures: 137.6 x 27.3 x 11.2; 301.7 grt, 287.73 net. On September 1882. Ownership of the barge *Lady Franklin* was changed to John A. Smith et al, Algonac, MI, on September 27, 1882. Her master in 1885 was Captain John A. Stewart. Her enrollment rig specifications for the barge *Lady Franklin* were changed to sloop in September 1885. October 1886, her enrollment rig specifications for the barge were changed to two-masted schooner. In May 1887, while under tow of the steambarge *Westford* (US80068), the schooner-barge *Lady Franklin* collided with the barge *Monitor* (US16650). Both sustained damages. In October 1889, the schooner-barge went ashore in a gale at Lexington, MI, Lake Huron. In September June 20, 2022

1895, the schooner-barge *Lady Franklin*, laden with railroad ties, dragged her anchor in Hammond Bay, Cheboygan, MI, Lake Huron during a gale and was driven ashore. She was declared a total loss. The final enrollment for the schooner-barge *Lady Franklin* was surrendered at Port Huron, MI, December 30, 1896 and endorsed "wrecked at Hammonds Bay. Lake Huron".



**George H. Parker:** Master carpenter, John Stupinski built at the J.P. Clark Shipyard, Detroit, a wooden tug (towboat) for George H. Parker & Whipple, Detroit. Her measures were: 108' x 18' 6" x 10'; tonnage (old style) 188 85/95. She was powered by a high-pressure engine, 26" bore x 30" stroke, re-built by Detroit Locomotive Works in 1861 and initial installed in the tug *B. F. Bruce* (built 1852). The *George H. Parker* was built for wrecking and lumber raft towing at a cost of \$12,000.

May 1866, the tug *George H. Parker* was readmeasured and her initial enrollment at Detroit were recorded as: 109 x 20.83 x 8.75; 96.11 grt. Official Number – 10242. In June 1868, her enrollment tonnage was changed to: 162.82 grt. April 1871, the *George H. Parker* went aground, assisting the schooner *Jessie Anderson* who had gone aground, at Port Huron, MI, Saint Clair River. In June of that year, she lost a portion of her lumber raft on Lake Huron.

Her ownership was changed to C. W. Norton, Detroit & Schulenberg, Chicago in April 1875.

November of 1876, her owners were listed as: George Campbell & Schulenberg, Windsor, Ont. Her U.S. enrolment was surrendered at Detroit and endorsed "sold foreign" in 1877. March 1877, the tug *George H. Parker* was enrolled Canadian as *George H. Parker*, (C74061) with the measures: 109 x 26.8 x 8.8, 212.3 grt, 139.22 net. May 1877, the tug *George H. Parker* went aground at Southeast Bend, Lake Erie. Master of the tug *George H. Parker* was Captain C.H. Jenkins for the 1881 season.

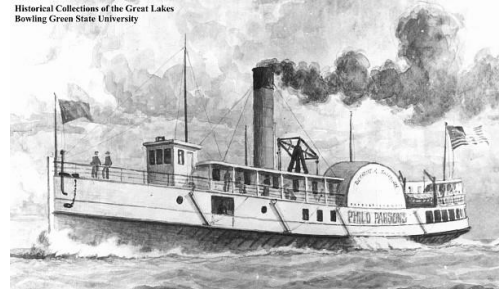
In 1882, ownership of the tug *George H. Parker* was changed to Brook Waters, Montreal, Que.

The tug *George H. Parker* was condemned in 1887, and purchased by Abraham Smith, Algonac, MI and rebuilt and re-engine. No buyer could be found and the tug lay idle at Detroit for five years. The vessel was re-enrolled at Port Huron, MI and endorsed "By Act of March 2, 1889" as *George H. Parker*, (U10242) with the measures: 106 x 21 x 9.5; 105.25 grt, 70.6 net on July 02, 1892. Her master for the 1891 – 93 season was Captain Samuel Parker with James B. Wellman as chief engineer in 1893 & 1897.

In 1893, ownership of the tug *George H. Parker* was changed to James Reid, Bay City, MI. In May of that year, the tug *George H. Parker* was wrecked at Cheboygan Lighthouse, MI., Lake Huron.

In 1895, ownership of the tug *George H. Parker* was changed to Edmund Hall, Detroit. While engaged in attempting to raise the sunken (May 1895), steel steambarge, *Cayuga* (U126556) near Skillagalee Light, Algonac, MI., Lake St. Clair, the tug *George H. Parker* caught fire and burned. She was scuttled at Hot Springs, MI in October 1897. Raised by the Reid Wrecking Co, Sarnia, Ont., the *George H. Parker* was towed to West Bay City for rebuilding. She was rebuilt, renamed and registration changed, on June 18, 1898, to *Salvor* with measures: 105 x 21.2 x 11.9; 116.23 grt, 64.96 net. Steeple compound engine 20", 38" bore x 30' stroke, built by Marine Iron Co., Bay City, MI; scotch boiler, 12' 6" x 12'. In 1898, the *Salvor* went aground at Harbor Springs, MI, Little Traverse Bay and capsized. June 1903, her final US enrollment was surrendered at Detroit and endorsed "sold foreign".

December 1903, registered Canadian to Reid Wrecking and Towing Co, Sarnia, Ont. as *Salvor*, (C74061) with the measures: 106 x 21 x 9.5; 126 grt, 72 net. (12/13/1903), Canadian masters of the tug *Salvor* were Captain Charles Hill in 1904, Captain E. J. Cadotte 1914 & 15. Her chief engineers were: J. Kenzie in 1904, P. J. Holland in 1914 and Lloyd William in 1915. June 1918, bound up from Port Huron, MI for French River, Ont. to pick up a log raft for Sarnia, ONT., the *Salvor* foundered in a storm in South Bay, Manitoulin Island, Georgian Bay. No lives lost.



**Philo Parsons:** Charles Hinman, at the Abram Smith Yard in Algonac, MI built a wooden, sidewheel steamer for Patrick Kean, Selah Dustin, and Walter Ashley all from Detroit. She was enrolled at Detroit, April 10, 1861 and her measures were; 136.0' x 25.0' x 8.5'; Tonnage (old style) 221 85/95. She was powered by a vertical beam, low pressure engine with a 40" bore x 108" stroke. Builder unknown. Originally installed in the sidewheel steamer "*Little Erie* (1836) then the *John Owen* (1845 – 1860). The sidewheel steamer *Philo Parsons* was built for the passenger and package freight service between Detroit and Sandusky, OH.

Ownership shares were transferred to: Patrick Kean and M.B. Kean in 1862. In October of 1862, the *Philo Parsons* broke her machinery on Lake St. Clair. She was repaired at a loss of \$500.

Ownership shares in the steamer *Philo Parsons* were transferred to: M.B. Kean; Selah Dustin; et al, March 1863. Bound up from Sandusky, in August 1863, the steamer *Philo Parsons* broke a crank and was disabled. She made port by the aid of one wheel. Repaired. In October of that year, she broke her cylinder head at Thunder Bay, Lake Huron. The steamer *Philo Parsons* had two masters in 1864, Captain S.F. Atwood and Captain John Horace Langley.

In September 1864, the steamer *Philo Parsons* was captured by Confederate agents in an aborted attempt to capture the iron gunboat *U.S.S. Michigan* and free southern prisoners held at Johnson Island, on Sandusky Bay. The vessel was later scuttled after the agents abandoned her on the Canadian side of the Detroit River at Sandwich, Ont. In March 1865, the *Philo Parsons* was overhauled, both her engine and hull, and her enrollment measures were changed at Sandusky to 184.71 grt. In August 1866, she broke her machinery on Lake Michigan and in August 1866, she was damaged in a collision on Lake Michigan.

Ownership of the steamer *Philo Parsons* was changed to: Henry Fuller, Chicago, and she was readmeasured: 184.71 grt, and assigned official number 19678, in 1868.

June 1869, her ownership was changed to: Charles D. Chapman; et al. Chicago, and measures recorded as: 134.9 x 21.2 x 8.2. The following month, she went ashore at Holland, MI,

July 1870, ownership of the steamer *Philo Parsons* was changed to John Klug, Chicago. She would provide service on Lake Michigan. During the Great Chicago fire of October 8 – 9, 1874, the sidewheel steamer *Philo Parsons* burned to a total loss and sank in the Chicago River. The vessel had vanished and her documentation surrendered and endorsed "lost at an unknown place", December 31, 1874. In June 1877, the charred hull was found in the North Branch of the Chicago River. She was raised on June 27, 1877 and moored in Ogden's Canal. In August 1880, the hull was towed to a boneyard north of Chicago's north pier and abandoned.



**E. M. Peck:** Enrolled at Cleveland, May 4, 1861, the wooden propeller, built by Peck & Masters, measures recorded as: 102.8' x 19.9' x 8.9', tonnage (old style) 168 38/95. She was powered by a high-pressure engine, 26 3/8" bore x 30" stroke, 475 horsepower, built by Globe Iron Works, Cleveland, OH. She was equipped with a firebox boiler, 8.8' x 17', 80 pounds steam. Her owner was A. M. Harmon et al, Cleveland, who planned to use her in the towing trade on the Detroit and St. Clair Rivers. Her master for the 1864 season was Captain R. H. Hackett. She was readmeasured in 1865 and her enrollment updated to: 102.4' x 19.0' x 7.4'; 86 grt. She was issued official number 7494.

Ownership of the tug *E. M. Peck* was changed to Glum & Bradley, Sault Ste. Marie, MI in 1866. In August 1869, she had her machinery disabled while off Lime Island, Ont. on the Sault Ste Marie River. She was towed to Detroit for repairs. November 1878, while going to the aid of a stranded propeller on a reef northwest of Cockburn Islands, Lake Superior, during a snow storm, the *E. M. Peck* went ashore and was stranded near the propeller. Recovered.

The following year her ownership was changed to Trempe, Sault Ste. Marie. George M.

June 20, 2022

Belloir served as chief engineer aboard the *E. M. Peck* during the 1880 and 81 seasons. Her owners had the tug rebuilt in 1893 and her name was changed to *C. E. Benham*. Her master for the 1893 season was Captain George Y. Dayton and for the 1896 season Captain William P. Benham with William Carrick as chief engineer in 1893 & 94.

In 1899, her ownership was changed to C. A. Benham, Cleveland.

In 1903, ownership of the tug *C. E. Benham* was changed Canadian to W. J. McMenemy, Bruce Mines, Ont. and she was assigned official number C116243. In 1905, the tug *C. E. Benham* was condemned and certificate surrendered. Her final disposition was listed as "Abandoned".

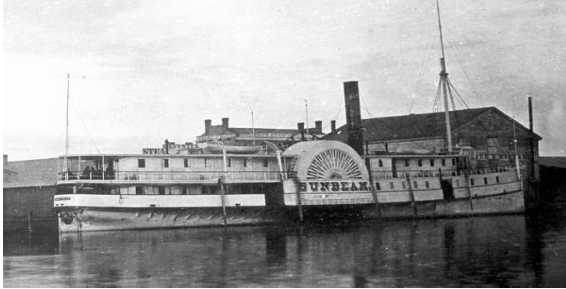


**Queen Victoria:** Augustin Cantin & Co., Hull Que, Launched a wooden, sidewheel steamer on November 26, 1860. She was enrolled at Montreal, Que. early in 1861 and her measures recorded: 169.5' x 23.3' x 7.6' and unit tons: 651.63. Her engine was a vertical beam built by Bartley & Gilbert, Montreal. She was delivered to her original owner, Ottawa River Navigation on July 15, 1861. The steamer *Queen Victoria* was built for the passenger, package freight trade and ran as a night steamer between Ottawa, Ont. and Grenville. Que. on the Ottawa River. Her master for the 1877 season was Captain Thomas Simmonds.

Ownership of the steamer *Queen Victoria* was changed to Victoria Park Co., Toronto, Ont. when the night steamer service on the Ottawa River was discontinued in 1880. In the Spring of 1881, the steamer *Queen Victoria* was too large for the Carillon - Grenville Canal and had to be brought down the Long Sault Rapids of the Ottawa River during spring high water. She was the only large steamer to ever run the rapids. Upon arrival at Toronto in 1881, much of her cabin was removed to make available more deck space for package freight and lumber trade.

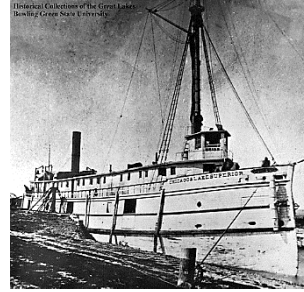
In 1882, ownership of the steamer *Queen Victoria* was changed to Captain St. Amour et al. Her master for the 1883 season was Captain Seymour. Early in the morning on September 13, 1883, the steamer *Queen Victoria*, six miles downriver from

Chatham, Ont. at Clemens's Warf, on the Thames River, loading cordwood for fuel, when it was discovered to be on fire from sparks from a passing steamer. The steamer burned to a total loss. No lives lost.



**Sunbeam:** W. W. Bates, Manitowoc, WI, built for the Goodrich Line; Capt. Albert E. Goodrich, Chicago, a wooden, sidewheel steamer. She was enrolled at Chicago, August 22, 1861, and her measures were: 165.0' x 23.6' x 10.3' with a tonnage (old style) of 398 28/95. She was powered by a vertical beam engine, builder unknown. The Goodrich Line planned to use her for the passenger, package freight trade, running between Chicago, Kenosha, Racine, Milwaukee, Port Washington and other ports around Lake Michigan and Lake Superior. Originally launched as *Victor* and built with Whittaker side screws that proved to be a failure and were replaced with conventional sidewheel. She was renamed and first documented as *Sunbeam* in June 1861.

In 1862, the steamer *Sunbeam* ran on the west shore Lake Michigan, touching at: Chicago, Racine, Kenosha & Two Rivers. In 1863, she ran on a route from Chicago to Grand Haven and St. Joseph, MI with trips to Lake Superior. August 28, 1863, on Lake Superior, bound from Ontonagon, MI for Cooper Harbor, MI, the steamer *Sunbeam* was caught in a gale above Eagle Harbor, and foundered off Keweenaw Point. Twenty-eight lives were lost. There was one survivor.



**Union:** W. W. & Stephen Bates, Manitowoc, built for Albert E. Goodrich, Chicago, a wooden, propeller to be used in the bulk freight trade. Her first enrollment was at Chicago on May 14, 1861 and her measures were: 163' 5" x 26' x 10' 9", with a tonnage (old style) of 434 86/95. Her machinery came from the steamer *Ogontz*. Her master for the 1861 season was Captain Dougal. May of 1861, the steamer was chartered by the Great Western Railway and ran between Chicago & Sarnia, Ont. June of 1862, laden with a cargo of shingles, the propeller *Union*, went aground on a reef in Green Bay, WI, Lake Michigan. She incurred a loss to her cargo of \$170 and to her hull for \$1870.

Ownership of the *Union* was changed to J. M. Mead & J. F. Kirkland, Sheboygan, WI in August 1862. In 1863, the ownership reverted back to A. E. Goodrich, Chicago, IL.

May 1863, her ownership was changed to Mead & Kirkland, Sheboygan, WI. Her master for the 1865 – 66 seasons was Captain John Dean Sullivan. The propeller *Union* was readmeasured at Milwaukee, May 22, 1865, and enrollment measures updated to: 166' 2" x 28' 5" x 10' 8"; 553.75 grt. She was assigned official number 25048.

In May 1866, ownership of the propeller *Union* changed to German Bank, Sheboygan.

In April 1869, ownership of the propeller *Union* was changed to Lewis Curtis, Sheboygan, et al. Her master for the 1870 season was Captain Fairgrieve. The propeller *Union* was chartered to the Canadian Government June 1870 and carried troops & supplies from the Soo to Fort William, Ont during Fenian Scare. Her master for the 1871 season was Captain Thomas Hawley. The *Union* had part of cabin removed, and she was converted into a steambarge at Buffalo, in March 1872.

April 1872, ownership of the steambarge *Union* changed to Mark English, Sheboygan, and her enrollment tonnage changed to 341.84 grt. In June of 1872, the steambarge went ashore on Laughing Whitefish Reef, Lake Superior. In September of the following year, the steambarge *Union* stranded, during a storm, on Au Sable Point, Lake Superior and was declared a "total loss".

**Zouave:** B. B. Jones, Milwaukee, built for James M. Jones, Detroit a wooden towboat for lake and river towing. Her measures were: 84' x 17' 6" x 8' with a tonnage (old style) of 108 30/95. The *Zouave* towed vessels on the Detroit & St. Clair Rivers in early 1861 then was taken to Saginaw Bay for the purpose of towing vessels on the river and from the bay.

In May 1862, the *Zouave* had her boiler explode near Windmill Point at the entrance to the Detroit River from Lake St. Clair, sinking with a loss of four lives.

Ownership of the towboat *Zouave* was changed to Captain John Sloan et al. He raised the *Zouave* in 1862, then had her rebuilt and lengthened 13 feet by S. McDonald, Detroit. Her measures were: 97' x 19.9' x 7' 9", 117 tons (old style).

Her ownership was changed to R. L. Felcher, Saginaw, MI. in early 1863, then to Captain C. H. Carey in July 1863.

Ownership of the towboat *Zouave* was changed again in 1864 to John Henderson, Detroit. Her initial enrollment was issued in April 1865 after she had been readmeasured at Detroit: 97' x 19' 9" x 7' 9", 80.56 grt and she was issued official number 28021 at that time.

The towboat *Zouave* ownership was changed to Hackett et al, Detroit, in 1866. Master of the towboat *Zouave* was Captain M. McGregor during the 1866 season. In April 1868 the towboat was re-engine, 200 horsepower, built by the Detroit Locomotive Works. Master of the towboat for the 1869 – 71 seasons was Captain Eugene Rathbun. In September 1869, the towboat *Zouave* blew out her cylinder head while on Lake Huron.

March 1871, ownership of the towboat *Zouave* was changed to Northwest Transportation Company, Detroit, and she was valued at \$8,000.

In September of that year her ownership was changed to J. R. Gillet, Detroit. In November of that year, she lost her smokestack in a collision with the schooner *Sherwood* (either *Anne* (US310) or *Grace* (US10793) at the mouth of the Detroit River from Lake Erie.

In 1873, her ownership was changed to J. R. Gillet et al, Detroit. Her master for the 1874 season was Captain Byron B. Inman and for the 1875 season, Captain Henry Bell. In July of 1875, the *Zouave* broke her shaft and lost her propeller in 45 feet of water of Saginaw Bay. In September of that year, the towboat *Zouave*, with two vessels in tow, ran aground on Elk Island, St. Clair River. In May 1877, the towboat *Zouave* was struck and sunk by the Canadian ferry *David Scoville* (C71220) while laid up at Sombra, Ont, St. Clair River.

May 1881, Captain P. Williams purchased the sunken remains of the *Zouave*. He raised the vessel to remove the machinery which was then put up for sale.

The final enrollment for the towboat *Zouave* was surrendered at Port Huron, MI, November 30, 1881 and endorsed "wrecked in foreign waters".

## Some Notes:

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

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

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

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

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

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

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<sup>7</sup>/<sub>94</sub> tons, whereas the American calculations gave the burthen as 1444 tons. The British measure yields values about 6% greater than the American. The US system was in use from 1789 until 1864, when a modified version of the Moorsom System was adopted (see below).

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

**Measurement Ton (M/T) or Ship Ton** Calculated as 40 cubic feet of cargo space. Example, a vessel having

capacity of 10,000 M/T has a bale cubic of 400,000 cubic ft.

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

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

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

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

The current system of measurement for ships includes:

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

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

P.Q.: Province of Quebec

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

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

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

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

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

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