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RUTHERFORD B. HAYES

Last square rigger built on the Lakes

See page 3

Telescope

PUBLISHED BY

GREAT LAKES MODEL SHIPBUILDERS' GUILD

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EDITORIAL

THANKS FOR THE LIFT.

Not so long ago called for "Copy". The response has been most gratifying. Keep it up, we can use more. Most of what came in is good stuff, well written,--not needing so much as a t crossed or an i dotted. One is just information and pictures from which an article has been prepared.

Now don't get the idea that more is not needed. With our kind of printing we have little opportunity to switch type for making everything fit into the available space. Too frequently we find we have space left over which will not accomodate any article or story we have on hand. Then is when we need short items about a half column or less in length. Don't think you have to come up with two or three pages. Short ones are very welcome.

A GREAT LAKES MARINE NEWS SUMMARY.

Mr. Robert B. Radunz, 3060 Coventry, Drayton Plains, Michigan is responsible for the summary of marine news for 1956, which came out in our January-February issues. We believe this to be something we should repeat each year. How about sending him newspaper clippings on local marine news? This can develope into one of our most important projects, if we all lend a hand.

Be sure to indicate on each clipping the paper from which you took it, and the date. By including this information, in Telescope we will be building up an invaluable list for future students of Lakes History. Then, by cutting up what we publish and filing the pieces under ship names we can maintain a running, and continuous history of each vessel. Such a record would be better than a collection of old log books, and of tremendous value in future research work. For the Guild it would mean increased prestige.

In this work we should not be restricted to items just about vessels, but should include port news,--harbor and channel work done or projected, including shore installations. The task calls for more than can be expected of any one of us. LEND A HAND!

THE GUILD

Organized in 1952 to locate, acquire, and preserve information and objects related to the history of shipping on the Great Lakes and to make same available to the public through the Museum of Great Lakes History and the columns of Telescope. The construction of authentic scale models of Great Lakes ships is one of the prime objectives of the organization, which has brought into being the largest existing collection of models of these ships. The Museum of Great Lakes History, located at 5401 Woodward Avenue, Detroit 2, Michigan, is official headquarters for the organization and the repository of all of its holdings. The Guild is incorporated as an organization for no profit under the laws of the State of Michigan. No member receives any compensation for his services. Donations to the Guild are Deductible for tax income purposes.

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THE LAST SQUARE RIGGER BUILT ON THE LAKES

by Loudon G. Wilson

It was a bright, clear fall day in the year 1876. Three men stood ankle-deep in the red and yellow leaves under the tall trees that fringed the little shipyard of Gibraltar on the west bank of the Detroit River or Straits of Detroit.

Prominent in their line of vision, on the stocks along the shore, rose a massive wooden hull which appeared ready for launching. Closer inspection, however, would reveal no fresh wood chips about the deck or shoring and much that had yet to be done before she would plunge into her element.

This vessel had the sturdy look of all the products of the yard. The almost plumb stem broke into a graceful curve, soaring to the rising bowsprit where a scroll and trailboards swept back over the bulwarks of her bows. Though the hull had a sharp entrance and clean ran aft, full lines, flat floors, and hard bilges reached well fore and aft of her midships.

"She'll be a gr-r-rand car-r-rier and a handy sailer-r, I'll warr-r-rant!" said one of the three.

The eldest of the group, a potential customer, nursed the gold watch chain across his well-padded vest while he studied the vessel's lower masts which were already stepped. The foremast crosstrees were something less than two-thirds the height of the main crosstrees.

The stillness of the morning was broken by a high-pitched sound so faint as to be hardly perceptible to the three men as the elder said "Yes, John, but she's not a schooner and she'll take a sizable crew to handle her."

John Craig was only half listening, his ear cocked to the northwest. "Aye, she's a true barquentine and that's the way she'll be r-r-rigged." He turned away and, stalking through the brush that lay between the yard and house, soon disappeared from sight.

"Well, that's that! He'll not be back and he'll not talk business the rest of this day, you may be sure!" sighed Craig's partner, R. W. Lynn.

Lynn & Craig had begun this vessel late in 1873 as a slack time project. When the recession that followed the War of the States reached the lakes and ships were laid up, many practical shipbuilders chose to make the most of idle sailors and unwanted timber. The vessels they built were for the most part sailing craft, averting costly investment in engines and boilers.

In the years that followed there had been a buyers' market in new vessels, with all the lake yards offering their products. The Detroit Drydock Company had built a whopping big three-mast topsail schooner called "Michigan," which they were putting in the trade themselves rather than bargain her. Most of the new craft followed the current trend for economy and efficiency. The vessels had less square canvas and were mainly fore-and-aft schooners, a few with square topsails and brailled lower on the foremast. Square rig was disappearing on the Lakes. Steam propellers with auxiliary sails were pushing the sailing vessel to measures of newly-contrived simplicity. Later, only the cost of engines and the inaccessibility of some harbors would save the most efficient schooners from extinction for another decade.

John Craig, a conservative and (no doubt) stubborn Scot, was to carry over from wooden sail and steam vessels to the finest steel passenger propellers launched on the inland seas. These fast and comely vessels set a pattern to follow for years thereafter.

Craig and his partner had, however, in 1876 created a dilemma with their recession project. This vessel, the last square rigged vessel

built on the Detroit River, was possibly the last true square rigger built on the Lakes. (The historic five-master "David Dows" was technically a topsail schooner, as were many of the so-called lake barkentines of the days of sail).

The foremast was stepped farther aft, leaving sufficient buoyancy forward to support the press of wind exerted on the great spread of square canvas forward when the wind was abaft the beam. Deck beams, hatchways, mast partners, knees, all constructed to meet this masting, made any drastic change undesirable and costly now. Reduction of the forward sail plan would make the vessel light at the head and give her a bad weather helm with a strong tendency to "broach to" in a following wind, all connotations of an unbalanced sail plan.

Who would do this to any ship? Not John Craig! Besides, John had heard the skirl of the pibroch. The roving piper was marching the pike and, as was his custom, John Craig would invite him in for a nip and a bite. With chairs set out on the lawn and the piper treading the soft turf to endless Scottish airs, Mr. and Mrs. Craig would forget the passing hours - - and the shipyard too!

Financial considerations demanded that Lynn and Craig find a purchaser before final costs of sparring and fitting-out would become feasible. Thus, the new vessel stood for three years on the stocks, begging a buyer. The winter of 1876-77 produced this necessary ingredient and the day came in 1877 when the vessel took the water at last. True, this was made possible only by a considerable loss to her builders.

That she was completed as a true barkentine is proven by the existence of a contemporary sailor-built model. This model was in the possession of the J. C. Goss Company of Detroit as late as 1930 when the author made notes and took photos of it.

She was eventually re-masted and rigged as a fore-and-aft schooner some years later. A draft of this new sail plan was unearthed among old records of the Bates Shipyard, Manitowoc, by Andrew Hoigard, Guild Member, in 1955.

She was christened "Rutherford B. Hayes," probably as the choice of her purchaser. Hayes in 1876 had won the nomination for the presiden-

cy over James G. Blaine, then scraped into the office over the winning Democratic opponent, Samuel J. Tilden, through smart politicking by Zachariah Chandler.

Oddly enough, all of the four men involved in the above situation had lake sailing vessels named in their honor. Hayes had the edge, however, when a sidewheel steamer built at Sandusky in 1876 was named the "R.B. Hayes."

The "Rutherford B. Hayes," built 1874-77 at Gibraltar, was 668 gross tons, 177 feet long by 34 feet wide. She was credited as the first vessel on the Great Lakes to carry regular load line markings on her hull. She foundered off Chicago in 1893.

SPEAKING OF FIRSTS

Many times we have commented upon the many nautical inventions which have had their beginnings on the Great Lakes, and now we come up with one which started right here in Detroit.

Mr. William T. Harms, of 40 Rhode Island Avenue, Highland Park, Michigan, has come up with a photostat of a newspaper clipping dated June 24, 1902, in which the following is related in regard to the Holland submarine: "This brings to mind the fact that the birthplace of the Holland craft was in Delray. This boat was the invention of a Chicago man named Charles Baker, and after the hull had been built at the Detroit Boat Works in 1891 she was towed down the river to Boston's boat house on the River Rouge, where much of the machinery was put in.

The hull was of solid wood, five inches thick, and planked with two-inch oak plank. The propelling power was a 50-horsepower dynamo, operated by storage batteries weighing 14 tons. In addition to this there were 20 tons of pig iron as ballast, and the boat was raised and lowered by letting or pumping out enough water to counterbalance the resistance of the air carried for the use of the operatives. The only outside opening was the conning tower, which projected above the surface of the water, and from which the operations of the boat were directed. Inside

the hull were large tanks of compressed air, kept cool by means of ice, and as fast as the air within became vitiated it was pumped out into the water and compressed air let out of these tanks to take its place.

Unlike other boats of this character the boat did not dive to the bottom head first, but sank gradually on an even keel, the movement being directed by means of propeller wheels attached to each side.

After several successful trials in the Rouge, the boat was taken to Fort Wayne, and ran from that point to Fighting Island under water. Later in the season the craft was inspected by government officials who were well pleased with it, but deemed it unsafe to experiment with it in the Detroit River owing to the large lake traffic, so she was ordered to Chicago. There a thorough test was given with such satisfactory results that a bill was introduced in Congress to appropriate \$200,000.00 to build a larger boat and make some improvements. While in Washington, Baker, the inventor died and Holland, a man who had invented a torpedo gun for use on the boat, took charge of the craft, since which time it has been known by his name.

During the experiments in the Rouge the evolutions of the strange craft were watched by hundreds of people who expected to see it sink never to rise again. No accidents happened, however, and from the experiments carried on in Delray has been evolved the boat which recently made such a fine showing in New York harbor."

The boat described here was cigar-shaped, 40 feet long, 14 feet high, and 9 feet wide amidships. The battery had 200 cells, said to be the largest in the world at the time.

The wheels were halfway between bow and stern and one foot below the center line. They could be deflected in any direction to produce the desired motion.

EARLY GREAT LAKES STEAMBOATS

WESTWARD HO! AND FLUSH TIMES 1831-1837

III

By H. A. Musham.

Thirty steamboats plied on Lake Erie this year. Others ran in connection with them on the Detroit River, and on Lakes Huron and Michigan. (45). The Steamboat Association consisted of eighteen steamers, valued at \$600,000. To take care of the business on Lake Michigan it arranged for a steamer to visit Chicago every week. Business done above Detroit amounted to \$201,838, of which \$12,000 to \$14,000 was paid by the federal government for moving troops and supplies. (46). But all was not well this year. There was a drop in the general prosperity induced by the easy money of Andrew Jackson's time, an ominous sign of harder times to come shortly. But business was good for the steamboats, especially on Lake Ontario. Large passenger loads were common. UNITED STATES put in at the Genesee early in May, carrying 1,000 passengers. (47).

Only two accidents are reported to have taken place this season. NEW YORK was damaged near Erie in July, by the bursting of her steam pipes. In August, the machinery of DANIEL WEBSTER gave way causing some damage. There were two losses, those of PIONEER on Lake Michigan, and of KINGSTON sunk in December on Lake Ontario.

This year the town of York was incorporated as the city of Toronto. Toronto (48), is the old Indian name for the locality.

Other steamboats built in 1834 and not mentioned heretofore were:

Name	Tons	Place built.
Commodore Perry	352	Perrysburg.
Mazeppa	312	Buffalo.
Little Western	60	
Sandusky	277	Sandusky.
Thomas Jefferson	428	Erie.
Victory	77	Buffalo.
New York	325	Black Rock.
Commodore Barrie	275	Kingston.

Engaged in the commerce of Lake Erie and the upper lakes were: (49).

Type	Number	Flag	Tons
Steamers	31	American	11,662.
Schooners	334	"	22,012.
Brigs	3	"	645.
Steamers	3	Canadian
Schooners	25	"

Ten new steamers came out in 1835. Five were built on Lake Erie, one on Lake Michigan and one at Chatham on the Thames. Three were built on Lake Ontario, one American and two Canadian. All were of the usual models, except ROBERT FULTON, 368 tons, launched at Cleveland. She is described as being built on a new plan with a round stern instead of one of the usual square type. She had a high pressure engine of 118 horsepower and could carry 1,200 barrels of freight in the hold. Though built almost expressly for a freight boat she was capable of carrying a goodly number of passengers. Her owners were the Troy & Erie and United States Lines. (50). Another, TRAVELLER, 350 tons, Canadian, was a fabricated job. The parts were formed in Scotland and assembled at Niagara by the Niagara Dock Company under superintendence of Robert Gilkison. She was 145 feet long, 23.5 feet wide and had a depth of hold of 11 feet. She could make eleven to thirteen miles per hour, and was considered to be the fastest boat on the lake. She was owned by John Hamilton and cost £8,000. Captain James Sutherland was her master and she ran between Toronto, Cobourg and Rochester. (51).

GREAT BRITAIN went into service this season with accommodations enlarged to take care of 1,000 passengers. This made her the equal of UNITED STATES in passenger capacity. These two boats had established themselves as favorites with the travelling public and ran in connection with one another, the former between Prescott, Toronto and Niagara along the north shore and the latter from Ogdensburg along the south. Captain D. J. Van de Water,

from the Hudson, commanded UNITED STATES in 1833 and 1834, with Joel F. Taylor as his sailing master. His place was taken over by Captain Van Cleve in 1835, who needed no such assistant because of his long experience on the lake and the St. Lawrence. His mate was R. S. Robertson. (52).

This year CANADA came out under a commander other than Captain Richardson, her principal owner, though he remained her manager. Captain Frank Bury took her over. Richardson and his associates had bought CONSTITUTION, renamed her TRANSIT and ran her from Hamilton to Toronto, Port Hope, Cobourg, and Dorchester. (53).

Out in the far West, the Indians of the country around the head of Lake Michigan assembled on the north bank of the Chicago River at the start of the trail to Green Bay (54). On 18 August, according to the treaty made with them two years before, and staged their last dance on their tribal lands. They then left for their new home across the Mississippi River. The prairies were now safe for settlers, and to them the restless turned their steps all eager to get rich. (55). The steamboats and sailing craft were ready to carry them and their effects to the new west.

Local service around the head of Lake Michigan was improved this year by the addition of CHICAGO, 166 tons, built at St. Joseph by James Averill, shipwright from Maine. At Buffalo, CHARLES TOWNSEND, 312 tons, was launched early in November. She was built by Carrick and Bidwell for Townsend, Coit and Company. Her engine was that of the old SUPERIOR, which had also done duty in WALK-IN-THE-WATER. Shortly after launching she was seriously damaged by a severe storm on 11 November which drove her onto the bank of Buffalo Creek. Other steamers built in 1835, and not mentioned heretofore were:

Name	Tons	Place built
Columbus	* 391	Huron.
W.F.P. Taylor	* 95	Silver Creek
United States	* 312	Huron.
Susquehannah	*	Oswego.
Hamilton	# 300	Hamilton.
Thames	# 160	Chatham.

Disasters and losses other than those mentioned and recorded this year were:

DANIEL WEBSTER, damaged by fire at Buffalo in January; loss \$8,000. Owned by Pratt, Taylor & Company. GENERAL PORTER, sunk at Black Rock. GREAT BRITAIN, driven ashore near Toronto, in a storm in April. WILLIAM PEACOCK, ashore during a severe gale, near Buffalo, in June.

COMMODORE PERRY, disabled by explosion of steam pipes, near Buffalo in June. Again disabled by bursting of boiler near Detroit, in September; five lives lost. Towed in by DANIEL WEBSTER.

MICHIGAN, ashore at the mouth of the Detroit River in September, released.

COLUMBUS, ashore near Erie, in November.

DANIEL WEBSTER, damaged by collision with piers at Grand River.

FOOTNOTES

- (45) "Niles Weekly Register", XLVI (10 May, 1834).
- (46) Ibid.
- (47) "History of the Great Lakes, Illustrated, I, 448-619.
- (48) To-ron-to is said to mean the place of trees.
- (49) "Niles Weekly Register", XLVII (15 February 1835).
- (50) "Chicago Democrat", 21 October 1835.
- (51) Van Cleve, op.cit., p.63. Robertson, op.cit., p.860. Augusta Grant Gilkison, "Early Ship Building at Niagara", Niagara Historical Society, No.18.
- (52) Van Cleve, op.cit., p.87.
- (53) Robertson, op.cit., pp.857-860.
- (54) Now at the foot of Rush Street.
- (55) A United States land office was opened at Chicago, 28 May 1835. Cont'd. May issue.

ALABAMA

WILL SHE SAIL AGAIN?

Rusting away at her dock in Holland, Michigan, is the old ice-breaking passenger steamer "Alabama." She has been there 12 years, awaiting her fate, with occasional rumors of her being reconditioned and put back in service.

Despite the peeling paint and rust streaks down her side, she isn't in bad shape in the essentials. Superstructure, and hull are almost as sound as when she was built, back in 1910. Most of her interior woodwork has been removed and installed in the Georgian Bay Club, on Mackinac Island, but the members to which the fine panels were attached is still in good condition. The wheel is gone from the pilot house but the radio direction finder and the binnacle are still in place. Her chime whistle is in service on the Georgian Bay Str. South American, and the big bell and the name plate are missing. Her five lifeboats are still under their davits,--only the work boat is not in place, but stored in the shed on the dock, along with other equip-

ment.

The bar is intact, as is other similar built-in items. The galley is complete, and the ornate doors to the rooms still in place. The electrical system seems to be in average condition, and the sprinkler system has always been ready for emergencies. The power plant can be put into operation in a matter of days.

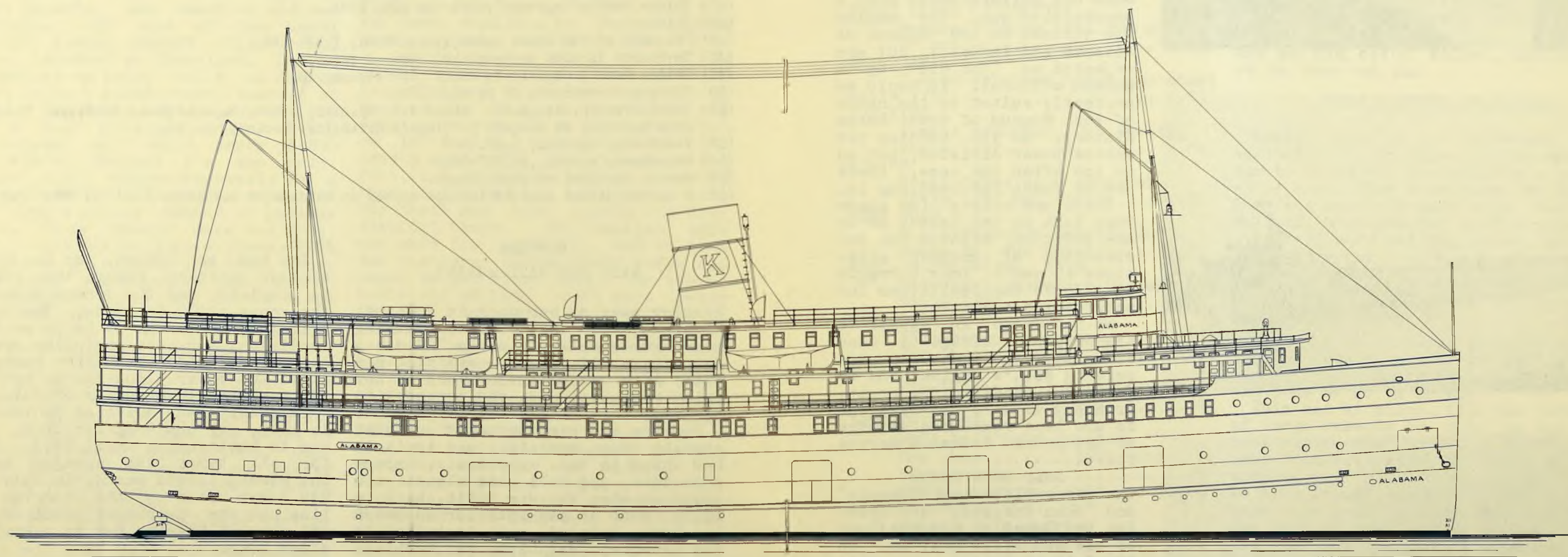
"Alabama" was built at Manitowoc, in 1910, for the Goodrich line, and was in their hands until 1933. Then for six years she changed hands but earned little money. In 1939 she was taken over by the Georgian Bay line but the passenger business did not warrant keeping her in operation after 1943.

She was last operated by Islands-Bay Company, as a floating casino but that was not successful (1944) and she was returned to her previous owners, the Georgian Bay Lines.

Currently there is a rumor that she will sail again, but details are not available at this time.

Our center spread in this issue shows her outboard profile, printed directly from the original designers

See page 11



PASSENGER STR. ALABAMA
BUILT 1909 BY MANITOWOC DRY DOCK CO.
GREAT LAKES MODEL SHIPBUILDERS' GUILD
5401 WOODWARD AVENUE
DETROIT 2, MICHIGAN

LEAVING THE SCENE



The year 1957 will see three veteran Lakes craft pass from the local scene. "Chicago Harbor No.4," the little green tug which has served the port since 1904 is scheduled to be scrapped, unless some last-minute buyer can find a use for her, possibly as a diesel-powered boat. Her 100-year-old steam engine may still be usable, but to replace her worn out boilers would cost a prohibitive sum. The engine was offered to the Museum of Science and Industry, but was rejected as "Too Old" by a museum official. It would be perfectly suited to the needs of the Museum of Great Lakes History, in its budding new motive power division, but as is too often the case, there are no funds for handling it.



There are only a few steam tugs left on the Lakes, so we are about to witness the destruction of another milestone in man's long struggle to improve the facilities for water-borne commerce.

We have made an appeal to the City of Chicago to consider ways and means for preserving No.4's engine, but so far have received no reply. Probably we were too late. She is the last remaining vestige of the great Graham & Morton fleet.

SOLD DOWN RIVER

The venerable barges "Marsala" and "John Smeaton," are leaving the Lakes to join the fleet of the Nashville Coal Co. on the Gulf of Mexico. In this day of self-unloaders these two old timers also have become obsolete for the Lakes trade though they still can find a job to do in less-competitive fields.



These notes and pictures come to us from Andrew J. Hoi-gard, our member from Oak Park, Illinois.

Now AVAILABLE



Complete

Blue prints of:

BUTCHER BOY

A huron boat. Two sheets,
scale $\frac{1}{2}$ " \$2.00

HELEN MacLEOD II.

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A Mackinaw boat. Two sheets,
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Modern fishing boat. Two sheets
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3-mast schooner. Two sheets,
scale $\frac{1}{8}$ " 2.00

MILTON

Great Lakes scow schooner.
Scale $\frac{1}{8}$ ". One sheet 1.50

SURF BOAT

U.S. Lifesaving Service, 1895.
Scale $\frac{1}{4}$ ". Two sheets 2.00

WALK-IN-THE-WATER, 1818

Sidewheel passenger. One sheet.
Scale $\frac{1}{8}$ " 1.50

MICHIGAN

Sidewheel passenger.
Two sheets. Scale $\frac{1}{8}$ "... 2.00

ONOKO

First iron-hull bulk carrier.
One sheet. Scale $\frac{1}{8}$ ".... 1.50

JOHN ERICSSON

Whaleback bulk carrier.
One sheet..... $\frac{1}{8}$ " scale,
blue print..... 1.20
Black on white, $\frac{1}{16}$ ". 1.00

WILFRED SYKES (1950)

Modern bulk carrier
One sheet. $\frac{1}{8}$ " scale 1.50

MINNESOTA (Ex Harlem)

Package freighter converted
to passenger. Three sheets
Scale $\frac{1}{8}$ " 3.00

PUT-IN-BAY (1911)

Detroit River day excursion
steamer. Three sheets.
Scale $\frac{1}{8}$ " 3.50

STAKE BOAT

For setting and pulling up pil-
ing for pound nets. Scale $\frac{1}{2}$ ".
One sheet \$1.00

ALABAMA

Passenger steamer (1910). Scale
 $\frac{1}{8}$ ". Three sheets \$3.00

Add mailing costs: Folded, 10¢. Roll-
ed in tube add 30¢.

DETAIL SHOTS AVAILABLE

Detail shots of the "Alabama" are
available in our files for inspect-
ion by those who are building a mod-
el of her. They were taken by Bill
Hoey who recently made trip over to
Molland, Michigan for that purpose.

We need more sailing vessel plans
to balance our program. Who has any
we can borrow?

ALABAMA _____ (Cont'd)

tracing. In our next issue we will
present deck plans, or the hull, de-
pending upon which is completed at
the time we go to press.

This set of plans, like all others
of large vessels is done to our u-
sual scale-- $\frac{1}{8}$ " to 1'. There have
been countless perplexing problems in
turning out this job, but we believe
we have ironed out all the bugs and
hope that some member will take on
the task of constructing a model in
the near future. The complete set,
including the outboard profile will
cost \$3.50, postpaid.

SAMUEL WARD STANTON DRAWINGS OF GREAT LAKES VESSELS
(Continued)

IRONSIDES

Built at Cleveland, Ohio, by Quayle & Martin. Wooden hull: length of
keel 219 feet; over all 231 feet; breadth 31 feet (over guards 38 ft)
depth of hold 14 feet. Tonnage 1223.

Engine by Cuyahoga Works, Cleveland.

Boilers 21 feet long by 10 feet diameter.

The "Ironsides" was built for the Cleveland & Lake Superior Line, and was one of the most substantial and elegant passenger propellers of her day. She was strongly built and had a beautiful model.

After running to Lake Superior for a number of years she was transferred to the Engelman Transportation Company's line between Milwaukee and Grand Haven, on Lake Michigan.

On the evening of September 14, 1873, she left Milwaukee, bound for Grand Haven. During the night a violent storm arose and in attempting to enter the harbor at Grand Haven she struck on the bar. She was turned about and headed away from the shore again, and when ten miles from land foundered; the passengers and crew took to the boats, but 24 of them perished. At the time the "Ironsides" was lost she was worth \$125,000.00.

MERCHANT

Built 1862 at Buffalo, N.Y., by David Bell. Hull of iron. Length of keel 192 feet; breadth of beam 29 feet; depth of hold 14 feet; average draft of water 12 feet. The hull was afterwards lengthened 30 feet.

Engine, single cylinder, condensing. Diameter of cylinder 40 inches by 36 inches stroke. Indicated horsepower 600.

Boiler, one of iron, return flue. Total grate surface 60 square feet; total heating surface 1800 square feet.

Wheel, four blades, 10 feet in diameter and 14 feet pitch.

Joiner work by Hitchcock & Gibson. Tonnage 861.

Built for J.C. & E.T. Evans, for the Buffalo and Chicago passenger and freight business, and she ran successfully between these two ports for 13 seasons. Cost \$90,000.00. Speed 14 miles per hour.

On October 6, 1875, the "Merchant" ran onto Racine Reef, Lake Michigan, and became a total loss.

BADGER STATE

Built 1862 at Buffalo, N.Y. Hull of wood, built by Mason & Bidwell. Length 213 feet; beam 33 feet; depth of hold 12 feet.

Engine, originally single, constructed by Shepard Iron Works, Buffalo. Diameter of cylinder 44 inches, afterwards changed to "steeple" compound, with cylinders 25 $\frac{1}{4}$ and 54 inches in diameter, by 42 ins. stroke.

Boiler, of iron, built by Shepard Iron Works. Diameter 12 feet; length 20 feet; working pressure 51 lbs. steam per square inch.

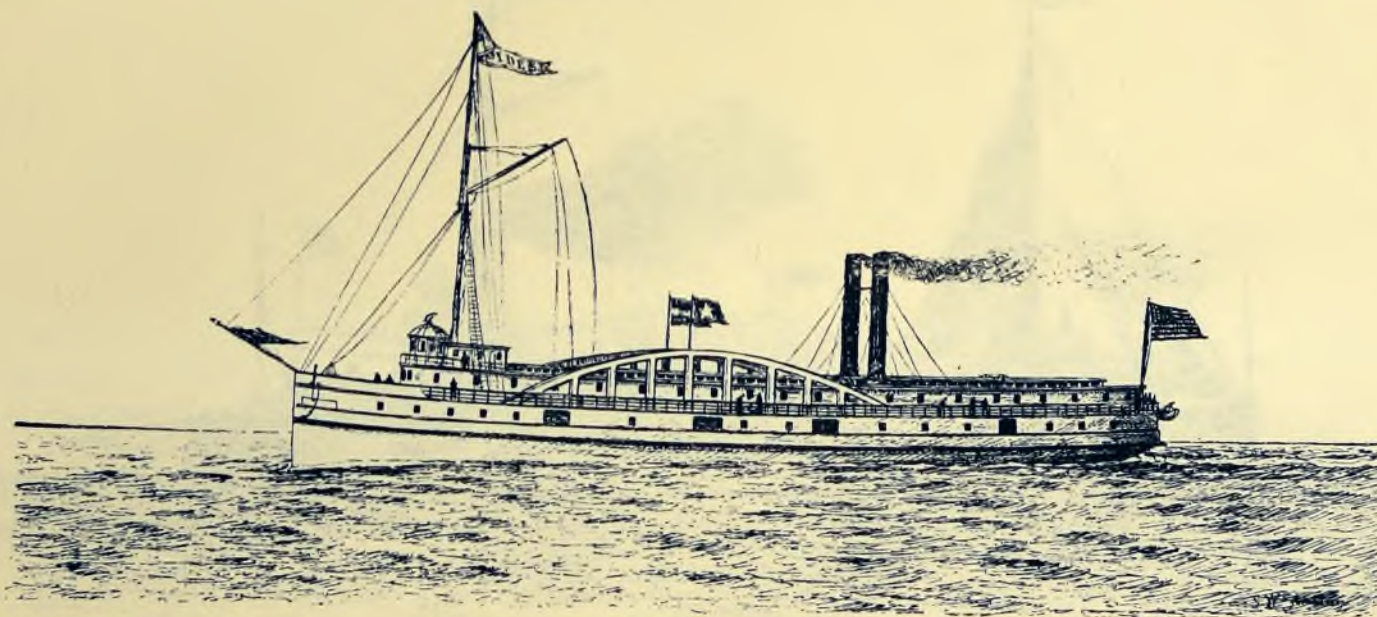
Tonnage 1115 gross. 917 net.

Built for the Peoples Line of passenger propellers running between Buffalo and Chicago. A well-built and comfortably furnished boat of the typical style of passenger propellers of her time. Afterwards used as a passenger boat in the Lake Superior Transit Line, between Buffalo and Duluth.

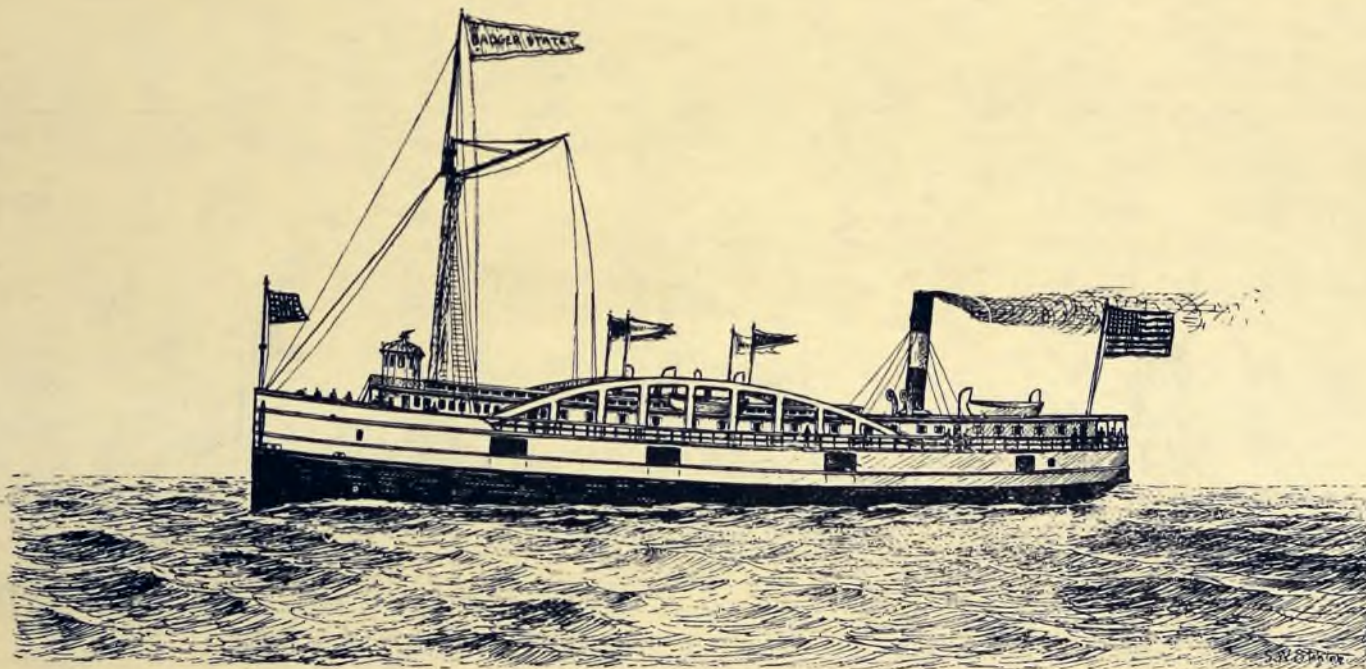
NORTH STAR

Built at Cleveland, Ohio, 1854. Length 274 feet; beam 33 $\frac{1}{2}$ feet; hold 15 $\frac{1}{2}$ feet; 1106 tons. The "North Star" was built for the Cleveland and Lake Superior Line, and was launched on May 20, 1854. She was considered one of the most beautiful boats of her class and was splendidly furnished throughout. She had a speed of between 16 and 18 miles an hour. She ran regularly each season between Cleveland and Detroit and the ports on Lake Superior. She was burned at her dock in Cleveland, February 21, 1862.

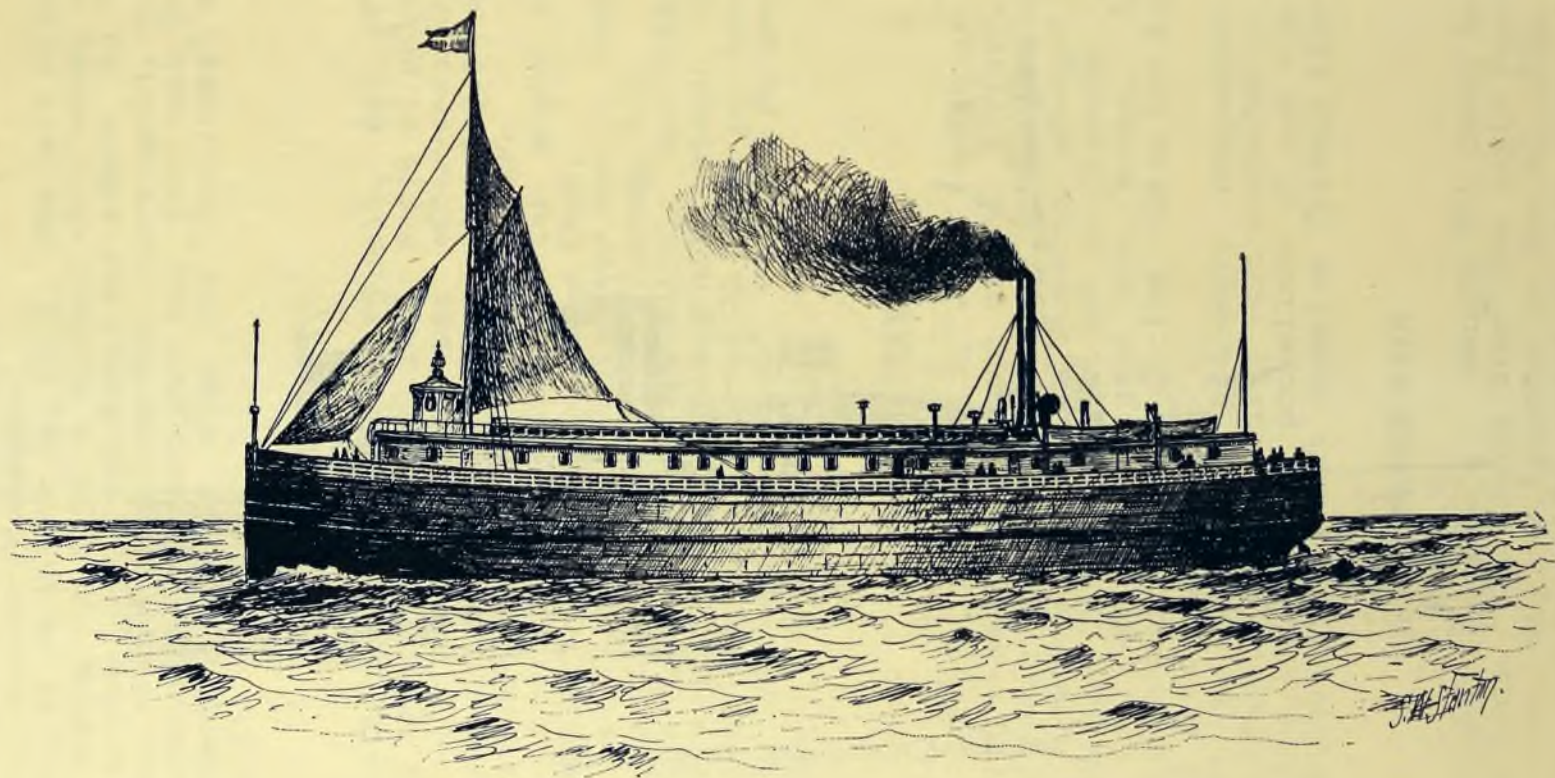
To be continued in May issue.



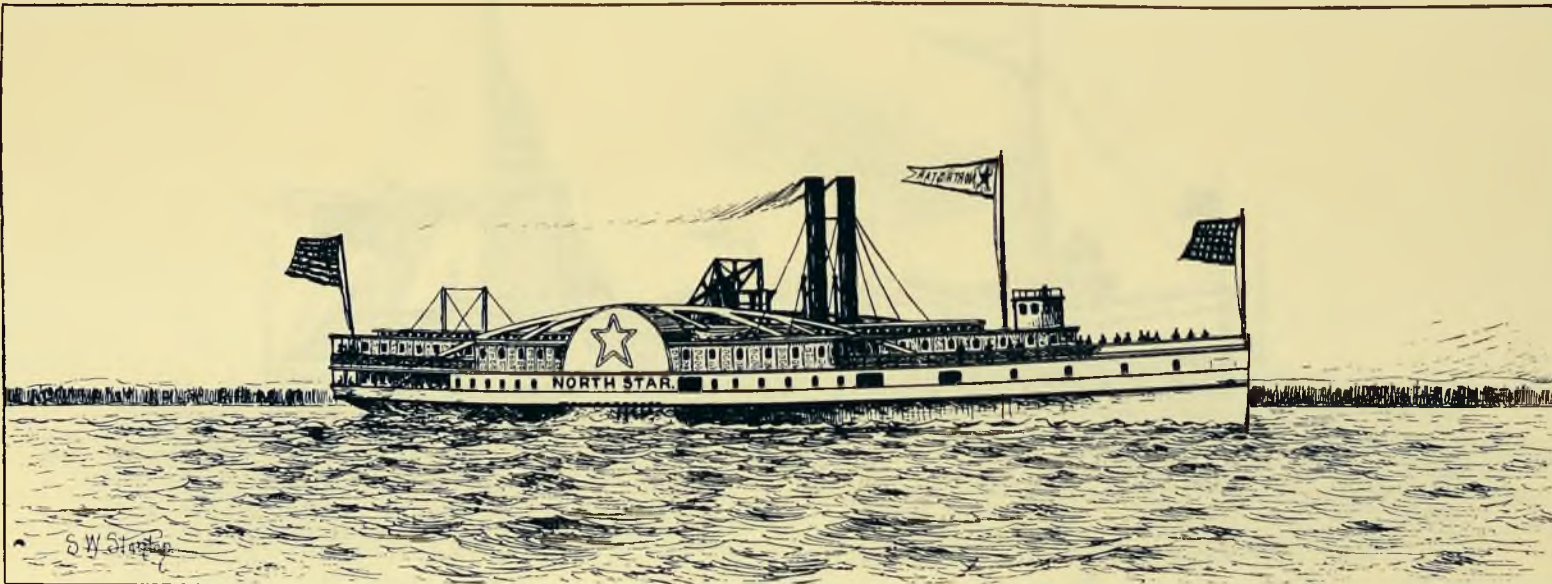
GREAT LAKES PROPELLER IRONSIDES, 1864.



GREAT LAKES PASSENGER PROPELLER BADGER STATE, 1862.



GREAT LAKES PROPELLER MERCHANT, 1862.



GREAT LAKES STEAMBOAT NORTH STAR, 1854.