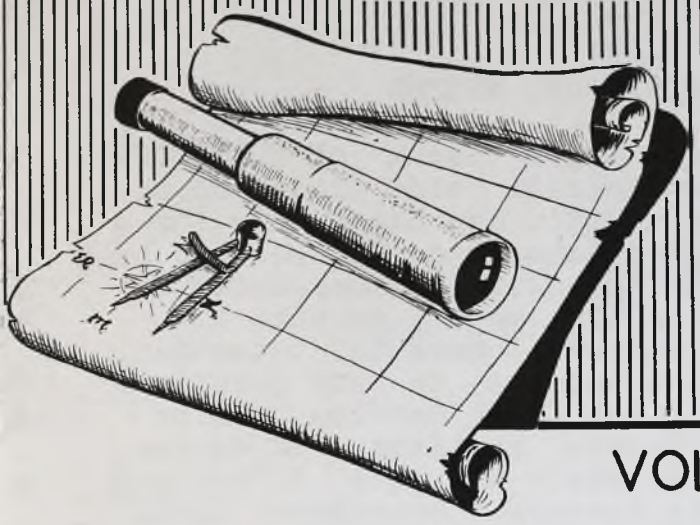
35 CENTS



TELESCOPE

VOL. 8 - FEBRUARY 1959 - NO. 2

EARLY MAPS OF THE GREAT LAKES REGION

From an Atlas published 1570

Telescope

PUBLISHED BY

GREAT LAKES MODEL SHIPBUILDERS' GUILD

5401 Woodward Avenue

Detroit 2, Michigan

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 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.

Supported in part by
THE
DETROIT HISTORICAL
SOCIETY

****

Joseph E.Johnston,
Editor

MEETINGS

February 27, 1959
March 27, 1959
7-30 PM.
Detroit
Historical Museum
5401 Woodward Ave.

Editorial

MORE COPY NEEDED

If this, or some later issue of TELESCOPE appears a bit on the slim side please do not blame your editor. You can blame him for a lot of things--like the grade "A" boo-boo he failed to note in the January issue under the heading "Regarding the Above", on page 2.

I can assure you that I have no intention, or ability to give answers to any questions which may occur in the Civil Service examination for Marine Museum Exhibitor. Of course, what I intended to state was that I "can not give any specific answers. Somewhere along the way the word "not" got lost.

The matter of copy is again very pressing. Perhaps I could fill every issue with my own work but I have never wanted this to become a one-man magazine. Among our members there are many who can write on some phase of Great Lakes history. The only way we can keep the publication alive is for all of us to contribute what we can. NOW is the time to send in your stories.

SOME SUGGESTIONS

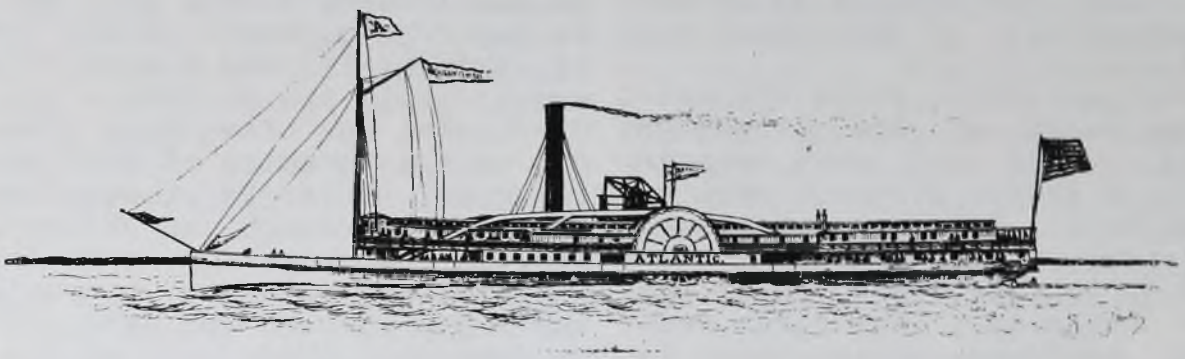
On page 16 of the January issue we offered some suggestions on what to include in brief port histories. We would like to mention now some other subjects which we would like to feature:

Islands of the Great Lakes, lighthouses, canals tributary to the Lakes, biographies of people who have contributed to the developing of our shipping, types of vessels which have been used on these waters, histories of shipbuilding firms, and the work done by government agencies in the region. Anything from one column to 32 pages will be welcome.

WINKY THE SHIP'S CAT SAYS,

"Count your calories, as well as your blessings,if you want to enjoy the blessings."

GUILD MEMBERSHIP runs by calendar year. Dues $4.00



LAKE ERIE STEAMBOAT ATLANTIC, 1848.

THE LOOTED TREASURE SHIP

By Ted King

I have yet to read a story concerning sunken treasure in the Great Lakes, that didn't contain a mention of the immigrate ship ATLANTIC that went to the bottom of Lake Erie, off of Long Point, Ontario, on the night of August 20, 1852, after a collision with the steamer OGDENSBURG The vessel carried over two hundred people down with her, plus a substantial amount of money that was said to be in excess of $60,000. The money was the property of the Adams Express Company.

Writers of sunken treasure tales are not the only ones that still list her as one of the "treasure ships" of Lake Erie. Historical writers who use these Great Inland seas as their subject, have been making the same mistake for years! Anyone interested can consult books that deal with sunken treasure, and find this vessel listed along with other so called Lake Erie "treasure ships", such as the S.S. DEAN RICHMOND, S. S. DACOTAH, the schooner LEXINGTON etc. The truth of the matter is, that the strong box from the sunken ATLANTIC was brought to surface on Sunday, June 22, 1856, by a diver (commonly called submarine men a hundred years ago) named Elliot P. Harrington! He accomplished this feat in four days and eighteen dives, in 181 feet of water! A depth that even the modern day diver watches his step in, and doesn't try to push his luck.

The exact amount of money in the strong box recovered from the ATLANTIC was $36,000. $5,000 in gold pieces, $31,000 in currency and six gold watches, (two of which would still run when wound.) The paper money, though soggy from its forty six month immersion in Lake Erie, still in good enough condition to be counted. Aside from this, there was a package of bonds, issues of the State of Michigan, plus a warrant on the treasurer of the United States, drawn in favor of John N. Gaines, paymaster, U. S. Army for $10,000. It bore the number 2841, and was dated August 11, 1852. This warrant was returned to the United States Army, and the bonds were sent to Ypsilanti, Michigan. Thirty six thousand dollars is a far cry from the reported sixty thousand, that some of the so called authorities on such matters, claim is in the safe of this wreck. Many years of research proves otherwise.

There had been six previous attempts made to recover the money from the ATLANTIC and all had met with failure, until the exceptional Mr Harrington decided to try his luck. I do not use the term "exceptional" in reference to Mr. Harrington lightly, for he was all of that, and more besides. As a capsule run down on this man's life, a bit further on, will show.

Before tackling the job of salvaging the strong box on the ATLANTIC he had built quite a reputation for himself by salvaging the complete cargo of the steamer ONEIDA which had gone to the bottom of Lake Erie a few miles east of Barcelona, New

York in 1852. The cargo of this vessel was flour, and strange as it may seem, very little of this flour was damaged!

The year of 1853 found him salvaging the cargo of the propeller PRINCETON, which had gone down in Lake Erie, a short distance west of Van Buren Point, New York. Harrington recovered most of the cargo and returned it to the owner, which was the Erie Railroad. The cargo consisted of hardware, agricultural implements, dry goods, and stoves. The next two years he spent diving to wrecks in the upper lakes, and recovering many valuable cargoes for their owners. His diving ability was known from the northern shores of Lake Superior, to the South shore of Lake Erie. He never lacked for work. Whenever ship owners or Marine Underwriters needed the services of a diver, a call was sent out for Mr. Harrington.

Early in June 1856 be began to lay his plans for the attack on the ATLANTIC. To him it was a challenge, for the ship as fate would have it, had gone down in one of the deepest holes in Lake Erie. His first step was to have a talk with the purser of the sunken vessel, who had been one of the survivors of the sinking. He readily told Harrington as to where the strong box would be found on the wreck. He stated that, it was in his stateroom, which was the third room aft of the wheel-house, on the port side. With this vital information, Harrington picked his partners, all experienced men in the marine field, and June 19th found them aboard the salvage vessel FLETCHER and anchored over the sunken hulk of the ATLANTIC. His partners in this venture were William Newton, Charles Gardner, and Martin Quigley. Quigley was also a submarine man, but he made no dives to the ATLANTIC.

The day was ideal for the beginning of operations, not a ripple broke the surface of the lake, she was as smooth as a piece of glass. Harrington was made ready by his tender for the first dive, which was to be more or less exploratory. For this particular salvage attempt, he had discarded the conventional diving gear of the day because of the great depth. Instead, he was using a sort of combination diving bell and dress. He had free movement of his arms in it, though it was a sort of copper armor shell, shaped like a man. Mr. Harrington has often been given credit as the inventor of this odd diving gear; this is inaccurate. An inventor of recognized ability, Harrington did, however, make improvements on it, that made it easier for the submarine men who used it later to carry out their work on the bottom of the lakes.

By nine a.m., young Harrington was encased in his diving gear, lowered over the side, and on his way down to the wrecked ATLANTIC. At the fifty foot depth, complete darkness closed in on him, and as he continued to go down, the water became colder. By the time his lead shoes thudded on to the deck of the sunken craft, he was chilled to the marrow of his bones, and might just as well have been working in a huge bottle of black ink. Harrington's guess was that he had landed on the promenade deck of the silent ATLANTIC, about forty feet aft of the pursers cabin. He had no way of actually knowing for sure, the only way he would be able to confirm his belief, was to prowl the promenade deck and search out the cabin that contained the coveted strong box. The only working tool that Harrington had taken down with him was a short iron bar, roughly three foot in length. He carried it for use in helping to extricate himself, in the event that be became entangled in any debris that might have been strewn on the wreck. This same iron bar turned out to be the means of his locating the stateroom he sought. Due to the intense cold of the water, Harrington's hands soon became numb, and in the many ensuing descents to the treasure ship, be used the bar as a crudgel to beat his way to the wanted room. His hands were so cold that he could not distinguish the feel of wood from glass, and as he made his way forward in the search, he would strike blows with his bar. If the blow landed solid he knew it was wood he was hitting, if it crashed through an opening, he knew without a doubt, that he was breaking the glass in the windows of the staterooms. By this

method, he knew that slowly but surely, he would find his prize. Reverberations concerning the use of this bar, were to cast an echo fifty seven years later.

The time spent by Harrington on deck of the ATLANTIC, during his first dive to her, was one minute. In all, four dives were made to the wreck that day. The first one lasted as stated above, one minute, the second three minutes, the third four, and the last dive of the day, Harrington remained on the wreck for seven minutes, which made a grand total of fifteen minutes. His constant companion throughout the whole venture was danger. Danger of the dreaded bends, the fear of the present day diver, as it was the diver of yester-year. Though not as much was known about the bends a hundred years ago, as there is today, that alone, is enough to make Harrington's exploit a marine salvage marvel.

The four descents by the treasure seeker had supplied the expedition with the basic facts, needed by them to lay their complete plans as to any other gear needed to carry out their operations.

It was reported by Harrington, "that the ATLANTIC was resting on the bottom at about a ten degree angle to the port side, three to four inches of slime and mud covered her deck." He also stated that there was no current encountered down there.

The four salvagers, well satisfied with their first days progress, hauled up their anchor and headed into port, to rest and gird themselves for the next day's assault into the lair of Davy Jones.

Friday, June 20th. 1856

Daybreak found the salvage craft with its eager crew aboard, hovering over the sunken treasure ship. Again the weather was ideal for diving operations. Hot, clear, and the surface of the lake as calm as a mill pond. The sun had just cleared the horizon, when Harrington went over the side for his first descent of the day. He prowled the promenade deck for four minutes before signaling to be hauled up. After a short rest, he made ready and down again he went. This time he withstood the terrific pressure for seven minutes, all the while, smashing at the bulkheads of the cabins on the promenade deck, with his iron bar. Brought to the surface, he took another short rest period, and back he went to the task of locating the purser's room. This time he was only able to stay down three minutes, slowly stalking along the slightly tilted deck, and lashing out with his iron bar.

It was mid-afternoon now, and Harrington prepared for the final dive of the day. He was down for six minutes on this descent, and it was on this dive that he located the purser's cabin. At last he stood within a few feet of the strong box, that had defied six previous salvage attempts. It was now almost within the grasp of the treasure hunters. Several more dives were to be made by the daring Harrington, before the box containing the treasure would see the light of day again. He had already made eight dives in two days, to the great depth of one hundred and eighty one feet; proof of his iron stamina, and stubborn determination to wrest the valuables from the grip of Davy Jones.

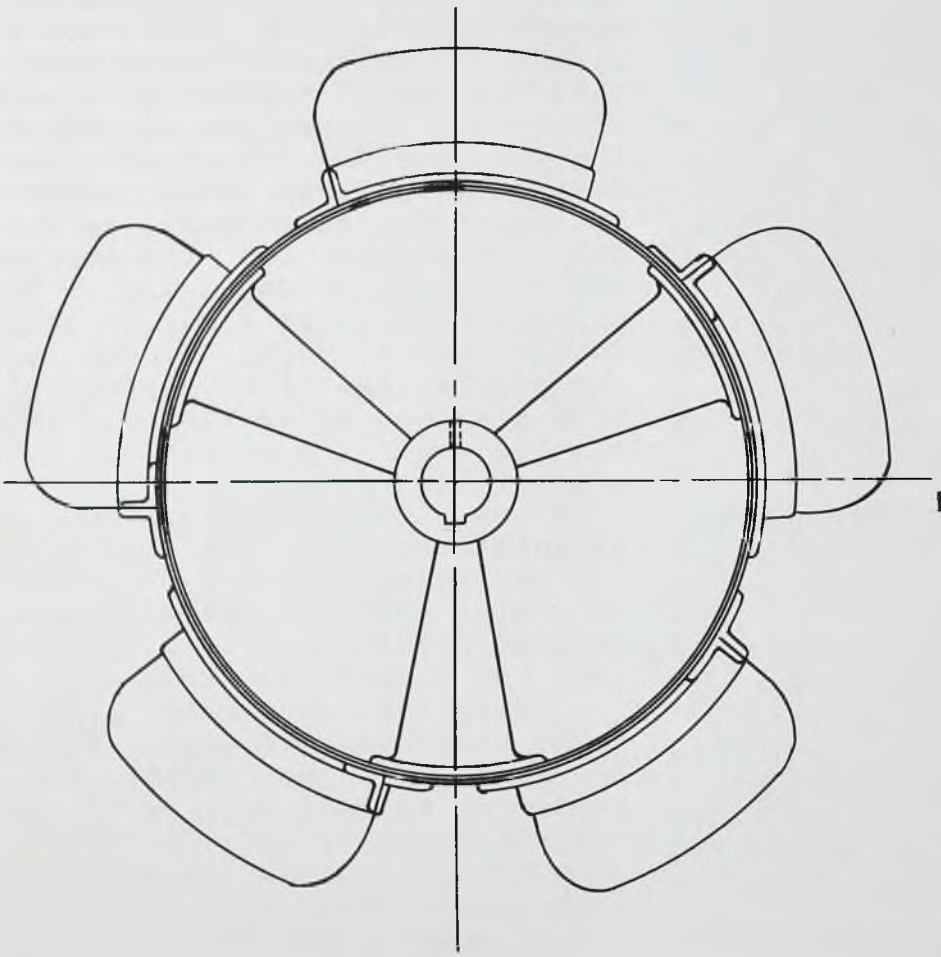
It was with light heart and great expectations for the morrow, that the men weighed anchor and went back to their base of operations, with knowledge that the end of their project was almost in sight.

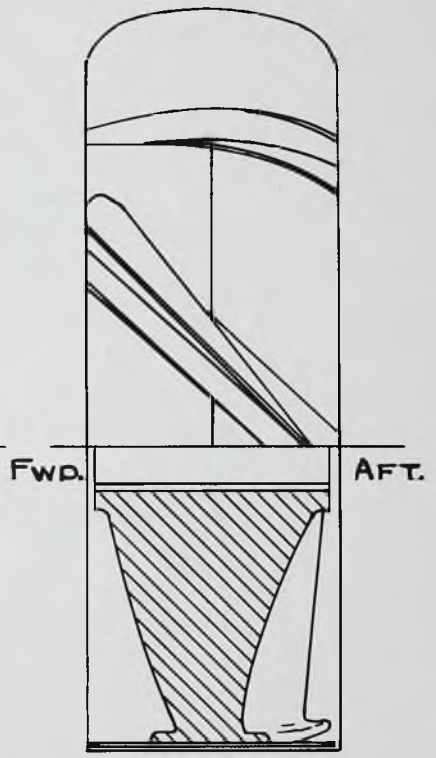
Saturday, June 21st. 1856

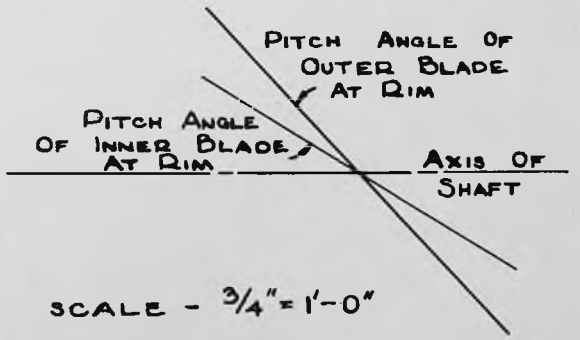
The elements were again favorable to Elliot P. Harrington and his partners, as they once again headed for the grave of the ATLANTIC to resume their assault on the wreck. Anchored securely over her, the master of submariners began his third day of work on the water filled hulk. Knowing the dimensions of the strong box, from the information that the purser had given him, Harrington knew that it would never fit through the shattered window of the cabin, even if he were able to crawl in there and drag it over to the opening. He did the next best thing in view of the situation. With his iron bar, he began prying and hammering on the window frame, with the intentions in mind, of tearing out the bulkhead from the window ledge down

Cont'd. on P. 14.

PROPELLER OF
-INDEPENDENCE-
1845
NOW IN GOVERNMENT PARK
SAULT STE. MARIE, MICH.







SCALE - 3/4" = 1'-0"

DRAWN FROM MEASURMENTS
TAKEN FROM PROPELLER
BY FRANCIS J. SLYKER
TRC'D BY J. B. JONES 1-7-59

PROPELLER OF INDEPENDENCE 1845

By F. J. Slyker

The steamer INDEPENDENCE was built at Chicago in 1843 by an Englishman, J. M. Averill, who dreamed of establishing a Chicago-Europe shipping line. Inspired by the recent success of the VANDALIA, the first propeller on the Lakes, this method of propulsion was also chosen for the new vessel. However, when the ship was tried out, she was found to be not only exceedingly slow but also to have a rather high rate of fuel consumption, so that she was obviously unsuited for her intended trade. It was then decided to put her in service on Lake Superior, which was as yet without a steamboat. The next two years were spent preparing her for this trade, during which time she received a new set of engines. I suspect also that her propellers were altered, as they now have only five blades around the rim, whereas there are holes indicating that six blades were used at one time.

Late in the summer of 1845, the ship set out for Sault Ste. Marie, where she was portaged around the St. Mary's River Rapids, as the canal and locks were not yet built. For the next eight years she sailed from port to port serving the fast growing mining industry of that region. On November 22, 1853, while getting underway on her "last trip for the season," she was sunk by a boiler explosion in the St. Mary's River about one mile above the rapids.

In 1933, a dredging operation brought her two propellers and some hull timbers to the surface. The wood was made into canes, checkerboards and other souvenirs, and one of the propellers was mounted in the park next to the modern MacArthur Lock, where it may be seen today.

The hub and inner blades are a single, iron casting. The hub is cylindrically bored for a 6 inch diameter shaft, which was locked in place by a key and a big set screw. The inner blades are teardrop shaped in cross section. Their pitch angle is nearly zero at the axis of the shaft, and is, as shown on the drawing, at the band. Their outer ends have cast on flanges to which is riveted an iron band. This band was built up out of four pieces. The inner band was made of two semi-circular strips of 5/16 inch iron, the ends being jointed with 3 inch overlaps. Outside of this band there are two circular bands of 5/16 inch iron, which are each only half width. Outside of this band there are sheet iron blades, riveted in place by means of 2 1/2 x 2 3/4 x 3/8 inch angle clips. There are holes punched in the band for six of these blades; however, only five of them seem to have been mounted, unless a change was made at some time during the ship's career.

Most of the information used in the above historical sketch was gotten from Dana T. Bowen's book, Shipwrecks of the Lakes, chapter three. The dimensions and structural notes were taken from the old propeller by the author.

SPRING BINDERS FOR TELESCOPE

We can now supply you with spring binders for TELESCOPE at the following prices:

No. 7

1 inch. Holds 12 issues.....$1.35

No. 118-A

1 inch. Holds 12 issues..... 1.94
1½ inch. Holds 18 issues..... 2.45
2 inch. Holds 24 issues..... 2.65

Postage and packaging extra. The word TELESCOPE imprinted on cover, 20¢. Volume and year in addition to title 35¢ for both.

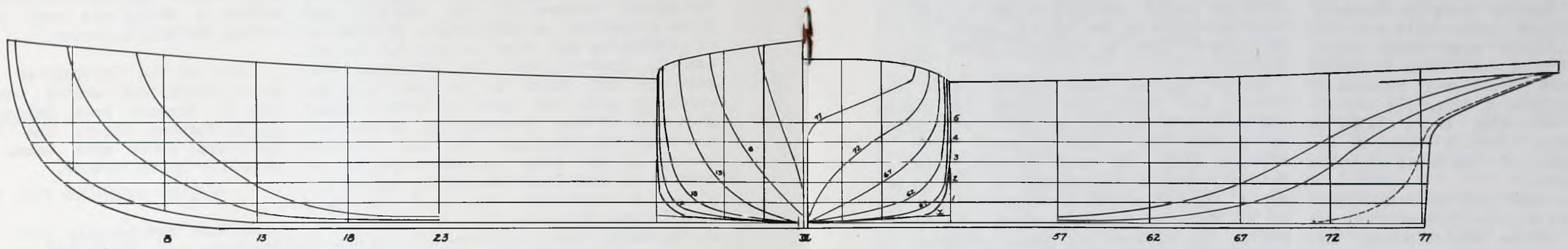
These two numbers are identical except in quality of simulated leather covers. Both can be supplied in black only. Constructed with tempered steel clips over steel-reinforced, rounded backbone, concealed in binding. Reinforced hinges. There is an inner folder with scored hinges.

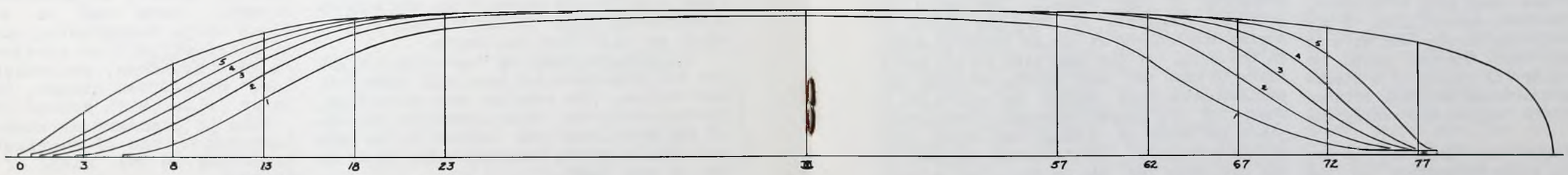
This is standard merchandise manufactured by one of America's largest companies in the field of files and binders.

In order to take advantage of these very special prices get your order in before February 27. We must order in quantity to get this discount.

Send your check with your order or if a library we will bill you. This offer is for a limited time only.

Protect your back issues of TELESCOPE from loss and damage. Libraries from Nova Scotia to California and from Canada to Rio Grande are doing this, so they must have a value. We certainly think so.





Scale in Feet
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Flint & Pere Marquette R.R. Steamers No. 1 & 2	
Built 1882 By Detroit Dry Dock Co.	
Great Lakes Model Shipbuilders' Guild	
5401 Woodward Avenue Detroit 2, Michigan	
Drwn By James B. Jones	Chk'd By J. E. Johnston
Trc'd By James B. Jones	Date 1-13-59

PISTON TO PADDLEWHEEL
MARINE STEAM ENGINES

From the time of James Watt and his experiments to harness the power of steam, man worked diligently to develop a satisfactory method of applying this power to the propulsion of boats. Many complicated mechanisms were tried out before the simple marine steam engine, as we know it today, was developed. Passing over the numerous unsuccessful devices which would not work at all we will begin with those which, though they performed, were soon discarded for more efficient inventions. Because of the conflicting claims of inventors and diverse opinions regarding those claims we will, in the main, identify types of engines by the names of the boats in which they were installed.

It has been pointed out that the G r e at Lakes constituted a prime laboratory during early years of marine motive power. Towards this there were to the contributing factors of an abundance of fuel and an urgent need for dependable service. With these two facts definitely established, capital was easily attracted. Wood yards were located only a few miles apart, all around the Lakes, as rapidly as demand for cord wood developed. The mad rush of settlers created business. It was an inventor's paradise wherein he could sell almost any idea that promised the investor a profit, as the many queer devices attest. It was a most inefficient engine which could not travel from one wood yard to another, and impatient travelers were willing to pay handsomely to avoid the passage westward in sail, to be first into the new lands, or just for the novelty of riding on a steamboat. Ocean and coastwise shipping offered less until the steam engine was vastly improved.

When the "Ontario" was launched in the summer of 1816, steam navigation on the Hudson River was already proving its worth, and making its way on the Mississippi, where smooth water prevailed. On the broad expanse of the Great Lakes more seaworthy vessels were required. The "Ontario," and in fact, many of her immediate successors, had the hulls of sailing vessels, and all carried sails of some kind. Her engine was of the "walking beam" type, which for side-wheel steamers remained popular for one hundred years.

It appears that the inventors of marine steam engines had difficulty in deciding how to transfer the power from the cylinder to the water. Of course, the piston rod was common to all engines using steam, and still is. The force generated in the boiler and released into the cylinder must be transferred to the point where the actual work is done, which in a boat means to the water, where it is expended in propulsion. In all reciprocating engines it is the piston rod which carries the effort from the piston rod within the cylinder to some mechanism on the outside, where it can be changed from a straight line into a circle.

In the walking beam engine, as in all others, the first step beyond the piston rod must be a connecting rod of some type, to deflect the flow of power from a straight line. In later engines, this rod extends from a "crosshead" on the outer end of the piston rod directly to the crank on the main drive-shaft, where the rotary action is achieved at once. However, in the "Ontario" and other boats with similar installations, this rod extended upward to one end of the huge walking beam, which was pivoted at a point near its mid-length to allow it to rock up and down. At the opposite end of the beam another connecting rod, usually know as a "pitman" extended downward to the main crank, thus introducing two integral parts not at all necessary in a simple solution of the problem. In trying to follow the thought processes of the inventors, we may assume that considerable concern was felt regarding the stability of the vessel. Obviously it would be desirable to keep the weight of engine and boilers as low as possible within the hull. At the same time it was necessary to have the main shaft, carrying the paddlewheels, high enough to allow for a wheel of the proper diameter. This would place the shaft in a plane well above that of the machinery. In stationary engines of the day, made for use on land, the walking beam was already accepted as a desirable unit, so its principle was applied to navigation, and with quite a bit of success. One disadvantage lay in the large openings through the decks which were required for the moving parts and the large frames supporting them. Through these openings, both rain and spray were admitted according to the weather, creating undesirable conditions below.

While the "Ontario" was being constructed at Sacket's Harbor, New York, the Canadians were rushing to completion, on their side

of the lake, another steamboat which was given the name "Frontenac." A sketch of the latter does not show a walking beam, so it may be supposed that other ideas were being tried out. Two years later, in 1818, the "Walk-in-the-Water" was built at Black Rock, N. Y., being the first steamboat on the Lakes above Niagara Falls. In her engine another idea was put to work, and while the lofty walking beam, with heavy supporting frame were eliminated, the entire engineroom was left open to the weather. This engine had a single cylinder from which the piston rod extended upward to a crosshead running in guides on two upright posts placed athwartships. From near the ends of the crosshead, two connecting rods extended downward, each being attached to one corner of a large iron triangle on either side. The triangle was pivoted at its center so it could rock in a perpendicular plane like a walking beam. The hypotenuse of the triangle was at the bottom. The connecting rod engaged the forward corner and on the after corner there was a counter-weight. From the apex, a pitman extended aft to the main shaft where it engaged a wrist pin, not on a crank, but set into the side of a solid iron wheel. The rim of each of the iron wheels, one to port and one to starboard, was fitted with teeth for a sprocket chain. Contrary to custom there were two main shafts instead of one extended the full width of the boat.

The problem of transferring the power from the piston to the shaft was solved at this point, but in the mind of the designer there was another problem, and that was to keep the power flowing evenly. To accomplish this, a fourteen-foot cast iron balance wheel was mounted on a shaft aft of, and parallel to, the main shaft. This balance wheel was activated by sprocket chains leading off of the iron wheels on the two main shafts. It is understandable that this device tended to keep the low-pressure engine turning smoothly, but what is not so obvious is how the engine could be brought to a quick stop from full speed ahead.

After the Walk-in-the-Water was wrecked, in 1821, this engine was recovered and installed in the "Superior" where it continued to serve for some years. After the "Superior" was retired from service, the same engine was taken on sleds, over the ice and snow, from Detroit to Saginaw, Michigan, where it was installed in the first steam-powered saw mill in the Saginaw Valley. There is no record of a similar engine having been built, and so it passed out to make way for better inventions. On the other hand walking beam engines continued in use for one hundred years.

By 1842 the "inclined" engine had been invented, and until the end of the age of the sidewheel steamboat, they were found satisfactory. These engines differed from the horizontal types used on the Mississippi River only in the way they were installed, that is, with the cylinder lower than the crank. The only reason for this method of installing was to keep the center of gravity low, and yet be able to reach up to the main shaft. For use in sidewheel steamers little basic change has been made in the inclined engine though efficiency was vastly increased. The connecting rod, or pitman, was the only link between the crosshead and the crank. There was no way to further simplify the problem of transferring power from piston to paddlewheel.

PISTON TO PROPELLER

When John Ericsson brought out the "Vandalia" in 1841 there was no other successful propeller-driven commercial steamer in the world. After her first trip up Lake Ontario and back to Oswego, N. Y., this type of propulsion rapidly gained favor. Her little power plant, set far back towards the stern, left much more space for cargo than was possible in a sidewheeler. Vessel owners were impressed, and such installations rapidly increased in number, though they did not completely replace the sidewheelers in the passenger runs. Some of the most luxurious passenger sidewheelers were built half a century later.

It is interesting to note that while the engineers were able to construct engines to drive propellers, the builders of ships could not work out a method of piercing the sternpost for the shaft. Until this obstacle was surmounted all propellers were installed in pairs, though they were turned by one engine. The "Vandalia's" engine had two cylinders, placed fore and aft, and in an upright position. The piston rods moved up and down above the cylinder, each activating a crosshead from which extended, to port and starboard, a crossarm. From the ends of these crossarms the connecting rods dropped straight down to the cranks on the twin shafts, rotating them, and their propellers, in opposite directions. The compound engine was on its way, but that way was not a straight one. There were still a

few bugs to iron out. The fear of weights too high in the boat still haunted the designers, and to meet that threat, they came up with a double-opposed engine, placed so that the stroke was horizontal, but at right angles to the keel. Several types of this engine were developed, and while they were not popular on the Lakes, several were installed in ocean vessels. One was, if possible, more complicated than the engine in the "Walk-in-the-Water." It was used to turn two propellers, as was the case with the "Vandalia," and my guess is that more power was expended to activate the unnecessary parts, than was required the propel to vessel. Another was fitted with two piston rods on each piston.

Once the inventors decided that the cylinder, or cylinders, could be placed above the drive-shaft, with the piston working downward, the road was open for the development of really efficient engines of the reciprocating type. The steam turbine, which develops the rotary motion directly from the flow of steam, gained popularity because of its greater economy of operation, but since a separate engine must be provided to gain anything like efficient backing power, they have not met with universal acceptance, particularly with the men who handle the ships.

Diesel engines have made a fair bid for popularity in the marine world, and by some observers it was thought that the marine steam engine was on the way out, when along came the Skinner Uniflow, which apparently has proved its superiority, at least for use in the huge ore ships of the Great Lakes. The Ford Motor Company which had operated its big motor vessel "Benson Ford," for many years, powered its latest addition to their fleet, the "William Clay Ford," with a uniflow engine. Outwardly the uniflow appears no different from any other marine steam engine of recent times. The key to its popularity is a simple method of freeing the cylinders of expanded steam at the end of a stroke, instead of pushing it back out of the end at which it entered. By just such little steps has the marine steam engine slowly advanced in efficiency since 1807, when Robert Fulton brought out his "Clermont," which was followed by countless fuel devouring inventions, many of which were hardly more satisfactory than the sailing craft with which they competed. During the 151 years since the "Clermont," the most interesting feature of the development of the marine steam engine is the persistency with which the engineers avoided the simple solution for the complex. In this paper only one problem has been treated, the transference of power from the piston to the water.

MARINE NEWS 1958

By Robert B. Radunz

APRIL 29
New ship being built for Columbia Transportation fleet to be named Edmund Fitzgerald. The icebreaker MACKINAW ties up at Cheboygan its operations completed until next winter.

APRIL 30
Mayor Richard Daley of Chicago calls meeting of union and shipping officials in an effort to end strike which has tied up overseas shipping in Chicago and other Great Lakes ports.

MAY 1
Pilots and foreign ship owners resume negotiations in Montreal to end strike of Great Lakes pilots.

MAY 2
A federal judge in Chicago bans lake port picketing by Masters, Mates & Pilots Union. Attempt to auction straits ferry fleet fails. Bids called lower than scrap prices.

MAY 3
Court ban on picketing starts flurry of activity on docks at Milwaukee and Chicago. Several foreign ships tied up by strike of pilots and stevedore refusal to cross picket lines are unloaded.
Heavy fog in Detroit River forces four ships to anchor at mouth of river.
Lakes Seaway Line of Chicago bids $465,000 for ferry VACTIONLAND. Firm wants to use her as trailer ship between Muskegon & Milwaukee. Bid is rejected.

MAY 4
A new Cuban shipping service will enter the Lakes in 1959. Six small cargo vessels to be operated by Flota Maritime Browning de Cuba, headed by Troy Browning of Detroit.

MAY 5
CANADIANA to run between Toledo & Bob-Lo. Skipper will be Philip Thorpe.
A total of 414 vessels passed through the Soo Locks in April. Of the total, 232 were upbound and 182 downbound. Vessels carried 1,230,215 tons of goods.

MAY 9
A federal court order that broke up tie-up of foreign ships in Milwaukee and other Great Lakes ports was extended indefinitely after a hearing in Chicago.
Great Lakes newest freighter the JOHN SHERWIN carries a record cargo of 21,532 net tons of taconite pellets from Taconite Harbor on Lake Superior.

MAY 12
Pittsburgh Steamship division plans to put only 37 of its boats into service this Season. Interlakes plans to use 18 of 33. Hutchinson 12 of 24. Cargo Carriers 1 out of 5, Oglebay Norton only 4 or 5 of 8, Cleveland Cliffs 10 of 16. Decreased demand for ore has left big stockpiles on Lake Erie ore docks.

MAY 17
The U. S. House of Representatives Appropriations committee rejected President Eisenhowers proposal that Federal subsidies be denied Great Lakes ship operators.
The G.F. BECKER, owned by Frank Becker of Detroit wins the 9th International Tug Boat Race.
With only 104 of 250 ore freighters in commission, Great Lakes vessel operators are feeling the business recession that has curtailed steel production.

MAY 18
Traffic was blocked in the Welland canal when the tanker B. A. PEERLESS strikes a lock fender.
The JOHN SHERWIN loaded her first coal cargo of 17,500 tons at Toledo, the load is destined for Indiana Harbor the largest cargo of coal ever to go to that port.
The Canadian steamer FRANK A. SHERMAN will be christened May 31 and go into service immediately. The 681 foot ship built at Port Weller Dry Docks Ltd. will join the fleet of the Upper Lakes and St. Lawrence Transportation Co.
Jobs are being sought for 101 of the 476 state ferry employees left on the beach when the Mackinac Straits Bridge opened November 1.

MAY 25
Two tugs free the 530-foot freighter LACKAWANNA after it ran aground on the Canadian side of the St. Clair River south of the Blue Water Bridge.

MAY 28
Army engineers say they will be able to complete most of the work on the Great Lakes connecting channels by 1962 under the spending program proposed by the Eisenhower administration.
Indicative of the slow pace of the 1958 ore shipping season is the situation at Escanaba where up to this date only 9 ore carriers had loaded, compared with 182 at this time last year.

MAY 31
The WYANDOTTE rescued two Ohio fishermen in Lake Erie after they had drifted 13 hours in their small boat.

Cont'd. from P. 5.
to the deck. This would give him an improvised doorway, and he'd be able to walk into the cabin, and haul the strong box out onto the deck, where lines could be attached to it to haul it top side.

After three dives, which consumed fourteen minutes, he saw that he was making little progress with his plan. He just couldn't seem to get in the right blows, or place the bar into spots where he could get sufficient leverage, to tear out the woodwork beneath the window to enlarge the opening. As most people realize, or can surmise, it is no easy matter to strike a powerful blow underwater, even in a shallow depth. And it must be remembered, that Harrington was working one hundred and eighty one feet below the surface. At which depth, it is a sort of slow motion process.

The next three dives by Harrington found him carrying a double bitted axe down with him, instead of his usual iron bar. On these three descents, he managed to chop out enough of the woodwork to allow him to enter the water filled cabin, and muscle the strong box to within five feet of the opening he had made. This he thought would be close enough to enable him to attach a line to it, and have it hauled up to the salvage vessel. This turned out to be the only wrong approach he made, in regards to the ATLANTIC expedition.

After being hauled to the surface, and taking his usual short-rest period, he descended to what he thought was to be his last dive to the wreck. For in his hand trailed the line that was going to bring the hard fought-for metal container to the surface. Entering the room again, he attached the line to the handles of the strong box and signaled for his partners to haul away. The line tightened as strain was put on it. Angled as it was, the box slowly skidded across the cabin floor towards the opening. But instead of sliding out onto the open deck as was expected, one end of it hung on the edge of the opening that Harrington had cut. And as added strain was put on the line, it slowly began to creep up the edge of the make shift doorway instead of swinging clear, to enable a straight lift. Harrington by keeping his hands resting on the box, was able to follow the progress of it, even in the pitch blackness. Knowing that it was not going to swing clear. He took his ever present bar and struck it a blow to try and knock it clear. Instead of accomplishing what he had hoped for, he felt a dull thud close by him and wondering what had happened, he began feeling around. To his surprise, his numbed hands felt the outline of the strong box! Exploring it by feel as best he could he determined that the handles on it had been torn loose. And on top of that, it had rolled half way back into the cabin. The handles had been made for men to lift it by, and not to stand the strain of a winch pulling on them. As much as he hated to, he signaled to be taken up. Once aboard the salvage tug, they headed for home, vowing to get the strong box for sure, on the following day. It was a ripe plum now, just waiting to be picked.

In all Harrington had made seven dives that day, for a total of thirty three minutes. Taken individually they were four, four, six, three, five, four, and seven minutes respectively. The exertion of enlarging the hole, at the great depth, had limited most of his time.

After docking their boat, Harrington went to work at a local blacksmith shop, and worked far into the night, forging a chain with which he could encircle the sunken strong box.

Sunday, June 22nd. 1856

With the weather still favoring them, they arrived on the scene of operations, and Harrington went down immediately. His mission, was to get the strong box out on the open deck, to prevent any chance of its getting snagged again on some obstruction. The box was heavy, and it took the young submarine two dives to get it placed where he wanted it. On his third dive to the treasure, he took the chain he had made, plus the line he was going to attach to the chain, to send their prize top side. Less than six minutes after the water had closed over the head of Harrington, the eager and somewhat impatient hands of his companions on the salvage boat felt the tug of the line in their hands.

The signal they had been waiting for, needed no repeating. Eager hands walked the capstan, for they knew that on the other end, were the riches they had sought. To their astonishment, when the strong box broke the surface, there was Harrington standing on it!

It has already been stated, as to what was found in the strong box when it was opened. Newspapers throughout the Great Lakes region, acclaimed Elliot P. Harrington's feat in a vain that was almost to the point of hero worship. So great was the public interest aroused, that some enterprising publicity man of that day, arranged with some shipping company that ran excursion vessels, for Mr. Harrington to be aboard one of them when it took its trip. This announcement to the public, brought the boat owners a landslide of business. People stood in long lines, to purchase tickets to ride on the vessel he was to be on, which was the steamer OCEAN. Hundreds of prospective customers were turned away. As an added attraction, submariner Harrington, would take a dive for the benefit of the excursionists. The recovered, and now empty, strong box was to be aboard the OCEAN also, for the people to view.

It was a foregone conclusion, that such wide spread publicity over the affair would, sooner or later, reach the ears of the Adams Express Company who owned the money. It did! The Express Company had undertaken to transport the money to its destination. When the ATLANTIC was lost, the Adams Express made good the money, so lawfully the money that went to the bottom belonged to them. It wasn't long before an attorney, representing the express company contacted Mr. Harrington and his partners and informed them that the money was not theirs, and that they must return it to the owners. The lawyer also went before the United States Court in Buffalo, and obtained an injunction against the keeping or spending of this money by the man that had recovered it. Brought into court, Harrington, Quigley, Gardner and Newton were informed by the judge, that once they had recovered the money, they should have gone to a United States Court, stated the facts and demanded a disposition of their findings. At this point, the Express Company stepped in and informed the court of its desire and willingness to settle with the salvagers. The proposition put forth was this. They would make a gift of the $5,000 in gold, and two thousand dollars of paper money, to the recoverers of the strong box, for their labor. This division gave each man seventeen hundred and fifty dollars, which is quite a difference from the nine thousand dollars, which they had thought would be theirs! It appears this settlement was satisfactory to all parties concerned, for no more was ever heard of the case.

For fifty seven years after Harrington recovered the strong box, the ATLANTIC lay in her watery grave undisturbed, untouched. Then her decks again felt the tread of a divers lead shoes. This expedition of treasure hunters, who were out of Detroit, had little trouble in locating the sunken hulk. Their drag cable caught onto one of the guards over the huge paddle wheels on the fourth sweep of the area, that she was known to be lying in. The salvage tug was anchored over the wreck, and a diver went down to look her over, and see what chance there was of locating and recovering, the "treasure" aboard her! When he came back up, his report to the rest of the party dashed their hopes of becoming rich at the expense of the ATLANTIC. For the diver reported, that he had found many broken windows on the cabins of the promenade deck, and that a huge hole had been cut beneath the window of the third cabin aft of the wheel-house, forming a crude but large opening! He went on to state, "Someone must have been there before them, and got whatever was valuable in that cabin." Little did anyone in this salvage expedition realize, that a diver of 1856, had been the one to beat the modern diver to the treasure. However the salvagers did not go back to Detroit empty handed. One of the party's divers sent up an anchor

from the ATLANTIC. A friend of mine in Port Dover Ontario has told me that he saw this anchor lying on the deck of the salvage tug, when it stopped there to take on water, in the summer of 1913 on the way back to Detroit.

Once again the ATLANTIC went back to sleep in the cold dark waters of Lake Erie off of Long Point. For another forty one years the slumber of the ATLANTIC was undisturbed, then in the summer of 1954, down came the divers again. Only this time, so the papers claimed, the divers were going to search for $338,000 in gold and silver that was supposed to be aboard her. (Incidently, one of the divers who was in on this find, was a fellow from Buffalo, named John C, Holzer, of 42 Holland Place. I wrote to this diver regarding the matter, but received no answer.) And that item was the last to date, that ever appeared in the newspapers regarding this particular salvage expedition. They too, no doubt, are wondering who broke all of those stateroom windows on the ATLANTIC and what valuables were recovered from the cabin, with the huge gaping hole in it! The ATLANTIC has once again gone back to sleep. How long it will be allowed to remain undisturbed, is anyone's guess.

Though the recovery of the safe from the ATLANTIC was the pinnacle of Elliot P. Harrington's diving career, he also ran himself up an enviable record during the Civil War.

At the outbreak of the War between the States, Harrington offered his services to the Union Naval forces, and in view of his past record, he was readily accepted. Space limits a complete review of his war exploits, but a sample of them, would not be amiss at this point.

In 1862 he was called to Norfolk, Va. to dive to the Confederate battleship MERRIMAC, make a survey of it, then prepared to raise it. His dive to her revealed that the current was too strong at this spot, for such an undertaking.

Cont'd. in next month's issue.

W A N T E D

Can you tell me when the wooden car-ferry INTERNATIONAL came to Detroit?

The last notice I have of her says she entered Buffalo on November the sixth, 1873. I take this to be the wooden 1857 vessel built at Buffalo, and not the 1872 iron INTERNATIONAL, built 1872 at Fort Erie.

Erik Heyl
136 West Oakwood Place
Buffalo 14, N.Y.

W A N T E D

The name and address of makers and/or dealers who can supply us with scale deck winches, etc such as those on modern steam vessels. Commercially built models are equipped with finely detailed items of this kind so there must be a source of supply.

The Editor: TELESCOPE

QUESTIONS AND ANSWERS

So many questions have been received by your editor for which he has been unable to supply answers, he will in the future run them in TELESCOPE.

After all, mutual aid is one of the purposes of the Guild and none of us have all the answers so we should be willing to pool our resources. There is little to be gained by sitting on our collections and not sharing what we have. In my relatively few years in the Great Lakes region I have not experienced anything more depressing than the report of some hard-working individual having lost his collection or had it severely damaged by water or fire, or some other misfortune.

Let's do more sharing with others.

THIS MONTH'S COVER

This month we begin a series of maps and charts of the Great Lakes region which will run for at least half of this volume of TELESCOPE.

These items emphasize the length of time taken to fully explore this part of the world and publish what was learned.