L.R. Vol. 258. p. 185.

(Built at Detroit in 1868. Tonnage 300, new measurement.)
Purchased in Jan'y 1870, for use at Spectacle Reef, Mich.

1871. "A steam barge built at Detroit in 1868, purchased and refitted in 1870-'71. Propeller; Price paid $25,000.
Measurement; length 152', beam 25', hold 9' 4", draft 8', tonnage 300, new measurement.
She is under the charge of the Engineer of the 11th District.
Repaired in spring of '79, at a cost of about $16,000. In June
1879. 1879 ready for service in excellent condition.
1886. Was transferred to the 11th Inspector on Dec. 6, 1886."

1870 The steam-tender Warrington and the sailing schooner Belle are employed exclusively by the engineer in transporting material and workmen to the different light stations for construction or repair, as the case may be. The Warrington is an indispensable adjunct to the other means employed for constructing the difficult works on Spectacle Reef. As the operations for this work are at present mainly on shore, she has been used during the present season in transporting materials for numerous new works in the district. She has delivered so far all the materials for Spectacle Reef, in addition to those of ten other light-stations, which have been, or are at present, in progress. 11th Dist.

1871 The steam-barge *Warrington* has been principally used this season in connection with the work on *Spectacle Reef*. During last winter she was strengthened by arches and additional bilge kelsons, and her deck-beams supported by stanchions, thus preparing her for carrying on her deck the heavy stones to be used in building the tower. She has also been fitted with a steam-derrick with which to handle the stone. This derrick has proved of the very greatest service already. Do. do.
The hard work of the season developed such defects in her boiler that a new one was deemed necessary. Hence, in August last the tender was laid up, and a new boiler eight feet in diameter and eighteen feet long was put in, when the vessel returned to her work. As the new boiler has a larger steam capacity, it will require less coal to run it when towing in heavy weather than was required for the old one, as it will no longer be necessary to force the fires as before.

1872 The steam-barge Warrington has been almost exclusively used as a tender upon the work at Spectacle Reef. Last fall she was supplied with a new boiler and heater, both of the very best class, and her machinery for handling freight put into the best possible condition, and she has contributed greatly to the success of the work on Spectacle Reef. Do. do.

1876 The steam-barge Warrington has been constantly in service during the season of operations in carrying materials for the construction of new stations, the repair of others, and in conveying working-parties. During the winter she was overhauled and necessary repairs made. Do. do.

1877 The steam-barge Warrington has been constantly employed during the season of operations in carrying working parties and material for the construction of new stations, and the repair of others. Do. do.

1878. The steamer Dahlia and steam-barge Warrington are in good condition. They have been in constant service during the season and have been able to perform all the service required of them. Do. do.

1879. The steam-barge Warrenton has been constantly in service, during the season of operations, in carrying material for the construction of the new station at Stannard's Rock, and the repair of other stations, and in carrying working parties to and from different stations. During the winter her hull was almost entirely rebuilt, and a new cabin built to replace the old one, which was destroyed by fire. She is now in good condition. 11th Dist.

1880. The steam-barge Warrington is in excellent condition. Do. do.

1881 The steam barge Warrington was constantly in service during the season of operations in carrying materials for the construction of the new stations at Stannard's Rock, Sand Island, and Passage Island, for the repair of other stations, and in carrying working parties and materials to and from different stations. During the winter she was overhauled and repaired, and is now in good condition. Do. do.

1882. The steam-barge Warrington was constantly in service, during the season of operations, in carrying materials for the construction of the new stations at Stannard's Rock, Passage Island, and Sand Island, and the repair of other stations, and in carrying working parties and materials to and from different stations. During the winter her boiler and machinery were overhauled and extensively repaired and improved, and she is now in first-rate condition. Do. do.

1883. *Warrington.*—This steam-barge has been constantly employed during the working season in carrying materials for the construction of the station at Stannard's Rock, and transporting repair parties and materials to and from different stations. During the winter arrangements were made for using steam to work the windlass, and various minor repairs were made to the hull, the engine, and the small boats. She is now in fair condition. Do. do.

1884. *The Warrington.*—This steam-barge was employed during the working season of the last calendar year in carrying materials for the completion of the construction work at Stannard's Rock, and in carrying repair parties and materials to and from different stations. During the winter the number of the crew was reduced to diminish expenses. During the present season she was employed in taking materials and working parties to Little Traverse and Sturgeon Bays, and carrying the engineer on trips of inspection. She is now in fair condition, and will probably require only ordinary incidental repairs during the year. Do. do.

An. Rep. 1885. 11th Dist.

The Warrington.—This steam-barge was engaged until September 9, 1884, in conveying the engineer secretary of the Board, and the engineer of the district on a visit of inspection to various stations, delivering workmen and materials at Passage Island light-station, Lake Superior, for the erection of a steam fog-whistle, delivering materials for repairs at Sand Island, Big Sable, and Spectacle Reef light stations, making repairs to the boat-landing at Sand Island and the protecting pier at Spectacle Reef, and delivering the illuminating apparatus at Little Traverse light station, Michigan. She was then laid up under the charge of her mate and engineer. In the spring of 1885 the decayed portions of her bilge keelsons, 80 feet of the main rail, and the wedges around the foremast were renewed, repairs were made to the deck, small boats, and machinery, a new fore-gaff was made, and she was docked and her bottom seams recalked. The repairs and fitting out were completed on May 9, her boilers were inspected on the 12th, and from that date until the end of June she was employed delivering materials at Sand Beach for a new light station. She is now in good condition.

An. Rep. 1886. Do. do.

The Warrington.—During July, August, and September this steam-barge transported and delivered materials and workmen for rebuilding the boat-landing crib and erecting a fog-signal house, and steam fog-signal, in duplicate, at Poverty Island light-station, Lake Michigan; the boilers and machinery for a fog-signal, in duplicate, at Duluth, Minn.; and materials for works of construction and repair at Sand Beach, Charlevoix pier-head, White Fish Point, Granite Island, Manitou, Gull Rock, Eagle Harbor, Grand Marais, and Passage Island. She also conveyed the engineer of the district on a visit of inspection to a number of stations in Lakes Erie, Huron, Michigan, and Superior. During the months of November and December a number of small repairs, at a cost of about $400, were made to her hull, engine, and boiler. She was repainted in the spring, and is now in good condition. A scow-lighter and steam-launch which have been used in connection with the tender were at Sand Beach until the completion of work there, and were then brought to the depot and laid up. The lighter was repaired in December and painted in the spring, and is in good condition.

An. Rep. 1887. Do. do.

The Warrington.—This steamer was engaged from August 6, to September 1, in conveying the engineer of this district on a visit of inspection, and on the return from that duty was laid up at the depot. She was transferred to the inspector by the engineer of this district on January 1, 1887. Her engines were since thoroughly repaired, her sides calked, and important changes made in the interior arrangements to fit her for purposes of supply. The large carrying capacity of this steamer will make her a useful tender.

An. Rep. 1888

11th Dist.

The Warrington.—This steam-barge is so old and worn that she will scarcely be fit for duty through another year. The *Warrington* was built as a lake barge in 1867. She is, therefore, twenty years old, about the lifetime of a wooden vessel on the lakes. She was purchased by the Government in 1870. Her bottom has never received any material repairs. Borings were made in all the floor timbers conveniently accessible, and it was found that out of 59 frames 35 were rotten, 19 were soft, and that 5 were fairly good. Her stem and stern posts were also found to be rotten. Were the upper works new, it might be economy to put in new floors, stern and stem posts, but these are now ten years old. Her boiler is fifteen years old. It was condemned by the supervising inspector of steam-boats four years ago, and authority was given for the purchase of a new boiler. It was thought better, however, to refrain from putting one in until it is decided whether the ship shall be rebuilt, and therefore the old boiler was merely repaired. It is the opinion of the Board that this vessel can not be kept much longer in service without being completely rebuilt and furnished with new boiler and engines. It would be wiser economy to build a new vessel better adapted to the needs of the service. With care in avoiding bad weather and keeping her from touching the bottom, the *Warrington* can probably do the work of the district for a year to come, but it will not be safe to rely upon her for any longer service. Meantime, if she meets with the slightest accident, she will in all probability become a total wreck. The Board has concluded that the interests of the service decidedly require that a new tender be built for this district at the earliest date practicable. It was, therefore, urgently recommended that an appropriation of $85,000 be made to build a new steel tender having twin screws and the modern appliances for handling heavy buoys. A clause for this purpose was inserted in the sundry civil appropriation bill, but it failed to become a law.

an. Rep. 1889

Do. do.

The Warrington.—This steamer was temporarily repaired in February, so as to fit her for service this season. The keelsons were taken up, and additional 6-inch oak frames were inserted in every space from the foremast to the engine bed-plate. New keelsons were fitted, and inside flooring. The effect has been to stiffen the vessel very perceptibly. The boiler, however, is old; in fact, the whole vessel is old, and she can not be expected to do much more service.

1890

Do. do.

The Warrington.—This steamer, although old, is at present in fair condition, but she will require a new boiler and extensive repairs to fit her for further service. During the year she removed, repainted, and replaced 132 buoys; delivered 285 tons of coal and 25 cords of wood to the fog-signals, and 9,625 gallons of mineral oil, besides all the cleaning materials and various articles of supply used at the ninety-five light-stations in the district, each of which was visited by the inspector in the tender at least three times during the season of navigation. While lying at the depot wharf her crew was constantly and profitably employed in making spar buoys, repairing boats for light-stations, and in repairing the walks and the wharf. She was under steam 296 days, in which she steamed 10,688 miles. In doing this she consumed 522 tons of coal.

1891 p. 154 + p. 131

The Warrington.—This steamer was temporarily transferred, on March 10, 1891, by the inspector to the engineer of the ninth and eleventh light-house districts. The hull of the tender was calked and painted. A new set of grate bars was provided for the boiler and the machinery was thoroughly overhauled. The tender was fitted out and put in service on April 1, 1891. It first made some local inspections and carried materials for the construction of Windmill Point range. The tender was employed during May and June in transporting the workmen and materials needed in building Devils Island light-station.

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1892 p. 148.

The Warrington.—This steamer was employed in delivering materials at St. Helena, Beaver Island Harbor, Beaver Island, South Fox Island, Poverty Island, Pottawatomie, Porte des Morts, Point Betsey, South Manitou, and Waugoshance light-stations, in delivering workmen and materials at Seul Choix Pointe light-station, and in placing anchors for Grays Reef, Simmons Reef, and White Shoal light-vessels. She was docked on December 5; the stern bearing received a thorough overhauling, and the bottom was calked where required. She was put into winter quarters on December 8. During the winter she was carefully overhauled and painted. The repairs were finished in ample time for the season's work.

1892 p. 179.

The Warrington.—This steamer underwent general repairs during the winter. The machinery, steam pipes and fittings, and the hoisting engine and pumps were thoroughly overhauled. During the latter part of April she was loaded with material for the construction of St. Marys River range lights. She left the light-house depot May 3 for St. Marys River, and from that date to the close of the year was continuously employed in delivering material and in locating the ranges, assisting in the establishment of cribs for lights, and attending working parties.

1893.

The Warrington.—This steamer was employed on the St. Marys River during the season of 1892 in locating cribs, locating and running ranges, transferring workmen and material from station to station, and assisting in the measurement of ranges, in delivering materials to Round Island, and attending the working party at that station; also transferring men and materials for the erection of small lamp houses for range lights, St. Marys River, and in inspecting the upper and lower St. Clair Flats Canal light-stations. She was docked and examined and minor repairs were made. She was laid up for the season at the end of November, and all of the officers and crew were discharged, except the first mate and the engineer. She is still out of commission.

1894

The Warrington.—This steamer was out of commission and lying at the light-house depot wharf in Detroit.

1895 *The Warrington.*—The defective parts of the galley range of this steam screw barge were renewed, a new stovepipe was provided, her hull was calked and painted, and irons were placed upon her bow. The inside woodwork was painted, the boilers and machinery were overhauled and repaired and put in good working condition. She was loaded at the Detroit light-house depot with materials for the construction of Hay Lake Channel light-stations and for repairs at Whitefish Point light-station. She left with the construction party for Hay Lake Channel May 5, and was continuously employed on that construction to June 30. During that time she steamed some 1,709 miles, and in so doing consumed about 160 tons of coal.

1896 *The Warrington.*—This steam screw barge was loaded at the Detroit light-house depot in April with materials for repairs at Waugoshance light-station, Michigan. The hull and machinery were repaired. She was employed on the work at Waugoshance continuously during May and June.

1897 *The Warrington.*—This steam screw barge received extensive repairs. Contracts were made for rebuilding and renewing the hull and for providing a new boiler and refitting and altering the engine. The contractors put the boat in the dry dock on April 24, 1897. The contract for repairing the hull was completed, and the boat was delivered at the light-house depot dock. During June, 1897, the contractor for repairs to the engine and machinery and new boiler completed the boiler, ready for testing. The boat is practically new up to and including the main rail and bulwarks. Steps are being taken for repairs to the upper works and completion of the boat.

Scow lighter.—The scow lighters were thoroughly recalked and painted.

1898 *The Warrington.*—This wooden steam screw barge was built in 1868, and is of 300 tons burden. Plans for completing her repair were made. The new boiler was tested with a pressure of 180 pounds hydrostatic, and was set. The engine and shaft were set, fastened, and lined up, and all connections were made with the boiler. An ash gun was provided. Bids for furnishing material for making repairs were obtained and contract was made for the material. The work of the cabin and deck was commenced on August 2, 1897. On October 25, 1897, the whaleboat, supply boats, and dingey were completed, tested, and accepted. New deck beams were placed and the main deck and hatch coamings were renewed. A forecastle deck was built, with forward pilot house, texas, master's and chart rooms. The mates' and quartermaster's staterooms, oil room lined with galvanized sheet iron, men's bathroom, etc., were provided on the main deck under the forecastle deck. The after cabin on the main deck was rearranged in rebuilding, providing on the main deck for a galley, officers' and men's mess rooms, pantry with dumb waiter up to saloon; also staterooms for two engineers, cook, bathroom for officers, ice box, store, and room. The spar deck was rebuilt, providing the main cabin with saloon, two staterooms, bathroom, pantry, linen room, and closets. A deck house was built on the forward part of the spar deck for an engineer's office, and provided with upholstered couch and chart table. A hurricane deck, canvased and painted, covers the entire main cabin. Bulwarks were

(over.)

1898. Cont'd. p. 168.

placed from the main rail to the spar deck. These contain brass port lights, eleven on each side. Twelve new deadlights were put in to light the forecastle, fire hold, engine room, and after hold or shaft room, where five berths are built. Two spars were set up and stayed, and rigging for them was spliced and fitted. The tiller ropes, with fair-leaders, were placed and boxed. The smokestack was placed and thoroughly guyed, and the blow-off from the safety valve was placed. Ventilators were placed, a stovepipe connection made with the galley range, engine room and fire hold gratings were fitted in place. A steam-heating system was installed, with radiators in all rooms. The boiler, engine, cylinder, and steam pipes were covered with nonconductor magnasbestos, well plastered and canvased, and the boiler was covered with galvanized sheet-iron jacket. A foundation was laid for the hoisting engine, and copper casings were placed on the rudder. Iron stanchions for coal-bunker walls were placed and walls were built. Speaking tubes were placed. A water-supply system was installed, with hot-water boilers placed and pipe connections made with heating coils. A complete outfit for the tender was purchased. On December 8, 1897, the tender made a trial trip on Lake St. Clair, and the machinery worked satisfactorily, the highest number of revolutions being 102, and steam pressure 110 pounds. On March 21, 1898, the tender towed a scow to St. Clair Flats Range and to Grossepoint Beacon, Lake St. Clair, and returned, the machinery working satisfactorily. The drum and friction cone to the hoisting engine, with levers and gear, were repaired and set up, and inclosed with bulkhead. Skylights were fitted, doorsteps coppered, cleats made and fitted to mainmast and flagstaff, and the main hull and main deck were calked. Twenty-two hanging fenders, 12 capstan bars, and 3 pump handles were made, and sheet iron placed on mainmast from top of main rigging down. A complete electric-lighting plant, with search light, was installed. The rebuilding of the tender was finished and the tender and outfit were transferred on April 25, 1898, to the charge of the engineer of the Tenth light-house district.

Since that time she was engaged in the general service, inspecting the light-stations, and transporting material for use in making repairs and improvements, including the delivery of two iron oil houses at Presqu'ile Pierhead and Presqu'ile, Pennsylvania, light-stations.

1898 p. 182.

The Warrington.—This wooden steam screw barge was thoroughly repaired and was on April 25, 1898, transferred to the charge of the engineer of the Tenth light-house district. A full account of the repairs made to this barge will be found under the proper head in the account given on another page of the operations in the Tenth light-house district.

1899

Warrington.—This wooden steam screw barge was built in 1868 and is of 300 tons burden. Excepting during the period November 19, 1898, to April 30, 1899, when laid up for the winter, she was engaged in inspecting and making repairs and improvements at various light-stations, including the delivery of four iron oil houses for Manhattan and Maumee Bay, Ohio, and Dunkirk and Fair Haven, N. Y., light-stations. She has steamed some 2,350 miles during the year and consumed about 615 tons of coal. She was painted outside and inside.

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1900

Warrington.—This wooden steam-screw barge was built in 1868, and is of 257 tons gross burden. Excepting between November 26, 1899, to May 1, 1900, when she was laid up for the winter, she was engaged in making the usual periodical inspections of light and fog-signal stations, and transporting and handling materials entering into the work of repairs and improvements throughout the district. She steamed some 6,698 miles and consumed about 541.58 tons of coal. She was painted outside and inside.

1901

Warrington.—This wooden steam screw barge was built in 1868 and is of 257 tons gross burden. From December 4, 1900, to May 1, 1901, she was laid up in winter quarters at the Buffalo light-house depot. During the remainder of the year she was employed in making

inspections of the light and fog-signal stations, transporting and handling materials, and transferring employees connected with various works of repairs and improvement. She steamed some 5,796 miles and consumed about 433 tons of coal. She was put in dry dock twice during the year for repairs. Some 51 feet of keel was renewed; the old rudder post was cut out and fastened to the forward side of the rudder to form a counterbalance; the iron shoe was replaced by one of steel; the propeller wheel was removed, the keyway was dressed and provided with a new key; 30 braces and 60 crowfeet were replaced by larger ones in the boiler over the combustion chamber; 20 rivets were renewed and the seams were calked along the side of the boiler. A new hydraulic steering apparatus was provided. Various minor repairs were made.

1902

Warrington.—This wooden steam screw barge was built in 1868, and is of 257 tons gross burden. She was in winter quarters from November 28, 1901, to April 1, 1902, and during the remainder of the year was employed in transporting and handling materials for general repairs and improvements to light-house structures and making the annual inspection of all light-stations in the district. She steamed some 6,099 miles and consumed about 361 tons of coal. She went into dry dock once to remove a cable from around the sternpost below water line, when 20 butts of the bottom were recalked; a new piece of plank was put in on the port side 2 feet below water line, where it had been cut nearly through while recently lying at the Detroit River light-station. While in winter quarters 38 feet of rail and 4 pieces of plank in deck were renewed; 5 graving pieces and 6 new planks and pieces of plank were put in the hull, the rail, and the quickwork, and 18 new elm fenders were provided; the forward hatch was repaired by putting a one-quarter inch steel plate on the inside lower front face and part of side faces, and 4 face plates on the main hatch; 20 seams above the water line all around the vessel were calked; some stern planking and timbers under the fantail were renewed; 15 pieces old decking across stern were renewed, and seams were calked, and an oak yoke piece was fitted and bolted to the deck and transom, then 3

screw bolts were run up through the outside planking, transom, timbers, deck and yoke piece, above the deck, to close the openings and securely hold all in place. An outrigger for derrick and 2 quadrant chocks were provided; trap doors between the hold and the fire room were put in for better ventilation; a solid foundation for the dynamo engine was made of timbers bolted together and to deck beams; the ice room was enlarged, and numerous other minor repairs were made. The old universal clutch coupling was taken off and replaced with a flange coupling with 8 bolts and keyed to the shaft, and the air-pump cylinder was bored out. An iron foundation plate was provided for the dynamo engine. The old piston valve was transformed into a solid valve, the valve seat was bored out, and 2 piston rings were provided. The hoisting engine was provided with 1 36-inch cast-iron

over

gear with 8-inch face and 1 10-inch pinion to match with 10-inch face, fitted and keyed to the shaft. Two new valve stems were turned, each 1-inch in diameter; brass bushings were put in the glands; 2 new rings were fitted into the bottom of the stuffing box, and a new flat spring for the throttle valve was provided and fitted; a new split collar was provided for the clutch coupling, and a new key and set screw were fitted in the eccentric on the crank shaft. Various other repairs were made. Two cast-iron rings were made and fitted to furnace doors to reduce the size for the correction of the draft; rivets and seam across the boiler front of 8 leg corners were calked and 4 rivets were replaced; 2 stay braces were shortened, and a stud bolt was replaced.

1903

Warrington.—This wooden steam screw barge was built in 1868 and is of 257 tons gross burden. She was in winter quarters from November 1, 1902, to March 31, 1903. During the remainder of the year she was employed in transporting materials for general repairs and improvements to light-house structures and making the annual inspection of all light-stations in the district. She steamed some 4,375 miles and consumed about 431 tons of coal. She received various repairs and was supplied with needed stores and fitments.

Sec. Ins.

1904

Warrington.—This wooden steam screw barge was built in 1868 and is of 257 tons gross burden. She was in winter quarters from December 14, 1903, to March 31, 1904, inclusive, and during the remainder of the year she was employed in transporting and handling materials for construction work and general repairs and improvements to light-house structures and making inspections of light-stations within the district. She steamed some 7,717 miles and consumed about 820 tons of bituminous coal. Various repairs were made.

1905

Warrington.—This wooden steam propeller barge was built in 1868 and is of 257 tons gross burden. She was in winter quarters from December 21, 1904, to March 31, 1905, inclusive. During the remainder of the year she was employed in transporting and handling materials for construction work and general repairs and improvements to light-house structures and making inspections of light-stations in the district. She steamed some 6,755 miles and consumed about 607 long tons of coal. She received needed fitments, supplies, and repairs.

1906

Warrington.—This wooden steam-propeller barge was built in 1868 and is of 410 tons gross burden. She was in winter quarters from November 20, 1905, to March 5, 1906, inclusive. During the remainder of the year she was employed in transporting and handling materials for construction work and general repairs and improvements to light-house structures and in making inspections of light-stations in this district. She steamed some 4,860 miles and consumed about 525 long tons of coal. She received needed fitments and supplies.

1907

Warrington.—This wooden steam propeller barge was built in 1868 and is of 244 net tons burden. She was in winter quarters from December 20, 1906, to March 31, 1907, inclusive. During the remainder of the year she was employed in transporting and handling materials for construction work and general repairs and improvements at light-stations in the district. She steamed some 5,074 miles and consumed about 513 long tons of coal. She received needed fitments, supplies, and repairs.

Ri (Copy)
AAB

11th District.

Light-house Establishment,

Office of Engineer, 9th and 11th Districts,

Detroit, Mich., April 26, 1898.

Subject:
Tender Warrington.

The Light-house Board,

Washington, D.C.

Sirs:

I have the honor to inform the Board that in compliance with the directions contained in the Board's letters of March 11, 1898 and April 22, 1898, and telegram of April 22, 1898, the U.S. Light-house tender Warrington and outfit was yesterday transferred to the charge of the Engineer of the 10th Light-house District.

Respectfully,

M. B. Adams,
Major of Engineers, U.S.A.,
Light-house Engineer.

Material of frame, White oak.
Fastenings, iron.
Heavy repairs in 1878.
New engine, 1878, built by
Detroit Dry Dock Engine Works.
Boiler built 1871, at Detroit, by
Desotel(?) & Hutton.

Marine Engineering