

IRON SHIP. 19393

No. 3899 Survey held at West Hartlepool Date, First Survey 11 June Last Survey 29 October 1877
 the S.S. "Amanda" Master W. Gray

Official Number 1260.95
 Tonnage under
 Deck 130.46
 Ditto of Third Spar, or
 of Awning Deck 0.21
 Ditto of Poop, or
 Raised Qr. Dk. 86.89
 Ditto of Houses
 on Deck 34.24
 Ditto of Forecastle 32.91
 Gross Tonnage 1260.95
 Less Crew Space 48.36
 Less Engine Room 403.50
 Register Tonnage
 as out on Beam 809.09

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING DECKED VESSEL.
 HALF BREADTH (moulded) 15-9
 DEPTH from upper part of Keel to top of Upper Deck Beams 10-8 1/2
 GIRTH of Half Midship Frame (as per Rule) 51-4 1/2
 1st NUMBER 65.10
 1st NUMBER, if a THREE-DECKED VESSEL
 [deduct 7 feet] 233.11
 LENGTH 233.11
 2nd NUMBER 15390
 PROPORTIONS—Breadths to Length within 7 1/2
 Depths to Length—Upper Deck to Keel 1.3
 Main Deck ditto

Built at West Hartlepool
 When built 1877 Launched 0.1.1877
 By whom built W. Gray
 Owners W. Gray
 Port belonging to Hartlepool
 Destined Voyage
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 233-11 BREADTH Moulded 31-6 DEPTH top of Floors to Upper Deck Beams 10-8 1/2 Do. do. Main Deck Beams 10-8 1/2 Power of Engines 110 Horse. 110 No. of Decks with flat laid One No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 237-6 breadth, 31-6 depth, 19-2

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<u>8 x 2 3/4</u>	<u>8 x 2 3/4</u>
STEM, moulding and thickness	<u>7 3/4 x 2 3/4</u>	<u>7 3/4 x 2 3/4</u>
STERN-POST for Rudder do. do.	<u>8 x 4 1/2</u>	<u>7 1/2 x 4 3/4</u>
for Propeller	<u>8 x 4 1/2</u>	<u>7 1/2 x 4 3/4</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>23</u>	<u>23</u>
FRAMES, Angle Iron, for 1/2 length amidships	<u>4 x 3</u>	<u>4 x 3</u>
Do. for 1/2 at each end	<u>4 x 3</u>	<u>4 x 3</u>
REVERSED FRAMES, Angle Iron	<u>3 x 3</u>	<u>3 x 3</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<u>19 1/2 x 7/16</u>	<u>19 1/2 x 7/16</u>
thickness at the ends of vessel	<u>10</u>	<u>10</u>
depth at 3/4 the half-bdth. as per Rule	<u>39</u>	<u>39</u>
height extended at the Bilges	<u>5 1/2</u>	<u>5 1/2</u>
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 1/2 x 3</u>	<u>5 1/2 x 3</u>
Single or double Angle Iron on Upper edge	<u>23</u>	<u>23</u>
Average space	<u>23</u>	<u>23</u>
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 1/2 x 3</u>	<u>5 1/2 x 3</u>
Single or double Angle Iron, on Upper Edge	<u>4 x 3</u>	<u>4 x 3</u>
Average space	<u>8-10</u>	<u>8-10</u>
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 1/2 x 3</u>	<u>5 1/2 x 3</u>
Single or double Angle Iron on Upper Edge	<u>4 x 3</u>	<u>4 x 3</u>
Average space	<u>8-10</u>	<u>8-10</u>
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	<u>10 x 10/16</u>	<u>15 x 11/16</u>
Rider Plate	<u>11 x 11/16</u>	<u>10 3/4 x 11/16</u>
Bulb Plate to Intercostal Keelson	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
Double Angle Iron Side Keelson	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
Side Intercostal Plate	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
do. Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
Attached to outside plating with angle iron	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
BILGE Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
do. Bulb Iron	<u>7 1/2 x 7/16</u>	<u>7 1/2 x 7/16</u>
do. Intercostal plates riveted to plating for length	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
BILGE STRINGER Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
Intercostal plates riveted to plating for length	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
SIDE STRINGER Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Flat Keel Plates, breadth and thickness	<u>34</u>	<u>11/16</u>	<u>34</u>	<u>11/16</u>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	<u>9 1/6 x 10/16</u>	<u>9 1/6 x 10/16</u>	<u>9 1/6 x 10/16</u>	<u>9 1/6 x 10/16</u>
of doubling at Bilge, or increased thickness, and length applied	<u>10/16-11/16</u>	<u>10/16-11/16</u>	<u>10/16-11/16</u>	<u>10/16-11/16</u>
fm up. part of Bilge to lr. edge of Sh'rstrake	<u>9 1/6 x 10/16</u>	<u>9 1/6 x 10/16</u>	<u>9 1/6 x 10/16</u>	<u>9 1/6 x 10/16</u>
Main Sheerstrake, breadth and thickness	<u>36</u>	<u>13/16</u>	<u>36</u>	<u>13/16</u>
of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>
Up. or Spar Dk. Sh'rstrake, breadth & thickness	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>
Butt Straps to outside plating, breadth & thickness	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>	<u>9 3/4 x 11/16</u>
Lengths of Plating	<u>9 ft. 7</u>	<u>9 ft. 7</u>	<u>9 ft. 7</u>	<u>9 ft. 7</u>
Shifts of Plating, and Stringers	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>33</u>	<u>10/16</u>	<u>33</u>	<u>10/16</u>
Angle Iron on ditto	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>	<u>5 x 3 1/2</u>
Tie Plates fore and aft, outside Hatchways	<u>Iron Deck</u>	<u>Iron Deck</u>	<u>Iron Deck</u>	<u>Iron Deck</u>
Diagonal Tie Plates on Beams No. of Pairs	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Planksheer material and scantling	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Waterways do. do.	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Flat of Upper Deck do. do.	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
How fastened to Beams	<u>5/8 inch</u>	<u>5/8 inch</u>	<u>5/8 inch</u>	<u>5/8 inch</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Is the Stringer Plate attached to the outside plating?	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Angle Irons on ditto, No.	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>
Tie Plates, outside Hatchways	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>
Diagonal Tie Plates on Beams, No. of pairs	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Waterways materials and scantlings	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Flat of Middle Deck do. do.	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
How fastened to Beams	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Is the Stringer Plate attached to the outside plating?	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Angle Irons on ditto, No.	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>
Stringer or Tie Plates, outside Hatchways	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>
Flat of Lower Deck	<u>30</u>	<u>0/16</u>	<u>30</u>	<u>0/16</u>
Ceiling betwixt Decks, thickness and material	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
in hold do. do.	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
Main piece of Rudder, diameter at head	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
do. at heel	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Can the Rudder be unshipped afloat?	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Bulkheads No. 4 Thickness of	<u>6 1/4 x 5/16</u>	<u>6 1/4 x 5/16</u>	<u>6 1/4 x 5/16</u>	<u>6 1/4 x 5/16</u>
Height up	<u>Man Deck</u>	<u>Man Deck</u>	<u>Man Deck</u>	<u>Man Deck</u>
How secured to sides of ship	<u>To double frames</u>	<u>To double frames</u>	<u>To double frames</u>	<u>To double frames</u>
Size of Vertical Angle Irons	<u>3 x 3 x 6/16</u>	<u>3 x 3 x 6/16</u>	<u>3 x 3 x 6/16</u>	<u>3 x 3 x 6/16</u>
and distance apart	<u>30 ins.</u>	<u>30 ins.</u>	<u>30 ins.</u>	<u>30 ins.</u>
Are the outside Plates doubled two spaces of Frames in length?	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>

Transoms, material. Knight-heads. Hawse Timbers. Plates
 Windlass Emerson & Walker Pall Bitt Patent

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.
 The REVERSED ANGLE IRONS on floors and frames extend across middle line to above holdbeam string and to gunwale alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1/2 in. diameter, averaging 5 3/4 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 3/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 3/4 ins. from centre to centre.
 Butts of Three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 3/4 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 3/4 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.
 Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.
 Breadth of laps of plating in double riveting 5 1/4 x 4 1/2 Breadth of laps of plating in single riveting none

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & treble

Waterway, how secured to Beams (Explain by Sketch, if necessary.) Plates to angle beams

How the various Decks, how secured to the sides? End turned & pieces welded No. of Breasthooks, Five Crutches, Three

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good

Manufacturer's name or trade mark, Hartlepool M. S. Co. Stockton M. S. Co. D. L. Co. West Hartlepool

The above is a correct description.

Builder's Signature, William Gray Surveyor's Signature, S. P. G. G. G. G.

Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 474-0165

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *Yes*

Are the fillings between the ribs and plates solid single pieces? *Solid*

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes*

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*

Do any rivets break into or through the seams or butts of the plating? *A few in butts*

19395 *Iron*

Masts, Bowsprit, Yards, &c., are *Pitch Pine* in *Good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Main Mast 64 ft. 8 in. Dia 19 inches Fore Mast 60 ft. 9 in. Dia 19 in.*

NUMBER for EQUIPMENT	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
One suit of good sails	Fore Sails,	Chain	240	1 9/16	40 5/10	2400 yds	40 5/10	Bowers	2	21-1-0	21-16-1-0	21-0-0	21-12-0-0
	Fore Top Sails,	At Low Water 23 Aug 1877								21-0-0	21-12-2-0	21-0-0	21-12-0-0
	Fore Topmast Stay Sails	Robert Munnell								18-1-12	19-6-2-7	17-3-11	10-10-0-0
	Main Sails,	Hampe Strm Cbl	60	15/16									
	Main Top Sails,	Hawser ...	90	8									
		Towlines ...	90	10									
and		Warp	180	6 1/2				Stream	1	9-1-7		9-0-0	
		quality good	180	8 1/2				Kedges	2	4-2-14		4-2-0	

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *four* Long Boats and *good*

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *four of 6 in. piston*

Engine Room Skylights.—How constructed? *3 in. Teak 1/4 in. casing & 1/4 in. bridge* How secured in ordinary weather? *Bullrogs*

What arrangements for deadlights in bad weather? *Bullrogs*

Coal Bunker Openings.—How constructed? *Iron bonings* How are lids secured? *by bars* Height above deck? *12 inches*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports & scuppers*

Cargo Hatchways.—How formed? *7/16 Plate*

State size Main Hatch *19 ft. 2 x 12 ft. bonings 33* Fore hatch *11 ft. 5 x 10 ft. bonings 35* Quarter hatch *21 ft. 1 x 12 ft. bonings 24 in*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *7/16 Mch. beam the whole depth of bonings one in. cabin & two in. after hatchway*

Hatches, If strong and efficient? *Strong & efficient*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	in builder's yard.	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	2nd. On the plating during the process of riveting	3rd. When the beams were in and fastened, and before the decks were laid...	4th. When the ship was complete, and before the plating was finally coated or cemented..	5th. After the ship was launched and equipped
622	24 Feb 1877			174							

General Remarks (State quality of workmanship, &c.) *Workmanship & material good*

Is fitted with long Raised Quarter Deck frames all to the top height, beams of Angles 5 1/2 x 3 x 7/16 Stringer plates in 30 x 33 x 10/16 Angles 5 x 3 1/2 x 8/16 Deck 6/16 planked over at after end for 46 ft. with 4/16 Pine Plating outside 9/16-8/16-7/16 Forecastle frames all to the top height, beams of Angles 5 x 3 x 6/16 top of bulk 7 x 6/16 Angles on top edge 3 x 3 x 6/16 Stringer plates in ends 20 x 6/16 Angles in 30 x 3 1/2 x 3 x 6/16 the plates 7 x 6/16 Plating 6/16 Waterways 11 x 7/16 Deck 3 in 9/16 Pine Waterballast tanks fitted in fore & after holds frames cut connection made with three plates, side plates 7/16 Angles in 30 x 3 1/2 x 3 1/2 x 7/16 Web plates 6/16 Angles in 30 x 3 x 3 x 6/16 top plating 6/16 Tested by a head of water to the height of load line Deck house fitted up for cabin length 29 ft 10 x 15 ft 6, framed with 3 x 3 x 8/16 Angles beams 4 x 3 x 0/16 spaced 30 to 36 inches frames riveted to casing plates & iron deck planked over with 3 x 2 1/4 4/16 Pine sides & top

State if one, two, or three, decked vessel, or if spar, or awning decked, and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Plat. cemented with Portland cement* Outside *other parts with Paint & blue staining*

I am of opinion this Vessel should be Classed *100 A1*

The amount of the Entry Fee ... £ 15 : 0 : 0 is received by me, *J. M. G. 1877*

Special ... £ 55 : 6 : 0 - 24 Oct 1877

Certificate ... : : :

(Travelling Expenses, if any, £ ...)

Committee's Minute 2nd November, 1877

Character assigned *100 A1*

Lloyd's M. B. 1077 *ATP* *double bottom* *100 A1*

Lloyd's Register *Foundation*