

IRON SHIPS.

No. 2910 Survey held at West Hartlepool Date, First Survey 7th Sept 1870 Last Survey 10th Feb 1871

On the Screw Steamer "Mellie" Master

Tonnage under Tonnage Deck	542.50	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at	West Hartlepool
of Spar Deck, or Awning Deck.		Half moulded breadth 14- "	Half Moulded Breadth....	When built	1870-71
Ditto of Poop, or Raised Qr. Dk.	63.44	Depth from upper part of Keel to top of Upper Deck Beams 15-11	Total Depth if three or more Decks	Launched	21 July 1871
Ditto of Houses on Deck	9.08	Girth of Half Midship Frame (as per Rule) ... 26-3	Total Girth of Half Midship Frame	By whom built	Deakin Gray & Co.
Ditto of Forecastle		1st Number 56-2	3rd Number.....	Owners	J. Pym
Gross Tonnage	615.77	Length 170-7	Length.....	Port belonging to	West Hartlepool
Crew Space, as per Rule	23.61	2nd Number.... 10.020	4th Number....	Destined Voyage	Mediterranean
Register Tonnage, cut on Beam...	197.05	Depths to Length. Over 12.	Breadths to Length. Within 6 1/2	If Surveyed while Building, Afloat, or in Dry Dock.	
Engine Room	328.11				
Engine Tonnage, as a Steamer, cut on Beam					

Length on deck as per Rule, 170	Feet. 170	Inches. 7	Moulded Breadth, 27	Feet. 27	Inches. 10	Depths from top of Floors to Upper and Main Deck Beams, as per Rule, 14	Feet. 14	Inches. 6	Power of Engines, 00	Horse. 00	Nº. of Decks, One	Nº. of Tiers of Beams, One																																																																																																																																									
Dimensions of Ship per Register, length, 179-7 breadth, 20-3 depth, 14-2																																																																																																																																																					
Keel, if bar iron, depth and thickness	Inches in Ship, 7 1/2 x 2 1/4	Inches required per Rule, 7 1/2 x 2 1/4	Do. if centre through plate, depth and thickness	7 1/2 x 2 1/4	6 3/4 x 2 1/4	Stem, if bar iron, moulding and thickness	7 1/2 x 3 1/4	6 3/4 x 4 1/4	Stern-post for Rudder do. do.	0 x 3 1/4	6 3/4 x 4 1/4	Distance of Frames from moulding edge to moulding edge, all fore and aft	22	(Class 90 A)																																																																																																																																							
Frames, size of Angle Iron, for 1/2 length amidships	3 1/2	3	6 1/6	3 1/2	3	Reversed Frames, size of Angle Iron	2 1/2	2 1/2	5 1/6	2 1/2	2 1/2	Floors, depth and thickness of Floor Plate at mid line for half the length amidships	17 1/2	x	7 1/6	17 1/2	x	7 1/6	Do. at the ends	17 1/2	x	6 1/6	17 1/2	x	6 1/6	Do. do. do. at Bilge Keelson	14	3 1/2	Do. height extended at the Bilges	3 1/2	3 1/2																																																																																																																						
Beams, Upper, Spar, or Awning Deck (No. 4)	6 1/2	x	7 1/6	6 3/4	x	6 1/6	single or double Angle Iron, Plate or Tee Bulb Iron	2 1/2	2 1/2	5 1/6	2 1/2	2 1/2	Single or double Angle Iron on Upper edge	2 1/2	2 1/2	5 1/6	Average space	44 in.	44 in.	Beams, Main or Middle Deck (No.) single, or double Angle Iron, Plate or Tee Bulb Iron			Single, or double Angle Iron, on Upper Edge			Average space			Beams, Lower Deck, Hold or Orlop (No. 6)	6 1/2	x	7 1/6	6 3/4	x	6 1/6	single or double Angle Iron, Plate or Tee Bulb Iron	4	3	7 1/6	2 1/2	2 1/2	5 1/6	Single or double Angle Iron on Upper Edge	4	3	7 1/6	2 1/2	2 1/2	5 1/6	Average space	44 in.	44 in.	Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	11 1/2	x	9 1/6	11 1/2	x	9 1/6	Do. Bulb Plate to Intercoastal Keelson	4	3	6 1/6	4	3	6 1/6	Do. Size of Angle Irons	4	3	6 1/6	4	3	6 1/6	Do. Side Intercoastal Keelson, size of Plates	4	3	6 1/6	4	3	6 1/6	Do. Angle Irons on tops of Floors	4	3	6 1/6	4	3	6 1/6	Do. Bilge Keelson, Bulb Iron	7	x	7 1/6	6 3/4	x	6 1/6	Do. do. Intercoastal plates riveted to plating for length	4	3	6 1/6	4	3	6 1/6	Do. do. Angle Irons	4	3	6 1/6	4	3	6 1/6	Side Stringers (No. one) size of Angle Irons	4	3	6 1/6	4	3	6 1/6	Do. Intercoastal plates riveted to plating for length							Transoms, material, 12 plates or, if none, in what manner compensated for.			Knight-heads, Iron	Hawse Timbers, Iron	Windlass, English Oak	Pall Butt, English Oak	The Frames extend in one length from Reel to gunwale	Riveted through plates with (1/6 in.) Rivets, about 5 in. apart.	The Reverse Angle Irons on the floors and frames extend across the middle line to above hold beams and to gunwale alternately	Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes	And are their butts properly shifted? Yes	Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (1/6 in.) diameter, averaging (5 in.) from centre to centre.	Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (1/6 in.) diameter, averaging (3 in.) from centre to centre.	Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1/6 in.) thick, double or single Riveted; with Rivets (1/6 in.) diameter averaging (3 in.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? no	Do. of One Strakes at Bilge for half length, double riveted with Butt Straps 1/16 thicker than their plates.	Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single riveted; with rivets (1/6 in.) diameter, averaging (2 3/4 in.) from centre to centre.	Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge single to below At lower edge Double	Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (1/6 in.) thick, double or single Riveted; with Rivets (1/6 in.) diameter, averaging (3 in.) from centre to centre.	Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for half length amidships. Breadth of laps of plating in double Riveting (4 1/2) Breadth of laps of plating in single Riveting (2 1/2)	Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double	Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)	Beams of the various Decks, how secured to the sides? Beams ends turned & pieces welded	No. of Breasthooks, Four	Crutches, Two	What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good	Manufacturer's name or trade mark, Stockton Iron Works

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, Deakin Gray & Co.

Surveyor's Signature, J. P. Gladstone

Workmanship. Are the butts of plating planed or otherwise fitted? Planed 8724 Trans
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? They do
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid in due length
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? yes and are the rivet holes well and sufficiently countersunk in the plate and punched from the facing surfaces? yes
Are there any rivets which either break into or have been put through the seams or butts of the plating? a few in butts

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the 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 54 ft Diameter 18 in Fore Mast 59 ft Diameter 18 in

Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
SAILS.											
Fore Sails,						Bowers	3	13.3.0	13.0.0.14	12.0.0	13-17-0-0
Fore Top Sails,						(State Machine where Tested, and name of Superintendent.)		13.2.7	13.5.0.0	12.0.0	13-17-0-0
Fore Topmast Stay Sails						With Stock Stream		12.0.21	14.0.3.21	10.0.23	12-17-0-0
Main Sails,											
Main Top Sails,						Kedges	2	3.0.0		2.2.0	
and								1.2.3		1-5-0	

Her Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has Three Long Boat and Good

The present state of the Windlass is Good Capstan Iron and Rudder Good Pumps 2 of Metal

Engine Room Skylights.—How constructed? 3 in Pine & Plate casing How secured in ordinary weather? Wrap gratings

What arrangements are there for deadlights in such for bad weather? Pine & Deadlights

Coal Bunker Openings.—How constructed? Iron Pipes How are lids secured? Bars How high above deck? 11 inches

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Scupper ports & ports in bulwark

Cargo Hatchways.—How formed? 7/16 Plate riveted to beams length 27 ft State size 10-0 x 10 ft + 14-7 x 11 ft

If of extraordinary size, state how framed and secured? none

What arrangement for shifting beams? 7/16 Plate in centre the whole depth of Casings, Double Angles on top edges 3 x 3 1/2

Hatches, themselves, whether strong and efficient? Good & efficient Main Hatchways.—State size 10 ft 0 in x 10 ft

Order for Special Survey No. 353 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Special Survey

Date 24 Sept 1870 Surveys held 2nd. On the plating during the progress of riveting See twice each week during building

Order for Ordinary Survey No. while building 3rd. When the beams were in and fastened, and before the decks were laid

Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented

No. in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks, Has a Raised Quarter Deck, frames all to the top height; beams of

bulb 6 1/2 x 7/16. Double Angles on top edges 2 x 2 x 3/16. Stringer plates at end of beams 3 1/4 x 6/16.

Angles on so. 3 1/2 x 3 x 3/16. Side plates 12 x 7/16. Plating outside 5/16. Deck 3 in. P. Pine. Gunter

waterways.

Water ballast tanks fitted in fore & after hold, frames cut off, connection made

with knee plates to top & bottom of sides, side plates 7/16. Angles on so. 3 1/2 x 3 x 3/16. Web

plates 5/16. Angles on so. 2 1/2 x 2 1/2 x 3/16. Top plating 5/16.

Iron Deck fitted over Engine & boiler space, 6/16 plate riveted to beams, length

41 ft

Five butts of shell plating at bilges lap butted & treble riveted, in each side

Denton Gray & Co

In what manner are the surfaces preserved from oxidation? Inside Plat cemented with Outside with Paint & Black Lead

I am of opinion this Vessel should be Classed 90 A1

The amount of the Entry Fee£ 5 : 0 : 0 is received by me, S. N. Gladstone

Special£ 29 : 12 : 0

Certificate : :

(Travelling Expenses) (if any) £

Committee's Minute 21st February 1871

Character assigned 90 A1

part double bottom

See Secretaries letter dated 1st August 1870

also letter for Messrs Denton Gray & Co. dated 16th Aug. 1870

This Green Steamer built under

"Special Survey" appears eligible for

Classification as recommended above

to 90 A1 and to be marked part double

bottom, as by Dealer's mark in this

is 43 ft and that left 5 1/2 ft, total 90 ft.

they are both clear of the engine room

It will be observed that in Classification

the 1st class is reserved for ships

of 100 tons and upwards, as by Rule 17, Sec 50

of the Act of 1862, and this ship is

under 100 tons, and therefore

is not eligible for the 1st class

but is eligible for the 2nd class

and is accordingly marked 90 A1

and is entered in the Register