

# IRON SHIPS.

No. 1199 Survey held at Newcastle Date, First Survey 12<sup>th</sup> April Last Survey 18<sup>th</sup> December 1872

On the Iron Screw Steamer "Hoyle" Master D. Gillespie

Tonnage under Tonnage Deck	295.77	ONE, OR TWO DECKED, SPAR, OR AWNING DECKED VESSELS	THREE DECKED VESSELS	Built at	Newcastle
Ditto of Third Spar, or Awning Deck		Half moulded breadth .... 10.4	Half Moulded Breadth....	When built	1872
Ditto of Poop, or Raised Qr. Dk.	12.68	Depth from upper part of Keel to top of Upper Deck Beams .... 13.5	Total Depth if three or more Decks .....	Launched	29 <sup>th</sup> October
Ditto of Houses on Deck ....	11.18	Girth of Half Midship Frame (as per Rule) ... 20.8	Total Girth of Half Midship Frame .....	By whom built	Cole Brothers
Ditto of Forecastle		1st Number .... 44.4	3rd Number .....	Owners	Michael Mc. Chrystal
Gross Tonnage	319.63	Length .... 159	Length .....	Port belonging to	Londonderry
Net Tonnage	18.33	2nd Number .... 7104.3	4th Number ....	Destined Voyage	Ireland
Engine Room	102.28	Depths to Length. 11.4	Breadths to Length ..... 7.5	If Surveyed while Building, Afloat, or in Dry Dock.	While building
Register Tonnage, as a Steamer, on Beam	199.02				

Length on deck as per Rule, 159 Feet. 0 Inches. Moulded Breadth, 20 Feet. 10 Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule, 6 Feet. 6 Inches. Power of Engines, 56 Horse. No. of Decks with flat laid one No. of Tiers of Beams one

Dimensions of Ship per Register, length, 160 breadth, 21 depth, 12.1

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2
Do. if centre through plate, depth and thickness	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2	7 x 1 1/2
Stem, if bar iron, moulding and thickness	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4
Stern-post for Rudder do. do.	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4	6 1/2 x 3 1/4
Stern-post for Propeller	21	21	21	21	21	21	21	21
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	21	21	21	21	21	21	21
Frames, size of Angle Iron, for 1/2 length amidships	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2
Do. for 1/4 at each end	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2	3 2 1/2
Reversed Frames, size of Angle Iron	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	12	12	12	12	12	12	12	12
Do. at the ends	5	5	5	5	5	5	5	5
Do. do. do. at Bilge Keelson	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Do. height extended at the Bilges	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Beams, Upper, Spar, or Awning Deck (No. 15) single or double Angle Iron, Plate or Tee Bulb Iron	6 3	6 3	6 3	6 3	6 3	6 3	6 3	6 3
Single or double Angle Iron on Upper edge	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2
Average space	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2
Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron	6 3	6 3	6 3	6 3	6 3	6 3	6 3	6 3
Single, or double Angle Iron, on Upper Edge	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2
Average space	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2
Beams, Lower Deck, Hold or Orlop (No. ) single or double Angle Iron, Plate or Tee Bulb Iron	6 3	6 3	6 3	6 3	6 3	6 3	6 3	6 3
Single or double Angle Iron on Upper Edge	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2
Average space	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	17	17	17	17	17	17	17	17
Do. Bulb Plate to Intercoastal Keelson	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Do. Size of Angle Irons	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Do. Side Intercoastal Keelson, size of Plates	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Do. Angle Irons on tops of Floors	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Do. Bilge Keelson, Bulb Iron	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Do. do. Intercoastal plates riveted to plating for length	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Do. do. Angle Irons	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2	5 3 1/2
Side Stringers (No. one) size of Angle Irons	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3
Do. Intercoastal plates riveted to plating for	6	6	6	6	6	6	6	6
Bulb Plate, length. 96 feet	6	6	6	6	6	6	6	6

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads Iron Hawse Timbers Iron

Windlass Harfield's Pull Butt Patent

The Frames extend in one length from Keel to Cumwale Riveted through plates with ( 5/8 in.) Rivets, about 5 apart.

The Reverse Angle Irons on the floors and frames extend across the middle line to upper turn of bilges on and to every frame 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 1/2 in.) diameter, averaging ( 2 1/2 ins.) from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets ( 5/8 in.) diameter, averaging ( 2 1/2 ins.) from centre to centre.

Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes ( 5/8 thick, double or single Riveted; with Rivets ( 5/8 in.) diameter averaging ( 2 1/2 ins.) 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 Strake at Bilge for half length, double riveted with Butt Straps 1/6 thicker than their plates.

Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece ( 5/8 thick, or clencher, double or single riveted; with rivets ( 5/8 in.) diameter, averaging ( 2 1/4 ins.) from centre to centre.

Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge Single At lower edge double

Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps ( 5/16 ) thick, double or single Riveted; with Rivets ( 5/8 in.) diameter, averaging ( 2 1/4 ins.) 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

Butt Straps for half length amidships. Breadth of laps of plating in double Riveting ( 1 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 riveted

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? Keel plates riveted to frames No. of Breasthooks, four Crutches, three

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

Manufacturer's name or trade mark, Malleable Iron Co. Plates Bolckow Vaughan & Co

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

Builder's Signature, Cole Bros Surveyor's Signature, J. H. Cooke

IRON 453-0004



10909 Iron  
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  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid single pieces  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? fairly so and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? yes  
Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

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 ✓

Number for equipment		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.	
N <sup>o</sup> .	SAILS.	CABLES, &c.											
	Fore Sails,	Chain .....	180	1 7/16	20.6.0	1 7/16	20 6/20	Bowers ....	1	8.2.19	10.16.1.0	8.1.0	10 7/20
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	Lloyd's Type P. H. W. Burrell. Supt.				(State Machine where Tested, and name of Superintendent).	1	8.1.10	10.10.0.0			
	Fore Topmast Stay Sails	Hempen Stream Cable	60	7/16		4 1/2		1	7.0.0	9.5.0.0	7.0.2	9 5/20	
	Main Sails,	Hawser .....	90	7/16		6		Lloyd's Type P. H. W. Burrell. Supt.					
	Main Top Sails,	Towlines ...	90	5 1/2			Stream ....	1	3.1.12		3.0.0		
		Warp .....	90	4 1/2									
		All of good quality.	180	3 1/2			Kedges ....	1	1.2.1		1.2.0		

Her Standing and Running Riggering Manilla sufficient in size and good in quality. She has one Life Long Boat and one other boat.  
The present state of the Windlass is Good. Capstan Good and Rudder Good Pumps Good.

Engine Room Skylights.—How constructed? Iron Comings Wood Tops How secured in ordinary weather? Bolted to angle iron  
What arrangements are there for deadlights in such for bad weather? Solid shutters and bulls eyes.

Coal Bunker Openings.—How constructed? Cast iron pipes How are lids secured? by studs How high above deck? 5 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?  
Four ports each side besides mooring ports.

Cargo Hatchways.—How formed? Iron Comings State size 14 ft x 7 ft after Hatch.

If of extraordinary size, state how framed and secured? Ordinary size

What arrangement for shifting beams? One shifting beam & one fore & after to each hatchway

Hatches, themselves, whether strong and efficient? Yes. Main Hatchways.—State size 14 ft x 7 ft

Order for Special Survey No. 895 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought  
Date 7 March 1872 Surveys held 2nd. On the plating during the progress of riveting  
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. 17 in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks, This is a one decked vessel, built in accordance with section attached. She has a raised Quarter deck 22 feet in length, Bridge house 17 ft 6 in in length, and water ballast tank amidships 32 feet in length, tank top plating 5/16 thick. For a distance of 32 feet amidships, also 16 feet from stem & each extending from side to side. She has an iron deck 5/16 thick, butt straps double riveted, edge straps single riveted, with wood deck over the same.

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

In what manner are the surfaces preserved from oxidation? Inside Cement & Paint Outside Paint

I am of opinion this Vessel should be Classed 90 A1.

The amount of the Entry Fee ..... £ 4 : 0 : 0 is received by me,

on 30 tons Special 15 : 1 : 0  
Certificate .... : : :

(Travelling Expenses)  
(if any) £ —

Committee's Minute 31<sup>st</sup> Decr 1872

Character assigned 90 A1

E. H. Cooke.

This vessel appears to be eligible for the class recommended by

90 A1.

1872

Lloyd's Register

Foundation