

Steel IRON SHIP.

Received at London Office, SAT 17 SEPT 1887

No. *2613^a* Survey held at *Penarth* Date, First Survey *Dec 8th 1886* Last Survey *Sept 13/87* 1887

On the

Screw tug Hawk

Tonnage under Tonnage Deck
Ditto of Third, Spar, or Awning Deck.
Ditto of Poop, or Raised Qr. Dk.
Ditto of Houses on Deck
Ditto of Forecastle
Gross Tonnage
Less Crew Space
Less Engine Room
Register Tonnage as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL,
SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) *4.5*
Depth from upper part of Keel to top of Upper Deck Beams *8.83*
Girth of Half Midship Frame (as per Rule) *14.*
1st Number *30.33*
1st Number, if a 3-Decked Vessel deduct 7 feet
Length *40*
2nd Number *2123*
Proportions— Breadths to Length *4.6*
Depths to Length— Upper Deck to Keel *8*
Main Deck ditto *8*

Master
Built at *Penarth*
When built *1884* Launched *Sept 15*
By whom built *Penarth Ship Blk & Ship repairing Co*
Owners *Messrs Watkins & Co*
Residence *121 Fenchurch St. London*
Port belonging to *London*
Destined Voyage
 Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule *40* Feet. Inches. BREADTH Moulded... *15* Feet. Inches. DEPTH top of Floors to Upper Deck Beams *8* Feet. Inches. Do. do. Main Deck Beams *6* Feet. Inches. Power of Engines... Horse. N^o. of Decks with flat laid N^o. of Tiers of Beams

Item	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule	Item	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
KEEL, depth and thickness	<i>5 1/2 x 1</i>		<i>5 1/2 x 1</i>		PLATES in Garboard Strakes, br'dth & thickness	<i>30</i>	<i>4 1/2</i>	<i>30</i>	<i>4 1/2</i>
STEM, moulding and thickness	<i>5 x 1</i>		<i>5 x 1</i>		From Garboard to upper part of Bilges		<i>3 1/2</i>		<i>3 1/2</i>
STERN-POST for Rudder do. do.	<i>5 x 2</i>		<i>5 x 2</i>		Of d'bling at Bilge, or increased thickness, and length applied		<i>3 1/2 x 1/4</i>		<i>3 1/2 x 1/4</i>
" " for Propeller	<i>5 x 2</i>		<i>5 x 2</i>		From up. prt of Bilge to l. edge of Sh'rstrake		<i>4</i>		<i>4</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>18</i>		<i>18</i>		Main Sheerstrake, breadth and thickness	<i>30</i>	<i>5</i>	<i>30</i>	<i>5</i>
FRAMES, Angle Iron, for 2/3 length amidships	<i>2 1/2 x 2 1/2</i>	<i>4</i>	<i>2 1/2 x 2 1/2</i>	<i>4</i>	Of d'bling at Sh'stk. & lng. applied				
Do. for 1/3 at each end	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	From M'n. to Up. or Spar Dk. Sh'rstrake				
REVERSED FRAMES, Angle Iron	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	Up. or Spar Dk Sh'rstrake, br'dth & thick'ns.				
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>10</i>	<i>4</i>	<i>10</i>	<i>4</i>	Butt Straps to outside plating, breadth & thickness	<i>8 x 11</i>	<i>4 x 6</i>	<i>8 x 11</i>	<i>4 x 6</i>
thickness at the ends of vessel		<i>3</i>		<i>3</i>	Lengths of Plating	<i>5 1/2</i>	<i>spaces</i>	<i>5</i>	<i>spaces</i>
depth at 1/4 the half-bdth. as per Rule	<i>5</i>		<i>5</i>		Shifts of Plating, and Stringers	<i>30</i>		<i>30</i>	
height extended at the Bilges	<i>20</i>		<i>20</i>		Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<i>18</i>	<i>4</i>	<i>18</i>	<i>4</i>
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge	<i>3 1/2</i>	<i>2 1/2</i>	<i>5</i>	<i>3 1/2</i>	<i>2 1/2 x 2 1/2 x 4</i>	<i>2 1/2</i>	<i>2 1/2</i>	<i>4</i>	<i>4</i>
Average space	<i>18</i>		<i>18</i>		Tie Plates fore and aft, outside Hatchways	<i>6</i>	<i>4</i>	<i>6</i>	<i>4</i>
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single, or double Angle Iron, on Upper Edge					Diagonal Tie Plates on Beams No. of Pairs	<i>4</i>	<i>2 1/2</i>	<i>4</i>	<i>2 1/2</i>
Average space					Flat of Up., Spar, or Awning Dk.*	<i>1/2</i>	<i>bolts nuts</i>		
BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge					How fastened to Beams				
Average space					Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge					Is the Stringer Plate attached to the outside plating?	<i>Yes</i>			
Average space					Angle Irons on ditto, No.				
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates					Tie Plates, outside Hatchways				
Rider Plate					Diagonal Tie Plates on Beams, No. of pairs				
Bulb Plate to Intercostal Keelson	<i>2 1/2</i>	<i>2 1/2</i>	<i>5</i>	<i>2 1/2</i>	Flat of Middle Deck* do. do.				
Angle Irons					How fastened to Beams				
Double Angle Iron Side Keelson					Stringer Plates on ends of Lower Deck, Hold or Orlop Beams				
Side Intercostal Plate					Is the Stringer Plate attached to the outside plating?				
do. Angle Irons					Angle Irons on ditto, No.				
Attached to outside plating with angle iron					Stringer or Tie Plates, outside Hatchways				
BILGE Angle Irons	<i>2 1/2</i>	<i>2 1/2</i>	<i>5</i>	<i>2 1/2</i>	Flat of Lower Deck*				
do. Bulb Iron					Ceiling betwixt Decks, thickness and material				
do. Intercostal plates riveted to plating for length	<i>2 1/2</i>	<i>2 1/2</i>	<i>5</i>	<i>2 1/2</i>	in hold do. do.	<i>2</i>	<i>pine</i>		
BILGE STRINGER Angle Irons					Main piece of Rudder, diameter at head	<i>2 1/2</i>		<i>2 1/2</i>	
Intercostal plates riveted to plating for length					do. at heel	<i>2</i>		<i>2</i>	
SIDE STRINGER Angle Irons					Can the Rudder be unshipped afloat?	<i>Yes</i>			

The FRAMES extend in one length from *keel* to *gunwale* Riveted through plates with *5/8* in. Rivets, about *5* apart.
The REVERSED ANGLE IRONS on floors and frames extend *from* middle line to *upper turn of bilge* and to *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 *7/8* in. diameter, averaging *4 1/2* ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *5/8* in. diameter, averaging *2 1/2* ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, *double* riveted; with rivets *5/8* in. diameter averaging *2 1/2* ins. from centre to centre.
Butts of *all* Strakes at Bilge for *all* length, treble riveted with Butt Straps *1/4* thicker than the plates they connect.
Edges from Bilge to Main Sheerstrake, worked clencher, *double* or single riveted; with rivets *5/8* in. diameter, averaging *2 1/2* ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, *double* riveted; with rivets *5/8* in. diameter, averaging *2 1/2* 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 *all* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *length* amidships.
Butts of Main Stringer Plate, treble riveted for *all* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *length* amidships.
Breadth of laps of plating in double riveting *4* Breadth of laps of plating in single riveting *2 1/2*
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? No. of Breasthooks, *2* Crutches, *1*
What description of *STEEL* is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *good*
Manufacturer's name or trade mark, *Landore*
The above is a correct description.
Builder's Signature, *Penarth Ship Building & Ship repair. Co. Ltd* Surveyor's Signature, *G. L. Hindmarsh* Lloyd's Register
Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1 for Iron Ships—1000—1887—transfer last.

State clearly where plating is of alternate thicknesses as distinguished from diminished thickness at ends of vessel.

* If Iron Deck, state if whole or part, and if wood deck to hold thereon.

Workmanship. Are the butts of plating planed or otherwise fitted? *Yes*
 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? *Yes*
 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? *No*

Masts, Bowsprit, Yards, &c., are *wood* 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

NUMBER for EQUIPMENT 2123		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprintd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	Wght req'd per Rule.	Machine where Tested & Suprintd.
SAILS.							Bower Anchors					
N ^o .	CABLES, &c.						(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
1	Fore Sails,	60	5 8	1000 4 5/8 x 9 1/2	60 fath 5 8	Lipton		1	cut grs lbs tons cut gr lbs cut gr lbs			
	Fore Top Sails,					Certificate Mars 1887 No 18939 E. R. Smith						
	Fore Topmast Stay Sails,	50	6		50 fath 6"		Stream Anchor					
	Main Sails,	50	4		50 "		Kedge ...	1	cut gr lbs		cut gr lbs	
	Main Top Sails, and						2nd Kedge ...	1	0 3 0		0 3 0	

Standing and Running Rigging is sufficient in size and good in quality. She has *one* Long Boat and
 The Windlass is *iron, good* Capstan and Rudder *good* Pumps *good*
 Engine Room Skylights.—How constructed? *Iron crammings & wood top* How secured in ordinary weather? *Lead light flaps.*
 What arrangements for deadlights in bad weather?
 Coal Bunker Openings.—How constructed? *ordinary* How are lids secured? *with a clutch* Height above deck? *flush*
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *one washport, 2 mooring pipes and 2 scuppers on each side*
 Cargo Hatchways.—How formed?
 State size Main Hatch Forehatch Quarterhatch
 If of extraordinary size, state how framed and secured?
 What arrangement for shifting beams?
 Hatches, If strong and efficient?

Order for Special Survey No. _____ Date *Oct 7 1886*
 Order for Ordinary Survey No. _____ Date _____
 No. *8* in builder's yard.
 State dates of letters respecting this case *Oct 7 - 1886*

- 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
- Date of first visit *Dec 8th 1886*
 " last *Sept 13 1887*
 Number of Visits *48*

General Remarks (State quality of workmanship, &c.) *This vessel has been constructed under Special Survey in accordance with the Rules and the enclosed tracings. She is of good material and workmanship. The steel has been tested at the makers with satisfactory results. The fore and after peaks tested before launching and found tight. The vessel has now left this port for London in tow of one of the owners tugs to receive her machinery & boiler, and to complete the survey viz: the deck plating and casing in way of machinery space to be riveted and pullars to be fitted to the beams where necessary. The above mentioned bower anchor was taken ashore for another vessel and a new one will be put on board at London the certificate of which is enclosed. On the completion of the survey the vessel in my opinion will be eligible for the notification of A Steel for towing purposes.*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)
 How are the surfaces preserved from oxidation? Inside *cement and paint* Outside *paint*
 I am of opinion this Vessel should be Classed A Steel for towing purposes
 The amount of the Entry Fee£ : : is received by me *at 1/10 1887*
 Special£ 10 : 10 :
 Certificate
 Travelling Expenses, if any, £
 Committee's Minute
 Character assigned *A 1 Steel for towing purposes*
da xcp d m c 1/88
15th
 4/2/88
 10000

