

IRON SHIP.

No. 13362 Survey held at *Newcastle*
On the *S.S. "Thickham"*

Date, First Survey *10th Jan 76* Last Survey *29th Sep 1876*

Master *C. Stewart*

TONNAGE under Tonnage Deck *1648.33*
Ditto of Third, Spar, or Awaiting Deck *28.40*
Ditto of Propeller Raised Qr. Dk. *19.56*
Ditto of Houses on Deck *28.81*
Gross Tonnage *1735.10*
Less Crew Space *55.80*
Less Engine Room *555.26*
Register Tonnage as out on Beam *1124.07*

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING DECKED VESSEL.
HALF BREADTH (moulded) *16.85*
DEPTH from upper part of Keel to top of Upper Deck Beam *26.45*
GIRTH of Half Midship Frame (as per Rule) *38.90*
1st NUMBER *75.20*
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] *268.5*
LENGTH *201.91*
2nd NUMBER *20191*
PROPORTIONS—Breadths to Length *under 8*
Depths to Length—Upper Deck to Keel *under 11*
Main Deck ditto *under 14*

Built at *Newcastle*
When built *1876* Launched *9th Aug*
By whom built *Stephens & Co. Bristol*
Owners *J. H. Davidson*
Port belonging to *London*
Destined Voyage *Bombay*
Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule *260* Breadth Moulded *33* DEPTH top of Floors to Upper Deck Beams *24* Power of Engines *180* No. of Decks with flat laid *two* No. of Tiers of Beams *three*

Dimensions of Ship per Register, length, *270* breadth, *34* depth, *24.4*

KEEL, depth and thickness *9 1/2 x 2 1/2*
STEM, moulding and thickness *9 x 2 1/2*
STERN-POST for Rudder do. *9 x 5*
for Propeller *9 1/2 x 5*
Distance of Frames from moulding edge to moulding edge, all fore and aft *24*
FRAMES, Angle Iron, for 1/2 length amidships *5 3 8*
Do. for 1/2 at each end *5 3 8*
REVERSED FRAMES, Angle Iron *3 3 8*
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships *23 1/2 x 9*
thickness at the ends of vessel *11 3/4*
depth at 1/2 the half-bdth. as per Rule *11 3/4*
height extended at the Bilges *4 1/2*
BEAMS, Upper, Spar, or Awaiting Deck Single or double Angle Iron, Plate or Tee Bulb Iron *2 1/2 x 6*
Single or double Angle Iron on Upper edge *on alternate frames*
Average space *on every frame*
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron *5 1/2 x 8*
Single or double Angle Iron, on Upper Edge *on every frame*
Average space *semi-laps*
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron *8 x 8*
Single or double Angle Iron on Upper Edge *3 3 6*
Average space *see plan annexed*
KEELSONS Centre line, single or double plate, box, or intercostal, Plates *18 x 13*
Rider Plate *12 x 13*
Bulb Plate to intercostal Keelson *5 1/2 x 9*
Angle Irons *5 1/2 x 9*
Double Angle Iron Side Keelson *5 1/2 x 9*
Side intercostal Plate *5 1/2 x 9*
do. Angle Irons *5 1/2 x 9*
Attached to outside plating with angle iron *3 3 6*
BILGE Angle Irons *5 1/2 x 9*
do. Bulb Iron *5 1/2 x 9*
do. Intercostal plates riveted to plating for length *5 1/2 x 9*
BILGE STRINGER Angle Irons *5 1/2 x 9*
Intercostal plate for 1/2 length *5 1/2 x 9*
Transoms, material. Knight-heads. Hawse Timbers. *Iron*
Windlass *show patent* Pall Bitt *show*

Flat Keel Plates, breadth and thickness *36*
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied *10 x 11*
fm up. part of Bilge to l.r. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. *10 x 11*
Up. *40* Spar Dk Sh'rstrake, brdth & thickness *13*
Butt Straps to outside plating, breadth & thickness *8 1/2 x 14*
Lengths of Plating *5 spaces*
Shifts of Plating, and Stringers *2 spaces*
Gunwale Plate on ends of Awaiting Spar *58*
Upper Deck Beams, breadth and thickness *9*
Angle Iron on ditto *4 x 4 x 9*
Tie Plates fore and aft, outside Hatchways *14*
Diagonal Tie Plates on Beams No. of Pairs *14*
Flanksheer material and scantling *show*
Waterways do. *show*
Flat of Upper Deck do. *show*
How fastened to Beams *by nut and screw bolts*
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness *38*
Is the Stringer Plate attached to the outside plating? *yes*
Angle Irons on ditto, No. *2*
Tie Plates, outside Hatchways *4 x 4 x 9*
Diagonal Tie Plates on Beams No. of pairs *4*
Waterways materials and scantlings *show*
Flat of Middle Deck do. *show*
How fastened to Beams *by nut and screw bolts*
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams *35*
Is the Stringer Plate attached to the outside plating? *yes*
Angle Irons on ditto, No. *2*
Stringer or Tie Plates, outside Hatchways *4 x 4 x 9*
Flat of Lower Deck *show*
Ceiling betwixt Decks, thickness and material in hold *2 1/2*
Main piece of Rudder, diameter at head *6 3/4*
do. at heel *3 1/2*
Can the Rudder be unshipped afloat? *yes*
Bulkheads No. *4* Thickness of *6 1/2*
Height up *as to U.D. two to M.D.K. and one to Hold beams*
How secured to sides of ship *by double frames*
Size of Vertical Angle Irons *3 x 3 1/2* and distance apart *30* ins.
Are the outside Plates doubled two spaces of Frames in length? *yes*

The FRAMES extend in one length from *Keel* to *gunwale* Riveted through plates with *7/8* in. Rivets, about *4* apart.

The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *M.D.S.A.T.* 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 1/2* in. diameter, averaging *5 1/2* ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *3 3/4* ins. from centre to centre.

Butts of *3* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *1/2* thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double *single* riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from cr. to cr.

Edges of Main Sheerstrake, double *single* riveted. Upper Sheerstrake, double *single* riveted.

Butts of Main Sheerstrake, double riveted, for *1/2* length amidships. Butts of Upper *Spar* Sheerstrake, treble riveted *1/2* length amidships.

Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper *Spar* Stringer Plate, treble riveted for *1/2* length.

Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting *5 1/4*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *double and treble riveted*

Waterway, how secured to Beams *riveted* (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? *U.D. & M.D. by mild steel plates* No. of Breasthooks, *0* Crutches, *0*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *frames, beams and angles from Phoenix*

Manufacturer's name or trade mark. *about 180, the Telford Iron Co. and Nippon, Gilbey & Co. and the plating from the Baringfield Iron Co.*

The above is a correct description.

Builder's Signature, *For Coll. Bros & others* Surveyor's Signature, *R. Reed*

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

IRON 469-0097

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? *yes.*

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

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*

Masts, Bowsprit, Yards, &c., are *Iron & 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 *Foremast 77 feet x 20 1/2 dia. This is a two plate mast, plate 1/6 and 7/16 thick, with lands double, and butts double and tuble riveted, the plating is doubled in way of partners; and has been supplied by the Bousfield Iron Co.*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.					Bowers	3	Ex. Stock.			
	Fore Sails,	Chain	270	1 3/4	55 1/2	270-1 3/4			30. 1.10	28. 1.10	30. 0.0	28. 1.10
	Fore Top Sails,	R. W. P. H. J. Hartness Sept. 3							24. 0.0	24. 2.2.0	30. 0.0	28. 1.10
	Fore Topmast Stay Sails	Steam chain	90	1 1/8	90-1 1/8				24. 3.0	26. 1.3.0	25. 2.0	25. 4/2.0
	Main Sails,	Hump Strm Cbl	90	1 1/8	90-1 1/8							
	Main Top Sails,	Hawser ...	90	1 1/8	90-1 1/8							
		Towlines ...	160	8 1/2	90.4							
		Warp	80	5								
		quality <i>good</i>										

Standing and Running Rigging *Keap* sufficient in size and *good* in quality. She has *1 life* Long Boat and *3 others*

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good* and sufficient

Engine Room Skylights. How constructed? *Solid tub plates & half eyes.* How secured in ordinary weather? *latched down*

What arrangements for deadlights in bad weather? *none required.*

Coal Bunker Openings. How constructed? *proper Iron Comings* How are lids secured? *Solid latches* Height above deck? *25 1/2*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Seven ports, and mooring pipes on each side*

Cargo Hatchways. How formed? *Iron comings and head ledges riveted together*

State size Main Hatch *24.0 x 12.0* Forehatch *8.0 x 8.0* Quarterhatch *16.0 x 9.0*

If of extraordinary size, state how framed and secured? *Solid deep comings-plate riveted, and deck laid on a caulked iron portion*

What arrangement for shifting beams? *One hull beam and 2 wood fore-and-afters.*

Hatches, If strong and efficient? *Yes - solid latches.*

Order for Special Survey No. <i>1112</i>	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	<i>Built under Special Survey.</i>
Date <i>4 Jan 1876</i>		2nd. On the plating during the process of riveting	<i>18.7.6 Jan 10.14.17.20.25. Feb 1.4.8.11.15.17.24.</i>
Order for Ordinary Survey No. <i>—</i>		3rd. When the beams were in and fastened, and before the decks were laid ...	<i>29. March 7.9.10.15.17.22.24.27.30. April 6.12.</i>
Date <i>—</i>		4th. When the ship was complete, and before the plating was finally coated or cemented...	<i>21.25. May 2.9.15.22. June 1.7.12.15.20.23.</i>
No. <i>36</i> in builder's yard.		5th. After the ship was launched and equipped	<i>July 3.8.10.15.18.25.26.31. Aug 4.9.15.17. Sept. 15.19.22.27.29.</i>

General Remarks (State quality of workmanship, &c.)

This vessel is built in accordance with the midship section approved, and in other respects in accordance with the Rules. She has a raised quarter deck 32 feet long, and a top gallant forecastle 38 feet long. She has a ballast tank under boilers 24 feet long, and another in after hold 22 feet long, the top plating being 1/6" and the flange plates 7/16" thick. She is schooner rigged, and the workmanship throughout is very good indeed. She is fitted with panting beams and stringer plates before the collision bulkhead, and abaft it is fitted an extra semi-hon beam situated below the line of hold beams, and specially arranged to prevent panting. A strong semi-hon beam double battened, is fitted between the engines and boilers, both beams of same being securely pillared to the middle line keelson below.

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 *by cement and paint* Outside *paint of composition.*

I am of opinion this Vessel should be Classed *100 A 1.*

The amount of the Entry Fee ... £ *5* : : : is received by me, *P. Young.*

Special *paid* £ *64* : : : *1 Nov 1876*

Certificate *... : : : -

(Travelling Expenses, if any, £ *—*).

Committee's Minute *3rd November 1876*

Character assigned *100 A 1*

DR L. J. G. McC 2 Dks 3 Tis Buns

This vessel appears eligible to be classed as recommended by Lloyd's Register