

IRON SHIPS.

4554

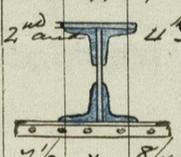
Rec 15/2/66

2490 Survey held at Middlebro Date 24 August 65 to 14 February 1866
 the S.S. "DRUID" Master Capt. Pearson
 Tonnage under tonnage deck 651.89 Built at Middlebro When built 1865 Launched 16 December 65
 to of poop 25.95 By whom built Radlich Fox & Co Owners R M Hudson & Co
 on deck 17.85 to of engine room 143.41
 Register tonnage 552.28 Port belongs to Scotland Destined Voyage Mediterranean
 Gross tonnage 605.69
 Surveyed while Building, Afloat, or in Dry Dock While Building to 600 tons scale A grade

Length aloft 193 Feet. 9 Inches. Extreme Breadth 28 Feet. 8 Inches. Depth from top of Upper Deck Beam to top of Floor 16 Feet. 6 1/2 Inches. Power of Engines 90 Horse. N^o. of Decks one

Dimensions of Ship per Register, length 194.4 breadth 28.7 depth 16.4

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Plates in Garboard Strakes, breadth and thickness	30	10/16	30	10/16	30 x 10/16
Ditto from Garboard to upper part of Bilges	9	9/16	9	9/16	9/16
from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	8	8/16	8	8/16	8/16
from 3/4ths depth of Hold to lower edge of Sheerstrake	7	7/16	7	7/16	7/16
Sheerstrake, breadth and thickness	34 1/2	11 9/16	30	1/2 - 9/16	30 1/2 - 9/16
Butt Straps to outside plating, breadth and thickness	9 x 7/16	8 1/4	7 1/2	7 1/2 + 1/16	8 1/4 7 1/2 + 1/16
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	27 3/4	8 1/16	27 1/2	8 1/16	27 1/2 x 8 1/16
Angle Iron on ditto	4 1/2	3 1/2 x 7/16	4 1/2	3 1/2 x 7/16	4 1/2 x 3 1/2 x 7/16
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	11	8 1/16	10 1/2	8 1/16	10 1/2 x 8 1/16
Diagonal Tie Plates on ditto	11	8 1/16	10 1/2	8 1/16	10 1/2 x 8 1/16
Planksheer, materials and scantlings					
Waterway ditto ditto					
Flat of Upper Deck, thickness and material	3 1/2	4 1/2	3 1/2		3 1/2
how fastened to Beams	1/2 gal iron				
Ceiling betwixt Decks and in Hold, thickness and material	2 1/2	R 7			
Clamps or Spirketting ditto					
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	20 1/2	8 1/16	20 1/2	8 1/16	20 1/2 x 8 1/16
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	10 1/2	8 1/16	10 1/2	8 1/16	10 1/2 x 8 1/16
Stringers in Hold	4 1/2	3 1/2 x 7/16	4 1/2	3 1/2 x 7/16	4 1/2 x 3 1/2 x 7/16
Flat of Lower Deck, thickness and material	4 3/4		4 3/4		4 3/4
Main piece of Rudder, diameter at head	4 3/4		4 3/4		4 3/4
" " " at heel	2 3/4		2 3/4		2 3/4
(Can the Rudder be unshipped afloat)					Yes
Bulkheads, N ^o . 4 Thickness of			6 1/16		6 1/16 on top.
Height up			3 to main deck		afterward to Cabin deck elevated.
how secured to the sides of the ship			double frames & cross beams		
size of vertical angle irons			3 x 3 x 7/16		and their distance apart 30 ins



Keelson, single or double plate, on top or intercostal
 Size of Plates 12 x 9 1/16
 Size of Angle Irons 4 1/2 x 3 1/2 x 7/16
 Side, single or double plate, box or intercostal
 Bilge (No. one) at each Bilge, single or double, plate, or box
 Ransoms, material Iron or, if none, in what manner compensated for.
 Night heads, and Hawse Timbers pipes filled with iron beads & plates
 The Frames extend in one length from Keel to gunwale
 The reverse angle irons on the floors extend in one length across the middle line from top of Bilge to top of Bilge
 " " " on the frames " " " from top of Bilge to gunwale on alternate frames.

Keelson, how are the various lengths of plates or angle irons connected? Butts sheffed & strapped & rivetted.
 Plates, Garboard, double or single rivetted to keel, double or single at upper edge, with rivets (3/4 ins.) diameter, averaging (2 3/4 ins.) apart.
 Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart.
 Butts from Keel to turn of bilge, worked carvel with butt straps (9 x 9 1/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart.
 Do the butt straps lap over and rivet through the lands of the strake below? no

Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 in.) apart.
 Do the butt straps lap over and rivet through the lands of the strake below? no
 Edges of Sheerstrake, double or single rivetted? At upper edge single bottom bulbs At lower edge Double
 Butts from bilge to planksheers, worked carvel with butt straps (9 x 8 1/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 3/4)

Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double Rivetted.
 Planksheer, how secured to the plating of the sides { Explain by sketch } Gutter Waterway.
 Waterway " " planksheer and to the Beams { if necessary. }
 Deck Beams, how secured to the side? Beam ends turned and knees welded
 Upper or Lower Deck ditto do do

No. of breasthooks 4 crutches 2
 A description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? good
 Manufacturer's name or trade mark "skema" "shotley" "north Yorkshire"

We certify that the above is a correct description of the several particulars therein given.
 Builder's Signature Radlich, Fox & Co Surveyor's Signature James Purdie
 Lloyd's Register Foundation
 RN439-0179

Workmanship. Are the lands or laps of the clenwork in all cases in breadth at least five and a half times the diameter of the rivets in d rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? They are
 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 are
 Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? single solid
 Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? They do and are the rivet holes well and sufficiently countersunk in the outer plate? sufficiently countersunk
 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. 4554 Iron (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 rivetting, quality of Materials, and if stamped with Maker's name.)

General Remarks continued - she is fitted with a house on deck - aft Engine Hatch and under Bridge 13 feet 4 x 17 feet 6 in x 7 feet angle Iron frames 3 1/2 x 3 x 7/16 Beams 4 x 3 x 7/16 spaced 4 feet 3 in. plating 2 1/2 fastened with J.S. Bolts 9/16 diam.
 She has SAILS, CABLES, &c. ANCHORS, and their weights.

N ^o .	Fathoms.	Inches.	Tons.	No.	Weight Ex. Stock	Tons		
							Tested to	
Fore Sails,	Chain	270	1 9/16	34	Bowers,	3	16.3.21	18
Fore Top Sails,	Hempen Stream Cable	90	1 2/16	10 2/20	Stream, <i>stock included</i>	1	6.3.21	7
Fore Topmast Stay Sails,	Hawser	90	8 1/2		Kedges,	2	1.3.6	3
Main Sails,	Towlines	90	6 1/2					
Main Top Sails,	Warp	90	5					
and	All of <u>good</u> quality.							

Her Standing and Running Rigging Wire Hemp Manila sufficient in size and good in quality.
 She has one Long Boat and one Life and one Jig
 The present state of the Windlass is greenheart Capstan and Rudder good Pumps 3 - 2 trans. chambers 3 1/2 1 cast iron 5 1/2

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought seen
 No. 234 65 Surveys held 2nd. On the plating during the progress of rivetting twice each
 Date 26 August while building 3rd. When the beams were in and fastened, and before the decks were laid twice
 Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated while Building
 No. Section 18. 5th. After the ship was launched

State if she has a Deck Half Poop decked 4 1/2 or Forecastle 2 1/2 fastened with J.S.B 8/16. Iron Pop. Watertight 11 x 5. Leak and J.S.B

General Remarks,
she is fitted with a "double bottom" extending from after Engine Room Bulkhead to aftermost Bulkhead - being a length of 63 feet frames. all cut in the way of tank side plates - and connected to these plates with plate tubes 6/16 thick - side iron and aft plates 20 x 7/16 tapering to 13 x 7/16 at after end - having a bar of angle iron 3 1/2 x 3 1/2 x 7/16 on lower edge - close rivetted through shell plating (9/16) - Bar on upper edge 3 x 2 3/4 x 6/16 close rivetted to tank top - the plating which is 6/16. Single Rivetted Edges & Butts (3/4 Rivets) - Tank supported by (4) iron and aft plates 2 1/2 x 6/16 with angle iron on each edge. 2 1/2 x 2 1/2 x 6/16 - Rivetted to floor and tank top - the middle line keelson under tank plates 2 1/2 x 8/16 with 4 angles 4 1/2 x 3 1/2 x 7/16 forward of this reduced to 12 x 9/16 with plate on top. 7 1/2 x 8/16 - ship being over 11 depths. The sheerstrakes increased for 2/16 for stores on the length of vessel - she is fitted with a Raised Quarter deck - all frames to top height plating 6/16 - single rivetted at Edges, double at Butts 3/4 Rivets - Beams. Iron Bars of a.I. 5 x 3 x 9/16 and 2 1/2 x 2 1/2 x 6/16 stringers 2 1/2 x 7/16 with a.I. on top. 4 x 3 x 7/16 - Lie plates 10 x 5/16 (see above)

In what manner are the surfaces preserved from oxidation? Inside Bottom cemented all other work
 Ditto ditto Outside inside and out with 3 coats of paint

I am of opinion this Vessel should be Classed B 1
 The amount of the Fee £ 5 : 0 : 0 is received by me,
John W. M. Special £ 34 : 15 : 0
 Certificate (if required) £ : :
 Committee's Minute 16th February 18 66
 Character assigned B 1
A & C. P.
W. M.
 James Purdie
 Lloyd's Register
 Feb 15 66

See Secretary letter S. 1. 1. 65 and therein refer to

This has been examined and approved for Classification and recommended for entry in Lloyd's Register
 Feb 15 66