

# IRON OR STEEL SHIP.

(Received at London Office, 47)

No. 47 Survey held at

Stockton

Date, First Survey

Port of Middlesbrough

Last Survey 28 April 1890

On the Steel Screw Steamer "Newby".

Rig Schooner

Master J. A. Mungest

Year of appointment (1) As master in service of owner of present vessel: 1882 (2) As master of this vessel: 1890

Built at Stockton on Tees

When built 1890 Launched 22 Jan 1890.

By whom built R. Popner & Son

Owners R. Popner & Co.

Managers " "

Residence " "

Port belonging to West Hartlepool

Destined Voyage Not fixed

Surveyed while Building Afloat, or in Dry Dock.

While building and afloat.

TONNAGE under Tonnage Deck 1620.53  
Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.  
Total under Upper Dk.  
Do. of Poop 80.38  
Do. of Raised Or. Dk. or Break 122.23  
Do. of Bridge House 280.28  
Do. of Houses on Deck 4.84  
Do. of excess of Hatchways 20.80  
Do. of Forecastle 38.85  
Gross Tonnage 2167.91  
Less Crew Space 67.39  
2100.52  
Less Engine Room 693.73  
Register Tonnage as cut on Beam 1406.79

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

Half Breadth (moulded) 19.33  
Depth from upper part of Keel to top of Upper Deck Beams 22.75  
Girth of Half Midship Frame (as per Rule) 37.75  
1st Number 49.83  
1st Number, if a 3-Decked Vessel deduct 7 feet  
Length 270.45  
2nd Number 216.13  
Proportions— Breadths to Length 6.9  
Depths to Length— Upper Deck to Keel 11.9  
Main Deck ditto

LENGTH on deck as per Rule 270 9 BREADTH— Moulded 38 9 DEPTH top of Floors to Upper Deck Beams 19 7 Do. do. Main Deck Beams 19 7 Power of Engines 200 No. of Decks with flat laid One. No. of Tiers of Beams Two.

Dimensions of Ship per Register, length, 272.3 breadth, 38.9 depth, 18.6

KEEL, depth and thickness Side Bars 9 x 1 1/4  
STEM, moulding and thickness 9 x 2 1/2  
STERNPOST for Rudder do. do. 9 x 5 1/2  
" for Propeller 9 x 5 1/2  
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 5 3 8  
Do. for 1/4 at each end 5 3 7 5 3 7  
REVERSED FRAMES, Angle Iron 3 1/2 3 8 3 1/2 3 8  
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 38 Iron 1/4 38 1/4  
" thickness at the ends of vessel Cellular Double Bottom  
" depth at 1/4 the half-bdth. as per Rule all fore & aft (See plans)  
" height extended at the Bilges

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  
Average space 24  
BEAMS, Main, or Middle Deck 6 1/2 3 9 6 1/2 3 9  
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron  
Single, or double Angle Iron, on Upper Edge  
Average space 24  
BEAMS, Lower Deck 9 9 9 9 9  
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron  
Single or double Angle Iron on Upper Edge  
Average space See plans  
BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron  
Single or double Angle Iron on Upper Edge  
Average space  
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates 38 10 38 10  
" Rider Plate Center Strake of D.P. 50 Iron 1/4 50 1/4  
" Bulb Plate to Intercoastal Keelson 4 4 9 4 4 9  
" Angle Irons 3 1/2 3 1/4 3 1/2 3 1/4  
" Double Angle Iron Side Keelson 3 1/2 3 1/4 3 1/2 3 1/4  
" Side Intercoastal Plate 6 1/4  
" do. Angle Irons 3 1/2 3 1/4 3 1/2 3 1/4  
" Attached to outside plating with angle iron 3 1/2 3 1/4 3 1/2 3 1/4

BILGE Angle Irons  
" do. Bulb Iron  
" do. Intercoastal plates riveted to plating for length Well-frames and Stringers  
BILGE STRINGER Angle Irons  
Intercoastal plates riveted to plating for length See plans  
SIDE STRINGER Angle Irons

The FRAMES extend in one length from Middle line to Tankside and from S.S. to Runway  
The REVERSED ANGLE IRONS on floors and frames extend from middle line to Tankside and from S.S. to Main Deck and to R.P.D. & Lower Deck  
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 1/4 in. diameter, averaging 5 1/2 ins. from centre to centre.  
" Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from centre to centre.  
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/4 ins. from centre to centre.  
" Butts of All Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 3/20 thicker than the plates they connect.  
" Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.  
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 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 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.  
" Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.  
" Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting  
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? 3 lbs + 1/2 No. of Breasthooks, 3 & Deck Crutches, 2 & Deck  
That description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good malleable Quality.  
Manufacturer's name or trade mark, West Hartlepool & Co., Stockton Malleable & Co., Consett, Steel Co. of Scotland, Dorman Long & Co.  
The above is a correct description  
Builder's Signature, Surveyor's Signature, Allison & Wilson, Surveyor to Lloyd's Register of British and Foreign Shipping

State clearly where plating is of alternate thicknesses as distinguished from distinguished thickness at ends of vessel.  
\* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

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? 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? A few through butts.

Masts, Bowsprit, Yards, &c., are Iron in Good condition, and sufficient in size and length. If of Iron or Steel give Scallings 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 These masts which are intended for auxiliary purposes only, have been constructed by the Cleveland Bridge & Engineering Co. in accordance with the tracing approved by the Committee (Secretary's letter 22.11.88) and the material which is of good malleable quality was manufactured by the West Hartlepool S. & S. Co. and has been tested as per Rule requirements.

Number for Equip-ment 24045		CABLES, &c.		Test per Certificate.		Fathoms & Inches per Rule.		Machine where Tested and Superintendent, also Name of Chain Maker.		ANCHORS.		Weight. Ex. Stock.		Test per Certificate.		Weight req'd per Rule.		Machine where Tested and Superintendent, also Name of Anchor Maker.		
Letter for do. Y		Number of Certificate.		Inches.		Tons.		per Rule.		Name of Chain Maker.		Number of Certificate (State if any and which Anchors are Stockless.)		Ex. Stock.		Superintend.		Name of Anchor Maker.		
		8333	270	1 1/2	77 1/2	55 1/2	270	1 1/2	J. B. Hartman		20305	38.1.16	34.16	1.0	37.2.0	J. B. Hartman		J. B. Hartman		
		Calipans								J. B. Hartman		20304	37.2.14	34.4.1	1.14	37.2.0	J. B. Hartman		J. B. Hartman	
		8337	75	1 1/2	20 1/2	30 3/4	75	1 1/2	J. B. Hartman		20303	32.2.20	30.13	3.0	31.3.14	J. B. Hartman		J. B. Hartman		
		Iron Stream Chain								J. B. Hartman		Smith's Striders						J. B. Hartman		
		or								J. B. Hartman		Supplied						J. B. Hartman		
		Hempen Str'm Cable								J. B. Hartman		Collective Weights		108.2.22		106.3.14		J. B. Hartman		
		TOWLINE—								J. B. Hartman		Stream		9.2.14		11.13.1.21		J. B. Hartman		
		Hemp or Steel Wire.								J. B. Hartman		Kedge		4.3.14		7.5.0.0		J. B. Hartman		
		Hawser								J. B. Hartman		2nd Kedge		2.2.14		5.2.2.0		J. B. Hartman		
		Warp								J. B. Hartman								J. B. Hartman		

Standing and Running Rigging Iron Wire & Hemp sufficient in size and Good in quality. She has 2 life Long Boats and 2 Other  
The Windlass is Good Capstan Good and Rudder Good Pumps Good  
Engine Room Skylights. How constructed? Iron How secured in ordinary weather? Bolted

What arrangements for deadlights in bad weather? Dead lights  
Coal Bunker Openings. How constructed? Iron How are lids secured? Hatch Bars Height above deck? 16"

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Six Pits each side in Bulwark.

Cargo Hatchways. How formed? Plates & Angles Hatches, If strong and efficient? 3" x 2 1/2"  
State size Main Hatch 15ft 9 x 13ft Quarterhatch 22ft x 14ft 2 Quarterhatch 21ft 9 x 14ft  
If of extraordinary size, state how framed and secured... Ordinary size What arrangement for shifting beams? As per Rule

Order for Special Survey No. 2398 1st. On the several parts of the frame, when in place, and before the plating was wrought  
Date 17th July 1889 2nd. On the plating during the process of riveting  
Order for Ordinary Survey No. 245 3rd. When the beams were in and fastened, and before the decks were laid....  
Date 22nd June 1889 4th. When the ship was complete, and before the plating was finally coated or cemented..  
No. 245 in builder's yard. 5th. After the ship was launched and equipped  
State dates of letters respecting this case 22nd June 1889

General Remarks (State quality of workmanship, &c.) This vessel which is a sister ship to the S.S. "AEON" by the same Builders, has been built in accordance with the Rules, and the plans submitted to and approved by the Committee. The whole of the material in the Hull is of good malleable quality, and has been tested as per Rule requirements. The punching, countersinking and riveting have been well executed, and the cement well laid, firmly adhering to the several surfaces.  
The hull has been marked on the vessel's sides in conformity with that assigned to the sister vessel as follows.  
Winter 2ft 2. Summer 1.10 1/2. Height of fresh water mark above centre of Disc 4 1/2.

How are the surfaces preserved from oxidation? Inside Portland Cement and Paint Outside Paint

Particulars for Record in R.B.—Length of Poop 30.9 ft., R.Q.D. 82 ft., Bridge Dk., 106 ft., F'castle 29.6 ft.; No. of Dks. (excluding spar, awn, &c.)  
Material of dks. Iron If spar, awn, dk., &c. Iron Material of spar, awn, dk., &c. Iron; No. of tiers of beams (with and without dks. laid)  
Official No. 97392; Signal Letters LRBY  
If double bottom, state particulars on separate form.

I am of opinion this Vessel should be Classed 100 A1, STEEL  
The amount of the Entry Fee £ 5 is received by me, R. H. A.  
Special £ 14 : 14 : 6 29. 4 1890  
Certificate ...  
Travelling Expenses, if any, £  
Committee's Minute FRIDAY 2 MAY 1890  
Character assigned 100 A1 Steel  
+ Lumber 4/90  
well dk  
Allison Wilson Davidson  
Surveyor to Lloyd's Register of British and Foreign Shipping.  
It is submitted that this vessel appears eligible to be Classed 100 A1 Steel as recommended by the Committee.  
Call to B. particulars appended.