

# IRON SHIPS.

No. 9908 Survey held at Newcastle Date 13<sup>th</sup> Nov. 1865 to 8<sup>th</sup> June 1866  
 on the S.S. "John Brogden" Master George Carr  
 Tonnage under tonnage deck 484.03 Built at Newcastle When built 1866 Launched 18<sup>th</sup> April/66  
 Ditto of poop or spar deck 63.94 By whom built C. Mitchell & Co. Owners A. Brogden  
 Ditto of engine room 139.94  
 Total Register tonnage 408.03  
 Gross Tonnage 544.94 Port belonging to Swansea Destined Voyage Coasting  
 If Surveyed while Building, Afloat, or in Dry Dock While building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	Nº. of Decks
162.2			27.3			15.7			80		one laid

(Dimensions of Ship per Register, length 162.2 breadth 27.3 depth 15.5)

	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						
„ if plate iron, breadth and thickness	30 x 1 1/16	24 x 1 1/16				
Stem, if bar iron, moulding and thickness	6 3/4 x 2 1/2	6 3/4 x 2 1/2				
„ if plate iron, breadth and thickness	4 x 5	4 x 5				
Stern-post, if bar iron, moulding and thickness						
„ if plate iron, breadth and thickness						
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	23				
Frames, Size of Angle Iron, single or double	3 1/2	3	3 1/2	2 3/4	3 1/2	2 3/4
„ Reversed Iron, if to every frame or every frame	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	17 1/2	7 1/2	17 1/2	7 1/2	17 1/2	7 1/2
„ Ditto ditto at Bilge Keelson						
„ Size of Reversed Angle Iron, and No. 142 at top of Floor Plate	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Beams, Deck (Nº. 28) double Angle Iron, Plate, Tee, or Bulb Iron		6 1/2	4 1/2		6 1/2	4 1/2
„ „ double or single Angle Iron, on edge	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
„ „ average space between	Alternate frames					
„ Hold, or Lower Deck (Nº. 16) double Angle, Tee, Plate, or Bulb Iron		6 1/2	4 1/2		6 1/2	4 1/2
„ „ double or single Angle Iron, on edge	3	2 1/2	4 1/2	2 1/2	2 1/2	4 1/2
„ „ average space between	2nd & 4th frames					
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron	Alternate					
„ Engine						
Keelson, single or double plate, box, or intercostal		22	3 1/2		22	3 1/2
„ Size of Plates						
„ Size of Angle Irons	4	3 1/2	7 1/2	4 1/2	3 1/2	7 1/2
„ Side, single or double, plate, box, or intercostal						
„ Bilge (Nº. ) at each Bilge, single, or double, plate, or box	see section					

Plates in Garboard Strakes, breadth and thickness 34 9/16 24 9/16

Ditto from Garboard to upper part of Bilges 8 1/6 9/16

„ from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold 7 1/6 7/16

„ from 3/4ths depth of Hold to lower edge of Sheerstrake 6 1/6 & 5/16 6 1/6 & 5/16

„ Sheerstrake, breadth and thickness 30 9 5/8 24 9 5/8

Butt Straps to outside plating, breadth and thickness 9 1/2 13 1/6 to 4 1/6

Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness 23 1/2 7 1/6 23 1/2 7 1/6

Angle Iron on ditto 3 1/2 x 3 1/2 x 4 1/6 4 x 3 x 4 1/6

Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways 12 1/4 7 1/6 10 7/16

Diagonal Tie Plates on ditto 10 7/16 10 7/16

Planksheer, materials and scantlings

Waterway ditto ditto Gutter Waterway

Flat of Upper Deck, thickness and material 3/4 Pine 3 3

„ how fastened to Beams nut & screw bolts

Ceiling between Decks and in Hold, thickness and material 2nd. Red Pine

Clamps or Spirketting ditto

Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness 18 1/2 7 1/6 18 7/16

Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams 3 1/2 x 3 1/2 x 4 1/6 4 x 3 x 4 1/6

Stringers in Hold double angle iron 4 x 3 1/2 x 7 1/6 4 1/4 x 3 1/2 x 7 1/6

Flat of Lower Deck, thickness and material

Main piece of Rudder, diameter at head 4 1/2 4 1/2

„ at heel 3 2 3/4

(Can the Rudder be unshipped afloat Yes)

Bulkheads, Nº. 4 Thickness of 7 1/6

„ Height up to upper deck

„ how secured to the sides of the ship rivetted to double frames

„ size of vertical angle irons 2 1/2 x 2 1/2 and their distance apart 2 1/2 in.

The Frames extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (6 in.) apart

The reverse angle irons on the floors extend in one length across the middle line from side to side of Tank, and from the

„ „ „ on the frames „ „ „ from top of Tank to hold stringer and gunwale alternately

Keelson, how are the various lengths of plates or angle irons connected? by butt straps

Plates, Garboard, double or rivetted to keel, double or rivetted at upper edge, with rivets (7/8 x 3/4 in.) diameter, averaging (3 1/4 in.) apart.

„ Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart.

„ Butts from Keel to turn of bilge, worked carvel with butt straps (13 1/2 9/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) 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 1/2 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 At lower edge double

„ Butts from bilge to planksheers, worked carvel with butt straps (9 1/2 7/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart. Breadth of laps in double rivetting (4 1/8) Breadth of laps in single rivetting (2 5/8)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?

Planksheer, how secured to the plating of the sides Explain by sketch

Waterway „ „ planksheer and to the Beams if necessary. Gutter Waterway

Deck Beams, how secured to the side? Single plate knees, rivetted to beams and frames

Hold or Lower Deck ditto do do do

Paddle „ „ No. of breasthooks 3 crutches 3

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

Manufacturer's name or trade mark Frames & Beams, L. W. & B. Walker Plates & Consell.

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

Builder's Signature C. Mitchell & Co. Surveyor's Signature A. Harding

4758 Iron

**Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least live and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? 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

Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? in long lengths

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? 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 rivetting, quality of Materials, and if stamped with Maker's name.

She has SAILS.		CABLES, &c., tested at "Lloyd's" proving house					ANCHORS, tested at "Lloyd's" proving house				
No.		No. on Chain seen by me.	No. and date on Certificate	Fathoms.	Inches.	Tested to. Tons.	No.	No. on Anchor seen by me.	No. and date on Certificate.	Weight. Ex. Stock.	Tested to. Tons.
✓	Fore Sails,	Chain	1398	1398.16.5.66	135	1 1/2	282.0.0	1	3200	3200.16.5.66	13.3.18 15.12.2.0
✓	Fore Top Sails,	Hemp	1188	1188.12.3.66	105	1 1/2	282.0.0	1	3198	3198.16.5.66	13.2.22 15.8.0.14
one complete	Fore Topmast Stay Sails,	Stream Cable			60	3/4		1	3199	3199.16.5.66	11.3.11 13.15.0.0
✓	Main Sails,	Hawser			90	7 1/2		1			6.0.26 In
✓	Main Top Sails,	Towlines			90	5 1/2		1			3.0.12 Stock
and		Warp						1			1.2.8
		All of <u>good</u> quality.									

Her Standing and Running Rigging is sufficient in size and good in quality.

She has one Life Long Boat and two others

The present state of the Windlass is good Capstan good and Rudder good Pumps two hand, main, engine and donkey

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought

No. 537 Surveys held 2nd. On the plating during the progress of rivetting

Date 9th Nov. 1865 while building 3rd. When the beams were in and fastened, and before the decks were laid

Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated

No. — Section 18. 5th. After the ship was launched

Date —

State if she has a Spar Deck — Poop and smaller or Forecastle —

# General Remarks,

This vessel has a Tank bottom <sup>ft in</sup> 101.6 in length, the top plating of which is 5/16 thick.

She has been built in accordance with the Midship Section and per Secretary's letter 17th November 1865.

In what manner are the surfaces preserved from oxidation? Inside Red lead and Cement

Ditto

ditto

Outside Paint

I am of opinion this Vessel should be Classed B 1

The amount of the Fee £ 5 is received by me,

June 1866 Special £ 27 8 :

Certificate (if required) £ 4 :

Committee's Minute 12th June 1866

Character assigned B 1

A. Harding

I concur in the above  
received  
11 June 1866  
Lloyd's Register  
Foundation

X. Mearns Esq, Mitchell & Co, New Water, Newcastle-on-Tyne.