

IRON SHIPS.

Recd 24/12

Survey held at Newcastle Date 21st August to 16th December 1865
S.S. "Bullfinch" Master R. Pentney
 Tonnage under tonnage deck 804.11 Built at Newcastle When built 1865 Launched 21st October
 Ditto of poop or spar deck
 Ditto of engine room 176.42 By whom built Palmer Shipbuilding Company Owners J. W. Harris
 Total Register tonnage 627.69 Port belonging to London Destined Voyage Home
 Gross Tonnage 804.11
 Surveyed while Building, Afloat, or in Dry Dock while building

Length aloft 209 Feet. Extreme Breadth 28.15 Feet. Depth from top of Upper Deck Beam to top of Floor 17.5 Feet. Power of Engines 100 Horse. N^o. of Decks 1

Dimensions of Ship per Register, length 209 breadth 28.15 depth 17.5

	Inches in Ship.	Inches required per Rule.	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	$7\frac{1}{4} \times 2\frac{1}{2}$	$7\frac{1}{2} \times 3$						
if plate iron, breadth and thickness								
Stem, if bar iron, moulding and thickness	$7\frac{1}{4} \times 2\frac{1}{2}$	$7\frac{1}{2} \times 3$						
if plate iron, breadth and thickness								
Stern-post, if bar iron, moulding and thickness	$8\frac{1}{4} \times 5$	$7\frac{1}{2} \times 6$						
if plate iron, breadth and thickness								
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	21						
Frames, Size of Angle Iron, single or double	4 3	$5\frac{1}{16} \times 3$	3 3	$5\frac{1}{16} \times 3$				
Reversed Iron, if to every frame or every frame	3 3	$5\frac{1}{16} \times 3$	3 3	$5\frac{1}{16} \times 3$				
Floors, depth and thickness of Floor Plate at mid line	18	$9\frac{1}{16}$	18	$9\frac{1}{16}$				
Ditto ditto at Bilge Keelson	7							
Size of Reversed Angle Iron, and No. at top of Floor Plate	3 3	$5\frac{1}{16} \times 3$	3 3	$5\frac{1}{16} \times 3$				
Beams, Deck (N ^o . 41) double Angle Iron, Plate, Tee, or Bulb Iron	7	$5\frac{1}{16}$	7	$5\frac{1}{16}$				
double or single Angle Iron, on top edge	$2\frac{3}{4} \times 2\frac{3}{4}$	$5\frac{1}{16} \times 2\frac{1}{2}$	$2\frac{3}{4} \times 2\frac{3}{4}$	$5\frac{1}{16} \times 2\frac{1}{2}$				
average space between	3 feet	6 inches						
Hold, or Lower Deck (N ^o . 24) double Angle, Tee, Plate, or Bulb Iron	7	$5\frac{1}{16}$	7	$5\frac{1}{16}$				
double or single Angle Iron, on top edge	$2\frac{3}{4} \times 2\frac{3}{4}$	$5\frac{1}{16} \times 3$	$2\frac{3}{4} \times 2\frac{3}{4}$	$5\frac{1}{16} \times 3$				
average space between	2 nd & 4 th frame							
Paddle, sided and moulded, thickness of Plate size of Angle Iron								
Engine								
Keelson, single or double plate, box, or intercostal	24	$8\frac{1}{16}$	22	$9\frac{1}{16}$				
Size of Plates top of floors	14	$8\frac{1}{16}$						
Size of Angle Irons	5 3	$5\frac{1}{16} \times 4$	5 4	$5\frac{1}{16}$				
Side, single or double, plate, box, or intercostal	5 3	$5\frac{1}{16} \times 4$	5 4	$5\frac{1}{16}$				
Bilge (No. 2) at each Bilge, single, or double, plate, or box	5 3	$5\frac{1}{16} \times 4$	5 4	$5\frac{1}{16}$				

Transoms, material Plate or, if none, in what manner compensated for.
 Knight-heads, and Hawse Timbers Planks
 The Frames extend in one length from Keel to Gunnwale rivetted through plates with ($\frac{3}{4}$ in.) rivets, about (6) apart
 The reverse angle irons on the floors extend in one length across the middle line from Keel to bottom to bilge and from bilge to hold beam stringer and alternately to deck,
 " " " on the frames " " " from " to "

Keelson, how are the various lengths of plates or angle irons connected? by Butt Straps

Plates, Garboard, double rivetted to keel, double or and at upper edge, with rivets ($\frac{1}{8} \times \frac{1}{8}$ ins.) diameter, averaging (4x3 in.) apart.
 Edges from Garboards to upper part of bilge, worked clench, double or single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 $\frac{3}{4}$ ins.) apart.
 Butts from Keel to turn of bilge, worked carvel with butt straps ($\frac{1}{16} \times \frac{1}{16}$) thick, double or single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 $\frac{3}{4}$ 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 clench, double or single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 $\frac{3}{4}$ 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 At lower edge double
 Butts from bilge to planksheers, worked carvel with butt straps ($\frac{1}{16} \times \frac{1}{16}$) thick, double or single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 $\frac{3}{4}$ ins.) apart. Breadth of laps in double rivetting ($\frac{1}{4}$) Breadth of laps in single rivetting ($\frac{1}{2}$)

Butt 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

Waterway " " planksheer and to the Beams if necessary. Bolted to stringer & outside plating

Deck Beams, how secured to the side? Bracket ends rivetted to frames

Hold or Lower Deck ditto do

Paddle " " No. of breasthooks 5 crutches 4

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

Manufacturer's name or trade mark Angle iron marked Palmer's Best; Plates Lonsdale

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

Builder's Signature Palmer & Co. Limited Surveyor's Signature J. H. Siltman

IRON 439-0079

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.

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

She has one Long Boat and two others

The present state of the Windlass is Good Capstan Good and Rudder Good Pumps 4 deck Pumps
and Engine Pump

State if she has a Spar Deck Quarter Peep Deck 62 1/2' or Forecastle

General Remarks, This vessel has a double bottom extending from the Engine room Bulkhead to the fore Bulkhead, 110 feet. She has been built (with one or two slight exceptions) in accordance with the appended tracing of midship section. She was not intended to exceed 800 tons, but now when completed she proves to be 804 tons, the thickness of the outside Plating, stringers &c is up to the 800 tons scale, and as the deficiencies are only slight, I beg respectfully to recommend her to the favourable consideration of the Committee for the B Class.

In what manner are the surfaces preserved from oxidation? Inside Asphalt & Paint
Ditto ditto Outside Paint

I am of opinion this Vessel ^{may}~~should~~ be Classed B T

The amount of the Fee£ 5: 0: is received by me,

* Dec 1885 Special£ 40: 4:

Certificate (if required)£ 0: 0:

Committee's Minute 22nd December 1865 —
26th December 1865.

Character assigned B / 5 4 2 P

J. H. Giltman

(The above by H. Low "Hoo")