

IRON SHIPS.

2663 Survey held at Glasgow Date 13 July 1887 18

Ship "Barnbarrow Castle" Master Wm. Pole

Age under tonnage deck 1198.83 Built at Glasgow When built 1867 Launched 20 June 1867

of poop or spar deck By whom built Barclay Curle & Co. Owners D. Currie & Co.

to of engine room 1.10

Register tonnage 1199.98 Port belonging to Liverpool & London Destined Voyage Calcutta

Surveyed while Building, Afloat, or in Dry Dock whilst building and afloat

Length aloft 220 Feet. Inches. Extreme Breadth 30.3 Feet. Inches. Depth from top of Upper Deck Beam to top of Floor 21.36 Feet. Inches. Horse. N°. of Decks Two

Dimensions of Ship per Register, length 229 breadth 36.3 depth 21.1

	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	13 x 5 1/2	8 1/2 x 3	Plates in Garboard Strakes, breadth and thickness	30	18	36	18	18
" if plate iron, breadth and thickness	8 1/2 x 3	8 1/2 x 3	Ditto from Garboard to upper part of Bilges	12	18	18	18	18
Stem, if bar iron, moulding and thickness	8 1/2 x 3	8 1/2 x 3	" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	18	18	18	18	18
" if plate iron, breadth and thickness	8 1/2 x 3	8 1/2 x 3	" from 3/4ths depth of Hold to lower edge of Sheerstrake	18	18	18	18	18
Stern-post, if bar iron, moulding and thickness	8 1/2 x 3	8 1/2 x 3	" Sheerstrake, breadth and thickness	30	18	30	18	18
" if plate iron, breadth and thickness	8 1/2 x 3	8 1/2 x 3	Butt Straps to outside plating, breadth and thickness	10 1/2	18	10 1/2	18	18
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	31 1/2	18	31 1/2	18	18
Frames, Size of Angle Iron, single or double	5 x 3	5 x 3	Angle Iron on ditto	5 x 4 1/2	9	5 x 4 1/2	9	9
" Reversed Iron, if to every frame	to the upper part of	to the upper part of	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	14	18	13 1/2	18	18
" Hold for every other frame	to the Gunwale	to the Gunwale	Diagonal Tie Plates on ditto	14	18	13 1/2	18	18
Floors, depth and thickness of Floor Plate at mid line	3 1/2	4	Planksheer, materials and scantlings	4 x 4	9	4 x 4	9	9
" Ditto ditto at Bilge Keelson	1 1/2	4	Waterway ditto ditto	4 x 4	9	4 x 4	9	9
" Size of Reversed Angle Iron, and No. 1, 2, 3 at top of Floor Plate	3 1/2	4	Flat of Upper Deck, thickness and material	5 x 4	9	5 x 4	9	9
Beams, Deck (N°. ") double Angle Iron, Plate, Tee, or Bulb Iron	8 1/2	8 1/2	" how fastened to Beams	cut and screw bolts		cut and screw bolts		
" double or single Angle Iron, on upped edge	3 1/2	4	Ceiling betwixt Decks and in Hold, thickness and material	2 1/2	18	2 1/2	18	18
" average space between	4 feet	4 feet	Clamps or Spirketting ditto	"	"	"	"	"
Hold, or Lower Deck (N°. ") double Angle, Tee, Plate, or Bulb Iron	8 1/2	8 1/2	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	24	18	23 1/2	18	18
" double or single Angle Iron on upped edge	3 1/2	4	Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	14	18	13 1/2	18	18
" average space between	4 feet	4 feet	Stringers in Hold	5 x 4 1/2	9	5 x 4 1/2	9	9
Paddle, sided and moulded, thickness of Plate size of Angle Iron	"	"	Flat of Lower Deck, thickness and material	5 x 4	9	5 x 4	9	9
Engine " " " " " "	"	"	Main piece of Rudder, diameter at head	6	18	5 1/2	18	18
" in, single or double plate, box, or intercostal	"	"	" " " at heel	3	18	3	18	18
Size of Plates	30	29	(Can the Rudder be unshipped afloat)	Yes				
Size of Angle Irons	8 1/2	8 1/2	Bulkheads, N°. Thickness of	70	70			
" Side, single or double plate, box, or intercostal	5 1/2	5 1/2	" Height up upper deck					
" Bilge (N°. ") at each Bilge, single, or double plate, or box	5 1/2	5 1/2	" how secured to the sides of the ship	rivetted between frames				
Transoms, material	Iron		" size of vertical angle irons	3 1/2	3 1/2			
" if none, in what manner compensated for.								
Knight-heads, and Hawse Timbers	Iron							
The Frames extend in one length from middle line to Gunwale								
The reverse angle irons on the floors extend in one length across the middle line from upped part of Hold Beams to D.								
" " " on the frames " " " from middle line to Gunwale								
Keelson, how are the various lengths of plates or angle irons connected?	by lining pieces							
Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (1/2 in.) diameter, averaging (2 in.) apart.								
" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (1/2 in.) diameter, averaging (3 in.) apart.								
" Butts from Keel to turn of bilge, worked carvel with butt straps (7/8 in.) thick, double or single rivetted; with rivets (1/2 in.) diameter, averaging (3 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 (1/2 in.) diameter, averaging (3 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 to Bulwark At lower edge Double								
" Butts from bilge to planksheers, worked carvel with butt straps (7/8 in.) thick, double or single rivetted; with rivets (1/2 in.) diameter, averaging (3 in.) apart. Breadth of laps in double rivetting () Breadth of laps in single rivetting ()								
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	Double							
Planksheer, how secured to the plating of the sides	Explain by sketch							
Waterway " " planksheer and to the Beams	if necessary.							
Deck Beams, how secured to the side?	Welded knees rivetted to frames							
Hold or Lower Deck ditto								
Paddle " " " " " "								
No. of breasthooks	Five							

IRON 44-0087

Workmanship.

Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in dov

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?* *Yes*

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 in corners of But*

Her Masts, Bowsprit, Yards, &c., are in *Good* condition, and sufficient in size and length. (If they are of Iron or Steel give the Scanlings 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.

Fore Sails,
Fore Top Sails,
Fore Topmast Stay Sails,
Main Sails,
Main Top Sails,

CABLES, &c.

Chain *14*.....*300*
Hempen Stream Cable *90*
Hawser *Chain*..... *90*
Towlines *90*
Warp *90*
All of *Good* quality.

Fathoms.

Inches.

Tested to Tons.

ANCHORS, and their weights.

Public Magazine

Shay 11/11

Bowers, *Shay 11/11*.....

Stream, *1*

Kedges, *2*

No.

Weight.

Tested to Tons.

Ex. Stock

30.3.19

2.0.12.9.5

30.2.9.29.0

25.2.20.25.8

5.0.0.25.8

72.1.20

1.0.0.20

3.0.15

Her Standing and Running Rigging *Good* sufficient in size and *Good* in quality.

She has *two 14 feet life* *Long* Boat and *a 22 feet* *Long* Boat *Two Quarter Boats 20 feet*

The present state of the Windlass is *New* Capstan *New* and Rudder *New* Pumps *New and efficient*

Order for Special Survey

DATES of

1st. On the several parts of the frame, when in place, and before the plating was wrought

No. *472* Surveys held

2nd. On the plating during the progress of rivetting *Built under special survey*

Date *Aug. 22/64* while building

3rd. When the beams were in and fastened, and before the decks were laid *from the 31st July*

Order for Ordinary Survey

as per

4th. When the ship was complete, and before the plating was finally coated *to the 15th July/64*

No. *72*

Section 18.

5th. After the ship was launched

Date *72*

State if she has a Spar Deck

No

Prop

Raised B^d or Forecastle *Yes*

General Remarks.

Frames spaced twenty four inches apart and doubled with Angle Bars 5 x 3 x 9/8 for half the length of the ship amidships, and extended as far up the Bulges as practicable. Floors worked long and short arms alternately. Butts overlapped and treble riveted. Bulb Bar fitted to Middle line Intercoastal Keelson fore and aft 8 1/2 x 9/8. Side Intercoastal Keelson 2 1/2 x 9/8 for half the length of the ship in midships. The Angle Bars extended as far fore and aft as practicable. Hold Beam Stantions to each Beam 3 1/2; Deck D. 3 1/2. Butt Straps to Sheerstrake and Gunwale Plate are 15 lbs wide and treble riveted. Lower deck fitted with a Gutter Waterway 15 lbs wide. Fitted with 70 lb iron Bulwarks, 1 1/2 Spurs 4 ft 10 in apart. Sheerstrake extended 12 1/2 lbs in midships and about 18 lbs at ends above Gunwale plate.

Fore. Main and Bowsprit of iron each of four plates, lands double clencher. Butts treble carvel riveted to 3/4 thick.

Fore and Main Yards of two Plates 70. 9/8 & 5/8 thick, lands single clencher and Butts double carvel riveted.

In what manner are the surfaces preserved from oxidation? Inside *coated with Portland Cement*.

Ditto

ditto

Outside

Red Lead and Oil paints

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

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

John W. M.

Special £ *60* : : :

Certificate (if required) £ *10* : : :

Committee's Minute *26th July* 18 *64*

Character assigned

A

A & C P

MAS.

This Sailing Ship appears eligible for Classification as recommended by Lloyd's Register Foundation