

IRON SHIPS.

No. 7536 Survey held at Sunderland Date 6th August 1887
 on the S.S. "Dunrobin" Master Brown
 Tonnage Gross 823 Engine Room 152 Register 671 Built at Sunderland
 When Built 1862 By whom built Mr R Osvald Owners Lt G Pearson & Co
Lam shed 15th Feb 1862 Port belonging to London Destined Voyage Hull George Fleming Surveyor
 Surveyed Afloat or in Dry Dock Whilst Building

| Length aloft | | Extreme Breadth | | Depth from top of Upper Deck | | Power of Engines | | Horse No. |
|---|---------|-----------------|---------|--|---------|--|---------|-----------|
| Feet. | Inches. | Feet. | Inches. | Feet. | Inches. | Feet. | Inches. | |
| 220 | 1 | 29 | | 17 | | 90 | | 90 |
| Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft | | | | Inches in Ship. | | Inches required per Rule. | | |
| | | | | 18 | | 18 | | |
| Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate | | | | Inches in Ship. | | Inches required per Rule. | | |
| | | | | 4 1/2 | | 3 | | |
| ,, depth and thickness of Floor Plate at mid line | | | | 20 | | 9 1/2 | | |
| ,, depth and thickness of Floor Plate at Bilge Keelson | | | | 4 1/2 | | 8 1/2 | | |
| ,, Size of Reversed Angle Iron, and No. 1 at top of Floor Plate | | | | 3 | | 3 | | |
| Frames, Size of Angle Iron, single or double | | | | 4 1/2 | | 3 | | |
| ,, Reversed Iron, if to every frame | | | | No | | No | | |
| Beams, Deck (N ^o . 52) double Angle Iron or Bulb Iron with double Angle Iron on top | | | | 3 | | 2 1/2 | | |
| ,, depth & thickness of plate amidships | | | | 7 | | 8 1/2 | | |
| ,, double or single Angle Iron, on lower edge | | | | 3 | | 3 | | |
| ,, average space between | | | | 3 feet | | 3 feet | | |
| ,, if wood (N ^o . 1111) sided & moulded | | | | 3 | | 2 1/2 | | |
| Hold, or Lower Deck (N ^o . 37) double Angle Iron or Bulb Iron with double Angle Iron on top | | | | 3 | | 2 1/2 | | |
| ,, depth & thickness of plate amidships | | | | 7 | | 8 1/2 | | |
| ,, double or single Angle Iron, on lower edge | | | | 3 | | 3 | | |
| ,, average space between | | | | 3 | | 3 | | |
| ,, if wood (N ^o .) sided & moulded | | | | 3 | | 2 1/2 | | |
| ,, Paddle, wood, sided and moulded or if Iron, size of Plate | | | | 3 | | 2 1/2 | | |
| ,, Engine | | | | 3 | | 2 1/2 | | |
| Keelson, wood sided & moulded iron, size of plate, if Box, give sketch & dimensions | | | | 6 | | 3 | | |
| ,, Side or Bilge | | | | 6 | | 3 | | |
| ,, Number | | | | 3 | | 3 | | |
| Transoms, material <u>Iron</u> or, if none, in what manner compensated for. | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | are they free from defects? | | |
| Knight-heads | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | how secured to the sides of the ship | | |
| Hawse Timbers | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| The Frames or Ribs extend in one length from <u>Noel</u> to <u>Gunnale</u> rivetted through plates with (3/4 in.) rivets, about (6 in) apart. | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | how secured to the sides of the ship | | |
| The reverse angle irons on the floors extend in one length across the middle line from <u>Mid line</u> to <u>Gunnale</u> rivetted through plates with (3/4 in.) rivets, about (6 in) apart. | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Keelson, how are the various lengths of plates or angle irons connected? | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 in.) diameter averaging (4 1/2 in.) from centre to centre of rivet. | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| ,, Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| ,, Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| ,, Edges from bilge to planksheer, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| ,, Butts from bilge to planksheers, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter averaging (3 in.) from centre to centre of rivets. Breadth of laps in double rivetting (3/4 in.) Breadth of laps in single rivetting (1/2 in.) | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Planksheer, how secured to the plating of the sides | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Waterway | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Side trussing | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Deck trussing | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Deck Beams, how secured to the side? | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Hold or Lower Deck | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| Paddle | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| No. of breasthooks | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |
| What description of iron is used for the angle iron and plate iron in the vessel? | | | | Bulkheads, N ^o <u>None</u> Thickness of <u>9/16</u> | | size of vertical angle iron and their distance apart | | |

2880 Iron
are the lands or laps of the work in all cases in breadth at least five times the diameter of the rivets in double rivetted butts, and at least three times the diameter of the rivets where single rivetting is admitted? Yes
the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes
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, lining pieces, 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 Butts

Her Masts, Yards, &c., are in good condition, and sufficient in size and length.

| She has SAILS. | | CABLES, &c. | | ANCHORS, and their weights. | |
|------------------|--------------------------|-----------------------------|-----|-----------------------------|---------|
| N ^o . | | | | N ^o . | Weight. |
| 2 | Fore Sails, | Chain | 270 | 3 | 25.5. |
| 1 | Fore Top Sails, | Hempen Stream Cable | 85 | 1 | 22.2 |
| 2 | Fore Topmast Stay Sails, | Hawser | 70 | 1 | 8.3. |
| 1 | Main Sails, | Towlines | 80 | 2 | 4.1. |
| 2 | Main Top Sails, | 2 Warps | 80 | 2 | 2.2. |
| and | | All of <u>good</u> quality. | 80 | | |

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

She has Nine Boats Long Boat and Two of which are Life Boats
The present state of the Windlass is Capstan and Rudder and Pumps good

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

- DATES of Surveys held while building, as per Section 17.
- 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under special
 - 2nd. On the plating during the progress of rivetting Survey and visited during
 - 3rd. When the beams were in and fastened, and before the decks were laid construction from Ma
 - 4th. When the ship was complete, and before the plating was finally coated 1861 until present
 - 5th. After the ship was launched

In addition to the rules and in conformity with the Secretary's letter of the 4th February 1861, this vessel is fitted with an extra keelson and the sheerstrakes are an 1/8 of inch thicker than prescribed by the rules. There is a fitted on top of hold beams, a clamp plate 11 x 9/16 running fore and aft rivetted to reverse iron on frames and angle iron on beam stinger 6 x 4 x 5/16, also fitted a plate on top of keelson 9 x 5/16 rivetted to angle irons shown in sketch, and a bar of half round iron 4 x 2 1/4 x twenty feet lengths on top of sheerstrake rivetted every 15 inches with a scarf 9 inches in length one and two rivets in each run of the bulkheads are strengthened by the addition of 3 angle iron bars on each + + horizontal as a compensation for the vertical bars being thin, 5/16. The stinger plate to the beams are not fitted out to the sheerstrakes, & frames, arising from put on a thick sheerstrake instead of double, but the angle on top of gunwale plate is of extra size 6 x 4 1/2 x 5/16 and rivetted, which together with the iron bar wrought on top of sheerstrake 4 x 2 1/4 gives considerable additional strength at that part.

In what manner are the surfaces preserved from oxidation? Portland Cement to top of Bilge outside and inside & coats of sea lead

I am of opinion this Vessel should be classed GA1

The amount of the Fee£ 5 : - : - is received by me, 20/8/52

Order No. 1063 Special£ 41 : 3 : - } 20/8/52

Certificate (if required)£ - : - : -

Committee's Minute 22nd August 1862

Character assigned GA1



Being to the circumstances in which the Builder of this vessel was placed during the period of her construction, the workmanship is not so perfect as we could have wished.