

# IRON OR STEEL SHIP.

(Received at London Office) WED 19 MARCH 1890

Date of writing Report *13* Survey held at *Middlebrough* Port of *Middlebrough* Date, First Survey *July 12<sup>th</sup> 1889* Last Survey *March 5<sup>th</sup> 1890*

*Steel Screw Steamer* **BONA** Rig *Schooner 2 Masts.* Master *P. H. Leach*

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

Half Breadth (moulded) ... .. 19.91  
 Depth from upper part of Keel to top of Upper Deck Beams ... .. 22.16  
 Girth of Half Midship Frame (as per Rule) ... .. 37.87  
 1st Number ... .. 79.94  
 1st Number, if a 3-Decked Vessel .. deduct 7 feet  
 Length ... .. 295.33  
 2nd Number ... .. 23608  
 Proportions— Breadths to Length... .. 7.41  
 Depths to Length—Upper Deck to Keel... .. 13.32  
 Main Deck ditto ... ..

Year of appointment (1) As master in service of owner of present vessel:—1890  
 (2) As master of this vessel:—1890  
 Built at *Middlebrough*  
 When built *1889.90* Launched *Decr. 23.89*  
 By whom built *Raylton Dixon & Co*  
 Owners *C. J. Bowring & Co* English & American Shipping Co. (Ld.)  
 Managers  
 (If desired to be entered in Reg. Book.)  
 Residence *50 & 51 Lime St. London*  
 Port belonging to *London*  
 Destined Voyage *Hamburg*  
 X Surveyed while Building, Afloat, or in Dry Dock.

Feet. Inches. BREADTH Moulded... 39 10 DEPTH top of Floors to Upper Deck Beams ... 19 0  
 Do. do. Main Deck Beams... 19 0  
 Power of Engines ... 250  
 N°. of Decks with flat laid 1  
 N°. of Tiers of Beams 2 mch.

Length of Ship per Register, length, 297.0 breadth, 40.0 depth, 18.9 Moulded depth 21.4

|  | Inches in Ship.    | Inches per Rule. |        | Inches in Ship. | Inches per Rule. |
|--|--------------------|------------------|--------|-----------------|------------------|
| Flat Keel Plates, breadth and thickness ...  | 36                 | 16               | 36     | 16              |                  |
| PLATES in Garboard Strakes, br'dth & thickness                                       | 36                 | 12               | 36     | 12              |                  |
| From Garboard to upper part of Bilges...   |                    | 11               |        | 11              |                  |
| Of d'bling at Bilge, or increased thickness, and length applied                      |                    |                  |        |                 |                  |
| From up. prt of Bilge to l.r. edge of Sh'rstrake...                                  |                    | 11               |        | 11              |                  |
| Main Sheerstrake, breadth and thickness.....   | 40                 | 15               | 40     | 15              |                  |
| Of d'bling at Sh'rk & lng. applied 1/2 length  |                    | 11               |        | 11              |                  |
| From M'n. to Up. or Spar Dk. Sh'rstrake...   |                    | 9                |        | 9               |                  |
| Up. or Spar Dk Sh'rstrake, br'dth & thckn'ss...                                      |                    | 10               |        | 10              |                  |
| Butt Straps to outside plating, breadth & thickness                                  | 19 1/4             | 18-11            | 19 1/4 | 18-11           |                  |
| Lengths of Plating   | 7 spaces of frames |                  |        |                 |                  |
| Shifts of Plating, and Stringers   | as per rule        |                  |        |                 |                  |
| Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... | 40                 | 9                | 40     | 9               |                  |
| Angle Iron on ditto ...  | 3x3                | 8                | 3x3    | 8               |                  |
| Tie Plates fore and aft, outside Hatchways   |                    |                  |        |                 |                  |
| Diagonal Tie Plates on Beams No. of Pairs  |                    | 56               |        | 56              |                  |
| Flat of Up. Spar, or Awning Dk. Iron   |                    | 76               |        | 76              |                  |
| How fastened to Beams  | wetted             |                  |        |                 |                  |
| Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness           | 42                 | 11               | 42     | 11              |                  |
| Is the Stringer Plate attached to the outside plating?                               | Yes                |                  |        |                 |                  |
| Angles Irons on ditto, No. 2   | 4x4                | 9                | 4x4    | 9               |                  |
| Tie Plates, outside Hatchways  |                    |                  |        |                 |                  |
| Diagonal Tie Plates on Beams, No. of pairs   |                    | 6                |        | 6               |                  |
| Flat of Middle Deck* do. do. Iron  |                    | 76               |        | 76              |                  |
| How fastened to Beams  | wetted             |                  |        |                 |                  |
| Stringer Plates on ends of Lower Deck, Hold or Orlop Beams                           | 39                 | 9                | 39     | 9               |                  |
| Is the Stringer Plate attached to the outside plating?                               | Yes                |                  |        |                 |                  |
| Angles Irons on ditto, No. 2   | 4x4                | 9                | 4x4    | 9               |                  |
| Stringer or Tie Plates, outside Hatchways  |                    |                  |        |                 |                  |
| Flat of Lower Deck*  |                    |                  |        |                 |                  |
| Ceiling betwixt Decks, thickness and material...                                     | 2 1/2 Pine         | 2 1/2            |        |                 |                  |
| " in hold do. do.  | 2 1/2              |                  |        |                 |                  |
| Main piece of Rudder, diameter at head   | 7 3/4              |                  | 7 3/4  |                 |                  |
| do. at heel  | 5 1/4              |                  | 3 3/4  |                 |                  |
| Can the Rudder be unshipped afloat?  | Yes                |                  |        |                 |                  |
| Bulkheads No. 5 No. per Rule 5   |                    |                  |        |                 |                  |
| " Thickness of 2 1/2 to 3  |                    |                  |        |                 |                  |
| " Height up Main, Awning & 2 <sup>nd</sup> dk  |                    |                  |        |                 |                  |
| " How secured to sides of ship double frames   |                    |                  |        |                 |                  |
| " Size of Vertical Angles Irons 5x3x20 and distance apart 30 ins.                    |                    |                  |        |                 |                  |
| " Are the outside Plates doubled two spaces of Frames in length?                     | Yes                |                  |        |                 |                  |

FRAMES extend in one length from *bilge to bilge & bilge to top height*

REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *bilge, all to mid dk fore* and to *Midmost 2<sup>nd</sup> dk* alternately

IRON. Are the various lengths of Plates and Angles properly connected? *Yes* And butts properly shifted? *Yes*

TING. Garboard, double riveted to Keel, with rivets in diameter, averaging ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 3/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/8 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of all Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 3/8 thicker than the plates they connect, unless lapped or doubled

Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 3/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, double riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for 2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

Breadth of laps of plating in double riveting 6 diam Breadth of laps of plating in single riveting

Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted

No. of Breasthooks, 4 Crutches, deep floors

at description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. *Siemens-Martin*

Manufacturer's name or trade mark, *Croft & Co. Ltd. Moor & Co. Dorman & Co. Bolton & Co. Langham & Co.*

Builder's Signature, *RAYLTON DIXON & CO.* Surveyor's Signature, *N. M. Williams* Surveyor to Lloyd's Register of British and Foreign Shipping.

State clearly where plating is of alternate thicknesses as distinguished from diminished thickness at ends of vessel.

\* If Iron Deck, state if whole or part, and if wood deck as laid thereon.



