

IRON SHIP.

No. 2703 Survey held at *Belfast* Date, First Survey *1 Sept 1879* Last Survey *Feb 1880*
On the *Iron screw schooner "Rosetta"* Master *A. S. Harlow*

TONNAGE under Tonnage Deck *2006.55*
Ditto of Third, Spar, or Awning Deck }
Ditto of Poop, or Raised Or Deck }
Ditto of Houses on Deck }
Ditto of Forecastle }
Gross Tonnage *3457.25*
Less Crew Space *133.91*
Less Engine Room *1106.32*
Register Tonnage as out on Beam *2217.02*

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.
HALF BREADTH (moulded) *20.00* Feet.
DEPTH from upper part of Keel to top of Upper Deck Beams *24.20*
GIRTH of Half Midship Frame (as per Rule) *42.90*
1st NUMBER *84.9*
1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet *7.0*
LENGTH *388.16*
2nd NUMBER *32.954*
PROPORTION— Breadths to Length *9.7*
Depths to Length— Upper Deck to Keel *13.37*
Main Deck ditto *18.4*

Built at *Belfast*
When built *1880* Launched *27 May 1880*
By whom built *Harland & Wolff*
Owners *Peninsular & Oriental Steam Navigation Co*
Port belonging to *Belfast*
Destined Voyage *London and India*
Surveyed while Building, Afloat, or in Dry Dock.

Official Number *81959*

PLATE CASE

LENGTH on deck as per Rule *388* Feet. *2* Inches. BREADTH— Moulded *40* Feet. *0* Inches. DEPTH top of Floors to Upper Deck Beams *26* Feet. *11* Inches. Do. do. Main Deck Beams *19* Feet. *0* Inches. Power of Engines *700* Horse. No. of Decks with flat laid *Three* No. of Tiers of Beams

| | Inches in Ship. | | Inches per Rule. | | Inches in Ship. | | Inches per Rule. | | Inches in Ship. | | Inches per Rule. | |
|--|-----------------|-----------|------------------|-----------|-----------------|-----------|------------------|-----------|-----------------|-----------|------------------|-----------|
| | In Ship. | per Rule. | In Ship. | per Rule. | In Ship. | per Rule. | In Ship. | per Rule. | In Ship. | per Rule. | In Ship. | per Rule. |
| KEEL, depth and thickness | 11 | 3 | 11 | 3 | 11 | 3 | 11 | 3 | 11 | 3 | 11 | 3 |
| STEM, moulding and thickness | 11 | 3 | 11 | 3 | 11 | 3 | 11 | 3 | 11 | 3 | 11 | 3 |
| STERN-POST for Rudder do. do. | 11 | 6 | 11 | 6 | 11 | 6 | 11 | 6 | 11 | 6 | 11 | 6 |
| " " for Propeller | 11 | 6 | 11 | 6 | 11 | 6 | 11 | 6 | 11 | 6 | 11 | 6 |
| Distance of Frames from moulding edge to moulding edge, all fore and aft | 24 | | 24 | | 24 | | 24 | | 24 | | 24 | |
| FRAMES, Angle Iron, for $\frac{1}{2}$ length amidships | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 |
| Do. for $\frac{1}{4}$ at each end | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 | 5 | 3/2 |
| REVERSED FRAMES, Angle Iron | 5/2 | 3/2 | 5/2 | 3/2 | 5/2 | 3/2 | 5/2 | 3/2 | 5/2 | 3/2 | 5/2 | 3/2 |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships | 25 | 10 | 25 | 10 | 25 | 10 | 25 | 10 | 25 | 10 | 25 | 10 |
| " thickness at the ends of vessel | 8 | | 8 | | 8 | | 8 | | 8 | | 8 | |
| " depth at $\frac{3}{4}$ the half-bdth. as per Rule | 14 | | 12 1/2 | | 14 | | 12 1/2 | | 14 | | 12 1/2 | |
| " height extended at the Bilges | 60 | | 60 | | 60 | | 60 | | 60 | | 60 | |
| BEAMS, Upper, Spar, or Awning Deck } Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper edge | 6 | 3 | 9 | | 6 | 3 | 9 | | 6 | 3 | 9 | |
| Average space | 24 | | 24 | | 24 | | 24 | | 24 | | 24 | |
| BEAMS, Main, or Middle Deck } Single or double Ang. Iron, Plate or Tee Bulb Iron } Single, or double Angle Iron, on Upper Edge | 6 1/2 | 3 | 9 | | 6 1/2 | 3 | 9 | | 6 1/2 | 3 | 9 | |
| Average space | 24 | | 24 | | 24 | | 24 | | 24 | | 24 | |
| BEAMS, Lower Deck, Hold, or Orlop } Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge | 7 1/2 | 3 | 9 | | 7 1/2 | 3 | 9 | | 7 1/2 | 3 | 9 | |
| Average space | 48 | | 48 | | 48 | | 48 | | 48 | | 48 | |
| KEELSONS Centre line, single or double plate, box, or intercostal, Plates | 14 1/2 | 13 | 10 | | 14 1/2 | 13 | 10 | | 14 1/2 | 13 | 10 | |
| " Rider Plate | 14 | 11 | 11 | | 14 | 11 | 11 | | 14 | 11 | 11 | |
| " Bulb Plate to Intercostal Keelson | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | |
| " Angle Irons | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | |
| " Double Angle Iron Side Keelson | 10 | 10 | 10 | | 10 | 10 | 10 | | 10 | 10 | 10 | |
| " Side Intercostal Plate | 9 1/2 | 9 | 9 | | 9 1/2 | 9 | 9 | | 9 1/2 | 9 | 9 | |
| " do. Angle Irons | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | |
| " Attached to outside plating with angle iron | 3 1/2 | 3 1/2 | 8 | | 3 1/2 | 3 1/2 | 8 | | 3 1/2 | 3 1/2 | 8 | |
| BILGE Angle Irons | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | |
| " do. Bulb Iron for $\frac{1}{2}$ length | 9 1/2 | 9 | 9 | | 9 1/2 | 9 | 9 | | 9 1/2 | 9 | 9 | |
| " do. Intercostal plates riveted to plating for $\frac{3}{5}$ length | 10 | 10 | 10 | | 10 | 10 | 10 | | 10 | 10 | 10 | |
| BILGE STRINGER Angle Irons | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | |
| Intercostal plates riveted to plating for $\frac{3}{5}$ length | 10 | 10 | 10 | | 10 | 10 | 10 | | 10 | 10 | 10 | |
| SIDE STRINGER Angle Irons | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | | 6 1/2 | 4 1/2 | 9 | |
| Transoms, material. Knight-heads. Hawse Timbers. | <i>Iron</i> | | | | | | | | | | | |
| Windlass <i>Harfield's patent</i> Pall Bitt | <i>Iron</i> | | | | | | | | | | | |

The FRAMES extend in one length from *keel* to upper stringer & *alternately* Riveted through plates with *1* in. Rivets, about *6 1/2* apart.
The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *middle deck* and to *upper deck* alternately
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? *yes* And butts properly shifted? *yes*
PLATING. Garboard, double riveted to Keel, with rivets *1 1/4* in. diameter, averaging *4 1/4* ins. from centre to centre.
" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *1* in. diameter, averaging *3 1/2* ins. from centre to centre.
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *1* in. diameter averaging *3 1/2* ins. from centre to centre.
" Butts of all Strakes at Bilge for *half* length, treble riveted with Butt Straps *1/6* thicker than the plates they connect.
" Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *1* in. diameter, averaging *3 1/2* ins. from cr. to cr.
" all Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *1* 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, treble riveted for *half* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *half* length amidships.
" Butts of Main Stringer Plate, treble riveted for *half* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *half* length amidships.
" Breadth of laps of plating in double riveting *6 1/4* Breadth of laps of plating in single riveting *6 1/4* *Set for middle deck stringer*
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Quadruple, treble & double riveted*
Waterway, how secured to Beams *futter* (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? *turned knees, welded* No. of Breasthooks, *4* Crutches, *3*
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. *angles, moulds, plates, rivets, keel crown*
Manufacturer's name or trade mark, *Trossend & Co. Belfast*

The above is a correct description.
Builder's Signature, *Harland & Wolff* Surveyor's Signature, *J. W. Seal*
Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 495 - 0236



Workmanship. Are the butts of plating planed or otherwise fitted? *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*
 Are the fillings between the ribs and plates solid single pieces? *yes*
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *yes*
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *yes*
 Do any rivets break into or through the seams or butts of the plating? *no*

27886 Iron

Masts, Bowsprit, Yards, &c., are in condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Three iron pole masts as auxiliary to the steam power.*
 Length of fore mast - 57.6 dia 28" *Built from the same drawings as was appld for*
 main " " " 65.0 " " *the "British Empire" - Belfast report No 2544.*
 Mizzen " " " 55.6 " 25"

| No. | NUMBER for EQUIPMENT | SAILS. | CABLES, &c. | Fathoms. | Inches. | Test per Certificate. | Inches per Rule. | Machine where Tested & Suprntd. | ANCHORS. | No. | Weight. Ex. Stock. | Test per Certificate. | W'ght req'd per Rule. | Machine where Tested & Suprntd. |
|-----|----------------------|--------------------------|------------------|-----------|---------|-----------------------|------------------|---------------------------------|---------------|--------|--------------------|-----------------------|-----------------------|---------------------------------|
| | | | | | | | | | | | | | | |
| | | Fore Sails, | Chain | 150 | 2 1/4 | 76-10-0 | 300-2 7/8 | 76 7/8 | Bower Anchors | 42-2-4 | 37-11-3-14 | 48-0-0 | 35 1/2 | |
| | | Fore Top Sails, | Iron Str'm Chain | 75 | 1 1/4 | 28-2-2-0 | 90-1 3/8 | | | | | | | |
| | | Fore Topmast Stay Sails, | Hmpn Strm Cbl | 120-4 1/2 | 3/4 | 28-2-2-0 | 90-12 | | | | | | | |
| | | Main Sails, | Hawser ... | 120-3 1/2 | | | 90-12 | | | | | | | |
| | | Main Top Sails, and | Towlines | 120-3 | | | | | | | | | | |
| | | | Warp ... | 120-5 3/4 | 3/4 | | 90-8 | | | | | | | |
| | | | quality | 120-6 1/2 | | | | | | | | | | |

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *2* masts Long Boat and *2* cutters, *sq. mail boat & dolly boat*. The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good*

Engine Room Skylights.—How constructed? *thoroughly of Teak* How secured in ordinary weather? *always shipped*

What arrangements for deadlights in bad weather? *bull's eyes.*

Coal Bunker Openings.—How constructed? *cast iron* How are lids secured? *screws* Height above deck? *black underfoot etc*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *8 scuppers and 48 freeing ports between breaks of Forecastle and poop.*

Cargo Hatchways.—How formed? *Plate & angles*

State size Main Hatch *19.6 x 12.0; 9.9 x 10.0* Forehatch *11.6 x 10.0; 7.6 x 8.0* Quarterhatch *✓*

If of extraordinary size, state how framed and secured? *✓*

What arrangement for shifting beams? *deep iron shifting beam and oak fore and aft*

Hatches, If strong and efficient?

Order for Special Survey No. *89* Date *4th Sept 1879*

Order for Ordinary Survey No. *✓* Date *✓*

No. *134* in builder's yard.

General Remarks (State quality of workmanship, &c.) *This three decked vessel has been built in accordance with the midship section submitted and approved see secretary's letter of the 20th August 1879; and in other respects to the Rules for the 100 A grade.*

She has a fore-castle 46 feet in length with the windlass fitted under. The poop deck is 261 feet long, beams 6 1/2 x 3 x 9 1/2 and a 2 1/2 inch deck, with the engine room skylight fitted on it, the boats are also skidded on this deck.

The materials of which she is constructed are very good, and the workmanship throughout is of a superior character.

The midship section and tracing of strengthening in engine and boiler space are attached hereto.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, fore-castle, or raised quarter-deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement and paint* Outside *paint*

I am of opinion this Vessel should be Classed *+ 100 A.1.*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, } *paid*
 Special ... £ 11 : 8 : 6 20/8 1879 }
 Certificate ... *gratis*
 Machinery fees & expenses *67 9 0*
 Travelling Expenses, if any, £

Committee's Minute *Tuesday, August 31st 1880*

Character assigned *100 A.1*

Lloyd's M.B. 8.80 Lloyd's A.1 1st 3 Decks 2 Bow Decks

Lloyd's Register of British and Foreign Shipping.

This vessel has been built in accordance with the approved tracing appended and appears to be eligible to be classed 100 A.1 - a

Lloyd's Register Foundation

The Surveyors are requested not to write on or below the space for Committee's Minute.