

# IRON SHIP.

No. *5333* Survey held at *Dumbarton* Date, First Survey *15 July 1880* Last Survey *26 March 1891*  
On the *S.S. "Pertusola"* Master *Romanelli*

TONNAGE under Tonnage Deck *543.53*  
Ditto of Third, Spar, or Awning Decks, excess, Ratches, Ditto of Hoop, & Raised Qr. Dk. *2.77*  
Ditto of Houses on Deck *28.50*  
Ditto of Forecastle *15.24*  
Gross Tonnage *590.04*  
Less Crew Space *37.38*  
*552.66*  
Less Engine Room *209.76*  
Register Tonnage as cut on Beam *342.90*

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
SPAR OR AWNING-DECKED VESSEL.  
HALF BREADTH (moulded) *13.25*  
DEPTH from upper part of Keel to top of Upper Deck Beams *16.3*  
GIRTH of Half Midship Frame (as per Rule) *27.3*  
1st NUMBER *56.85*  
1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet  
LENGTH *75.875*  
BREAD NUMBER *9998*  
PROPORTIONS—Breathths to Length *6.63*  
Depths to Length—Upper Deck to Keel *10.72*  
Main Deck ditto *✓*

Built at *Dumbarton*  
When built *1880/81* Launched *13 Jan'y 1881*  
By whom built *R. Chambers Junr.*  
Owners *R. Rubattino & Co.*  
Port belonging to *Genoa*  
Destined Voyage *Genoa*  
If Surveyed while Building, Afloat, or in Dry Dock. *While building & afloat*

Official Number

LENGTH on deck as per Rule *75* Feet. *10 1/2* Inches. BREADTH Moulded *26* Feet. *6* Inches. DEPTH top of Floors to Upper Deck Beams *14* Feet. *11 1/2* Inches. Do. do. Main Deck Beams *14* Feet. *11 1/2* Inches. Power of Engines *90* Horse. N° of Decks with flat laid *2* N° of Tiers of Beams *2*

Dimensions of Ship per Register, length, *77.3* breadth, *26.7* depth, *14.9*

|  | Inches in Ship.      | Inches per Rule.     |
|--|----------------------|----------------------|
| KEEL, depth and thickness  | <i>7 1/2 x 2 1/4</i> | <i>7 1/2 x 2 1/4</i> |
| STEM, moulding and thickness   | <i>6 3/4 x 2 1/8</i> | <i>6 3/4 x 2 1/8</i> |
| STERN-POST for Rudder do. do.  | <i>6 3/4 x 4 1/4</i> | <i>6 3/4 x 4 1/4</i> |
| " " for Propeller  | <i>6 3/4 x 4 1/4</i> | <i>6 3/4 x 4 1/4</i> |
| Distance of Frames from moulding edge to moulding edge, all fore and aft             | <i>22</i>            | <i>22</i>            |
| FRAMES, Angle Iron, for 1/2 length amidships   | <i>3 1/2 x 3</i>     | <i>3 1/2 x 3</i>     |
| Do. for 1/4 at each end  | <i>3 1/2 x 3</i>     | <i>3 1/2 x 3</i>     |
| REVERSED FRAMES, Angle Iron  | <i>3 x 2 1/2</i>     | <i>3 x 2 1/2</i>     |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships     | <i>19</i>            | <i>19</i>            |
| " thickness at the ends of vessel  | <i>18</i>            | <i>18</i>            |
| " depth at 3/4 the half-bdth. as per Rule  | <i>19</i>            | <i>19</i>            |
| " height extended at the Bilges  | <i>19</i>            | <i>19</i>            |
| BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron | <i>5 x 3</i>         | <i>5 x 3</i>         |
| Single or double Angle Iron on Upper edge  | <i>5 x 3</i>         | <i>5 x 3</i>         |
| Average space  | <i>22</i>            | <i>22</i>            |
| BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron         | <i>5 x 3</i>         | <i>5 x 3</i>         |
| Single or double Angle Iron, on Upper Edge   | <i>5 x 3</i>         | <i>5 x 3</i>         |
| Average space  | <i>22</i>            | <i>22</i>            |
| BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron  | <i>5 x 3</i>         | <i>5 x 3</i>         |
| Single or double Angle Iron on Upper Edge  | <i>5 x 3</i>         | <i>5 x 3</i>         |
| Average space  | <i>22</i>            | <i>22</i>            |
| KEELSONS Centre line, single or double plate, box, or Intercoastal Plates            | <i>20 1/2</i>        | <i>19</i>            |
| " Rider Plate <i>7/8</i> plating <i>5/16</i>   | <i>20 1/2</i>        | <i>19</i>            |
| " Bulb Plate to Intercoastal Keelson   | <i>20 1/2</i>        | <i>19</i>            |
| " Angle Irons <i>girders 5/16</i>  | <i>20 1/2</i>        | <i>19</i>            |
| " Double Angle Iron Side Keelson   | <i>20 1/2</i>        | <i>19</i>            |
| " Side Intercoastal Plate  | <i>20 1/2</i>        | <i>19</i>            |
| " do. Angle Irons <i>3 x 3 x 5/16</i>  | <i>20 1/2</i>        | <i>19</i>            |
| " Attached to outside plating with angle iron  | <i>20 1/2</i>        | <i>19</i>            |
| BILGE Angle Irons  | <i>3 1/2 x 3 1/2</i> | <i>3 1/2 x 3 1/2</i> |
| " do. Bulb Iron  | <i>3 1/2 x 3 1/2</i> | <i>3 1/2 x 3 1/2</i> |
| " do. Intercoastal plates riveted to plating for length                              | <i>3 1/2 x 3 1/2</i> | <i>3 1/2 x 3 1/2</i> |
| BILGE STRINGER Angle Irons   | <i>3 1/2 x 3 1/2</i> | <i>3 1/2 x 3 1/2</i> |
| Intercoastal plates riveted to plating for length                                    | <i>3 1/2 x 3 1/2</i> | <i>3 1/2 x 3 1/2</i> |
| SIDE STRINGER Angle Irons  | <i>3 1/2 x 3 1/2</i> | <i>3 1/2 x 3 1/2</i> |

|   | Inches. In Ship.          | 16ths. In Ship. | Inches. per Rule.         | 16ths. per Rule. |
|---|---------------------------|-----------------|---------------------------|------------------|
| Flat Keel Plates, breadth and thickness   | <i>32</i>                 | <i>9</i>        | <i>32</i>                 | <i>9</i>         |
| PLATES in Garboard Strakes, breadth and thickness                                     | <i>32</i>                 | <i>9</i>        | <i>32</i>                 | <i>9</i>         |
| of doubling at Bilge, or increased thickness, and length applied                      | <i>32</i>                 | <i>9</i>        | <i>32</i>                 | <i>9</i>         |
| fm up. part of Bilge to lr. edge of Sh'rstrake.                                       | <i>32</i>                 | <i>9</i>        | <i>32</i>                 | <i>9</i>         |
| Main Sheerstrake, breadth and thickness   | <i>33</i>                 | <i>10</i>       | <i>33</i>                 | <i>10</i>        |
| of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.    | <i>33</i>                 | <i>10</i>       | <i>33</i>                 | <i>10</i>        |
| Tip or Spar Dk. Sh'rstrake, breadth & thickness                                       | <i>33</i>                 | <i>10</i>       | <i>33</i>                 | <i>10</i>        |
| Butt Straps to outside plating, breadth & thickness                                   | <i>1 1/2</i>              | <i>4</i>        | <i>1 1/2</i>              | <i>4</i>         |
| Lengths of Plating  | <i>7</i>                  | <i>8</i>        | <i>7</i>                  | <i>8</i>         |
| Shifts of Plating, and Stringers  | <i>2</i>                  | <i>2</i>        | <i>2</i>                  | <i>2</i>         |
| Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness     | <i>5 1/2</i>              | <i>6</i>        | <i>5 1/2</i>              | <i>6</i>         |
| Angle Iron on ditto   | <i>3 1/2 x 3 1/2</i>      | <i>6</i>        | <i>3 1/2 x 3 1/2</i>      | <i>6</i>         |
| Tie Plates fore and aft, outside Hatchways  | <i>Iron</i>               | <i>5/8</i>      | <i>Iron</i>               | <i>5/8</i>       |
| Diagonal Tie Plates on Beams No. of Pairs   | <i>Iron</i>               | <i>5/8</i>      | <i>Iron</i>               | <i>5/8</i>       |
| Planksheer material and scantling   | <i>none</i>               | <i>none</i>     | <i>none</i>               | <i>none</i>      |
| Waterways do. do.   | <i>5/16</i>               | <i>Iron</i>     | <i>5/16</i>               | <i>Iron</i>      |
| Flat of Upper Deck do. do.  | <i>5/16</i>               | <i>Iron</i>     | <i>5/16</i>               | <i>Iron</i>      |
| How fastened to Beams   | <i>Riveted</i>            | <i>5/16</i>     | <i>Riveted</i>            | <i>5/16</i>      |
| Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness            | <i>5 1/2</i>              | <i>5</i>        | <i>5 1/2</i>              | <i>5</i>         |
| Is the Stringer Plate attached to the outside plating?                                | <i>Yes</i>                | <i>Yes</i>      | <i>Yes</i>                | <i>Yes</i>       |
| Angle Irons on ditto, No. <i>2</i>  | <i>3 1/2 x 3 1/2</i>      | <i>6</i>        | <i>3 1/2 x 3 1/2</i>      | <i>6</i>         |
| Stringer or Tie Plates, outside Hatchways   | <i>5/8</i>                | <i>Iron</i>     | <i>5/8</i>                | <i>Iron</i>      |
| Flat of Lower Deck  | <i>5/8</i>                | <i>Iron</i>     | <i>5/8</i>                | <i>Iron</i>      |
| Ceiling betwixt Decks, thickness and material   | <i>2 1/2</i>              | <i>P. P.</i>    | <i>2 1/2</i>              | <i>P. P.</i>     |
| " in hold do. do.   | <i>2 1/2</i>              | <i>P. P.</i>    | <i>2 1/2</i>              | <i>P. P.</i>     |
| Main piece of Rudder, diameter at head  | <i>4 1/2</i>              | <i>4 1/2</i>    | <i>4 1/2</i>              | <i>4 1/2</i>     |
| do. at heel   | <i>2 3/4</i>              | <i>2 3/4</i>    | <i>2 3/4</i>              | <i>2 3/4</i>     |
| Can the Rudder be unshipped afloat?   | <i>Yes</i>                | <i>Yes</i>      | <i>Yes</i>                | <i>Yes</i>       |
| Bulkheads No. <i>4</i> Thickness of <i>5/16</i>                                       | <i>5/16</i>               | <i>5/16</i>     | <i>5/16</i>               | <i>5/16</i>      |
| " Height up <i>3</i> to up. <i>5/8</i> & one to main <i>5/8</i> with <i>W.T. flat</i> | <i>5/16</i>               | <i>5/16</i>     | <i>5/16</i>               | <i>5/16</i>      |
| " How secured to sides of ship  | <i>Double angle irons</i> | <i>5/16</i>     | <i>Double angle irons</i> | <i>5/16</i>      |
| " Size of Vertical Angle Irons <i>3 x 2 1/2 x 5</i> and distance apart <i>30</i> ins. | <i>3 x 2 1/2 x 5</i>      | <i>30</i>       | <i>3 x 2 1/2 x 5</i>      | <i>30</i>        |
| " Are the outside Plates doubled two spaces of Frames in length?                      | <i>Yes</i>                | <i>Yes</i>      | <i>Yes</i>                | <i>Yes</i>       |

Transoms, material: Knight-heads. Hawse Timbers. *Iron*  
Windlass *Smuson & Walker's Patent* Pall Bitt *✓*

The FRAMES extend in one length from *middle line* to *gunwale* Riveted through plates with *3/4* in. Rivets, about *6* apart.  
The REVERSED ANGLE IRONS on floors and frames extend *from middle line to lower deck* and to *upper* 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* in. diameter, averaging *5* ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *3/4* in. diameter, averaging *3 1/2* ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *3/4* in. diameter averaging *3* ins. from centre to centre.  
Butts of *2* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *1/16* thicker than the plates they connect.  
Edges from bilge to Main Sheerstrake, worked clencher, double *single* riveted; with rivets *3/4* in. diameter, averaging *3 1/2* ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *3/4* in. diameter, averaging *3* ins. from cr. to cr.  
Edges of Main Sheerstrake, double *single* riveted. *Upper Sheerstrake, double or single riveted.*  
Butts of Main Sheerstrake, treble riveted for *1/2* length amidships. *Butts of Upper or Spar Sheerstrake, treble riveted length amidships.*  
Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. *Butts of Upper or Spar Stringer Plate, treble riveted for length.*  
Breadth of laps of plating in double riveting *5 1/2* Breadth of laps of plating in single riveting *2 3/4*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Double and Treble.*  
Waterway, how secured to Beams *Riveted* (Explain by Sketch, if necessary.)  
Beams of the various Decks, how secured to the sides? *Forged knees riveted* No. of Breasthooks, *3* Crutches, *2*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Iron? Phoenix, H B D*  
Manufacturer's name or trade mark, *Johnson & Peary, Phoenix, Drumpeller and Bowersfields Iron Companies.* *Bowersfield Iron Co.*  
The above is a correct description.

Builder's Signature, *Robert Chambers Junr.* Surveyor's Signature, *C. H. Scott*  
Surveyor to Lloyd's Register of British and Foreign Shipping.

**Workmanship.** Are the butts of plating planed or otherwise fitted? *Planed* 5333  
 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? *A few.*

Masts, Bowsprit, Yards, &c., are *2 Pole masts* in *good* 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 *The two pole masts are of Pitch Pine.*

| N <sup>o</sup> . | NUMBER for EQUIPMENT | SAILS.                   | CABLES, &c.         | Fathoms. | Inches. | Test per Certificate. | Inches per Rule. | Machine where Tested & Suprntd. | ANCHORS.   | N <sup>o</sup> . | Weight. Ex. Stock. | Test per Certificate. | W'ght req'd per Rule. | Machine where Tested & Suprntd. |
|------------------|----------------------|--------------------------|---------------------|----------|---------|-----------------------|------------------|---------------------------------|--|------------------|--------------------|-----------------------|-----------------------|---------------------------------|
|                  |                      |                          |                     |          |         |                       |                  |                                 |  |                  |                    |                       |                       |                                 |
|                  |                      | Fore Sails,              | Chain .....         | 105      | 1 3/8   | 38                    | 195 fms          | Robertson                       | Bower Anchors  | 1                | 12-1-0             | 14-1-5-14             | 12 cwt                | Robertson                       |
|                  |                      | Fore Top Sails,          | Iron Str'm Chain    | 90       | 1 3/8   | 25.7                  | 13 1/8 ins       | and                             | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) | 1                | 11-3-8             | 13-17-2-0             | 3 1/2 cwt             | signed by                       |
| <i>One</i>       |                      | Fore Topmast Stay Sails, | Ditto do.           | 60       | 1 3/8   | 17.8                  | 13 1/8 ins       | signed by                       | 18 Sep. 1880   | 1                | 10-0-22            | 12-4-1-4              |                       |                                 |
| <i>Suit</i>      |                      | Main Sails,              | Hmpn Strm Cbl       | 75       | 8 1/2   | 11.875                | 75-8 1/2         | D.G.                            | Stream   | 1                | 3-3-17             | 6-7-2-0               | 4 cwt                 | D.G.                            |
|                  |                      | Main Top Sails, and -    | Hawser ...          | 90       | 6 1/2   |                       | 90-6 1/2         | Lewis.                          | Kedge  | 1                | 2-1-0              | 3-4-250-0             | 2 ---                 | Lewis                           |
|                  |                      |                          | Towlines ...        | 90       | 6 1/2   |                       |                  |                                 | Ditto  | 1                | 1-1-19             |                       | 1 ---                 |                                 |
|                  |                      |                          | Warp ...            | 90       | 6 1/2   |                       |                  |                                 |  |                  |                    |                       |                       |                                 |
|                  |                      |                          | quality <i>good</i> |          |         |                       |                  |                                 |  |                  |                    |                       |                       |                                 |

Standing and Running Rigging *wire & hump* sufficient in size and *good* in quality. She has *one* Long Boat and *two* others.  
 The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good*.  
 Engine Room Skylights.—How constructed? *Teak on Iron casing* How secured in ordinary weather? *Bolted*  
 What arrangements for deadlights in bad weather? *Deadlights hinged to skylight*  
 Coal Bunker Openings.—How constructed? *Cast Iron* How are lids secured? *Bayonet fastening* Height above deck? *flush*  
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *3 scuppers and open bulwarks 15' above deck.*  
 Cargo Hatchways.—How formed? *as usual*  
 State size Main Hatch *15' 9" x 11 ft* Forehatch *5' 6" x 6 ft* Quarterhatch *3' 9" x 5' 4"*  
 If of extraordinary size, state how framed and secured? *not of extraordinary size*  
 What arrangement for shifting beams? *one shifting beam in each hatch.*  
 Hatches, If strong and efficient? *yes.*

| Order for Special Survey No. | Date                      | Order for Ordinary Survey No. | Date | No. | DATES of Surveys held while building as per Section 18.  |
|------------------------------|---------------------------|-------------------------------|------|-----|--|
| 1514                         | 12 <sup>th</sup> Aug 1880 |                               |      | 16  | 1st. On the several parts of the frame, when in place, and before the plating was wrought<br>2nd. On the plating during the process of riveting<br>3rd. When the beams were in and fastened, and before the decks were laid...<br>4th. When the ship was complete, and before the plating was finally coated or cemented...<br>5th. After the ship was launched and equipped |
|                              |                           |                               |      |     | <i>13, 16, 20, 23, 27, 30; Oct. 4, 8, 11, 14, 19, 22, 25, 28; Nov. 1, 4, 11, 16, 18, 22, 29; Dec. 2, 6, 9, 13, 16, 20, 23, 27, 30; 1880. 1881:—Jan 10, 13, 17, 20, 27, 28, 31; Feb 2, 6, 14, 17, 21, 24; Mar 2, 7, 10, 14, 17, 21, 26.</i>   |

General Remarks (State quality of workmanship, &c.) *The workmanship is good.*  
*The vessel has been built in accordance with the approved sketches, 3 in number, attached herewith, and in accordance with instructions contained in the Secretary's letter of the 9<sup>th</sup> Aug 1880 & 30<sup>th</sup> Nov. 1880, marked "M. & P.", and in general conformity with the Rules.*

*She has a double bottom in the fore hold 60 ft long containing about 85 Tons of water, and in the after hold 41 ft long containing about 40 Tons. These tanks were tested with a head of water as required by the Rules.*

*Open Bridge house 14 ft long; Engine casing & abaft Bridge 32 ft; House aft 18 ft x 10 ft and sunk forecabin 27 ft long*

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 : : : is received by me,  
 Special ... £ 27 : 13 : : 30<sup>th</sup> March 1881  
 Certificate ... : : :  
 (Travelling Expenses, if any, £ 5 : 5 : 0.)

Committee's Minute *Friday, April 1st, 1881*  
 Character assigned *100 A.1.*  
 Surveyor to Lloyd's Register of British and Foreign Shipping. *C. J. Dodd*  
*This vessel appears eligible to be classed \*100 A.1. as recommended.*  
 Lloyd's Register Foundation

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