

# IRON SHIP.

No. 710 Survey held at Stiel Date, First Survey April Last Survey Aug 5<sup>th</sup> 1884

On the Iron Barque Mercator **ONE OR TWO DECKED, ~~THREE DECKED~~ VESSEL.** Master Breckwoldt

|   |            |
|---|------------|
| Tonnage under Tonnage Deck                    | <u>730</u> |
| Ditto of Third, Spar, or Awning Deck          |            |
| Ditto of <del>Forecastle</del> Raised Or. Dk. | <u>68</u>  |
| Ditto of Houses                               | <u>33</u>  |
| <del>Main Deck</del> Ditto of Forecastle      | <u>2</u>   |
| Gross Tonnage                                 | <u>833</u> |
| Less Crew Space                               | <u>26</u>  |
| Less Engine Room                              |            |
| Register Tonnage as cut on Beam               | <u>807</u> |

|  |               |
|--|---------------|
| Half Breadth (moulded)                                   | <u>15.79</u>  |
| Depth from upper part of Keel to top of Upper Deck Beams | <u>20.17</u>  |
| Girth of Half Midship Frame (as per Rule)                | <u>30.66</u>  |
| 1st Number   | <u>06.62</u>  |
| 1st Number, if a 3-Decked Vessel .. deduct 7 feet        |               |
| Length   | <u>177.0</u>  |
| 2nd Number   | <u>11792</u>  |
| Proportions— Breadths to Length ..                       | <u>5 to 6</u> |
| Depths to Length— Upper Deck to Keel ..                  | <u>8 to 9</u> |
| Main Deck ditto ..                                       |               |

Built at Stiel  
 When built 1884 Launched July 9. 84  
 By whom built Schiffswerft "Germania"  
 Owners Dreyers & Breckwoldt  
 Residence Blankenese  
 Port belonging to Blankenese  
 Destined Voyage New York via Stettin  
 If Surveyed while Building, ~~Afloat~~, or in Dry Dock.

Official Number

|  |            |                 |             |   |             |                  |               |                             |            |
|--|------------|-----------------|-------------|---|-------------|------------------|---------------|-----------------------------|------------|
| LENGTH on deck as per Rule               | <u>177</u> | BREADTH Moulded | <u>31</u>   | DEPTH top of Floors to Upper Deck Beams | <u>18</u>   | Power of Engines |               | No. of Decks with flat laid | <u>one</u> |
| Dimensions of Ship per Register, length, | <u>177</u> | breadth,        | <u>31.7</u> | depth,                                  | <u>18.1</u> | Depth Moulded    | <u>19' 8"</u> | No. of Tiers of Beams       | <u>two</u> |

|  | Inches in Ship       | Inches in Ship | 16ths in Ship | Inches per Rule      | Inches per Rule | 16ths per Rule |  | Inches in Ship | 16ths in Ship               | Inches per Rule | 16ths per Rule         |
|--|----------------------|----------------|---------------|----------------------|-----------------|----------------|--|----------------|-----------------------------|-----------------|------------------------|
| KEEL, depth and thickness  | <u>7 1/2 x 2 1/4</u> |                |               | <u>7 1/2 x 2 1/4</u> |                 |                | Flat Keel Plates, breadth and thickness  |                |                             |                 |                        |
| STEM, moulding and thickness   | <u>7 1/2 x 2 1/4</u> |                |               | <u>7 1/2 x 2 1/4</u> |                 |                | PLATES in Garboard Strakes, br'dth & thickness                                       | <u>32</u>      | <u>9 x 8</u>                | <u>33</u>       | <u>9 x 8</u>           |
| STERN-POST for Rudder do. do.  | <u>7 1/2 x 2 1/4</u> |                |               | <u>7 1/2 x 2 1/4</u> |                 |                | " From Garboard to upper part of Bilges  |                | <u>9 1/2</u>                | <u>8</u>        | <u>8 1/2</u>           |
| " " for Propeller  |                      |                |               | <u>7 1/2 x 2 1/4</u> |                 |                | " Of Bilge at Bilge, or increased thickness, and length applied                      |                |                             |                 |                        |
| Distance of Frames from moulding edge to moulding edge, all fore and aft         | <u>22"</u>           |                |               | <u>22</u>            |                 |                | " From up. prt of Bilge to lr. edge of Sh'rstrake                                    |                | <u>8 1/2</u>                |                 | <u>8 1/2</u>           |
| FRAMES, Angle Iron, for 1/2 length amidships                                     | <u>4 1/2</u>         | <u>3</u>       | <u>7</u>      | <u>4</u>             | <u>3</u>        | <u>7</u>       | " Main Sheerstrake, breadth and thickness  | <u>33</u>      | <u>10.9.8</u>               | <u>33</u>       | <u>10</u>              |
| Do. for 1/2 at each end  | <u>4 1/2</u>         | <u>3</u>       | <u>6</u>      | <u>4</u>             | <u>3</u>        | <u>6</u>       | " Of Bilge at Sh'atk. & lng. applied   |                |                             |                 |                        |
| REVERSED FRAMES, Angle Iron  | <u>3</u>             | <u>3</u>       | <u>6</u>      | <u>3</u>             | <u>3</u>        | <u>6</u>       | " From M.n. to Upr. or Spar Dk. Sh'rstrake   |                |                             |                 |                        |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships | <u>20</u>            |                | <u>8</u>      | <u>20</u>            |                 | <u>8</u>       | " Up. or Spar Dk Sh'rstrake, br'dth & thickness                                      |                |                             |                 |                        |
| " thickness at the ends of vessel  |                      |                | <u>7</u>      |                      |                 | <u>7</u>       | Butt Straps to outside plating, breadth & thickness                                  |                | <u>9 3/4</u>                | <u>1/16</u>     | <u>thicker</u>         |
| " depth at 1/2 the half-bdth. as per Rule  | <u>10</u>            |                | <u>10</u>     |                      |                 | <u>10</u>      | Lengths of Plating   |                | <u>22" x 6</u>              | <u>spaces</u>   |                        |
| " height extended at the Bilges  | <u>46</u>            |                | <u>46</u>     |                      |                 | <u>46</u>      | Shifts of Plating, and Stringers   |                | <u>2-3</u>                  | <u>spaces</u>   |                        |
| BEAMS, Upper, Spar, or Awning Deck   |                      |                |               |                      |                 |                | Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness    |                |                             |                 |                        |
| Single or d'ble Ang. Iron, Plate or Tee Bulb Iron                                |                      |                |               |                      |                 |                | Angle Iron on ditto  |                |                             |                 |                        |
| Single or double Angle Iron on Upper edge  |                      |                |               |                      |                 |                | Tie Plates fore and aft, outside Hatchways   |                |                             |                 |                        |
| Average space  |                      |                |               |                      |                 |                | Diagonal Tie Plates on Beams No. of Pairs  |                |                             |                 |                        |
| BEAMS, Main, or Middle Deck  | <u>7 1/2</u>         | <u>7</u>       | <u>7 1/2</u>  | <u>7</u>             |                 | <u>7</u>       | Flat of Up., Spar, or Awning Dk.*  |                |                             |                 |                        |
| Single or d'ble Ang. Iron, Plate or Tee Bulb Iron                                |                      |                |               |                      |                 |                | How fastened to Beams  |                |                             |                 |                        |
| Single or double Angle Iron on Upper Edge  | <u>3</u>             | <u>3</u>       | <u>6</u>      | <u>3</u>             | <u>3</u>        | <u>6</u>       | Stringer Plate on ends of Main or Middle Deck  |                |                             |                 |                        |
| Average space  | <u>44</u>            |                | <u>44</u>     |                      |                 | <u>44</u>      | Beams, breadth and thickness   | <u>34-23</u>   | <u>8-7</u>                  | <u>34</u>       | <u>8</u>               |
| BEAMS, Lower Deck  |                      |                |               |                      |                 |                | Is the Stringer Plate attached to the outside plating?                               | <u>yes</u>     |                             |                 |                        |
| Single or d'ble Ang. Iron, Plate or Tee Bulb Iron                                | <u>7 1/2</u>         | <u>7</u>       | <u>7 1/2</u>  | <u>7</u>             |                 | <u>7</u>       | Angle Irons on ditto, No. <u>two</u>   |                | <u>4 1/2 x 3 x 7</u>        |                 |                        |
| Single or double Angle Iron on Upper Edge  | <u>3</u>             | <u>3</u>       | <u>6</u>      | <u>3</u>             | <u>3</u>        | <u>6</u>       | Tie Plates, outside Hatchways  |                | <u>10</u>                   | <u>8-7</u>      | <u>10</u>              |
| Average space  | <u>44</u>            |                | <u>44</u>     |                      |                 | <u>44</u>      | Diagonal Tie Plates on Beams, No. of pairs   | <u>3</u>       | <u>10</u>                   | <u>8</u>        | <u>10</u>              |
| BEAMS, Hold, or Orlop  |                      |                |               |                      |                 |                | Flat of Middle Deck* do. do. <u>5 x 3 1/2</u>  |                |                             |                 |                        |
| Single or d'ble Ang. Iron, Plate or Tee Bulb Iron                                |                      |                |               |                      |                 |                | How fastened to Beams <u>galv. Screw bolts</u>                                       |                |                             |                 |                        |
| Single or double Angle Iron on Upper Edge  |                      |                |               |                      |                 |                | Stringer Plates on ends of Lower Deck, <del>Hold</del>                               |                |                             |                 |                        |
| Average space  |                      |                |               |                      |                 |                | <u>Orlop Beams</u>   | <u>25-19</u>   | <u>7-6</u>                  | <u>25</u>       | <u>7 x 6</u>           |
| KEELSONS Centre line, single or double plate, box, or Intercostal, Plates        | <u>12</u>            | <u>10</u>      | <u>12</u>     | <u>10</u>            |                 | <u>10</u>      | Is the Stringer Plate attached to the outside plating?                               | <u>yes</u>     |                             |                 |                        |
| " Rider Plate  | <u>9 3/4</u>         | <u>10</u>      | <u>9 3/4</u>  | <u>10</u>            |                 | <u>10</u>      | Angle Irons on ditto, No. <u>two</u>   |                | <u>3 1/2 x 3 1/2 x 7/16</u> | <u>3 1/2</u>    | <u>3 1/2 x 7/16</u>    |
| " Bulb Plate to Intercostal Keelson  |                      |                |               |                      |                 |                | Stringer or Tie Plates, outside Hatchways  |                | <u>9</u>                    | <u>6</u>        | <u>at hatches only</u> |
| " Angle Irons  | <u>4 1/2</u>         | <u>3</u>       | <u>7</u>      | <u>4 1/2</u>         | <u>3</u>        | <u>7</u>       | Flat of Lower Deck* <u>Single Angles fore &amp; aft</u>                              |                | <u>4 1/2</u>                | <u>3 x 7/16</u> |                        |
| " Double Angle Iron Side Keelson   |                      |                |               |                      |                 |                | Ceiling betwixt Decks, thickness and material  |                | <u>2" battens</u>           | <u>2 1/2</u>    |                        |
| " Side Intercostal Plate   |                      |                |               |                      |                 |                | " in hold do. do.  |                | <u>2 1/2</u>                | <u>2 1/2</u>    |                        |
| " do. Angle Irons  |                      |                |               |                      |                 |                | Main piece of Rudder, diameter at head   |                | <u>4 1/2</u>                | <u>4 1/2</u>    |                        |
| Upper Attached to outside plating with angle iron                                |                      |                |               |                      |                 |                | " do. at heel  |                | <u>2 3/4</u>                | <u>2 3/4</u>    |                        |
| BILGE Angle Irons  | <u>4 1/2</u>         | <u>3</u>       | <u>7</u>      | <u>4 1/2</u>         | <u>3</u>        | <u>7</u>       | Can the Rudder be unshipped afloat?  | <u>yes</u>     |                             |                 |                        |
| " do. Bulb Iron  | <u>7 1/2</u>         | <u>7</u>       | <u>7 1/2</u>  | <u>7</u>             |                 | <u>7</u>       | Bulkheads No. <u>2</u> No. per Rule <u>one</u>                                       |                |                             |                 |                        |
| " do. Intercostal plates riveted to plating for length                           |                      |                |               |                      |                 |                | " Thickness of <u>6-5</u>  |                |                             |                 |                        |
| Lower BILGE STRINGER Angle Irons   | <u>4 1/2</u>         | <u>3</u>       | <u>7</u>      | <u>4 1/2</u>         | <u>3</u>        | <u>7</u>       | " Height up to main deck   |                |                             |                 |                        |
| Intercostal plates riveted to plating for length                                 |                      |                |               |                      |                 |                | " How secured to sides of ship <u>double frames</u>                                  |                |                             |                 |                        |
| SIDE STRINGER Angle Irons  |                      |                |               |                      |                 |                | " Size of Vertical Angle Irons <u>4 x 3 x 7/16</u> and distance apart <u>30</u> ins. |                |                             |                 |                        |
|  |                      |                |               |                      |                 |                | " Are the outside Plates doubled two spaces of Frames in length?                     | <u>yes</u>     |                             |                 |                        |

The FRAMES extend in one length from Keel to Main & Quarter Deck Riveted through plates with 3/4 in. Rivets, about 6" apart.  
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main Deck and to 6" above lower 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 in. diameter, averaging 4 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 1/8 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 two 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 or single~~ riveted; with rivets 3/4 in. diameter, averaging 3 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 ~~or 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 4 1/2 Breadth of laps of plating in single riveting 2 1/2  
 Butt Straps of Keelsons, ~~double or single~~ Riveted? for 1/2 length No. of Breasthooks, 2 Crutches, 2

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Boiler quality  
 Manufacturer's name or trade mark, Platts Consett Iron Works. Angles: Dorman, Long & Co. Middleboro'  
 The above is a correct description.  
 Builder's Signature, H. E. Johns Surveyor's Signature, G. S. P. Addesat  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

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

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

For Iron



HAMM116-0248

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

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*

Masts, Bowsprit, Yards, &c., are *3 Masts, Bowsprit, 2 lower yards* <sup>72 lower topsail yards of iron</sup> 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

*Mainmast 71' diam. 24 1/2" three plates in circumference } 2 lower yards 72 dia 18" 3 plates  
Foremast 71' " do } 60 7/16 thick, longitudinal seams } 2 low. topsail do. 65 1/2" 16" 3 plates  
Mizzenmast 71' " 20 } double riveted, butts from keel } single riveted, butts treble  
Bowsprit 28' 6" 24 1/2" riveted. No angles. } No angles.*

| NUMBER for EQUIPMENT |                          | 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. |
|----------------------|--------------------------|----------|---------|-----------------------|------------------|---------------------------------|--|------------------|--------------------|----------------------|-----------------------|---------------------------------|
| SAILS.               |                          |          |         |                       |                  |                                 | Bower Anchors  |                  |                    |                      |                       |                                 |
| CABLES, &c.          |                          |          |         |                       |                  |                                 | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) |                  |                    |                      |                       |                                 |
| N <sup>o</sup> .     | Chain                    | 270      | 1 9/16  | 43-9/10               | 270 x 1 9/16     |                                 | E.P. Jitt  | 1                | 24.2.0             | 24.6.1.0             | 2 3/2                 |                                 |
|                      | Fore Sails,              |          |         |                       |                  | Tipton R. Jitt May 24. 84       | Tipton   | 1                | 23.2.0             | 23.10.0.0            |                       |                                 |
|                      | Fore Top Sails,          | 60       | 7/8     | 13 3/4                | 60 7/8           |                                 | May 1884   | 1                | 20.0.14            | 20.17.0.21           | 2 1/2                 |                                 |
|                      | Fore Topmast Stay Sails, | 90       | 10      |                       | 90 x 10          |                                 | Stream Anchor  | 1                | 8.1.21             | 10.12.2.0            | 8                     |                                 |
|                      | Main Sails,              | 90       | 8       |                       | 90 x 8           |                                 | Kedge  | 1                | 4.4                | 14.6.15.0.0          | 4                     |                                 |
|                      | Main Top Sails,          | 90       | 5       |                       | 90 x 5           |                                 | 2nd Kedge  | 1                | 2.0.0              | 4.10.0.0             | 2                     |                                 |
|                      | and                      |          |         |                       |                  |                                 |  |                  |                    |                      |                       |                                 |

Standing and Running Rigging *galv wire & hemp* sufficient in size and *good* in quality. She has *two* Long Boats *and* *2 2 ft* one *20' x 11' x 16'*

The Windlass is *Emmerson & Walker* Capstan *Windlass* and Rudder *good* Pumps *2*, hold *x 1* low pump

Engine Room Skylights. How constructed? How secured in ordinary weather?

Coal Bunker Openings.—How constructed? How are lids secured? Height above deck?

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Three water ports 2' 6" x 2' and 2 Scuppers on each side*

Cargo Hatchways.—How formed? *Iron comings 18" above deck 9/16 plates*

State size *Main Hatch 14' 6" x 10' 0"* Forehatch *7' 8" x 6' 0"* Quarterhatch *5' 6" x 6' 0"*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Main hatch with shifting beam*

Hatches, If strong and efficient? *Solid 2 1/2" thick*

|                                  |   |   |                       |
|----------------------------------|---|---|-----------------------|
| Order for Special Survey No.     | DATES of Surveys held while building as per Section 18. | 1st. On the several parts of the frame, when in place, and before the plating was wrought | <i>Special Survey</i> |
| Date                             |   | 2nd. On the plating during the process of riveting  |                       |
| Order for Ordinary Survey No.    |   | 3rd. When the beams were in and fastened, and before the decks were laid...               |                       |
| Date                             |   | 4th. When the ship was complete, and before the plating was finally coated or cemented..  |                       |
| No. <i>19</i> in builder's yard. |   | 5th. After the ship was launched and equipped   |                       |

General Remarks (State quality of workmanship, &c.)

*The vessel has a house deck for a cabin 29 feet long and a raised quarter round the deck house of 62 feet long, also a deck house for the crew of 26 feet long. The iron work is very good and the plates are of boiler quality. The deck is of Baltic oak, the deck houses themselves of iron and the wood work of teak. The whole of the workmanship is very good, as also the equipment and outfit.*

State if *one, two, or three* decked vessel, or if *spar, or arcing* decked; and the lengths of *poop, bridge, foredeck, or raised quarter* deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Cement & red lead* Outside *red lead x two other coats off paint, bottom Patent paint*

I am of opinion this Vessel should be Classed *100 A1*

The amount of the Entry Fee .....£ *5 : 0 : 0* is received by me, *Aug 8. 1884*

Special .....£ *41 : 13 : 0* Certificate ... : *5 : 0*

(Travelling Expenses, if any, £ *5.5.0*.)

Committee's Minute *TUESDAY 12 AUGUST 1884 18*

Character assigned *LATE*

*Ernest Tadder*  
Surveyor to Lloyd's Register of British and Foreign Shipping.



Reference should be made to any correspondence connected with the case.

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