

# Steel SHIP

THURSDAY 19 SEPTEMBER 1884

No. 4752 Survey held at Dundee Date, First Survey April 18th Last Survey 3rd September 1884  
On the S.S. Herald

|                 |                                 |        |   |        |   |                                       |
|-----------------|---------------------------------|--------|---|--------|---|---------------------------------------|
| Official Number | TONNAGE under Tonnage Deck      | 485.19 | ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAN, OR AWMING DECKED VESSEL. | Master | <u>J.R. Savory</u>                                  |                                       |
|                 | Ditto of Upper Deck             | 10.6   | Half Breadth (moulded)  | 14.00  | Built at  | <u>Dundee</u>                         |
|                 | Ditto of Lower Deck             | 29.67  | Depth from upper part of Keel to top of Upper Deck Beams                | 14.5   | When built  | <u>1884</u> Launched <u>23rd July</u> |
|                 | Ditto of Houses                 | 26.12  | Girth of Half Midship Frame (as per Rule)                               | 25.5   | By whom built                                       | <u>Pearce Bros.</u>                   |
|                 | Ditto of Forecastle             | 8.32   | 1st Number  | 54.00  | Owners  | <u>Stone Bros.</u>                    |
|                 | Gross Tonnage                   | 559.9  | 1st Number, if a 2-Decked Vessel deduct 7 feet                          |        | Residence   | <u>Auckland N.Z.</u>                  |
|                 | Less Crew Space                 | 24.67  | Length  | 170.87 | Port belonging to                                   | <u>Auckland</u>                       |
|                 | Less Engine Room                | 179.17 | 2nd Number  | 9226.9 | Destined Voyage                                     | <u>Auckland N.Z.</u>                  |
|                 | Register Tonnage as cut on Beam | 356.06 | Proportions— Breadths to Length   | 6.1    | If Surveyed while Building, Afloat, or in Dry Dock. | <u>Surveyed while building</u>        |
|                 |                                 |        | Depths to Length—Upper Deck to Keel                                     | 11.7   |   |                                       |

|   |  |                 |                      |   |                      |                  |    |                             |     |
|---|--|-----------------|----------------------|---|----------------------|------------------|----|-----------------------------|-----|
| LENGTH on deck as per Rule  | 170 10   | BREADTH—Moulded | 28 0                 | DEPTH top of Floors to Upper Deck Beams | 13 2 1/2             | Power of Engines | 90 | No. of Decks with flat laid | One |
| Dimensions of Ship per Register, length, 172.0 breadth, 28.2 depth, 13.25                                       |  |                 |                      |   |                      |                  |    |                             |     |
| KEEL, depth and thickness   | <u>Flat plate</u>  |                 | <u>2 1/2</u>         |   | <u>2 1/2</u>         |                  |    |                             |     |
| STEM, moulding and thickness  | <u>Iron</u>  |                 | <u>6 3/4 x 2 1/2</u> |   | <u>6 3/4 x 2 1/2</u> |                  |    |                             |     |
| STERN-POST for Rudder do. do.   |  |                 | <u>6 3/4 x 4 1/2</u> |   | <u>6 3/4 x 4 1/2</u> |                  |    |                             |     |
| " " for Propeller   |  |                 | <u>2 1</u>           |   | <u>2 1</u>           |                  |    |                             |     |
| Distance of Frames from moulding edge to moulding edge, all fore and aft  |  |                 | <u>32 1/2</u>        |   | <u>(Class 100A)</u>  |                  |    |                             |     |
| FRAMES, Angle Iron, for 1/2 length amidships  | <u>3 1/2</u>   | <u>3</u>        | <u>10</u>            | <u>3 1/2</u>                            | <u>3</u>             | <u>10</u>        |    |                             |     |
| Do. for 1/4 at each end   | <u>3 1/2</u>   | <u>3</u>        | <u>8</u>             | <u>3 1/2</u>                            | <u>3</u>             | <u>8</u>         |    |                             |     |
| EVERSED FRAMES, Angle Iron  | <u>3</u>   | <u>2 1/2</u>    | <u>8</u>             | <u>3</u>                                | <u>2 1/2</u>         | <u>8</u>         |    |                             |     |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships                                | <u>15 1/2</u>  |                 | <u>12 x 10</u>       | <u>15 1/2</u>                           |                      | <u>12 x 10</u>   |    |                             |     |
| " thickness at the ends of vessel   | <u>8</u>   |                 | <u>8</u>             | <u>8</u>                                |                      | <u>8</u>         |    |                             |     |
| " depth at 1/4 the half-bdth. as per Rule   | <u>8</u>   |                 | <u>8</u>             | <u>8</u>                                |                      | <u>8</u>         |    |                             |     |
| " height extended at the Bilges   | <u>twice midship height</u>  |                 |                      |   |                      |                  |    |                             |     |
| BEAMS, Upper, Span, or Awwing Deck  | <u>5</u>   | <u>3</u>        | <u>12</u>            | <u>5</u>                                | <u>3</u>             | <u>12</u>        |    |                             |     |
| Angle or double Angle Iron on Upper edge  | <u>(Built beam 6 1/2 x 3 1/2 at each)</u>  |                 |                      | <u>6 1/2 x 3 1/2</u>                    |                      |                  |    |                             |     |
| Average space   | <u>8 1/2</u>   |                 |                      | <u>8 1/2</u>                            |                      |                  |    |                             |     |
| BEAMS, Main, or Middle Deck   | <u>3 1/2</u>   | <u>3</u>        | <u>10</u>            | <u>3 1/2</u>                            | <u>3</u>             | <u>10</u>        |    |                             |     |
| Angle or double Angle Iron on Upper edge  | <u>(Built beam 6 1/2 x 3 1/2 at each)</u>  |                 |                      | <u>6 1/2 x 3 1/2</u>                    |                      |                  |    |                             |     |
| Average space   | <u>8 1/2</u>   |                 |                      | <u>8 1/2</u>                            |                      |                  |    |                             |     |
| BEAMS, Lower Deck   | <u>3 1/2</u>   | <u>3</u>        | <u>10</u>            | <u>3 1/2</u>                            | <u>3</u>             | <u>10</u>        |    |                             |     |
| Angle or double Angle Iron on Upper edge  | <u>(Built beam 6 1/2 x 3 1/2 at each)</u>  |                 |                      | <u>6 1/2 x 3 1/2</u>                    |                      |                  |    |                             |     |
| Average space   | <u>8 1/2</u>   |                 |                      | <u>8 1/2</u>                            |                      |                  |    |                             |     |
| BEAMS, Hold or Orlop  | <u>3 1/2</u>   | <u>3</u>        | <u>10</u>            | <u>3 1/2</u>                            | <u>3</u>             | <u>10</u>        |    |                             |     |
| Angle or double Angle Iron on Upper edge  | <u>(Built beam 6 1/2 x 3 1/2 at each)</u>  |                 |                      | <u>6 1/2 x 3 1/2</u>                    |                      |                  |    |                             |     |
| Average space   | <u>8 1/2</u>   |                 |                      | <u>8 1/2</u>                            |                      |                  |    |                             |     |
| KEELSONS Centre line, single or double plate, box, or Intercoastal Plates                                       | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " Rider Plate   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " Bulb Plate to Intercoastal Keelson  | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " Angle Irons   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " Double Angle Iron Side Keelson  | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " Side Intercoastal Plate   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " do. Angle Irons   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| " Attached to outside plating with angle iron   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| BILGE Angle Iron  | <u>4</u>   | <u>3</u>        | <u>10</u>            | <u>4</u>                                | <u>3</u>             | <u>10</u>        |    |                             |     |
| " do. Bulb Iron   | <u>6 1/2</u>   | <u>10</u>       | <u>6 1/2</u>         | <u>10</u>                               | <u>6 1/2</u>         | <u>10</u>        |    |                             |     |
| " do. Intercoastal plates riveted to plating for length   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| BILGE STRINGER Angle Iron   | <u>4</u>   | <u>3</u>        | <u>10</u>            | <u>4</u>                                | <u>3</u>             | <u>10</u>        |    |                             |     |
| Intercoastal plates riveted to plating for length   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| SIDE STRINGER   | <u>4 x 3 1/2</u>   |                 | <u>10 1/2</u>        | <u>4 x 3 1/2</u>                        |                      | <u>10 1/2</u>    |    |                             |     |
| The FRAMES extend in one length from  | <u>Keel</u>  |                 |                      | <u>to</u>                               |                      |                  |    |                             |     |
| The REVERSED ANGLE IRONS on floors and frames extend  | <u>from middle line to upper part of bilge</u>   |                 |                      | <u>and to</u>                           |                      |                  |    |                             |     |
| KEELSONS. Are the various lengths of Plates and Angle Irons properly connected?                                 | <u>Yes</u>   |                 |                      | <u>And butts properly shifted?</u>      |                      | <u>Yes</u>       |    |                             |     |
| PLATING. Garboard, double riveted to Keel, with rivets  | <u>3/4 in. diameter, averaging 3 ins. from centre to centre.</u>                       |                 |                      |   |                      |                  |    |                             |     |
| " Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets                   | <u>3/4 in. diameter, averaging 3 ins. from centre to centre.</u>                       |                 |                      |   |                      |                  |    |                             |     |
| " Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets                                  | <u>3/4 in. diameter averaging 3 ins. from centre to centre.</u>                        |                 |                      |   |                      |                  |    |                             |     |
| " Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps                                   | <u>7/16 thicker than the plates they connect.</u>                                      |                 |                      |   |                      |                  |    |                             |     |
| " Edges from Bilge to Main Sheerstrake, worked clencher, double riveted; with rivets                            | <u>3/4 in. diameter, averaging 3 ins. from cr. to cr.</u>                              |                 |                      |   |                      |                  |    |                             |     |
| " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets                              | <u>3/4 in. diameter, averaging 3 ins. from cr. to cr.</u>                              |                 |                      |   |                      |                  |    |                             |     |
| " Edges of Main Sheerstrake, double riveted.  | <u>Upper Sheerstrake double or single riveted.</u>                                     |                 |                      |   |                      |                  |    |                             |     |
| " Butts of Main Sheerstrake, treble riveted for 1/2 length amidships.   | <u>Butts of Upper or Spar Sheerstrake, treble riveted for 1/2 length amidships.</u>    |                 |                      |   |                      |                  |    |                             |     |
| " Butts of Main Stringer Plate, treble riveted for 1/2 length amidships.  | <u>Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length amidships.</u> |                 |                      |   |                      |                  |    |                             |     |
| " Breadth of laps of plating in double riveting   | <u>4 1/2</u>   |                 |                      |   |                      |                  |    |                             |     |
| " Butt Straps of Keelsons, Stringer and Tie Plates, treble double riveted?                                      | <u>Yes</u>   |                 |                      |   |                      |                  |    |                             |     |
| " What description of iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? | <u>Siemens</u>   |                 |                      |   |                      |                  |    |                             |     |
| " Manufacturer's name or trade mark,  | <u>D. Colville Northwell</u>   |                 |                      |   |                      |                  |    |                             |     |
| " The above is a correct description.   | <u>Pearce Bros</u>   |                 |                      |   |                      |                  |    |                             |     |
| " Builder's Signature,  | <u>Pearce Bros</u>   |                 |                      |   |                      |                  |    |                             |     |
| " Surveyor's Signature,   | <u>Geo. L. Cooper</u>  |                 |                      |   |                      |                  |    |                             |     |
| " Surveyor to Lloyd's Register of British and Foreign Shipping.   | <u>Geo. L. Cooper</u>  |                 |                      |   |                      |                  |    |                             |     |



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 *Iron* 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

*Schmied. rypd.*  
*7. Mast Deck 6 rounds 39.9 x 15 1/2*  
*12. " " 43.0 x 15*

| NUMBER for EQUIPMENT 10149-2. |  |  |  |  |  | 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.                        |  |  |  |  |  | CABLES, &c. |         |                       |                  |                                  |  |                  |                    |                       |                       |                                  |        |
| N <sup>o</sup> .              | Chain .....  |  |  |  |  | 195         | 1 3/4   | 25 3/8                | 195-1 3/4        | P. New Comm. P. 14<br>J. Hartman | Bower Anchors  | 13683            | 12-0-7             | 13-19-2-21            | 12-0-0                | P. New Comm. P. 14<br>J. Hartman |        |
| Fore Sails,                   | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) |  |  |  |  | No 5650     |         |                       |                  |                                  | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) |                  | 13682              | 11-2-0                | 13-7-2-0              |                                  | 12-0-0 |
| Fore Top Sails,               | Iron Stream Chain  |  |  |  |  |             |         |                       |                  |                                  |  |                  | 13684              | 11-0-0                | 12-17-2-0             |                                  | 10-1-0 |
| Fore Topmast Stay Sails,      | or Steel Wire ..   |  |  |  |  | 60 1/2      | 3/4     | 11 7/8                | 60-3/4           |                                  |  | Total            |                    |                       |                       |                                  |        |
|                               | or Hempen Strm Cable .....   |  |  |  |  | No 5651     |         |                       |                  |                                  |  |                  |                    | 34-2-7                |                       |                                  | 34-1-0 |
| Main Sails,                   | Towline, Hemp.   |  |  |  |  |             |         |                       |                  |                                  |  |                  | 13685              | 4-0-0                 | 6-7-2-0               |                                  | 4-0-0  |
|                               | or Steel Wire ..   |  |  |  |  |             |         |                       |                  |                                  |  |                  | Stream Anchor      |                       |                       |                                  |        |
| Main Top Sails, and           | Hawser .....   |  |  |  |  | 75          | 8 1/2   |                       | 75-8 1/2         |                                  | Kedge ...  | 13680            | 2-0-0              | 4-10-0-0              | 2-0-0                 |                                  |        |
|                               | Warp .....   |  |  |  |  | 90          | 6 1/2   |                       | 90-6 1/2         |                                  | 2nd Kedge ...  |                  | 1-1-16             |                       | 1-0-0                 |                                  |        |
| quality good                  |  |  |  |  |  |             |         |                       |                  |                                  |  |                  |                    |                       |                       |                                  |        |

Standing and Running Rigging *Wire & rope* sufficient in size and *good* in quality. She has *one* Life Boat and *one* other

The Windlass is *Patent* Capstan *good* and Rudder *good* Pumps *5 in. diam.*

Engine Room Skylights.—How constructed? *Leak skylight in air* How secured in ordinary weather? *bolted*

What arrangements for deadlights in bad weather? *Crammed 7 ft above main deck fitted with strong framing*

Coal Bunker Openings.—How constructed? *As Hatchways—also* How are lids secured? *Hatchways with straps* Height above deck? *of bulkhead 12 in. of deck 3 in.*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Freeing ports & scuppers*

Cargo Hatchways.—How formed? *Crammed to lower edge of beam - 24 in above deck*

State size Main Hatch *19.3 x 14* Forehatch *14 x 12* Quarterhatch *12.3 x 12*

If of extraordinary size, state how framed and secured? *Not extraordinary size*

What arrangement for shifting beams? *Not plate in main hatch bulk beam in other*

Hatches, If strong and efficient? *Yes solid 2 1/2 in*

|  |   |   |  |
|--|---|---|--|
| Order for Special Survey No. <i>454</i>      | 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>1884 April 28 May 6 9 13 15 19 22 June 4</i>          |
| Date <i>4 April 1884</i>                     |   | 2nd. On the plating during the process of riveting  | <i>11 13 20 30 July 3 7 11 16 19 23 25 30 Aug 4 8 11</i> |
| Order for Ordinary Survey No. <i>10149-2</i> |   | 3rd. When the beams were in and fastened, and before the decks were laid....              | <i>13 15 19 21 25 27 29 Sep 3</i>                        |
| Date <i>10 April 1884</i>                    |   | 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.) *NE 7 1/2 January 1884*

This is a one decked screw steamer, built of steel, in accordance with the approved plans herewith & in other respects in accordance with the Rules

She has raised gr deck 34 ft long & 3 1/2 in height - a bridge deck 43 ft long & fore-castle 18 ft 6 in long -

An outside bilge keelson extending with fore & aft is fitted composed of Bulb plate 7 x 1/2 between two angles 4 x 3 x 1/2

Water ballast as per sketch of mid-section is fitted in after hold, & the vessel has a fore peak tank - These having been tested as per Rule are satisfactory

The material is all insured & having been tested in the presence of the Society's Surveyor & has proved to be very good

The workmanship is satisfactory

State if one, two, or three decked vessel, or if open, or covering decked; and the lengths of *43 ft 18 1/2 ft* bridge, fore-castle, or raised quarter deck. *34 ft* If double bottom, state particulars on separate form.)

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

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

The amount of the Entry Fee ... £ 3 : 0 : 0 is received by me, *91.6*

Special ... £ 28 : 0 : 0 *30th Aug 1884*

Certificate ...

(to be sent as per margin).

(Travelling Expenses, if any, £ ...)

Committee's Minute

Character assigned

*100 A*

FRIDAY 5 SEPT 1884

18

*100 A*

*100 A*

Lloyd's Register Foundation