

# IRON SHIP.

(Received at London Office AUGUST 1885)

No. 4592 Survey held at Glasgow Date, First Survey 9<sup>th</sup> Dec<sup>r</sup> 1885 Last Survey 23<sup>rd</sup> August 1886  
On the Iron Ship "Earl of Aberdeen" 4 Stud Masts (Barque)

|   |  |  |
|---|--|--|
| <b>TONNAGE</b> under Tonnage Deck <u>2064.87</u>  | <b>ONE OR TWO DECKED, THREE DECKED VESSEL, OR AWNING DECKED VESSEL.</b>      | Master <u>Capt. Shaw</u>   |
| Ditto of Third, Spar, or Awning Deck <u>93.82</u> | <b>Half Breadth</b> (moulded) <u>21.25</u>                                   | Built at <u>Glasgow</u>  |
| Ditto of Poop, or Raised Or. Deck <u>38.49</u>    | <b>Depth</b> from upper part of Keel to top of Upper Deck Beams <u>27.08</u> | When built <u>1885-86</u> Launched <u>31 July 1886</u>                                 |
| Ditto of Houses on Deck <u>0.95</u>               | <b>Girth</b> of Half Midship Frame (as per Rule) <u>42.91</u>                | By whom built <u>C. Cornell &amp; Co.</u>  |
| Ditto of Forecastle <u>0.95</u>                   | <b>1st Number</b> <u>91.24</u>   | Owners <u>David Brown &amp; Sons</u>   |
| Gross Tonnage <u>2204.13</u>                      | <b>1st Number, if a 2-Decked Vessel deduct 7 feet</b>                        | Residence <u>147 Leadenhall Street</u>   |
| Less Crew Space <u>71.17</u>                      | <b>Length</b> <u>279.75</u>  | Port belonging to <u>London</u>  |
| Less Engine Room <u>2.32.96</u>                   | <b>2nd Number</b> <u>255.24</u>  | Destined Voyage <u>Cardiff</u>   |
| Register Tonnage as out on Beam <u>2132.96</u>    | <b>Proportions— Breadths to Length</b> <u>6.58</u>                           | If Surveyed while Building, Afloat, or in Dry Dock. <u>Built under Special Survey.</u> |
|   | <b>Depths to Length— Upper Deck to Keel</b> <u>10.23</u>                     |  |
|   | <b>Main Deck ditto</b> .. .. .   |  |

| LENGTH on deck as per Rule   | Feet. Inches.  | BREADTH— Moulded | Feet. Inches.   | DEPTH top of Floors to Upper Deck Beams | Feet. Inches.  | Power of Engines | Horse. | N° of Decks with flat laid | N° of Tiers of Beams |
|--|----------------|------------------|-----------------|---|----------------|------------------|--------|----------------------------|----------------------|
| 279  | 7              | 42               | 6               | 24                                      | 3              |                  |        | Two                        | Two                  |
| Dimensions of Ship per Register, length, <u>291.2</u> breadth, <u>42.65</u> depth, <u>24</u> <u>Moulded depth 21.5</u> |                |                  |                 |   |                |                  |        |                            |                      |
| <b>KEEL</b> , depth and thickness  | Inches in Ship |                  | Inches per Rule |   |                |                  |        |                            |                      |
| <b>STEM</b> , moulding and thickness   | 10 x 2 3/4     |                  | 10 x 2 3/4      |   |                |                  |        |                            |                      |
| <b>STERN-POST</b> for Rudder do. do.   | 10 x 2 3/4     |                  | 10 x 2 3/4      |   |                |                  |        |                            |                      |
| " " for Propeller  | 10 x 2 3/4     |                  | 10 x 2 3/4      |   |                |                  |        |                            |                      |
| Distance of Frames from moulding edge to moulding edge, all fore and aft   | 24             |                  | 24              |   |                |                  |        |                            |                      |
| <b>FRAMES</b> , Angle Iron, for 2/3 length amidships   | Inches in Ship | Inches in Ship   | 16ths per Rule  | Inches in Ship                          | Inches in Ship | 16ths per Rule   |        |                            |                      |
| Do. for 1/2 at each end  | 5 1/2          | 3 1/2            | 8               | 5 1/2                                   | 3 1/2          | 8                |        |                            |                      |
| <b>REVERSED FRAMES</b> , Angle Iron  | 3 1/2          | 3 1/2            | 8               | 3 1/2                                   | 3 1/2          | 8                |        |                            |                      |
| <b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships                               | 3 1/4          | 10               | 3 1/4           | 10                                      |                |                  |        |                            |                      |
| " thickness at the ends of vessel  | 8              | 8                | 8               | 8                                       |                |                  |        |                            |                      |
| " depth at 3/4 the half-bdth. as per Rule  | 17             | 17               | 17              | 17                                      |                |                  |        |                            |                      |
| " height extended at the Bilges  | 19             | 19               | 19              | 19                                      |                |                  |        |                            |                      |
| <b>BEAMS</b> , Upper, Spar or Awning Deck  | Inches in Ship | Inches in Ship   | 16ths per Rule  | Inches in Ship                          | Inches in Ship | 16ths per Rule   |        |                            |                      |
| Single or double Angle Iron, Plate or Tee Bulb Iron  | 3 1/2          | 3 1/2            | 7               | 3 1/2                                   | 3 1/2          | 7                |        |                            |                      |
| Single or double Angle Iron on Upper edge  | 4 1/8          | 4 1/8            | 4 1/8           | 4 1/8                                   |                |                  |        |                            |                      |
| Average space  | 48             | 48               | 48              | 48                                      |                |                  |        |                            |                      |
| <b>BEAMS</b> , Main or Middle Deck   | Inches in Ship | Inches in Ship   | 16ths per Rule  | Inches in Ship                          | Inches in Ship | 16ths per Rule   |        |                            |                      |
| Single or double Angle Iron, Plate or Tee Bulb Iron  | 3 1/2          | 3 1/2            | 8               | 3 1/2                                   | 3 1/2          | 8                |        |                            |                      |
| Single or double Angle Iron on Upper Edge  | 4 1/8          | 4 1/8            | 4 1/8           | 4 1/8                                   |                |                  |        |                            |                      |
| Average space  | 48             | 48               | 48              | 48                                      |                |                  |        |                            |                      |
| <b>BEAMS</b> , Lower Deck  | Inches in Ship | Inches in Ship   | 16ths per Rule  | Inches in Ship                          | Inches in Ship | 16ths per Rule   |        |                            |                      |
| Single or double Angle Iron, Plate or Tee Bulb Iron  | 3 1/2          | 3 1/2            | 8               | 3 1/2                                   | 3 1/2          | 8                |        |                            |                      |
| Single or double Angle Iron on Upper Edge  | 4 1/8          | 4 1/8            | 4 1/8           | 4 1/8                                   |                |                  |        |                            |                      |
| Average space  | 48             | 48               | 48              | 48                                      |                |                  |        |                            |                      |
| <b>BEAMS</b> , Hold or Orlop   | Inches in Ship | Inches in Ship   | 16ths per Rule  | Inches in Ship                          | Inches in Ship | 16ths per Rule   |        |                            |                      |
| Single or double Angle Iron, Plate or Tee Bulb Iron  | 3 1/2          | 3 1/2            | 8               | 3 1/2                                   | 3 1/2          | 8                |        |                            |                      |
| Single or double Angle Iron on Upper Edge  | 4 1/8          | 4 1/8            | 4 1/8           | 4 1/8                                   |                |                  |        |                            |                      |
| Average space  | 48             | 48               | 48              | 48                                      |                |                  |        |                            |                      |
| <b>KEELSONS</b> Centre line, single or double plate, box or intercostal Plates   | 19             | 13               | 19              | 13                                      |                |                  |        |                            |                      |
| " Rider Plate  | 13             | 13               | 13              | 13                                      |                |                  |        |                            |                      |
| " Bulb Plate to Intercostal Keelson  | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " Angle Irons  | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " Double Angle Iron Side Keelson   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " Side Intercostal Plate   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " do Angle Irons   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " Attached to outside plating with angle iron  | 3 1/2          | 3 1/2            | 8               | 3 1/2                                   | 3 1/2          | 8                |        |                            |                      |
| <b>BILGE</b> Angle Irons   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " do Bulb Iron   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| " do Intercostal plates riveted to plating for length  | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| <b>BILGE STRINGER</b> Angle Irons  | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| Intercostal plates riveted to plating for length   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| <b>SIDE STRINGER</b> Angle Irons   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| Bulb plates from aft to fore   | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |
| Intercostal plates afloat  | 6              | 4                | 9               | 6                                       | 4              | 9                |        |                            |                      |

The **FRAMES** extend in one length from middle line to gunwale

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to gunwale and to fore and aft 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 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, 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 Shell 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 3/8 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. 1" Ribs to Sheerstrake

" Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.

" Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.

" Breadth of laps of plating in double riveting 5 1/4 x 6" Breadth of laps of plating in single riveting 5 1/4 x 6"

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes No. of Breasthooks, 6 Crutches, 16

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best

Manufacturer's name or trade mark, Plato. Consett Anglo-Coats

The above is a correct description.

Builder's Signature, Charles Cornell & Co Surveyor's Signature, Chas. Loring

C. Cornell Surveyor to Lloyd's Register of British and Foreign Shipping.

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

Official Number

Form No. 1 for Iron Ship (Revised 1884 - Transfer Ink.)

4592 Gls

Planned

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

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 *Steel* 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 spars are constructed in accordance with the approved description attached hereto. The steel has been tested as required by the Rules and found good. Cornett & Clydesdale*

| N <sup>o</sup> . | 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. |            |  |
|                  | Fore Sails,                  | Chain                           | 270      | 2 1/16  | 36 107 1/2            | 270-2 1/16       |                                 | Bower Anchors    | 15349              | 41.0                  | 36.10                 | 40.0.0     |  |
|                  | Fore Top Sails,              | Iron Stream Chain               | 100      | 1 1/8   | 34 1/8                | 100-1 1/8        |                                 |                  | 15334              | 39.1.0                | 35.5.2.14             | Coll. with |  |
|                  | Fore Topmast Stay Sails,     | or Steel Wire ..                |          |         | 22 3/4                |                  |                                 |                  | 15335              | 34.2.0                | 32.0.0.0              | 114 lbs    |  |
|                  | Main Sails,                  | or Hempen Strm } Cable          | 90       | 1 1/2   |                       | 90-1 1/2         |                                 |                  |                    |                       |                       |            |  |
|                  | Main Top Sails,              | Towline, Hemp. or Steel Wire .. | 90       | 1 1/2   |                       | 90-1 1/2         |                                 |                  |                    |                       |                       |            |  |
|                  | and                          | Hawser                          | 3090     | 3"      | 3090                  | 3090-3"          |                                 |                  |                    |                       |                       |            |  |
|                  | Standing and Running Rigging | Warp                            | 90       | 8"      |                       | 90-8"            |                                 |                  |                    |                       |                       |            |  |
|                  |                              | quality                         | 3 coils  | 5"      |                       |                  |                                 |                  |                    |                       |                       |            |  |

The Windlass is *Harfield Roy patent* Capstans *good* and Rudder *good* Pumps *good*

**Engine Room Skylights.**—How constructed? *✓* How secured in ordinary weather? *✓*

What arrangements for deadlights in bad 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? *Five marring pipes, five wash ports 3.0 x 2.0, and seven scuppers on each side.*

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

State size **Main Hatch** *20.0 x 10.0 x 30* Forehatch *4.0 x 10.0 x 30* Quarterhatch *8.0 x 10.0 x 30*

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

What arrangement for shifting beams? *One web plate & 3 bars & afters in Main hatch.*

**Hatches,** If strong and efficient? *Yes solid, 3" thick*

| Order for Special Survey No. | Date                          | Order for Ordinary Survey No. | Date | No. | State dates of letters respecting this case              |
|------------------------------|-------------------------------|-------------------------------|------|-----|--|
| 2056                         | 4 <sup>th</sup> December 1885 |                               |      | 145 | 4 <sup>th</sup> December 1885 6 <sup>th</sup> March 1886 |

**General Remarks** (State quality of workmanship, &c.) *The workmanship is good & the vessel has been constructed in accordance with the approved sketch of midship section and in general conformity with the Rules. The sketch of rigging plan, the approved description of spars and two forging reports are also attached hereto. The fore mast has been tested as required and found good. The twin deck breathers required by the Rules, could not be fitted owing to the lower pipes being led down below the upper deck, but vertical plates extending from side to side & riveted to the frames have been fitted, and the strength fully made up.*

State if one, two, or three decked vessel, or if open or running decked, and the lengths of poop, bridge, fore-castle, or raised quarter-deck. (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.1.*

The amount of the Entry Fee .....£ 5 : - : - is received by me, *(Signature)*

Special .....£ 48 : 6 : - 28/8 1886

(to be sent as per margin) Certificate ...

(Travelling Expenses, if any, £ .....

Committee's Minute *TUESDAY 31 AUGUST 1886 18*

Character assigned *100 A.1*

*2 Des / Iron*

*31/8/86*

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

*It is submitted that the vessel appears eligible to be classed 100 A.1 as recommended.*

*2 D's (one iron)*

*Lloyd's Register*

*It is concluded that the twin deck breathers have been fitted as shown in the sketch of midship section 30/8/86 T.B.*

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