

Independent IRON SHIP.

Received 20th April 1875.

No. 11083 Survey held at Sunderland Date, First Survey October 22nd / 74 Last Survey April 23rd 1875

On the B. Kingdom of Sweden Yard Number 71 Master W. G. Smith

TONNAGE under
Tonnage Deck } 727.33
Ditto of Third, Spar,
or Awning Deck. }
Ditto of Poop, or
Raised Or. Dk. } 66.17
Ditto of House
on Deck } 10 46
Ditto of Forecastle } 25.99
Gross Tonnage } 829.95
Less Crew Quarters } 42 43
Less Engine Room }
Register Tonnage } 787.52
as cut on Beam }

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
HALF BREADTH (moulded) ... 15.9
DEPTH from upper part of Keel to top of Upper Deck Beams 20.3
GIRTH of Half Midship Frame (as per Rule) ... 31.1
1st NUMBER ... 67.3
1st NUMBER, if a THREE-DECKED VESSEL
deduct 7 feet ... 183.0
LENGTH ... 12.315
2nd NUMBER ... under 6
PROPORTIONS—Breadths to Length ... under 6
Depths to Length—Upper Deck to Keel ... under 9-11
Main Deck ditto ...

Built at Sunderland
When built 1875. Launched 5th April.
By whom built Mounsey & Foster
Owners Gosman & Smith
Port belonging to London
Destined Voyage Madras Coast
Surveyed while Building Afloat, or in Dry Dock.

LENGTH on deck as per Rule ... 183 0 BREADTH—Moulded ... 31 11 DEPTH top of Floors to Upper Deck Beams ... 18 7 1/2 Power of Engines ... ✓ Horse. ✓ No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 191.7 breadth, 32.0 depth, 18.4

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness ...	<u>8 x 2 3/8</u>	<u>8 x 2 3/8</u>
STEM, moulding and thickness ...	<u>7 x 2 3/8</u>	<u>7 x 2 3/8</u>
STERN-POST for Rudder do. do. ...	<u>7 x 2 3/8</u>	<u>7 x 2 3/8</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft ...	<u>22</u>	<u>22</u>
FRAMES, Angle Iron, for 1/2 length amidships ...	<u>4 3 1/6</u>	<u>4 3 1/6</u>
Do. for 1/4 at each end ...	<u>4 3 1/6</u>	<u>4 3 1/6</u>
REVERSED FRAMES, Angle Iron ...	<u>3 3 6</u>	<u>3 3 6</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ...	<u>20 1/2 8</u>	<u>20 1/2 8</u>
thickness at the ends of vessel ...	<u>7</u>	<u>7</u>
depth at 3/4 the half-bdth. as per Rule ...	<u>10 1/2</u>	<u>10 1/2</u>
height extended at the Bilges ...	<u>10 1/2</u>	<u>10 1/2</u>
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper edge ...	<u>3 3 6</u>	<u>3 3 6</u>
Average space ...	<u>alternates frames</u>	<u>alternates frames</u>
BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single, or double Angle Iron, on Upper Edge ...	<u>3 3 6</u>	<u>3 3 6</u>
Average space ...	<u>alternates frames</u>	<u>alternates frames</u>
BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge ...	<u>3 3 6</u>	<u>3 3 6</u>
Average space ...	<u>alternates frames</u>	<u>alternates frames</u>
KEELSONS Centre line, single or double plate, box, or intercostal, plates ...	<u>13 10</u>	<u>13 10</u>
" Rider Plate ...	<u>9 1/2 10</u>	<u>9 1/2 10</u>
" Bulb Plate to Intercostal Keelson ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" Angle Irons ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" Double Angle Iron Side Keelson ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" Side Intercostal Plate ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" do. Angle Irons ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" Attached to outside plating with angle iron ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
BILGE Angle Irons ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" do. Bulb Iron ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
" do. Intercostal plates riveted to plating for length ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
LOWER STRINGER Angle Irons ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
Intercostal plates riveted to plating for length ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>
STRINGER Angle Irons ...	<u>4 1/2 3 1/2 7</u>	<u>4 1/2 3 1/2 7</u>

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness ...	<u>32</u>	<u>10</u>	<u>32</u>	<u>10</u>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ...	<u>9</u>	<u>9</u>	<u>9.8</u>	<u>9.8</u>
fin up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. Spar Dk Sh'rstrake, brdth & thickness ...	<u>9.8</u>	<u>9.8</u>	<u>9.8</u>	<u>9.8</u>
Butt Straps to outside plating, breadth & thickness Lengths of Plating ...	<u>10.1 1/2</u>	<u>7.11</u>	<u>9 1/2 16 3/4</u>	<u>7.11</u>
Shifts of Plating, and Stringers ...	<u>From J. to</u>	<u>11</u>	<u>11</u>	<u>11</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ...	<u>36</u>	<u>8</u>	<u>36</u>	<u>8</u>
Angle Iron on ditto ...	<u>4 1/2 x 3 1/2 x 7</u>	<u>4 1/2 x 3 1/2 x 7</u>	<u>4 1/2 x 3 1/2 x 7</u>	<u>4 1/2 x 3 1/2 x 7</u>
Tie Plates fore and aft, outside Hatchways ...	<u>10</u>	<u>8</u>	<u>10</u>	<u>8</u>
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling ...	<u>Butter</u>	<u>gunwale</u>	<u>Butter</u>	<u>gunwale</u>
Waterways do. do. ...	<u>4</u>	<u>7.8</u>	<u>3 1/2</u>	<u>3 1/2</u>
Flat of Upper Deck do. do. ...	<u>4</u>	<u>7.8</u>	<u>3 1/2</u>	<u>3 1/2</u>
How fastened to Beams ...	<u>4</u>	<u>7.8</u>	<u>3 1/2</u>	<u>3 1/2</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ...	<u>27</u>	<u>7</u>	<u>27</u>	<u>7</u>
Is the Stringer Plate attached to the outside plating? ...	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Angle Irons on ditto, No. ...	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>
Tie Plates, outside Hatchways ...	<u>10</u>	<u>8</u>	<u>10</u>	<u>8</u>
Diagonal Tie Plates on Beams, No. of pairs Waterways materials and scantlings ...	<u>3</u>	<u>8</u>	<u>3</u>	<u>8</u>
Flat of Middle Deck do. do. ...	<u>2 1/2</u>	<u>11</u>	<u>2 1/2</u>	<u>11</u>
How fastened to Beams ...	<u>3</u>	<u>11</u>	<u>3</u>	<u>11</u>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ...	<u>4 3/4</u>	<u>2 3/4</u>	<u>4 3/4</u>	<u>2 3/4</u>
Is the Stringer Plate attached to the outside plating? ...	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Angle Irons on ditto, No. ...	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>
Stringer or Tie Plates, outside Hatchways ...	<u>10</u>	<u>8</u>	<u>10</u>	<u>8</u>
Flat of Lower Deck ...	<u>3</u>	<u>8</u>	<u>3</u>	<u>8</u>
Ceiling betwixt Decks, thickness and material in hold do. do. ...	<u>2 1/2</u>	<u>11</u>	<u>2 1/2</u>	<u>11</u>
Main piece of Rudder, diameter at head do. at heel ...	<u>4 3/4</u>	<u>2 3/4</u>	<u>4 3/4</u>	<u>2 3/4</u>
Can the Rudder be unshipped afloat? ...	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Bulkheads No. 1 Thickness of ...	<u>6 1/2 7/16</u>	<u>6 1/2 7/16</u>	<u>6 1/2 7/16</u>	<u>6 1/2 7/16</u>
Height up ...	<u>Upper Deck</u>	<u>Upper Deck</u>	<u>Upper Deck</u>	<u>Upper Deck</u>
How secured to sides of ship ...	<u>Between double frames</u>	<u>Between double frames</u>	<u>Between double frames</u>	<u>Between double frames</u>
Size of Vertical Angle Irons ...	<u>3.3 1/2</u>	<u>3.3 1/2</u>	<u>3.3 1/2</u>	<u>3.3 1/2</u>
Are the outside Plates doubled two spaces of Frames in length? ...	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>

Frames, material. Knight-heads. Hawse Timbers. Class Harfield's Patent Secured to iron plates &c

FRAMES extend in one length from Keel 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 Upper Deck and all frames

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 1/4 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 5 1/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 5 1/4 ins. from centre to centre.

Butts of Two Strakes at Bilge for half 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 5 1/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted with rivets 3/4 in. diameter, averaging 5 1/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted. double lower edge

Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

Breadth of laps of plating in double riveting 4 1/2 - 5 1/4 Breadth of laps of plating in single riveting 4 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and treble

Waterway, how secured to Beams Butter gunwale (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Butts turned down & riveted to fr. No. of Breasthooks, Four Crutches, Three

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

Manufacturer's name or trade mark, Plates Sherm Iron Works Darlington; Angles & Bulbs Tynack and Co

The above is a correct description.

Builder's Signature, Mounsey & Foster Surveyor's Signature, Joseph Keen

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are Iron in good condition, and sufficient in size and length. If of Iron or Steel, state the number of Plates and Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, 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 please see sketch attached

NUMBER for EQUIPMENT 13136

one complete set and a second and
N^o SAILS. CABLES, &c.
Fore Sails, Chain ...
Fore Top Sails, (State Machine where Tested, Date, & name of Superintendent.)
Fore Topmast Stay Sails, Chain
Main Sails, Hemp Strm Cbl
Main Top Sails, Hawser Hemp
Towlines " ...
Warp " ...
quality Good

Fathoms. 270
Inches. 1 1/16
Test per Certificate. 43 1/2
Lgh. & Size req'd pr Rule. 270-1 1/16
Test req'd per Rule. 43 9/10
These links in each length tested to breaking strain 61 1/2 tons. R.H.C.P.Y. signed J. Hartnups Feb 19 1875

ANCHORS, N^o. Weight. Ex. Stock. Test per Certificate. W'ght req'd per Rule.
Bowers ... 1 23.2.7 23.10.3.21 23.2.9
1 22.2.8 22.16.3.14 23.2.9
1 20.3.14 21.10.1.7 19.3.28
(State Machine where Tested, Date, and name of Superintendent.) marked R.H.C.P.Y. signed J. Hartnups Feb 19 1875
Stream ... 1 10.2.21 10.0.0
Kedges ... 1 5.1.7 5.0.0
1 2.3.4 2.2.0

Standing and Running Rigging Sails - 1 Hemp & Hemp sufficient in size and good in quality. She has 2 Life Long Boat and 2 others, &c.

The Windlass is Hartnups patent good Capstans 2 Winch good Rudder good Pumps 2 N^o "Donatons" with 15

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? Scuppers and ports on each side fitted in the Bulmarks

Cargo Hatchways. How formed? Iron plates strengthened by angles and Rubbing

State size Main Hatch 18 x 10 feet Forehatch 7 x 6 feet Quarterhatch 7 x 6 feet

If of extraordinary size, state how framed and secured? Main Hatch has fore and aft ties of double 2

What arrangement for shifting beams? Main Hatch has deep Webb plate Slipping B^m and one each

Hatches, If strong and efficient? Strong and efficient Remainder has one ceiling

Order for Special Survey No. 2574 DATES of Surveys held while building as per Section 18.
Date 29th September 1874 1st. On the several parts of the frame, when in place, and before the plating was wrought
Order for Ordinary Survey No. 2574 2nd. On the plating during the process of riveting
Date 29th September 1874 3rd. When the beams were in and fastened, and before the decks were laid...
No. 41 in builder's yard. 4th. When the ship was complete, and before the plating was finally coated or cemented...
5th. After the ship was launched and equipped

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

She has a full Prop 41 ft long; Topgallant Forecastle 24 feet long; Deck House 20 1/2 feet by 14 3/4 feet

The whole of the Reverse frames extend from keels to Upper Deck, Rule requires them on alternate frames between only.

The three lower inside courses of plating 1/16 in thickness in excess of Rule fore and aft

The Frames and Reverse frames of this Vessel were tested by order of the Committee for results please see Surveyors letter dated 16th Dec 1874.

The plating of this Vessel was submitted to a tensile and other tests in particulars see Surveyors letter dated 25th Feb 1875.

State if one, two or three decked vessel, or if open or awning decked, and lengths of poop, fore-castle, or raised quarter deck, or of double or part double bottom

How are the surfaces preserved from oxidation? Inside Cement to Bilges paint above Outside Composition paint on Bottom. Paints above

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

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

Special ... £ 39 : 8 : 0 21st April 1875

Certificate ...

(Travelling Expenses)

(if any) £

Committee's Minute 27th April 1875

Character assigned 100 A 1

Accepted

J. Hartnups

This vessel is

classified 100 A

recommended

Quoted 1875

Lloyd's Register

Foundation