

IRON SHIP.

No. 4024 Survey held at *Dundee* Date, First Survey *14 April* Last Survey *29 Nov 1876*

the *Bk. "Arthurstone"* Master *Jas. Peters.*

FACE under *1082.16* ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Third, Spar, *81.58* SPAR, OR AWNING DECKED VESSEL.
 of Poop, *16.52* HALF BREADTH (moulded)... *17.5*
 of Houses *38.96* DEPTH from upper part of Keel to top of Upper Deck Beams *23.25*
 on Deck *56.26* GIRTH of Half Midship Frame (as per Rule) *35.0*
 Ditto of Forecastle *1219.20* 1st NUMBER *75.75*
 Gross Tonnage *56.26* 1st NUMBER, if a THREE-DECKED VESSEL
 Less Crew Space *1162.94* LENGTH *218.75*
 Engine Room *1654.0* 2nd NUMBER
 Net Tonnage *1162.94* PROPORTIONS—Breadths to Length *under 7 3/8ths*
 out on Beam *10 depths* Depths to Length—Upper Deck to Keel
 Main Deck ditto

Built at *Dundee.*
 When built *1876* Launched *18th Oct 76*
 By whom built *Gourlay Bros & Co.*
 Owners *D. Bruce & Co.*
 Port belonging to *Dundee.*
 Destined Voyage *S. Francisco*
 If Surveyed while Building, Afloat, or in Dry Dock.
while Building and afloat.

LENGTH *218* Feet. *9* Inches. BREADTH—Moulded... *35* Feet. *0* Inches. DEPTH top of Floors to Upper Deck Beams *21* Feet. *3 1/2* Inches. Power of Engines... *Two*. No. of Decks with flat laid *Two*. No. of Tiers of Beams *Two*.

	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Power of Engines	Horse.	No. of Decks with flat laid	No. of Tiers of Beams
Dimensions of Ship per Register, length, <i>230.6</i> breadth, <i>35.1</i> depth, <i>21.26</i>												
KEEL, depth and thickness												
KEEL, moulding and thickness												
KEEL POST for Rudder do. do.												
for Propeller												
Distance of Frames from moulding edge to moulding edge, all fore and aft												
FRAMES, Angle Iron, for 1/2 length amidships												
Do. for 1/4 at each end												
REVERSED FRAMES, Angle Iron												
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships												
thickness at the ends of vessel												
depth at 1/2 the half-bdth. as per Rule												
height extended at the Bilges												
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron on Upper edge												
Average space												
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron, on Upper Edge												
Average space												
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron												
Double Angle Iron on Upper Edge												
space												
Centre line, single or double plate, box, or Intercoastal, Plates												
Under Plate												
Bulb Plate to Intercoastal Keelson												
Angle Irons												
Double Angle Iron Side Keelson												
Side Intercoastal Plate												
do. Angle Irons												
Attached to outside plating with angle iron												
Large Angle Irons												
do. Bulb Iron												
do. Intercoastal plates riveted to plating for length												
Large STRINGER Angle Irons												
Intercoastal plates riveted to plating for length												
Middle STRINGER Angle Irons												
Transoms, material. Knight-heads. Hawse Timbers.												
Windlass												

Flat Keel Plates, breadth and thickness... *34 11 34 11*
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied... *2 strike 1/2 increase for 92 ft. I - - - 76 - - - 9 1/2*
 fm 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 Upr. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness *36 12 36 12*
 Butt Straps to outside plating, breadth & thickness *10.11 1/2 16 3/4 9 3/4 11 1/2 16 3/4*
 Lengths of Plating... *11.6 9.7*
 Shifts of Plating, and Stringers... *3 and 2 spaces of 1/2 ft. 2 spaces*
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... *42 10 42 10*
 Angle Iron on ditto... *5 x 3 1/2 x 9 1/2 5 x 3 1/2 x 9 1/2*
 Tie Plates fore and aft, outside Hatchways... *12 10 12 10*
 Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling... *Gutter*
 Waterways do. do. *4 8*
 Flat of Upper Deck do. do. *Sc. B. 4 8*
 How fastened to Beams... *Sc. B. 4 8*
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness... *31 9 31 9*
 Is the Stringer Plate attached to the outside plating?
 Angle Irons on ditto, No. *2*
 Tie Plates, outside Hatchways... *4 x 4 x 8 1/2 4 x 4 x 8 1/2*
 Diagonal Tie Plates on Beams, No. of pairs... *12 10 12 10*
 Waterways materials and scantlings... *3 2 pine battens*
 Flat of Middle Deck do. do. *2 1/2 R.P. 2 1/2*
 How fastened to Beams... *5 1/2 5 1/2*
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams... *3 3*
 Is the Stringer Plate attached to the outside plating?
 Angle Irons on ditto, No. *2*
 Stringer or Tie Plates, outside Hatchways... *4 x 4 x 8 1/2 4 x 4 x 8 1/2*
 Flat of Lower Deck... *12 10 12 10*
 Ceiling betwixt Decks, thickness and material... *3 2 pine battens*
 in hold do. do. *2 1/2 R.P. 2 1/2*
 Main piece of Rudder, diameter at head... *5 1/2 5 1/2*
 do. at heel... *3 3*
 Can the Rudder be unshipped afloat? *Yes.*
 Bulkheads No. *One* Thickness of *6.5.*
 Height up *upper deck.*
 How secured to sides of ship *double angle iron frames.*
 Size of Vertical Angle Irons *3 x 3 x 1/2* and distance apart *30 ins.*
 Are the outside Plates doubled two spaces of Frames in length? *Yes.*

FRAMES extend in one length from *Centre line to fore part of upper deck* Riveted through plates with *7/8* in. Rivets, about *6 in.* apart.
 The REVERSED ANGLE IRONS on floors and frames extend *from the middle line to upper deck on and to all frames 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 *1/8* in. diameter, averaging *3 3/4* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *1/8* in. diameter averaging *3 3/4* ins. from centre to centre.
 Butts of *three* Strakes at Bilge for *half* length, treble riveted with Butt Straps *7/8* thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *1/8* in. diameter, averaging *3 3/4* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *1/8* in. diameter, averaging *3 3/4* 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 *6 diam* Breadth of laps of plating in single riveting *3 1/2 diam*
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *treble and double.*

Waterway, how secured to Beams *Gutter* (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? *Knees turned & solid welded* No. of Breasthooks, *5* Crutches, *4*
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Good.*
 Manufacturer's name or trade mark, *Bulb Iron from J. & S. Co. angles, Sheerstrake, Main & Spar from J. & S. Co. plates, S. Vaughan, Shell plates, S. Vaughan & Co. Bolts from J. & S. Co.*
 The above is a correct description.
 Builder's Signature, *Gourlay Bros & Co.* Surveyor's Signature, *J. H. Smith*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

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