

IRON SHIP.

No. 15588 Survey held at
On the *Scw. Cr.*

Newcastle Date, First Survey *9 March*
"Bracadale"

Last Survey *18 August* 1881
Master *Reynolds*

TONNAGE under Tonnage Deck *2060.69*
 Ditto of Poop *63.73*
 Ditto of Forecastle *34.10*
 Gross Tonnage *2198.52*
 Less Crew Quarters *78.53*
 Net Tonnage *2119.99*
 Less Engine Room *703.46*
 Register Tonnage *1416.53*
 as out on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING DECKED VESSEL.
HALF BREADTH (moulded) *18.50*
DEPTH from upper part of Keel to top of Upper Deck Beams *26.75*
GIRTH of Half Midship Frame (as per Rule) *41.00*
1st NUMBER *79.25*
1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet *290.5*
LENGTH *230.22*
2nd NUMBER *7.85*
PROPORTIONS—Breadths to Length *10.80*
 Depths to Length—Upper Deck to Keel *14.71*
 Main Deck ditto

Built at *Newcastle*
 When built *1881* Launched *28 June 80*
 By whom built *Messrs. Palmers & Co.*
 Owners *J. Temperley & Co.*
 Port belonging to *Newcastle*
 Destined Voyage *Rombay*
 If Surveyed while Building, Afloat, & in Dry Dock.

Official Number

LENGTH on deck as per Rule *290.6* **BREADTH**—Moulded *37*
DEPTH top of Floors to Upper Deck Beams *23.8 1/2*
 Do. do. Main Deck Beams *16.9*
 Horse Power of Engines *270*
 N° of Decks with flat laid *two*
 N° of Tiers of Beams *three*

	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
KEEL , depth and thickness <i>side bars 9 x 1 3/4</i>			<i>10 x 2 3/4</i>	<i>10 x 2 3/4</i>
STEM , moulding and thickness			<i>10 x 5 1/2</i>	<i>10 x 5 1/2</i>
STERN-POST for Rudder do. do.			<i>24 ins</i>	<i>24</i>
" for Propeller				
Distance of Frames from moulding edge to moulding edge, all fore and aft				
FRAMES , Angle Iron, for 1/2 length amidships	<i>5</i>	<i>3</i>	<i>8</i>	<i>5</i>
Do. for 1/4 at each end	<i>5</i>	<i>3</i>	<i>7</i>	<i>5</i>
REVERSED FRAMES , Angle Iron	<i>3 1/2</i>	<i>3</i>	<i>8</i>	<i>3 1/2</i>
FLOORS , depth and thickness of Floor Plate at mid line for half-length amidships			<i>36</i>	<i>6</i>
thickness at the ends of vessel			<i>36</i>	<i>6</i>
depth at 3/4 the half-bdth. as per Rule				
height extended at the Bilges			<i>7 1/2</i>	<i>7</i>
BEAMS , Upper, Spar, or Awning Deck			<i>3</i>	<i>3</i>
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			<i>3</i>	<i>3</i>
Single or double Angle Iron on Upper edge			<i>3</i>	<i>3</i>
Average space			<i>6</i>	<i>3</i>
BEAMS , Main, or Middle Deck			<i>6</i>	<i>3</i>
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			<i>6</i>	<i>3</i>
Single or double Angle Iron on Upper Edge			<i>6</i>	<i>3</i>
Average space			<i>9</i>	<i>9</i>
BEAMS , Lower Deck, Hold, or Orlop			<i>4</i>	<i>4</i>
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			<i>4</i>	<i>4</i>
Single or double Angle Iron on Upper Edge			<i>4</i>	<i>4</i>
Average space			<i>9</i>	<i>9</i>
KEELSONS Centre line, single or double plate, Intercoastal, Plates			<i>36</i>	<i>11</i>
" Rider 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				
BILGE Angle Irons			<i>6</i>	<i>4</i>
" do. Bulb Iron			<i>9</i>	<i>6</i>
" do. Intercoastal plates riveted to plating for length			<i>3</i>	<i>3</i>
BILGE STRINGER Angle Irons			<i>6</i>	<i>4</i>
Intercoastal plates riveted to plating for 1/2 length			<i>3</i>	<i>3</i>
SIDE STRINGER Angle Irons				
Transoms, material. <i>Keight heads. Naws Timbers. Iron</i>				
Stanchions, material. <i>Iron</i>				
Staircase, material. <i>Iron</i>				
Staircase, Bitt				

Flat Keel Plates, breadth and thickness *36 13 36 13*
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges
 of doubling at Bilge, or increased thickness, and length applied *11*
 fm up part of Bilge to lr. edge of Sh'rstrake. *11*
 Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. *40 13 40 13*
 Up. or Spar Dk Sh'rstrake, brdth & thickness *40 13 40 13*
 Butt Straps to outside plating, breadth & thickness *6 1/2 9 6 1/2 9*
 Lengths of Plating *6 frame spaces*
 Shifts of Plating, and Stringers *2 frame spaces*
 Gunwale Plate on ends of *4 1/2 9 4 1/2 9*
 Upper Deck Beams, breadth and thickness *4 x 4 x 9 4 x 4 x 9*
 Angle Iron on ditto *6/16 Iron Deck*
 Tie Plates fore and aft, outside Hatchways *Iron Deck*
 Diagonal Tie Plates on Beams No. of Pairs
 Planksheer material and scantling *Gutter Gunwale*
 Waterways do. do.
 Flat of Upper Deck do. *Yellow pine 4*
 How fastened to Beams *Galvanizing. Screw bolts & nuts*
 Stringer Plate on ends of Main or Middle Deck *4 1/2 10 4 1/2 10*
 Beams, breadth and thickness
 Is the Stringer Plate attached to the outside plating? *Yes*
 Angle Irons on ditto, No. *2*
 Tie Plates, outside Hatchways *Iron Deck*
 Diagonal Tie Plates on Beams, No. of pairs
 Waterways materials and scantlings *Cement*
 Flat of Middle Deck do. do. *Iron 6/16*
 How fastened to Beams *Riveted*
 Stringer Plates on ends of *Iron Deck, Hold*
 Beams *38 9 38 9*
 Is the Stringer Plate attached to the outside plating? *Yes*
 Angle Irons on ditto, No. *3, 3 & 4. as per Profile drawing*
 Stringer or Tie Plates, outside Hatchways
 Flat of Lower Deck *2 1/2 3/8*
 Ceiling betwixt Decks, thickness and material
 " in hold do. *7 1/2 7 1/2*
 Main piece of Rudder, diameter at head *4 3 3/4*
 do. at heel *4 3 3/4*
 Can the Rudder be unshipped afloat? *Yes*
 Bulkheads No. *7* Thickness of *7 x 6/16*
 " Height up *To upper deck and as per rule*
 " How secured to sides of ship *Between double frame*
 " Size of Vertical Angle Irons *3 1/2 x 3 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 *Bilges* to *gunwale* Riveted through plates with *7/8* in. Rivets, about *6 1/2* apart.
REVERSED ANGLE IRONS on floors and frames extend *near* middle line to *Main deck* and to *Gunwale* alternately
PLATES. 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 1/2* ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *7/8* in. diameter, averaging *3 1/16* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *4* ins. from centre to centre.
 Butts of *3* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *7/16* thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *7/8* in. diameter, averaging *3 1/16* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *4* ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. *Upper Sheerstrake, double or single riveted.*
 Butts of Main Sheerstrake, *quadruple* riveted for *1/2* length amidships. Butts of Upper or Spar Sh'rstrake, treble riveted length amidships.
 Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper Spar Stringer Plate, treble riveted for *1/2* length.
 Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting *Nil*
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Double & treble throughout*
 Waterway, how secured to Beams *As per sketch (Explain by Sketch, if necessary.)*
 Beams of the various Decks, how secured to the sides? *Curved down ends riveted to frames & stringer plates*
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Palmers' Iron*
 Manufacturer's name or trade mark, *James Sibson & Co. Ltd*
 The above is a correct description.

Builder's Signature, *James Sibson & Co. Ltd*
 Surveyor's Signature, *James Sibson*
 Surveyor to Lloyd's Register of British and Foreign Shipping.
 No. of Breasthooks, *4* Crutches, *3 & 2 transoms*
 Mxc778-0273

Refined head (1881) sent to London

Workmanship. Are the butts of plating planed or otherwise fitted? *All Butts, & edges of outer shades 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 very well*
 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 very few*

Masts, Bowsprit, Yards, &c., are of 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 *Foremast 85' 6" by 25 ins diam, Main Mast 77' 3" by 24 ins diam. Plates 11' 4 1/2 long 7/16 & 9/16 in thickness, seams double riveted and Butts treble riveted; doubled at partners with 8/16 plates. Masts of iron Palmers Patent*

NUMBER for EQUIPMENT	CABLES, &c.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.		Test per Certificate	Weight req'd per Rule.	Machine where Tested & Suprntd.
						No.	Weight. Ex. Stock.			
270	Chain	1 7/8	63 1/4	1 1/16		1	33.1.0	32.11.1.0	34.0.0	
90	Iron Str'm Chain	1 1/8	22 3/4	75-1 1/2		1	35.0.7	32.8.1.21		
90	Ditto do.	3/4	34 1/2			1	29.3.7	28.9.2.21	29.0.0	
120	Hmpn Strm Cbl	5 1/2		9 1/2		1	11.0.7	12.18.2.0	10.3.0	
90	Hawser	11		12		1	5.2.14	7.18.1.21	5.2.0	
90	Towlines	12		8		1	2.2.0	5.0.0.0	2.2.0	
90	Warp	9 1/2								
90	Warp	7 1/2								

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *2* Long Boats and *2* others.
 The Windlass is *good*
 Engine Room Skylights.—How constructed? *On Bridge deck*
 What arrangements for deadlights in bad weather? *Solid Oak shutters & thick circular glass*
 Coal Bunker Openings.—How constructed? *Plate Hatchway* How are lids secured? *Solid latches* Height above deck? *30 ins*
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports & Scuppers each side*

Cargo Hatchways.—How formed? *Iron plate comings & Headledges, Quarterhatch 16.0 x 12.0 & 16.0 x 12.0*
 State size *Main Hatch 24.0 x 12.0* Forehatch *12.0 x 12.0*
 If of extraordinary size, state how framed and secured?
 What arrangement for shifting beams? *Deep web frames as per sketch*

Hatches, If strong and efficient? *2 3/4 Solid*
 Order for Special Survey No. *1510*
 Date *7 Jan'y 1881*
 Order for Ordinary Survey No. *449*
 Date *24 Sept 1881*
 No. *449* in builder's yard.

General Remarks (State quality of workmanship, &c.) *This Vessel has been constructed in accordance with the approved tracings, & the rules; on the cellular bottom principle, with double bottom all fore and aft, a partly enclosed Top-gallant Forecastle 34' 3" in length; An open Bridge 52' 0" in length, and full Poop about 26' 0" in length. The Sheerstrake is quadruple riveted for 1/2 length amidships, and the upper deck is plated with iron beneath the wood deck; The double bottom has been tested to a Head of water not less than the height of the load-line & proved satisfactory. The workmanship and materials throughout the structure are of a good description.*

State if *one, two, or three* decked vessel, *if open, or awning decked*; and the lengths of poop, fore-castle, *and the length of double, ~~and the length of double,~~*
 How are the surfaces preserved from oxidation? *Inside Portland cement to upper turn Outside 4 Coats of paint*
 I am of opinion this Vessel should be Classed *100 A.I. of Rules & paint above*

The amount of the Entry Fee ... £ *5 : 0 : 0* is received by me, *W.E.S.*
 Special ... £ *48 : - : -* *24 Sept 1881*
 Certificate *fiats* - : - : -
 (Travelling Expenses, if any, £ - : - : -)
 Committee's Minute
 Character assigned
 Tuesday, September, 27th 1881.
 James Sibson
 Surveyor to Lloyd's Register of British and Foreign Ships
 It is respectfully sub-
 mitted that the above
 vessel is classed 100 A.I. as re-
 quired by the Rules of the
 Register of British and Foreign
 Shipping.