

IRON OR STEEL SHIP.

(Received at London Office, 9830)

No. 9830 Survey held at Bowling Date of writing Report 3 May 1890 Port of Glasgow
Date, First Survey 14 Nov. 1889 Last Survey 2 May 1890
On the Iron Twin Screw "Bute No 2" Rig Smack
Master John Buie
Year of appointment 1890
Built at Bowling When built 1890 Launched 17 April 1890
By whom built Scott & Co. Owners J. Rodger
Managers J. Rodger
Residence Seaview, Largo, Ayrshire
Port belonging to Glasgow
Destined Voyage Coasting
Surveyed while Building, Afloat, or in Dry Dock.

TONNAGE under Tonnage Deck 147.53 ONE, OR TWO DECKED, THREE DECKED VESSEL,
SPAR, OR AWNING DECKED VESSEL.
Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.
Total under Upper Dk. 21.16
Do. of Poop
Do. of Raised Qr.
Do. of Break
Do. of Bridge House
Do. of Houses on Deck
Do. of excess of Hatchways
Do. of Forecastle
Gross Tonnage 169.86
Less Crew Space 11.19
Less Engine Room 127.84 139.03
Register Tonnage 30.83
as cut on Beam

Half Breadth (moulded) 11.00
Depth from upper part of Keel to top of Upper Deck Beams 9.66
Girth of Main Midship Frame (as per Rule) 17.91
1st Number 38.57
1st Number, if a 2 Decked Vessel deduct 7 feet
Length 114.83
2nd Number 4428.9
Proportions Breadths to Length 5.21
Depths to Length—Upper Deck to Keel 11.68
Main Deck ditto

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH top of Floors to Upper	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid
on deck as	114	10	Moulded...	22	0	Deck Beams	8	8½	Engines ...	50	Nº. of Tiers of Beams
per Rule ...						Do. do. Main Deck Beams					
Dimensions of Ship per Register, length,	116.4		breadth,	22.0		depth,	8.7				
KEEL, depth and thickness			Inches in Ship.			Inches per Rule.			Moulded depth	9.0	
STEM, moulding and thickness			7 x 1¼			6¾ x 1¼			Flat Keel Plates, breadth and thickness		
STERN-POST for Rudder do. do.			7 x 1¼			6 x 1¼			PLATES in Garboard Strakes, br'dth & thickness	30	6
" " for Propeller			7 x 1¼			6 x 1¼			" From Garboard to upper part of Bilges	6	6
Distance of Frames from moulding edge to									" Of d'bling at Bilge, or increased thickness,		
moulding edge, all fore and aft	21								and length applied		
FRAMES, Angle Iron, for ½ length amidships	3	2½	5	3	2½	5			" From up. prt of Bilge to l.r. edge of Sh'rstrake	6.5	6.5
Do. for ¼ at each end	3	2½	5	3	2½	5			" Main Sheerstrake, breadth and thickness	30	8
REVERSED FRAMES, Angle Iron	2½	2½	4	2½	2½	4			" Of d'bling at Sh'str. & l.r. applied		
FLOORS, depth and thickness of Floor Plate	11½		5	11½		5			" From M'n. to Up. of Spar Dk. Sh'rstrake		
at mid line for half length amidships									" Up. or Spar Dk. Sh'rstrake, br'dth & thickn's	9¾ x 9/16	9¾ x 9/16
" thickness at the ends of vessel									Butt Straps to outside plating, breadth & thickness	8 x 1.5	8 x 1.5
" depth at ¾ the half-bdth. as per Rule	5¾		5¾			5			Lengths of Plating	7	Frame Spaces
" height extended at the Bilges	23		23						Shifts of Plating, and Stringers	2	2 x 4 spaces
BEAMS, Upper, Spar, or Awning Deck	5½	3	7	5½	3	7			Gunwale Plate on ends of Awning, Spar, or	20	6
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron									Upper Deck Beams, breadth and thickness		
Single or double Angle Iron on Upper edge									Angle Iron on ditto	3 x 3 x 7/8	3 x 3 x 7/8
Average space	42		42						Diagonal Tie Plates on Beams No. of Pairs	7	6
BEAMS, Main, or Middle Deck									Flat of Up., Spar, or Awning Dk.	3	2
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron									How fastened to Beams		
Single or double Angle Iron on Upper edge									Stringer Plate on ends of Main or Middle Deck		
Average space									Beams, breadth and thickness		
BEAMS, Lower Deck									In the Stringer Plate attached to the outside plating?		
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron									Angle Irons on ditto, No.		
Single or double Angle Iron on Upper edge									Tie Plates, outside Hatchways		
Average space									Diagonal Tie Plates on Beams, No. of pairs		
BEAMS, Hold, or Orlop									Flat of Middle Deck do.		
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron									How fastened to Beams		
Single or double Angle Iron on Upper edge									Stringer Plates on ends of Lower Deck, Hold or		
Average space									Orlop Beams		
KEELSONS Centre line, single or double plate,	8½		9	8½		9			In the Stringer Plate attached to the outside plating?		
box, or Intercoastal, Plates									Angle Irons on ditto, No.		
" Rider Plate	6½		7	6½		7			Stringer or Tie Plates, outside Hatchways		
" Bulb Plate to Intercoastal Keelson	3	3	6	3	3	6			Flat of Lower Deck		
" Angle Irons									Ceiling between Decks, thickness and material	2	2
" Double Angle Iron Side Keelson									" in hold do.		
" Side Intercoastal Plate									Main piece of Rudder, diameter at head	3½	3½
" do. Angle Irons									do. at heel	2	2
" Attached to outside plating with angle iron									Can the Rudder be unshipped afloat?	Yes	
BILGE Angle Irons	3	3	6	3	3	6			Bulkheads No. 3	No. per Rule 3	
" do. Bulb Iron	6½		6	6½		6			" Thickness of	1/4	
" do. Intercoastal plates riveted to									" Height up	to deck	
plating for length									" How secured to sides of ship	by double frame angle	
BILGE STRINGER Angle Irons	3	3	6	3	3	6			" Size of Vertical Angle Irons	3 x 2½ x 7/8	and distance apart 30 ins.
Intercoastal plates riveted to plating for									" Are the outside Plates doubled two spaces of Frames in length?	Yes	
length											
SIDE STRINGER Angle Irons											

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 5/8 in. Rivets, about 5 apart.
The REVERSED ANGLE IRONS on floors and frames extend across middle line to bilge stringers and to way of bridge fore and aft
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 7/8 in. diameter, averaging 4 3/8 ins. from centre to centre.
" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 5/8 in. diameter, averaging 2 3/8 ins. from centre to centre.
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 1/2 ins. from centre to centre.
" Butts of one Strake at Bilge for 1/2 length, double riveted with Butt Straps 1/6 thicker than the plates they connect.
" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 5/8 in. diameter, averaging 3 2 3/8 ins. from cr. to cr.
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 5/8 in. diameter, averaging 3 2 1/2 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 length amidships. Butts of Upper or Spar Sheerstrake, double riveted. length amidships.
" Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length amidships.
" Breadth of laps of plating in double riveting 3 1/4 4 1/2 Breadth of laps of plating in single riveting 2 1/4
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted Yes No. of Breasthooks, 3 Crutches, 2
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good. Angles. Phoenix & Clifton
Manufacturer's name or trade mark, Plates. Hill and Stockton Malleable
The above is a correct description.
Builder's Signature, Scott & Co. Surveyor's Signature, L. Shear
Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed and fitted*
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 only at the butts*

Masts, Bowsprit, Yards, &c., are *all* 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
P. Pine Pole.

Number for Equip- ment.	Letter for do.	CABLES, &c.			Test per Certificate. Tons.	Fathoms & Inches per Rule.	Machine where Tested and Superintendent, also Name of Chain Maker.	ANCHORS. Number of Certificate State if any and which Anchors are Stockless.)	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Machine where Tested and Superintendent, also Name of Anchor Maker.
		Number of Certificate.	Fathoms.	Inches.								
4401	C	19113	60	13/16	17 1/2	11 1/2	10/3/90	27431	5.0.113	7 1/2		10/3/90
		19114	75	"	"	"	20/3/90	27432	1.1.113	7 1/2		20/3/90
		19115					20/3/90					
		Iron Stream Chain or Steel Wire ..	45	9/16	7 1/2	3 3/4	45. 9/16					
		Hempen Str'm Cable										
		TOWLINE— Hemp or Steel Wire	75	6			75. 6					
		Hawser	90	4			90. 4					
		Warp	90	2 1/2								
		Good										

Standing and Running Rigging *are* sufficient in size and *good* in quality. She has *2* Long Boats and
The Windlass is *Iron patent* Capstan *good* and Rudder *good* Pumps *good and sufficient*
Engine Room Skylights.—How constructed? *Iron Casings. Leak over* How secured in ordinary weather? *Straps & screw bolts*
What arrangements for deadlights in bad weather? *Short glass panes with gratings over*
Coal Bunker Openings.—How constructed? *Cast iron frame* How are lids secured? *Bayonet Coupling* Height above deck? *Flush*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *One lubber's port 24" x 16" also 2 scuppers on each side.*
Cargo Hatchways.—How formed? *Iron coamings and headledges* Hatches, If strong and efficient? *Solid 3"*
State size Main Hatch *14.0" x 8.0"* Forehatch *✓* Quarterhatch *✓*
If of extraordinary size, state how framed and secured ... *✓* What arrangement for shifting beams? *good.*

Order for Special Survey No. <i>2323</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	1889. Nov. 14. 20. 27. Dec. 6. 9. 13. 17. 27.
Date <i>1st Oct. 1889</i>	2nd. On the plating during the process of riveting	1890 Jan. 9. 10. 15. 20. 22. 28. 30.
Order for Ordinary Survey No. <i>✓</i>	3rd. When the beams were in and fastened, and before the decks were laid...	Feb. 5. 11. 13. 18. 19. 21. 26. 28.
Date <i>✓</i>	4th. When the ship was complete, and before the plating was finally coated or cemented...	March 6. 7. 11. 14. 18. 21. 25. 27.
No. <i>78</i> in builder's yard.	5th. After the ship was launched and equipped	April 1. 10. 11. 14. 18. 21. 28. May 2.
State dates of letters respecting this case		Total No. of Visits <i>39</i>

General Remarks (State quality of workmanship, &c.)
This is an iron twin screw steamer with a topmasted forecabin and bridge house. She has been built in accordance with the approved plans attached hereto and with the Rules generally. The materials and workmanship are good.

The Survey Report has been kept back awaiting particulars of tonnage.

How are the surfaces preserved from oxidation? Inside *Paint and Cement* Outside *Paint and Composition*

Particulars for Record in R.B.—Length of Poop *✓* ft., R.Q.D. *✓* ft., Bridge Dk., *40* ft., F'castle *17* ft.; No. of Dks. (excluding spar, awn, &c.) *1*
Material of dks. *P. Pine* If spar, awn, dk., &c. *✓* Material of spar, awn, dk., &c. *✓*; No. of tiers of beams (with and without dks. laid) *1*
Official No. *97632*; Signal Letters *✓* If double bottom, state particulars on separate form.

I am of opinion this Vessel should be Classed ** 90 A*
The amount of the Entry Fee£ *1* : : : is received by me, *[Signature]*
Special£ *4* : *19* : : *15/5/1890*
(to be sent as per margin). Certificate ... *✓* : : : *22. 5. 90*
Travelling Expenses, if any, £

Committee's Minute *TUES 20 MAY 1890* *FRI 11 SEP 1891*
Character assigned *90 A 1*
+ Rule 5/90
Lancet
Surveyor to Lloyd's Register of British and Foreign Shipping.
It is submitted that this vessel appears eligible to be classed 90.A.1 as recommended. N.B. (Particulars appended) 10th. J.H. 17/5/90