

IRON SHIP.

(Received at London Office, ...)

No. 3870 Survey held at Aberdeen Date, First Survey 8 Dec^r 1887 Last Survey 2 June 1888On the Schooner Rigged Steel S.S. INANDA (Spar Deck)TONNAGE under Tonnage Deck } 1693-04
Ditto of Third, Spar, or Awning Deck. }
Ditto of Poop, or Raised Qr. Deck }
Ditto of Houses }
Ditto of Deck }
Ditto of Forecastle }
Gross Tonnage } 1758-23
Less Crew Space } 1671-23
Less Engine Room } 562-63
Register Tonnage } 1128-37
as cut on Beam }ONE, OR TWO DECKED, THREE DECKED VESSEL,
SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) ... 17-5

Depth from upper part of Keel to top of Upper Deck Beams ... 17-87

Girth of Half Midship Frame (as per Rule) ... 31-25

1st Number ... 66-62

1st Number, if a 3-Decked Vessel ... deduct 7 feet

Length ... 268-25

2nd Number ... 17870

Proportions— Breadths to Length ... 7-6

Depths to Length—Upper Deck to Keel ... 10-7

Main Deck ditto ... 15-

Master C Stuart 83-88.Built at AberdeenWhen built 1888 Launched 9 MayBy whom built Hall Russell & Co.Owners J. T. Reunier & SonResidence Aberdeen & LondonPort belonging to AberdeenDestined Voyage Natal

If Surveyed while Building, Afloat, or in Dry Dock.

while building

LENGTH on deck as per Rule ... 268 3 BREADTH Moulded ... 35 - DEPTH top of Floors to Upper Deck Beams ... 23 2 1/2 Do. do. Main Deck Beams ... 16 2 1/2 Power of Engines ... 220 No. of Decks with flat laid ... Two No. of Tiers of Beams ... Three

Dimensions of Ship per Register, length, 270-4 breadth, 35-25 depth, 23-05

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2	Flat Keel Plates, breadth and thickness	36 1/2	14 36 14
STEM, moulding and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2	PLATES in Garboard Strakes, br'dth & thickness	44	11 36 11
STERN-POST for Rudder do. do.	8 1/2 x 5	8 1/2 x 5	From Garboard to upper part of Bilges	10	
" " for Propeller	24	24	Of d'bling at Bilge, or increased thickness, and length applied		
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	From up. prt of Bilge to lr. edge of Sh'rstrake	10	10 10
FRAMES, Angle Iron, for 1/2 length amidships	4 3 7 4 3 7	4 3 7 4 3 7	Main Sheerstrake, breadth and thickness	40	12 40 12
Do. for 1/2 at each end	3 3 6 3 3 6	3 3 6 3 3 6	Of d'bling at Sh'stk. & lng. applied	24	10 10
REVERSED FRAMES, Angle Iron	3 3 6 3 3 6	3 3 6 3 3 6	From M'n. to Upr. or Spar Dk. Sh'rstrake	40	11 40 10 11
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	20 9-8 20 9-8	20 9-8 20 9-8	Up. or Spar Dk Sh'rstrake, br'dth & thicken'ss	21 10	15 6 7 19 6 7 15 6 7
" thickness at the ends of vessel	10 10	10 10	Butt Straps to outside plating, breadth & thickness		
" depth at 3/4 the half-bdth. as per Rule	40 40	40 40	Lengths of Plating	5 frames	
" height extended at the Bilges	40 40	40 40	Shifts of Plating, and Stringers	2 frames	
BEAMS, Upper, Spar, or Awning Deck	7 7 7 7 7 7	7 7 7 7 7 7	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	44	8 44 8
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 6 3 3 6	3 3 6 3 3 6	Angle Iron on ditto	4 x 4 x 9	4 x 4 x 9
Single or double Angle Iron on Upper edge	Two frames	Two frames	Tie Plates fore and aft, outside Hatchways	26 x 13	8 26 x 13 8
Average space	Two frames	Two frames	Diagonal Tie Plates on Beams No. of Pairs		
BEAMS, Main, or Middle Deck	6 1/2 3 9	6 1/2 3 9	Flat of Up., Spar, or Awning Dk.	Yellow Pine	3 1/2 3 1/2
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 6 3 3 6	3 3 6 3 3 6	How fastened to Beams	bolts	
Single or double Angle Iron on Upper edge	6 1/2 3 9	6 1/2 3 9	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	139	10 39 10
Average space	Every frame	Every frame	Is the Stringer Plate attached to the outside plating?	Yes	
BEAMS, Lower Deck	7 7 7 7 7 7	7 7 7 7 7 7	Angle Irons on ditto, No. 2	4 x 4 x 9	4 x 4 x 9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 6 3 3 6	3 3 6 3 3 6	Tie Plates, outside Hatchways	Deck increased	1/20 lower strake
Single or double Angle Iron on Upper edge	3 3 6 3 3 6	3 3 6 3 3 6	Diagonal Tie Plates on Beams, No. of pairs		
Average space	as per plan	as per plan	Flat of Middle Deck	do Steel	entire no wood
BEAMS, Hold, or Orlop	9 1/2 9 9 1/2 9	9 1/2 9 9 1/2 9	How fastened to Beams	riveted	
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4 4 8 4 4 8	4 4 8 4 4 8	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	32	9 32 9
Single or double Angle Iron on Upper edge	4 4 8 4 4 8	4 4 8 4 4 8	Is the Stringer Plate attached to the outside plating?	Yes	
Average space	as per plan	as per plan	Angle Irons on ditto, No. 2	4 x 4 x 9	4 x 4 x 9
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	13 13 13 13 13 13	13 13 13 13 13 13	Stringer or Tie Plates, outside Hatchways		
" Rider Plate	10 3/4 12 10 3/4 12	10 3/4 12 10 3/4 12	Flat of Lower Deck		
" Bulb Plate to Intercoastal Keelson	5 4 9 5 4 9	5 4 9 5 4 9	Ceiling betwixt Decks, thickness and material	1 1/2	Red Pine
" Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9	" in hold do. do.	2 1/2	2 1/2
" Double Angle Iron Side Keelson	5 4 9 5 4 9	5 4 9 5 4 9	Main piece of Rudder, diameter at head	6 1/4	6 1/4
" Side Intercoastal Plate	5 4 9 5 4 9	5 4 9 5 4 9	do. at heel	3 1/2	3 1/4
" do. Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9	Can the Rudder be unshipped afloat?	Yes	
" Attached to outside plating with angle iron	3 3 8 3 3 8	3 3 8 3 3 8	Bulkheads No. 5 No. per Rule 4		
BILGE Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9	" Thickness of	6 1/2	iron
" do. Bulb Iron	5 4 9 5 4 9	5 4 9 5 4 9	" Height up	76	Spar Deck
" do. Intercoastal plates riveted to plating for 3/5 length	5 4 9 5 4 9	5 4 9 5 4 9	" How secured to sides of ship	double bar	
BILGE STRINGER Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9	" Size of Vertical Angle Irons	4 x 3 x 7/16	and distance apart 30 ins.
" Intercoastal plates riveted to plating for 1/2 length	5 4 9 5 4 9	5 4 9 5 4 9	" Are the outside Plates doubled two spaces of Frames in length?	Yes	
SIDE STRINGER Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9			

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 7/8 in. Rivets, about 7 apart.The REVERSED ANGLE IRONS on floors and frames extend from middle line to Spar Deck and to Main Deck alternatelyKEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? YesPLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 4 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 1/4 ins. from centre to centre.Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/8 ins. from centre to centre.Butts of all Strakes up to Main Sheerstrake for 1/2 length, treble riveted with Butt Straps 3/10 thicker than the plates they connect.Edges from Bilge to Main Sheerstrake, worked clencher, double single riveted; with rivets 7/8 in. diameter, averaging 3 1/4 ins. from cr. to cr.Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/8 ins. from cr. to cr.Edges of Main Sheerstrake, double single riveted. Upper Sheerstrake, double single riveted.Butts of Main Sheerstrake, double riveted for entire 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 1/2 Breadth of laps of plating in single riveting 5Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Table & ditto No. of Breasthooks, on all Stringer Crutches, on upperWhat description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good SteelManufacturer's name or trade mark, Angles Dorman Long & Co.The above is a correct description. Plates Cornish Iron Co.Builder's Signature, Hall Russell & Co. Surveyor's Signature, John H. Heck

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

3870 Abn

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

Masts, Bowsprit, Yards, &c., are *of 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 *Total Length of Foremast 104'-9". Do Mainmast 99 ft. Two plates in the round. Butts little & edges double riveted, doubled at partners with the plates, Thick of plates 7 1/2 -*
Makers of Material Consell Iron Co

NUMBER & LETTER for EQUIPMENT 21626		Test per Certificate.		Inches per Rule.		Machine where Tested and Superintendent, also Number of Certificate.		ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
SAILS.		CABLES, &c.											
N ^o .		Fathoms.	Inches.										
<i>One Suit.</i>	Fore Sails,	Chain	270	1 3/4	77 1/2 x 55 1/2	1 3/4		Bower					
		Iron Stream Chain	75	1 1/2	30 1/2 x 20 1/2	1 1/2		Anchors	1	31-1-14	29-13-0-14	30	
	Fore Top Sails,	or Steel Wire							1	28-2-21	27-13-3-0	30	
	Fore Topmast Stay Sails,	or Hempten Strm							1	26-1-14	25-18-0-14	25 1/2	
		Cable	120	10		11 or			1	10-0-0	12 tons	9 1/2	
		Towline, Hemp.	90	3 1/2	26 L	3 1/2		Stream					
		Steel Wire	90	3 1/2				Anchor					
	Main Sails,	Hawser	90	7 1/2		9		Kedge	1	4-3-21	7-7-2-0	4 3/4	
	Main Top Sails, and	Warp	90	6		7 1/2		2nd Kedge.	1	2-2-14	5-2-2-0	2 1/2	
		quality	75	5									

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *four* Boats and *4* others.

The Windlass is *Harfield's Patent* Capstan and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *of lead bolted to iron framing* How secured in ordinary weather? *always secured*

What arrangements for deadlights in bad weather? *strong bull's eyes in the solid shutters*

Coal Bunker Openings. How constructed? *iron castings* How are lids secured? *hatches & tarpaulins* Height above deck? *11 1/2*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *open rails & stanchions fore & aft*

Cargo Hatchways. How formed? *iron coaming & huddles*

State size **Main Hatch** *24 ft x 14 ft* Forehatch *18 ft x 11.75 ft* Quarterhatch *22 ft x 11.75 ft*

If of extraordinary size, state how framed and secured? *ordinary size, Spar deck plates over in way of Main hatch*

What arrangement for shifting beams? *FH. Two fore & after & 1 W Plate, M & QH. Two fore & after & 2 W Plates.*

Hatches, If strong and efficient? *yes*

Order for Special Survey No. *606*
Date *25-11-87*
Order for Ordinary Survey No. *247*
Date *17-11-87*
No. *247* in builder's yard.
State dates of letters respecting this case *17-11-87 - 1-3-88. 2-3-88 - 9-12-87.*

General Remarks (State quality of workmanship, &c.) *This vessel has been built under Special Survey, in accordance with the rules, approved tracings & Secretary's letter 17.11.1887. She is built of steel & all the requirements in connection with steel vessels have been carried out. The material & workmanship is good.*

She has ordinary ballast tanks in the fore & after holds & a deep tank in the main hold. The same tested by water to the upper deck & found Sat.

She is a spar deck vessel, having an upper wood deck & a main deck of steel not covered with wood, she has 3 web frames in E+B space extending up to main deck & one in way of main hatch extending to upper deck.

She has a low monkey forecandle for anchors only & a bridge deck 38 ft long.

Tracings of Long's plan & midship section forwarded 14 May 1888.

Tracings of Marks, Pumping Arrangements, Deep tank. Arrangements of after bulkhead & Faying certificate forwarded herewith.

The Society's Freeboard W 6.2, S 5.11, 5 1/2 F W has been painted on, verified & stamped in.

State if one, two, or three decked vessel, and the lengths of poop, bridge, forecandle, 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. Spar Deck Steel & the Freeboard to be recorded in R Book*

The amount of the Entry Fee *£ 4 : - : is received by me,*

Special *£ 67 : 5 : 6* *6/6/1888*

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

(Travelling Expenses, if any, £ ...)

Committee's Minute *TUES 5 JUNE 1888*

Character assigned *100 A.1 Steel Spar Deck*

+ d m b 6/88 *100 A.1 Steel Spar Deck*

Laecp *3 1/2 Bms*

Record Freeboard *Lloyd's Register*

Foundation