

IRON SHIP.

N^o 5514 Survey held at Glasgow Date, First Survey Feb'y 17th Last Survey 11th October 1881

On the S. S. "Princess Alexander"

TONNAGE under 1986 1986.19 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Spar, OR AWNING-DECKED VESSEL.
 Ditto of Third, Spar, or Awning Deck } 912.84 Half Breadth (moulded) 19.4
 Ditto of Poop, or Raised Or Deck } 289.80 Depth from upper part of Keel to top of Upper Deck Beams 23.3
 Ditto Houses on Deck } 18.85 Girth of Half Midship Frame (as per Rule) 36.7
 Ditto Forecastle } 1.25 1st Number 79.4
 Gross Tonnage 2977.93 1st Number, if a 3-Decked Vessel deduct 7 feet
 Less Crew Space 119.97 Length 348
 Less Engine Room 952.94 2nd Number 27631
 Register Tonnage as cut on Beam } 1905.02 Proportions— Breadths to Length 8.9
 Depths to Length—Upper Deck to Keel
 Main Deck ditto 14.9

Master M. C. Braat
 Built at Glasgow
 When built 1881 Launched 23rd Aug 1881
 By whom built Jno. Elder & Co.
 Owners Stoomvaart Maatschappij Nederland
 Residence Amsterdam
 Port belonging to Amsterdam
 Destined Voyage Amsterdam
 Surveyed while Building, Afloat, or in Dry Dock.
 Built under Special Survey

LENGTH on deck as per Rule 348 Feet. Inches. BREADTH Moulded 38 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 29 Feet. Inches. 6 Power of Engines 400 Horse. N^o. of Decks with flat laid Three N^o. of Tiers of Beams Three

Dimensions of Ship per Register, length, 345.5 breadth, 38.2 depth, 21.2

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	10 x 2 3/4	10 x 2 3/4
STEM, moulding and thickness	10 x 2 3/4	11 x 2 3/4
STERN-POST for Rudder do. do.	10 x 6	10 x 5 1/2
" " for Propeller	10 x 6	11 x 5 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24
CLIPS, Angle Iron, for 1/2 length amidships	5 3 8	5 3 8
Do. for 1/2 at each end	5 3 7	5 3 7
REVERSED FRAMES, Angle Iron	3 1/2 3 8	3 1/2 3 8
JOISTS, depth and thickness of Floor Plate	24 x 10	24 x 10
Mid line for half length amidships	-	-
Thickness at the ends of vessel	-	-
Depth at 3/4 the half-bdth. as per Rule	12	12
Height extended at the Bilges	Twice	Twice
BEAMS, Upper, Spar, or Awning Deck	7 1/2 x 7	7 1/2 x 7
Single or double Angle Iron, Plate or Tee Bulb Iron	3 3 6	3 3 6
Angle or double Angle Iron on Upper edge	48	48
Average space	9 1/2	9 1/2
BEAMS, Main, or Middle Deck	9 1/2 x 9	9 1/2 x 9
Single or double Angle Iron, Plate or Tee Bulb Iron	3 1/2 3 7	3 1/2 3 7
Single, or double Angle Iron, on Upper Edge	48	48
Average space	9 1/2	9 1/2
BEAMS, Lower Deck	9 1/2 x 9	9 1/2 x 9
Single or double Angle Iron, Plate or Tee Bulb Iron	3 1/2 3 7	3 1/2 3 7
Single or double Angle Iron on Upper Edge	48	48
Average space	9 1/2	9 1/2
BEAMS, Hold, or Orlop	-	-
Single or double Angle Iron, Plate or Tee Bulb Iron	-	-
Single or double Angle Iron on Upper Edge	-	-
Average space	-	-
KEELSONS Centre line, single or double plate	26 x 13	26 x 13
Box, or Intercoastal, Plates	21 x 12	21 x 12
" Rider Plate	9 x 10	9 x 10
" Bulb Plate to Intercoastal Keelson	6 4 10	6 4 10
" Angle Irons	6 4 10	6 4 10
" Double Angle Iron Side Keelson	6 4 10	6 4 10
" Side Intercoastal Plate (Bulb 9 1/2 x 9 for 1/2 length)	9	9
" do. Angle Irons	3 1/2 3 8	3 1/2 3 8
" Attached to outside plating with angle iron	6 4 9	6 4 9
WEDGE Angle Irons	6 4 9	6 4 9
" do. Bulb Iron	9 1/2 x 9	9 1/2 x 9
" do. Intercoastal plates riveted to plating for 1/2 length	-	-
BILGE STRINGER Angle Irons	6 4 9	6 4 9
Intercoastal plates riveted to plating for 3/5 length	-	-
WIDE STRINGER Angle Irons	-	-

Flat Keel Plates, breadth and thickness	39	13	36	13
PLATES in Garboard Strakes, br'dth & thickness	11-12	-	11-12	-
" From Garboard to upper part of Bilges	11	260	11	-
" Of d'bling at Bilge, or intermediate thickness and length applied	11-12	-	11-12	-
" From up. prt of Bilge to l.r. edge of Sh'rstrake	43 1/2	15	40	15
" Main Sheerstrake, breadth and thickness	18	12	18	12
" Of d'bling at Sh'stk. & lng. applied	8	-	8	-
" From M'n. to Up. or Spar Dk. Sh'rstrake	47 1/2	11	40	11
" Up. or Spar Dk Sh'rstrake, br'dth & thickn'ss.	16	11	16	11
Butt Straps to outside plating, breadth & thickness	6	5	6	5
Lengths of Plating	Two spaces	2 spaces	Two spaces	2 spaces
Shifts of Plating, and Stringers	68	10	48	10
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	3 1/2 x 3 1/2 x 8	3 1/2 x 3 1/2 x 8	3 1/2 x 3 1/2 x 8	3 1/2 x 3 1/2 x 8
Angle Iron on ditto	13	10	13	10
Tie Plates fore and aft, outside Hatchways	13	10	13	10
Diagonal Tie Plates on Beams No. of Pairs	3	3	3	3
Flat of Upper, Spar, or Awning Dk. <u>Seak</u>	3	3	3	3
Beams riveted in way of bolts and bolts <u>Rebeld. and</u>	7 1/2	6	7 1/2	6
How fastened to Beams	49	10	49	10
Stringer Plate on ends of Main Middle Deck	42	9	42	9
Beams, breadth and thickness	Yes	Yes	Yes	Yes
Is the Stringer Plate attached to the outside plating?	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Angle Irons on ditto, No. 2	7 1/2	6	7 1/2	6
Tie Plates, outside Hatchways	16	10	16	10
Diagonal Tie Plates on Beams, No. of pairs	3 1/2	-	3 1/2	-
Flat of Middle Deck* do. do.	42	9	42	9
How fastened to Beams	Yes	Yes	Yes	Yes
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Is the Stringer Plate attached to the outside plating?	16	10	16	10
Angle Irons on ditto, No. 2	3 1/2	-	3 1/2	-
Stringer or Tie Plates, outside Hatchways	Joiner work	-	Joiner work	-
Flat of Lower Deck* <u>Pitch Pine</u>	8	8	8	8
Ceiling betwixt Decks, thickness and material	4 1/2	4	4 1/2	4
" in hold <u>Pitch Pine</u> and <u>Pitch Pine</u>	Yes	Yes	Yes	Yes
Main piece of Rudder, diameter at head	2 1/2	-	2 1/2	-
do. at heel	4 1/2	4	4 1/2	4
Can the Rudder be unshipped afloat?	6	No. per Rule	4	-
Bulkheads No. 6	Thickness of 7 and 9/16	Forward and after ones 8 x 7/16	-	-
" Thickness of 7 and 9/16	Height up	Forward one to Spar deck, others to main deck	-	-
" Height up	How secured to sides of ship	By double frames	-	-
" How secured to sides of ship	Size of Vertical Angle Irons	3 1/2 x 3 1/2 and distance apart 30 ins.	-	-
" Size of Vertical Angle Irons	Are the outside Plates doubled two spaces of Frames in length?	Yes	-	-
" Are the outside Plates doubled two spaces of Frames in length?	-	-	-	-

FRAMES extend in one length from Keel to Gunwale
 REVERSED ANGLE IRONS on floors and frames extend from middle line to above main deck and to spar deck 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 7/8 in. diameter, averaging 3 3/8 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/8 ins. from centre to centre.
 Butts of all Strakes at Bilge for 174 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 3/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/8 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or treble riveted.
 Butts of Main Sheerstrake, treble riveted for 174 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 210 length amidships.
 Butts of Main Stringer Plate, treble riveted for 174 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 174 length.
 Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting -
 of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes No. of Breasthooks, Six Crutches, Four

Portion of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best
 name or trade mark, Angles and Bulbs "Mossend" and "Parkhead," Plates "Dalzell" and "Gordon"
 is a correct description.
 Signature, John Elder & Co. Surveyor's Signature, Sam'l. Lanthorn
 Lloyd's Register of British and Foreign Shipping.

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

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anship. Are the butts of plating planed or otherwise fitted? *Planed*

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

allings between the ribs and plates solid single pieces? *Yes*

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*

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 *Three Masts Barque rigged*

"Consett" Iron, mast plate quality, hot & cold tested { Fore Mast 90.0 x 27 - 20 - 20 - 16 } *Three plates in circle 76 1/2 diameter riveted edge to edge and double*
Main Mast 90.9 x 27 - 20 - 20 - 16 *riveted butts, butt straps 1/6 thick*
Mizen Mast of Pine 53 x 20 *Three plates 3 angles to each in from keel to hounds 3 1/2 x 3 1/2*

NUMBER for EQUIPMENT 33199		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILES.												
CABLES, &c.												
N ^o .	Chain	300 1/2	72	300-2			Bower Anchors	6162	38.2.14	34.17.0.0	38	
Fore Sails,	Iron Stream Chain	90 1/2	13 1/16	25 3/8	90-13 1/16			6159	38.0.12	34.11.2.0	38	
Fore Top Sails,	or Steel Wire ..							6160	32.2.0	30.10.0.0	32 1/4	
Fore Topmast Stay Sails,	or Hempen Strm Cable	120	4 1/2	skel	120-12		Total = 109.0.16					
Main Sails,	Towline, Hemp.	120	3 1/4	"	90-10		Stream Anchor	6164	11.2.20	13.11.1.0	11 1/2	
Main Top Sails,	or Steel Wire ..	120	3	"	90-8 1/2		Kedge	6163	5.3.4	8.1.3.0	5 3/4	
and 8 spare	Warp	240	2 1/2	"			2nd Kedge	6165	2.3.12	5.7.2.0	2 3/4	
	quality New	360	6 1/2	Manilla			Total = 108 1/4					

Standing and Running Rigging *Wool Hemp* sufficient in size and *good* in quality. She has *Eight* ~~Long~~ Boat Sma (2 ft as life boat)

The Windlass is *Harfield's Patent* Capstan *3* Good and Rudder *Good* Pumps *Good and efficient as per*

Engine Room Skylights.—How constructed? *Teak framing on top of* How secured in ordinary weather? *By Bars*

What arrangements for deadlights in bad weather? *Thick teak covering with Bulls eyes*

Coal Bunker Openings.—How constructed? *Circular Castings* 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? *Open bulwarks with scuppers for drainage*

Cargo Hatchways.—How formed? *Plate and angle iron*

ate size Main Hatch *15'6" x 11'* Forehatch *7'6" x 8'0"* Quarterhatch *7'6"*

of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Portable beam at main hatch*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>1585</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	1881- Feb 4, 17, 22, 25 March 4, 7, 11, 14, 16, 18, 21
Date <i>26th March 1881</i>		2nd. On the plating during the process of riveting	March 22, 24, 25, 28, 31 April 2, 4, 8, 12, 14
Order for Ordinary Survey No. <i>1</i>		3rd. When the beams were in and fastened, and before the decks were laid....	April 18, 20, 22, 27 May 2, 3, 6, 9, 11, 17
Date <i>1881</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	May 19, 20, 23, 25 June 1, 3, 8, 14, 20, 23, 29
No. <i>251</i> in builder's yard.		5th. After the ship was launched and equipped	July 1, 6, 11, 13, 14, 15 Aug 1, 5, 9, 11, 13, 17, 19, 28 Sept 5, 6, 13, 19, 26 Oct 1, 7, 11

General Remarks (State quality of workmanship, &c.) *The workmanship is of good quality, Built in accordance with the approved midship and longitudinal sketches herewith and in general conformity with the Rules with a view to the grade contemplated*

Fitted on deck with Smoking Companion 19x18, Captain's Room and Engine Case 29.9x14, Galley, Boiler casing and Cabins 81.6x15, Bridge 52, side houses underneath bridge 52x6, Throttle back forward 40.

State if one, two, or three-decked vessel, or if spar, or running decked; and the lengths of poop, bridge, fore-castle, or raised quarter-deck. (If double bottom, state particulars on separate form.)

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

I am of opinion this Vessel should be Classed *100 A1 Spar-Decked*

The amount of the Entry Fee ... £ 5 : : is received by me, *Saml. Laphor*

Special ... £ 96 : 9 : 12/10/ 1881

Certificate ... *Gratis*

(to be sent as per margin).

Travelling Expenses, if any, £ ()

Committee's Minute

Character assigned

Friday, October, 14th 1881.

Surveyor to Lloyd's Register of British and Foreign

This vessel has been built in accordance with the approved drawings and appears eligible to be registered in Lloyd's Register of British and Foreign