

# IRON SHIP.

12th JUNE, 82.

3410

No. 3419 Survey held at Aberdeen Date, First Survey Oct 7 1881 Last Survey June 10 1882

On the *Dabutanzi Iron Screw*

AGE under  
Average Deck } 990.01  
Third, Spar, }  
Average Deck } 990.01  
Mess room }  
Poop, or }  
Or. Deck } 4.21  
Houses } 29.24  
Deck }  
Forecastle } 4.35  
Hatches } 4.00  
Tonnage } 1534.15  
Crew Space } 54.90  
Engine Room } 491.89  
Tonnage }  
out on Beam } 980.31

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 14.5  
Girth of Half Midship Frame (as per Rule) . . . . . 21.0  
1st Number . . . . . 56.0  
1st Number, if a 3-Decked Vessel deduct 7 feet  
Length . . . . . 208.5  
2nd Number . . . . . 4201  
Proportions— Breadths to Length . . . . . 4.3  
Depths to Length— Upper Deck to Keel . . . . . 14.4  
Main Deck ditto . . . . .

Master *E. G. Langley*  
Built at *Aberdeen*  
When built *1882* Launched *May 2 1882*  
By whom built *James Hall, Dundee*  
Owners *J. J. Ronnie & Co*  
Residence *48 Raperich Street Aberdeen*  
Port belonging to *Aberdeen*  
Destined Voyage *India*  
If Surveyed while Building, Afloat, or in Dry Dock, *Under special Survey*

LENGTH Feet. Inches. BREADTH— Feet. Inches. DEPTH top of Floors to Upper Deck Beams . . . . . 21.5 Do. do. Main Deck Beams . . . . . 14.8 Power of Engines . . . . . 200 Horse. N° of Decks with flat laid . . . . . 3 N° of Tiers of Beams . . . . . 3

Dimensions of Ship per Register, length	Inches in Ship.	Inches per Rule.	Feet. Inches.	Feet. Inches.	Power of Engines	Horse.	N° of Decks with flat laid	N° of Tiers of Beams
Length	208.5	208.5	21.5	14.8	200	200	3	3
Breadth	35.4	35.4	3.5	3.5				
Depth	21.2	21.2	2.1	1.5				
Keel, depth and thickness	2 1/2 x 2 1/2	2 1/2 x 2 1/2						
Plating, moulding and thickness	2 1/2 x 5	2 1/2 x 5						
Post for Rudder do. do.	2 1/2 x 5	2 1/2 x 5						
Post for Propeller	2 1/2 x 5	2 1/2 x 5						
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 inches	24 inches						
Frames, Angle Iron, for 1/2 length amidships	4 3 7/16	4 3 7/16						
for 1/4 at each end	4 3 5/16	4 3 5/16						
Reversed Frames, Angle Iron	3 3 5/16	3 3 5/16						
Beams, depth and thickness of Floor Plate	3 5 9/16	3 5 9/16						
mid line for half length amidships	as arranged	as per Rule						
thickness at the ends of vessel	as arranged	as per Rule						
depth at 3/4 the half-bdth. as per Rule	as arranged	as per Rule						
height extended at the Bilges	as arranged	as per Rule						
Beams, Upper, Spar, or Awning Deck	4 3 7/16	4 3 7/16						
single or double Angle Iron, Plate or Tee Bulb Iron	3 3 5/16	3 3 5/16						
single or double Angle Iron on Upper edge	4 feet	4 feet						
Average space	4 feet	4 feet						
Beams, Main, or Middle Deck	3 3 5/16	3 3 5/16						
single or double Angle Iron, Plate or Tee Bulb Iron	3 3 5/16	3 3 5/16						
single or double Angle Iron on Upper Edge	3 3 5/16	3 3 5/16						
Average space	every frame	every frame						
Beams, Lower Deck—on Hold Beams	4 4 9/16	4 4 9/16						
single or double Angle Iron, Plate or Tee Bulb Iron	4 4 9/16	4 4 9/16						
single or double Angle Iron on Upper Edge	4 4 9/16	4 4 9/16						
Average space	every 10 frames	every 10 frames						
Beams, Hold, or Orlop	3 3 5/16	3 3 5/16						
single or double Angle Iron, Plate or Tee Bulb Iron	3 3 5/16	3 3 5/16						
single or double Angle Iron on Upper Edge	3 3 5/16	3 3 5/16						
Average space	3 3 5/16	3 3 5/16						
Keelsons Centre line, single or double plate, box, or intercostal, Plates	3 5 9/16	3 5 9/16						
Rider Plate								
Bulb Plate to Intercostal Keelson								
Angle Irons	5 4 9/16	5 4 9/16						
Double Angle Iron Side Keelson								
Side Intercostal Plate	3 3 5/16	3 3 5/16						
do. Angle Irons	3 3 5/16	3 3 5/16						
Attached to outside plating with angle iron	3 3 5/16	3 3 5/16						
Large Angle Irons								
do. Bulb Iron								
do. Intercostal plates riveted to plating for whole length	3 1/16	3 1/16						
Large Stringer Angle Irons	5 4 9/16	5 4 9/16						
Intercostal plates riveted to plating for 1/2 length	3 1/16	3 1/16						
Small Stringer Angle Irons								

FRAMES extend in one length from *keel to bilge and from bilge to deck* Riveted through plates with 3/4 in. Rivets, about 8 apart.  
 REVERSED ANGLE IRONS on floor and frames extend *from middle line to bilge and to main & upper 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 in. diameter, averaging 4 ins. from centre to centre.  
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 2 1/2 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 1/2 ins. from centre to centre.  
 Butts of *Three* Strakes at Bilge for *half* length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.  
 Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 2 3/4 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 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 *half* length amidships. Butts of Upper or Spar Sheerstrake, *double* treble riveted *all fore and aft* length amidships.  
 Butts of Main Stringer Plate, treble riveted for *half* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *half* length.  
 Breadth of laps of plating in double riveting *2 1/2* Breadth of laps of plating in single riveting *1*  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Yes* No. of Breasthooks, *4* Crutches, *4*  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *James Lang & Co*  
 Manufacturer's name or trade mark, *plating various, Messrs. James Lang & Co.*  
 The above is a correct description.  
 Builder's Signature, *James Lang & Co* Surveyor's Signature, *J. W. Kettle*  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

State clearly where plating is of alternate thicknesses—as distinguished from unfinished thickness at ends of vessel. \* If Iron Deck, state if whole or part, and if round deck is laid thereon.

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

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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 in corners of butts.*

Masts, Bowsprit, Yards, &c., are *iron & red pine in good condition*, and sufficient in size and length. If of Iron or Steel give Scanlings 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 *Masts fore and main formed of 2 plates 5/16 thick lands double clencher. Butts hubble camel shape 1/16 thicker than plates. Length of fore mast deck to bounds 45.6. Sets of main mast 47.9. Set at head 20 1/2. Deck 22. Hull 21 and were doubled at deaks.*

Tested by *O. G. Lewis at Rotherham 9.10.82*, *Tested by O. G. Lewis 15.20 March 1882 at Deptford*

NUMBER for EQUIPMENT 20680		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS, N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Machine where Tested & Suprntd.	
SAILS.							Bower Anchors	3	30.1.13	25.15.0/6	27.3.0	25.15/20
N <sup>o</sup> .	CABLES, &c.											
One	Chain	240	1 3/4	53.2.20	240/8	57 1/4						
	Fore Sails,			44.2.20		41 1/4		4.1.4				
	Fore Top Sails,	75	1 1/16	20.5.0.0		40 1/16		28.5.14	24.14.2.0	27.3.0	25.15/20	
	Fore Topmast Stay Sails,	90	3 1/2	30.8.0.0				4.0.26				
	Main Sails,	90	10 1/2	26 tons		90-11		24.1.2	25.13.0/6	23.2.10	23.19/20	
	Main Top Sails,	90	6 1/2			90-9		4.1.15				
	and	90	4 1/2			90-7						
	quality good	90	5 1/2									
	Standing and Running Riggings	Galvanized Hemp sufficient in size and good on quality. She has <i>one 20 ft</i> Long Boat and <i>2 24 ft</i> life boats, <i>1 20 ft</i> gig										
	The Windlass is	<i>Good</i> Capstan and Rudder <i>good</i> Pumps <i>4 5 in</i> dia efficient										
	Engine Room Skylights.	How constructed? <i>strong cup frame</i> How secured in ordinary weather? <i>bolts to craming</i>										
	What arrangements for deadlights in bad weather?	<i>glass brass eyes</i>										
	Coal Bunker Openings.	How constructed? <i>Iron craming</i> How are lids secured? <i>with a bar</i> Height above deck? <i>1.5 and 2.0</i>										
	Scuppers, &c.	What arrangements for clearing upper deck of water, in case of shipping a sea? <i>Eight scuppers on each side to spar deck, and four scuppers each side main deck to bilge.</i>										
	Cargo Hatchways.	How formed? <i>Iron craming &amp; head ledges riveted to beams &amp; iron deck</i>										
	State size Main Hatch	<i>20.5 x 12.0</i>		Forehatch		<i>18.0 x 11.8</i>		Quarterhatch		<i>18.0 x 12.0</i>		
	If of extraordinary size, state how framed and secured?	<i>Medium size</i>										
	What arrangement for shifting beams	<i>2 beams in main hatch, 1 beam in fore and quarter hatch, and one beam in main hatch on main deck.</i>										
	Hatches, If strong and efficient?	<i>Yes. Solid</i>										

Reference should be made to any correspondence connected with the case.

Engine Room Skylights. How constructed? *strong cup frame* How secured in ordinary weather? *bolts to craming*

What arrangements for deadlights in bad weather? *glass brass eyes*

Coal Bunker Openings. How constructed? *Iron craming* How are lids secured? *with a bar* Height above deck? *1.5 and 2.0*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Eight scuppers on each side to spar deck, and four scuppers each side main deck to bilge.*

Cargo Hatchways. How formed? *Iron craming & head ledges riveted to beams & iron deck*

State size Main Hatch *20.5 x 12.0* Forehatch *18.0 x 11.8* Quarterhatch *18.0 x 12.0*

If of extraordinary size, state how framed and secured? *Medium size*

What arrangement for shifting beams *2 beams in main hatch, 1 beam in fore and quarter hatch, and one beam in main hatch on main deck.*

Hatches, If strong and efficient? *Yes. Solid*

Order for Special Survey No. *574* 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

2nd. On the plating during the process of riveting

3rd. When the beams were in and fastened, and before the decks were laid...

4th. When the ship was complete, and before the plating was finally coated or cemented..

5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) *Workmanship of good quality*

*The iron used in the construction of this vessel as well as the masts has been tested and found to be of good quality.*

*The water ballast space has been tested as per rules previous to and after launching and found to be quite tight*

*Length of double bottom 220 feet, capacity in tons 325.*

*Length of bridge space 28 feet*

*And is built in accordance with accompanying approved drawings as per Secretary's letter dated 5 October 1881 and 6 April 1882.*

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

How are the surfaces preserved from oxidation? Inside *Red lead, Portland Cement* Outside *tarred paint*

I am of opinion this Vessel should be Classed *100A1 Spar decked, complete, double bottom.*

The amount of the Entry Fee ... £ *5:00* is received by me, *J. W. Kettle*

Special ... £ *01:150* 10 June 1882

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

Travelling Expenses, if any, £ *none*

Committee's Minute *Tuesday, 13th June 1882*

Character assigned *100A1 Spar decked, complete, double bottom.*

*188 (Iron) & Spar deck 365 Bms*

*all double bottom 220 ft - 325 tons.*

*12/6/82*

*J. W. Kettle*

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

*This vessel has been built in accordance with the approved plans appended, and appears to be suitable to be classed as recommended.*

*Lloyd's Register*

*100A1 Spar decked as recommended*

*188 (Iron) & Spar deck 365 Bms*

*all double bottom 220 ft - 325 tons.*

*12/6/82*

*J. W. Kettle*

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