

IRON SHIP.

No. 11,011 Survey held at Kindulana Date, First Survey March 25th / 94 Last Survey January 15, 1895
On the S.S. "Nautilus" Yard Number 1 Master Wills

TONNAGE under		ONE, OR TWO DECKED, THREE DECKED VESSEL.	
Tonnage Deck	635 94	SPAR, OR AWNING DECKED VESSEL.	
Ditto of Third Space		HALF BREADTH (moulded)	Feet. 13 11
on Awning Deck.		DEPTH from upper part of Keel to top of Upper Deck Beams	17 3
Ditto of Deck	56 18	BIRTH of Half Midship Frame (as per Rule)	28 1
Raised Or. Dk.		1st NUMBER	59 25
Ditto of Houses	9 54	1st NUMBER, if a THREE-DECKED VESSEL	
on Deck		deduct 7 feet	
Ditto of Forecastle	16 71	LENGTH	199
Gross Tonnage	718 49	2nd NUMBER	11790
Less Crew Space	21 67	PROPORTIONS—Breadths to Length . . under	8
	696 70	Depths to Length—Upper Deck to Keel . . under	12
Less Engine Room	229 88	Main Deck ditto	
Register Tonnage	466 82		
as cut on Beam			

Built at Sunderland
 When built 1874 Launched 14 Nov
 By whom built H. S. Girdston
 Owners General Steam Navigation
 Port belonging to London
 Destined Voyage London
 & Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule	Feet.	Inches.	BREADTH— Moulded...	Feet.	Inches.	DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet.	Inches.	Power of Engines ...	Horse.	N ^o . of Decks with flat laid N ^o . of Tiers of Beams	1 1 and under raised deck
Dimensions of Ship per Register, length,	199	11	27	10			15	10	95			

	Inches in Ship.	Inches per Rule.
KEEL , depth and thickness	$\frac{1}{2} \times 2\frac{1}{4}$	$7\frac{1}{2} \times 2\frac{1}{4}$
STEM , moulding and thickness	$\frac{1}{4} \times 2\frac{1}{4}$	$7 \times 2\frac{1}{4}$
STERN-POST for Rudder do. do.	$\frac{1}{4} \times 4\frac{1}{2}$	$7 \times 4\frac{1}{2}$
for Propeller	$1 \times 4\frac{1}{2}$	$7 \times 4\frac{1}{2}$
Distance of Frames from moulding edge to } moulding edge, all fore and aft }	22	22 (Class 90A)

	In Ship.	In Ship.	In Ship.	required	required	required
	per Rule	per Rule	per Rule	per Rule	per Rule	per Rule
FRAMES, Angle Iron, for $\frac{3}{4}$ length amidships ...	$\frac{3}{2}$	3	7	$\frac{3}{2}$	3	7
Do. for $\frac{1}{4}$ at each end						

REVERSED FRAMES, Angle Iron	...	...	...	...	...	...	...	...	...
FLOORS, depth and thickness of Floor Plate)	3	2 1/2	6	3	2 1/2	6	3	2 1/2	6

at mid line for half length amidships	...	17 1/2	76	17 1/2	76
thickness at the ends of vessel	...	...	...	...	...
length at 3/4 thickness	...	...	...	...	...

depth at $\frac{1}{4}$ the main-butt. as per rule ... *8 1/4* *10 1/4*
height extended at the Bilges... *10 1/4* *10 1/4*

Single or double Angle Iron, Flat or Tee Bulb Iron	7	8 1/2	6 1/2	6
Single or double Angle Iron on Upper edge	1 1/2	2 1/2	5	5

Average space...	11	9	1	1	1
BEAMS Main or Middle Deck				44"	44"

Single, or double Angle Iron, on Upper Edge

BEAMS, Lower Back, Hold or Grip	7	6/16	6/12	6
---------------------------------	---	------	------	---

Single or double Angle Iron on Upper Edge ...	2 1/2	2 1/2	5	2 1/2	2 1/2	5
Average space	4 1/2"	4 1/2"		4 1/2"	4 1/2"	

KEELSON'S Centre line, single or double plate, } box or Intercostal Plates	12 1/4	10	12 1/4	10
--	--------	----	--------	----

9	Rider Plate	8 1/2	8	6 1/2	8
10	Rail Plate to Intercoastal Keelson				


"	Angle Irons	...	...	...	...	4 1/2	3 1/2	7	4 1/2	3	7
"	Double Angle Iron Side Keelson	...	...	...	...	-	-	-	-	-	-
"	Side Interportal Plate	...	...	...	...	-	-	-	-	-	-

11	do.	Angle Irons	✓	✓	✓	✓	✓
12	Attached to outside plating with angle iron		✓	✓	✓	✓	✓

BILGE	Angle Irons	... ..	4½	3	7	4½	3	7
"	do Bath Iron							

" do. Intercoastal plates riveted to plating for 1 length 7 16 7 16

BILGE STRINGER Angle Irons	...	...	...	4 1/2	3	7	4 1/2	3	7
Intercostal plates riveted to plating	for								

length. 

Transoms, material. Knight-heads. Hawse Timbers. Iron

Windlass Iron Patent Pall Bitt none.

The **FRAMES** extend in one length from 1422 to 1422
The **REVERSED ANGLE IRONS** on floors and frames extend 3'-0" middle line

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? _____

PLATING. Garboard, double riveted to Keel, with rivets $\frac{1}{2}$ in. diameter, average
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted

Butts from Keel to turn of Bilge, worked carvel, double riveted; with

Edges from bilge to Main Sheerstrake, worked clencher, double or single

Butts from Ridge to Main Sheerstrake, worked, carved, double riveted.
Edges of Main Sheerstrake, double or single riveted. Upper Sheer

Butts of Main Sheerstrake, treble riveted for $\frac{1}{2}$ length amidships.

Breadth of laps of plating in double riveting $\frac{3}{2}$ Breadth of laps of plating in single riveting $\frac{3}{2}$

Waterway, how secured to Beams gutter (Explain by Sketch, if

Beams of the various Decks, how secured to the sides by lashed timbers
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer

Manufacturer's name or trade mark, *Lyons & Co. Boston*

The above is a correct description.

Builder's Signature, W. J. Gurnea Sail No.

23. 270.

Flat Keel Plates, breadth and thickness	30	8	30	8	32.9
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling of Bilge, & increased thickness, and length applied <i>12 length</i>	768		768		
fm up. part of Bilge to lr. edge of Sh'rstrake	116	1.5	116		
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake	9		9		
Up. or Spar Dk Sh'rstrake breadth & thickness	768		768		
	30	11.9	30	11.9	
	33	7	33	7	

Butt Straps to outside plating, breadth & thickness	9 3/4	7 10	9 3/4	7 10
Lengths of Plating	8 ft	11 ft	8 ft	11 ft
Shifts of Plating, and Stringers	2 ft	2 ft	2 ft	2 ft
Gunwale Plate on ends of Gunwale Spar, and				
Upper Deck Beams, breadth and thickness	40	6	40	6
Angle Iron on ditto	3 1/2	3 1/2	3 1/2	3 1/2
Tie Plates fore and aft, outside Hatchways	8	7	8	7
Diagonal Tie Plates on Beams No. of Pairs				
Planksheer material and scantling				
Waterways do do	6 in	2 in	6 in	2 in

Flat of Upper Deck do.	...	...	...	3/4	3/4
How fastened to Beams	...	...	...	with screws	✓
Stringer Plate on ends of Main on Middle Deck	...	...	...
Beams, breadth and thickness	...	...	...	40	5 40 5
Is the Stringer Plate attached to the outside plating?	...	...	...	yes	yes
Angle Irons on ditto, No.	...	...	...	4/4	3.7 4/4 3.7
Tie Plates, outside Hatchways	...	...	...	9	8 9 8
Diagonal Tie Plates on Beams, No. of pairs	...	...	...	1	1
Waterways materials and scantlings	...	...	...	galvan	galvan
Flat of Middle Deck do.	...	...	...	3/4	3/4
How fastened to Beams	...	...	...	with screws	with screws

Stringer Plates between of Lower Deck, Hold or	25	7	25	7
Orlop Rooms	yes		yes	
Is the Stringer Plate attached to the outside plating?	3/4	3/4	3/4	3/4
Angle Irons on ditto, No. 3	4 1/2	3 1/2	4 1/2	3 1/2
Stringer or Tie Plates, outside Hatchways	7	7	7	7
Flat of Lower Deck	7	7	7	7
Ceiling betwixt Decks, thickness and material	sparring	sparring	sparring	sparring
in hold do. do.	2 1/2	2 1/2	2 1/2	2 1/2
Main piece of Rudder, diameter at head	4 3/4	4 3/4	4 3/4	4 3/4
do. at heel	2 3/4	2 3/4	2 3/4	2 3/4
Can the Rudder be unshipped afloat?	yes	yes	yes	yes

Bulkheads No. 4 Thickness of 7/16 7/16
Height up to main deck and raised deck.
How secured to sides of ship between double frames
Size of Vertical Angle Irons 3 x 3 1/2 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? yes
yes Riveted through plates with 3/4 in. Rivets, about 6 apart.
to gunwale and to upper iron plate alternately
yes And butts properly shifted? yes.

g 3 ins. from centre to centre.
 riveted; with rivets $\frac{3}{4}$ in. diameter, averaging $3\frac{3}{8}$ ins. from centre to centre.
 rivets $\frac{3}{4}$ in. diameter averaging $3\frac{3}{8}$ ins. from centre to centre.
 Butt Straps $\frac{1}{16}$ thicker than the plates they connect. $\frac{3}{16}$ in way of shear the bottom
 riveted; with rivets $\frac{3}{4}$ in. diameter, averaging $3\frac{3}{8}$ ins. from cr. to cr.
 ; with rivets $\frac{3}{4}$ in. diameter, averaging $3\frac{3}{8}$ ins. from cr. to cr.
 rstrake, double or single riveted. ✓
 Butts of Upper or Spar Sheerstrake, treble riveted ✓ length amidships.
 ts of Upper or Spar Stringer Plate, treble riveted for ✓ length.

ing in single riveting 0
 necessary.)
 No. of Breasthooks, 4 Crutches, 3
 Plates, Outside Plating, &c. ? Angles, T-zack and Corrug
Plates Corros
 Signature S. Montague



Foundation

1R04460-0021

Workmanship.

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

13799 *Iron*

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*

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. *Fore and Off Schooner. Wood pole masts.*

NUMBER for EQUIPMENT <i>12970</i>			Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
No.	SAILS.		<i>240</i>	<i>1 1/2</i>	<i>34 tons</i>	<i>240 1/2</i>	<i>34 tons</i>	Bowers ... (State Machine where Tested, Date, and name of Superintendent.) <i>Marked R.W.G.P.T. Syd J. Hartnefs Dept 25</i> <i>Graded respectively Oct 13, Oct 16 and Nov 13 1874</i>	<i>1</i>	<i>16.3.14</i>	<i>18.2.37</i>	<i>16 3/4</i>	<i>18</i>
	Fore Sails,								<i>2</i>	<i>16.3.7</i>	<i>18.2.37</i>	<i>16 3/4</i>	<i>18</i>
	Fore Top Sails,								<i>3</i>	<i>14.0.0</i>	<i>15.12.20</i>	<i>14.0.27</i>	<i>15 1/2</i>
	Fore Topmast Stay Sails												
	Main Sails,												
	Main Top Sails,												
	and												
	CABLES, &c.												
	Chain ...												
	Hawser ...												
	Towlines ...												
	Warp ...												
	quality <i>good</i>												

Standing and Running Rigging *Wire and Hemp* sufficient in size and *good* in quality. She has *two* Long Boats *and 1 fitted with buoyancy*

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Iron and Wood* How secured in ordinary weather? *Iron gratings*

What arrangements for deadlights in bad weather? *Plalines*

Coal Bunker Openings. How constructed? *Wood coverings* How are lids secured? *Strong Hatches* Height above deck? *15 inches*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports and scuppers*

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

State size Main Hatch *22' 6" x 10'* Fore hatch *7' 6" x 7'* Quarter hatch *22' 6" x 10'*

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

What arrangement for shifting beams? *Process and nuts and screws*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>2479</i>	DAYS 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	<i>Built under S.S. and surveyed 1/4 Mch 25 April 1872</i>
Date <i>21 March 74</i>		2nd. On the plating during the process of riveting	<i>May 13 29 June 8 11 15 17 20 26 July 6 14 17 23 Aug 5 12 14 17 23 28 October</i>
Order for Ordinary Survey No. —		3rd. When the beams were in and fastened, and before the decks were laid...	<i>13 15 22 26 28 Nov 1 14 27 29 Dec 2 22 24 Jan 4 5 18 19</i>
Date —		4th. When the ship was complete, and before the plating was finally coated or cemented...	
No. — in builder's yard.		5th. After the ship was launched and equipped	

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

The workmanship in this vessel is of good quality and she has been built in accordance with the approved midship section attached and in conformity with the Rules for 1872 & 1873. The requirements contained in the Secretary's letter dated 4th Nov 1874 and quoted in Red on the section have been fully carried out. She has a raised quarter deck 75 feet long. A House constructed of Iron over engine room and a short Forecastle for the crew. A water ballast tank is fitted in Fore Hold from engine room bulkhead extending forward 45 feet — and in After hold from bulkhead extending aft. 55 feet. Efficiently constructed and tested to a head of water four feet above top.

State if one, two or three decked vessel, or if spar or running decked, and length of poop, *small forecabin and seventy five feet long* ~~forecabin or raised quarter deck, or of double or part double bottom.~~

How are the surfaces preserved from oxidation? Inside *Liniment and red lead* Outside *Red lead & Paint*

I am of opinion this Vessel should be Classed *90 A1*

The amount of the Entry Fee ... £ *5* : : is received by me,
Special ... £ *34* : *17* : *16 Jan 1875*
Certificate ... *Gratis* : *HW*

(Travelling Expenses) (if any) £ —

Committee's Minute *19 January 1875*

Character assigned *90 A1*