

IRON SHIP.

Survey held at *London*
S.S. "*Granton*"

Date, First Survey *15 Dec^r 1876*

Last Survey *16th March 1877*

Master *Tranack*

815.67

~~ONE OR TWO DECKED, THREE DECKED VESSEL.~~
~~SPAR, OR AWNING DECKED VESSEL.~~

Built at *Gundel*

When built *1866* Launched

By whom built *Gourlay*

Owners *General Steam Navigation Co^s*

Port belonging to *London*

Destined Voyage

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

Spar, or Deck.

Pump, or raised Gr. Dk.

of Houses on Deck

of Forecastle

Tonnage

Crew Space

Engine Room

ter Tonnage

ut on Beam

937.19

(299.9)

637.29

HALF BREADTH (moulded) *15.0*

DEPTH from upper part of Keel to top of Upper Deck Beams .. *18.4*

GIRTH of Half Midship Frame (as per Rule) *29.5*

1st NUMBER *62.9*

~~1st NUMBER, if a THREE DECKED VESSEL~~

LENGTH *234.0*

2nd NUMBER *14.718*

PROPORTIONS—Breadths to Length *under 8*

Depths to Length—Upper Deck to Keel *13*

Main Deck ditto

GTH deck as Rule .. *234 0* BREADTH—Moulded .. *30 0* DEPTH top of Floors to Upper Deck Beams .. *16 11* Power of Engines .. *230* Horse. *230* N^o. of Decks with flat laid *2* N^o. of Tiers of Beams *2*

ensions of Ship per Register, length, *235* breadth, *30.15* depth, *16.85*

	Inches in Ship.	Inches per Rule.
EL, depth and thickness	<i>7 1/2 x 3</i>	<i>8 x 2 3/8</i>
M, moulding and thickness	<i>7 1/2 x 3</i>	<i>7 1/2 x 2 3/8</i>
RN-POST for Rudder do. do.	<i>10 x 4 1/2</i>	<i>7 1/2 x 4 3/4</i>
for Propeller	<i>7 1/2 x 6</i>	<i>23</i>
ance of Frames from moulding edge to	<i>21</i>	(Class <i>100A</i>)
oulding edge, all fore and aft		
AMES, Angle Iron, for 1/2 length amidships	<i>4 1/2 3 8</i>	<i>4 3 7</i>
o. for 1/2 at each end	<i>3 7</i>	<i>4 3 6</i>
VERSED FRAMES, Angle Iron	<i>3 7</i>	<i>3 3 6</i>
DOORS, depth and thickness of Floor Plate	<i>19 1/2 9</i>	<i>18 8</i>
mid line for half length amidships		<i>7</i>
thickness at the ends of vessel		<i>9 3/4</i>
depth at 1/2 the half-bdth. as per Rule		<i>39</i>
height extended at the Bilges		
AMS, Upper, Spar, or Awning Deck	<i>7 1/2 7</i>	<i>7 1/2 7</i>
le or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>3 2 1/2 6</i>	<i>3 3 6</i>
le or double Angle Iron on Upper edge	<i>42</i>	<i>46</i>
verage space		
AMS, Main, or Middle Deck	<i>7 1/2 7</i>	<i>7 1/2 7</i>
le or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>3 2 1/2 6</i>	<i>3 3 6</i>
le or double Angle Iron, on Upper Edge	<i>42</i>	<i>46</i>
verage space		
AMS, Lower Deck, Hold, or Orlop	<i>7 1/2 7</i>	<i>7 1/2 7</i>
le or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>3 2 1/2 6</i>	<i>3 3 6</i>
le or double Angle Iron on Upper Edge	<i>42</i>	<i>46</i>
verage space		
ELSONS Centre line, single or double plate,	<i>24 18</i>	<i>23 7</i>
box, or Intercoastal, Plates		
Rider Plate	<i>7 1/2 7</i>	<i>7 1/2 7</i>
Bulb Plate to Intercoastal Keelson	<i>5 4 1/2 9</i>	<i>5 3 1/2 8</i>
Angle Irons		
Double Angle Iron Side Keelson		
Side Intercoastal Plate		
do. Angle Irons		
Attached to outside plating with angle iron		
GE Angle Irons	<i>5 4 1/2 9</i>	<i>5 3 1/2 8</i>
do. Bulb Iron	<i>7 1/2 7</i>	<i>7 1/2 7</i>
do. Intercoastal plates riveted to		
plating for length		
STRINGER Angle Irons	<i>5 4 1/2 9</i>	<i>5 3 1/2 8</i>
Intercoastal plates riveted to plating for		
length		
STRINGER Angle Irons	<i>5 4 1/2 9</i>	<i>5 3 1/2 8</i>
soms, material. Knight-heads. Hawse Timbers. <i>Iron</i>		
class Pall Bitt		

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Flat Keel Plates, breadth and thickness	<i>30</i>	<i>12</i>	<i>34</i>	<i>11</i>
PLATES in Garboard Strakes, breadth and thick-				
ness from Garboard to upper part of Bilges	<i>33</i>	<i>11</i>	<i>9.10</i>	<i>and 11</i>
of doubling at Bilge, or increased thick-				
ness, and length applied		<i>10</i>	<i>9 1/10</i>	
fin up. part of Bilge to Ir. edge of Sh'rstrake				
Main Sheerstrake, breadth and thickness				
of d'bling at Sh'rstrake, & length applied				
from Mn. to Up. or Spar Dk. Sh'rstrake				
Up. or Spar Dk Sh'rstrake, brdth & thickness	<i>36</i>	<i>13</i>	<i>36</i>	<i>13</i>
Butt Straps to outside plating, breadth & thickness	<i>10</i>	<i>13/16</i>	<i>11 1/4</i>	<i>10 and 11/16</i>
Lengths of Plating				<i>Five frame spaces</i>
Shifts of Plating, and Stringers				<i>Two frame spaces</i>
Gunwale Plate on ends of Awning, Spar, or	<i>36</i>	<i>12</i>	<i>37</i>	<i>10</i>
Upper Deck Beams, breadth and thickness				
Angle Iron on ditto	<i>4 1/2 x 4 1/2 x 10</i>		<i>5 x 3 1/2 x 5/16</i>	
Tie Plates fore and aft, outside Hatchways	<i>11 1/2</i>	<i>9</i>	<i>11</i>	<i>9</i>
Diagonal Tie Plates on Beams No. of Pairs,	<i>11 1/2</i>	<i>9</i>	<i>11</i>	<i>9</i>
Planksheer material and scantling				
Waterways do. do.				<i>Teak</i>
Flat of Upper Deck do. do.				<i>Red Pine 3 1/2</i>
How fastened to Beams				<i>Iron nut and screw bolts and galv^d screws for double fastening</i>
Stringer Plate on ends of Main or Middle Deck				
Beams, breadth and thickness				
Is the Stringer Plate attached to the outside plating?	<i>Yes</i>			
Angle Irons on ditto No.				
Tie Plates, outside Hatchways				
Diagonal Tie Plates on Beams No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold	<i>26</i>	<i>9</i>	<i>29</i>	<i>8</i>
Orlop Beams				
Is the Stringer Plate attached to the outside plating?	<i>No</i>			
Angle Irons on ditto No. <i>one</i>				
Stringer or Tie Plates, outside Hatchways	<i>11 1/2</i>	<i>9</i>	<i>11</i>	<i>9</i>
Flat of Lower Deck	<i>3</i>		<i>3</i>	
Ceiling betwixt Decks, thickness and material				<i>2 Red Pine</i>
in hold do. do.				<i>Batten & Space</i>
Main piece of Rudder, diameter at head				<i>2 1/2 Iron Elm</i>
do. at heel				<i>5 1/2</i>
Can the Rudder be unshipped afloat?				<i>3</i>
Bulkheads No. <i>4</i> Thickness of <i>5/16</i>				<i>6/16</i>
Height up				<i>1/2 upper deck</i>
How secured to sides of ship <i>with double angle iron frames</i>				
Size of Vertical Angle Irons <i>3 x 3 x 7/16</i> and distance apart <i>30</i> ins.				
Are the outside Plates doubled two spaces of Frames in length?				

FRAMES extend in one length from *Middle line* to *upper deck stringer* Riveted through plates with *7/8* in. Rivets, about *7* apart.

REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *upper deck stringer* and to *lower deck* alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? And butts properly shifted?

LATING. Garboard, double riveted to Keel, with rivets *7/16* in. diameter, averaging *5 5/8* 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 *4 3/16* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *4* ins. from centre to centre.

Butts of Strakes at Bilge for length, treble riveted with Butt Straps 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 *4 3/16* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *4* ins. from cr. to cr.

Edges of *upper* Main Sheerstrake, double or single riveted. *Upper Sheerstrake*, double or single riveted.

Butts of *upper* Main Sheerstrake, treble riveted for *whole* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of *upper* Main Stringer Plate, treble riveted for *whole* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

Breadth of laps of plating in double riveting *5 inches* Breadth of laps of plating in single riveting

But Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Stringer plate with straps treble riveted*

Waterway, how secured to Beams *nut and screw bolts through stringer plate* (Explain by Sketch, if necessary.) See Sketch attached to original 1st Entry Report

ams of the various Decks, how secured to the sides? *19 inch bracket ends 5 rivets in each* No. of Breasthooks, Crutches,

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? See below

Manufacturer's name or trade mark, *W.B. (Best) Walker for angles & Shetley, Messrs Iron Co^s. Hartlepool Rolling Mills. Stockton Hall Iron Co^s*

The above is a correct description.

Builder's Signature, Surveyor's Signature, *Jas. Callard*

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Are the butts of plating planed or otherwise filed?
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiency?
Are the fillings between the ribs and plates solid single pieces?
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?
Do any rivets break into or through the seams or butts of the plating?

5268 Iron

Masts, Bowsprit, Yards, &c., are in condition, and sufficient in size and length. If of Iron or Steel, 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

NUMBER for EQUIPMENT

N ^o .	SAILS.	CABLES, &c. Chain	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test r per R
	Fore Sails,							Bowers					
	Fore Top Sails,												
	Fore Topmast Stay Sails	Hmpn Strm Cbl											
	Main Sails,	Hawser						Stream ...					
	Main Top Sails,	Towlines											
	and	Warp						Kedges ...					
		quality											

Standing and Running Rigging sufficient in size and in quality. She has Long Boat and
The Windlass is Capstan and Rudder Pumps
Engine Room Skylights.—How constructed? How secured in ordinary weather?
What arrangements for deadlights in bad weather?
Coal Bunker Openings.—How constructed? How are lids secured? Height above deck?
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea?

Cargo Hatchways.—How formed?

State size Main Hatch Forehatch Quarterhatch

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams?

Hatches, If strong and efficient?

Order for Special Survey No.	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 }
Date			2nd. On the plating during the process of riveting
Order for C-inary Survey No.			3rd. When the beams were in and fastened, and before the decks were laid }
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.)

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside Outside

I am of opinion this Vessel should be Classed

The amount of the Entry Fee£ : : is received by me, }
Special£ : : 187 }
Certificate ... : :

(Travelling Expenses, if any, £

Committee's Minute 18

Character assigned