

# IRON SHIP.

Per 13/2/73

No. 10506 Survey held at Sunderland Date, First Survey 15<sup>th</sup> August 72 Last Survey 12<sup>th</sup> February 73 18

On the Screw Steamer "Nanauqua" Yard Number 138 Master C. G. Thompson

TONNAGE under Tonnage Deck 289.09

Ditto of Third, Spar, or Awning Deck. 59.72

Ditto of Reefs, or Raised Qr. Dk. 3.44

Ditto of Houses on Deck 3.44

Ditto of Forecastle 3.44

Gross Tonnage 352.25

Less Crew Space 22.27

Less Engine Room 127.21

Register Tonnage 202.77

(as cut on Beam)

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

HALF BREADTH (moulded) 11.00

DEPTH from upper part of Keel to top of Upper Deck Beams 12.00

GIRTH of Half Midship Frame (as per Rule) 20.75

1st NUMBER 43

1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 162.5

LENGTH 162.5

2nd NUMBER 7109

PROPORTIONS—Breadths to Length 13

Depths to Length—Upper Deck to Keel 13

Main Deck ditto 13

Built at Sunderland

When built 1872 Launched 30 Nov 72

By whom built Messrs Oswald & Co

Owners Union S. S. Comp<sup>y</sup> Limited

Port belonging to Southampton

Destined Voyage C of Good Hope

Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 162 6 BREADTH—Moulded 22 0 DEPTH top of Floors to Upper Deck Beams 11 Power of Engines 80 N<sup>o</sup>. of Decks with flat laid One N<sup>o</sup>. of Tiers of Beams One

Dimensions of Ship per Register, length, 162.5 breadth, 22.2 depth, 10.95

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	6 x 2	7 x 1 1/2	6 x 2	7 x 1 1/2	6 x 2	7 x 1 1/2	6 x 2	7 x 1 1/2
STEM, moulding and thickness	6 x 2	7 x 1 1/2	6 x 2	7 x 1 1/2	6 x 2	7 x 1 1/2	6 x 2	7 x 1 1/2
STERN-POST for Rudder do. do.	6 1/2 x 3	6 1/2 x 3 1/4	6 1/2 x 3	6 1/2 x 3 1/4	6 1/2 x 3	6 1/2 x 3 1/4	6 1/2 x 3	6 1/2 x 3 1/4
for Propeller	6 1/2 x 3 1/2	6 1/2 x 3 1/4	6 1/2 x 3 1/2	6 1/2 x 3 1/4	6 1/2 x 3 1/2	6 1/2 x 3 1/4	6 1/2 x 3 1/2	6 1/2 x 3 1/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	21 ins	(Class 100 A)	21 ins	(Class 100 A)	21 ins	(Class 100 A)	21 ins	(Class 100 A)
FRAMES, Angle Iron, for 1/2 length amidships	3 1/2 x 2 1/2	5 1/2 x 2 1/2	3 1/2 x 2 1/2	5 1/2 x 2 1/2	3 1/2 x 2 1/2	5 1/2 x 2 1/2	3 1/2 x 2 1/2	5 1/2 x 2 1/2
Do. for 1/2 at each end	3 1/2 x 2 1/2	5 1/2 x 2 1/2	3 1/2 x 2 1/2	5 1/2 x 2 1/2	3 1/2 x 2 1/2	5 1/2 x 2 1/2	3 1/2 x 2 1/2	5 1/2 x 2 1/2
REVERSED FRAMES, Angle Iron	2 1/4 x 2 1/4	4 1/4 x 2 1/4	2 1/4 x 2 1/4	4 1/4 x 2 1/4	2 1/4 x 2 1/4	4 1/4 x 2 1/4	2 1/4 x 2 1/4	4 1/4 x 2 1/4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	12	12	12	12	12	12	12	12
thickness at the ends of vessel	6 1/2	6	6 1/2	6	6 1/2	6	6 1/2	6
depth at 1/2 the half-bdth. as per Rule	6 1/2	6	6 1/2	6	6 1/2	6	6 1/2	6
height extended at the Bilges	twice midship depth		twice midship depth		twice midship depth		twice midship depth	
BEAMS, Upper, Spar, or Awning Deck	5 1/2 x 3 1/2	8 1/2 x 3 1/2	5 1/2 x 3 1/2	8 1/2 x 3 1/2	5 1/2 x 3 1/2	8 1/2 x 3 1/2	5 1/2 x 3 1/2	8 1/2 x 3 1/2
Single or double Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3 1/2	8 1/2 x 3 1/2	5 1/2 x 3 1/2	8 1/2 x 3 1/2	5 1/2 x 3 1/2	8 1/2 x 3 1/2	5 1/2 x 3 1/2	8 1/2 x 3 1/2
Single or double Angle Iron on Upper edge with	2 1/2 x 2 1/2	7 1/2 x 2 1/2	2 1/2 x 2 1/2	7 1/2 x 2 1/2	2 1/2 x 2 1/2	7 1/2 x 2 1/2	2 1/2 x 2 1/2	7 1/2 x 2 1/2
Average space	alternate frames		alternate frames		alternate frames		alternate frames	
BEAMS, Main or Middle Deck	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2
Single or double Ang. Iron, Plate or Tee Bulb Iron	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2
Single, or double Angle Iron, on Upper Edge	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2
Average space	not required		not required		not required		not required	
BEAMS, Lower Deck, Hold or Orlop	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2
Single or double Ang. Iron, Plate or Tee Bulb Iron	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2
Single or double Angle Iron on Upper Edge	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2	4 1/2 x 3 1/2	7 1/2 x 3 1/2
Average space	not required		not required		not required		not required	
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	10 1/2 x 8	9 3/4 x 8	10 1/2 x 8	9 3/4 x 8	10 1/2 x 8	9 3/4 x 8	10 1/2 x 8	9 3/4 x 8
" Rider Plate	8 1/2 x 7	7 1/2 x 6	8 1/2 x 7	7 1/2 x 6	8 1/2 x 7	7 1/2 x 6	8 1/2 x 7	7 1/2 x 6
" Bulb Plate to Intercoastal Keelson	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" Angle Irons	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" Double Angle Iron Side Keelson	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" Side Intercoastal Plate	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" do. Angle Irons	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" Attached to outside plating with angle iron	not attached		not attached		not attached		not attached	
BILGE Angle Irons	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" do. Bulb Iron	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
" do. Intercoastal plates riveted to plating for length	6 1/2 x 6	5 1/2 x 5	6 1/2 x 6	5 1/2 x 5	6 1/2 x 6	5 1/2 x 5	6 1/2 x 6	5 1/2 x 5
BILGE STRINGER Angle Irons	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
Intercoastal plates riveted to plating for length	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
SIDE STRINGER Angle Irons	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3

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

Windlass Hawfield's patent Pall Bitt Iron

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 5 apart.

The REVERSED ANGLE IRONS on floors and frames extend near middle line to upper turn of Bilge and to gunwale alternately except in

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 5 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 ins. from centre to centre.

Butts of 1 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 5/8 in. diameter, averaging 2 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 5/8 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 1/2 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 4 1/2 Breadth of laps of plating in single riveting 2 1/4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double and treble

Waterway, how secured to Beams Gutter gunwale (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? clamped down ends No. of Breasthooks, 3 Crutches 29/Transom

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

Manufacturer's name or trade mark, W. G. & Co

The above is a correct description

Builder's Signature, James Wilson Surveyor's Signature, James Wilson

IRON 453-0214



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 generally  
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 generally  
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 very few

Masts, Bowsprit, Yards, &c., are of wood 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

Chains tested in accordance with Act 1864, Vessel contracted for in May 1871 date of testing certificate 7<sup>th</sup> Decr. 72 marked R.W.C, signed John Hartness

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
300		210	1 3/4	25 2/3	1 1/2	20 2/3	Bowers	1	12.1.0	14.1.3.14	8.1.0	10.7.0.0
N <sup>o</sup> .							(Machine where Tested, date, and name of Superintendent.)	1	12.0.0	13.17.2.0	8.1.0	10.7.0.0
SAILS.							Stream	1	11.1.0	13.2.2.0	7.0.2	9.5.0.0
CABLES, &c.							Kedges	1	2.2.10	1.2.0		
Chain												
Fore Sails,												
Fore Top Sails,												
Fore Topmast Stay Sails												
Main Sails,												
Main Top Sails,												
Hempen Stream Cable		90	8									
Hawser Chain		90	15									
Towlines		90	16									
Warp		90	4									
quality												

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has two Long Boats and 2 others  
The Windlass is Hartfield's Patent Capstan good and Rudder good Pumps Good

Engine Room Skylights. How constructed? Strong Lead framing How secured in ordinary weather? Screws

What arrangements for deadlights in bad weather? Thick glass and strong wire netting

Coal Bunker Openings. How constructed? Circular openings How are lids secured? with studs Height above deck? flush

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? 3 Ports & 2 Scuppers on each side

Cargo Hatchways. How formed? Iron plate comings and Headledges

State size Main Hatch 6ft x 7ft Forehatch 7' 10" x 5' 10" Quarterhatch -

If of extraordinary size, state how framed and secured? -

What arrangement for shifting beams? -

Hatches, If strong and efficient? Yes

Order for Special Survey No. 2391 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under R.W.C.  
Date 30<sup>th</sup> November 72 Surveys held 2nd. On the plating during the progress of riveting Revised 1873 Aug 15.22.24.30. 1874 April 11.25.26.30. Oct 10.14.22.24.26.30. Nov 5.11.12.15.16.20.23  
Order for Ordinary Survey No. - while building 3rd. When the beams were in and fastened, and before the decks were laid  
Date - as per 4th. When the ship was complete, and before the plating was finally coated or cemented 23.28.4.22 2.5.10.22.13.18.19.36  
No. 135 in builder's yard. Section 18. 5th. After the ship was launched and equipped 31. 1873 Jan 6.7.10.20.22.30.31. Feb 7.1.3.6.8.

General Remarks, This vessel has a ballast tank in the fore hold, extending from the foremost bulkhead of engine-room, to the collision bulkhead about 56 feet in length, and a tank in after hold, extending from the after bulkhead of engine-room, aft. to within 2 spaces of frames of the after bulkhead, about 47 feet in length. It is constructed with a raised quarter deck extending from the foremost bulkhead of boiler room, aft. about 90 feet in length, and strengthened at the break with doubling plates as per rule. There are 11 hold beams fitted in the after hold, & 6 ft. in fore hold, with a 3in flat-laid, for carrying passengers.

State if one, two, or three decked vessel, or if open orawning decked, and length of poop, fore-castle or raised quarter deck, or of deck or part double bottom.

How are the surfaces preserved from oxidation? Inside Portland Cement & upper part of Outside 3 coats of paint

I am of opinion this Vessel should be Classed \* 100 A Barges, and paint above

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

Special ... £ 16 : 9 : : 100 A

Certificate ... : : : : James Gibson

(Travelling Expenses)  
(if any) £ -

Committee's Minute 14<sup>th</sup> Febry 1873

Character assigned 100 A ACEP part double bottom

IBW all C part double bottom