

# IRON SHIP.

Per 13/2/43

No. 10506 Survey held at Cumberland Date, First Survey 15<sup>th</sup> August 1873 Last Survey 12<sup>th</sup> August 1873  
On the Screw Steamer "Nanaqua" Yard Number 135 Master C. G. Thomson

TONNAGE under Tonnage Deck } 289.09  
Ditto of Third, Spar, or Awning Deck. }  
Ditto of Roof, or Raised Qr. Dk. } 59.72  
Ditto of Houses on Deck. } 3.44  
Ditto of Forecastle }  
Gross Tonnage 352.25  
Less Crew Space 22.27  
Less Engine Room 127.21  
Register Tonnage (as cut on Beam) 202.77

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 ... ..  
LENGTH ... .. 162.5  
2nd NUMBER ... .. 7109  
PROPORTIONS—Breadths to Length ... ..  
Depths to Length—Upper Deck to Keel ... .. 13  
Main Deck ditto ... ..

Built at Cumberland  
When built 1872 Launched 30 Nov 1872  
By whom built Messrs Oswald & Co  
Owners Union S. Comp<sup>y</sup> Limited  
Port belonging to Southampton  
Destined Voyage C of Good Hope  
Surveyed while Building, Afloat, or in Dry Dock.

PLANS CASE

Official Number

LENGTH on deck as per Rule ... 162 6 BREADTH—Moulded ... 22 0 DEPTH top of Floors to Upper Deck Beams ... 11 0 Power of Engines ... 80 Horse. N° of Decks with flat laid One N° 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.	
	In Ship.	In Ship.	Inches per Rule.	Inches per Rule.
KEEL, depth and thickness	6	2	7	1 5/8
STEM, moulding and thickness	6	2	6 1/4	1 5/8
STERN-POST for Rudder do. do.	6 1/2	3	6 1/4	3 1/4
for Propeller	6 1/2	3 1/2	6 1/4	3 1/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	21 ins (Class 100 A)			
FRAMES, Angle Iron, for 1/2 length amidships	3	2 1/2	5	2 1/2
Do. for 1/3 at each end	3	2 1/2	4	2 1/2
REVERSED FRAMES, Angle Iron	2 1/4	2 1/4	4	2 1/4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	12 6			
thickness at the ends of vessel	5			
depth at 1/2 the half-bdth. as per Rule	6 1/2			
height extended at the Bilges	source midship depth			
BEAMS, Upper, Spar, or Awning Deck	5	3	8	5
Single or double Ang. Iron, Plate or Tee Bulb Iron	Bulb plates at Hatchways 6x2			
Single or double Angle Iron on Upper edge	2 1/2	2 1/2	7 1/2	5
Average space	alternate frames			
BEAMS, Main or Middle Deck	-			
Single or double Ang. Iron, Plate or Tee Bulb Iron	-			
Single, or double Angle Iron, on Upper Edge	-			
Average space	-			
BEAMS, Lower Deck, Hold or Orlop	4	3	7	not required
Single or double Ang. Iron, Plate or Tee Bulb Iron	-			
Single or double Angle Iron on Upper Edge	-			
Average space	-			
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	10	5	9 3/4	8
" Rider Plate	8	7	7 1/4	6
" Bulb Plate to Intercoastal Keelson	-			
" Angle Irons	3	3	6	3
" Double Angle Iron Side Keelson	3	3	6	3
" Side Intercoastal Plate	-			
" do. Angle Irons	-			
" Attached to outside plating with angle iron	Not attached			
BILGE Angle Irons	3	3	6	3
do. Bulb Iron	6	6	5	5
do. Intercoastal plates riveted to plating for length	-			
BILGE STRINGER Angle Irons	-			
Intercoastal plates riveted to plating for length	-			
SIDE STRINGER Angle Irons	3	3	6	3
Transoms, material. Knight-heads. Hawse Timbers.	Iron			
Windlass <u>Hawfield's patent</u> Pall Bitt <u>Iron</u>	-			

	Inches. In Ship.	16ths. In Ship.	Inches. required	16ths. required
Flat Keel Plates, breadth and thickness	30	8	30	8
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	1 1/2	8	8 1/2	7
fin up. part of Bilge to Ir. edge of Sh'rstrake	6 1/2	-	6 1/2	-
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	32	10 1/8	30	10 1/8
Up. or Spar Dk Sh'rstrake, brdth & thickness	-	-	-	-
Butt Straps to outside plating, breadth & thickness	8 1/4	5 1/4	8 1/4	5 1/4
Lengths of Plating	5 spaces of frames			
Shifts of Plating, and Stringers	2 spaces of frames			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	3 1/2	7 1/2	3 1/2	7 1/2
Angle Iron on ditto	3	3	5 1/2	3
Tie Plates fore and aft, outside Hatchways	1 1/2	6	7 1/2	6
Diagonal Tie Plates on Beams No. of Pairs	-			
Planksheer material and scantling	Gutter gunwale			
Waterways do. do.	-			
Flat of Upper Deck do. do.	3 in Yellow pine			
How fastened to Beams	galvanized iron screw bolts and nuts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	-			
Is the Stringer Plate attached to the outside plating?	-			
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 or Orlop Beams	14	6	-	-
Is the Stringer Plate attached to the outside plating?	No			
Angle Irons on ditto, No.	3	3	6	-
Stringer or Tie Plates, outside Hatchways	-			
Flat of Lower Deck	part Cabin flat 3 in			
Ceiling betwixt Decks, thickness and material	2 1/2 in battens			
in hold do. do.	2 1/4 in			
Main piece of Rudder, diameter at head	3 3/4	-	3 3/4	-
do. at heel	2 1/4	-	2 1/4	-
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 4 Thickness of 4 1/2	-			
Height up Upper Deck, after one to cabin flat and plating	-			
How secured to sides of ship	between double frames			
Size of Vertical Angle Irons	3x3x5/16 and distance apart 30 ins.			
Are the outside Plates doubled two spaces of Frames in length?	Yes			

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/16 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 engine room

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 clencher, double riveted; with rivets 5/8 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 Strake 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 clencher, 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? curved down end No. of Breasthooks, 3 Crutches 29 Transoms

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. & A. Mitchell

The above is a correct description

Builder's Signature, W. & A. Mitchell Surveyor's Signature, James Gibson

Lloyd's Register Foundation

**Workmanship.** Are the butts of plating planed or otherwise fitted? Planed 11084 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 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 1873 date of testing certificate 7th 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.
N <sup>o</sup> .	SAILS.											
	CABLES, &c.	210	1 3/16	25 1/2	1 1/16	20 5/16		1	12.1.0	14.1.3.14	8.1.0	10.7.0.0
	Chain						Bowers	1	12.0.0	13.17.2.0	8.1.0	10.7.0.0
	Fore Sails,						(Machine where Tested, date, and name of Superintendent.)	1	11.1.0	13.2.2.0	7.0.2	9.5.0.0
	Fore Top Sails,						Stream	1	5.0.0	3.0.0		
	Fore Topmast Stay Sails	90	5				Kedges	1	2.2.10	1.2.0		
	Main Sails,	90	15					1	11.0.17			
	Main Top Sails,	90	16									
	Warp	90	4									
	quality											

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has two Long Boat and 2 others  
 The Windlass is Hargreaves Patent Capstan — 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.P.R.  
 Date 30th November/72 Surveys held 2nd. On the plating during the progress of riveting Permitted 1872 Aug 15-22-29-30, 1st Sep 1872 11-18-25-26-29, Oct 1-14-21-28-29-30, Nov 1-14-21-28-29-30  
 Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid Nov 1-14-21-28-29-30  
 Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented 23-28-29-30, 2-5-10-12-13-18-19-30  
 No. 135 in builder's yard. Section 18. 5th. After the ship was launched and equipped 31-10-72 Jan 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 in fore hold, with a 3in flat-laid, for carrying passengers.

State if one, two, or three decked vessel, or if open or awning decked, and length of poop, forecastle or raised quarter deck, — of deck or part double bottom.  
 How are the surfaces preserved from oxidation? Inside Portland Cement Scuppers — Outside 3 coats of paint  
 I am of opinion this Vessel should be Classed 100 A Beiges, and paint above

The amount of the Entry Fee ... £ 4 : : : is received by me,  
 Special ... £ 16 : 9 : :  
 Certificate ... : : :  
 (Travelling Expenses) (if any) £ —  
 Committee's Minute 14th Febry 1873  
 Character assigned 100 A A & CP  
JBW all C part double bottom  
 James Gibson  
 Lloyd's Register Foundation