

IRON SHIP.

No. 12219 Survey held at Newcastle Date, First Survey 16 Dec^r 1845 Last Survey 14th May 1846

On the S.S. "Widgeon"

Master

TONNAGE under Tonnage Deck } 601.33
 Ditto of Third Spar, or Awning Deck }
 Ditto of Poop, or Raised Qr. Dk. } 128.02
 Ditto of Houses on Deck } 9.94
 Ditto of Forecastle } 48.41
 Gross Tonnage } 784.70
 Less Crew Space } 32.22
 Less Engine Room } 755.48
 Register Tonnage as out on Beam } 503.42

ONE, OR TWO DECKED, THREE DECKED VESSEL.
~~SPAR, OR AWNING DECKED VESSEL.~~
 HALF BREADTH (moulded)... 14.3
 DEPTH from upper part of Keel to top of Upper Deck Beams 15.4
 GIRTH of Half Midship Frame (as per Rule) 26.1
 1st NUMBER 55.8
~~1st NUMBER, if a THREE DECKED VESSEL~~
 LENGTH 218.5
 2nd NUMBER 12192
 PROPORTIONS—Breathths to Length Under 8
 Depths to Length—Upper Deck to Keel Under 15
 Main Deck ditto

Built at Newcastle
 When built 1846 Launched 24th March
 By whom built C. Mitchell & Co
 Owners General Steam Navigation Co
 Port belonging to London
 Destined Voyage
 If Surveyed while Building, Afloat, or in Dry Dock.

PLANS CASE

LENGTH on deck as per Rule 218 6 Feet. Inches. BREADTH—Moulded... 28 6 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 13 11 Feet. Inches. Power of Engines ... 160 Horse. N^o. of Decks with flat laid Two N^o. of Tiers of Beams Two

Dimensions of Ship per Register, length, 219.5 breadth, 28.6 depth, 14.1

	Inches in Ship	Inches in Ship	16ths in Ship	Inches per Rule	Inches per Rule	16ths per Rule
KEEL, depth and thickness	7	2 3/4	7	2 3/8	7	2 3/8
STEM, moulding and thickness	6 1/2	4 1/2	7	4 3/4	7	4 3/4
STERN-POST for Rudder do. do. for Propeller	22		22		22	
Distance of Frames from moulding edge to moulding edge, all fore and aft	3 1/2	3	6	3 1/2	3	6
FRAMES, Angle Iron, for 1/2 length amidships Do. for 1/2 at each end	3 1/2	3	5	3 1/2	3	5
REVERSED FRAMES, Angle Iron	3	2 1/2	5	3	2 1/2	5
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 3/4 the half-bdth. as per Rule height extended at the Bilges	17	8 1/2	15 1/2	8 1/2	6	6
BEAMS, Upper, Spar, or Awning Deck Single or Double Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge Average space	3	3	6	3	3	6
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	5	3	6	5	3	6
BEAMS, Lower Deck, Hold or Orlop Single or Double Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space	4 1/2	3 1/2	7	4 1/2	3 1/2	7
KEELSONS Centre line, single or double plate, Intercostal, Plates Rider Plate Bulb Plate to Intercostal Keelson Angle Irons Double Angle Iron Side Keelson Side Intercostal Plate do. Angle Irons Attached to outside plating with angle iron	4 1/2	3 1/2	7	4 1/2	3 1/2	7
BILGE Angle Irons do. Bulb Iron do. Intercostal plates riveted to plating for length	4 1/2	3 1/2	7	4 1/2	3 1/2	7
BILGE STRINGER Angle Irons Bulb Intercostal plates riveted to plating for length	4 1/2	3 1/2	7	4 1/2	3 1/2	7
SIDE STRINGER Angle Irons	4 1/2	3 1/2	7	4 1/2	3 1/2	7
Transoms, material. Knight-heads. Hawse Timbers.						
Windlass Bands Patent Pall Bitt						

	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
Flat Keel Plates, breadth and thickness	32	13	32	13
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied 1/2 fm up. part of Bilge to lr. edge of Sh'rstrake	20	10	one strake doubled	8 1/2
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Main to Upper Spar Dk. Sh'rstrake Upper Spar Dk. Sh'rstrake, breadth & thickness	36	10	36	10
Butt Straps to outside plating, breadth & thickness	10	10	10	10
Lengths of Plating	See frame spaces			
Shifts of Plating, and Stringers	Two frame spaces			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	54	9	48	10
Angle Iron on ditto	4	4	7	4 1/2
Tie Plates fore and aft, outside Hatchways	10	8	10	8
Diagonal Tie Plates on Beams No. of Pairs, Plankhook material and scantling				
Waterways do. do.	Butter waterway			
Flat of Upper Deck do. do.	P Pine 3 1/2			
How fastened to Beams	nut & screw bolts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
Is the Stringer Plate attached to the outside plating?	no			
Angle Irons on ditto, No.	4 1/2	3 1/2	7	4 1/2
Tie Plates, outside Hatchways	4	3	3	3
Diagonal Tie Plates on Beams, No. of pairs				
Waterways material and scantling				
Flat of Middle Deck do. do.	4. Pine 3 in			
How fastened to Beams	3 B. Pine 2 1/2			
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	12	7		
Is the Stringer Plate attached to the outside plating?	no			
Angle Irons on ditto, No. 1	4 1/2	3 1/2	7	4 1/2
Stringer or Tie Plates, outside Hatchways	4	3	3	3
Flat of Lower Deck	4. Pine 3 in			
Ceiling betwix Decks, thickness and material in hold do. do.	3 B. Pine 2 1/2			
Main piece of Rudder, diameter at head do. at heel	5		5	
Can the Rudder be unshipped afloat?	yes			
Bulkheads No. 4 Thickness of Height up	5 1/6			5 1/6
How secured to sides of ship	double frame			
Size of Vertical Angle Irons 3 x 2 1/2 x 7/8 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 3/4 in. Rivets, about 6 apart.
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper pt of bilge and to gunwale 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 7/8 in. diameter, averaging 5 1/2 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 3 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 3 1/2 ins. from centre to centre.
 Butts of Gunwale Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 7/8 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 3 1/2 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 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, double riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 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 amidships.
 Breadth of laps of plating in double riveting 5 1/2 x 4 1/2 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double Riveted?
 Waterway, how secured to Beams riveted (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Solid Nuts rivets to frames No. of Breasthooks, 4 Crutches, 3
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Ordinary
 Manufacturer's name or trade mark, R. J. Felling Co. Plate & Bolt Co. & Bolton & Mather H^{rs}
 The above is a correct description.
 Builder's Signature, W. C. Mitchell & Co. Surveyor's Signature, Geo. J. Cooper
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 466-0451

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*
 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? *few* 16H66 Iron

Masts, Bowsprit, Yards, &c., are *New* 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

Schooner rigged - Two Masts

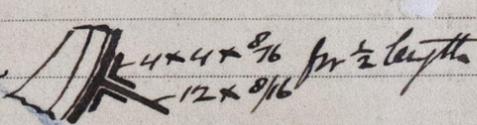
NUMBER for EQUIPMENT 13411		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.	240	1 3/8	34 ton	240-1 3/8	Bowers	1	17-0-0	18.5-0-0	16-3-0	18-0-0
			Chain	135	5 1/2	51 ton	51 ton		1	16-3-0	18-0-2-14	16-3-0
	Fore Sails,	R.W.C.P.Y. J. Harkness										
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,	Hemp Strm Cbl	90	1 1/2	90-1 1/2	8/2 1/2						
	Main Top Sails,	Hawser ...	75	8	90-8		Stream	1	7-1-0		7-0-0	
	and	Towlines ...	90	6	90-6			1	3-2-0		3-2-0	
		Warp ...	90	5 1/2	90-5		Kedges	1	1-3-24		1-3-0	
		quality <i>good</i>										

Standing and Running Rigging *wire rope* sufficient in size and *good* in quality. She has *Two Life* Boats and *3 others*
 The Windlass is *good* Capstan *good* and Rudder *good* Pumps *Sufficient* *Two*
 Engine Room Skylights.—How constructed? *Iron clad to bridge deck* How secured in ordinary weather? *Bolted*
 What arrangements for deadlights in bad weather? *with top with solid shutters & bulwarks*
 Coal Bunker Openings.—How constructed? *Iron rim & cover* How are lids secured? *Chain* Height above deck? *flush*
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Pots & scupper*

Cargo Hatchways.—How formed? *Plates & angle bars in the usual way*
 State size Main Hatch *14.6 x 9* Forehatch *—* Quarterhatch *12 x 9*
 If of extraordinary size, state how framed and secured? *Not extraordinary size*
 What arrangement for shifting beams? *Shung two fore & after*
 Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *109* Date *8 Dec 70*
 Order for Ordinary Survey No. *—* Date *—*
 No. *333* in builder's yard.
 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 *1878 Dec-10-22-31-1876 Jan-5-7-10-14-17-20.*
 2nd. On the plating during the process of riveting *27-31-1-10-17-25-28-2-13-15-23-27-31-3.*
 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.) *This is a two decked vessel built in accordance with the approved midsection keels attached & Secretary's letter No 13th Dec^r 1875.*

She is fitted with water ballast under Baysian & Roiler for a distance of 40 ft. - Tank top 9/16 - Central girder 7/16 other girders 5/16 - This tank has been tested & found satisfactory - Additional girders are fitted under Baynie sealing as shown in ticked lines in red ink on tracing of midsection -
A bilge keel is fitted for 1/2 length of this form 

A Poop 68 ft long from Stem Post - Bridge deck 53 ft long & Top-suller Forecastle 45 ft long are fitted - Beams A. & 4 1/2 x 3 x 9/16 - Stringers 24 x 9/16 Tier 9 x 9/16 - Side Plating 7/16 - The Beams on main deck from fore part of after hatch to the fore end of Baynie space are plated with 9/16 between stringers & ties. The workmanship & material are alike satisfactory.

State if one, two, or three, decked vessel; or if spar, or awning decked; and the lengths of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom.
 How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paints*

I am of opinion this Vessel should be Classed *100 A 1*
 The amount of the Entry Fee ... £ 5 : : : is received by me, *T. Young*
 Special Certificate ... £ 37 : 10 : : 2 June 1876

Committee's Minute *6th June 1876*
 Character assigned *100 A 1*
 Lloyd's Register of Shipping
 double bottom

I have examined the vessel on the 10th June 1876

