

Steel

IRON SHIP.

TUESDAY 29 JUNE 1886

No. 9159 Survey held at Greenwich Date, First Survey 3rd March 1886 Last Survey 23rd June 1886
On the Screw Steamer "Danube" (35 visits)

TONNAGE under Tonnage Deck <u>93.2</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING DECKED VESSEL.	Master <u>Charles Smith</u>
Ditto of Third, Spar, or Awning Deck. <u>93.2</u>	Half Breadth (moulded) <u>9.0</u>	Built at <u>Port-Glasgow</u>
Ditto of Poop, or Raised Or. Dk. <u>93.2</u>	Depth from upper part of Keel to top of Upper Deck Beams <u>11.15</u>	When built <u>1886</u> Launched <u>7th June</u>
Ditto of Houses on Deck <u>93.2</u>	Girth of Half Midship Frame (as per Rule) <u>16.75</u>	By whom built <u>D. J. Dunlop & Co.</u>
Ditto of Forecastle <u>93.2</u>	1st Number <u>36.9</u>	Owners <u>Ed. London & T. H. Lightfoot & Co.</u>
Gross Tonnage <u>93.2</u>	1st Number, if a 3-Decked Vessel deduct 7 feet	Residence <u>50. May Lane London E.C.</u>
Less Crew Space <u>86.31</u>	Length <u>79</u>	Port belonging to <u>London</u>
Less Engine Room <u>6.89</u>	2nd Number <u>2975</u>	Destined Voyage <u>London</u>
Register Tonnage as out on Beam <u>6.89</u>	Proportions— Breadths to Length <u>4.4</u>	If Surveyed while Building, Afloat, or in Dry Dock. <u>While building under S.O.</u>
	Depths to Length—Upper Deck to Keel <u>7.1</u>	
	Main Deck ditto <u>—</u>	

LENGTH on deck as per Rule <u>79.0</u>	BREADTH Moulded <u>18.0</u>	DEPTH top of Floors to Upper Deck Beams <u>9.9</u>	Power of Engines <u>70</u>	Horse. <u>70</u>	Nº of Decks with flat laid Nº. of Tiers of Beams <u>One Cabin floor.</u>
Dimensions of Ship per Register, length, <u>80.0</u> breadth, <u>18.1</u> depth, <u>9.75</u>					
KEEL, depth and thickness <u>6 x 1 1/8</u>	Inches in Ship <u>6 x 1 1/8</u>	Inches per Rule <u>6 x 1 1/8</u>	Flat Keel Plates, breadth and thickness <u>30 6/20 30 6/20</u>		
STEM, moulding and thickness <u>6 x 1 1/8</u>	Inches in Ship <u>6 x 1 1/8</u>	Inches per Rule <u>6 x 1 1/8</u>	PLATES in Garboard Strakes, br'dth & thickness <u>30 6/20 30 6/20</u>		
STERN-POST for Rudder do. do. <u>5 1/2 x 2 1/4</u>	Inches in Ship <u>5 1/2 x 2 1/4</u>	Inches per Rule <u>5 1/2 x 2 1/4</u>	" From Garboard to upper part of Bilges... <u>— 6/20 4/6 — 6/20 4/6</u>		
" " for Propeller <u>5 1/2 x 2 1/4</u>	Inches in Ship <u>5 1/2 x 2 1/4</u>	Inches per Rule <u>5 1/2 x 2 1/4</u>	" Of d'bling at Bilge, or increased thickness, and length applied <u>— — —</u>		
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>20</u>	Inches in Ship <u>20</u>	Inches per Rule <u>20</u>	" From up. prt of Bilge to l.r. edge of Sh'rstrake... <u>— 6/20 4/6 — 6/20 4/6</u>		
FRAMES, Angle Iron, for 1/2 length amidships <u>2 1/2 x 3/4</u>	Inches in Ship <u>2 1/2 x 3/4</u>	Inches per Rule <u>2 1/2 x 3/4</u>	" Main Sheerstrake, breadth and thickness... <u>— — —</u>		
Do. for 1/2 at each end <u>2 1/2 x 3/4</u>	Inches in Ship <u>2 1/2 x 3/4</u>	Inches per Rule <u>2 1/2 x 3/4</u>	" Of d'bling at Sh'stk. & Ing. applied <u>— — —</u>		
REVERSED FRAMES, Angle Iron <u>2 1/4 x 3/4</u>	Inches in Ship <u>2 1/4 x 3/4</u>	Inches per Rule <u>2 1/4 x 3/4</u>	" From M'n. to Up. or Spar Dk. Sh'rstrake... <u>30 6/20 30 6/20</u>		
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships <u>16 1/2 — 4</u>	Inches in Ship <u>16 1/2 — 4</u>	Inches per Rule <u>16 1/2 — 4</u>	" Up. or Spar Dk Sh'rstrake, br'dth & thck'n'ss... <u>30 6/20 30 6/20</u>		
" thickness at the ends of vessel <u>— — 4</u>	Inches in Ship <u>— — 4</u>	Inches per Rule <u>— — 4</u>	Butt Straps to outside plating, breadth & thickness <u>8 4/6 20 8 4/6 20</u>		
" depth at 3/4 the half-bdth. as per Rule <u>— — 4</u>	Inches in Ship <u>— — 4</u>	Inches per Rule <u>— — 4</u>	Lengths of Plating <u>— — —</u>		
" height extended at the Bilges... <u>— — 4</u>	Inches in Ship <u>— — 4</u>	Inches per Rule <u>— — 4</u>	Shifts of Plating, and Stringers <u>— — —</u>		
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>4 1/2 3 6 4 1/2 3 6</u>	Inches in Ship <u>4 1/2 3 6 4 1/2 3 6</u>	Inches per Rule <u>4 1/2 3 6 4 1/2 3 6</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... <u>20 4/6 20 4/6</u>		
Single or double Angle Iron on Upper edge <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Angle Iron on ditto <u>3 x 3 x 6/20 3 x 3 x 6/20</u>		
Average space... <u>40</u>	Inches in Ship <u>40</u>	Inches per Rule <u>40</u>	Tie Plates fore and aft, outside Hatchways <u>7 4/6 7 4/6</u>		
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Diagonal Tie Plates on Beams No. of Pairs <u>— — —</u>		
Single, or double Angle Iron, on Upper Edge <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Flat of Up., Spar, or Awning Dk. * <u>2 1/2 — 2 1/2</u>		
Average space... <u>—</u>	Inches in Ship <u>—</u>	Inches per Rule <u>—</u>	How fastened to Beams <u>— — —</u>		
BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness <u>— — —</u>		
Single or double Angle Iron on Upper Edge <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Is the Stringer Plate attached to the outside plating? <u>— — —</u>		
Average space... <u>—</u>	Inches in Ship <u>—</u>	Inches per Rule <u>—</u>	Angle Irons on ditto, No. <u>— — —</u>		
BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Tie Plates, outside Hatchways <u>— — —</u>		
Single or double Angle Iron on Upper Edge <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Diagonal Tie Plates on Beams, No. of pairs <u>— — —</u>		
Average space... <u>—</u>	Inches in Ship <u>—</u>	Inches per Rule <u>—</u>	Flat of Middle Deck* do. do. <u>— — —</u>		
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates <u>7 1/2 — 6/20 7 1/2 — 6/20</u>	Inches in Ship <u>7 1/2 — 6/20 7 1/2 — 6/20</u>	Inches per Rule <u>7 1/2 — 6/20 7 1/2 — 6/20</u>	How fastened to Beams <u>— — —</u>		
" Rider Plate <u>6 1/2 — 6/20 6 1/2 — 6/20</u>	Inches in Ship <u>6 1/2 — 6/20 6 1/2 — 6/20</u>	Inches per Rule <u>6 1/2 — 6/20 6 1/2 — 6/20</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams <u>— — —</u>		
" Bulb Plate to Intercostal Keelson <u>3 3 6/20 3 3 6/20</u>	Inches in Ship <u>3 3 6/20 3 3 6/20</u>	Inches per Rule <u>3 3 6/20 3 3 6/20</u>	Is the Stringer Plate attached to the outside plating? <u>— — —</u>		
" Angle Irons <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Angle Irons on ditto, No. <u>— — —</u>		
" Double Angle Iron Side Keelson <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Stringer or Tie Plates, outside Hatchways <u>— — —</u>		
" Side Intercostal Plate <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Flat of Lower Deck* <u>— — —</u>		
" do. Angle Irons <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Ceiling betwixt Decks, thickness and material <u>— — —</u>		
" Attached to outside plating with angle iron <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	" in hold do. do. <u>2 — 2 —</u>		
BILGE Angle Irons <u>3 3 6/20 3 3 6/20</u>	Inches in Ship <u>3 3 6/20 3 3 6/20</u>	Inches per Rule <u>3 3 6/20 3 3 6/20</u>	Main piece of Rudder, diameter at head <u>3 — 3 —</u>		
" do. Bulb Iron <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	do. at heel <u>2 — 2 —</u>		
" do. Intercostal plates riveted to plating for length <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Can the Rudder be unshipped afloat? <u>Yes</u>		
BILGE STRINGER Angle Irons <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	Bulkheads No. <u>Four</u> No. per Rule <u>Four</u>		
Intercostal plates riveted to plating for length <u>— — —</u>	Inches in Ship <u>— — —</u>	Inches per Rule <u>— — —</u>	" Thickness of <u>4</u>		
SIDE STRINGER Angle Irons <u>3 3 6/20 3 3 6/20</u>	Inches in Ship <u>3 3 6/20 3 3 6/20</u>	Inches per Rule <u>3 3 6/20 3 3 6/20</u>	" Height up <u>upper deck</u>		

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 5/8 in. Rivets, about 5 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper turn of bilges and to 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 5/8 in. diameter, averaging 4 3/8 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 2 1/2 ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 1/2 ins. from centre to centre.

" Butts of one Strakes at Bilge for half length, treble riveted with Butt Straps 1/20 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 — length amidships. Butts of Upper or Spar Sheerstrake, double riveted whole length amidships.

" Butts of Main Stringer Plate, treble riveted for — length amidships. Butts of Upper or Spar Stringer Plate, double riveted for whole length.

" Breadth of laps of plating in double riveting — 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 No. of Breasthooks, Two Crutches, One

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

Manufacturer's name or trade mark, Anglo-Saxony Plates Consort

The above is a correct description.

Builder's Signature, Wm. D. Mundy Surveyor's Signature, D. J. Dunlop

Surveyor to Lloyd's Register of British and Foreign Shipping

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? *Yes a few in the butts*

Masts, Bowsprit, Yards, &c., *in P. Pine* 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

NUMBER & LETTER for EQUIPMENT		CABLES, &c.		Test per Certificate.		Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.		ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	
N ^o .	SAILS.	Chain	Inches.	T	T	Fath	in		Bower						
	Fore Sails,	16327 60	11/16	8 1/2	12 3/4	120	1/16	Netherton, S. G. Lewis	Anchors	20589	3-2-14	6-0-3-21	3-2-0	Netherton, S. G. Lewis	
	Fore Top Sails,	16325 60	11/16	8 1/2	12 3/4			do : do		20571	3-2-2	6-0-3-21	3-2-0	do : do	
	Fore Topmast Stay Sails,	16331 45	1/2	3	6	45	3/16	do : do					7-0-0		
	Main Sails,								Stream		3-3		3-0		
	Main Top Sails, and								Kedge		2-0		2-0		
									2nd Kedge.						

Standing and Running Rigging *3/16 Manila* sufficient in size and *good* in quality. She has *One* Boat and The Windlass is *good* Capstan *✓* and Rudder *good* Pumps *good*
Engine Room Skylights.—How constructed? *5/16 Comp. 2' above 8"* How secured in ordinary weather? *Draw bolted*
What arrangements for deadlights in bad weather? *Teak glass circular lights*
Coal Bunker Openings.—How constructed? *Circular flanks* How are lids secured? *Bayonet joint* Height above deck? *Flush*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Two scuppers each side*
Cargo Hatchways.—How formed? *Compauion Away Comp. of Teak*
State size Main Hatch Fore hatch *5ft x 8ft* Quarter hatch *3ft x 2-6*
If of extraordinary size, state how framed and secured? *✓*
What arrangement for shifting beams? *✓*
Hatches, If strong and efficient? *✓*

Order for Special Survey No. <u>301</u>	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	1886. Mar. 3. 4. 11. 12. 15. 19. 22. 24. 26. 30.
Date <u>10th Feb 1886</u>			2nd. On the plating during the process of riveting	Apr. 2. 6. 9. 12. 15. 19. 20. 27. 28.
Order for Ordinary Survey No. <u>✓</u>			3rd. When the beams were in and fastened, and before the decks were laid....	May 6. 7. 10. 14. 19. 25. 31.
Date <u>✓</u>			4th. When the ship was complete, and before the plating was finally coated or cemented..	June 3.
No. <u>181</u> in builder's yard.			5th. After the ship was launched and equipped	June 8. 10. 14. 18. 21. 22. 23.
State dates of letters respecting this case			<u>11th Feb 24th April 1886.</u>	

General Remarks (State quality of workmanship, &c.) *Quality of workmanship good.*
This vessel has been constructed in accordance with the accompanying approved sketches and in other respects with the Rules & the Committee's Circulars on Steel &c

Capacity of Fresh water tank fore side of Boiler B.A. - 7 tons.

State if one, two, or three decked vessel, *one*, or *any* decked; and the length of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)
How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint*.
I am of opinion this Vessel should be Classed *100 A.1. Steel*
The amount of the Entry Fee£ *1 : 0 : 0* is received by me, *J. H.*
Special£ *4 : 13 : 0* 28th June 1886
(to be sent as per margin). Certificate ... *grates*
(Travelling Expenses, if any. £ *Nil*).
Committee's Minute
Character assigned *100 A.1. Steel*

Surveyor to Lloyd's Register of British and Foreign Shipping
It is submitted that this vessel appears worthy to be classed "Steel" as recommended.
Lloyd's Register Foundation