5896

IRON SHIPS.

Rec 2/12/67

No. 2732 Survey held at Glasgow Date 30th Nov. 1866

on the Barque "Dinaric" Master Connell

Tonnage under tonnage deck 599.83 Built at Glasgow When built 1867 Launched 14th Nov. 1867

Ditto of poop ____ or spar deck — " —

Ditto of engine room — " —

Total Register tonnage 599.83 By whom built Glasgow Stephen & Sons Owners Louden & others

Gross Tonnage — " — Port belonging to Liverpool See below Destined Voyage San Francisco

If Surveyed while Building, Afloat, or in Dry Dock whilst building and afloat

Length aloft 170 ft. Extreme Breadth 27 ft. 8 in. Depth from top of Upper Deck Beam to top of Floor 18 ft. 4 in. Power of Engines — Horse. No. of Decks One

(Dimensions of Ship per Register, length 175.4 breadth 27.8 depth 18.25)

	Inches in Ship.			Inches required per Rule. for 3 feet Sections Scale.		
Keel, if bar iron, depth and thickness	7 × 2½			7 × 2½		
" if plate iron, breadth and thickness	— " —			— " —		
Stem, if bar iron, moulding and thickness	7 × 2½			7 × 2½		
" if plate iron, breadth and thickness	— " —			— " —		
Stern-post, if bar iron, moulding and thickness	7 × 2½			7 × 2½		
" " if plate iron, breadth and thickness	— " —			— " —		
Distance of Frames from moulding edge to moulding edge, all fore and aft	21			21		
	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	Inches. required per Rule.	16ths required per Rule.
Frames, Size of Angle Iron, single ~~or~~ and double	3½	3	7/16	3¾	2½	7/16
" " Reversed Iron, ~~if~~ to every frame ~~or~~ and every other frame	to the Hold Beams					
	to the Gunwale					
Floors, depth and thickness of Floor Plate at mid line	19	"	8/16	18½	"	8/16
" Ditto ditto at Bilge Keelson	7	"	8/16	"	"	"
" Size of Reversed Angle Iron, and No. 1 3 2 at top of Floor Plate	3	2½	6/16	3	2½	6/16
Beams, Deck (No. 1) ~~double Angle Iron, Plate, Tee, or~~ Bulb Iron	7	"	7/16	6¾	"	7/16
" " double ~~or single~~ Angle Iron, on upper edge	2½	2½	5/16	2½	2½	5/16
" " average space between	3 feet			3 feet		
" Hold, or Lower Deck (No. — " —) ~~double Angle, Tee, Plate, or~~ Bulb Iron	7	"	7/16	6¾	"	7/16
" " double ~~or single~~ Angle Iron on upper edge	2½	2½	5/16	2½	2½	5/16
" " average space between	3 feet			3 feet		
" Paddle, sided and moulded, — " — thickness of Plate ____ size of Angle Iron	"	"	"	"	"	"
" Engine " " " "	"	"	"	"	"	"
Keelson, single ~~or double~~ plate, ~~box, or intercostal~~	Wing & plate					
" Size of Plates	10	"	13/16	12	"	11/16
" Size of Angle Irons	Angle Bars					
" Side, ~~single~~ or double, ~~plate, box, or intercostal~~	4	3½	7/16	4½	3½	7/16
" Bilge (No. Three Angle Bars) at each Bilge, ~~single, or double, plate, or box~~	4	3½	7/16	4½	3½	7/16

	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths required per Rule.
Plates in Garboard Strakes, breadth and thickness	30	11/16	30	11/16
Ditto from Garboard to upper part of Bilges		10/16		10/16
" from upper part of Bilge to a perpendicular height from upper side of Keel of ⅗ths the entire depth of Hold		9/16		9/16
" from ⅗ths depth of Hold to lower edge of Sheerstrake		8/16		8/16
" Sheerstrake, breadth and thickness	35	10/16	30	10/16
Butt Straps to outside plating, breadth and thickness	9 × 13	8/16	to 11/16	8/16 to 11/16
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	32	8/16	23¾	8/16
Angle Iron on ditto	4 ×	3½ × 7/16	4 ×	3½ × 7/16
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	10	8/16	10½	8/16
Diagonal Tie Plates on ditto	10	8/16	10½	8/16
Planksheer, materials and scantlings	Iron Bulwarks			
Waterway ditto ditto	Gutter			
Flat of Upper Deck, thickness and material	4 ×	5	Cl.	Pine 3½
" " how fastened to Beams	Bolts and Screw bolts			
Ceiling betwixt Decks and in Hold, thickness and material	6 × 2	Battens	"	
Clamps or Spirketting ditto	2½	Ame. Elm	&	R. pine
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	21	8/16	18	8/16
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	4 ×	3½ × 7/16	4½	3½ × 7/16
Stringers in Hold	4 ×	3½ × 7/16	4½	3½ × 7/16
Flat of Lower Deck, thickness and material	3½	Spruce	"	
Main piece of Rudder, diameter at head	4¾		4½	
" " " at heel	2¾		2¾	
(Can the Rudder be unshipped afloat Yes)				
Bulkheads, No. One Thickness of 5/16				
" Height up upper deck				
" how secured to the sides of the ship riveted between two L's				
" size of vertical angle irons 3 × 2½ × 7/16 and their distance apart 30 inch				

Transoms, material Iron Plate or, if none, in what manner compensated for.

Knight-heads, and Hawse Timbers Iron Frames

The Frames extend in one length from Middle line to Gunwale riveted through plates with (¾ in.) rivets, about (6 in.) apart.

The reverse angle irons on the floors extend in one length across the middle line from upper part of Hold Beams to D.

" " " on the frames " " " from Middle line to Gunwale

Keelson, how are the various lengths of plates or angle irons connected? by lined pieces

Plates, Garboard, double ~~or~~ rivetted to keel, double ~~or~~ at upper edge, with rivets (7/16 ins.) diameter, averaging (3¾ in.) apart.

" Edges from Garboards to upper part of bilge, worked clencher, double ~~or single~~ rivetted; with rivets (¾ in.) diameter, averaging (2¼ ins.) apart.

" Butts from Keel to turn of bilge, worked carvel with butt straps (11/16 & 10/16) thick, double ~~or single~~ rivetted; with rivets (¾ in.) diameter, averaging (2¼ ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? Yes

" Edges from bilge to sheerstrake, worked ~~carvel with a lining piece~~ ( ) ~~thick, or~~ clencher, ~~double or~~ single rivetted; with rivets (¾ in.) diameter, averaging (2¼ in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? Yes

" Edges of Sheerstrake, double or single rivetted? At upper edge Single to Bulwarks At lower edge Double

" Butts from bilge to planksheers, worked carvel with butt straps (8/16 to 10/16) thick, double ~~or single~~ rivetted; with rivets (¾ in.) diameter, averaging (2¼ ins.) apart. Breadth of laps in double rivetting (5½ in. of Rivets). Breadth of laps in single rivetting (3¼ in. of Rivets)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double

Planksheer, how secured to the plating of the sides } Explain by sketch if necessary. } Iron Bulwarks

Waterway " " planksheer and to the Beams } Gutter

Deck Beams, how secured to the side? Welded Knees riveted to Frames

Hold or Lower Deck ditto D D

Paddle " " ____ No. of breasthooks Four crutches Four

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

Manufacturer's name or trade mark ____

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Alex Stephen & Sons *Surveyor's Signature* [illegible]

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IRON44-0348

5896 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? Yes

Do the edges of the carvel work and of the butts fay close together throughout their length without requiring any making good of deficiencies? Yes

Do the fillings between the ribs and plates fill in solid with single pieces? ~~or are they in short lengths of various thicknesses~~? Yes

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes

Are there any rivets which either break into or have been put through the seams or butts of the plating? a few in corners of

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. *(If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.*

Tested by Mr Taylor 19 & 20 Sept 07 Glasgow Public Machine

Tested by Mr Taylor 18 & 19 Sept 07 Glasgow Pr Lt 21 Sept 07

No.	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
Double Suit of Sails	Fore Sails,	Chain	270	1 7/16	3 1/4	1 7/16	3 1/2/10	Bowers	3	20.5.0 / 4.0.22	20.15.0	18.0.0	19
	Fore Top Sails,									19.0.17 / 4.3.25	19.19	18.0.21	19
	Fore Topmast Stay Sails	Hempen Stream Cable	90	10		9	"			7.1.2 / 5.3.15	18.8.3	15.0.0	15 1/2
	Main Sails,	Hawser	75	14/16		"	"	Stream	1	8.1.15	9.7.0	21 8.	✓
	Main Top Sails,	Towlines	90	8		9	"						
		Warp	90	6		"	"						
	and	All of Good quality.	90	5 1/4		"	"	Kedges	2	4.1.21 / 3.0.8	5.18.3 / 4.18.3	4. / 2.	✓

Her Standing and Running Rigging Galv^d Wire & Hemp sufficient in size and Good in quality.

She has 24 × 7.0 × 3.0 Long Boat ~~and~~ 24 × 7.0 × 3.0 life boat. 23 × 6.3 × 2.0 Jolly B^t 23 × 5 × 2

The present state of the Windlass is New Capstan New and Rudder New Pumps New and efficient

Order for Special Survey No. 491 Date June 4/67

Order for Ordinary Survey No. ✓ Date ✓

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

2nd. On the plating during the progress of rivetting Built under special survey

3rd. When the beams were in and fastened, and before the decks were laid from the 22nd Aug^t

4th. When the ship was complete, and before the plating was finally coated to the 30th Novr 1867

5th. After the ship was launched

State if she has a Spar Deck No Poop R^d D^k D^k or Forecastle No

General Remarks,

Butts of Gunwale Plate are treble rivetted, also Sheerstrake.
Bulb Bar fitted to Bilge Keelson 7 × 7/16, between Keel and Bars 4 × 3½ × 7/16. An extra Stringer fitted in flat of Bottom formed of double Angle Bars 4 × 3½ × 7/16.
Hold Beam Stanchions 3 rows.
Main piece of Windlass of Greenheart, with Strength Spindle.
Iron outside Hatchways on Hold Beams formed of double Angle Bars 4 × 3½ × 7/16, tween decks laid for this breadth.
Fore and Mainmasts and Bowsprit are of Iron, formed of three plates 9/16 thick, lands double clenched, and Butts treble carvel rivetted.
Fore and Main Yards are of Iron 9/16, 5/16 & 7/16 thick, lands single clenched and Butts treble carvel rivetted.

In what manner are the surfaces preserved from oxidation? Inside Flat of Bottom with Portland Cement & Red lead and patent paints
Ditto ditto Outside

I am of opinion this Vessel should be Classed A 1

The amount of the Fee .....£ 5 : " : " is received by me,
Decr WM Special .....£ 30 : " : "
Certificate (if required) .....£ ~~Statis~~

Committee's Minute 3rd December 1867

Character assigned A 1

A v C P W.M.S.

B^r Darling

This Sailing Barque built of Iron appears eligible for classification as recommended above.

Sec. Dec 23/67

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