

IRON SHIP.

(Received at London Office, Rec'd 25th FEB, 1884.)

No. 6435 Survey held at Glasgow Date, First Survey 29 Mar. 1883 Last Survey 21 February 1884

On the Iron Screw Steamer "Copack" (Two masts, schooner rig)

TONNAGE under Tonnage Deck 2546.11 ONE OR TWO DECKED, THREE DECKED VESSEL, Master M. S. Thomson

Half Breadth (moulded) 7.85 Depth from upper part of Keel to top of Upper Deck Beams 27.50 Built at Glasgow

Girth of Half Midship Frame (as per Rule) 42.56 When built 1883 Launched 29 Decr.

By whom built D. & W. Henderson & Co.

Owners China Shippers Mutual Steam Navigation Co. Ltd.

Residence 3 Billerica Street, London E.C. 6.

Port belonging to London

Destined Voyage China

If Surveyed while Building, Afloat, or in Dry Dock, While Building & afloat.

Register Tonnage as cut on Beam 1729.90

LENGTH on deck as per Rule 348.6 BREADTH—Moulded 41.6 DEPTH top of Floors to Upper Deck Beams 23.8 Power of Engines 480 No. of Decks with flat laid 2

Dimensions of Ship per Register, length, 352.0 breadth, 41.8 depth, 23.5

KEEL, depth and thickness see flat keel

STEM, moulding and thickness 11 x 2 3/4

STERN-POST for Rudder do. do. 12 1/2 x 5 3/4

" " for Propeller 12 1/2 x 5 3/4

Distance of Frames from moulding edge to moulding edge, all fore and aft 24

FRAMES, Angle Iron, for 2/3 length amidships 5 x 3 1/2

Do. for 1/3 at each end 5 x 3 1/2

REVERSED FRAMES, Angle Iron 3 1/2 x 3 1/2

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships solid floors 7/16 thick with manholes at every alternate frame, and 1/2 thick at every frame under the engines—

" thickness at the ends of vessel as per approved sketch.

" depth at 2/3 the half-bdth. as per Rule as per approved sketch.

" height extended at the Bilges as per approved sketch.

BEAMS, Upper, Spar, or Auxiliary Deck 9 x 9

Single or double Angle Iron, Plate or Tee Bulb Iron 3 1/2 x 3

Single or double Angle Iron on Upper edge 48

Average space 10

BEAMS, Main, or Middle Deck 10 x 10

Single or double Angle Iron, Plate or Tee Bulb Iron 3 1/2 x 3 1/2

Single or double Angle Iron on Upper Edge 48

Average space 10

BEAMS, Lower Deck 11 x 11

Single or double Angle Iron, Plate or Tee Bulb Iron 5 x 4

Single or double Angle Iron on Upper Edge 10 frame spaces

Average space 10 frame spaces

KEELSONS, Centre line, single or double plate, 42 x 11

" Rider Plate 42 x 9

" Bulb Plate 5 x 4

" Angle Irons 6 1/2 x 4

" Double Angle Iron Side Keelsons 3 1/2 x 3 1/2

" Side Intercoastal Plate 3 1/2 x 3 1/2

" do. Angle Irons 3 1/2 x 3 1/2

" Attached to outside plating with angle iron 3 1/2 x 3 1/2

BILGE Angle Irons 3 1/2 x 3 1/2

" do. Bulb Iron 3 1/2 x 3 1/2

" do. Intercoastal plates riveted to plating for all length

BILGE STRINGER Angle Irons 6 1/2 x 4

Intercoastal plates riveted to plating for all length

SIDE STRINGER Angle Irons 3 1/2 x 3 1/2

The FRAMES extend in one length from keel to gunwale

The REVERSED ANGLE IRONS on floors and frames extend from middle line to bilge then to upper deck and to middle deck alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes.

PLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 4 ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.

" Butts of all Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 7/16 in. thicker than the plates they connect.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 6435 glo
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? *A few*

Masts, Bowsprit, Yards, &c., are *now* 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, State also Length and Diameter of Lower Masts and Bowsprit *This vessel has two masts of steel with square yards of steel on the fore mast; these have been constructed in accordance with the accompanying approved tracing of the scantlings and arrangements and the steel used has been tested at the Manufacturers (Messrs) in accordance with the Committee's requirements.*

NUMBER for EQUIPMENT 34812		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.	
N ^o .	SAILS.	CABLES, &c.		Tons. fms. in.			Bower Anchors						
	Fore Sails,	Chain	150	2	100' 84" 72	300 - 2	No. 563	1	39.1.2	35.7.0.21	38	No. 16528	
		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	150	2	100' 84" 72		No. 561		Netherlon, 8.12.83, sqd. D. G. Lewis.				
	Fore Top Sails,	Iron Stream Chain	300		Glasgow, 25.1.84, sqd. W. Fraser.			2	39.0.0	35.2.2.0	38	No. 16529	
		or Steel Wire ..	91	1 3/8	38 x 23 3/8	90 - 1 3/8	No. 565	3	32.3.18	30.16.2.7	32 1/2	No. 992	
	Fore Topmast Stay Sails,	or Hempen Strm Cable							Glasgow 28.1.84, sqd. W. Fraser.				
		Towline, Hemp ..	20 1/2	5	5" steel wire	120 - 4	steel wire.						
	Main Sails,	or Steel Wire ..	10 1/2	4	do.	90 - 10	Hemp.	Stream Anchor	4	11.1.15	13.5.0.0	11 1/2	No. 991
		Hawser	40 1/2	3	do.	90 - 8 1/2	Hemp.	Kedge ...	5	5.3.24	8.5.0.0	5 3/4	No. 990
	Main Top Sails, and	Warp	Certificates of test of wire ropes produced				2nd Kedge ...	6	2.3.3	5.5.0.0	2 3/4	No. 989	
		quality good	90 fms of 8" 6" 5" 4" 3" 2" 1" 1/2" 1" 1/4" 1" 1/8" 1" 1/16"										
	Standing and Running Rigging	galvanized iron wire	sufficient in size and good in quality.				She has	4	life boats	and	2 others.		

The Windlass is *Hanfields* Capstan *Hanfields* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Teak hood* How secured in ordinary weather? *glass bulls' eyes.*

What arrangements for deadlights in bad weather? *Tarpanlins*

Coal Bunker Openings. How constructed? *Sq. hatchways (4 ft)* How are lids secured? *Tarpanlins* Height above deck? *18 inches.*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *13 wash ports, 5 scuppers and 4 mooring pipes each side.*

Cargo Hatchways. How formed? *iron plate coverings.*

State size Main Hatch *20 ft. x 13 ft.* Forehatch *12 ft. x 9 ft.* Quarterhatches *16' x 13' and 12' x 9'.*

If of extraordinary size, state how framed and secured? *One iron web plate beam in the main hatchway, and one shifting beam in No. 3 (after) hatchway.*

What arrangement for shifting beams? *and one shifting beam in No. 3 (after) hatchway.*

Hatches, If strong and efficient? *Yes, solid 3 ins.*

Order for Special Survey No. <i>1836</i>	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	<i>1883, Mar. 29, April 25, 26; May 1, 9, 14, 25, 28, 30; June</i>
Date <i>6 March 1883</i>		2nd. On the plating during the process of riveting	<i>6.0.16.20.22.26.27.28; July 2, 5, 11, 25, 31; Aug. 3, 6, 11, 17</i>
Order for Ordinary Survey No. <i>1837</i>		3rd. When the beams were in and fastened, and before the decks were laid....	<i>22.24.29; Sept. 3, 10, 17, 19, 24; Oct. 3, 15, 18, 22, 29, 31; Nov. 8,</i>
Date <i>10 March 1883</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>10, 23, 26, 28; Dec. 4, 6, 11, 17, 20, 24, 27; Jan. 9, 11, 15, 22, 31; Feb. 2, 4, 6, 8, 9</i>
No. <i>262</i> in builder's yard.		5th. After the ship was launched and equipped	<i>12, 13, 15, 16, 18, 19, 20, 21</i>

State dates of letters respecting this case.

General Remarks (State quality of workmanship, &c.)

This vessel has been built generally in accordance with the rules and with the accompanying approved sketches (5 No.). See also Secretary's letters dated 20 Feb. 1883, also 24 Feb., 12 Mar., 19 April, 11 Aug., 2^d Oct. 1883. The workmanship and material are good throughout. The ballast tanks were all tested as required by the rules before launching, the fore peak bulkhead tested with hose, and the after peak filled with water and found satisfactory. The flat of the shaft tunnel and the tunnel recess have also been tested with water about 4 ins. deep at the fore end and 12 ins. aft - and the result was satisfactory. This test was done at the Owner's request.

State ~~one, two, or three~~ decked vessel, ~~or of spar, or sailing~~ decked; and the lengths of poop, bridge, forecabin, or raised quarter deck (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Cement and paint* Outside *paint*

I am of opinion this Vessel should be Classed **100A.1. Two iron decks, three tiers of beams.*

The amount of the Entry Fee£ *5: 0: 0* is received by me, *G. Stanbury.*

Special£ *89: 14: 6* 21/2 1884

(to be sent as per margin). Certificate ... *0: 0: 0*

(Travelling Expenses, if any, £)

Committee's Minute *TUESDAY 26 FEB 1884 18*

Character assigned *100A.1*

L.A.C. 2 5th Dec

21st Dec

21st Dec

21st Dec