





BULKHEADS.				No. in Vessel		No. Req'd. by Rule	
Thickness.	Angles.	Spacing.	Height up.	Sngl. or Dbl. Frames.			
W. T. BULKHEADS	4-6/20	Vrtel. 5' 3 1/2" x 8'	30	Three to Upper and	Double.		
		Hrztl. 4' 3 1/2" x 8'	48	Two to R. D. 5' 2" as the			
PARTITION....		Vrtel. 4' 3 1/2" x 8'					
LONGITUDINAL		Hrztl. 4' 3 1/2" x 8'					

The **FRAMES** extend in one length from Middle line to tank side. Hence to gunwale. Riveted through Plates with 3/8 in. Rivets, about 6 1/2" apart. The **REVERSED ANGLE** on floors and frames extend from Middle line to above upper stringer and to upper deck alternately, and all to upper deck abaft after peak bulkhead, and alternate lines to Forecastle deck.

**RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.**

**Garboard**, double riveted to Bar Keel or Flat Plate Keel, with rivets 1/2 in. diameter, averaging 5 1/2 in. from centre to centre.

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

**Butts from Keel to turn of Bilge**, worked carvel, treble or double riveted; treble for 3/4 length; with rivets 3/8 in. dia., averaging 3 1/2 in. from cr. to cr.

**Butts of all Strakes at Bilge** for 3/4 length, treble riveted with Butt Straps 20, thicker than the plates they connect. Accepting as above stated.

**Edges from Bilge to Sheerstrake**, worked clencher, double or single riveted; with rivets 3/8 in. diameter, averaging 3 1/2 in. from centre to centre.

**Butts from Bilge to Sheerstrake**, worked carvel, treble or double riveted; treble for 3/4 length; with rivets 3/8 in. dia., averaging 3 1/2 in. from cr. to cr.

**Edges of Sheerstrake**, double or single riveted.

**Butts of Main Stringer Plate**, treble riveted for 3/4 length amidships. **Single or Double Butt Straps to Stringer Plate** for 1/2 length.

**Butts of Inner Bottom Plating** double riveted for 1/2 length. **Butts of Centre Girder** treble riveted. **Double Straps**.

**Breadth of edge laps of Shell Plating** in double riveting 5 1/4. **Breadth of edge laps of Shell Plating** in single riveting 9.

**Butt Straps of Shell Plating** breadth and thickness 16 1/2 x 9 1/4 x 19-16-15 x 11-9/16.

**Butt Straps of Keelsons, Stringer and Tie Plates**, treble or double riveted? Treble + double.

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.: *Steel plates from the Iron Co. Consist Iron Co. & Stockton Hall Co. Steel angles, bolts, Dormer Long Co. (Smeeths Martin Steel).*

**Workmanship.** Are the butts of plating planed or otherwise fitted? *Planed*

Is the riveted work properly closed? *Yes*

Are the liners between the frames 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, at the butts only*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes*

**MASTS, SPARS, &c.**

	Material.	Total Length	DIAMETER AND THICKNESS			No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hounds.		Number.	Size.	Seams.	Butts.
Fore .....	Iron	77'-9"	20 x 7/8	16 x 5/8	16 1/2 x 5/8	13 1/2 x 5/8	1/2	1/2	Single	Double & double
Lower Masts.... Main .....	Iron	68'-9"	20 x 7/8	16 x 5/8	16 1/2 x 5/8	13 1/2 x 5/8	1/2	1/2	Single	As per Rule.
Mizen .....										

**Bowsprit**

**Topmasts, Yards and Remainder of Spars** *Pitch pine.*

**Rigging, Material and Size, Shrouds** *6" x 1/2" Hemp* *Chrouds 3 1/2"* *Stays 4 1/2"* *Backstays 5 1/2"*

**Sails.** *One complete* *Suit of* *Sails, and the following spare sails*

**EQUIPMENT No. 29313 LETTER T. ANCHORS.**

Number of Certificate.	Weight, Ex. Stock	Weight of Stock	TEST, PER CERTIFICATE.			WEIGHT REQ. BY RULE			Description of Anchor.	Makers.	Where and when tested and Superintendent.
			Tons.	cwt.	qrs.	lbs.	Tons.	cwt.			
21343 1st Bower ..	45 0 0	45 0 0	39	5	0	42	2	0	Hartshornes Patent	Hartshornes Co	20-1-91
21342 2nd " ..	40 2 14	40 2 14	36	4	1	42	2	0	"	"	20-1-91
21344 3rd " ..	34 3 0	34 3 0	34	6	1	36	1	0	"	"	21-1-91
Collective weight	123 1 14	123 1 14				121	1	0			
21244 Stream ....	11 0 14	11 0 14	13	0	0	10	3	0	Common	Hartshornes Co	26-12-90
21245 Kedge .....	5 1 14	5 1 14	4	14	0	5	2	0	"	"	17-12-90
21289 2nd Kedge ..	2 2 14	2 2 14	5	2	2	2	2	0	"	"	30-12-91

**CHAIN CABLES.**

Number of Certificate.	Fathoms.	Size.	Test per Certificate.	Weight of Chain Cable.	Fathoms & Size.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Fathoms.	Size.	Fathoms & Size.
8624	24 1/4	1 1/4	65 1/2	88 1/2	240-1 1/4	Steel Line	Hartshornes Co	11-11-90 R. H. C. P. Y. by	TOWLINE	90	3 1/2	90-3 1/2
8704	45	1 1/2	22 1/2	34 1/2	45-1 1/2	Steel Line	"	30-12-90 R. H. C. P. Y. by	Hawser	90	2 1/2	90-2 1/2
									Manilla	180	0 1/2	
	100	4	33		100-4	Steel wire	Steel houses certified by Steel		Corbett and Co. Newall Co. (L.S.)			

**HAWSERS AND WARPS.**

**Boats** *Two life boats (22 feet), one life boat (18 feet) and one life (18 feet)*

**Pumps, Number** *Seven Hand pumps* **Diameter of Barrel and Tail Pipe** *Barrel 6" Tail pipe 3 1/2"*

**The Windlass is** *Emerson Walker & Co. (Steam)* **Capstan** *Four Steam winches*

**Engine Room Skylights.**—How constructed? *Iron on iron coamings.*

**What arrangements for deadlights in bad weather? *Iron shutters with bell eyes.***

**Coal Bunker Openings.**—How constructed? *Iron plates & angles* **How are lids secured? *Hatch bars* **Height above deck? *2' 6" + 5'*****

**Number of Scuppers, and number and dimensions of Freeing Ports, &c.** *Two freeing ports on each side in Well (30 x 24) and four on each side on Raised Quarter Deck (24 x 18) in addition to a sufficient number of Scuppers.*

**Cargo Hatchways.**—How formed? *Iron plates & angles in the usual manner* **Hatches, if strong and efficient?**

**State size No. 1 Hatch (Forward)** *22'-0" x 14'-0"* **No. 2 Hatch** *26'-0" x 14'-0"* **No. 3 Hatch** *24'-0" x 14'-0"* **No. 4 Hatch** *24'-0" x 14'-0"*

**Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch** *Two web plate beams and a partition bulkhead in No. 2, and two web plate beams in No. 1-3-4. Three web fore and afters in each.*

**Bulwarks, height above deck and description** *In Well 66" on R. D. 5' 4 1/2" Iron plates & angles* **Main Rail, material and size** *Steel angle 6 x 3 x 7/8*

The above is a correct description.

Builder's Signature, (here only) *ROPNER & SON.*

Surveyor's Signature, *Robert Williams* *Robert Haig*

Surveyor to Lloyd's Register of British and Foreign Shipping.

Order for Special Date 11/11/12

Order for Ordina Date 11/11/12

No. 255

State dates at

General Re

The ap

The ab

Rules

Pricty

Throug

have be

Reference should be made, to any correspondence connected with the case.

PARTICU

(in feet an

Raised

No. and Ma

should app

Official N

PARTICU

Double bo

Double bo

Double bo

Fore peak

Midship d

The

(If nece

How are

FREEBOA

I.

State if mark

The amount

Travell

Th. are

Lam of opi

Commit

Charact

+H



Order for Special Survey No. 19

Date 11<sup>th</sup> Sept 1890

Order for Ordinary Survey No.

Date

No. 255 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
- 2nd. On the plating during the process of riveting
- 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

First Survey 9<sup>th</sup> September 1890

Last Survey 3<sup>rd</sup> February 1891

Total No. of Visits 52

State dates and initials of letters respecting this case

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

This steel screw steamer has been built in accordance with the approved plans of Midship Section and Profile as amended, the Secretary's letters of the above-mentioned dates bearing on the case, and in other respects as required by the Rules for the class contemplated. The workmanship is good throughout.

The steel used in her construction has been tested at the steel works by the Society's Surveyors in conformity with the Rules requirements, and iron rivets have been used throughout.

The bow anchors are Harbushorn's Patent Steelclaws, and the cast-steel parts of them have been subjected to drop mechanical tests by Mr. D. G. Lewis at Rotherham.

**PARTICULARS FOR RECORD in the REGISTER BOOK.**—Length of Poop 28.83 ft., R.Q.D. or Break 10.4 ft., Bridge Dk. 11.8 ft., F'castle 31.5 ft. (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated. *Raised Quarter Deck and Bridge deck joined.*

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 1 *all iron* 1 *tier of beams*.  
Official No. 98503; Signal Letters *MDGF*.

**PARTICULARS OF WATER BALLAST.**

Double bottom, aft, length ☒ and water capacity in tons ☒ Double bottom, forward, length ☒ and water capacity in tons ☒  
Double bottom, under engines and boilers, length ☒ and water capacity in tons ☒ If under Engines only, or Boilers only, state which ☒  
Double bottom, constructed on the cellular system, length *258 feet* and water capacity in tons *550*  
Fore peak tank, water capacity in tons ☒ After peak tank, water capacity in tons *24 3/4*  
Midship deep tank, length ☒ and water capacity in tons ☒ Other tanks, if fitted, length ☒ and water capacity in tons ☒

The above have *all* been tested as required by the Rules.  
(If necessary, furnish further information by sketch.)

How are the surfaces preserved from oxidation? Inside *Portland cement & paint* Outside *Paint*

**FREEBOARD** assigned by the Committee, as per Secretary's

Letter, dated 24<sup>th</sup> January 1891

State if marked on Vessel's sides in accordance with Notice No. 477 *Yes*

In Summer 2 ft. 4 ins.  
In Winter 2 ft. 8 1/2 ins.  
For Winter in North Atlantic 3 ft. 1 ins.  
Fresh Water above the centre of disc 5 1/2 ins.

To top of Wood, Iron or Steel Upper Deck.  
*Statutory Deck Line*

The amount of Entry Fee £ 5 : 0 : 0 is received by me, *RHL*

Special ... £ 95 : 19 : 0 10.2.1891

Certificate\* £

Travelling Expenses, if any £

Sum of opinion this Vessel should be Classed *100A1 Steel*

\*Certificate to be sent to

*Jesse Williams Robert Haig*  
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. 13 FEB 1891

Character assigned

*+ L. H. 2/91 100A1 Stl*  
*A.H.D. 1 Stk. (Iron) 2 trs B. & H. webframes*  
*well Stk.*

*This submitted that this vessel*  
*adheres sh'ble to be classed 100A1*  
*(Steel) and recommended.*  
*1 Stk. (Iron) 2 trs Beams and*  
*web frames*  
*cell. D.B. (particulars above)*  
*well Stk.*

