

IRON SHIPS.

Rev 24/12/86

Survey held at Newcastle Date 15th August to the 19th Decr 1886
S. S. "Hornelen" Master R. J. Kramer
 under tonnage deck 198.24 Built at Newcastle When built 1866 Launched 21st Novr 1866
 engine room 63.44 By whom C. Mitchell & Co Owners Nordre Bergenhus Amt & Himmene
 register tonnage 134.80 Port belonging to Bergen Destined Voyage Bergen
 tonnage 198.24

eyed while Building, Afloat, or in Dry Dock While building

Feet.	Inches.	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	N ^o . of Decks	one laid and one part laid
loft	132.8	Extreme Breadth	21.1				45			
ons of Ship per Register, length 132.8 breadth 21.1 depth 11.5										
if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule. for 100 tons Scale.		Plates in Garboard Strakes, breadth and thickness					
if plate iron, breadth and thickness	6 1/4 x 2 1/8		6 x 1 1/2		Ditto from Garboard to upper part of Bilges..					
if bar iron, moulding and thickness	6 1/4 x 2 1/8		6 x 1 1/2		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold					
if plate iron, breadth and thickness	6 1/2 x 4/8		6 x 3		,, from 3/4ths depth of Hold to lower edge of Sheerstrake					
-post, if bar iron, moulding and thickness	6 1/2 x 4/8		6 x 3		,, Sheerstrake, breadth and thickness					
if plate iron, breadth and thickness	18		21		Butt Straps to outside plating, breadth and thickness					
ance of Frames from moulding edge to moulding edge, all fore and aft	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	Inches. required per Rule.	16ths. required per Rule.				
nes, Size of Angle Iron, single or double	3	2 1/2	4/16	2 1/2	2 1/2	4/16	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness			
Reversed Iron, if to every frame or every frame	2 1/4	2 1/4	4/16	2 1/4	2 1/4	4/16	Angle Iron on ditto			
ors, depth and thickness of Floor Plate at mid line	-	13 1/2	4/16	-	13 1/2	4/16	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways			
Ditto ditto at Bilge Keelson	-	3	4/16	-	-	-	Diagonal Tie Plates on ditto			
Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate	2 1/4	2 1/4	4/16	2 1/4	2 1/4	4/16	Planksheer, materials and scantlings			
ms, Deck (N ^o . 35) double Angle Iron, Plate, Tee, or Bulb Iron	6	3	4/16	6	3	4/16	Waterway ditto ditto			
double or single Angle Iron, on top edge	2 1/2	2 1/2	4/16	2 1/2	2 1/2	4/16	Flat of Upper Deck, thickness and material			
average space between	3 feet		3 feet		3 feet		,, how fastened to Beams			
Hold, or Lower Deck (N ^o . 34) double Angle, Tee, Plate, or Bulb Iron	4	3	4/16	4	3	4/16	Ceiling betwixt Decks and in Hold, thickness and material			
double or single Angle Iron on edge	3 feet		3 feet		3 feet		Clamps or Spirketting ditto			
average space between	3 feet		3 feet		3 feet		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness			
Paddle, sided and moulded, thickness of Plate size of Angle Iron	8		7/16		9		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams			
Engine	8		7/16		9		Stringers in Hold			
son, single or double plate, box, or intercostal	8		7/16		9		Flat of Lower Deck, thickness and material			
Size of Plates	3		2 1/2		4/16		Main piece of Rudder, diameter at head			
Size of Angle Irons	3		2 1/2		4/16		,, at heel			
Side, single or d'ble, plate, box, or intercostal	3		2 1/2		4/16		(Can the Rudder be unshipped afloat)			
Bilge (No. /) at each Bilge, single, or double, plate, or box	3		2 1/2		4/16		Bulkheads, N ^o . 4 Thickness of			
,, Height up three to upper deck, after one to hold beams, iron deck?										
,, how secured to the sides of the ship double frames										

IRON 440-0239

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 rivet 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 lay 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? long lengths

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? generally so 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

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.

She has SAILS.		CABLES, &c., tested at <u>Lloyd's "Tonic" proving house</u> (Signed) <u>Robt Bunnell Esq</u>					ANCHORS, tested at <u>Lloyd's "Tonic" proving house</u> (Signed) <u>Robt Bunnell Esq</u>				
N ^o .		No. on Chain seen by me.	No. and date on Certificate	Fathoms.	Inches.	Tested to Tons.	N ^o .	No. on Anchor seen by me.	No. and date on Certificate	Weight. Ex. Stock.	Test T
one	Fore Sails,	Chain	1771 1771-17.11.66	90	7/8	13.15.0.0	Bowers	1	4325 4325-14.12.66	5.1.0	7.11
	Fore Top Sails,	Hemp	1806 1806-14.12.66	90	7/8	13.15.0.0		1	4324 4324-14.12.66	5.0.24	7.11
Complete	Fore Topmast	Stream Cable		60	9/16			1	1825 1825-8.12.65	4.1.7	6.13
out	Stay Sails,	Hawser		80	6		Stream	1		2.0.21	
	Main Sails,	Towlines		120	4						
	Main Top Sails,	Warp		120	3 1/2		Kedges	1		1.0.0	
and		All of <u>good</u> quality.		120	3						

Her Standing and Running Rigging is sufficient in size and good in quality.

She has two life ~~long~~ Boats and one other

The present state of the Windlass is Capstan good and Rudder good Pumps 2 hand Main Engine & 1 hand

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought

No. 579 Surveys held 2nd. On the plating during the progress of rivetting

Date 13 Aug 1866 while building 3rd. When the beams were in and fastened, and before the decks were laid

Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated

No. — Section 18. 5th. After the ship was launched

Date —

State if she has a Raised Spar Deck Quarter deck Peep & small or Forecastle

General Remarks,

This Vessel has been built in accordance with the Midship Section and per Secretary's letter 23rd August 1866

One Bower Anchor is scarcely up to the requirements of Table 22, but seeing that an additional one of 4.1.1^{1/2} for stock has been supplied, I beg to leave the figure 1. for the favorable consideration of the Committee.

In what manner are the surfaces preserved from oxidation? Inside Cement and Paint

Ditto ditto Outside Paint

I am of opinion this Vessel should be Classed A

The amount of the Fee£ 2: 0: 0 is received by me,

Dec^r M^c Special£ 9: 10: 0

Certificate (if required)£ 0: 0: 0

Committee's Minute 27th December 1866

Character assigned A 1

J. Harding

The Hull of this Screw Steamer appears eligible for Classification and the Fig 1 as recommended above for Committee's consideration

Dec 24 1866

more 3, notation 26 & 3, down area, new article on 3/4