

IRON SHIPS.

No. 10250 Survey held at Newcastle Date 5th October 1866 to the 10th April 1867
 on the S.S. "Alster" Master P. Thomsen
 Tonnage under tonnage deck 687.32 Built at Newcastle When built 1867 Launched 6th March 1867
 Ditto of poop deck 20.65 By whom built Schlumberger, Davis & Co. Owners C. Eichmann
 Ditto of engine room 181.93
 Total Register tonnage 557.04 Port belonging to Hamburg Destined Voyage Hamburg
 ss Tonnage 408.97

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

Feet. Inches.		Feet. Inches.		Feet. Inches.		Feet. Inches.		Horse.		N ^o . of Decks			
Length aloft 200.0		Extreme Breadth 28.6		Depth from top of Upper Deck Beam to top of Floor 10.4		Power of Engines 80		N ^o . of Decks one laid					
Dimensions of Ship per Register, length 200.0 breadth 28.6 depth 10.25													
		Inches in Ship.		Inches required per Rule.				Inches. In Ship.		16ths required per Rule.			
1. if bar iron, depth and thickness		7 x 2 3/4		7 x 2 3/4				30		9 1/2			
2. if plate iron, breadth and thickness		7 x 2 3/4		7 x 2 3/4				8 1/2		9 1/2			
3. if bar iron, moulding and thickness		7 x 2 3/4		7 x 2 3/4				7 1/2		9 1/2			
4. if plate iron, breadth and thickness		8 x 4 3/4		7 x 5 1/2				9 1/2		9 1/2			
5. if bar iron, moulding and thickness		8 x 4 3/4		7 x 5 1/2				30		19 1/2 x 9 1/2			
6. if plate iron, breadth and thickness		21		21				8 1/2 to 9		10 1/2 to 9 1/2			
7. distance of Frames from moulding edge to moulding edge, all fore and aft		21		21				28 1/2		19 1/2 x 28 1/2			
Frames, Size of Angle Iron, single or double		4		3		9 1/2		4		3		9 1/2	
8. Reversed Iron, 1/2 to every frame or every frame		3		2 1/4		9 1/2		3		2 1/4		9 1/2	
9. Floors, depth and thickness of Floor Plate at mid line		18		9 1/2		18		9 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2	
10. Ditto ditto at Bilge Keelson		8		9 1/2		8		9 1/2		10 1/2		8 1/2	
11. Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		3		2 1/4		9 1/2		3		2 1/4		9 1/2	
12. Deck (N ^o . 40) double Angle Iron, Plate, Tee, or Bulb Iron		7		9 1/2		7		9 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2	
13. double or single Angle Iron, on top edge		2 1/2		2 1/2		9 1/2		2 1/2		2 1/2		9 1/2	
14. average space between		Alternate frames		Alternate frames		Alternate frames		Alternate frames		Alternate frames		Alternate frames	
15. old, or Lower Deck (N ^o . 18) double Angle, Tee, Plate, or Bulb Iron		7		9 1/2		7		9 1/2		7		9 1/2	
16. double or single Angle Iron, on top edge		3		3		9 1/2		3		2 1/4		9 1/2	
17. average space between		2 nd and 4 th frames		alternately		alternately		alternately		alternately		alternately	
18. Paddle, sided and moulded, thickness of Plate size of Angle Iron		4 1/2		3 1/2		9 1/2		4 1/2		3 1/2		9 1/2	
19. Engine		21		9 1/2		12		9 1/2		5		5	
20. Keelson, single or double plate, box, or intercostal		12 1/2		3 1/2		9 1/2		4 1/2		3 1/2		9 1/2	
21. Size of Plates		4 1/2		3 1/2		9 1/2		4 1/2		3 1/2		9 1/2	
22. Size of Angle Irons		4 1/2		3 1/2		9 1/2		4 1/2		3 1/2		9 1/2	
23. Side, single or d'ble, plate, box, or intercostal		4 1/2		3 1/2		9 1/2		4 1/2		3 1/2		9 1/2	
24. Bilge (No. 1) at each Bilge, single, or double, plate, or box		4 1/2		3 1/2		9 1/2		4 1/2		3 1/2		9 1/2	
25. Plates in Garboard Strakes, breadth and thickness		30		9 1/2		30		9 1/2		30		9 1/2	
26. Ditto from Garboard to upper part of Bilges		8 1/2		9 1/2		8 1/2		9 1/2		8 1/2		9 1/2	
27. from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		7 1/2		9 1/2		7 1/2		9 1/2		7 1/2		9 1/2	
28. from 3/4ths depth of Hold to lower edge of Sheerstrake		9 1/2		9 1/2		9 1/2		9 1/2		9 1/2		9 1/2	
29. Sheerstrake, breadth and thickness		30		19 1/2 x 9 1/2		30		9 1/2		30		9 1/2	
30. Butt Straps to outside plating, breadth and thickness		8 1/2 to 9		10 1/2 to 9 1/2		8 1/2 to 9		10 1/2 to 9 1/2		8 1/2 to 9		10 1/2 to 9 1/2	
31. Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		28 1/2		19 1/2 x 28 1/2		28 1/2		19 1/2 x 28 1/2		28 1/2		19 1/2 x 28 1/2	
32. Angle Iron on ditto		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2	
33. Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		10 1/2		8 1/2		10 1/2		8 1/2		10 1/2		8 1/2	
34. Diagonal Tie Plates on ditto		10 1/2		8 1/2		10 1/2		8 1/2		10 1/2		8 1/2	
35. Planksheer, materials and scantlings		Butter Waterway		Butter Waterway		Butter Waterway		Butter Waterway		Butter Waterway		Butter Waterway	
36. Waterway ditto ditto		9 Pine 3 1/2		3 1/2		9 Pine 3 1/2		3 1/2		9 Pine 3 1/2		3 1/2	
37. Flat of Upper Deck, thickness and material		2 1/2		2 1/2		2 1/2		2 1/2		2 1/2		2 1/2	
38. how fastened to Beams		But 8 screw bolts		But 8 screw bolts		But 8 screw bolts		But 8 screw bolts		But 8 screw bolts		But 8 screw bolts	
39. Ceiling between Decks and in Hold, thickness and material		2 1/2		Red Pine		2 1/2		Red Pine		2 1/2		Red Pine	
40. Clamps or Spirketting ditto		21 1/2		9 1/2		21 1/2		9 1/2		21 1/2		9 1/2	
41. Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2	
42. Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2	
43. Stringers in Hold		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2		4 1/2 x 3 1/2 x 7 1/2	
44. Flat of Lower Deck, thickness and material		5		5		5		5		5		5	
45. Main piece of Rudder, diameter at head		3		3		3		3		3		3	
46. at heel		3		3		3		3		3		3	
47. (Can the Rudder be unshipped afloat)		Yes		Yes		Yes		Yes		Yes		Yes	
48. Bulkheads, N ^o . 5 Thickness of		9 1/2		9 1/2		9 1/2		9 1/2		9 1/2		9 1/2	
49. Height up		4 to upper deck, after one to Cabin flat, iron decked over		4 to upper deck, after one to Cabin flat, iron decked over		4 to upper deck, after one to Cabin flat, iron decked over		4 to upper deck, after one to Cabin flat, iron decked over		4 to upper deck, after one to Cabin flat, iron decked over		4 to upper deck, after one to Cabin flat, iron decked over	

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

Knight-heads, and Hawse Timbers Checks and plates

The Frames extend in one length from Keel to gunwale

The reverse angle irons on the floors extend in one length across the middle line from to side of to Keel and from top of tank

,, on the frames ,, ,, from to above the to hold stringer and gunwale alternately

Keelson, how are the various lengths of plates or angle irons connected? by butt straps

Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets 1/2 x 3/4 ins. diameter, averaging 3 1/2 ins. apart.

,, Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets 3/4 in. diameter, averaging 2 1/2 ins. apart.

,, Butts from Keel to turn of bilge, worked carvel with butt straps 9 x 9 1/2 thick, double or single rivetted; with rivets 3/4 in. diameter, averaging 2 1/2 ins. apart.

Do the butt straps lap over and rivet through the lands of the strake below? no

,, Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets 3/4 in. diameter, averaging 2 1/2 ins. apart.

Do the butt straps lap over and rivet through the lands of the strake below? no

,, Edges of Sheerstrake, double or single rivetted? At upper edge single At lower edge double

,, Butts from bilge to planksheers, worked carvel with butt straps 10 1/2 x 9 1/2 thick, double or single rivetted; with rivets 3/4 in. diameter, averaging 2 1/2 ins. apart. Breadth of laps in double rivetting 4 1/4 Breadth of laps in single rivetting 2 1/2

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

Waterway ,, ,, planksheer and to the Beams if necessary. Gutter waterway

Deck Beams, how secured to the side? Three plates

Hold or Lower Deck ditto ditto

Paddle ,, ,, No. of breasthooks 4 crutches 4

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? 2019

Manufacturer's name or trade mark Frames & Beams, "Hockton M. S. C." Plates & Consell.

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

Builder's Signature Schlumberger, Davis & Co. Surveyor's Signature Mording

IRON 440 6434

5726 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 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 Lloyd's Regd. Roving house (Signed) Robt. Bunnell Super
ANCHORS, tested at Sunderland's Roving house (Signed) John Thompson Super

No.	Fore Sails,	Chain	No. on Chain seen by me.	No. and date on Certificate	Fathoms.	Inches.	Tested to. Tons.	No.	Bowers	No. on Anchor seen by me.	No. and date on Certificate	Weight. Ex. stock.	Tested to. Tons.
1	Fore Top Sails,	Hemp	1947	1947-20.2.67	30	1 3/8	34.0.0.0	1	2551	2551-8.3.67	16.3.14	18.2.3.7	
2	Fore Topmast Stay Sails,	Stream Cable	1951	1951-2.3.67	45	1 3/8	34.0.0.0	1	2545	2545-4.3.67	16.3.4	18.2.3.7	
3	Main Sails,	Hawser	1980	1980-14.3.67	180	1 3/8	34.0.0.0	1	2534	2534-20.2.67	14.1.0	15.10.3.14	
4	Main Top Sails,	Towlines	2032	2032-4.4.67	15	1 3/8	34.0.0.0	1					
		Warp			90	2							
		All of <u>good</u> quality.			150	6 1/2							

and wire Her Standing and Running Rigging is sufficient in size and good in quality.
She has one life Long Boat and two others
The present state of the Windlass is good Capstan good and Rudder good Pumps two deck pumps and engine pump

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought
No. 584 Surveys held 2nd. On the plating during the progress of rivetting
Date 1st Oct 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 Spar Deck house and Peep small or Forecastle

General Remarks,

This vessel has a double bottom 11 1/2 feet in length, with top plating 9/16 thick. She has been built in accordance with the midship section and per Secretary's letter 4th Oct 1866, excepting the Angle irons to Hullson and bilge stringer, which are not up to the requirements of Table G, the Gross tonnage having been slightly increased by the building of a deck house in midships.

The vessel having been intended for the A grade, I beg to submit the same for the consideration of the Committee.

In what manner are the surfaces preserved from oxidation? Inside Asphalte and Paint
Ditto ditto Outside Paint

I am of opinion this Vessel should be Classed 1
The amount of the Fee£ 5: 0: 0 is received by me,
Special£ 35: 9: 0
Certificate (if required)£ 0: 0: 0

Committee's Minute 12th April 18 67 by

Character assigned A 1 MS.

I am of opinion this Iron built Steamer is eligible for Class A 1 as per above. Should Committee see fit April 11/67

Wm. H. Harrison, Surveyor, Davis St. 2, Wall Lane, Newcastle-on-Tyne.