

IRON SHIP.

(15th JUNE, 82...)

5737

No. 3439 Survey held at

Glasgow

Date, First Survey 10th Oct 1881

Last Survey 12th June 1882

On the

Screw Steamer "Heimdal"

Master C. F. Johansen

Built at Glasgow

When built 1881-82 Launched 4/4/82

By whom built Dobie & Co.

Owners Dampftraktorbeket

Residence Copenhagen

Port belonging to Kjöbenhavn

Destined Voyage New York

If Surveyed while Building, Afloat, or in Dry Dock.

Building and Afloat in

TONNAGE under Tonnage Deck	1904.34
Do. of Third Spar, on Awaiting Deck	
Do. of Booms, or Raced on Deck	
Do. of Houses on Deck	84.10
Do. of Forecastle	36.11
Gross Tonnage	2024.58
Less Crew Space	53.42
	1971.16
Less Engine Room	644.84
Register Tonnage as cut on Beam	1323.29

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING DECKED VESSEL.	
Half Breadth (moulded)	17.5
Depth from upper part of Keel to top of Upper Deck Beams	27.2
Girth of Half Midship Frame (as per Rule)	40.2
1st Number	84.9
1st Number, if a 3-Decked Vessel .. deduct 7 feet	7.0
	77.9
Length	284.34
2nd Number	2250.08
Proportions— Breadths to Length	8.12
Depths to Length—Upper Deck to Keel	10.45
Main Deck ditto	14.04

LENGTH on deck as per Rule	284.34	BREADTH— Moulded	35.0	DEPTH top of Floors to Upper Deck Beams	25.2	Power of Engines	200	No. of Decks with flat laid	2	No. of Tiers of Beams	3
----------------------------	--------	------------------	------	---	------	------------------	-----	-----------------------------	---	-----------------------	---

Dimensions of Ship per Register, length, 286.0 breadth, 35.2 depth, 25.0

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
KEEL, depth and thickness	10x22	10x22								
STEM, moulding and thickness	10x22	10x22								
STERN-POST for Rudder do. do.	10x6	10x6								
" " for Propeller	10x6	10x6								
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24								
FRAMES, Angle Iron, for 3/4 length amidships	5 3/2	8	5 3/2	8						
Do. for 1/2 at each end	5 3/2	4	5 3/2	4						
REVERSED FRAMES, Angle Iron	3 1/2	3	3 1/2	3						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24	9	24	9						
" thickness at the ends of vessel		7		7						
" depth at 3/4 the half-bdth. as per Rule	12		12							
" height extended at the Bilges	48		48							
BEAMS, Upper, Spar, or Awaiting Deck	7	7	7	7						
Single or double Angle Iron, Plate or Tee Bulb Iron										
Single or double Angle Iron on Upper edge										
Average space	48		48							
BEAMS, Main, or Middle Deck	6	3	6	3						
Single or double Angle Iron, Plate or Tee Bulb Iron										
Single or double Angle Iron, on Upper Edge										
Average space	24		24							
BEAMS, Lower Deck										
Single or double Angle Iron, Plate or Tee Bulb Iron										
Single or double Angle Iron on Upper Edge										
Average space										
BEAMS, Hold, or Orlop	8 1/2	8	8 1/2	8						
Single or double Angle Iron, Plate or Tee Bulb Iron										
Single or double Angle Iron on Upper Edges										
Average space	20 feet		20 feet							
KEELSONS Centre line, single or double plate, box, or Intercoastal Plates	19	13	19	13						
" Rider Plate	12 3/4		12 3/4							
" Bulb Plate to Intercoastal Keelson	6	4	6	4						
" Angle Irons										
" Double Angle Iron Side Keelson										
" Side Intercoastal Plate										
" do. Angle Irons	6	4	6	4						
" Attached to outside plating with angle iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8				
BILGE Angle Irons	6	4	6	4						
" do. Bulb Iron	8 1/2		8 1/2							
" do. Intercoastal plates riveted to plating for length										
BILGE STRINGER Angle Irons	6	4	6	4						
Intercoastal plates riveted to plating for half length	11		11							
SIDE STRINGER Angle Irons										

The FRAMES extend in one length from Middle line to Gunwale Riveted through plates with 7/8 in. Rivets, about 6" apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main deck and to Upper deck alternately

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

PLATING. Garboard, double riveted to Keel, with rivets 1 1/2 in. diameter, averaging 6 ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 to 3 3/4 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 to 3 3/4 ins. from centre to centre.

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

" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Lower Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

" Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

" Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

" Breadth of laps of plating in double riveting 5 1/2 to 6 1/2 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble + double No. of Breasthooks, 5 Crutches, 3

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

Manufacturer's name or trade mark, Ince and Phoenix & West Stratton.

The above is a correct description.

Builder's Signature, Dobie & Co. Surveyor's Signature, J. J. House

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

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 5737 *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*
 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? *yes 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, and if stamped with Maker's name.
 State also Length and Diameter of Lower Masts and Bowsprit *Length. 1st. 23ins. 18ins. 15ins. 12ins. 9ins. 6ins. 4ins. 2ins. 1ins. 1/2ins. 1/4ins.*

Iron Foremast B.B. Foremast 76 1/2 ft 17ins 23ins 18ins 15ins 12ins 9ins 6ins 4ins 2ins 1ins 1/2ins 1/4ins
Mainmast 45 1/2 - 16 1/2 - 20 - 15 1/2 - 9 1/2 ins topmast head
Grainmast and maintmast in one, Extreme length 84 feet.

NUMBER for EQUIPMENT 25749.

No.	SAILS.	CABLES, &c.	Pathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
	Chain	.....	240	1 1/8	12.5	2 1/2 x 1 1/8	Low Walker	Bower Anchors	6804	33.0.14	30.19.1.14	32	
	Fore Sails,	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)							6498	32.2.14	30.11.3.14	32	
	Fore Top Sails,	.....	90	1 1/8	12.5	2 1/2 x 1 1/8	Low Walker	Stream Anchor	6800	24.2.4	20.15.3.21	24 1/2	
	Fore Topmast Stay Sails,	.....	90	4	8.5	33.5	.....	Kedge	1834	10.2.2	12.13.0.14	10 1/2	
	Main Sails,	.....	90	3 1/4	8.5	22.4	.....	2nd Kedge	1835	5.0.23	4.11.3.14	5 1/2	
	Main Top Sails,	.....	90	4 1/2	9.0	22.4	.....		1836	2.2.14	5.2.2.0	2 1/2	

Standing and Running Rigging *wire and hemp* sufficient in size and *good* in quality. She has *2-28ft Long* Boats and *1-24ft launch, 1-24ft cutter, 1-24ft gig and 1 jolly boat.*
 The Windlass is *Iron Harfield's Patent* Capstan *steam* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Deck framing* How secured in ordinary weather? *Angle iron rim & screws*

What arrangements for deadlights in bad weather? *Flaps with glass panels protected by gratings & tarpaulin*

Coal Bunker Openings.—How constructed? *Coaming plates & angles* How are lids secured? *Solid hatches* Height above deck? *2 feet*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Twelve scuppers and ten water ports.*

Cargo Hatchways.—How formed? *Deep coaming plates*

State size Main Hatch *20'0" x 10'0"* Forehatch *12'0" x 8'0"* Quarterhatch *16'0" x 10'0"*

If of extraordinary size, state how framed and secured? *Deep coaming plates & angles*

What arrangement for shifting beams? *One deep web plate in each large hatch*

Hatches, If strong and efficient? *yes*

Order for Special Survey No.	Date	1st.	2nd.	3rd.	4th.	5th.
1663	11 Nov 1881	On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid...	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped
		1881. Oct. 10, 14, 18, 21, 24 and 28.	Nov. 4, 7, 8 and 30.	Dec. 2, 5, 8, 12, 15, 22 and 23.	1882. Jan. 9, 16, 20, 26 and 27.	Feb. 8, 14, 21 and 24.
		March 1, 3, 6, 9, 10, 13, 14, 21, 24 & 28.	April 3, 8 and 17.	May 4, 12, 23 and 29.	June 1, 3, 8 and 12.	

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

This vessel has been built in conformity with the approved Guidship Section and Longitudinal plans (4 Nos) herewith, the instructions contained in the Secretary's letters dated 16th Sept^r and 1st November 1881, and 2nd February 1882, and otherwise in accordance with the Rules with a view to the grade contemplated. The quality of workmanship and material is good.

Note. This vessel is also built with a view to being classed in the Bureau Veritas.

Three decked vessel - with Forecastle 28 1/2 feet, Bridge 18 feet, and hood over steering wheel 8 feet.

State if one, two, or three decked vessel, or if spar, or awning 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 *Paint & Cement* Outside *Paint*

I am of opinion this Vessel should be Classed ** 100 A1.*

The amount of the Entry Fee ... £ 5: 0: 0 is received by me, *J. J. House*
 Special ... £ 44: 5: 6 *6/6 1882*
 Certificate ... 0: 0: 0
 (to be sent as per margin) *5/4: 5: 6*

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

Committee's Minute *Friday, 16th June, 1882.*

Character assigned *100 A1*

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

The Surveyors are requested not to write on or below the space for Committee's Minute.