

IRON SHIP.

No. 625 Survey held at *Skid* Date, First Survey *Aug 1st* Last Survey *October 18th 1883*

On the *Screw Steamer "Union"*

TONNAGE under
Tonnage Deck }
Ditto of Third, Spar,
or Awning Deck. }
Ditto of Poop, or
Raised Or. Dk. }
Ditto of Houses
on Deck }
Ditto of Forecastle }
Gross Tonnage *340.29*
Less Crew Space *15.53*
Less Engine Room *62.45*
Register Tonnage
as cut on Beam } *262.31*

ONE, ~~DECKED~~ VESSEL,
Half Breadth (moulded) ... *11.5*
Depth from upper part of Keel to top of Upper Deck Beams *14.5*
Girth of Half Midship Frame (as per Rule) ... *23.*
1st Number ... *49.0*
1st Number, if a 3-Decked Vessel .. deduct 7 feet
Length ... *137.5*
2nd Number ... *6737*
Proportions— Breadths to Length... *5.97*
Depths to Length— ~~Upper Deck~~ to Keel... *9.48*
Main Deck ~~to~~ ...

Master *Peter von Barm*
Built at *Skid*
When built *1883* Launched *Sept 12th*
By whom built *Georg Howaldt*
Owners *H. Sandberg*
Residence *Flensburg*
Port belonging to *Flensburg*
Destined Voyage *Baltic*
If Surveyed while Building, ~~Afloat, or in Dry Dock~~

LENGTH on deck as per Rule ... *137* 6 BREADTH— Moulded... *23* 0 DEPTH top of Floors to Upper Deck Beams ... *13* 4 Power of Engines ... *40* Horse. N° of Decks with flat laid *one* N° of Tiers of Beams *one*

Dimensions of Ship per Register, length, *42.36* breadth, *7.0* depth, *3.47* Meters

KEEL, depth and thickness *of Side Bars* *7 x 1 5/8*
STEM, moulding and thickness... *7 x 1 5/8*
STERN-POST for Rudder do. do. ... *6 1/4 x 3 1/4*
" " for Propeller ... *21*
Distance of Frames from moulding edge to moulding edge, all fore and aft ... *21*

FRAMES, Angle Iron, for 2/3 length amidships ... *3* 3 6 *3* 3 6
Do. for 1/3 at each end ... *3* 3 5 *3* 3 5
REVERSED FRAMES, Angle Iron ... *2 1/2* 2 1/2 5 *2 1/2* 2 1/2 5
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... *14* 6 8 5 *14* 6
" thickness at the ends of vessel ...
" depth at 3/4 the half-bdth. as per Rule ... *28*
" height extended at the Bilges... *28*

BEAMS, Upper, Spar, or Awning Deck }
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron }
Single or double Angle Iron on Upper edge }
Average space...
BEAMS, Main, ~~Deck~~ }
Single ~~Ang. Iron, Plate or Tee Bulb Iron~~ }
Single, or double Angle Iron, on Upper Edge ... *5 1/2* 5 *5 1/2* 5
Average space... *21 inches*

BEAMS, Lower Deck }
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron }
Single or double Angle Iron on Upper Edge }
Average space...
BEAMS, Hold, or Orlop }
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron }
Single or double Angle Iron on Upper Edge }
Average space...

KEELSONS Centre line, single *24* 6 6 *24* 6 6
" Intercoastal, Plates *10* 7 *10* 7
" Rider Plate *24* 7 *24* 7
" Angle Irons ... *3* 3 6
" Double Angle Iron Side Keelson ...
" Intercoastal *2 1/2* 2 1/2 5 *2 1/2* 2 1/2 5
" do. two Angle Irons ...
" Attached to outside plating with angle iron

BILGE Angle Irons ... *3* 3 6 *3* 3 6
" do. Bulb Iron...
" do. Intercoastal plates riveted to plating for length }
BILGE STRINGER Angle Irons ...
Intercoastal plates riveted to plating for length }

SIDE STRINGER Angle Irons ...
The FRAMES extend in one length from *Centre line of Keel to Main deck*
The REVERSED ANGLE IRONS on floors and frames extend *from middle line to upper turn of bilge and to main 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 *7/8* in. diameter, averaging *3 1/4* ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *5/8* in. diameter, averaging *3 1/8* ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *5/8* in. diameter averaging *2 1/2* ins. from centre to centre.
Butts of *one* Strake at Bilge for *1/2* 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 *5/8* in. diameter, averaging *2 1/2* ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *5/8* in. diameter, averaging *2 1/2* ins. from cr. to cr.
Edges of Main Sheerstrake, double ~~riveted~~. Upper Sheerstrake, double or single riveted.
Butts of Main Sheerstrake, treble riveted for *1/2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted for *1/2* length amidships.
Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length amidships.
Breadth of laps of plating in double riveting *4 1/2* Breadth of laps of plating in single riveting *2 1/2*
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double ~~or single~~ Riveted? No. of Breasthooks, *two* Crutches, *two*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *German Iron*
Manufacturer's name or trade mark *Morcotty in Duisburg, Westphalia*
The above is a correct description.
Builder's Signature, *Georg Howaldt* Surveyor's Signature, *Emil Taddes*
Surveyor to Lloyd's Register of British and Foreign Shipping.

(Form No. 1 for Iron Ships—4000—24/5/81.)

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

* If Iron Deck, stiff, if whole or part, and if wood deck

8810-91111111

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*
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? *No*

Masts, Bowsprit, Yards, &c., are of *Pitch pine* 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

NUMBER for EQUIPMENT <i>7186</i>		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.
SAILS.							Bower Anchors					
CABLES, &c.							(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
Fore Sails,	Chain	<i>105</i>	<i>1</i>	<i>27.0.0.0</i> <i>15.0.0.0</i>	<i>165x1"</i>	<i>D. E. Lewis</i> <i>Netherston Dudley</i> <i>Sept. 1883</i>	<i>D. E. Lewis</i> <i>Netherston</i> <i>Sept. 6. 83</i>	<i>1</i>	<i>7.1.12</i>	<i>9.11.2.7</i>	<i>7/4</i>	
Fore Top Sails,	Iron Stream Chain	<i>45.2 ft</i>	<i>7/16</i>	<i>12.15.0.0</i> <i>8.10.0.0</i>	<i>45x7/16</i>			<i>1</i>	<i>7.1.10</i>	<i>9.11.2.7</i>	<i>7/4</i>	
Fore Topmast Stay Sails,	or Steel Wire .. or Hempen Strm } Cable											
Main Sails,	Towline, Hemp.	<i>75</i>	<i>7/8</i>		<i>75x7/8</i>							
Main Top Sails,	or Steel Wire .. Hawser	<i>90</i>	<i>5/8</i>		<i>90x5/8</i>		Stream Anchor	<i>1</i>	<i>2.0.26</i>	<i>4.15.0.0</i>	<i>2 1/4</i>	
and	Warp						Kedge ...	<i>1</i>	<i>1.0.0</i>	<i>3.7.2.0</i>	<i>1</i>	
quality <i>good</i>							2nd Kedge ...					

Standing and Running Rigging of wire sufficient in size and *good* in quality. She has *2 wooden* ~~Long~~ Boats and *18x14* feet long

The Windlass is *Emmerson Walker* Capstan and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Above Bridge Deck* How secured in ordinary weather? *Well*

What arrangements for deadlights in bad weather? *Iron lids*

Coal Bunker Openings. How constructed? *Of iron* How are lids secured? *Double wooden lids with rails* Height above deck? *16 inches*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Open Bulwarks*

Cargo Hatchways. How formed? *Of Iron 2 1/2 x 9/16 plate*

State size Main Hatch *17.6 x 8.0* Fore hatch *7.0 x 8.0* Quarter hatch *17.6 x 8.0 x 8.9 x 8*

If of extraordinary size, state how framed and secured? *Welded frames*

What arrangement for shifting beams?

Hatches, If strong and efficient? *Solid 2 1/2" thick*

Order for Special Survey No.

Date

Order for Ordinary Survey No.

Date

No. *105* 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

Special Survey

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

The vessel has a double bottom under Engine and Boiler room and built after the Bracket system, she has also in her after hold a ballast tank, which has been tested according to the Rules and found tight. The decks are of iron as also the houses. The length of Bridge-house 26'.

The workmanship has been carried out to my satisfaction as also the equipments

State if one, ~~two~~ *three* decked vessel, or if ~~one~~ *two* masted vessel, and the length of poop, bridge, foremast, or mainmast, &c. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *3 coats of red lead, bottom cemented* Outside *3 coats of paint, bottom Patent paint.*

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

The amount of the Entry Fee ... £ *2 : 0 : 0* is received by me, }

Special ... £ *17 : 0 : 0* 18 }

Certificate ... : *5 : 0*

(Travelling Expenses, if any, £ *5.0.0.*).

Committee's Minute

FRIDAY 2 NOV 1883 18

Character assigned

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

Lloyd's Register
Foundation