

IRON SHIP.

Survey held at

Bergen

Date, First Survey *9 March*

Last Survey

15 December 1881

NAME under Tonnage Deck *383.30*

of Third, Spar, or Awning Deck *135.80*

of Poop, or raised Qr. Dk. *2.70*

of Houses on Deck *28.41*

of Forecastle *550.21*

Crew Space *40.75*

Engine Room *509.46*

ster Tonnage out on Beam *106.40*

403.06

ONE, OR TWO DECKED, THREE DECKED VESSEL. SPAR, OR AWNING-DECKED VESSEL.

HALF BREADTH (moulded) *12.00*

DEPTH from upper part of Keel to top of Upper Deck Beams *14.975*

GIRTH of Half Midship Frame (as per Rule) *22.875*

1st NUMBER *49.25*

1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet *~*

LENGTH *168.75*

2nd NUMBER *8311*

PROPORTIONS—Breadths to Length *7.03*

Depths to Length—Upper Deck to Keel *~*

Main Deck ditto *11.75*

Built at *Bergen*

When built *1881*

Launched Nov. 19th 1881

By whom built *Bergens mst. Verksted*

Owners *M. Aug. Schjelderup & Sundt*

Port belonging to *Bergen*

Destined Voyage *Foreign*

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

in all cases

Length of Ship per Register, length, *169'11"* breadth, *24'2"* depth, *13'0"*

EL, depth and thickness *7 1/2" x 1 3/8"*

EM, moulding and thickness *7 1/2" x 1 3/8"*

ERN-POST for Rudder do. do. *6 1/2" x 3 3/4"*

for Propeller *6 1/2" x 3 3/4"*

Distance of Frames from moulding edge to moulding edge, all fore and aft *21"*

AMES, Angle Iron, for 1/2 length amidships *3 3/4"*

for 1/2 at each end *3 3/4"*

VERSED FRAMES, Angle Iron *2 1/2" x 5/16"*

DOORS, depth and thickness of Floor Plate *14 5/16"*

mid line for half length amidships *14 5/16"*

thickness at the ends of vessel *7 5/16"*

depth at 3/4 the half-bdth. as per Rule *28*

height extended at the Bilges *~*

AMS, Upper, Spar, or Awning Deck *6 5/16"*

Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron *2 1/2" x 5/16"*

Angle or double Angle Iron on Upper edge *42*

average space *6 5/16"*

AMS, Main, or Middle Deck *6 5/16"*

Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron *2 1/2" x 5/16"*

Angle or double Angle Iron on Upper Edge *6 5/16"*

average space *84*

AMS, Lower Deck, Hold, or Orlop *11 9/16"*

Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron *7 1/2" x 9/16"*

Angle or double Angle Iron on Upper Edge *~*

average space *~*

ELSONS Centre line, single or double plate, box, or intercostal, Plates *~*

Rider Plate *~*

Bulb Plate to Intercostal Keelson *~*

Angle Irons *~*

Double Angle Iron Side Keelson *~*

Side Intercostal Plate *~*

do. Angle Irons *~*

Attached to outside plating with angle iron *~*

GE Angle Irons *3 1/2" x 3 5/16"*

do. Bulb Iron *6 5/16"*

do. Intercostal plates riveted to plating for length *~*

GE STRINGER Angle Irons *3 1/2" x 3 5/16"*

Intercostal plates riveted to plating for length *~*

GE STRINGER Angle Irons *~*

Isoms, material. Knight heads. Hawse Timbers. *Iron*

Class of approved construction. Pall Bitt *Iron*

FRAMES extend in one length from *middle line* to *main deck & to poop*

REVERSED ANGLE IRONS on floors and frames extend *from middle line to top of half beams stringers* and to *main deck* alternately

ELSONS. Are the various lengths of Plates and Angle Irons properly connected? *yes* And butts properly shifted? *yes*

TING. Garboard, double riveted to Keel, with rivets *1* in. diameter, averaging *5* ins. from centre to centre.

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

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8 x 3/4* in. diameter averaging *2 1/2 x 3* ins. from centre to centre.

Butts of *1* Strake at Bilge for *1/2* length, *double* riveted with Butt Straps *7/16"* thicker than the plates they connect.

Edge from bilge to Main Sheerstrake, worked clencher, *double or single* riveted; with rivets *3/4* in. diameter, averaging *3* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8 x 3/4* in. diameter, averaging *2 1/2 x 3* ins. from cr. to cr.

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

Butts of Main Sheerstrake, treble riveted for *~* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *~* length amidships.

Butts of Main Stringer Plate, treble riveted for *~* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *~* length.

Breadth of laps of plating in double riveting *5 1/2 x 3 3/4* Breadth of laps of plating in single riveting *2 7/8*

Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Center keelson held, stringer & tie plates double riveted*

erway, how secured to Beams *in the ordinary way* (Explain by Sketch, if necessary.)

ms of the various Decks, how secured to the sides? *with bracket plates*

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

ufacturer's name or trade mark, *Plates J.B. & Co Angles & Bulbs Dorman Lang & Co Middlesbrough*

The above is a correct description.

der's Signature, *B. Coucherons*

Surveyor's Signature, *P. J. M. M.*

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

Flat Keel Plates, breadth and thickness *30 8/16"*

PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges *4 1/6" x 7/16"*

of doubling at Bilge, or increased thickness, and length applied *one strake to*

fm up. part of Bilge to tr. edge of Sh'rstrake. *4 1/6" x 7/16"*

Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied *33 17/16"*

from Mn. to Up. or Spar Dk. Sh'rstrake. *50 ft in way of back of poop*

Up. or Spar Dk Sh'rstrake, brdth & thickness *~*

Butt Straps to outside plating, breadth & thickness *as per rule 11 1/4 x 9 3/4 x 8"*

Lengths of Plating *6 spaces of frame*

Shifts of Plating, and Stringers *2 1/2"*

Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness *~*

Angle Iron on ditto *~*

Tie Plates fore and aft, outside Hatchways *~*

Diagonal Tie Plates on Beams No. of Pairs *~*

Planksheer material and scantling *~*

Waterways do. do. *~*

Flat of Upper Deck do. do. *~*

How fastened to Beams *~*

Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness *38 7/16"*

Is the Stringer Plate attached to the outside plating? *yes*

Angle Irons on ditto, No. one, two in way of poop & fore-castle *3 1/2" x 3 5/16"*

Tie Plates, outside Hatchways *8 7/16"*

Diagonal Tie Plates on Beams, No. of pairs *8 7/16"*

Waterways materials and scantlings *~*

Flat of Middle Deck do. do. *~*

How fastened to Beams *with nut and screw bolts*

Stringer Plates on ends of Lower Deck, Hold or Orlop Beams *12 7/16"*

Is the Stringer Plate attached to the outside plating? *no*

Angle Irons on ditto, No. one *3 1/2" x 3 5/16"*

Stringer or Tie Plates, outside Hatchways *~*

Flat of Lower Deck *~*

Ceiling betwixt Decks, thickness and material *2 1/2" pine 2 1/8" pine*

in hold do. do. *4 1/4"*

Main piece of Rudder, diameter at head *3*

do. at heel *~*

Can the Rudder be unshipped afloat? *yes*

Bulkheads No. 5 Thickness of *the aftermost & forward bulkhead 7/16"* the remainder *4/16"*

Height up *the aftermost to hold beams, the remainder to main deck*

How secured to sides of ship *between double frames*

Size of Vertical Angle Irons *2 1/2" x 2 1/2" x 7/16"* and distance apart *30* ins.

Are the outside Plates doubled two spaces of Frames in length? *yes*

at fore-castle deck respectively

Riveted through plates with *3/4* in. Rivets, about *6"* apart.

REVERSED ANGLE IRONS on floors and frames extend *from middle line to top of half beams stringers* and to *main deck* alternately

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

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Are the fillings between the ribs and plates solid single pieces?

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

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are *fair pine & pine* condition, and sufficient in size and length. If of Iron or Steel give 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

Foremast length from main deck 39'3" diam at partner 15 1/2"
Mainmast " " " " 40'9" " " " 15 1/2"

NUMBER for EQUIPMENT		Fathoms.	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.
SAILS.		CABLES, &c.										
Nº.	Chain	195.5	1 3/16	3 1/2 tons	1 3/16	1881	Bower Anchors	1	13 1/4 Cwt.	14-17-0-21	10	3rd Sept
/ Fore Sails	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	Hays & Poiry, Hays-Tipton 1st Sept. 1881										
/ Fore Top Sails	Iron Str'm Chain	60.8	3/16	15 tons	3/16	E.R. Osell		1	12 "	13-17-2-0	12	3rd "
/ Fore Topmast	Do do.	Hays & Poiry, Hays-Tipton 2nd Aug 1881										
/ Fore Topmast	Hmpn Strm Cbl											
/ Fore Stay Sails	Hawser ...											
/ Fore Stay Sails	Towlines	75	8 1/2		8		Stream	1	4 "	6-7-2-0	3 1/4 3/4	12 1/4 "
/ Main Sails	Warp ...	90	6 1/2		6		Kedge	1	1 1/16	4-10-0-0	1 1/4 1/4	3rd "
/ Main Top Sails	and / Fore Topmast quality											

Standing and Running Rigging *standing wire rope* sufficient in size and *good* in quality. She has *2* Long Boats and *1* life boat

The Windlass is *Harfield's* Capstan *good* and Rudder *good* Pumps *good* *3* double equipment

Engine Room Skylights.—How constructed? *Iron coming 3-0" above poop deck* How secured in ordinary weather? *fixed with screws*

What arrangements for deadlights in bad weather? *Tarpanine*

Coal Bunker Openings.—How constructed? *Iron coming 7/16" thick* How are lids secured? *by iron bars* Height above deck? *12"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *3 ports and 2 scuppers on each side*

Cargo Hatchways.—How formed? *Iron coming 7/16" thick, extending to lower edge of beams, no carlings*

State size Main Hatch *14'0" x 7'0"* Forehatch *7'0" x 5'0"* Quarterhatch *10'6" x 7'0"*

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

What arrangement for shifting beams? *A deep web plate is fitted in the middle of main hatch, extending the depth of*

Hatches, If strong and efficient? *yes*

Order for Special Survey No.	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
Date		2nd. On the plating during the process of riveting
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..
No. <i>116</i> in builder's yard.		5th. After the ship was launched and equipped

24 meetings

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

She has a: Full poop for a length of 92'3" from fore part of stem post

Top-gallant fore-castle " " 31'0" from stem

Deep-Water-Ballast-Tank in main hold 12'3" long from bilge bulkhead. 15" above

" " " " in after peak 14'6" " " propeller post. to hold

The ship being very carefully built in every respect in conformity with the rules I recommend it to be classed 90A1.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside Outside

I am of opinion this Vessel should be Classed

The amount of the Entry Fee ... £ 5 : 0 : - is received by me,

Special ... £ 27 : 10 : - 23/12 1881

Certificate ... 0 : 5 : -

Travelling Expenses, if any, £ 2-)

Committee's Minute Friday January 13th. 1882

Character assigned *90A1*

Harfield & Co

BGN 1105/57

11/1/82

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

This vessel has been built in accordance with the approved plans appended and is submitted she appears to be eligible to be classed 90A1 as recommended

Surveyor to Lloyd's Register of British and Foreign Shipping

Lloyd's Register of British and Foreign Shipping