

Steel IRON SHIP.

No. 52 Survey held at Göteborg Date, First Survey 1 Aug 1881 Last Survey 20 December 1881
 On the S. S. "Nanna"

TONNAGE under Tonnage Deck 373.49
 Ditto of Third, Spar, or Awning Deck. }
 Ditto of Poop, or Raised Or. Dk. }
 Ditto of Houses on Deck } 80.85
 Ditto of Forecastle }
 Gross Tonnage 454.34
 Less Crew Space 21.73
432.61
 Less Engine Room 81.40
 Register Tonnage 351.21
 out on Beam }

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 15.25
 Girth of Half Midship Frame (as per Rule) 24.62
 1st Number 51.87
 1st Number, if a 3-Decked Vessel .. deduct 7 feet
 Length 147.5
 2nd Number 7650.82
 Proportions— Breadths to Length 1:6.1
 Depths to Length— Upper Deck to Keel 1:9.6
 Main Deck ditto

Master H. Schjote
 Built at Lindholmen
 When built 1881 Launched 1/11
 By whom built Motals Company
 Owners Johan C. Giertsen
 Residence Bergen (Norway)
 Port belonging to Bergen
 Destined Voyage Newcastle
 If Surveyed while Building, Afloat, or in Dry Dock, while Building

LENGTH on deck as per Rule	Feet. Inches.	BREADTH— Moulded	Feet. Inches.	DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet. Inches.	Power of Engines	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
147 6		24		14 1/2		50		1	2
Dimensions of Ship per Register, length, <u>150.8</u> breadth, <u>12.27</u> depth, <u>15.8</u>									
KEEL, depth and thickness		Inches in Ship. <u>7 1/4 x 1 1/2</u>	Inches per Rule. <u>7 1/4 x 1 1/2</u>	Flat Keel Plates, breadth and thickness					
STEM, moulding and thickness		<u>6 1/2 x 1 1/2</u>	<u>6 1/2 x 1 1/2</u>	PLATES in Garboard Strakes, br'dth & thickness	<u>30</u>	<u>1 1/2</u>	<u>30</u>	<u>1 1/2</u>	
STERN-POST for Rudder do. do.		<u>8" x 2 1/4</u>	<u>8" x 2 1/4</u>	" From Garboard to upper part of Bilges...	<u>alters</u>	<u>1/4 x 1/2</u>	<u>alters</u>	<u>1/4 x 1/2</u>	
" " for Propeller		<u>8" x 2 3/4</u>	<u>8" x 2 3/4</u>	" Of d'bling at Bilge, or increased thickness, and length applied		<u>1/4</u>		<u>1/4</u>	
Distance of Frames from moulding edge to moulding edge, all fore and aft		<u>21"</u>	<u>21"</u>	" From up. prt of Bilge to l. edge of Sh'rstrake...	<u>alters</u>	<u>1/4 x 1/2</u>	<u>alters</u>	<u>1/4 x 1/2</u>	
FRAMES, Angle Iron, for 1/2 length amidships		Inches. In Ship. <u>3</u>	Inches. In Ship. <u>3</u>	" Main Sheerstrake, breadth and thickness....	<u>33</u>	<u>1 1/2</u>	<u>33</u>	<u>1 1/2</u>	
Do. for 1/4 at each end		<u>3</u>	<u>3</u>	" Of d'bling at Sh'stk. & l. g. applied					
REVERSED FRAMES, Angle Iron		<u>2 1/2</u>	<u>2 1/2</u>	" From M'n. to Up. or Spar Dk. Sh'rstrake...					
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships		<u>1 1/2</u>	<u>1 1/2</u>	" Up. or Spar Dk Sh'rstrake, br'dth & thckn' as...					
" thickness at the ends of vessel		<u>1 1/2</u>	<u>1 1/2</u>	Butt Straps to outside plating, breadth & thickness	<u>8</u>	<u>1/4</u>	<u>8</u>	<u>1/4</u>	
" depth at 3/4 the half-bdth. as per Rule		<u>7 1/4</u>	<u>7 1/4</u>	Lengths of Plating	<u>12</u>		<u>12</u>		
" height extended at the Bilges		<u>29</u>	<u>29</u>	Shifts of Plating, and Stringers	<u>42</u>		<u>42</u>		
BEAMS, Upper, Spar, or Awning Deck				Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness...					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				Angle Iron on ditto					
Single or double Angle Iron on Upper edge				Tie Plates fore and aft, outside Hatchways					
Average space				Diagonal Tie Plates on Beams No. of Pairs					
BEAMS, Main, or Middle Deck				Flat of Up., Spar, or Awning Dk. *					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				How fastened to Beams					
Single or double Angle Iron, on Upper Edge				Stringer Plate on ends of Main or Middle Deck					
Average space				Beams, breadth and thickness	<u>28</u>	<u>1/4</u>	<u>28</u>	<u>1/4</u>	
BEAMS, Lower Deck— Channel Steel				Is the Stringer Plate attached to the outside plating?	<u>Yes</u>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				Angle Irons on ditto, No. <u>2</u>					
Single or double Angle Iron on Upper Edge				Tie Plates, outside Hatchways	<u>3 1/2 x 2 1/2 x 1/4</u>	<u>1/4</u>	<u>3 1/2 x 2 1/2 x 1/4</u>	<u>1/4</u>	
Average space				Diagonal Tie Plates on Beams, No. of pairs	<u>8</u>	<u>1/4</u>	<u>8</u>	<u>1/4</u>	
BEAMS, Hold, or Orlop				Flat of Middle Deck* do. do.	<u>5</u>	<u>3/4</u>	<u>5</u>	<u>3/4</u>	
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				How fastened to Beams	<u>2 1/2</u>	<u>1/4</u>	<u>2 1/2</u>	<u>1/4</u>	
Single or double Angle Iron on Upper Edge				Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>20</u>	<u>1/4</u>	<u>20</u>	<u>1/4</u>	
Average space				Is the Stringer Plate attached to the outside plating?	<u>Yes</u>				
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates				Angle Irons on ditto, No. <u>2</u>					
" Rider Plate				Stringer or Tie Plates, outside Hatchways	<u>3 1/2</u>	<u>2 1/2 x 1/4</u>	<u>3 1/2 x 2 1/2 x 1/4</u>	<u>1/4</u>	
" Bulb Plate to Intercoastal Keelson				Flat of Lower Deck *					
" Angle Irons				Ceiling betwixt Decks, thickness and material					
" Double Angle Iron Side Keelson				" in hold do. do.					
" Side Intercoastal Plate				Main piece of Rudder, diameter at head					
" do. Angle Irons				do. at heel					
" Attached to outside plating with angle iron				Can the Rudder be unshipped afloat?	<u>Yes</u>				
BILGE Angle Irons				Bulkheads No. <u>4</u> No. per Rule <u>4</u>					
" do. Bulb Iron				" Thickness of <u>1/4</u>					
" do. Intercoastal plates riveted to plating for length				" Height up <u>to main deck</u>					
BILGE STRINGER Angle Irons				" How secured to sides of ship <u>riveted to double frames</u>					
" Intercoastal plates riveted to plating for length				" Size of Vertical Angle Irons <u>2 1/2 x 2 1/4 x 1/4</u> and distance apart <u>30</u> ins.					
SIDE STRINGER Angle Irons				" Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>					

The FRAMES extend in one length from the Keel to Main deck Riveted through plates with 5/8 in. Rivets, about 5" apart.
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Bilge and Iron Upper Edge 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 1/8 in. diameter, averaging 4 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 2 3/4 ins. from centre to centre.
 " Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 3/8 ins. from centre to centre.
 " Butts of all Strakes at Bilge for whole length, double riveted with Butt Straps 1/4 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 3/4 ins. from cr. to cr.
 " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 5/8 in. diameter, averaging 2 3/8 ins. from cr. to cr.
 " Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
 " Butts of Main Sheerstrake, double riveted for whole length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
 " Butts of Main Stringer Plate, double riveted for whole length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
 " Breadth of laps of plating in double riveting 4 Breadth of laps of plating in single riveting 2 1/4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double No. of Breasthooks, 2 Crutches, 2
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Bessemer Steel

Manufacturer's name or trade mark, Motals Steel and Iron Co
 The above is a correct description.

Builder's Signature, _____ Surveyor's Signature, C. A. Moller
 Surveyor to Lloyd's Register of British and Foreign Shipping.

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 *Swedish Red 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

*Foremast 80 feet in length 16 1/4 inches Diameter
Mainmast 78 " " 15 1/2 " "*

NUMBER for EQUIPMENT <i>8415</i>		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprtdt.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Machine where Tested & Suprtdt.
SAILS.												
CABLES, &c.												
N ^o .												
3	Fore Sails,	180	1 1/8	34 2.2.0 22 15.0.0	1 1/6		Bower Anchors					
	Fore Top Sails,	60	1 1/6	11 5.0.0 5 12.2.0	1 1/6			1	9.0.8	11.4.2.21	8.0.1	28 Sept 81
	Fore Topmast Stay Sails,	75	8"		75 x 8			1	8.2.26	11.2.2.0	8.0.1	13 Oct 81
	Main Sails,	90	6"		90 x 6			1	7.1.14	9.11.2.7	7.0.0	12 Sept 81
	Main Top Sails,	120	3 1/2				Stream Anchor	1	2.0.8	5.12.0.21	2.2.0	28 Sept 81
	and						Kedge	1	1.2.10	2.18.2.0	1.0.1	13 Oct 81
							2nd Kedge					

Standing and Running Rigging *Wire and Hemp* sufficient in size and *good* in quality. She has *2* Long Boat and

The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Iron frame Wood Skylight* How secured in ordinary weather? *Secured*

What arrangements for deadlights in bad weather? *—*

Coal Bunker Openings.—How constructed? *Trunk from Bridge* How are lids secured? *—* Height above deck? *—*

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

Cargo Hatchways.—How formed? *Iron framed*

State size Main Hatch *15 3/4 x 8 3/4 x 2'* Forehatch *5 1/4 x 4-10 x 2'* Quarterhatch *10 1/2 x 8 3/4 x 1 1/2'*

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

What arrangement for shifting beams? *Bolts to double angles*

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	<i>15 Sept 1881</i>
Date		2nd. On the plating during the process of riveting	<i>20 Oct 1881</i>
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....	<i>1 Oct 1881</i>
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>1 Nov. 1881</i>
No. in builder's yard.		5th. After the ship was launched and equipped	<i>20 Dec. 1881</i>

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

The ship is built of steel tested in accordance with the Rules and annexed Report. The steel material is stamped with Lloyd's Brand and the Manufacturers Trade Mark. She is rigged as schooner and has Raised Quarter deck 50 feet, Bridgehouses 31 feet and Forecastle 12 feet in length.

She is built in accordance with approved Plans of 30/81

The Material and Workmanship is of good quality and the Vessel in a good and efficient state fit for the conveyance of dry and perishable goods to and from all parts of the world.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Bottom Cement, Topside Red Lead* Outside *Red Lead*

I am of opinion this Vessel should be Classed *90 A*

The amount of the Entry Fee *£ 5* is received by me, *CLM*

Special Certificate *£ 22 : 14* : *23 Dec. 1881*

Certificate *£ 3* : (to be sent as per margin).

(Travelling Expenses, if any, £ 1.2.6.) *£ 27 : 19*

Committee's Minute

Character assigned

Lloyd's M.C.

Friday, January 13th, 1882

90 A 1 Steel

Lloyd's M.C. TRW

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

This vessel has been built in accordance with approved plans and it is submitted she appears to be eligible to be classed as recommended.

90 A 1 Steel

Lloyd's Register Foundation

13/1/82