

IRON 467-0388

IRON SHIP.

16780

Reg 7/8/76

No. 12285 Survey held at Newcastle Date, First Survey 18th July Last Survey 25th July 1876

On the S.S. "Olaf Trygvesson" Master Berg

TONNAGE under Tonnage Deck } 585.50
 Ditto of Third Spar, or Awning Deck. }
 Ditto of Poop, or Raised Or. Dk. }
 Ditto of Houses on Deck } 8.85
 Ditto of Forecasts }
 Gross Tonnage 594.35
 Less Crew Space }
 Less Engine Room } 190.19
 Register Tonnage as cut on Beam } 404.16

~~ONE OR TWO DECKED, THREE DECKED VESSEL.~~
~~SPAR OR AWNING-DECKED VESSEL.~~
 HALF BREADTH (moulded) 12.5^{Feet}
 DEPTH from upper part of Keel to top of Upper Deck Beams 14.0
 GIRTH of Half Midship Frame (as per Rule) 23.0
 1st NUMBER 495
~~1st NUMBER if a THREE DECKED VESSEL~~
 LENGTH 175
 2nd NUMBER 8662
 PROPORTIONS—Breaths to Length 4.0
 Depths to Length—Upper Deck to Keel
 Main Deck ditto 12.5

Built at Newcastle
 When built 1876 Launched 20th June
 By whom built J. Nigham Richardson & Co.
 Owners Nordenfjeldske Sm. Kvarn Co.
 Port belonging to Thronhjem
 Destined Voyage ""
 If Surveyed while Building, ~~Afloat, or in Dry Dock.~~

PLANS CASE

Official Number

LENGTH on deck as per Rule ... 175 ^{Feet. Inches.} 0 BREADTH—Moulded... .. 25 ^{Feet. Inches.} 0 DEPTH top of Floors to Upper Deck Beams 12 ^{Feet. Inches.} 10 Power of Engines 90 Horse. N^o. of Decks with flat laid 2 ^{Ypl. third} N^o. of Tiers of Beams 2 ^{Ypl. third}

Dimensions of Ship per Register, length 176.0 breadth 25.2 depth 19.8

	Inches in Ship.		Inches per Rule.	
	Inches.	16ths.	Inches.	16ths.
KEEL, depth and thickness	<u>7 1/2</u>	<u>17/8</u>	<u>7 1/2</u>	<u>17/8</u>
STEM, moulding and thickness... ..	<u>6 1/2</u>	<u>13/8</u>	<u>6 1/2</u>	<u>13/8</u>
STERN-POST for Rudder do. do.	<u>6 1/2</u>	<u>3 3/4</u>	<u>6 1/2</u>	<u>3 3/4</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>		<u>21</u>	
FRAMES, Angle Iron, for 2/3 length amidships	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Do. for 1/3 at each end	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
REVERSED FRAMES, Angle Iron	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<u>14</u>	<u>7/16</u>	<u>14</u>	<u>7/16</u>
thickness at the ends of vessel	<u>5</u>		<u>5</u>	
depth at 3/4 the half-bdth. as per Rule	<u>4</u>		<u>4</u>	
height extended at the Bilges... ..	<u>28</u>		<u>28</u>	
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... ..	<u>4 1/2</u>	<u>3</u>	<u>4 1/2</u>	<u>2 1/2</u>
alternate frame				
BEAMS, Main, or Middle Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single, or double Angle Iron, on Upper Edge } Average space... ..	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
alternate frame				
BEAMS, Lower Deck, Hold, or Orlop } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge } Average space... ..	<u>4 1/2</u>	<u>3</u>	<u>4 1/2</u>	<u>6</u>
malt frame				
KEELSONS Centre line, single or double plate, } " " Intercoastal, Plates	<u>6</u>		<u>6</u>	
" " Bulb Plate	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
" " Bulb Plate to Intercoastal Keelson	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
" " Angle Irons	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
" " Double Angle Iron Side Keelson	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
" " Side Intercoastal	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
" " do. Angle Irons	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
" " Attached to outside plating with angle iron	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
BILGE Angle Irons	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
" do. Bulb Iron... ..	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
" do. Intercoastal plates riveted to plating for length	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
BILGE STRINGER Angle Irons	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
Intercoastal plates riveted to plating for length	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
SIDE STRINGER Angle Irons	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
Bulb Iron	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
Transoms, material. Knight-heads. Hawse Timbers.			<u>Gun</u>	

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
Flat Keel Plates, breadth and thickness	<u>30</u>	<u>9</u>	<u>30</u>	<u>9</u>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, increased thickness, and length applied 2 Strakes } fm up. part of Bilge to lr. edge of Sh'rstrake } Main Sheerstrake, breadth and thickness } of doubling at Sh'rstrake, & length applied } from Main to Upper Spar Dk Sh'rstrake } Upper Spar Dk Sh'rstrake, breadth & thickness }	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>
Butt Straps to outside plating, breadth & thickness	<u>9 1/2</u>	<u>1 1/2</u>	<u>5</u>	<u>12</u>
Lengths of Plating	<u>4</u>		<u>4</u>	
Shifts of Plating, and Stringers... ..	<u>2</u>		<u>2</u>	
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..	<u>21</u>	<u>6</u>	<u>21</u>	<u>6</u>
Angle Iron on ditto	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
Tie Plates fore and aft, outside Hatchways	<u>8</u>	<u>6</u>	<u>8</u>	<u>6</u>
Diagonal Tie Plates on Beams, No. of Pairs, Plankhook material and scantling				
Waterways				
Flat of Upper Deck do. do.	<u>4</u>	<u>Pine</u>	<u>2 1/2</u>	
How fastened to Beams	<u>nut & screw</u>		<u>bolts</u>	
Stringer Plate on ends of Main or Middle Deck } Beams, breadth and thickness	<u>38</u>	<u>8</u>	<u>38</u>	<u>8</u>
Is the Stringer Plate attached to the outside plating?	<u>yes</u>			
Angle Irons on ditto, No. <u>2</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
Tie Plates, outside Hatchways	<u>8</u>	<u>4</u>	<u>8</u>	<u>4</u>
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.	<u>Yellow Pine</u>		<u>3 1/2</u>	
How fastened to Beams	<u>nut & screw</u>		<u>bolts</u>	
Stringer Plates on ends of Lower Deck, } Holdings	<u>12</u>	<u>6</u>		
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No. <u>1</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
Stringer or Tie Plates, outside Hatchways	<u>4</u>		<u>4</u>	
Flat of Lower Deck	<u>4</u>		<u>4</u>	
Ceiling betwixt Decks, thickness and material	<u>B.R. Wood</u>		<u>2 1/4</u>	
in hold do. do.	<u>4 1/2</u>		<u>4 1/2</u>	
Main piece of Rudder, diameter at head	<u>4 1/2</u>		<u>4 1/2</u>	
do. at heel	<u>2 1/2</u>		<u>2 1/2</u>	
Can the Rudder be unshipped afloat?	<u>yes</u>			
Bulkheads No. <u>5</u> Thickness of <u>5/16</u>				
Height up <u>all to main deck</u>				
How secured to sides of ship <u>double frame</u>				
Size of Vertical Angle Irons <u>2 1/2 x 2 1/2 x 5/8</u> and distance apart <u>30</u> ins.				
Are the outside Plates doubled two spaces of Frames in length?	<u>yes</u>			

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 x 5/8 in. Rivets, about 5 1/2 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to upper bilge stringer and to main dk 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 5/8 in. diameter, averaging 4 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 x 5/8 in. diameter, averaging 2 1/2 ins. from centre to centre.

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

Butts of 2 Strakes at Bilge for 1/2 length, double riveted with Butt Straps 7/8 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 5/8 x 3/4 in. diameter, averaging 2 1/2 to 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 5/8 x 3/4 in. diameter, averaging 2 1/2 to 3 1/2 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 length amidships. Butts of awning Sheerstrake, double riveted length amidships.

Butts of Main Stringer Plate, double riveted for length amidships. Butts of awning Upper Stringer Plate, double riveted for length.

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, double, double or single Riveted?

Waterway, how secured to Beams riveted (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Mildew knees riveted to frame No. of Breasthooks, 4 Crutches, 4

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

Manufacturer's name or trade mark, Plates Bell Ridley & Bell
A.S. Pyzack & Co.

The above is a correct description.

Builder's Signature, William Richardson Surveyor's Signature, Geo. Cooper

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

2000 (12.6.75)

Workmanship. Are the butts of plating planed or otherwise fitted? *Yes* 16780 Iron
 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? *few*

Masts, Bowsprit, Yards, &c., are *New* 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
Iron Masts - Schooner Rig

NUMBER for EQUIPMENT 10105		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W ^g t req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.					Bowers	1	12-2-4	14-8-1-21	12	13 1/2
	Fore Sails,	Chain		105	1 3/4	25 3/8		1	11-3-21	13-16-1-0	12	12 3/4
	Fore Top Sails,	R. W. C. P. H.				38		1	9-3-4	11-14-3-4	10 1/4	12 3/4
	Fore Topmast Stay Sails	Harwood			195-1 1/2	25 3/8						
	Main Sails,	Strm Cbl		60	3/4	90-9						
	Main Top Sails,	Hawser ...		120	1 1/2	90-9						
	and	Towlines ...		90	1 1/2	90-9						
		Warp quality <i>good</i>		90	5	90-9						

Standing and Running Rigging *Iron & Rope* sufficient in size and *good* in quality. She has *two* Life Boat and *two* others
 The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good & sufficient*

Engine Room Skylights.—How constructed? *Non-removing Teak top* How secured in ordinary weather? *bolted*

What arrangements for deadlights in bad weather? *Solid Shutters & Bulwarks*

Coal Bunker Openings.—How constructed? *Cool iron rim & cover* How are lids secured? *Clip* Height above deck? *main flush*

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

Cargo Hatchways.—How formed? *Plates & Angles in the usual way*

State size Main Hatch *8.6 x 6.0* Forehatch *4.6 x 3.0* Quarterhatch *4.0 x 4.0*

If of extraordinary size, state how framed and secured? *Not extraordinary size*

What arrangement for shifting beams? *Trod fore & after*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *111* Date *11/24/1876*

Order for Ordinary Survey No. — Date —

No. *97* in builder's yard.

General Remarks (State quality of workmanship, &c.) *This is an awning decked vessel built in accordance with the approved mid-section attached & Secy letter 6/1/76.*

The scantlings of awning deck are given above.

The vessel is fitted with water ballast tank in the after hold for 28 feet.

Tank girders & tank top 7/16 thick. Same has been tested & found satisfactory.

In accordance with Circular No 354 the mark  is painted on the vessel's side at the 12'6" line as approved by Committee.

The Material & Workmanship are both satisfactory.

A Lower deck is laid in the fore & after hold for the accommodation of passengers.

The weights of the tower anchors are slightly different from the Rule - the collective weight being however equal thereto - & the same is submitted as satisfactory.

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

How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint*

I am of opinion this Vessel should be Classed *100 A 1 awning deck. Max Load line 12'6"*

The amount of the Entry Fee ... £ 5 : : : is received by me, *T. Young*

Special Certificate ... £ 29 : 14 : : 5 Aug 1876

(Travelling Expenses, if any, £ 2 : 2 : 0.)

Committee's Minute *8th August 1876*

Character assigned *100 A 1*

Lloyd's Register

one Dk & Awning Dk. Load line 12 feet 6 inches