

IRON SHIP.

No. 168 Survey held at Hamburg Date, First Survey 7th September Last Survey 16th September 1876

On the Iron Ship Herschel (late "Edith Byrne") Master J. J. Hammann

TONNAGE under Tonnage Deck <u>685.00</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Breukel</u>
Ditto of Third, Spar, or Awning Deck.	SPAR, OR AWNING-DECKED VESSEL.	When built <u>1857</u> Launched _____
Ditto of Poop, or Raised Qr. Dk.	HALF BREADTH (moulded) <u>15.10</u> Feet.	By whom built <u>Canada Works</u>
Ditto of Houses on Deck <u>129.34</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>21.40</u>	Owners <u>R. M. Sloman & Co</u>
Ditto of Forecastle	GIRTH of Half Midship Frame (as per Rule) <u>31.50</u>	Port belonging to <u>Hamburg</u>
Gross Tonnage <u>814.34</u>	1st NUMBER <u>68.00</u>	Destined Voyage <u>Australia</u>
Less Crew Space <u>27.78</u>	1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] _____	If Surveyed while Building, Afloat, or in Dry Dock.
Less Engine Room	LENGTH <u>164.00</u>	
Register Tonnage as cut on Beam <u>786.56</u>	2nd NUMBER <u>11152</u>	
	PROPORTIONS —Breadths to Length <u>over 5</u>	
	Depths to Length—Upper Deck to Keel <u>over 7</u>	
	Main Deck ditto _____	

LENGTH on deck as per Rule <u>164</u> Feet. <u>0</u> Inches.	BREADTH Moulded <u>30</u> Feet. <u>2 1/2</u> Inches.	DEPTH top of Floors to Upper Deck Beams <u>21</u> Feet. <u>3 1/2</u> Inches.	Power of Engines _____	Horse. _____	N° of Decks with flat laid <u>two</u>	N° of Tiers of Beams <u>two</u>
---	---	---	-------------------------------	---------------------	--	--

Dimensions of Ship per Register, length, breadth, depth,	Inches in Ship.	Inches per Rule.	Flat Keel Plates, breadth and thickness.	Inches. In Ship.	16ths. In Ship.	Inches. required	16ths. required
KEEL , depth and thickness <u>8</u> Stem <u>7 1/2 - 3</u>	<u>7 1/2</u>	<u>7 1/2 + 2 1/4</u>	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied _____	<u>11</u>	<u>9</u>	<u>9</u>	<u>16</u>
STEM , moulding and thickness _____			of doubling at Bilge, or increased thickness, and length applied _____	<u>8 1/2</u>	<u>9</u>	<u>8</u>	<u>16</u>
STERN-POST for Rudder do. do. for Propeller _____			fm up. part of Bilge to lr. edge of Sh'rstrake	<u>7-8 x 9</u>	<u>9</u>	<u>8</u>	<u>16</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft _____			Main Sheerstrake , breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	<u>10</u>	<u>10</u>	<u>10</u>	<u>16</u>
			Up. or Spar Dk Sh'rstrake, brdth & thickns				
FRAMES , Angle Iron, for 2/3 length amidships Do. for 1/2 at each end _____	<u>4 1/2</u>	<u>3</u>	Butt Straps to outside plating, breadth & thickness	<u>9</u>	<u>8 1/2</u>	<u>9</u>	<u>11</u>
REVERSED FRAMES , Angle Iron _____	<u>3</u>	<u>3</u>	Lengths of Plating _____	<u>110</u>			
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships _____			Shifts of Plating, and Stringers _____	<u>44</u>			
thickness at the ends of vessel _____			Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness _____				
depth at 2/3 the half-bdth. as per Rule _____			Angle Iron on ditto _____				
height extended at the Bilges _____			Tie Plates fore and aft, outside Hatchways _____				
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Diagonal Tie Plates on Beams No. of Pairs, _____				
Single or double Angle Iron on Upper edge _____			Planksheer material and scantling _____				
Average space _____			Waterways do. do. _____				
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>7</u>	<u>7</u>	Flat of Upper Deck do. do. _____				
Single, or double Angle Iron, on Upper Edge _____	<u>2 1/2</u>	<u>2 1/2</u>	How fastened to Beams _____				
Average space _____	<u>36 inches</u>		Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness _____	<u>24</u>	<u>8</u>		
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>plate 9" x 8/16 and angle 5 1/2 x 3 1/2</u>		Is the Stringer Plate attached to the outside plating? <u>Yes</u>				
Single or double Angle Iron on Upper Edge _____	<u>2 1/2</u>	<u>2 1/2</u>	Angle Irons on ditto, No. <u>1</u> _____				
Average space _____	<u>36 inches</u>		Tie Plates , outside Hatchways _____	<u>10</u>	<u>8</u>		
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates _____	<u>12 3/4</u>	<u>8/16</u>	Diagonal Tie Plates on Beams, No. of pairs _____				
" Rider Plate _____			Waterways materials and scantlings _____				
" Bulb Plate to Intercostal Keelson _____			Flat of Middle Deck do. do. _____				
" Angle Irons _____	<u>5</u>	<u>3</u>	How fastened to Beams _____				
" Double Angle Iron Side Keelson _____	<u>5</u>	<u>3</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams _____	<u>24</u>	<u>8</u>		
" Side Intercostal Plate _____	<u>5</u>	<u>3</u>	Is the Stringer Plate attached to the outside plating? <u>Yes</u>				
" do. Angle Irons _____	<u>5</u>	<u>3</u>	Angle Irons on ditto, No. <u>2</u> _____				
" Attached to outside plating with angle iron _____			Stringer or Tie Plates , outside Hatchways _____	<u>10</u>	<u>8</u>		
BILGE Angle Irons _____	<u>5</u>	<u>3</u>	Flat of Lower Deck _____	<u>3 1/4</u>	<u>8</u>		
" do. Bulb Iron _____			Ceiling betwixt Decks, thickness and material in hold do. do. _____				
" do. Intercostal plates riveted to plating for _____ length _____			Main piece of Rudder , diameter at head _____	<u>5</u>			
BILGE STRINGER Angle Irons _____			" do. at heel _____				
Intercostal plates riveted to plating for _____ length _____			Can the Rudder be unshipped afloat? <u>Yes</u>				
SIDE STRINGER Angle Irons _____	<u>3</u>	<u>3</u>	Bulkheads No. <u>2</u> Thickness of <u>5/16</u>				
Transoms, material. Knight-heads. Hawse Timbers. <u>good</u>			Height up to main deck _____				
Windlass <u>wood & good</u> Pall Bitt <u>good</u>			How secured to sides of ship <u>two frames</u>				
			Size of Vertical Angle Irons _____ and distance apart _____ ins.				
			Are the outside Plates doubled two spaces of Frames in length? _____				

The **FRAMES** extend in one length from centre of keel to upper deck stringer Riveted through plates with _____ in. Rivets, about _____ apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to upper part of bilges 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 4 in. diameter, averaging _____ 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 3/4 in. diameter averaging 3 ins. from centre to centre.

Butts of _____ Strakes at Bilge for _____ length, treble riveted with Butt Straps _____ thicker than the plates they connect.

Edges 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 _____ in. diameter, averaging _____ 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 _____ 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 _____ Breadth of laps of plating in single riveting _____

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? _____

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

Beams of the various Decks, how secured to the sides? _____ No. of Breasthooks, _____ Crutches, _____

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

Manufacturer's name or trade mark, _____

The above is a correct description.

Builder's Signature, _____ Surveyor's Signature, Ernst Hoff

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

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? 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?
 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?

16924 In

Masts, Bowsprit, Yards, &c., are of wood and in a 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 Pitch-pine

NUMBER for EQUIPMENT		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'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c. Chain					Bowers	3				
	Fore Sails,	270	1 9/16									
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,						Stream					
	Main Top Sails,						Kedges	1				
and												

Standing and Running Rigging good sufficient in size and good in quality. She has three Long Boats and two others.

The Windlass is of wood and good. Capstan of iron and Rudder good Pumps good

Engine Room Skylights.—How constructed? How secured in ordinary weather?

What arrangements for deadlights in bad weather?

Coal Bunker Openings.—How constructed? How are lids secured? Height above deck?

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? 3 on each side 20" x 15"

Cargo Hatchways.—How formed?

State size Main Hatch 15' x 10' 9" Forehatch 2' 6" x 4' 9" Quarterhatch 5' 6" x 4' 9"

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams?

Hatches, If strong and efficient?

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. in builder's yard.		5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) She has a poop of 50 feet, a house on deck of 36 feet. She is double riveted from keel to sheers-trake

Special Survey held according to Survey No. 3 (Iron ships)

The vessel placed on Patent Slip, the hold cleared, the ceiling removed and the thickness of plating stated by drilling. The bottom cemented where necessary; the floor plates, frames, keelsons, stringers, beams, watertight bulkheads and inner surface of the outside plating examined and found in an excellent condition. The six anchors of her first outfit are still on board, but I could not state their weight. The decks are doubled and good.

The vessel having undergone the whole of Survey No. 3 and been found in a good state, in our opinion, is eligible to be classed 100 A 1.

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 painted and cemented Outside painted

I am of opinion this Vessel should be Classed 100 A 1

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

Special ... £ 20 : 0 : 0 187
 Certificate ... 0 : 5 : 0

(Travelling Expenses, if any, £ _____)

Committee's Minute 19th September 1876

Character assigned

Wrote to Surveyor 10/9/76

100 A 1
W.M. S.S. No. 3 76