

# IRON SHIP.

No. 168 Survey held at Hamburg Date, First Survey 4<sup>th</sup> September Last Survey 16<sup>th</sup> September 1876.

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

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

<b>LENGTH</b> on deck as per Rule <u>164</u> Feet. <u>0</u> Inches.	<b>BREADTH</b> Moulded <u>30</u> Feet. <u>2 1/2</u> Inches.	<b>DEPTH</b> top of Floors to Upper Deck Beams <u>21</u> Feet. <u>3 1/2</u> Inches.	Power of Engines <u>...</u>	Horse. <u>...</u>	N <sup>o</sup> . of Decks with flat laid <u>two</u>	N <sup>o</sup> . of Tiers of Beams <u>two</u>
Dimensions of Ship per Register, length, breadth, depth,						
<b>KEEL</b> , depth and thickness <u>8</u> Stem <u>7 1/2 - 3</u> Inches in Ship. <u>7 1/2 + 2 1/4</u> Inches per Rule.						
<b>STEM</b> , moulding and thickness <u>...</u>						
<b>STERN-POST</b> for Rudder do. <u>...</u>						
for Propeller <u>...</u>						
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>...</u>						
<b>FRAMES</b> , Angle Iron, for $\frac{3}{4}$ length amidships <u>...</u>	Inches. In Ship. <u>4 1/2</u>	Inches. In Ship. <u>3</u>	16ths. In Ship. <u>7</u>	Inches. required per Rule <u>...</u>	Inches. required per Rule <u>...</u>	16ths. required per Rule <u>...</u>
Do. for $\frac{1}{2}$ at each end <u>...</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>7 1/6</u>
<b>REVERSED FRAMES</b> , Angle Iron <u>...</u>						
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships <u>...</u>						
thickness at the ends of vessel <u>...</u>						
depth at $\frac{3}{4}$ the half-bdth. as per Rule <u>...</u>						
height extended at the Bilges <u>...</u>						
<b>BEAMS</b> , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>...</u>						
Single or double Angle Iron on Upper edge <u>...</u>						
Average space <u>...</u>						
<b>BEAMS</b> , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>...</u>						
Single, or double Angle Iron, on Upper Edge <u>...</u>						
Average space <u>36 inches</u>						
<b>BEAMS</b> , Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>...</u>						
Single or double Angle Iron on Upper Edge <u>...</u>						
Average space <u>36 inches</u>						
<b>KEELSONS</b> Centre line, single or double plate, box, or Intercoastal, Plates <u>...</u>						
" Rider Plate <u>...</u>						
" Bulb Plate to Intercoastal Keelson <u>...</u>						
" Angle Irons <u>...</u>						
" Double Angle Iron Side Keelson <u>...</u>	<u>5</u>	<u>3</u>	<u>7 1/6</u>			
" Side Intercoastal Plate <u>...</u>	<u>5</u>	<u>3</u>	<u>7 1/6</u>			
" do. Angle Irons <u>...</u>	<u>5</u>	<u>3</u>	<u>7 1/6</u>			
" Attached to outside plating with angle iron <u>...</u>						
<b>BILGE</b> Angle Irons <u>...</u>	<u>5</u>	<u>3</u>	<u>7 1/6</u>			
" do. Bulb Iron <u>...</u>						
" do. Intercoastal plates riveted to plating for length <u>...</u>						
<b>BILGE STRINGER</b> Angle Irons <u>...</u>						
Intercoastal plates riveted to plating for length <u>...</u>						
<b>SIDE STRINGER</b> Angle Irons <u>...</u>	<u>3</u>	<u>3</u>	<u>7 1/6</u>			
Transoms, material. Knight-heads. Hawse Timbers. <u>good</u>						
Windlass <u>wood &amp; good</u> Pall Bitt <u>good</u>						

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 ...

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, ...

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



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

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 <u>18767</u>		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> .	SAILS.	<u>270</u>	<u>1 9/16</u>				Bowers	<u>3</u>				
	Fore Sails,						(State Machine where Tested, Date, & name of Superintendent.)					
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,						Stream					
and	Main Top Sails,	<u>sufficient</u>					Kedges	<u>1</u>				
	CABLES, &c. Chain											
	Hmpn Strm Cbl											
	Hayser											
	Towlines											
	Warp											
	quality											

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

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. 18767 Date 19th September 1876  
Order for Ordinary Survey No. 18767 Date 19th September 1876  
No. 18767 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 }

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 sheerstrake  
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 100 A 1  
SS. No. 3 76  
19th September 1876