

# IRON SHIP.

No. 3973 Survey held at Glasgow Date, First Survey 28-10-75 Last Survey 27 March 1876  
On the Screw Steam Ship "Hawthorn" Master Ryan

**TONNAGE** under Tonnage Deck 498.33  
Ditto of Third, Spar, or Awning Deck. 105.98  
Ditto of Poop, or Raised Orlop. 6.80  
Ditto of Houses on Deck. 37.27  
Gross Tonnage 648.38  
Less Crew Space 36.36  
Less Engine Room 236.85  
Register Tonnage as cut on Beam 375.26

**ONE, OR TWO DECKED, THREE DECKED VESSEL.**  
**PAR, OR AWNING-DECKED VESSEL.**  
**HALF BREADTH** (moulded) 13.5  
**DEPTH** from upper part of Keel to top of Upper Deck Beams 15.6  
**GIRTH** of Half Midship Frame (as per Rule) 25.66  
**1st NUMBER** 54.66  
**1st NUMBER, if a THREE-DECKED VESSEL** 54.66  
**LENGTH** 108.86  
**2nd NUMBER** 108.68  
**PROPORTIONS**—Breadths to Length 7.36  
Depths to Length—Upper Deck to Keel 12.82  
Main Deck ditto 12.82

Built at Glasgow  
When built 1876 Launched 12-2-76  
By whom built Goulet Brothers & Co  
Owners General H. Macdonald  
Port belonging to London  
Destined Voyage   
If Surveyed while Building, Afloat, or in Dry Dock.

**LENGTH** on deck as per Rule 108.10 **BREADTH** Moulded 27.0 **DEPTH** top of Floors to Upper Deck Beams 14.2 **Power of Engines** 140 **No. of Decks with flat laid** Two **No. of Tiers of Beams** Two

Dimensions of Ship per Register, length, <u>200.2</u> breadth, <u>27.4</u> depth, <u>14.1</u>	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
<b>KEEL</b> , depth and thickness	<u>7.2</u>	<u>2.38</u>	<u>7.2</u>	<u>2.14</u>		
<b>STEM</b> , moulding and thickness	<u>7.2</u>	<u>2.14</u>	<u>7.2</u>	<u>1.1</u>		
<b>STERN-POST</b> for Rudder do. do.	<u>7.2</u>	<u>4.2</u>	<u>7.2</u>	<u>4.2</u>		
for Propeller	<u>7.2</u>	<u>4.2</u>	<u>7.2</u>	<u>4.2</u>		
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>22</u>					
<b>FRAMES</b> , Angle Iron, for $\frac{1}{2}$ length amidships	<u>3.2</u>	<u>3.6</u>	<u>3.2</u>	<u>3.6</u>		
Do. for $\frac{1}{4}$ at each end	<u>4.1</u>	<u>5.16</u>	<u>4.1</u>	<u>5.16</u>		
<b>REVERSED FRAMES</b> , Angle Iron	<u>3</u>	<u>2.2</u>	<u>3</u>	<u>2.2</u>		
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	<u>15.2</u>	<u>6.16</u>	<u>15.2</u>	<u>6.16</u>		
thickness at the ends of vessel	<u>7.2</u>	<u>7.16</u>	<u>7.2</u>	<u>7.16</u>		
depth at $\frac{1}{4}$ the half-bdth. as per Rule	<u>7.2</u>	<u>7.16</u>	<u>7.2</u>	<u>7.16</u>		
height extended at the Bilges	<u>2.7</u>	<u>2.7</u>	<u>2.7</u>	<u>2.7</u>		
<b>BEAMS</b> , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>6.2</u>	<u>6.16</u>	<u>6.2</u>	<u>6.16</u>		
Single or double Angle Iron on Upper edge	<u>2.2</u>	<u>2.2</u>	<u>2.2</u>	<u>2.2</u>		
Average space	<u>3.8</u>	<u>3.8</u>	<u>3.8</u>	<u>3.8</u>		
<b>BEAMS</b> , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>6.2</u>	<u>6.16</u>	<u>6.2</u>	<u>6.16</u>		
Single or double Angle Iron, on Upper Edge	<u>2.2</u>	<u>2.2</u>	<u>2.2</u>	<u>2.2</u>		
Average space	<u>3.8</u>	<u>3.8</u>	<u>3.8</u>	<u>3.8</u>		
<b>BEAMS</b> , Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>6.2</u>	<u>6.16</u>	<u>6.2</u>	<u>6.16</u>		
Single or double Angle Iron on Upper Edge	<u>3.2</u>	<u>3.2</u>	<u>3.2</u>	<u>3.2</u>		
Average space	<u>3.8</u>	<u>3.8</u>	<u>3.8</u>	<u>3.8</u>		
<b>KEELSONS</b> Centre line, single or double plate, box or intercostal, Plates	<u>15.2</u>	<u>7.16</u>	<u>15.2</u>	<u>7.16</u>		
Rider Plate	<u>8.2</u>	<u>6.16</u>	<u>8.2</u>	<u>6.16</u>		
Bulb Plate to Intercostal Keelson	<u>4.2</u>	<u>3</u>	<u>4.2</u>	<u>3</u>		
Angle Irons	<u>4.2</u>	<u>3</u>	<u>4.2</u>	<u>3</u>		
Double Angle Iron Side Keelson	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>		
Side Intercostal Plate	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>		
do. Angle Irons	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>		
Attached to outside plating with angle iron	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>	<u>5.16</u>		
<b>BILGE</b> Angle Irons	<u>4.2</u>	<u>3</u>	<u>4.2</u>	<u>3</u>		
do. Bulb Iron	<u>6.2</u>	<u>6.16</u>	<u>6.2</u>	<u>6.16</u>		
do. Intercostal plates riveted to plating for length	<u>6.2</u>	<u>6.16</u>	<u>6.2</u>	<u>6.16</u>		
<b>BILGE STRINGER</b> Angle Irons	<u>4.2</u>	<u>3</u>	<u>4.2</u>	<u>3</u>		
Intercostal plates riveted to plating for length	<u>4.2</u>	<u>3</u>	<u>4.2</u>	<u>3</u>		
<b>SIDE STRINGER</b> Angle Irons	<u>4.2</u>	<u>3</u>	<u>4.2</u>	<u>3</u>		

Transoms, material, Knight-heads, Hawse Timbers. Plating & A  
Windlass Hawthorn's patent Pull Bitt  
The **FRAMES** extend in one length from Centre line to Poop Fore castle Main & Bridge  
The **REVERSED ANGLE IRONS** on floors and frames extend from the middle line to Main plate & to 4 inches and to above L.D.S.E. alternately  
**KEELSONS**. Are the various lengths of Plates and Angle Irons properly connected? Will Connected And butts properly shifted? Butts properly shifted  
**PLATING**. 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 12.16 in diameter, averaging 3.2 ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3.14 in diameter averaging 3.14 ins. from centre to centre.  
Butts of Two Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1.16 thicker than the plates they connect.  
Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3.14 in diameter, averaging 3.18 ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3.14 in diameter, averaging 3.14 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 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.  
Breadth of laps of plating in double riveting 4.2 5.2 Breadth of laps of plating in single riveting 2.34  
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble & double  
Waterway, how secured to Beams Screw bolts & nuts (Explain by Sketch, if necessary.)  
Beams of the various Decks, how secured to the sides? with double bracket and rivets Straps & nuts No. of Breasthooks, 3 Crutches, 3  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Bulbs - Coates Coalbridge plates, Connell & Lam Co  
Manufacturer's name or trade mark, Angles & Bulbs - Coates Coalbridge plates, Connell & Lam Co

The above is a correct description.  
Builder's Signature, Goulet Brothers & Co Surveyor's Signature, Alexander's Register  
Surveyor to Lloyd's Register of British and Foreign Shipping.



Planned

very close

Solid single pieces

Conform, well

well counter sunk & punched from  
the face of surface

Wood

in Good

condition, and sufficient in size and length. *If of Iron or Steel give*

State also Length and Diameter of Lower Masts and Bowsprit

Mast	Length	Diam	at Deck	at Top	at Base	at Top	at Base
Foremast (Pole Mast)	88' 9"	Diam	at Deck 17"	Pitch Pine	Pole Red Pine		
Main Mast (C.D.)	83' 0"	D	D	17"	D	D	

6071 L

NUMBER for EQUIPMENT 1165

The Windlass is *Harfield's Patent* 1 Capstan 1 St. Andrew and Rudder *Good* Pumps *Three* (one in Engine room, one in fore hold, one in aft hold)

**Engine Room Skylights.** How constructed? *16" plate glass on top* How secured in ordinary weather? *Hinged up with slat and wire gratings*

Coal Bunker Openings.—How constructed? *Circular Castings* How are lids secured? *Lock by 1/2 turn* Height above deck? *Flush*

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

Cargo Hatchways.—How formed? Built fore & after with plank & beams, windows & 1/2 in.  
12 1/2" x 8 1/2" Forehatch 14 1/2" x 8 1/2" inside Quarterhatch

If of extraordinary size, state how framed and secured? not extra large 1 page

What arrangement for shifting beams? *(None)*  
 Is strong and efficient? *Strong & efficient*

Order for Special Survey No. 225, 1st. On the several parts of the frame, when in 28 (10m 75) 14 9 11 13 17 20 22 24 29 (11m)

Date 6-10-75 Survey building location 1

2nd. On the plating during the process of riveting

3. When the beams were in and fastened

1 3 4 13 13 20 21 23 24 24 (12 m)

2 10 10 18 24 (1 m 26)

Order for Ordinary Survey No.	
Date	
AGES of while Secor Secor	3rd. When the beams were in and before the decks were laid... 4th. When the ship was complete, and before the plating was finally coated or cemented...

No. <u>72</u>	in builder's yard.	DATE held as per 5th. After the ship was launched and equipped	1-18-21	22	23	25	27 (3/4)
			1-21	2	4	11	12

General Remarks (State quality of workmanship, &c.) This vessel stern is normal with gun port.

Forrester and Dodge Creek 1 mi. S. of from June 1900. *Encens. v. Boettcheri* near Dry Creek

and Dudgey High 47 ft. standing over Convent 5. 1  
B 164 1 1/2 ft. partial room of stone house underneath

" + B. v. l. h. t. occiput. in frame space part of which forms Eysen seat

Set 1 1 with deep floor full back of trunk with two line of intercostal plates.

4. 1/2" under covers with 5/8" plate and 3/8" otherwise flange plate 7/16" heavy, not cut but 3/4"

doublets applied in way of Hays plate and 12 collars in spray. Has now been tested to

a head of water extending to 3000 feet & found light & satisfactory

And Austin Sub-7/10/75 - reply 9/10. Disputatory Nelson & At to be made 42 x 32 x 7/16

2<sup>nd</sup> Sheer stroke & he doubted all point of Poop & sides, in all other respects, carried out to

13/10/75 Boulder point out that the Kilm AE in section are to the only highly 13/10 AE may be

4<sup>th</sup> 3<sup>rd</sup> 7.16 13/10/75 Builder submit that they cannot get 3 Builders for 2 D plans & propose

6x 3/8 with one 2x2 5/16 AE on top. Reply 23/10 allows 6x 1 1/2 fully and one H on top. 5x5x 9.10'

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 Cement on bottom & 3 Coats oil Outside 3 Coats oil paint on bottom & 2 Coats aloft

I am of opinion this Vessel should be Classed 100 A1

The amount of the Entry Fee ... £ 7 : 4 : - is received by me,  
 Special ... £ 30 : 12 : - 1874

Certificate ... 135-120

Committee's Minute 4th April 1876

100 A.1.

Character assigned

*M. J. M. L. R. II 360 Loyas M.C.*