

# IRON SHIP.

No. 4560 Survey held at Glasgow Date, First Survey 27 March Last Survey 15 Decr 1877

On the "MABEL YOUNG" (BARQUE) Master Joseph S. Craus

TONNAGE under Tonnage Deck 950.14 ~~ONE, OR TWO DECKED, THREE DECKED VESSEL.~~  
 Ditto of Third, Spar, or Running Deck. 68.22 ~~SPAR, OR RUNNING DECKED VESSEL.~~  
 Ditto of Poop, 24.35 ~~HALF BREADTH (moulded) 16.65~~  
 Ditto of Houses on Deck 3.37 ~~DEPTH from upper part of Keel to top of Upper Deck Beams 22.66~~  
 Ditto of Forecastle 1046.08 ~~GIRTH of Half Midship Frame (as per Rule) 34.7~~  
 Gross Tonnage 30.38 ~~1st NUMBER 741.01~~  
 Less Crew Space 1015.70 ~~2nd NUMBER 14.950~~  
 Less Engine Room 202. ~~PROPORTIONS—Breadths to Length 6.06~~  
 Register Tonnage as cut on Beam 1015.70 ~~Depths to Length—Upper Deck to Keel 8.9~~  
 Main Deck ditto

Built at Glasgow  
 When built 1877 Launched 21 Decr 1877  
 By whom built A. Stephen & Sons  
 Owners Killick Martin & Co.  
 10 George Yard, Lombard St. London  
 Port belonging to London  
 Destined Voyage San Francisco  
 Surveyed while Building, Afloat, or in Dry Dock. under special survey

LENGTH on deck as per Rule 202 Feet. Inches. BREADTH Moulded 33 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 20 Feet. Inches. Do. do. Main Deck Beams 8 Feet. Inches. Power of Engines 16 Horse. No. of Decks with flat laid TWO No. of Tiers of Beams TWO

Dimensions of Ship per Register, length, breadth, depth,	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
EEL, depth and thickness	8 x 2 3/8	8 x 2 3/8						
EM, moulding and thickness	7 1/2 x 2 3/8	3 7/2 x 2 3/8						
TERN-POST for Rudder do. do.	6 1/8 x 3	23 in						
for Propeller	23 in	(Class 100A.)						
istance of Frames from moulding edge to moulding edge, all fore and aft	5 3 8/16	5 3 8/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16
FRAMES, Angle Iron, for 1/2 length amidships	5 3 8/16	5 3 8/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16
Do. for 1/2 at each end	5 3 8/16	5 3 8/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16	5 3 7/16
REVERSED FRAMES, Angle Iron	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	23 1/2 x 9/16	23 1/2 x 9/16	8 1/2 x 7/16	8 1/2 x 7/16	AS PER SECTION TWICE DEPTH.			
thickness at the ends of vessel	8 1/2 x 7/16	8 1/2 x 7/16						
depth at 1/2 the half-bdth. as per Rule	AS PER SECTION TWICE DEPTH.							
height extended at the Bilges	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
BEAMS, Upper, Spar, or Running Deck	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
Single or double Angle Iron, Plate or Tee Bulb Iron	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16				
Single or double Angle Iron on Upper edge	46 in	46 in						
Average space	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
BEAMS, Main or Middle Deck	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
Single or double Angle Iron, Plate or Tee Bulb Iron	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16				
Single or double Angle Iron on Upper Edge	46 in	46 in						
Average space	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
BEAMS, Lower Deck, Hold, or Orlop	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
Single or double Angle Iron, Plate or Tee Bulb Iron	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16				
Single or double Angle Iron on Upper Edge	46 in	46 in						
Average space	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16				
KEELSONS Centre line, single or double plate, or Intercoastal, Plates	15 1/2 x 1 1/16	15 x 1 1/16	12 x 1 1/16	11 x 1 1/16				
" Rider Plate	12 x 1 1/16	11 x 1 1/16						
" Plate to Intercoastal Keelson	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16				
" Angle Irons	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16				
" Double Angle Iron Side Keelson	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16				
" Side Intercoastal Plate	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16				
" do. Angle Irons	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16				
" Attached to outside plating with angle iron	3 3 7/16	3 3 7/16	3 3 7/16	3 3 7/16				
BILGE Angle Irons	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16				
" do. Bulb Iron	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16				
" do. Intercoastal plates riveted to plating for length	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16				
BILGE STRINGER Angle Irons	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16				
Intercoastal plates riveted to plating for length	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16				
STEEL STRINGER Angle Irons	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16	5 3 1/2 x 8/16				

Transoms, material. Knight-heads. Hawse Timbers. E. S. Oak  
 Windlass Iron Patent. Pall Bitt

The FRAMES extend in one length from Keel to gunwale. Riveted through plates with 3/4 in. Rivets, about 6 apart.  
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to above Lower Sheerstrake, and to gunwale 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 1/16 in. diameter, averaging 5 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 1/4 in. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/4 in. from centre to centre.  
 Butts of Strakes at Bilge for Keel 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 3/4 in. diameter, averaging 3 1/4 in. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 in. from cr. to cr.  
 Edges of Main Sheerstrake, double single riveted. Upper Sheerstrake, double or single riveted  
 Butts of Main Sheerstrake, treble riveted for Keel length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
 Butts of Main Stringer Plate, treble riveted for Keel length amidships. Butts of Upper or Spar Stringer Plate, treble riveted length amidships.  
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 4 1/2  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and Treble  
 Waterway, how secured to Beams Gutter Waterways (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? Reinforced Rivets to Beams No. of Breasthooks, 4 Crutches, 3  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates, S. B. C. (S. B. C. Iron)  
 Manufacturer's name or trade mark, angle iron, "Coak" "Phoenix"

The above is a correct description.  
 Builder's Signature, Ally Stephen & Sons Surveyor's Signature, James Dundas  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

2320-SL3NO21  
 1200475-0232



Workmanship. Are the butts of plating planed or otherwise fitted? *Planed & fair finished*  
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? *Very few and in butts only.* 19855

Masts, Bowsprit, Yards, &c., are 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 *Fore and Main masts of Iron. 76.0 x 20" & 79.0 x 20"*  
*Three plates in the round 7/16 to 4/16 - Mizzen mast 79.0 x 22 in two plates in the round 4/16 - 5/16. all dented at partners for 6 ft. - Bowsprit 20 feet outside x 26" dia - three plates in the round 7/16 to 4/16 - Edges zig zag and butts better riveted -*

NUMBER for EQUIPMENT		15946		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr 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.	CABLES, &c.	270	13/4	55 1/8	270 13/4	53 7/8	Bowers	3	30.1.24	29	30	28 1/2											
	Fore Sails,	Chain												River	Wear. Com.	29	30	29 30 Aug.	29	River	Wear. Com.	29	30	28 1/2
	Fore Top Sails,																							
	Fore Topmast Stay Sails																							
	Main Sails,																							
Main Top Sails,			90	15/16	90.15/16 or 10"	90.9	Stream	1	2.3.73	11 7/10	12.0.0	—												
													90	5 1/2	90.5 1/2	Kedges	2	2.2.14	4 17/10	3.0.0	—			
and		quality	good.																					

Standing and Running Rigging *More R. than S.* sufficient in size and *good* in quality. She has *1* Life ~~Boat~~ Boat and *three* others.

The Windlass is *iron patent*. Capstan *one* and Rudder *good*. Pumps *iron 6 1/4 cal iron with copper heads*

Engine Room Skylights *How constructed?* *How secured in ordinary weather?*

Water arrangements for floodlights in bad weather? *How are lids secured?* *Height above deck?*

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? *iron square ports on each side.*

Cargo Hatchways.—How formed? *iron comings*

State size Main Hatch *11.6 x 10.1* Forehatch *6.0 x 6.0* Quarterhatch *6.0 x 6.0*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *shifting beam & main bulk of bulk iron and angles.*

Hatches, If strong and efficient? *yes. solid hatches.*

Order for Special Survey No. <i>22</i>	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>1877. March 27. 29. April 4. 6. 9. 16.</i>
Date <i>July 27/77</i>		2nd. On the plating during the process of riveting	<i>23. 27. May 2. 4. 7. 10. 14. 17. 22. 29. 31. June</i>
Order for Ordinary Survey No. <i>✓</i>		3rd. When the beams were in and fastened, and before the decks were laid....	<i>5. 8. 12. 15. 19. 26. July 3. 5. 26. August 7. 14.</i>
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>24. 29. Sept 4. 7. 17. 21. 25. 28. Oct. 2. 4. 9. 12.</i>
No. <i>215</i> in builder's yard.		5th. After the ship was launched and equipped	<i>16. 19. 22. 29. Nov 2. 6. 8. 13. 16. 20. 24. December 1. 5. 8. 12. and 15<sup>th</sup> (1877)</i>

General Remarks (State quality of workmanship, &c.) *iron yards Continued -*

*Fore & Main Lower yards. 72.0 x 17 1/2. 2 plates 5/16. 4/16. & 3/16. 2 Edges zig zag Butts*

*& Lower Cap. 62.0 x 14 1/2. 4 4/16. 3/16. 2/16. 3 better riveted -*

*She has been constructed in accordance with approved midships and Longitudinal sections recommended. So well built and worthy in my opinion of the class recommended below.*

Deck House. *38.8" x 13.0"*  
*x 31 feet. Anchor St. *28.0"**

State if one, two, ~~or three~~, decked vessel, ~~or if open, or covering deck~~; and the lengths of poop, ~~forecastle, or raised quarter deck~~, and the length of double, ~~or part double bottom~~.

How are the surfaces preserved from oxidation? Inside *Cement and Cement rock in* Outside *Paint.*

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

The amount of the Entry Fee ... £ *5 : 7 : -* is received by me, *Dec 11th James Purdie.*

Special ... £ *50 : 8 : -* Dec 1877

Certificate ... *limited.*

(Travelling Expenses, if any, £ *-*).

Committee's Minute *18th December, 1877.*

Character assigned *100 A. 1.*

*DPW A & B*

*This vessel appears to be eligible to be classed as recommended viz 100 A.*

*Lloyd's Register Foundations*

*17.12.77.*