

IRON SHIP. 19112

No. 4086 Survey held at *Montrose* Date, First Survey 22nd Jan^y Last Survey 22nd Aug^t 1877. *Rev 25/8/77*

On the *S. S. "Emile Eloise"*

Master *Jules Lavallee*

TONNAGE under Tonnage Deck 160.98 ONE, OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third, Spar, or Awning Deck. 76 SPAR, OR AWNING DECKED VESSEL.
Ditto of *Deck* or Raised Qr. Dk. 14.86 HALF BREADTH (moulded) 10.03
Ditto of Houses on Deck 51.39 DEPTH from upper part of Keel to top of Upper Deck Beam 10.17
Ditto of Forecastle 4.41 GIRTH of Half Midship Frame (as per Rule) 18.00
Gross Tonnage 232.46 1st NUMBER 38.20
Less Crew Space 9.66 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet ✓]
Less Engine Room 74.48 LENGTH 124.0
Register Tonnage 148.62 2nd NUMBER 4736.8
as cut on Beam 148.62 PROPORTIONS Breadth to Length 6.1
Depths to Length Upper Deck to Keel 12.1
Main Deck ditto

Built at *Montrose*
When built 1877 Launched 24 May/77
By whom built *Messrs Black & Noble*
Owner *E. Buisine*
Port belonging to *Gravelines*
Destined Voyage *Gravelines*
If Surveyed while Building, Afloat, or in Dry Dock.
while Building and afloat.

LENGTH on deck as per Rule 124 - BREADTH Moulded 20 03/4 DEPTH top of Floors to Upper Deck Beams 9 2 1/2 Power of Engines 45 Horse. No. of Decks with flat laid One. No. of Tiers of Beams One.

Dimensions of Ship per Register, length, 124.3 breadth, 20.25 depth, 9.05

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	6 3/4 x 1 3/8	6 3/4 x 1 1/4	FLAT KEEL PLATES, breadth and thickness	31	6
STEM, moulding and thickness	6 3/4 x 1 1/4	6 x 1 1/4	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	31	6
STERN-POST for Rudder do. do.	6 x 2 1/2	6 x 2 1/2	fm up. part of Bilge to lr. edge of Sh'rstrake	30	9
for Propeller	6 x 2 1/2	6 x 2 1/2	Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	30	9
Distance of Frames from moulding edge to moulding edge, all fore and aft	20	20	Up. or Spar Dk. Sh'rstrake, brdth & thickness	30	9
FRAMES, Angle Iron, for 2/3 length amidships	3 2 1/2 x 5	3 2 1/2 x 5	Butt Straps to outside plating, breadth & thickness	9 3/4 x 5.6 x 8.10	9 3/4 x 5.6 x 8.10
Do. for 1/3 at each end	3 2 1/2 x 5	3 2 1/2 x 5	Lengths of Plating	5 ft. space.	5 ft. space.
REVERSED FRAMES, Angle Iron	2 1/2 x 4	2 1/2 x 4	Shifts of Plating, and Stringers	2	2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	1 1/2 x 5	1 1/2 x 5	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	28	7
thickness at the ends of vessel	6	5 3/4	Angle Iron on ditto	3.3	6/16
depth at 2/3 the half-bdth. as per Rule	24	23	Tie Plates fore and aft, outside Hatchways	7	6
height extended at the Bilges	5 1/2 x 3	5 1/2 x 3	Diagonal Tie Plates on Beams No. of Pairs		
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	5 1/2 x 3	Planksheer material and scantling		
Single or double Angle Iron on Upper edge	40	40	Waterways do. do.		
Average space			Flat of Upper Deck do. do.		
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			How fastened to Beams		
Single, or double Angle Iron, on Upper Edge			Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness		
Average space			Is the Stringer Plate attached to the outside plating?		
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Angle Irons on ditto, No.		
Single or double Angle Iron on Upper Edge			Tie Plates, outside Hatchways		
Average space			Diagonal Tie Plates on Beams, No. of pairs		
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	8 1/2 x 7	8 1/2 x 7	Waterways materials and scantlings		
" Rider Plate	7 1/2 x 7	6 1/2 x 7	Flat of Middle Deck do. do.		
" Bulb Plate to Intercostal Keelson			How fastened to Beams		
" Angle Irons	3 x 3	3 x 3	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams		
" Double Angle Iron Side Keelson			Is the Stringer Plate attached to the outside plating?		
" Side Intercostal Plate			Angle Irons on ditto, No.		
" do. Angle Irons			Stringer or Tie Plates, outside Hatchways		
" Attached to outside plating with angle iron			Flat of Lower Deck		
BILGE Angle Irons	3 x 3	3 x 3	Ceiling betwixt Decks, thickness and material		
" do. Bulb Iron	6 x 6	5 x 5	in hold do. do.		
" do. Intercostal plates riveted to plating for length	for 3/5 L.	for 3/5 Length	Main piece of Rudder, diameter at head	3 1/2	3 1/2
BILGE STRINGER Angle Irons			do. at heel	2 1/2	2 1/2
Intercostal plates riveted to plating for length			Can the Rudder be unshipped afloat?	yes	
SIDE STRINGER Angle Irons	3 x 3	3 x 3	Bulkheads No. 3 Thickness of		

Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Tie Plates, outside Hatchways
Diagonal Tie Plates on Beams, No. of pairs
Waterways materials and scantlings
Flat of Middle Deck do. do.
How fastened to Beams
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Stringer or Tie Plates, outside Hatchways
Flat of Lower Deck
Ceiling betwixt Decks, thickness and material
in hold do. do.
Main piece of Rudder, diameter at head
do. at heel
Can the Rudder be unshipped afloat?
Bulkheads No. 3 Thickness of
Height up 7 to upper deck
How secured to sides of ship between double frames
Size of Vertical Angle Irons 2 1/2, 2 1/2, 3/8 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? yes

Transoms, material. Knight-heads. Hawse Timbers. *Plates & angles*
Windlass *Iron, Emerson and Walker's (patent)*

The FRAMES extend in one length from *Keel to anchor deck stringer, main dk. stringer, and to raised dk. stringer*
The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *6" above side st. all fore and aft before R. & D. & 6" above side st. and gunwale alternately in main, sp. & R. & D.*
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 7/8 in. diameter, averaging 4 3/8 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 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/4 ins. from centre to centre.
Butts of *one* Strake at Bilge for *half* length, *double* riveted with Butt Straps 1/16 thicker than the plates they connect.
Edges from bilge to Main Sheerstrake, worked clencher, double *single* riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 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 *whole* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
Butts of Main Stringer Plate, *double* riveted for *whole* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 9/8

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
Waterway, how secured to Beams *Gutter.* (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? *Knee plates.* No. of Breasthooks, *one* Crutches, *one*
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Good.*
Manufacturer's name or trade mark, *For frame angles, floor plates, shell plates & angles for beams. The Stockton Iron Co.*

The above is a correct description.
Builder's Signature, *Blair Webb* Surveyor's Signature, *J. H. Minnett*
Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *not planed.*
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? *In a few cases at the butts.*

Masts, Bowsprit, Yards, &c., are *of wood.* 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 *wood pole masts.*

Fore mast. Length Extreme 68ft. Deck to hounds 36ft. Diameter Deck 12 ins.
Main " " 62 1/2 ft. " " 37ft. " " 12 ins.

NUMBER for EQUIPMENT 5210.					ANCHORS.				
N ^o .	3. SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	N ^o .	Weight. Ex. Stock.
one	Fore Sails,	Chain	135	13 1/2	13-15.00	35-13	11 1/2	1.	5.3.12
full	Fore Top Sails,	(State Machine where Tested, Date, & Name of Superintendent)							
Suit	Fore Topmast Stay Sails	Hmpn Strm Cbl	90	4 1/2	90-16			1.	5.3.4
and	Main Sails,	Hawser ...	40	4				Stream	1. 1.3.26
	Main Top Sails,	Towlines ...	90	3	90-4			Kedges	1. 1.0.2
		Warp quality <i>good</i>	90	3 1/2					

Standing and Running Rigging *Hire & Hemip* sufficient in size and *good* in quality. She has 1-18ft Long Boat and 1-14ft gig.

The Windlass is *good & efficient* Capstan *efficient* and Rudder *efficient* Pumps *efficient*.

Engine Room Skylights.—How constructed? *Diak framing on deck.* How secured in ordinary weather? *by bars & pins.*

What arrangements for deadlights in bad weather? *Coming on R. & D. S.* Strong leak framed lids with 6 bulls eyes on each side.

Coal Bunker Openings.—How constructed? *Circular hatches.* How are lids secured? *by clips.* Height above deck? *1-6 ins above deck.*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Two pair of scuppers and two pair of freeing ports.*

Cargo Hatchways.—How formed? *by plate* Corning's & angles attached to beams & fore & aft Carlines.

State size Main Hatch *13-4 x 9-0* Forehatch *6-8 x 6-0* Quarterhatch *nil.*

If of extraordinary size, state how framed and secured? *Shifting beams in Main Hatch.* *Plate 10 x 6/16*

What arrangement for shifting beams? *Double angles on Corning's.* *angles 2 1/4 x 2 1/4 x 4/16.*

Hatches, If strong and efficient? *yes.*

Order for Special Survey No. <i>356</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>especially surveyed. 1877.</i>
Date <i>2nd April 77</i>		2nd. On the plating during the process of riveting	<i>Jan 22; Feb 5, 9. 23; Mar 13.</i>
Order for Ordinary Survey No. <i>✓</i>		3rd. When the beams were in and fastened, and before the decks were laid....	<i>28; April 9. 30; May 1. 15. 26.</i>
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>June 12. 22; July 6. 18. 28; Aug.</i>
No. <i>7.</i> in builder's yard.		5th. After the ship was launched and equipped	<i>11. 15 and 22nd.</i>

General Remarks (State quality of workmanship, &c.) *Workmanship and Materials good.*

This vessel has been constructed in accordance with accompanying tracings 2nd. Submitted and approved see Secty Letter. 13th Nov. 1876.

She has a sunk forecastle with a water ballast tank under which has been tested with a head of water to load line and found tight.

She has a bridge deck and also a raised quarter deck constructed of the Scantlings & arrangements as shown on the tracings.

State if one, two, or three, decked vessel, or if spar, or running deck; and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom. *and R. & D. OK*

How are the surfaces preserved from oxidation? Inside *Cemented to upper part of bilge & 3 coats of paint above* Outside *Two coats of red lead and one of white.*

I am of opinion this Vessel should be Classed *90 A. 1.*

The amount of the Entry Fee ... £ 3 : 0 : 0 is received by me, *Sho*

Special ... £ 11 : 3 : 0 Aug 22nd 1877.

Machinery Certificate ... : 5 : 0

(Travelling Expenses, if any, £ 10-15-1).

Committee's Minute *28th August, 1877.*

Character assigned *90 A. 1*

This vessel has been built in accordance with approved plans appended and it is submitted appears eligible to be classed as recommended 90 A. 1

27/8/77