

IRON SHIP.

No. 10881 Survey held at Sunderland Date, First Survey May 6th 1873 Last Survey June 2nd 1873

On the Sailing Ship Olive Yard Number 235 Master Ego Davies

TONNAGE under Tonnage Deck } <u>821 7/2</u>	ONE OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third Spar, or Running Deck. }	CRAB OR AWNING DECKED VESSEL.
Ditto of Mast, or Raised Or. Dk. }	HALF BREADTH (moulded) <u>16.0</u>
Ditto of Houses on Deck .. . }	DEPTH from upper part of Keel to top of Upper Deck Beams <u>22.0</u>
Ditto of Forecastle	GIRTH of Half Midship Frame (as per Rule) .. . <u>32.5</u>
Gross Tonnage <u>884 81</u>	1st NUMBER <u>40.5</u>
Less Crew Space <u>38.70</u>	NUMBER, if a THREE-DECKED VESSEL
Less Engine Room	deduct 7 feet
Register Tonnage as cut on Beam } <u>846 59</u>	LENGTH <u>185.3</u>
	2nd NUMBER <u>13.063</u>
	PROPORTIONS—Breadths to Length .. . <u>Under 6</u>
	Depths to Length—Upper Deck to Keel .. . <u>9</u>
	Main Deck ditto

Built at Sunderland

When built 1873/4 Launched May 14/74

By whom built Wm Pile & Co Ltd

Owners Henry Ellis

Port belonging to Sunderland

Destined Voyage Singapore

If Surveyed while Building, Afloat, or in Dry Dock. Midst Building

LENGTH on deck as per Rule	Feet. Inches.	BREADTH Moulded	Feet. Inches.	DEPTH top of Floors to Upper Deck Beams	Feet. Inches.	Power of Engines	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
<u>185 3</u>		<u>32</u>		<u>20 2 1/2</u>				<u>one & 1/2</u>	<u>two</u>

Dimensions of Ship per Register, length, 194.6 breadth, 32.2 depth, 19.8

KEEL, depth and thickness	Inches in Ship.	Inches per Rule.
STEM, moulding and thickness	Inches in Ship.	Inches per Rule.
STERN-POST for Rudder do. do.	Inches in Ship.	Inches per Rule.
Distance of Frames from moulding edge to moulding edge, all fore and aft	22	22 (Class 100A)
FRAMES, Angle Iron, for $\frac{3}{4}$ length amidships	Inches. In Ship.	Inches. In Ship.
Do. for $\frac{1}{2}$ at each end	Inches. In Ship.	Inches. In Ship.
REVERSED FRAMES, Angle Iron	Inches. In Ship.	Inches. In Ship.
DOORS, depth and thickness of Floor Plate	Inches. In Ship.	Inches. In Ship.
at mid line for half length amidships	Inches. In Ship.	Inches. In Ship.
thickness at the ends of vessel	Inches. In Ship.	Inches. In Ship.
depth at $\frac{3}{4}$ the half-bdth. as per Rule	Inches. In Ship.	Inches. In Ship.
height extended at the Bilges	Inches. In Ship.	Inches. In Ship.
FRAMES, Upper, Spar, or Awning Deck	Inches. In Ship.	Inches. In Ship.
Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	Inches. In Ship.	Inches. In Ship.
Angle or double Angle Iron on Upper edge	Inches. In Ship.	Inches. In Ship.
Average space	Inches. In Ship.	Inches. In Ship.
FRAMES, Main or Middle Deck	Inches. In Ship.	Inches. In Ship.
Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	Inches. In Ship.	Inches. In Ship.
Angle or double Angle Iron, on Upper Edge	Inches. In Ship.	Inches. In Ship.
Average space	Inches. In Ship.	Inches. In Ship.
FRAMES, Lower Deck, Hold or Orlop	Inches. In Ship.	Inches. In Ship.
Angle or double Angle Iron, Plate or Tee Bulb Iron	Inches. In Ship.	Inches. In Ship.
Angle or double Angle Iron on Upper Edge	Inches. In Ship.	Inches. In Ship.
Average space	Inches. In Ship.	Inches. In Ship.
KEELSONS, Centre line, single or double plate, box, or Intercoastal, Plating	Inches. In Ship.	Inches. In Ship.
Rider Plate	Inches. In Ship.	Inches. In Ship.
Bulb Plate to Intercoastal Keelson	Inches. In Ship.	Inches. In Ship.
Angle Irons	Inches. In Ship.	Inches. In Ship.
Double Angle Iron Side Keelson	Inches. In Ship.	Inches. In Ship.
Side Intercoastal Plate	Inches. In Ship.	Inches. In Ship.
do. Angle Irons	Inches. In Ship.	Inches. In Ship.
Attached to outside plating with angle iron	Inches. In Ship.	Inches. In Ship.
do. Angle Irons	Inches. In Ship.	Inches. In Ship.
do. Bulb Iron	Inches. In Ship.	Inches. In Ship.
do. Intercoastal plates riveted to plating for length	Inches. In Ship.	Inches. In Ship.
STRINGER Angle Irons	Inches. In Ship.	Inches. In Ship.
Intercoastal plates riveted to plating for length	Inches. In Ship.	Inches. In Ship.
STRINGER Angle Irons	Inches. In Ship.	Inches. In Ship.

Flat Keel Plates, breadth and thickness	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>30 10</u>		<u>30 10</u>		<u>30 10</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	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>8 1/2 9</u>		<u>8 1/2 9</u>		<u>8 1/2 9</u>
fin up. part of Bilge to l. edge of Sh'rstrake	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>8 1/2 9</u>		<u>8 1/2 9</u>		<u>8 1/2 9</u>
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>39 10</u>		<u>39 10</u>		<u>39 10</u>
Up. or Spar Dk Sh'rstrake, brdth & thickness	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>10 1/4 1 1/2 9 1/2</u>		<u>10 1/4 1 1/2 9 1/2</u>		<u>10 1/4 1 1/2 9 1/2</u>
Butt Straps to outside plating, breadth & thickness	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>6 spaces</u>		<u>6 spaces</u>		<u>6 spaces</u>
Lengths of Plating	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>2 1/3 spaces</u>		<u>2 1/3 spaces</u>		<u>2 1/3 spaces</u>
Shifts of Plating, and Stringers	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>2 1/3 spaces</u>		<u>2 1/3 spaces</u>		<u>2 1/3 spaces</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>26 1/2 8</u>		<u>26 1/2 8</u>		<u>26 1/2 8</u>
Angle Iron on ditto	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>4 1/2 3 1/2 7</u>		<u>4 1/2 3 1/2 7</u>		<u>4 1/2 3 1/2 7</u>
Tie Plates fore and aft, outside Hatchways	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>9 8</u>		<u>9 8</u>		<u>9 8</u>
Diagonal Tie Plates on Beams No. of Pairs	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>9 8</u>		<u>9 8</u>		<u>9 8</u>
Planksheer material and scantling	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>1/2 inch Gunwale</u>		<u>1/2 inch Gunwale</u>		<u>1/2 inch Gunwale</u>
Waterways do. do.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>
Flat of Upper Deck do. do.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>
How fastened to Beams	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>24 7</u>		<u>24 7</u>		<u>24 7</u>
Is the Stringer Plate attached to the outside plating?	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>yes</u>		<u>yes</u>		<u>yes</u>
Angle Irons on ditto, No.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>2</u>		<u>2</u>		<u>2</u>
Tie Plates, outside Hatchways	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>
Diagonal Tie Plates on Beams, No. of pairs	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>
Waterways materials and scantlings	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>
Flat of Middle Deck do. do.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>
How fastened to Beams	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>		<u>3/4 inch Gunwale</u>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>24 7</u>		<u>24 7</u>		<u>24 7</u>
Is the Stringer Plate attached to the outside plating?	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>yes</u>		<u>yes</u>		<u>yes</u>
Angle Irons on ditto, No.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>2</u>		<u>2</u>		<u>2</u>
Stringer or Tie Plates, outside Hatchways	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>
Flat of Lower Deck	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>		<u>3 1/2 x 3 1/2 x 7</u>
Ceiling betwixt Decks, thickness and material	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>2 1/2 inch Pitch Pine</u>		<u>2 1/2 inch Pitch Pine</u>		<u>2 1/2 inch Pitch Pine</u>
in hold do. do.	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>2 1/2 inch Pitch Pine</u>		<u>2 1/2 inch Pitch Pine</u>		<u>2 1/2 inch Pitch Pine</u>
Main piece of Rudder, diameter at head	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>5</u>		<u>5</u>		<u>5</u>
do. at heel	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3 x 4</u>		<u>3 x 4</u>		<u>3 x 4</u>
Can the Rudder be unshipped afloat?	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>yes</u>		<u>yes</u>		<u>yes</u>
Bulkheads No. 1 Thickness of	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>6 1/2</u>		<u>6 1/2</u>		<u>6 1/2</u>
Height up	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>Upper Deck 16</u>		<u>Upper Deck 16</u>		<u>Upper Deck 16</u>
How secured to sides of ship	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>four frames</u>		<u>four frames</u>		<u>four frames</u>
Size of Vertical Angle Irons	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>3 x 3 1/2 6 1/2</u>		<u>3 x 3 1/2 6 1/2</u>		<u>3 x 3 1/2 6 1/2</u>
and distance apart	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>30</u>		<u>30</u>		<u>30</u>
Are the outside Plates doubled two spaces of Frames in length?	Inches in Ship.	16ths. in Ship.	Inches required	16ths. required
<u>yes</u>		<u>yes</u>		<u>yes</u>

Frames, material. Knight-heads. Hawse Timbers. Iron plates
Mass E. S. Leach Pall Bitt E. S. Leach

FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

REVERSED ANGLE IRONS on floors and frames extend from middle line to Hold Beam Stringer 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 in. diameter, averaging 4 1/2 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 Two Strakes at Bilge for half length, treble riveted with Butt Straps 1/2 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 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Edges of Main Sheerstrake, double 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 1/2 length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.

Breadth of laps of plating in double riveting 4 1/4 Breadth of laps of plating in single riveting 2 1/4 Angle at very ends of ship above bilge only.

Straps of Keelsons, Stringer and Tie Plates, treble, double single Riveted? pair double and 1st Treble

terway, how secured to Beams Butt Gunwale (Explain by Sketch, if necessary.) 1/2 inch

um's of the various Decks, how secured to the sides? Endstunned down & riveted to No. of Breasthooks, 4 Crutches, 3

at description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? 1/2 inch

manufacturer's name or trade mark, Stockton Malleable Iron Co & Barlborough

The above is a correct description.

Owner's Signature, Henry Ellis Surveyor's Signature, Joseph Keen

Workmanship. Are the butts of plating planed or otherwise fitted? 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? well fitted
Are the fillings between the ribs and plates solid single pieces? Solid Saw
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes generally
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? A few in butts only

Masts, Bowsprit, Yards, &c., are Iron & 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

Sketch attached

12902 Iron

NUMBER for EQUIPMENT 13580

Two complete Quits and Crochet Tunnels	SAILS.	CABLES, &c.	270	1 1/2	47 1/2	270	1 1/2	47 1/2	Bowers ...	3	25 2-0	25 3-0	25 2-0	25 3-0
	Fore Sails,	Chain ...	3	links in each length tested					(State Machine where Tested, Date, and name of Superintendent.)		25 2-14	22 1-1 4	21 2-20	21 2-0
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	As breaking strain	66 1/2					Machine RWC P.T.B.P.T.					
	Fore Topmast Stay Sails,	Chain	45	1 in	52				Ironed 1/2 Hartrop		Sailed 1/2 Hartrop April 21/74			
	Main Sails,	Hemp Strm Cbl	90	10	16				2 1/2 Hartrop		2		March 31/74	
	Main Top Sails,	Hawser ...	90	10	16				Stream ...	1	10 2-14	3		March 30/74
		Towlines ...	90	1 1/2	52				Kedges ...	2	5 3-0		5 1-0	
		Warp ...	90	5 1/2	52								2 3-0	
		quality	good											

Standing and Running Rigging Hire Sheer sufficient in size and good in quality. She has 14 Long Boats and 1 fitted with convenient

The Windlass is Good & 1 Deck Capstan good 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? Side Ports

Cargo Hatchways.—How formed? Plates & Angles in turning plates 2 1/2 in deep

State size Main Hatch 11 ft 6 in by 11 ft 6 in Forehatch 7 ft 6 in by 8 ft 2 in Quarterhatch 7 ft 5 in by 5 ft 5 in

If of extraordinary size, state how framed and secured? in shifting beams

What arrangement for shifting beams? in sockets & nuts & screws

Hatches, if strong and efficient? yes

Order for Special Survey No. <u>2416</u>	1st. On the several parts of the frame, when in place, and before the plating was wrought	Built under license and surveyed 1873 May 19/73 June 19/73 July 19/73
Date <u>27th March 1874</u>	2nd. On the plating during the process of riveting	Feb 24/74 March 12/74 April 12/74 May 12/74 June 12/74 July 12/74
Order for Ordinary Survey No. <u>—</u>	3rd. When the beams were in and fastened, and before the decks were laid,...	Oct 15/73 Nov 15/73 Dec 15/73 Jan 15/74 Feb 15/74 March 15/74
Date <u>—</u>	4th. When the ship was complete, and before the plating was finally coated or cemented...	June 18/74
No. <u>385</u> in builder's yard.	5th. After the ship was launched and equipped	

General Remarks, Workmanship Govt.

She has a Raised Quarter Deck about 40 feet long from the Sternpost— a short Monkey Forecastle to work the anchors easily, and a Deck House abaft the Foremast for the crew. The Butts of one Strake of outside plating in topboards are in the same space as the second strake below ditto, but the Butts are better rivetted with Bolt Straps 1/2 thicker than the Plates they connect & was allowed by the Committee

State if one, two or three decked vessel, or if open or covering decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Red Paint & Cement or Cotton Outside Red Paint

I am of opinion this Vessel should be Classed *100 A1

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

Special ... £ 42 : 4 - 27 June 1874

Certificate ... ✓

(Travelling Expenses)

(if any) £

Committee's Minute 30th June 1874

Character assigned 100 A1

✓

✓

✓

✓

✓

✓

✓