

No. 19107 Survey held at Preston Date April 25 to Dec 14/12/64 Dec 5th 1901 1864
 on the Sh^{rs} Annie Master James Spencer
 Tonnage Old Built at Preston When built 1864 Launched Nov 15/64
 By whom built Thos Smith Owners Thos Smith
 Port belonging to Preston Destined Voyage Coasting
 Surveyed while Building, Afloat, or in Dry Dock Whilst Building

Length aloft	Feet.		Inches.		Extreme Breadth Outside	Feet.		Inches.		Depth of Hold	Feet.		Inches.	
	96	6	18	7		20	9	9						
Scantlings of Timber.														
TIMBER AND SPACE	19	8 3/4	18	7	18	7	20	9	9	Thickness of Plank.				
Floors	6 1/2 to 7	7 1/2	6	6	Garboard Strakes	2 1/2	2	Limber Strakes	5	3 1/2				
1 st Foothooks	6 to 7	6 3/4	5 1/2	5 1/2	Garboard to Bilge	2 1/2	2	Bilge Planks	3 1/2	2				
2 nd Ditto	5 1/2 to 6	6 1/2	5 1/2	5 1/2	Bilge Planks	3 1/2	2	Ceiling in Flat	2 1/2	1 1/2				
3 rd Ditto	5 1/2	5	5 1/2	4 1/2	Bilge to Wales	2 1/2	2	Ditto Bilge to Clamp	2 1/2	1 1/2				
Top Timbers	5 1/2	7 1/2	7	7	Wales	3 1/2	3	Hold Beam Clamps	—	—				
Deck } N ^o 16 Average Space } 4 feet	7 1/2	7 1/2	7	7	Topsides	3 1/2	2 1/2	Deck Beam Ditto	5	2 1/2				
Beams }	18	—	—	—	Sheer Strakes	3 1/2	2 1/2	Ceiling 'twixt Decks	—	—				
Deck Beams, length amidships	10	12	8	8	Plank Sheers	2 1/2	2	Hold Beam Shelves	—	—				
Hold } N ^o — Average Space } None	—	—	—	—	Water- } Upper Deck	5	3 1/2	Deck Beam Ditto	—	—				
Beams }	—	—	—	—	Ways } Lower Deck	—	—	—	—	—				
Hold Beams, length amidships	5 feet	—	4 ft	—	Ditto, faying surface against Timbers	2 1/2	3 1/2	—	—	—				
Keel	12	26	9	9	Upper Deck	2 1/2	2 1/2	—	—	—				
Scarphs of Ditto	4 ft	—	4 ft	—	—	—	—	—	—	—				
Keelsons	—	—	—	—	—	—	—	—	—	—				
Scarphs of Ditto	—	—	—	—	—	—	—	—	—	—				

Size of Bolts in Fastenings, distinguishing whether Copper, Yellow Metal, or Iron; also of Treenails.

	Copper or Yellow Metal in Ship.	Iron in Ship.	Inches required per Rule.		Copper or Yellow Metal in Ship.	Iron in Ship.	Inches required per Rule.		Copper or Yellow Metal in Ship.	Iron in Ship.	Inches required per Rule.
Heel-Knee, & Deadwood abaft	—	1 1/8	1 1/4	Transoms and throats of Hooks	—	1 1/8	1 1/4	Hold Beam Bolts in	—	—	—
Scarphs of Keel, N ^o 7	—	1 1/4	1 1/4	Arms of Hooks	—	1	1 1/4	Waterway	—	—	—
Keelson Bolts through Keel at each Floor	—	1 1/8	1 1/4	Thro' Bilge & Limber Strakes	—	1 1/4	9/16	Knees	—	—	—
Bolts thro' Heels of Timbers against Deadwood	—	1 1/4	1 1/4	Thickstuff over Double Floors	—	1 1/4	9/16	Shelf or Clamp	—	—	—
				Butt End Bolts	—	1 1/4	9/16	Deck Beam Bolts in	—	1 1/4	1 1/4
				Pintles of the Rudder	—	1 1/8	1 1/8	Knees	7/8	1 1/4	1 1/4
								Shelf or Clamp	—	1 1/4	1 1/4
								Nails or Bolts in Flat of Deck	Iron	—	—
								Treenails	—	1 1/8	1

Timbering.—The Space between the Floor Timbers and Lower Foothooks is 3 1/2 Inches. The Space between the Top-Timbers is 1 1/4 Inches.

The Floors consist of Eng Oak The First Foothooks of Eng Oak
 The Second Foothooks of Eng Oak The Third Foothooks and Top Timbers of Eng Oak
 The Shifts of the First and Second Foothooks are not less than 3 ft 3 to 4 ft 6 N. B. When less than prescribed by the Rule, state how many.
 The rest of the Shifts of the Frame are the same
 The Frame is well squared from the First Foothook Heads upwards, and fairly free from sap, and from thence downwards, the frame is the same.
 The — Frames are all bolted together to the Gunwale. N. B. If not, state how bolted.

The Butts of the Timbers are well close together; their thickness not less than 1/3 of the entire moulding at that place.
 The Frame is crop chocked with no Butt at each end of the chock. The Main piece of Rudder is Eng Oak of Windlass is Eng Oak
 The Keel is R Elm The Main Keelson is Redpine and applies free from all defects.
 The Stem, and Stern Post of Eng Oak The Transoms, Knight Heads, Hawse Timbers, and Aprons of Eng Oak Deadwood, of Lower Pine Eng Elm & Eng Oak and are applies free from all defects.

The Deck and Hold Beams of Eng Oak The Breasthooks of Eng Oak The Knees of Eng Oak & Iron
Planking Outside.—From the Keel to the Height defined in Note to Table A, the Plank is to 4 ft 3 in forward R Elm Eng Elm & Hackmatack or to the First Foothook Heads 3 ft 7 aft
 From the above named Height to the Light Water Mark Hackmatack & Eng Oak
 From the Light Water Mark to the Wales Hackmatack & Eng Oak
 The Wales and Black-strakes are Eng Oak The Topsides & Sheer-strakes Eng Oak
 The Spirketting and Plank-sheers Hackmatack The Water-ways { Upper Deck Redpine Lower Deck —

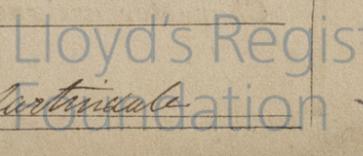
The Decks Yellow Pine State of Good
 The Shifts of the Planking are not less than 5 Feet — Inches. N. B. If less than prescribed by the Rule, state whether general or partial, and if partial, in what part of the Ship. The Planking is wrought three between, and without step-butting

Planking Inside.—The Limber-strakes and Bilge-strakes are Redpine, Am^l Oak, & Eng Oak
 The Ceiling, Lower Hold, and between Decks Redpine Shelf Pieces and Clamps Redpine

Fastenings.—To Hold Beams None

Deck Beams Double Eng Oak lodging Timbers & 4 Pairs of Iron Rider Pines extending below the Deck.
 Number of Breasthooks Two Pointers none Crutches one of Iron
 Butt End Bolts are of Iron in the Bottom: two Bolts in each Butt End one through and clenched.
 Bilge and Limber Strakes Iron & bolted through and clenched. Treenails of Eng Oak How Made Turned
 Thickstuff over Double Floors none bolted through and clenched. General Quality of Workmanship Good

We certify that the above is a correct description of the several particulars therein given
 Builder's Signature Thomas Smith Surveyor's Signature Seabourne Martin



LIV 584-036

Her Masts, Yards, &c. are in Good condition, and sufficient in size and length.

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.		
No.		Public Specification	Fathoms.	Mary St Bond Specification	No.	Weight.
	Fore Sails,	Chain	150	Common Iron Stock	2	3-0-16
	Fore Top Sails,	Hempen Stream Cable	80	Wichit 664		5-0-16
	Fore Topmast Stay Sails,	Hawser	60		1	2-1-0
	Main Sails,	Towlines	90			
	Main Top Sails,	Warp	90		1	1-0-10
	and	All of	quality.			

*She is
abundantly found*

Her Standing and Running Rigging (Hemp) are sufficient in size and Good in quality.

She has one Long Boat and Patent Windlass is Good Capstan W. Good Rudder Good Pumps 2 of Metal

General Remarks and Statement and Date of Repairs, if any.

- DATES of Surveys held while building, as per Section 35.
- 1st. When the Frame is completed _____
 - 2nd. When the Beams are put in, &c. _____
 - 3rd. { When completed, and before the } Whitst Building
plank be painted or payed }

This vessel is built to carry heavy cargoes Iron Ore, Pig Iron &c. and her scantling are much in excess of Rules.

The Upper Deck Beams are secured with double Wood (Eng Oak) Lodging knees, also 4 pairs of heavy Iron Rider knees extending below the bilges.

A large portion of her materials are of the highest grade, viz. all the frame, Stern Stempost Apron, Knighthead, Harrosettimbers, Eng Oak, & the Wales, Blackstake on topsides & Sheerstakes are the same, including the Beams, Breasthooks, Rudder & Windlass, but the Builder made a mistake by putting Redpine (instead of Pitch Pine) for the Keelson which reduces her to 7 years. They are nearly 4 times larger than required by the Rules and shod with Iron. Should they be removed at a future time and higher class timber substituted, she would in my opinion be eligible for the 8 years grade.

Present condition of Caulking of Bottom, Good Deck, Good and Waterways Good

If Sheathed, Doubled, Felted, or Coppered Single Bottom When last done _____

I am of opinion this Vessel should be Classed A1 Leithhouse Martindale

The Amount of the Fee.....£ 1 : 0 : 0 is received by me,
Special£ 4 : 4 : 0
Certificate£ : 2 : 6

Committee's Minute Spod, 13th Decemb 18 04
Character assigned A1 for 7 Years
(A.C.P.)



"Arrow" 1910