3594

COMPOSITE SHIP.

No 249

Rec 25/8/69

No. 3594 *Survey held at* Dundee *Date* 21st August 1869

on the Ship Tonbridge *Master* S. Pizzey

Tonnage under tonnage deck 783.86 *Built at* Dundee *When built* 1869 *Launched* 7-8-69

Ditto of poop 72.51 ~~*or spar*~~ *deck* 13.25 ~~*Ditto of engine room*~~ TG House Fore 33.28 *By whom built* A Stephen & Sons *Owners* Liscombe

Gross tonnage 902.9 *Port belonging to* London *Destined Voyage* India

Total Register tonnage ab 856.37

If Surveyed while Building, Afloat, or in Dry Dock Building & afloat

...oft (Feet) 181 (Inches) 2 | Extreme Breadth (Feet) 32 (Inches) — | Depth from top of Upper Deck Beam to top of Floor (Feet) 19 (Inches) 5 | ~~Power of Engines~~ (Horse) | No. of Decks Two

...s of Ship per Register, length 181' breadth 32' depth 19.4'

	Inches in Ship.			Inches required per Rule for 700 tons Scale.		
...g and moulding in 5 lengths	14 5/8 × 16			15 + 16½		
..., breadth and thickness	29" × 3/4"			29 – 3/4		
...g and moulding	14½ × 17			14½ × – 17		
...wood plate, breadth and thickness	D° × 13/16			" 13/16		
..., siding and moulding	14 5/8 × 17 3/8			14½. 16		
...lwood plate, breadth and thickness	D° × 13/16			" 13/16		
...of Frames from moulding edge to ...ding edge, all fore and aft	41.4 × 3½ × 1/2 21"			21" per sanction		
	Inches. In Ship.	**Inches. In Ship.**	**16ths. In Ship.**	**In. req'd per Rule for 700**	**In. req'd per Rule to**	**16's reqd per Rule ns Scale.**
...ize of Angle Iron, single or double 55 No	4"	3½"	1/2"	4	3½	½
...Reversed Iron, ~~on~~ in bottom every frame or on every other frame	3	3	7/16	3	3	3/8
...epth and thickness of Floor Plate at Mid line	21½		9/16	21½		9/16
...tto ditto at Bilge Keelson	8½"		D°	–	–	"
...ze of Reversed Angle Iron, and No. One at top of Floor Plate	3"	3"	7/16	3	3	3/8
~~...of Wood, siding & mould'g, at Mid. line~~						
...eck (No. 46) ~~double Angle Iron,~~ Plate, ~~Tee, or~~ Bulb Iron	8		1/2"	7½		1/2 full
,, double or single Angle Iron, on Top edge	3	3	3/8 full	2¾	2¾	11/32
,, average space between	3.6			3.6		
...ld, or Lower Deck (No. 43) ~~double Angle, Tee~~, Plate, ~~or~~ Bulb Iron	8		1/2"	per section submitted		
,, double ~~or single~~ Angle Iron on Top edge	3	3	3/8 full	3	3	3/8
,, average space between	3.6			3.6	per section	
...single ~~or double~~ plate, ~~box, or intercostal~~ Size of Plates	13 7/8		7/8	14		13/16
...undation plate 14 × 9/16 & Rider plate 9 × 9/16 Size of Angle Irons	4	4	9/16	5	4	1/2
~~If of Wood, siding and moulding~~						
...de, single ~~or d'ble~~, plate, ~~box, or~~ intercostal	14		9/16	8		9/16
...8 × 9/16 double AI 4 × 4 9/16 ...lge (No. One Bulb) at each Bilge, single, ~~or double~~, plate ~~or box~~	8 4	 4	9/16 9/16	8 5	 4	9/16 1/2

Outside Plank.	Inches in Ship.		Inches required by Rule.	
Crossbolted with 7/8 YM ab 4½ ft ap^t Garboard Strakes, thickness	10		10 5/8	
Garboard to Topsides ditto see section	5½ –		5½	
Topsides ditto / Sheerstrakes ditto — taper to 4" over plate	over plate 4"		4" over plate	
Planksheers ditto	4"		4"	
Water-Ways Upper Deck — see section	Gutter W^r ways			
Water-Ways Lower Deck — White pine	9 × 3½			
	Inches. In Ship.	**16th. In Ship.**	**In. req'd per Rule.**	**16th req'd per Rule.**
Iron Sheerstrake, breadth and thickness	32½	5/8	30¼	5/8
,, Bilge Plate ditto ditto ends	20	5/8	20	5/8
Diagonal Plates on Frames	10" 9 7/8	5/8	10	"
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	26	5/8	per stipulation 26	5/8
Angle Iron on ditto	4 × 4	× 9/16	5 – 4	1/2
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	12	5/8	11¼	5/8
Diagonal Tie Plates on ditto	D°	D°	"	"
Flat of Upper Deck, thickness	6 × 4			4"
Ceiling betwixt Decks, thickness — laden & space		2"		
in Hold, thickness		2¾		2¾
Clamps or Spirketting ditto — Iron Kelson to in above Bilge Stringers Close				
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	19½	5/8	19½	5/8
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	12	5/8	12	5/8
Stringers in Hold	4 × 4	9/16	4 – 4½	1/2
Flat of Lower Deck, thickness	8 × 3			
Diameter of Hold Pillars — Aberstowed & Twixt decks	3¼ 2½		3 3/8 2½	
Main piece of Rudder, diameter at head	16¼		–	16¼
(Can the Rudder be unshipped afloat)	Yes			

The Main piece of Rudder is Iron Bark of Windlass is Iron Bark

...oors consist of A Frames Plate Iron

...el is Amer^n Elm in The Main Keelson is Plate Iron and — free from all defects. —

...em, and Stern Post of 3 pieces Teak The Transoms, Knight Heads, Hawse Timbers,

... Aprons, of Teak Iron plating Deadwood, of Teak and are — free from all defects.

...eck and Hold Beams of Bulb Iron The Breasthooks of plate Iron The Knees of —

...ing Outside.—From the Keel to the Height defined in Note to Table or to the First Foothook Heads the Plank is Amer^n Elm & Teak

...he above named Height to the Light Water Mark

...he Light Water Mark to the Wales } Teak

...ales and Black-strakes are The Topsides & Sheerstrakes

...pirketting and Planksheers Gutter Waterways The Water-ways { Upper Deck Iron Gutter plate / Lower Deck }

...ecks Yellow & White Pine State of Good How fastened to Beams 5/8 Gal^d screw pointed bolts with nuts

...hifts of the Planking are not less than — Feet — Inches. *N. B. If less than prescribed by the Rule, state whether general*

...partial, and if partial, in what part of the Ship. The Planking is wrought Three between, *and without step-butting.*

...ing Inside.—The Limber-strakes and Bilge-strakes are Red Pine

...eiling, Lower Hold, and between Decks Red Pine ~~Shelf pieces and Clamps~~

...traps of Keelsons, Stringer and Tie Plates, double & upwards ~~or single~~ Chain rivetted? double & upwards Chain rivetted

...heer, how secured to the plating of the sides ...way ,, ,, planksheer and to the Beams { *Explain by sketch if necessary.* } See mid section — Iron Gutter Waterways

...Beams, how secured to the side? 20" deep turned Bracket ends on Beams with 4 rivets thro ribs

...r Lower Deck ditto D° D° D° D° D° D° D°

...l Quality of Workmanship Good No. of breasthooks 4 for under Main deck crutches Hooks or 3 aft

...description of Iron is used for the Frames, Beams, Keelsons, Stringer and Tie Plates, Outside Plating, &c.?

Manufacturer's name or trade mark LWB Walker for Angles & Beams Abbot for reversed Angle Iron & Ha... F H & C^o for plates

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Alex Stephen & Sons *Surveyor's Signature* Thomas Alexander

DUN106-0205

Size of Bolts in Fastenings, distinguishing whether Copper, Yellow Metal, Galvanized Iron, or Iron.

	Copper or YM. in Ship.	Iron in Ship.	Inches required per Rule		Copper or YM. in Ship.	Gal Iron in Ship.	Inches required per Rule		Copper or YM. in Ship.	Gal Iron in Ship.	Inches required per Rule
Deadwood forward and aft	1 2/16		1/8	~~Transoms and throats of Hooks~~				Hold Beam Bolts in ~~Waterway / Knees / Shelf or Clamp~~			
Scarphs of Keel, No. 8	7/8 & 1 1/8		8 × 7/8	~~Arms of Hooks~~ Bolts in		aloft					
~~Keelson~~ Bolts through Keel plate at each Floor	1 1/8		1 1/8	Thro' ~~Bilge and Limber Strakes~~ ~~Butt End Bolts~~ Wood planking	7/8	3/4	7/8 & 3/4 aloft	Deck Beam Bolts in ~~Waterway / Knees / Shelf or Clamp~~			
Bolts in Iron Keel Plate — No Galvanized bolts	1 2/16			Pintles of the Rudder No. 4 under Counter	3 3/8		3 1/2	~~Nails or~~ Bolts in Flat of Deck		5/8	5/8

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. *If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.*

	Lth ex	Diameter deck	Diameter head	Flanges end	Plates	L of plates	Sego	Rivetting laps	Butts	Butt straps
Fore Mast	74. 7	24 3/4	17"		7/16 & 3/8	ab 8 1/2 ft	4	double riveted	doubled	1/16 thicker than plates
Main Mast	76. 6	Do	Do		Do	Do	4	Do	Do	Do
Bowsprit	37	24 1/2	17"		Do	Do	4	Do	Do	
Fore & Main Yds	70			17" 8 1/2"	5/16 & 1/4"		2	Do	Do	Do & doubled - Center

Sunderland Public Test. John Hartness supt

No.	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
		8168 PHS - 3266 29-7-69						9.68 PHS 4227	29-7-69				
2	Fore Sails,	Chain	300	1 5/8	47.5	300 × 1 5/8	47.5	Bowers	+	25.3.0 / 5.3.0	25.8.0.14	25.10.00	25.2
4	Fore Top Sails, i.e. double							Do Do 4222	Do +	25.2.11 / 5.1.3	25.5.3.21	Do Do Do	Do Do
2	Fore Topmast Stay Sails,	Moor 3 / Hempen Stream Cable	70 / 90	7/8 Stud / 10"		7/8 / 10		Do Do 4.225	Do +	21.3.0 / 5.0.7	22.3.1.0	21.2.19	
2	Main Sails,	Hawser	90	8"		8	90 F of each	Stream with Stock		10.3.0		10.2.0	
4	Main Top Sails, i.e. double	Towlines	90	5"		5						5.1.0	
		Warp	90	4"									
	and others in all 53 pieces	All of Good quality.						Kedges	1	5.1.0 / 4.3.21	×	2.3.0	

Her Standing and Running Rigging Wire & Hemp sufficient in size and ——— in quality.

She has Five ~~Long~~ Boats ~~and~~ 2 of 26 ft & 3 of 24 feet

The present state of the Windlass is Good fitted with purchase 2 Capstans Good 2 Do Winches and Rudder Good Pumps Low & Duffs patent double action

Order for Special Survey No. 240 Date 11-1-69	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 Feby March
		2nd. On the plating during the progress of rivetting March April May & June
Order for Ordinary Survey No. ____		3rd. When the beams were in and fastened, and before the decks were laid May
Date ____		4th. When the ship was complete, and before the plating was finally coated July
		5th. After the ship was launched 7th to 21st August in all about 90 visits

State if she has a ~~Spar Deck~~ ____ Poop 42 Ft from front to aft of Sp. ~~or~~ T.G. Forecastle 32 1/2 Ft along Center

No 43 in Builders Yard

General Remarks, This vessel has been built under a roof with 14 years Materials in conformity with enclosed section – submitted 27/11/68 & approved with certain alterations stipulated by letter of 28/11/68 also in the Keel being entirely fastened with Yel. Metal thro bolts to the exclusion of Galvanized Iron as marked in section. Is fastened with Yel. Metal bolts from the lower part of the Keel up to 1/5 depth of Hold below the upper side of the upper deck above which height all fastenings are of Galvanized Iron.

The frames in wey of Top gallant forecastle having originally been carried to deck stringer & gutter Waterways carried forward – On application sanction was given to the plan enclosed in substitution for the frames having been cut off.

Prior to the vessel being launched an error was found in the calculated statement of Tonnage originally submitted causing the Register Tonnage by the erections above the Main deck to come within the scale for 800 tons & consequently affecting the equipment viz Main piece Rudder & Windlass Keel & Kelsons & also Upper & Lower deck stringers the Builders having submitted a proposal to apply in room of the slight deficiency in the Keel & Kelsons a double A1 stringer 4 1/2 × 4 × 7/16 along each Bilge for 1/2 the ships length was sanctioned by way of compensation under instructions of date 2nd/7/69 & applied accordingly.

The Builders in 5th/69 having applied to be permitted to dispense with certain portions of the pillars to Beams as stipulated in the rules on account of the closer spacing of Beams in this case. Sanction was declined but permission to use 3 1/4" in room of 3 3/8 for the Hold Beams granted. vide letter 24/5/69.

In what manner are the surfaces of Iron Work preserved from oxidation Several Coats Red Lead & other Color. Bottom inside coated i.e. up to upper part round of Bilge with Portland Cement

Present condition of Caulking of Bottom Efficient Deck, Efficient and Waterways ———

If Sheathed, Doubled, Felted, or Coppered Yel. Metal over 1/2 in. Felt & paper When last done Now

I am of opinion this Vessel should be Classed 17 A1

The Amount of the Fee.......... £ 5 : 0 : 0 is received by me, Thomas Alexander

Augt. 10th ... Special ...... £ 42 : 16 : 0

Certificate ...... £ : :

£ 47 16 0

This vessel appears eligible to be classed as recommended above, assuming that the thickness of planking is agreeable to the Rules viz 17 A1

26th Aug. 69 J.H.R.

Committee's Minute 27th August 1869

Character assigned A 1 for 17 Years