20132

IRON SHIP.

Rec 18/2/78

No. 4597 Survey held at Glasgow Date, First Survey 24 August 77 Last Survey 16 February 1878

On the S. S. "TITUS" (SCHOONER) Master P. J. Petersen

ONE, ~~OR TWO~~ DECKED, ~~THREE DECKED~~ VESSEL. ~~SPAR, OR AWNING DECKED VESSEL.~~

TONNAGE under Tonnage Deck	569.44
~~Ditto of Third, Spar, or Awning Deck~~	
Ditto of Poop, ~~or Raised Qr. Dk.~~	163.48
Ditto of ~~Houses~~ Hatches on Deck	.79
Ditto of Forecastle	26.10
Gross Tonnage	759.81
~~Less Crew Space~~	
Less Engine Room	243.14
Register Tonnage as cut on Beam	516.67

	Feet.
HALF BREADTH (moulded)	13.91
DEPTH from upper part of Keel to top of Upper Deck Beams	16.4
GIRTH of Half Midship Frame (as per Rule)	27.66
1st NUMBER	57.97
~~1st NUMBER, if a THREE DECKED VESSEL~~ [~~deduct 7 feet~~]	
LENGTH	189.
2nd NUMBER	10.956.
PROPORTIONS—Breadths to Length	6.8
Depths to Length—Upper Deck to Keel	11.52
Main Deck ditto	—

PLANS CASE

Built at Glasgow

When built 1878 Launched 8 February 78.

By whom built A. Stephen & Sons.

Owners Charles Andersen Hamburg.

Port belonging to Hamburg

Destined Voyage Baltic (via Workington)

If Surveyed while Building, Afloat, or in Dry Dock. x under special survey.

Official Number

183.8 × 27.1 × 14.8

LENGTH on deck as per Rule	Feet. 189	Inches. -	**BREADTH**—Moulded	Feet. 27	~~Inches.~~ 82	**DEPTH** top of Floors to Upper Deck Beams; Do. do. Main Deck Beams	Feet. 15	Inches. 0½	Power of Engines	Horse. 80	Nº. of Decks with flat laid ONE; Nº. of Tiers of Beams TWO

Dimensions of Ship per Register, length, 183.2 breadth, 28.2 depth, 14.8

	Inches in Ship.			Inches per Rule.		
KEEL, depth and thickness	7½ × 2¼			7½ × 2¼		
STEM, moulding and thickness	7 × 2¼			7 × 2¼		
STERN-POST for Rudder do. do.	7 × 4½			7 × 2¼		
for Propeller	7 × 4¾			7 × 4½		
Distance of Frames from moulding edge to moulding edge, all fore and aft	22in			22in (Class 90A)		
	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches per Rule	Inches per Rule	16ths per Rule
FRAMES, Angle Iron, for ⅗ length amidships	3½	3	7/16	3½	3	7/16
Do. for ⅕ at each end	3½	3	6/16	3½	3	6/16
REVERSED FRAMES, Angle Iron	3	2½	6/16	3	2½	6/16
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	16½ ×		7/16	16½ ×		7/16
thickness at the ends of vessel			6/16			6/16.
depth at ¾ the half-bdth. as per Rule	AS PER SECTION.					
height extended at the Bilges	TWICE DEPTH.					
BEAMS, Upper, ~~Spar, or Awning~~ **Deck** Single ~~or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	6½ ×		6/16.	6½ ×		6/16
~~Single or~~ double Angle Iron on Upper edge	2½	2½	6/16.	2½	2½	6/16
Average space	44in			44ins		
BEAMS, ~~Main or~~ **Middle Deck** Single ~~or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	7½ ×		7/16	7½ ×		7/16
~~Single, or~~ double Angle Iron, on Upper Edge	3 × 3 × 7/16.			3 × 3 × 7/16.		
Average space	10th frame.			10th frame		
~~BEAMS, Lower Deck, Hold, or Orlop~~ Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	(Zop plate. 7 × 7/16.)					
Single or double Angle Iron on Upper Edge						
~~Average space~~						
KEELSONS Centre line, single ~~or double~~ plate, ~~box, or Intercostal,~~ Plates	12½ ×		10/16.	12 ×		10/16
" Rider Plate	10¼ ×		10/16.	10 ×		10/16
" ~~Bulb Plate to Intercostal Keelson~~						
" Angle Irons	4½ × 3 × 7/16			4½ × 3 × 7/16		
" ~~Double Angle Iron Side Keelson~~						
" Side Intercostal Plate	Wash Plates 5/16 —					
" do. Angle Irons						
" ~~Attached to outside plating with angle iron~~						
BILGE Angle Irons	4½ × 3 × 7/16.			4½ × 3 × 7/16		
" do. Bulb Iron	6½ × 6/16.			6½ × 6/16		
" ~~do. Intercostal plates riveted to plating for length~~	In Half Length					
BILGE STRINGER Angle Irons	4½ × 3 × 7/16.			4½ × 3 × 7/16		
~~Intercostal plates riveted to plating for length.~~						
~~SIDE STRINGER Angle Irons~~						

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule	16ths per Rule
~~Flat Keel Plates, breadth and thickness~~				
PLATES in Garboard Strakes, breadth and thickness	32 ×	8/16.	32 ×	8/16
from Garboard to upper part of Bilges	7 –	8/16	7 –	8/16
~~of doubling~~ ONE STRAKE at Bilge, ~~or~~ increased thickness, and length applied Half Length	—	9/16		9/16
fm up. part of Bilge to lr. edge of Sh'rstrake	7 –	8/16.	7 –	8/16
Main Sheerstrake, breadth and thickness	32½ –	11/16.	33 ×	11/16.
~~of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.~~				
~~Up. or Spar Dk Sh'rstrake, brdth & thickns~~				
Butt Straps to outside plating, breadth & thickness	9¾. 14¼. 18¾	8-11/16	9¾. 14¼. 18¾	8-11/16
Lengths of Plating	Six spaces		Five spaces	
Shifts of Plating, and Stringers	Two spaces		Two spaces.	
Gunwale Plate on ends of ~~Awning, Spar, or~~ Upper Deck Beams, breadth and thickness	40½ ×	8/16	40 ×	8/16.
Angle Iron on ditto	4½ × 3 × 7/16		4½ × 3 × 7/16.	
Tie Plates fore and aft, outside Hatchways	9 ×	8/16	9 ×	8/16
~~Diagonal Tie Plates on Beams No. of Pairs~~				
Planksheer material and scantling	Gutter Waterways			
Waterways do. do.				
Flat of Upper Deck do. do.	3½	Y. P.	3½	
How fastened to Beams	Galv Iron		Bolts & nuts.	
Stringer Plate on ends of ~~Main or~~ Middle Deck Beams, breadth and thickness	23 ×	7/16	23 ×	7/16.
Is the Stringer Plate attached to the outside plating?	yes		—	
Angle Irons on ditto, No. 2	5½ × 3½ × 7/16		5½ × 3½ × 7/16	
~~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	Battens & space			
in hold do. do.	2½	Y. P.	2½	
Main piece of Rudder, diameter at head	4¾		4¾	
do. at heel	2¾		2¾	
Can the Rudder be unshipped afloat? yes.				
Bulkheads No. 5 Thickness of 5/16.			5/16	

Height up Four to Main deck aftermost to Cabin Dk.

How secured to sides of ship Double frames.

Size of Vertical Angle Irons 3 × 2½ × 6/16 and distance apart 30 ins.

Are the outside Plates doubled two spaces of Frames in length? yes.

Transoms, material. Knight-heads. Hawse Timbers. E. I. Teak.

Windlass Emmerson's Patent. Pall Bitt —

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with ¾ in. Rivets, about 6 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to above Lower deck 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 1/16 in. diameter, averaging 4¾ ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets ¾ in. diameter, averaging 3¼ ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets ¾ in. diameter averaging 3¼ ins. from centre to centre.

Butts of Two Strakes at Bilge for Half 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 ¾ in. diameter, averaging 3¼ ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets ¾ in. diameter, averaging 3¼ ins. from cr. to cr.

Edges of Main Sheerstrake, double ~~or~~ single riveted. ~~Upper Sheerstrake, double or single riveted.~~

Butts of Main Sheerstrake, treble riveted for Half length amidships. ~~Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.~~

Butts of Main Stringer Plate, treble riveted for Half length amidships. ~~Butts of Upper or Spar Stringer Plate, treble riveted for — length.~~

Breadth of laps of plating in double riveting 4½ Breadth of laps of plating in single riveting 2¾

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and Treble as per rule.

Waterway, how secured to Beams Gutter waterways (*Explain by Sketch, if necessary.*)

Beams of the various Decks, how secured to the sides? Beam Knees Riveted to Frames No. of Breasthooks, 5 Crutches, 3

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

Manufacturer's name or trade mark, Plates. "Mossend"

The above is a correct description.

Builder's Signature, Alexr Stephen & Sons *Surveyor's Signature,* James Purdie

Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON476-0049

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed where practicable*

Do the edges of the carvel work and of the butts fay 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* — 20132 Iron

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 bottom only*

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~~ *(Pitch Red Pine)*

NUMBER for EQUIPMENT *12051*

N°.	SAILS.	CABLES, &c. (State Machine where Tested, Date, & name Suprintndt.)	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS. (State Machine where Tested, Date, & name of Suprintndt.)	N°.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
one suit	Fore Sails,	Chain	210	15/16	31	210. 15/16	31.	Bowers	3	15.2.0	16 18/20	15 1/4	16 14/20
	Fore Top Sails,	*Breaking Test. 46½ Tons.*								15.1.15	16 18/20	15 1/4	16 14/20
	Fore Topmast Stay Sails	*Netherton P. Home 6 or 12 Feby 1878. D. G. Lewis Supt.*								12.3.20	14 3/4	12.3.24	14 13/20
		~~Hemp~~ Strm Cbl	45½	14/16	13 15/20	90 14/16 or 10		*Netherton P. Home 30 Jany 78. 5th Feby D. G. Lewis Supt.*					
	Main Sails,	Hawser ...	90	8		90 8		Stream *S. S.*	1	6.3.12	7 18/20	6½	
	Main Top Sails,	Towlines ...	90	6		90 5				3.1.10	5 3/20	3 1/4	
		Warp ...	180	4				Kedges *4 ...*	2	1.2.14	3 13/20	1 3/4	
	and quality *good*		90	3									

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *one life* ~~Long~~ Boat and *two others.*

The Windlass is *Emmersons patent.* Capstan *good* and Rudder *good.* Pumps *Two 5 inch copper chambers and one plunger pump*

Engine Room Skylights.—How constructed? *Iron coming & Teak above* How secured in ordinary weather? *Bolted down*

What arrangements for deadlights in bad weather? *Thick glass deadlights. Clinch Teak sashes.*

Coal Bunker Openings.—How constructed? *Iron comings* How are lids secured? *Battened down* Height above deck? *18 inches.*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Two square ports on each side*

Cargo Hatchways.—How formed? *Iron comings*

State size **Main Hatch** *18.6 × 9.0* Forehatch *14.8 × 9.0* Quarterhatch *18.0 × 9.0*

If of extraordinary size, state how framed and secured? *Framed with Hatchbeams and Iron comings.*

What arrangement for shifting beams? *Web plate full depth of coming with four angle irons.*

Hatches, If strong and efficient? *yes solid*

Order for Special Survey No. *1295*

Date *30th Augt 77.*

~~Order for Ordinary Survey No.~~

~~Date~~

No. *220* in builder's yard.

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 — *1877. August. 24. 29. September 4. 7*

2nd. On the plating during the process of riveting — *17. 21. 25. 28. October 2. 9. 12. 16. 19. 22. 29*

3rd. When the beams were in and fastened, and before the decks were laid — *November 2. 6. 8. 12. 16. 20. 23. 27. 29*

4th. When the ship was complete, and before the plating was finally coated or cemented — *December 4. 7. 11. 18. 21. 24. 28 — 1878*

5th. After the ship was launched and equipped — *January 8. 10. 15. 18. 22. 25. 29. Feby 1. 5. 11*

14 and 16th February 1878

General Remarks (State quality of workmanship, &c.)

Is fitted with full poop. 101 feet in Length. Sheerstrakes increased 1/16 and stringers 2/16 for 20 feet at break of poop — Iron front to poop and the deck plated in way thereof for one space of Beams.

Has Water ballast Tank in foremost and after Hold for 29.4 and 33 feet respectively — same tested with head of water equal to Load Line — 1st Feby 78 —

Constructed in accordance with midship Longitudinal and ballast sections & herewith attached — Is well built and worthy in my opinion of the class recommended below —

J. T.

State if one, ~~two, or three,~~ decked vessel, ~~or if spar, or awning decked~~; and the lengths of poop *101 feet* forecastle *24 feet* ~~or raised quarter deck~~, and the length of double, ~~or~~ part double bottom *Forward 29.4". Aft 33 feet.*

How are the surfaces preserved from oxidation? Inside *Cement in bottom. Paint above* Outside *Paint.*

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

The amount of the Entry Fee ... £ *5 : – : –* is received by me, *15th James Tindell.*

Feb 1878 Special ... £ *38 : – : –* *Feby 1878*

Certificate ... *Gratis*

(Travelling Expenses, if any, £ *–*)

It is submitted that vessel appears eligible to be classed 90 A1 recommended — 1 Dk. 2 Tr of Bms. "double Bottom 62.4" 19/2/78

Committee's Minute 19th February, 1878.

Character assigned *90 A 1*

Lloyd's M.C. 1 Dk. 2 T. B. W. Dbl Bot 62 feet