

STEEL STEAMER ~~OR MOTORSHIP~~

Received at London 11 SEP 1929

State if Report has been sent on the Freeboard of the Vessel *Yes*State if Report is sent on the Machinery of the Vessel *Yes*Date of completion of report *9/9/29*Port of *Glasgow*No. *49593*Survey held at *Glasgow*Date First Survey *22. 1. 29*Last Survey *30th Aug. 1929*

On the (State if Machinery fitted Aft and if Sple, Twin or Triple Screw)

T. S. S. "IRWIN" Machinery fitted Amidships

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings)

*Respected Class*State Type of Erections *Promenade deck*

TONNAGE under Tonnage Deck...

*300.64*CLASS *A.1.*State if with freeboard as condition of Class *Yes*Built at *Glasgow*Do. of space or spaces between Tonnage Dk. and Upper Dk. *✓*Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) *L 250.0*Launched *10th June 1929* Yard No. *859 M*

Total

Breadth (greatest moulded) *B 38.0*Builders *D W. Henderson & Co. Ltd*Gross Tonnage *940.11*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) *D 12.0*Owners *South Indian Railway Coy*Register Tonnage *377.39*1st Longitudinal Number (L x D) = *3000*Managers *do*

(Where necessary to be entered in Reg. Book.)

2nd Numeral L x (B + D) = *12500*Residence *London*

REGISTERED DIMENSIONS. FEET.

Framing Depth "d," at middle of length. See Sec. 3 (1d) *10.66*Port of Registry *Glasgow*Length *250.00*Proportions—Depth to Length—Uppermost continuous deck to top of keel *20.83*If surveyed while building, afloat, or in dry dock *Yes*Breadth *38.15*Do. Long Bridge to top of keel *✓*Depth *11.40*Draught Moulded *7'-4³/₄*

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships			Bracket Floors		
" " from $\frac{3}{8}$ length to Collision bulkhead.....	<i>25</i>	<i>✓</i>	" " Reversed Frame		
" " in peaks.....			" " Vertical Struts		
SIDE FRAMING.			Centre Girder , depth and thickness amidships		
Frame Amidships, Angle, <i>E or F</i>	<i>6 3 '32</i>	<i>✓</i>	" " top Angles		
" " Extends up to	<i>upper Deck</i>	<i>✓</i>	" " bottom Angles		
Reversed Frame Amidships, Angle	<i>Flanges clear of H.S.</i>	<i>✓</i>	Side Girders , No. each side and thickness		
" " Extends up to	<i>across floors</i>	<i>✓</i>	Margin Plate depth (excl. of flange) and thickness		
Depth of Framing Girder.....	<i>6</i>	<i>✓</i>	" " Vertical Angle to Tank side		
Frames in Uppermost Continuous (tween)			Bracket abaft $\frac{1}{4}$ len. from stem		
Decks, Angle <i>E or F</i>			" " Vertical Angle to Tank side		
" " Second tween Decks, Angle, <i>E or F</i>			Bracket forward $\frac{1}{4}$ len. from stem		
Third			Gussets, spacing and scantling abaft $\frac{1}{4}$ len. from stem		
Framing in Peaks, Angle <i>E or F</i>	<i>4 3 '34</i>	<i>✓</i>	" " Gussets, spacing and scantling forward $\frac{1}{4}$ len. from stem		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>3/4" - 5/4"</i>	<i>✓</i>	Tank Side Brackets , height above base line at toe of Frame and thickness		
State if Frame Joggled	<i>Yes</i>	<i>✓</i>	LINER BOTTOM PLATING.		
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	<i>Panting Straps per app. Plan</i>	<i>✓</i>	Thickness and thickness of Middle Line Struts		
STRENGTHENING OF BOTTOM FORWARD. State Particulars	<i>Double frames, closer spaced</i>	<i>✓</i>	Thickness of remainder in Holds		
SINGLE BOTTOM.			Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	<i>Yes</i>	<i>✓</i>
Floors, Depth and thickness at mid-line in Holds	<i>16 x '32</i>	<i>✓</i>	BEAMS.		
Height of Brackets at side above base line at toe of frame	<i>32</i>	<i>✓</i>	Uppermost Continuous Deck, amidships in Wells, Angle, <i>E or F</i>	<i>4 2 1/2 '30</i>	<i>✓</i>
Middle Line Keelson, on Floors, Angles, <i>E or F</i>	<i>4 3 '30</i>	<i>✓</i>	" " in way of Bridge, Angle, <i>E or F</i>		
" " Through Plate	<i>20 x '30</i>	<i>✓</i>	Spacing	<i>25</i>	<i>✓</i>
" " Foundation Plate on Floors	<i>10 x '30</i>	<i>✓</i>	Second Deck , amidships, Angle, <i>E or F</i>	<i>3 2 1/2 '25</i>	<i>✓</i>
" " Flat Plate Keel Angles	<i>3 3 '34</i>	<i>✓</i>	Spacing	<i>25</i>	<i>✓</i>
Side Keelsons, No. each side	<i>250</i>	<i>✓</i>	Third Deck , amidships, Angle, <i>E or F</i>		
" " thickness of Intercoastal Plate	<i>30</i>	<i>✓</i>	Spacing		
" " Angles	<i>5 3 '40</i>	<i>✓</i>	Fourth Deck , amidships, Angle, <i>E or F</i>		
DOUBLE BOTTOM.			Spacing		
Solid Floors, thickness and spacing			Poop Deck , Angle, <i>E or F</i>		
" " Are Frame and Reversed Frame joggled?			Spacing		
Bracket Floors, breadth and thickness at middle line			Promenade Bridge Deck , Angle, <i>E or F</i>	<i>3 2 1/2 '25</i>	<i>✓</i>
" " breadth and thickness at margin plate			Spacing	<i>at free end 4 2 1/2 '30</i>	<i>✓</i>

PILLARS AND DECKS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows.....	2	✓	Stringer Plate, breadth and thickness in way of Bridge.....		
in 'tween Decks, Size and Spacing.....	2 1/2 x 5/16 tubes 50" Spacing	✓	Thickness of Plating abreast Deck openings in way of Wells.....		
" " " " " "			Thickness of Plating abreast Deck openings in way of Bridge.....		
in Holds " " " "	3 x 1/16 tubes 50" Spacing	✓	Thickness of Plating within line of openings.....		
" " " " " "			If Sheathed, material and thickness.....	1/4 Teak	✓
Centre Line Bulkhead.			Third Deck.		
Stiffeners and Spacing.....			Stringer Plate, breadth and thickness.....		
Plating, thickness of.....			If Plated, state thickness.....		
STRINGERS AND DECKS.			Fourth Deck.		
Uppermost Continuous Deck.			Stringer Plate, breadth and thickness.....		
Stringer Plate, breadth and thickness in Wells.....	58 1/2 x 1/40	✓	If Plated, state thickness.....		
" " " " in way of Bridge.....			Poop Deck.		
Angle in Wells.....	4 4 1/40	✓	Stringer Plate, breadth and thickness.....		
for 1/2 length			Plating, Sheathing, material and thickness.....		
Thickness of Plating abreast Deck openings in way of Wells.....	26	✓	Promenade Bridge Deck.		
Thickness of Plating abreast Deck openings in way of Bridge.....	26	✓	Stringer Plate, breadth and thickness.....	15 x 25	✓
Thickness of Plating within line of openings.....	26	✓	Plating, Sheathing, material and thickness.....	8 x 20 5 x 1 1/2 Teak	✓
If Sheathed, material and thickness.....	5 x 2 Teak	✓	Forecastle Deck.		
Cabin Sole			Stringer Plate, breadth and thickness.....		
Second Deck, forward			Plating, Sheathing, material and thickness.....		
Stringer Plate, breadth and thickness in Wells.....	18 x 30	✓			

SHELL PLATING.

SCANTLINGS.					RIVETING.						
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.	NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.					Diam.	Spacing cr. to cr.	
FLAT PLATE KEEL.....	36	5/16	1/4	1/4	App ^d 50-1/40	Double	3/4 3/8	Triple	3/4	2 7/8	Lapped
" DBLG. (if any)											
BOTTOM PLATING, No. of Strakes.....	3	1/40	30	30	App ^d 35-26	Double	3/4 3/8	Triple	3/4	2 7/8	"
BILGE PLATING, No. of Strakes.....	1	1/40	30	30	do	"	"	"	"	"	"
SIDE PLATING, No. of Strakes.....	1	1/40	30	30	do	"	"	"	"	"	"
UPPER DECK Sheer strake in Wells.....	58 1/2	5/16	30	30	App ^d 50-26	"	"	"	"	"	"
UPPER DECK Sheer strake in Bridge.....											
STRAKE BELOW Sheer strake in Wells.....											
STRAKE BELOW Sheer strake in Bridge.....											
POOP SIDE PLATING.....											
Prom. deck Bridge SIDE PLATING.....		25	25			Single	3/4 3/8	Single	3/4	2 7/8	Lapped
FORECASTLE SIDE PLATING.....											
Note: The shell plating from keel to bulwarks has been galvanneal (hot process)											

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	Seven
Extending to Upper Deck (Sec. 3 c)	Seven
" Deck next below	
As per Rule	Seven

	Plating Thickness.	STIFFENERS.	
		VERTICAL.	HORIZONTAL.
		Scantlings, Spacing.	Scantlings, Spacing.
MIDSHIP BULKH'D, Upper tween decks	✓		
" " Second " "	✓		
" " Third " "	✓		
" " Holds	✓		
COLLISION " (in Hold)	30	6 x 3/8 24	Semi-Bulk Blank ✓
AFTER PEAK " "	30	5 x 3/8 24	✓ ✓

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bars.				
STEM	Rolled Steel bar	6 x 1 1/2		
STERN FRAME	Propeller Post..... Iron		Emerson	
	Rudder..... Forging	6 x 2	Walker Ltd.	
RUDDER—A x D.....		127.23		
Speed of Vessel.....		12 Knots	Emerson	
RUDDER mainpiece at head.....	Iron	6	Walker Ltd.	
" " heel.....	Forging	4 1/2	Ltd.	
" " how constructed.....	Forged frame shrunk on arms			
" double or single plate coupling, vertical or horizontal.....	Single Horizontal Coupling			

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) (Open Hearth process)

STEEL. David Colville & Sons, The Lanarkshire Steel Coy. Scottish Iron & Steel Coy.

Has the Steel been tested as required by the Rules? Yes

EQUIPMENT No. 13349												LETTER		ANCHORS.	
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.			
32012	1st Bower ...	28	0	16	Stockless			27	4	1	14	28	Cape Imp Stakes Not Stated	Sunderland	23 Butler
32013	2nd „ ...	28	0	7	do.			27	4	1	14	28	do.	do.	do. do. do.
	3rd „ ...														
	Collective weight.	56	0	21	✓							56	✓		
44382	Stream-	7	0	24	✓	1	3	20	9	9	1	14	✓	Ordinary	do. Bradley 8/5/29 Paul

HAWSERS AND WARPS.

Number of Certificate.	Length and size supplied.		Test per Certificate. Break- ing.	WEIGHT OF CHAIN CABLE.		Length and Size per Table 53.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and Size supplied.		Breaking Test of Steel Wire.	Length and Size per Table 53.	
	Length.	Diam.		Supplied.	Per Rule.	Length.	Diam.					Length.	Cir.		Length.	Cir.
	Fathoms.	Inch.	Tons.	Fms.	Cwts. qrs. lbs.	Cwts.	Fathoms.	Inch.				Fathoms.	Inch.	Tons.	Fathoms.	Inch.
42745	165	1 7/8	43.96	4	206.3.7	205	165	1 7/8	Stud drunk	Not stated	Bradley 8/15/79	POWELL...				
												HAWES & WARPS	90	10	Menila	90 10
												"	90	6	"	90 6
												"	90	5	"	90 5
From Certificate (Chain- Steel Wire)	75	3 3/4	29				75	3 3/4	Stud wire	R Hook Haggin Bros Worcester, n. Type						

Steering Gear, Steam by *McGregor's Port Glasgow Engineering Works* Steering Gear, Hand *Efficient*

Boats *5* Steering Chains, Size and Test *no chains* Windlass *Steam by Emerson Water*

Ceiling in Holds, thickness and material *1 1/4 pine* Cargo Battens, thickness, material and spacing *6 x 1 pine 6' spacing*

Cargo Hatchways.—(Upper Deck) *Coamings 30" x 36* Thickness of Hatches *2 1/2"*

Size of No. 1 Hatchway (Forward) *18'-9" x 14'* No. 2 *20'-0" x 14'* No. 3 No. 4 No. 5 No. 6

Number of Shifting Beams and/or Fore and Afters *Two webs in N. 1 hatch; 2 webs and 1 bulkhead in N. 2 Hatch*

Builder's Signature *Ed. A. Henderson* Director

GENERAL DECLARATION. It should be stated (a) whether the vessel is fitted for the carriage and burning of oil used as fuel Yes (b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo No The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point.

This vessel has been built in accordance with the approved plans, the Secretary's letters of various dates, and in general conformity with the Rules for the class contemplated. The materials and workmanship are good. The forward and the after peak tanks and the oil fuel bunkers have been tested with satisfactory results. The freeboards have been verified and the marks cut in on the vessel's sides. The vessel is fitted for burning oil or coal, and fuel oil is to be carried in a deep tank amidships, and Sect. 20 of the Rules has been complied with, as far as applicable. The weather decks, watertight bulkheads, and tunnel have been hose tested with satisfactory results.

The amount of Entry Fee £ 4 : 0 : 0 } Fees applied for,
 Special Survey Fee.... £ 97 : 0 : 0 } 10 SEP 1929
Truslow 7. 6. 8 } Received by me,
 Travelling Expenses, if any £ } 13. 9. 29

I am of opinion the Vessel should be Classed *+A.1. Freeboard*
"For service between
RAMES WARE & TALAIMANAAR
Fitted for Oil fuel F.P. above
150° F. 8.29.
 Signature *George Nicol*
 Surveyor to Lloyd's Register of Shipping.

State whether the Vessel has been built under Special Survey.....Yes

Signature

Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to GLASGOW Date of issue 13/9/29

Committee's Minute GLASGOW 10 SEP 1928

Character assigned $\frac{1}{2}$ A1.

With foreboard

For Service between Rameswaram & Talaimanaar

+ L. Mc 8.29 70

Fitted for oil fuel 8.29 Z.P. above 150° F

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

The following Plans forwarded herewith
Midship section vessel as approved
do. vessel as built

- ✓ Profile and Deck plan
- ✓ Pumping Plan
- ✓ Rudder and Stern frame
- ✓ Propeller Brackets
- ✓ Fore and aft peaks, Oil fuel Bunker and Amended Tunnel Plan
- ✓ Outline profile and deck plans
- ✓ Stiffening in way of Cargo Conveyors
- ✓ Oil fuel bunker filling arrangement.

Reports

Rudder Frame

Stern do

Propeller Brackets

Particulars of **Drop Test** of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower	17. 0. 7	S.T.	165	22. 3. 29
2nd "	16. 3. 21	S.T.	163	22. 3. 29
3rd "				

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ft., R.Q.D. ft., Bridge ft., Forecastle ft.

(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated

No. and Material of Decks (this information is to be given as it should appear in the Register Book) **1 Deck (teak) and Promenade Deck**

Official No. : Signal Letters

particulars of composition **1 Coat bitumastic solution and 1 Coat bitumastic enamel** Is bottom of Vessel coated with cement **No** if not give

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,	16.16	31
Double bottom, if under Engines only,			Deep tank, aft, Amidships (oil fuel bunker)	13.0	57
Double bottom, if under Boilers only,			Deep tank, forward,		79.5
Double bottom, forward,			Other tanks, if fitted,		
Total capacity of double bottom			(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. **6980**

Date **12. 3. 29**

Dates of Surveys held while building

1929 Jan 22. 24. 29. 31 Feb. 5. 8. 15. 19. 22. 26 Mar. 1. 5. 8. 11. 15. 19. 22. 27. 29 Apr. 2. 5. 10. 16. 19. 23
30 May 2. 7. 9. 14. 16. 20. 23. 29. 31 Jun. 3. 6. 10. 18. 26 July 4. 10. 26. 30 Aug. 9. 13. 15. 16. 19. 20. 24. 31

Total No. of Visits **53**