

3 Decks.

IRON OR STEEL STEAMER.

(Received at London Office)

22 DEC 1891

No. 11177 Survey held at Dumbarton Date of completion of report 21 December 1891 Port of Glasgow
Steel Sew By "Ruahine" N.W. "Antonio Lopez" Rig - Brig
THREE DECKED VESSEL.
CLASS 100A1
Master H. E. Greenstreet
Year of appointment (1) As Master in service of owner of present vessel: 1887
(2) As Master of this vessel: 1891
Built at Dumbarton
When built 1891 Launched 20 Oct 1891
By whom built W. Denny & Co.
Owners New Zealand Shipping Co. Ltd.
Managers
(Where necessary to be entered in Reg. Book.)
Residence 138 Leadenhall St. London E.C.
Port belonging to Plymouth
Destined Voyage Surveyed while Building, Afloat, in Dry Dock

on Deck	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	top of Floors to Upper Deck Beams	Feet.	Inches.	Power of	Horse	No. of Decks with flat laid
Rule	428	0	Moulded	50	0	Do.	Do.	23	6 1/2	Engines	624	2

of Ship per Register, Length 420.0 breadth 50.15 depth 31.6 Moulded depth, ft. 34.6 To Upper Dk. Beam, upper Dk., 12 1/2 ins.

FORGINGS or CASTINGS.	Inches in Ship.	Inches per Rule.	KEELSONS & STRINGERS.	Inches in Ship.	Inches per Rule.
Bar or Side Plates, depth and thickness	11 x 1 1/2	11 x 1 1/2	CENTRE LINE KEELSON, Vertical Plate above floor, Through Plate, or Intercoastal Plate		
moulding and thickness	12 x 3/8	12 x 3/8	Rider Plate		
POST for Rudder do. do.	12 x 7/8	12 x 7/8	Bull Plate to Intercoastal Keelson		
for Propeller	12 x 7/8	12 x 7/8	Horizontal Plates on Floors		
PIECE of Rudder, diameter at head	10 1/2	10 1/2	Angles		
do. at heel (riddle)	5 1/4	5 1/4	SIDE KEELSON, Angles		
FR, how constructed	Forced frame Centre plate		Bull on Plate above floor, for length		
the Rudder be unshipped afloat?	Yes		Intercoastal Plate, for length		
FRAMING.			Attached to outside Plating with Angle		
Angles on Bars for 3 length amidships	7 x 3 1/2 x 3/4	7 x 3 1/2 x 3/4	BILGE KEELSON, Angles		
at each end	4 x 3 1/2 x 3/4	4 x 3 1/2 x 3/4	Bull on Plate above floor, for length		
way of Double Bottoms	3 1/2 x 3 1/2 x 10	3 1/2 x 3 1/2 x 10	Intercoastal Plate for length		
of Frames from moulding edge to	30	30	Attached to outside Plating with Angle		
riding edge, all fore and aft	4 1/2 x 3 1/2 x 10	4 1/2 x 3 1/2 x 10	BILGE STRINGER Angles	3 1/2	3 1/2
USED FRAME Angles	4 1/2 x 3 1/2 x 10	4 1/2 x 3 1/2 x 10	Bull Plate for length	3 1/2	3 1/2
at mid-line for 3 length amidships			Intercoastal Plate for length	3 1/2	3 1/2
way of Engine and Boilers			Attached to outside Plating with Angle	3 1/2	3 1/2
width of the ends of vessel			BULB or INTERCOASTAL PLATE for whole length	10 1/2	10 1/2
at 3 the half breadth, as per Rule			Attached to outside Plating with Angle	3 1/2	3 1/2
BRACKETS in Cell Dble Bottoms			Upper Deck Stringer Plate, on ends of Beams, breadth and thickness	67	67
Distance apart	30	30	Angle on ditto	5 x 5 x	5 x 5 x
GIRDER, in Dbl Btm, depth & thickness	48	48	Tie Plates fore and aft, outside Hatchways		
Angles, Top 4 x 4 x 10 Bottom			Flat of Dk * Iron Steel, for whole lng	34	34
WDERS, number and thickness	2	2	How fastened to Beams	34	34
Angles	3 1/2 x 3 1/2 x 10	3 1/2 x 3 1/2 x 10	Middle Deck Stringer Plate, br'dth & thickness	67	67
PLATE, dpth (excl. of flange) & thickness	34	34	Angles on ditto, No. 2	4 x 4 x	4 x 4 x
Angles	4 x 4 x 10	4 x 4 x 10	Tie Plates outside Hatchways		
BOTTOM PLATING, breadth and thickness of Middle Line Strake	42	42	Diagonal Tie Plates on Bms, No. of p's.		
in Engine and Boiler space	11.20	11.20	Flat of Dk * Iron Steel, for whole lng	3	3
Remainder in Holds	9	9	Wood P. Pine Material & thickness	3	3
S, Upper Deck, Single Angle, Bulb	8 x 3 1/2 x 3 1/2	8 x 3 1/2 x 3 1/2	How fastened to Beams	56	56
Angle, Plate or Tee Bulb			Lower Deck Stringer Plate, br'dth & thickness	56	56
Angles on upper edge			Angles on ditto, No. 2	4 x 4 x 9	4 x 4 x 9
Average space	30	30	Tie Plates, outside Hatchways	24	24
S, Middle Deck, Single Angle, Bulb	8 x 3 1/2 x 3 1/2	8 x 3 1/2 x 3 1/2	Flat of Deck * Material and thickness		
Angle, Plate or Tee Bulb			How fastened to Beams		
Angles on upper edge			HOLD or ORLOP STRINGER PLATE, br'dth & thickness		
Average space	30	30	Let's Stringer Plate attached to the outside Plating?		
S, Lower Deck, Single Angle, Bulb	12	12	Angles on ditto, No.		
Angle, Plate or Tee Bulb			Tie Plates outside Hatchways		
Angles on upper edge			Flat of Deck * Material and thickness		
Average space	60	60	How fastened to Beams		
HOLD or ORLOP, Plate or Tee Bulb			POOP DECK STRINGER PLATE, breadth & thickness	30	30
Angles on upper edge			Angle on ditto	3 x 3 x 8	3 x 3 x 8
Average space	30	30	Tie Plates	15	15
POOP and BRIDGE DECK, Angle, Bulb	6 1/2 x 3 x 8	6 1/2 x 3 x 8	Flat of Deck, Material and thickness	25	25
Angle, Plate or Tee Bulb			Bridge Deck Stringer Plate, breadth & thickness	40	40
Angles on upper edge			Angle on ditto	4 x 4 x 9	4 x 4 x 9
Average space	30	30	Tie Plates	25	25
S, Forecastle Deck, Angle, Bulb	6 1/2 x 3 x 8	6 1/2 x 3 x 8	Flat of Deck, Material and thickness	25	25
Angle, Plate or Tee Bulb			Forecastle Deck Stringer Plate, br'dth & thickness	30	30
Angles on upper edge			Angle on ditto	3 x 3 x 8	3 x 3 x 8
Average space	30	30	Tie Plates	15	15
LARS, In 'tween Decks, Size and Spacing	3 1/2 x 60	3 1/2 x 60	Flat of Deck, Material and thickness	25	25
" Hold	4 x 60	4 x 60	PLATING.		
EB FRAMES, In Fore Body, No. and spacing	13	13	FLAT PLATE KEEL, breadth and thickness		
" " Br'dth. & Thickness	15 1/8	15 1/8	" Bilge on the thickness & length applied		
" No. of Side Stringers	2	2	PLATES in Garboard Strakes, br'dth & thickness	36	36
EB FRAMES, In After Body, No. and spacing	13	13	from Garboard to lower part of Bilges	13	13
" " Br'dth. & Thickness	15 1/8	15 1/8	State Thickness of Plating in way of Double Bottom.		
" No. of Side Stringers	2	2	Bilges, number of Strakes and thickness	15	15
" Size of Angles or Tee Bars to Web Frames	3 1/2 x 3 1/2 x 10	3 1/2 x 3 1/2 x 10	" " Bilge, or increased thickness, and length applied 3 strakes		
PACKET PLATES to Stringers between			from up. prt. of Bilge to lr. edge of Sh' strake		
Stringers			Sheerstrake, breadth and thickness	46	46
			Of d'bling at Sh' stk. & length appl.	27	27
			Poop Sides	9	9
			Bridge do.	12	12
			Forecastle do.	7	7
			Lengths of Plating	about 20 ft	about 20 ft

Order for Special Survey No. 24609
Date 19th March 1891
Order for Ordinary Survey No. ✓
Date ✓
No. 458 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 } 1891. Mar 24. 26. April 3. 6. 10. 14. 17. 21. 24. 27
2nd. On the plating during the process of riveting } May 1. 5. 8. 12. 15. 19. 22. 26. June 2. 5. 12. 19. 25. 30. July
3rd. When the beams were in and fastened and before the decks were laid } 7. 10. 14. 20. 21. Aug 4. 7. 11. 14. 22. Sept. 2. 11. 15. 18. 22. 29. Oct
4th. When the ship was complete, and before the plating was finally coated or cemented ... } 6. 8. 13. 15. 20. 30 Nov 3. 7. 10. 13. 14. 21. 24. 27
5th. After the ship was launched and equipped } Dec 3. 8. 11. 16. 18.

Total No. of Visits 61

State dates and initials of letters respecting this case.

11/2/91 26/2/91 12/3/91 5/6/91 11/7/91 14/7/91 18/11/91

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

This is a screw steamer, built of steel, rigged as a brig - having a topgallant forecabin - bridge house and poop. She has been built in accordance with the approved plans attached hereto and with the Rules generally.

She has been built for the purpose of bringing meat and dairy produce in a frozen condition from New Zealand to London, and her hold and tween decks are insulated for refrigerating requirements. The tween decks are also fitted with Haslam's refrigerating engines.

The vessel is also supplied with an installation of electric lighting by Messrs. J. & D. Cunningham & Co. - a survey report on the same being attached hereto.

The cellular double bottom has been tested with water pressure as required by the Rules and found satisfactory.

The materials and workmanship are good.

The studs of the bow and chain cable are in proper proportion of thickness to the links.

See Secretary's letter on this subject dated 18 Nov 1891.

The Owners have not desired a freeboard to be assigned by this Society.

PARTICULARS FOR RECORD in the REGISTER BOOK. - Length of Poop 54 ft., R.Q.D. or Break ✓ ft., Bridge Dk. 160 ft., F'castle 50 ft. (in feet and tenths) where the Poop is joined to the B.D., this should be distinctly stated.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 2 dks (upper and main dks steel - w.s.) 3 tiers beams and web frame
Official No. ✓; Signal Letters ✓

PARTICULARS OF WATER BALLAST. -

Double bottom, aft, length ✓ and water capacity in tons ✓. Double bottom, forward, length ✓ and water capacity in tons ✓.
Double bottom, under engines and boilers, length ✓ and water capacity in tons ✓. If under engine only, or boilers only, state which ✓.
Double bottom, constructed on the cellular system, length 341 and water capacity in tons 945.
Fore peak tank, water capacity in tons ✓. After peak tank, water capacity in tons ✓.
Midship deep tank, length ✓ and water capacity in tons ✓. Other tanks, if fitted, length ✓ and water capacity in tons ✓.
The above have all been tested as required by the Rules.
(If necessary, furnish further information by sketch.)

How are the surfaces preserved from oxidation? Inside Portland Cement and Paint Outside Paint

FREEBOARD assigned by the Committee, as per Secretary's Letter dated not assigned by Society.
In Summer ft. ins. In Winter ft. ins. To top of Wood, Iron or Steel Upper Deck.
For Winter in North Atlantic ft. ins.
Fresh Water above the centre of disc ft. ins.

Amount of Entry Fee £ 5 : - : - is received by me, ✓ * Certificate to be sent to Glasgow
Special £ 142 : 19 : 6 18/12/1891
Certificate £ - : - : -

Travelling Expenses, if any £ - : - : -
In opinion this Vessel should be Classed 100 A 1 Steel
2 dks (upper + main dks steel - w.s.) 3 tiers beams and web frame
Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute THURS. 24 DEC 1891 Cell. Dble Bottom, as above. TUES. 9 FEB 1892
Character assigned 100 A 1 Steel
+ Lmb 12/91 2 dks (Steel w.s.) 3 tiers
Lancp Electric Light
✓ Electric Light
It is submitted that this vessel appears eligible to be classed 100 A 1 (Steel) as recommended 2 dks steel w.s.) 3 tiers beams Cell. D.B. (particulars above) Electric Light