

THUR. 14 JUN 1900

7.8. Hull Mark 12715 No. 12688

# REPORT ON MACHINERY.

Port of Greenock

SAT. 16 JUN 1900

Received at London Office

No. in Survey held at Port Glasgow Date, first Survey 31<sup>st</sup> March Last Survey 15<sup>th</sup> May 1900  
 Reg. Book. on the Steel Twin S.S. "S. Luiz" (Murdoch & Murray's No 174) (Number of Visits 9) Tons <sup>Gross</sup>            <sub>Net</sub>             
 Master            Built at Port Glasgow By whom built Murdoch & Murray When built 1900-5  
 Engines made at Glasgow By whom made Lees, Anderson & Co. when made 1900.  
 Boilers made at            By whom made            when made             
 Registered Horse Power            Owners            Port belonging to             
 Nom. Horse Power as per Section 28            Is Electric Light fitted           

**ENGINES, &c.—Description of Engines** No. of Cylinders            No. of Cranks           

Diameter of Cylinders            Length of Stroke            Revolutions per minute            Diameter of Screw shaft            as per rule            as fitted           

Diameter of Tunnel shaft            as per rule            as fitted            Diameter of Crank shaft journals            Diameter of Crank pin            Size of Crank webs           

Diameter of screw            Pitch of screw            No. of blades            State whether moveable            Total surface           

No. of Feed pumps            Diameter of ditto            Stroke            Can one be overhauled while the other is at work           

No. of Bilge pumps            Diameter of ditto            Stroke            Can one be overhauled while the other is at work           

No. of Donkey Engines            Sizes of Pumps            No. and size of Suctions connected to both Bilge and Donkey pumps           

In Engine Room            In Holds, &c.           

No. of bilge injections            sizes            Connected to condenser, or to circulating pump            Is a separate donkey suction fitted in Engine room & size           

Are all the bilge suction pipes fitted with roses            Are the roses in Engine room always accessible            Are the sluices on Engine room bulkheads always accessible           

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates            Are the discharge pipes above or below the deep water line           

Are they each fitted with a discharge valve always accessible on the plating of the vessel Yes Are the blow off cocks fitted with a spigot and brass covering plate Yes

What pipes are carried through the bunkers            How are they protected           

Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times           

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges           

When were stern tube, propellers & screw shaft, and all connections examined in dry dock Before launching Is the screw shaft tunnel watertight           

Is it fitted with a watertight door            worked from           

**BOILERS, &c.—** (Letter for record           ) Total Heating Surface of Boilers            Is forced draft fitted           

No. and Description of Boilers            Working Pressure            Tested by hydraulic pressure to           

Date of test            Can each boiler be worked separately            Area of fire grate in each boiler            No. and Description of safety valves to each boiler           

Area of each valve            Pressure to which they are adjusted            Are they fitted with easing gear           

Smallest distance between boilers or uptakes and bunkers or woodwork            Mean diameter of boilers           

Length            Material of shell plates            Thickness            Description of riveting: circum. seams            long. seams           

Diameter of rivet holes in long. seams            Pitch of rivets            Lap of plates or width of butt straps           

Per centages of strength of longitudinal joint            rivets            Working pressure of shell by rules            Size of manhole in shell            plate           

Size of compensating ring            No. and Description of Furnaces in each boiler            Material            Outside diameter           

Length of plain part            top            Thickness of plates            crown            Description of longitudinal joint            No. of strengthening rings            bottom           

Working pressure of furnace by the rules            Combustion chamber plates: Material            Thickness: Sides            Back            Top            Bottom           

Pitch of stays to ditto: Sides            Back            Top            If stays are fitted with nuts or riveted heads            Working pressure by rules           

Material of stays            Diameter at smallest part            Area supported by each stay            Working pressure by rules            End plates in steam space:           

Material            Thickness            Pitch of stays            How are stays secured            Working pressure by rules            Material of stays           

Diameter at smallest part            Area supported by each stay            Working pressure by rules            Material of Front plates at bottom           

Thickness            Material of Lower back plate            Thickness            Greatest pitch of stays            Working pressure of plate by rules           

Diameter of tubes            Pitch of tubes            Material of tube plates            Thickness: Front            Back            Mean pitch of stays           

Pitch across wide water spaces            Working pressures by rules            Girders to Chamber tops: Material            Depth and thickness of girder at centre            Length as per rule            Distance apart            Number and pitch of Stays in each           

Working pressure by rules            Superheater or Steam chest; how connected to boiler            Can the superheater be shut off and the boiler worked separately           

Diameter            Length            Thickness of shell plates            Material            Description of longitudinal joint            Diam. of rivet holes           

Pitch of rivets            Working pressure of shell by rules            Diameter of flue            Material of flue plates            Thickness           

If stiffened with rings            Distance between rings            Working pressure by rules            End plates: Thickness            How stayed           

Working pressure of end plates            Area of safety valves to superheater            Are they fitted with easing gear           



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**DONKEY BOILER—**

Description \_\_\_\_\_

Made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_

Working pressure \_\_\_\_\_ tested by hydraulic pressure to \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of safety valves \_\_\_\_\_

No. of safety valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ If fitted with easing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_

Diameter of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_

Description of riveting long. seams \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_

Lap of plating \_\_\_\_\_ Per centage of strength of joint \_\_\_\_\_ Rivets \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_ Radius of do. \_\_\_\_\_ No. of Stays to do. \_\_\_\_\_

Dia. of stays \_\_\_\_\_ Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_ Thickness of furnace plates \_\_\_\_\_ Description of joint \_\_\_\_\_

Thickness of furnace crown plates \_\_\_\_\_ Stayed by \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_

Working pressure of furnace by rules \_\_\_\_\_ Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_

**SPARE GEAR.** State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

Dates { During progress of work in shops - - } 1900 Mar 31. April 11. 17. 24. 30. May 7. 9. 11. 15.

{ During erection on board vessel - - }

while building { Total No. of visits } 9.

**General Remarks** (State quality of workmanship, opinions as to class, &c.)

**ENGINES**—Length of stern bush \_\_\_\_\_ Diameter of crank shaft journals \_\_\_\_\_ as per rule \_\_\_\_\_ as fitted \_\_\_\_\_ Diameter of thrust shaft under collars \_\_\_\_\_

**BOILERS**—Range of tensile strength \_\_\_\_\_ Are they welded or flanged \_\_\_\_\_ **DONKEY BOILERS**—No. \_\_\_\_\_ Range of tensile strength \_\_\_\_\_

Is the approved plan of main boiler forwarded herewith \_\_\_\_\_

Is the approved plan of donkey boiler forwarded herewith \_\_\_\_\_

*Stern tubes, screw shafts, propellers and sea-connections fitted in place & found in order.*

*This vessel proceeds to Glasgow to receive her machinery.*

Certificate (if required) to be sent to Committee's Minute.

The amount of Entry Fee. . . . . £	:	:	When applied for,
Special . . . . . £	:	:	18.....
Donkey Boiler Fee . . . . . £	:	:	When received,
Travelling Expenses (if any) £	:	:	18.....

*R. Elliott.*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

TUES. 19 JUN 1900

Assigned



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