

REPORT ON MACHINERY.

Port of London.

SAT. 15 OCT 1898

Received at London Office 15 OCT 1898

No. in Survey held at London.

Date, first Survey July 17

Last Survey Oct 13th 1898.

Reg. Book.

430 on the Donkey Boiler for the S.S. Lismore Castle

(Number of Visits)

Tons } Gross
 } Net

Master J. Rose.

Built at Gls.

By whom built Burday Carter & Co.

When built 1891.

Engines made at Gls

By whom made Burday Carter & Co.

when made 1891

2 Boilers made at London.

By whom made Fraser and Neave Ltd

when made 1898

Registered Horse Power 479.

Owners (S. Currie & Co.)

Port belonging to London.

Nom. Horse Power as per Section 28

Is Electric Light fitted

PLATE

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 _____ Diameter of Crank shaft journals _____ Diameter of Crank pin _____ Size of Crank webs _____ as fitted

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 sections _____ 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 _____ Are they Valves or Cocks _____

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 _____ Are the blow off cocks fitted with a spigot and brass covering plate _____

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, propeller, screw shaft, and all connections examined in dry dock _____ 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 _____

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

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

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 _____

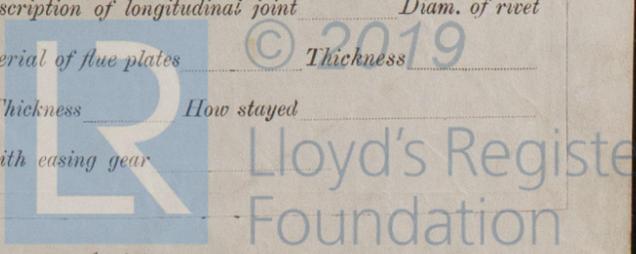
Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____ Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____

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 _____

Is a Report also sent on the Hull of the Ship? If not, state whether, and when, it will be sent?

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DONKEY BOILER— Description *Cylindrical Multitubular Single-ended.*
 Made at *Bramley, E.* By whom made *Fraser & Neave Ltd* When made *1898* Where fixed *Stothold*
 Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs*. No. of Certificate *377*. Fire grate area *16.25 sq ft* Description of safety valves *Spring.*
 No. of safety valves *2* Area of each *6.5 sq ft* Pressure to which they are adjusted *80 lbs* If fitted with easing gear *yes*. If steam from main boilers can enter the donkey boiler *no*. Diameter of donkey boiler *10'6"* Length *8'0"* Material of shell plates *Steel* Thickness *19/32"*
 Description of riveting long seams *Welded Lap.* Diameter of rivet holes *7/8"* Whether punched or drilled *Drilled.* Pitch of rivets *4 3/4"*
 Lap of plating *6 7/8"* Per centage of strength of joint *73%* Rivets *7/8"* Thickness of shell crown plates *✓* Radius of do. *✓* No. of Stays to do. *—*
 Dia. of stays. *2 1/4"* Diameter of furnace Top *2'10"* Bottom *—* Length of furnace *5'9"* Thickness of furnace plates *7/16"* Description of joint *welded.* Thickness of furnace crown plates *7/16"* Stayed by *—* Working pressure of shell by rules *84 lbs.*
 Working pressure of furnace by rules *82 lbs.* 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 of Survey while building
 During progress of work in shops - -
 During erection on board vessel - -
 Total No. of visits

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

This Donkey Boiler has been built under Special Survey, the material and workmanship are good, and the boiler has been tested by hydraulic pressure to 160 lbs per sq in; at which pressure it showed no signs of weakness.

The Boiler is to be fitted on board the vessel's return to London.

Certificate (if required) to be sent to
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee..	£	:	:	When applied for,
Special	£	2	2	0
Donkey Boiler Fee .. .	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	

W. Salmon.
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

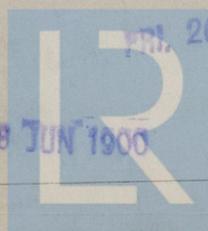
FRI. 20 JAN 1899

TUES. 13 JUN 1899

Assigned

TUES. 11 SEP 1900

FRI. 8 JUN 1900



FRI. 26 JAN 1900

Lloyd's Register Foundation