

REPORT ON MACHINERY.

Port of *Glasgow*

Received at London Office

THURS. 1 DEC 1892

No. in Reg. Book.

Survey held at *Glasgow*

Date, first Survey *10th March*

Last Survey *18th Novemb^r 1892.*

(Number of Visits *33*)

on the

S. S. "Rouen"

Tons { Gross *43*
Net *5*

Master *Mc Cameron*

Built at *Glasgow*

By whom built *J. Fletcher & Co*

When built *1892*

Engines made at *Glasgow*

By whom made *J. Fletcher & Co*

when made *1892*

Boilers made at *Glasgow*

By whom made *J. Neilson & Son*

when made *1892*

Registered Horse Power

Owners *Joseph Constant*

Port belonging to *London*

Nom. Horse Power as per Section 28

ENGINES, &c.—

Description of Engines *Compound*

No. of Cylinders *Two*

Diameter of Cylinders *13" & 26"* Length of Stroke *18"* Revolutions per minute *about 125* Diameter of Screw shaft *as per rule 4.8" as fitted 5 1/8"*
Diameter of Tunnel shaft *as per rule 4.6" as fitted 5"* Diameter of Crank shaft journals *5"* Diameter of Crank pin *5"* Size of Crank webs *6" x 3"*
Diameter of screw *8'-6"* Pitch of screw *6'-3"* No. of blades *3*. State whether moveable *not*. Total surface *20 sq ft*
No. of Feed pumps *One* Diameter of ditto *2"* Stroke *9"* Can one be overhauled while the other is at work *—*
No. of Bilge pumps *One* Diameter of ditto *2"* Stroke *9"* Can one be overhauled while the other is at work *—*
No. of Donkey Engines *One* Sizes of Pumps *Vauxhall 809* No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room *4. 2"* In Holds, &c. *2. 2"*

No. of bilge injections *1*. sizes *2"* Connected to ~~condensers~~ *or* to circulating pump *yes* Is a separate donkey suction fitted in Engine room & size *yes 2"*
Are all the bilge suction pipes fitted with roses *yes* Are the roses in Engine room always accessible *yes* Are the sluices on Engine room bulkheads always accessible *none*
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 *yes* Are the discharge pipes above or below the deep water line *above*
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 *none* How are they protected *—*
Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times *yes*
Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges *yes*
When were stern tube, propeller, screw shaft, and all connections examined in dry dock *on stocks* Is the screw shaft tunnel watertight *none*
Is it fitted with a watertight door *—* worked from *—*

BOILERS, &c.—

(Letter for record *S.*)

Total Heating Surface of Boilers *about 670.*

No. and Description of Boilers *One Multitubular* Working Pressure *100 lbs* Tested by hydraulic pressure to *200 lbs*
Date of test *4.8.92* Can each boiler be worked separately *—* Area of fire grate in each boiler *24 sq ft* No. and Description of safety valves to each boiler *two direct spring* Area of each valve *4"* Pressure to which they are adjusted *100 lbs* Are they fitted with easing gear *yes* Smallest distance between boilers or uptakes and bunkers or ~~work~~ *8"* Mean diameter of boilers *9'-0"*
Length *9'-0"* Material of shell plates *steel* Thickness *1 1/32* Description of riveting: circum. seams *d. riv. lap* long. seams *d. butt str.*
Diameter of rivet holes in long. seams *7/8"* Pitch of rivets *3 5/8"* Lap of plates or width of butt straps *7 1/2" & 9 1/2"*
Per centages of strength of longitudinal joint *83.* Working pressure of shell by rules *105 lbs* Size of manhole in shell *12" x 16"*
Size of compensating ring *in shells* No. and Description of Furnaces in each boiler *two plain* Material *steel* Outside diameter *31"*
Length of plain part *top 6.3 bottom 3.3* Thickness of plates *top 1 1/32 bottom 1 1/32* Description of longitudinal joint *d. butt str.* No. of strengthening rings *—*
Working pressure of furnace by the rules *100 lbs* Combustion chamber plates: Material *steel* Thickness: Sides *1 1/2"* Back *1 1/2"* Top *1 1/32* Bottom *1 1/32*
Pitch of stays to ditto: Sides *8 x 8"* Back *8 x 8 1/2"* Top *8 x 10 1/4"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *103 lbs*
Material of stays *steel* Diameter at smallest part *1.22* Area supported by each stay *64 sq in* Working pressure by rules *153 lbs* End plates in steam space:
Material *steel* Thickness *3/4"* Pitch of stays *18 x 13"* How are stays secured *d. nuts* Working pressure by rules *100 lbs* Material of stays *steel*
Diameter at smallest part *3"* Area supported by each stay *234 sq in* Working pressure by rules *105 lbs* Material of Front plates at bottom *steel*
Thickness *7/8"* Material of Lower back plate *steel* Thickness *1/2"* Greatest pitch of stays *8 3/4"* Working pressure of plate by rules *100 lbs*
Diameter of tubes *3 1/2"* Pitch of tubes *4 3/4"* Material of tube plates *steel* Thickness: Front *7/8"* Back *7/8"* Mean pitch of stays *11 7/8"*
Pitch across wide water spaces *14"* Working pressures by rules *150 lbs by 46* Girders to Chamber tops: Material *steel* Depth and thickness of girder at centre *6" x 7 1/8"* Length as per rule *24"* Distance apart *10 1/2"* Number and pitch of Stays in each *two 8"*
Working pressure by rules *112 lbs* Superheater or Steam chest; how connected to boiler *none* 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 *—*

No DONKEY BOILER— Description

11918. gcs

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:— *Top and bottom end bolts. Main - bearing and coupling bolts. Feed and bilge pump valves. —*

The foregoing is a correct description,

John Fletcher & Co. Manufacturer.s

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

The above mentioned engines and boiler have been built under special survey and are of fairly good workmanship and design. The safety valves have been adjusted and the machinery tried under steam. — The machinery is now in my opinion eligible to the notation: +L.M.C. 11.92. —

One forging report appended

It is submitted that this vessel is eligible for THE RECORD

+L.M.C. 11-92

H.A.

1-12-92

Certificate (if required) to be sent to

The amount of Entry Fee.. £ *1* : - : When applied for, *25/11/92*
 Special £ *8* : " : *31*
 Donkey Boiler Fee £ : : When received, *31/12/92*
 Travelling Expenses (if any) £ : : *18*

John Sanderson

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

Committee's Minute

MACHINERY CERTIFICATE WRITTEN. **FRI 2 DEC 1892**

Assigned

+ L.M.C. 11.92