

## REPORT ON MACHINERY.

No. 16352

Port of *Newport, Mon.*Received at London Office *FRI. 14 OCT 1910*No. in Survey held at *Chepstow*Date, first Survey *Aug 4*Last Survey *Sept 21* 1910

Reg. Book.

on the *Steel Screw Steamer "The Forester"*(Number of Visits *4*)

Master

Built at *Chepstow*By whom built *E. Fitch & Co. Ltd*Tons { Gross *190.78*Net *78.79*When built *1910*Engines made at *Gloucester*By whom made *R. Sissons & Co. (18923)*when made *1910*Boilers made at *Glasgow*By whom made *Lindley Burnett & Co. (170258)*when made *1910*Registered Horse Power *41*Owners *William Jones & Sons*Port belonging to *Gloucester*Nom. Horse Power as per Section 28 *41*Is Refrigerating Machinery fitted for cargo purposes *no*Is Electric Light fitted *no*

## ENGINES, &amp;c.—Description of Engines

No. of Cylinders

No. of Cranks

Dia. of Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

as per rule

as fitted

Material of

screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Is the after end of the liner made water tight

in the propeller boss If the liner is in more than one length are the joints burned

If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If two

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush

Dia. of Tunnel shaft as per rule as fitted

Dia. of Crank shaft journals as per rule as fitted

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. 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 *One*Sizes of Pumps *Duplex 3 1/2 x 2 1/2 x 4*

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

In Engine Room

*Three - 2" diam.*

In Holds, &amp;c.

*Two - 2" and one in fore*No. of Bilge Injections *One*sizes *2 1/2"*

Connected to condenser, or to circulating pump

*Under a separate Donkey Suction fitted in Engine room & size 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 *Yes*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*

Dates of examination of completion of fitting of Sea Connections

*Aug 4 Sept 1 of Stern Tube**Aug 4 Sept 1*

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record *S*) Manufacturers of Steel

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately *Yes*Area of fire grate in each boiler *33 sq*

No. and Description of Safety Valves to

each boiler *Two, Spring*Area of each valve *3-1/4*Pressure to which they are adjusted *125 lbs*Are they fitted with easing gear *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *20"*

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. 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

Thickness of plates

crown

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

plates

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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

Lloyd's Register

F598-0008

W598-0019



VERTICAL DONKEY BOILER—

Manufacturers of Steel

No. \_\_\_\_\_ Description \_\_\_\_\_

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

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

Valves \_\_\_\_\_ No. of Safety Valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Date of adjustment \_\_\_\_\_

If fitted with easing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_ Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_

Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Descrip. of riveting long. seams \_\_\_\_\_

Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plating \_\_\_\_\_ Per centage of strength of joint \_\_\_\_\_ Rivets \_\_\_\_\_ Plates \_\_\_\_\_

Working pressure of shell by rules \_\_\_\_\_ 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 \_\_\_\_\_

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

Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_ Dates of survey \_\_\_\_\_

SPARE GEAR. State the articles supplied:—

*Spare gear supplied as per Rules*

*(Letter 17/10/10)*

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 \_\_\_\_\_

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

Dates of Examination of principal parts—Cylinders \_\_\_\_\_ Slides \_\_\_\_\_ Covers \_\_\_\_\_ Pistons \_\_\_\_\_ Rods \_\_\_\_\_

Connecting rods \_\_\_\_\_ Crank shaft \_\_\_\_\_ Thrust shaft \_\_\_\_\_ Tunnel shafts \_\_\_\_\_ Screw shaft \_\_\_\_\_ Propeller \_\_\_\_\_

Stern tube *4/8/10* Steam pipes tested *1/9/10* Engine and boiler seatings *1/9/10* Engines holding down bolts *9/9/10*

Completion of pumping arrangements *21/9/10* Boilers fixed *9/9/10* Engines tried under steam *9/9/10*

Main boiler safety valves adjusted *9/9/10* Thickness of adjusting washers *4-1/2 3-1/2*

Material of Crank shaft \_\_\_\_\_ Identification Mark on Do. \_\_\_\_\_ Material of Thrust shaft \_\_\_\_\_ Identification Mark on Do. \_\_\_\_\_

Material of Tunnel shafts \_\_\_\_\_ Identification Marks on Do. \_\_\_\_\_ Material of Screw shafts \_\_\_\_\_ Identification Marks on Do. \_\_\_\_\_

Material of Steam Pipes *Copper* Test pressure *240 lbs*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery and boiler*

*have been fitted on board, Engines tried under steam and the main steam pipe tested by hydraulic pressure to 240 lbs square inch, the pumping arrangement fitted in accordance with the approved plans.*

*The vessel is now entitled to the record + L.M.C. 10-10 in the Register Book*

It is submitted that this vessel is eligible for THE RECORD. *42mc 9.10.*

*28/9/10*  
*18/10/10*

The amount of Entry Fee. . . £ : : When applied for, *13/10/1910*  
Special . . . . . £ : :  
Donkey Boiler Fee . . . . . £ : :  
Travelling Expenses (if any) £ *3/4* : : When received, *6.6*

Committee's Minute

Assigned

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

FRI. 24 MAR 1911



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Certificate (if required) to be sent to \_\_\_\_\_

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