

REPORT ON MACHINERY.

Port of

Received at London Office

13

No. in Survey held at

Donkey Boiler

Date, first Survey

Last Survey

18

Reg. Book.

(Number of Visits)

on the

S. S. Prathcarron

Tons } Gross
Net

Master

Built at

By whom built

When built

Engines made at

By whom made

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

See attached report.

ENGINES, &c.—

Description of Engines

See attached report.

No. of Cylinders

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 stices 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

No. and Description of Boilers

one

Working Pressure

100

Tested by hydraulic pressure to

200

Date of test

18.4.94

Can each boiler be worked separately

—

Area of fire grate in each boiler

18.6

No. and Description of safety valves to

each boiler

two spring

Area of each valve

3.14

Pressure to which they are adjusted

100

Are they fitted

with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

15" in bunker recess

Mean diameter of boilers

102"

Length

8'.0"

Material of shell plates

Steel

Thickness

9/16

Description of riveting: circum. seams

Lap & R.

long. seams

Lap & R.

Diameter of rivet holes in long. seams

7/8

Pitch of rivets

4 1/2"

Lap of plates or width of butt straps

6 3/4

Per centages of strength of longitudinal joint

80.6

plate

80.55

Working pressure of shell by rules

102 lb.

Size of manhole in shell

12 x 16

Size of compensating ring

Mo. Nuts

No. and Description of Furnaces in each boiler

two, Leper

Material

Steel

Outside diameter

3 1/2 x 2 1/4"

Length of plain part

top 5/16

Thickness of plates

bottom 3/16

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

124

Combustion chamber plates: Material

Steel

Thickness: Sides

7/16

Back

7/16

Top

8/16

Bottom

7/16

Pitch of stays to ditto: Sides

7 1/2

Back

7 3/8

Top

7 x 8

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

108

Material of stays

Steel

Diameter at smallest part

9/16

Area supported by each stay

7 3/8 x 7 3/8

Working pressure by rules

146

End plates in steam space:

Material

Steel

Thickness

3/4

Pitch of stays

15 7/8

How are stays secured

D. Nuts

Working pressure by rules

100

Material of stays

Steel

Diameter at smallest part

3 1/4

Area supported by each stay

206

Working pressure by rules

150

Material of Front plates at bottom

Steel

Thickness

1/16

Material of Lower back plate

Steel

Thickness

9/16

Greatest pitch of stays

7 3/8

Working pressure of plate by rules

100

Diameter of tubes

3"

Pitch of tubes

4 1/2"

Material of tube plates

Steel

Thickness: Front

3/4

Back

1/16

Mean pitch of stays

16.3

Pitch across wide water spaces

13

Working pressures by rules

160, 100

Girders to Chamber tops: Material

Iron

Depth and

thickness of girder at centre

4 x 2 x 1"

Length as per rule

21"

Distance apart

8"

Number and pitch of Stays in each

2 x 7"

Working pressure by rules

122

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

Steel

Description of longitudinal joint

Diam. of rivet

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

Working pressure by rules

End plates: Thickness

How stayed

Working pressure by rules

End plates: Thickness

How stayed

Working pressure by rules

End plates: Thickness

How stayed

Working pressure by rules

End plates: Thickness

Working pressure of end plates

Area of safety valves to superheater

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Working pressure by rules

End plates: Thickness

How stayed

Working pressure by rules

End plates: Thickness

How stayed

Working pressure by rules

End plates: Thickness

How stayed

Working pressure by rules

End plates: Thickness

How stayed

If not, state whether, and when, one will be sent? In a Report also sent on the Hull of the ship? [142—L.R.P.H.—5,000—Form No. 8.—4-2-92.—Copyright Ink.]

624328-0106



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. _____
 Plates _____
 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.

Thomson & Jackson

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

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

Certificate (if required) to be sent to

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

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

FRI 6 JUL 1894

Committee's Minute

Assigned



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