

REPORT ON MACHINERY.

Port of

TUES. 8 JUL 1902

Received at London Office

No. in Survey held at
Reg. Book.

Date, first Survey

Last Survey

(Number of Visits)

Gross

Net

When built

on the

Master

Built at

By whom built

Engines made at

By whom made

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners

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

Diameter of Tunnel shaft

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

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

plate

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

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

Lloyd's Register
Foundation

BEL72-0047

Auxiliary Heating Surface 1465 sq ft.

DONKEY BOILER— Description *Cylindrical, Single Ended*
 Made at *Wolfe* By whom made *Workman Clark & Co. Ltd* Where fixed *Stoke Newington*
 Working pressure *180 lbs* tested by hydraulic pressure to *360* No. of Certificate *317* Fire grate area *60 sq ft* Description of safety valves *2*
 No. of safety valves *2* Area of each *7.07* Pressure to which they are adjusted *180 lbs* fitted with easing gear *Yes* If steam from main enter the donkey boiler *Yes* Diameter of donkey boiler *15'-0"* Length *10'-0"* Material of shell plates *Steel* Thickness *1/2"*
 Description of riveting long seams *Butt Riddle* Diameter of rivet holes *1 1/8"* Whether punched or drilled *Drilled* Size of rivets *9/16"*
 Type of plating *2 1/4"* Per centage of strength of joint *88.2* Rivets *88.2* Thickness of shell plates *1 1/2"* Radius of do. *18'-14"* Stays to do. *18'-14"*
 Dia. of stays *3/4"* Diameter of furnace *48 1/2"* Length of furnace *6'-0"* Thickness of furnace plates *5/8"* Description of joint *Weld* Thickness of furnace plates *9/16"* Stayed by *Screwed Stay & Riddle* Working pressure of shell by rules *207 1/2*
 Working pressure of furnace by rules *205 1/2* Diameter of uptake *✓* Thickness of uptake plates *✓* Thickness of water tubes *4 1/2" x 4 3/8"*

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
 FOR WORKMAN, CLARK & CO., LIMITED.
M. H. Bell Manufacturer.

Dates of Survey while building
 During progress of work in shops— *April 5-7-8-9-10-11-17-25-28-30*
 During erection on board vessel— *May 2-3-3-6-7-12-14-16*
 Total No. of visits *42*

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

ENGINES—Length of stern bush *✓* Diameter of crank shaft journals *as per rule* Diameter of thrust shaft under collars *✓*
 BOILER—Range of tensile strength *✓* Are they welded or flanged *✓* DONKEY BOILER—No. *one* Range of tensile strength *28-32*
 Is the approved plan of main boiler forwarded herewith *✓* Is the approved plan of donkey boiler forwarded herewith *Yes*

A new Auxiliary Boiler, also an Evaporator has been fitted to this vessel, in consequence of having a large Refrigerator Installation fitted. The tunnel suction valves have been altered, & comply with the Board of Trade regulations, and have now had the regulating valves placed outside the tunnel, in the Engine Room.
 When the vessel was in dry dock, the propeller, sea-cocks, and fastenings were examined, and found in good order.
 The main steam pipes have all been annealed, and tested by hydraulic to 360 lbs per sq. inch with satisfactory results.
 The new auxiliary boiler is connected by a new copper main steam pipe to the range of main boilers.

In my opinion this vessel is eligible to remain as Classed, and I have record *N.B(1) 7-92*

1 new aux boiler fitted
 It is submitted that this vessel is eligible to remain as CLASSED.

The following to be noted in the Register
4 SB & 1 Aux 7:02, 1902, GS 319, HS 10315

The amount of Entry Fee... £
 Special ... £
 Donkey Boiler Fee ... £ *6*
 Travelling Expenses (if any) £
 When applied for *24-6-02*
 When received *2/7/02*

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

Committee's Minute **TUES. 15 JUL 1902**

Assigned *as now*

not record of boilers