

REPORT ON MACHINERY.

No. 17142.
WED. 5 SEP. 1917

Received at London Office

Date of writing Report 24 Aug 1917 When handed in at Local Office 28 Aug 1917 Port of Greenock

No. in Survey held at Greenock

Date, First Survey 3-4-16;

Last Survey

28-8-1917

Reg. Book. Suppt.

32 on the Black Sea Steamship

"LAMBETH"

(Number of Visits

66.

Gross 1635.51

Tons Net 835.35

When built 1917

Master J. P. Le Rouge

Built at

Dublin

By whom built

Dublin & Yard Co

Engines made at

Greenock

By whom made

John S. Sinclair & Co

when made 1917

Boilers made at

Glasgow

By whom made

John S. Sinclair

when made 1917

Registered Horse Power

Owners

South Metropolitan Gas Co

Port belonging to

London

Nom. Horse Power as per Section 28 182

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple compound

No. of Cylinders Three

No. of Cranks Three

Dia. of Cylinders 18 - 30 - 50

Length of Stroke 33

Revs. per minute 90

Dia. of Screw shaft

as per rule 10.46

Material of screw shaft

Steel

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

yes

Is the after end of the liner made water tight

in the propeller boss

yes

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 43

Dia. of Tunnel shaft

as per rule 2.03

Dia. of Crank shaft journals

as per rule 9.48

Dia. of Crank pin 9.48

Size of Crank webs 174.6

Dia. of thrust shaft under

collars 9.48

Dia. of screw 13.5

Pitch of Screw 12.9

No. of Blades 4

State whether moveable

yes

Total surface 554.4

No. of Feed pumps 4

Diameter of ditto 2 1/2

Stroke 18

Can one be overhauled while the other is at work

yes

No. of Bilge pumps 2

Diameter of ditto 3 1/2

Stroke 18

Can one be overhauled while the other is at work

yes

No. of Donkey Engines 2

Sizes of Pumps 8" & 4"

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

In Engine Room 2 1/2"

In Holds, &c. 2 1/2"

No. of Bilge Injections 5

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

2 1/2"

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

Dates of examination of completion of fitting of Sea Connections

2.8.17

of Stern Tube

17.7.17

Screw shaft and Propeller

31.8.17

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from Upper Deck

BOILERS, &c.—(Letter for record)

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

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 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

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

If not, state whether, and when, one will be used?

Is a Report also sent on the Hull of the Ship?

Im. 212. T.

VERTICAL DONKEY BOILER— Manufacturers of Steel

No.	Description	When made	Where fixed
Made at	By whom made		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate
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	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
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey

SPARE GEAR. State the articles supplied:— *The top end bolt. The bottom end bolt. The main bearing bolt. One set coupling bolt. One set feed pump valve one set safety pump valve one set C. safety valve spring one set escape valve spring. Safety pins and 12 condenser tubes.*

The foregoing is a correct description,

Manufacturer.

John G. Kincaid & Co Ltd p. Jell

Dates of Survey while building: During progress of work in shops: (1916) Apr. 3, May 15, 25, June 15, 21, July 12, 20, 21, 25, Aug. 4, 21, 23, Sep. 20, 22, 25, 27, 29, Oct. 6, 9, 13, 17, 20, 24, Nov. 6, 10, 14 (1917).
During erection on board vessel: Jan. 29, Feb. 22, 23, 26, 28, Mar. 12, Apr. 6, 12, 24, 26, 27, 30, May 2, 4, 28, 31, June 4, 6, 7, 11, 14, 18, 21, 25, July 2, 18, 20, 23, 26, 30, Aug. 3, 7, 8, 10, 13, 14, 20, 21, 23, 28.
Total No. of visits: 66.

Is the approved plan of main boiler forwarded herewith *no*

Dates of Examination of principal parts—Cylinders *18/6/17* Slides *29/8/17* Covers *18/6/17* Pistons *23/8/17* Rods *14/6/17*
Connecting rods *13/6/17* Crank shaft *14/6/17* Thrust shaft *30/4/17* Tunnel shafts *18/7/17* Screw shaft *18/7/17* Propeller *24/7/17*
Stern tube *2/7/17* Steam pipes tested *Guthrie 11/10/17* Engine and boiler seatings *10.7.17* Engines holding down bolts *5/10/17*
Completion of pumping arrangements *17.11.17* Boilers fixed *22/10/17* Engines tried under steam *17/11/17*
Main boiler safety valves adjusted *9/11/17* Thickness of adjusting washers *Port Boiler P 9 5/16 Start Boiler P 3 5/16*
Material of Crank shaft *Steel* Identification Mark on Do. *218* Material of Thrust shaft *Steel* Identification Mark on Do. *1862*
Material of Tunnel shafts *Steel* Identification Marks on Do. *218* Material of Screw shafts *Steel* Identification Marks on Do. *218*
Material of Steam Pipes *Copper* Test pressure *400 lbs. per square inch.*

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

The machinery of this vessel has been constructed under special survey the material and workmanship is good. They have been shipped to Dublin where they will be fitted.

This machinery has been fitted on board the vessel, examined under working conditions and found satisfactory, and is eligible, in my opinion, for classification with the record L.M.C. 11.17.

A.B. Forster

Dublin 5th December, 1917.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 11.17.

The amount of Entry Fee .. £ 2 : 0 :
Special .. £ 27 : 6 :
Donkey Boiler Fee .. £ : :
Travelling Expenses (if any) £ : :
When applied for, 1-9-1917.
When received, 8-9-17.

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

Committee's Minute **GLASGOW**

Assigned *Deferred for comple*

4. SEP. 1917

11 DEC. 1917

L.M.C. 11.17

Lloyd's Register Foundation