

REPORT ON MACHINERY.

No. 27823.

Received at London Office FRI. AUG. 14. 1914

Date of writing Report

19

When handed in at Local Office

16-8-14 Port of

Hull

No. in Survey held at

Hull

Date, First Survey

18-8-13

Last Survey

16-7-1914

Reg. Book.

308 on the

steel screw steamer Flaminian

(Number of Visits)

80

Tons

Gross 3440

Net 2218

Master

Built at

Hull

By whom built

Charles C. L. L.

When built

1914-7

Engines made at

Hull

By whom made

Charles C. L. L.

when made 1914-7

Boilers made at

Hull

By whom made

Charles C. L. L.

when made 1914-7

Registered Horse Power

Owners Ellerman Lines Ltd

Port belonging to

Nom. Horse Power as per Section 28

362

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

Three

No. of Cranks

3

Dia. of Cylinders

20 1/2" - 35 1/2" - 61"

Length of Stroke

42"

Revs. per minute

40

Dia. of Screw shaft

as per rule 13.05

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

yes

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

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

Length of stern bush

Dia. of Tunnel shaft

as per rule 11.56

Dia. of Crank shaft journals

as per rule 12.14

Dia. of Crank pin

12 5/8"

Size of Crank webs

19" x 8"

Dia. of thrust shaft under

collars

12 5/8"

Dia. of screw

16'-0"

Pitch of Screw

16'-0"

No. of Blades

4

State whether moveable

no

Total surface

No. of Feed pumps

Two inap

Diameter of ditto

7"

Stroke

18"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

two

Diameter of ditto

4"

Stroke

2.5"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

Four duplex

SIZES OF PUMPS

6 1/4" x 6 1/4" 2 1/2" x 4 1/4" 7 1/8" x 8"

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

In Engine Room

Three 3" dia on 2 1/2" in tunnel well

In Holds, &c.

Two 3" dia in each compartment

No. of Bilge Injections

one sizes 7"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

yes 3"

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

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

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

What pipes are carried through the bunkers

Forward suction

How are they protected

strong wooden casings

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

3-6-14

of Stern Tube

6-6-14

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

D. Colville Sons

Total Heating Surface of Boilers

5146 sq ft

Is Forced Draft fitted

yes

No. and Description of Boilers

Three single ended

Working Pressure

220 lbs

Tested by hydraulic pressure to

440 lbs

Date of test

5-6-14

No. of Certificate

Can each boiler be worked separately

yes

Area of fire grate in each boiler

16 1/4 x 36 8/8

No. and Description of Safety Valves to

each boiler

Two spring loaded

Area of each valve

4.9 sq in

Pressure to which they are adjusted

Smallest distance between

boilers or uptakes and bunkers

10" air casing

dia. of boilers

14 1/2"

Length

12'-4"

Material of shell plates

Steel

Thickness

5/16"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

double

long. seams

J. R. A. B. 1

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

9/4"

Lap of plates or width of butt straps

1'-7 3/8"

Per centages of strength of longitudinal joint

rivets 82.7

plate 85.8

Working pressure of shell by rules

242

Size of manhole in shell

Size of compensating ring

8 1/2" x 1 5/16"

No. and Description of Furnaces in each boiler

Two Brighton

Material

S

Outside diameter

Length of plain part

top

Thickness of plates

crown 2 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

Working pressure of furnace by the rules

246

Combustion chamber plates: Material

S

Thickness: Sides

3/4"

Back

2 3/32"

Top

2 3/32"

Bottom

Pitch of stays to ditto: Sides

9 3/8" x 8 3/8"

Back

8 1/2" x 8 1/2"

Top

8 3/4" x 8 3/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

240

Material of stays

S

Diameter at smallest part

2.40"

Area supported by each stay

98 sq in

Working pressure by rules

221

End plates in steam space:

Material

S

Thickness

1 5/32"

Pitch of stays

16 1/2" x 15"

How are stays secured

A. N.

Working pressure by rules

241

Material of stays

S

Diameter at smallest part

6.23"

Area supported by each stay

248 sq in

Working pressure by rules

261

Material of Front plates at bottom

S

Thickness

3 1/32"

Material of Lower back plate

S

Thickness

3 1/32"

Greatest pitch of stays

14 1/2" x 12"

Working pressure of plate by rules

230

Diameter of tubes

2 1/2"

Pitch of tubes

3 7/8" x 3 7/8"

Material of tube plates

S

Thickness: Front

3 1/32"

Back

7/8"

Mean pitch of stays

Pitch across wide water spaces

13"

Working pressures by rules

242

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

10 5/8" x 1 3/4"

Length as per rule

36 13/32"

Distance apart

8 3/4"

Working pressure by rules

237

Superheater or Steam chest; how connected to boiler

yes

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

yes

Lloyd's Register

W907-0117

Foundation

27823.

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, 3 junk ring bolts, 1/2 set air pump valves, one set bridge pump valves, two donkey pump valves, feed check valves one set of Ramsbottom rings for each piston, one air pump bucket rod, one air pump head valve, seat & guards, one circulating pump impeller shaft, one set of Wier pump (Feed) suction & delivery valves seats & guards, two safety valve springs, one spare propeller, one escape valve spring each size, & a quantity of bolts & nuts run of various sizes*

The foregoing is a correct description.

SHIPBUILDING & ENGINEERING CO. LIMITED
Sheffield
Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1913.- Aug 18, Oct 16, 22, 25, 29. Nov 3, 6, 7, 11, 14, 20, 27 Dec 1, 3, 10, 12, 17, 24. 1914.- Jan 6, 9, 12.
During erection on board vessel - - 14, 16, 21, 23, 27, Feb 5, 10, 12, 13, 16, 18, 23, 26, Mar 3, 4, 6, 9, 16, 23, 27, 31, Apr 3, 6, 7, 20, 22, 28, 30, May 1, 7, 12, 13, 15, 18, 20, 26, 29, Jun 3, 5, 6, 8, 10, 11, 12, 13, 16, 17, 18, 22, 24, 25, 29, 30, Jul 1, 2, 3, 6, 10, 16
Total No. of visits 80
Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts—Cylinders *6-4-14* Slides *20-4-14* Covers *6-4-14* Pistons *20-4-14* Rods *20-4-14*
Connecting rods *13-5-14* Crank shaft *7-4-14* Thrust shaft *15-5-14* Tunnel shafts *17-6-14* Screw shaft *10-6-14* Propeller *10-6-14*
Stern tube *18-5-14* Steam pipes tested *25-6-14* Engine and boiler seatings *25-5-14* Engines holding down bolts *25-6-14*
Completion of pumping arrangements *22-6-14* Boilers fixed *25-6-14* Engines tried under steam *3-7-14*
Main boiler safety valves adjusted *3-7-14* Thickness of adjusting washers *16 P 7/16 S 7/16; 6 1/2 P 1 3/32 S 7/16, Port P 1 1/8 S 1 3/32*
Material of Crank shaft *Steel* Identification Mark on Do. *5532 AB* Material of Thrust shaft *steel* Identification Mark on Do. *179 AL*
Material of Tunnel shafts *steel* Identification Marks on Do. *below* Material of Screw shafts *S* Identification Marks on Do. *178 AL*
Material of Steam Pipes *solid drawn steel* Test pressure *660 lbs.*
Is an installation fitted for burning oil fuel *no* Is the flash point of the oil to be used over 150°F. ☒
Have the requirements of Section 49 of the Rules been complied with ☒
Is this machinery duplicate of a previous case *no* If so, state name of vessel ☒

General Remarks (State quality of workmanship, opinions as to class, &c. *Thrust on int-shafts. 234 AL, 3800 lb. B., 235 AL, 3801 MB, 5374 HK.*

The machinery of this vessel has been constructed under special survey in accordance with the approved plans & the rules of this society, the materials & workmanship are good. The Boilers & steam pipes have been tested as above by hydraulic pressure & found sound & tight. The machinery has been properly fitted & secured on board & on completion was tried under steam & found satisfactory. The safety valves have been adjusted under steam & tested for accumulation, which did not exceed 227 lbs. In my opinion the vessel is eligible for the record & L. M. C. 7. 14
F. A. Blue Light G. 1. 14 H. 1. 5/14 6

It is submitted that
this vessel is eligible for
THE RECORD. + L M C 7. 14.

FD.
SJS
14. 8. 14
ARRA

The amount of Entry Fee ... £ 3 : 0 :
Special ... £ 32 : 2 :
Donkey Boiler Fee ... £ ✓ : :
Travelling Expenses (if any) £ ✓ : :
When applied for, 13/8/1914
When received, 24/8/14

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

Committee's Minute TUE. AUG. 18. 1914
Assigned + L M C 7. 14
F. D.

MAINTENANCE CERTIFICATE
WRITTEN



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Committee's Minute
Assigned

Rpt. 5a.
Date of writing Report
No. in Survey
Reg. Book.
308 on the
Master
Engines made at
Boilers made at
Registered Horse
MULTITUBULAR
(Letter for record)
Boilers Three
No. of Certificate
safety valves to each
Are they fitted with
Smallest distance between
Material of shell plates
Descrip. of riveting
Top of plates or tubes
rules 254
boiler Two
Description of longitudinal
plates: Material & thickness
Top 9/16 x 8 1/2" If staggered
smallest part 2' 40"
Pitch of stays 18 1/2"
Area supported by
Lower back plate 4"
Pitch of tubes 3 1/2"
water spaces 13"
girder at centre 10"
Working pressure by
separately ✓
holes ✓ Pitch of
If stiffened with rings
Working pressure of