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REPORT ON MACHINERY.

Nuc. No. 53878
Mdb. No. 5318

Port of Newcastle

Received at London Office

MON. 16 DEC. 1907

in Survey held at Newcastle

Date, first Survey 5th July 1907 Last Survey 4th Dec. 1907

Book.

on the

S/S Crespian

(Number of Vents 24)

or

Built at Middlesex

By whom built Raylton Dixon & Co.

Tons

Gross

Net

When built 1904

nes made at Newcastle

By whom made H. G. M. Eng. Co. Ltd.

when made 1904

rs made at

By whom made

when made 1904

stered Horse Power

Owners Booth S. S. Co. Ltd.

Port belonging to Liverpool

Horse Power as per Section 28 408

Is Refrigerating Machinery fitted for cargo purposes no.

Is Electric Light fitted Yes

GINES, &c.—Description of Engines In C. P. D.

No. of Cylinders 3

No. of Cranks 3

No. of Cylinders 25 41 68

Length of Stroke 48"

Revs. per minute 64

Dia. of Screw shaft as per rule 14 1/2

Material of screw shaft

Yes Steel

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

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

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

Length of stern bush 5' 6"

Dia. of Tunnel shaft as per rule 12 1/2

as fitted 13 1/2

Dia. of Crank shaft journals as per rule 13 1/2

as fitted 14

Dia. of Crank pin 14

Size of Crank webs 27 1/2 x 9

Dia. of thrust shaft under

bars 14

Dia. of screw 17 1/2

Pitch of Screw 17 1/2

No. of Blades 4

State whether moveable M

Total surface 86 1/2

No. of Feed pumps 2

Diameter of ditto 3 3/4

Stroke 24

Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2

Diameter of ditto 3 3/4

Stroke 24

Can one be overhauled while the other is at work Yes

No. of Donkey Engines 4

Sizes of Pumps 10 x 12 x 10, 6 x 7 x 7, 5.3 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4 of 3 1/2

In Holds, &c. 2 of 3 1/2 in each hold and in

deep tank one of 3 in tunnel

No. of Bilge Injections 1 sizes 8"

Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes 3 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

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 7.10.07 of Stern Tube 7.10.07 Screw shaft and Propeller 24.10.07

Is the Screw Shaft Tunnel watertight See Ship report Is it fitted with a watertight door Yes worked from upper grating

BOILERS, &c.—(Letter for record R) Manufacturers of Steel J. Spencer & Sons Ltd.

Total Heating Surface of Boilers 5702 Is Forced Draft fitted Yes No. and Description of Boilers 2 S.C.

Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 13.9.07 No. of Certificate 7588

Can each boiler be worked separately Yes Area of fire grate in each boiler 64 1/2 No. and Description of Safety Valves to

each boiler 2 Spring Area of each valve 11 1/2 Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 20 1/2 Mean dia. of boilers 16 3/2 Length 11 1/8 Material of shell plates S

Thickness 1 1/2 Range of tensile strength 28 1/2 - 32 Are the shell plates welded or flanged ENAS Descrip. of riveting: cir. seams & r. coils

long. seams d. bolts Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 10 Lap of plates or width of butt straps 21 3/4

Per centages of strength of longitudinal joint rivets 84 1/2 Working pressure of shell by rules 214 lb Size of manhole in shell 16 x 12

Size of compensating ring flange No. and Description of Furnaces in each boiler 3 Deigh Material S Outside diameter 4' 2 5/8

Length of plain part top Thickness of plates crown 3 1/2 Description of longitudinal joint weld No. of strengthening rings

Working pressure of furnace by the rules 223 Combustion chamber plates: Material S Thickness: Sides 23 3/2 Back 23 3/2 Top 23 3/2 Bottom 1 1/2

Pitch of stays to ditto: Sides 10 x 9 Back 10 x 9 Top 10 x 9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 194

Material of stays S Diameter at smallest part 2 3/8 Area supported by each stay 90 Working pressure by rules 196 End plates in steam space:

Material S Thickness 1 1/2 Pitch of stays 24 1/2 How are stays secured d. nuts Working pressure by rules 186 1/2 Material of stays S

Diameter at smallest part 8 1/2 Area supported by each stay 423 Working pressure by rules 208 Material of Front plates at bottom S

Thickness S Material of Lower back plate S Thickness 3 1/2 Greatest pitch of stays 15 Working pressure of plate by rules 185

Diameter of tubes 2 1/2 Pitch of tubes 3 3/4 x 3 3/4 Material of tube plates S Thickness: Front 7 1/2 Back 1 1/2 Mean pitch of stays 4 1/2

Pitch across wide water spaces 15 Working pressures by rules 182 Girders to Chamber tops: Material S Depth and

thickness of girder at centre 9 x 12 Length as per rule 3 1/2 Distance apart 9 Number and pitch of stays in each 2 @ 10

Working pressure by rules 200 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 S Material Description of longitudinal joint Diam. of rivet

holes Pitch of rivets Working pressure of shell by rules S 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

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