

# REPORT ON MACHINERY

No. 4345

Received at London Office

Date of writing Report 24<sup>th</sup> Dec. 1909. When handed in at Local Office 24<sup>th</sup> Dec. 1909. Port of Southampton

No. in Survey held at Southampton Date, First Survey Feb 3<sup>rd</sup> 1908. Last Survey 22<sup>nd</sup> Dec. 1909  
Reg. Book. (Number of Visits 26)

on the Steel Screw Lug Jean (Day Summers & Co. No 143) Gross 86 Tons  
Master J.A. Glover Built at Southampton By whom built Day Summers & Co. Ltd When built 1908

Engines made at Southampton By whom made Day Summers & Co. Ltd when made 1908

Boilers made at do By whom made do when made 1908

Registered Horse Power 50. Owners Ceylon Wharfrage Co. Port belonging to London

Nom. Horse Power as per Section 28 50 Is Refrigerating Machinery fitted for cargo purposes  Is Electric Light fitted no.

ENGINES, &c.—Description of Engines Inverted Compound Surface Condensing No. of Cylinders Two No. of Cranks Two

Dia. of Cylinders 15" x 30" Length of Stroke 24" Revs. per minute 130 Dia. of Screw shaft 6.98 as per rule 6.98 Material of steel screw shaft 7" as fitted

Is the screw shaft fitted with a continuous liner the whole length of the stern tube no. 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 no. 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 yes. Length of stern bush 2' 5"

Dia. of Tunnel shaft 6.21 as per rule 6.21 Dia. of Crank shaft journals 6.52 as per rule 6.52 Dia. of Crank pin 6 5/8" Size of Crank webs 4 1/2 x 9 1/2" Dia. of thrust shaft under collars 6 5/8" Dia. of screw 7.5" Pitch of Screw 9.6" No. of Blades 4 State whether moveable no Total surface 23 sq ft.

No. of Feed pumps no Diameter of ditto 2 1/4" Stroke 12" Can one be overhauled while the other is at work

No. of Bilge pumps no Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work

No. of Donkey Engines no Sizes of Pumps Duplex 2 3/4 x 4 1/2 x 4" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 2" Suctions In Holds, &c. no 2" Suction in each hold.

No. of Bilge Injections no sizes 3" Connected to condenser, or to circulating pump yes. Is a separate Donkey Suction fitted in Engine room & size yes 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 yes.

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 27 June 1908 of Stern Tube 27 June Screw shaft and Propeller 27 June

Is the Screw Shaft Tunnel watertight  Is it fitted with a watertight door  worked from

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Plate & Bar Colville & Co. Newcastle, Robert Miller.

Total Heating Surface of Boilers 951 sq ft Is Forced Draft fitted no. No. and Description of Boilers no Cyl. Multitubular.

Working Pressure 120 lbs. Tested by hydraulic pressure to 240 lbs. Date of test May 28<sup>th</sup> 1908 No. of Certificate 272.

Can each boiler be worked separately  Area of fire grate in each boiler 38 sq ft No. and Description of Safety Valves to each boiler Two Spring loaded Area of each valve 5.939 Pressure to which they are adjusted 125 lbs. Are they fitted with easing gear yes.

Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean dia. of boilers 10.6 Length 9.0 Material of shell plates Steel

Thickness 11/16" Range of tensile strength 29/32. Are the shell plates welded or flanged  Descrip. of riveting: cir. seams D.S. top. long. seams D.S. top & bottom

Per centages of strength of longitudinal joint rivets 84.9% Working pressure of shell by rules 120.5 lbs. Size of manhole in shell 12" x 16" plate 75.0%

Size of compensating ring 16 No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 3' 2 1/4"

Length of plain part top 6.3 Thickness of plates crown 3/32 Description of longitudinal joint Double butt straps No. of strengthening rings 17 bottom 6.8 bottom 3/32

Working pressure of furnace by the rules 120 lbs. Combustion chamber plates: Material Steel Thickness: Sides 17/32 Back 9/16 Top 19/32 Bottom 3/32

Pitch of stays to ditto: Sides 8 3/4 x 8 Back 9 1/2 x 9 1/2 Top 8 x 11 1/4 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 121 lbs.

Material of stays Steel Diameter at smallest part 1.448 Area supported by each stay 90.25 Working pressure by rules 128 lbs. End plates in steam space:

Material Steel Thickness 13/16" Pitch of stays 15 1/2 x 16 1/4 How are stays secured Dup. & Marked Working pressure by rules 124 lbs. Material of stays Steel

Diameter at smallest part 3.03 Area supported by each stay 251.875 Working pressure by rules 120 lbs. Material of Front plates at bottom Steel

Thickness 13/16" Material of Lower back plate Steel Thickness 3/32 Greatest pitch of stays Double Working pressure of plate by rules 120 lbs.

Diameter of tubes 3 1/2" Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 13/16 Back 3/4 Mean pitch of stays 13 1/2"

Pitch across wide water spaces 13" Working pressures by rules 120 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 5 3/4 x 1 1/2" Length as per rule 1. 11 1/2" Distance apart 11 1/4" Number and pitch of stays in each Two 8 x 11 1/4"

Working pressure by rules 129 lbs. 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

005779-005790-0110

Lloyd's Register Foundation

