

REPORT ON MACHINERY.

No. 23502

THUR. 30 MAR 1911

Received at London Office

Date of writing Report 19 When handed in at Local Office 15.3.11, Port of Hull

No. in Survey held at Hull Gool Date, First Survey July 5/10. Last Survey 14th Mar 1911
 Reg. Book. 46 (Number of Visits 49)

Master Steel S. K. Lucida Built at Gool By whom built Gool S. B. R. Co. Ld Tons { Gross 243 Net 93 When built 1911

Engines made at } By whom made } Messrs when made 1911
 Boilers made at } Hull By whom made } Earle's Co. Ld when made 1911

Registered Horse Power 85 Owners J. Marr & Son Port belonging to Fleetwood

Nom. Horse Power as per Section 28 85 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 12 1/2" - 21" - 35" Length of Stroke 26" Revs. per minute 110 Dia. of Screw shaft 7.75" 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 one length 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 40"

Dia. of Tunnel shaft 6.5" Dia. of Crank shaft journals 6.9" Dia. of Crank pin 7.125" Size of Crank webs 13 1/2" x 4 1/2" Dia. of thrust shaft under collars 7.125" Dia. of screw 9.3" Pitch of Screw 11-0" No. of Blades 4 State whether moveable No Total surface 28 sq ft

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

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

No. of Donkey Engines One Sizes of Pumps 6" x 3" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room One 2", One 2 1/2", one 3 1/2" In Holds, &c. One 2 1/2" to tank, One 2 1/2" to slush well. Ejector suction to all parts, (and separate centrifugal pump for Condenser)

No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes 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 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 hold suction How are they protected wood casing

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 31.1.11 of Stern Tube 1.3.11 Screw shaft and Propeller 1.3.11

Is the Screw Shaft Tunnel watertight No Is it fitted with a watertight door — worked from —

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Phoenix Apts. Ges. Abt. Hoerde Verein

Total Heating Surface of Boilers 1560 sq ft Is Forced Draft fitted No No. and Description of Boilers One Cyl. Hull Single Ended

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 2.11.10 No. of Certificate 1779

Can each boiler be worked separately — Area of fire grate in each boiler 36.7 sq ft No. and Description of Safety Valves to each boiler Two Spring Area of each valve 4.9 sq in Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 6" Mean dia. of boilers 13-6" Length 10-6" Material of shell plates S

Thickness 1 3/32" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams L.D.R. long. seams D.B.S.J.R. Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 3/8" Lap of plates or width of butt straps 16 3/4"

Percentages of strength of longitudinal joint rivets 85.8 Working pressure of shell by rules 180 lbs Size of manhole in shell 16" x 12" plate 85.7

Size of compensating ring 7 1/2" x 1 3/32" No. and Description of Furnaces in each boiler 2 plain Material S Outside diameter 45 1/2"

Length of plain part top 6.5" Thickness of plates crown 4.9" Description of longitudinal joint Welded No. of strengthening rings 0 bottom 6.4" Back 11" Top 5" Bottom 5"

Working pressure of furnace by the rules 180 lbs Combustion chamber plates: Material S Thickness: Sides 5" Back 11" Top 5" Bottom 5"

Pitch of stays to ditto: Sides 9" x 8 1/4" Back 9 1/2" x 8" Top 8 1/2" x 9" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 181 lbs

Material of stays S Diameter at smallest part 1 3/4" Area supported by each stay 94 sq in Working pressure by rules 229 lbs End plates in steam space: Material S Thickness 1 1/8" Pitch of stays 18" x 17 3/8" How are stays secured D.P. Working pressure by rules 181 lbs Material of stays S

Diameter at smallest part 2 1/2" Area supported by each stay 312.75 sq in Working pressure by rules 207 lbs Material of Front plates at bottom S

Thickness 1 5/16" Material of Lower back plate S Thickness 7/8" Greatest pitch of stays 14" x 8" Working pressure of plate by rules 203 lbs

Diameter of tubes 3 1/2" Pitch of tubes 5 1/2" x 4 1/2" Material of tube plates S Thickness: Front 1 5/16" Back 1 3/16" Mean pitch of stays 10"

Pitch across wide water spaces 14" Working pressures by rules 183 lbs Girders to Chamber tops: Material S Depth and thickness of girder at centre 10 1/2" x 1 1/2" Length as per rule 36" Distance apart 9" Number and pitch of stays in each Three 8 1/2"

Working pressure by rules 186 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 —

If not, state whether, and when, one will be sent?
 Is a Report also sent on the Hull of the Ship?
 Yes

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