

Rpt. 4. **REPORT ON MACHINERY.** No. 86129

Date of writing Report 2 - DEC 1922 When handed in at Local Office 2 - DEC 1922 Port of London
 No. in Survey held at Newbury Date, First Survey 27 FEBRUARY 1922 Last Survey 20th November 1922
 Reg. Book. on the Twin Engines No 2478 for Rangoon Firefloat 1/2 Maryweather (Number of Visits 33) Tons { Gross 136.98
 Master Built at London By whom built Edwards & Co 3/5 789 Net 61.65 When built 1922
 Engines made at Newbury By whom made Plenty & Son L^d when made 1922
 Boilers made at Dumbarton By whom made W Denny & Bros L^d when made 1922
 Registered Horse Power 800 I.H.P. Owners Rangoon Commissioners Port belonging to London
 Nom. Horse Power as per Section 28 100 118 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

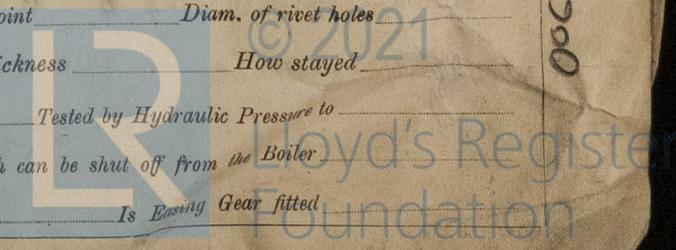
ENGINES, &c.—Description of Engines Twin Inverted Triple No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 10 - 14 - 26 1/2 Length of Stroke 16 Revs. per minute 250 Dia. of Screw shaft 5.32 Material of screw shaft Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No liners Is the after end of the liner made water tight in the propeller boss 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 30
 Dia. of Tunnel shaft 4.94 Dia. of Crank shaft journals 5.22 Dia. of Crank pin 5 1/4 Size of Crank webs 3 3/4 x 6 Dia. of thrust shaft under collars 5 1/4 Dia. of screw 6-0 Pitch of Screw 4-0 No. of Blades 3 State whether moveable No Total surface 14.2 sqft
 No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Donkey Engines 4 Sizes of Pumps 2 1/2 x 5 1/2 x 15 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room Two - 2" Boiler from one 2" In Holds, &c. Fore peak one - 2" Fore Hold one 2"
 In Engine Room Two - 2" Boiler from one 2" In Holds, &c. Fore peak one - 2" Fore Hold one 2"
 No. of Bilge Injections one sizes 6 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 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 Yes
 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
 Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record 2000) Manufacturers of Steel one
 Total Heating Surface of Boilers 2000 Is Forced Draft fitted Yes No. and Description of Boilers one
 Working Pressure Tested by hydraulic pressure to 205 1/4 Date of test 7.07 No. of Certificate See Report
 Can each boiler be worked separately 2 Spring direct Area of fire grate in each boiler See Report No. and Description of Safety Valves to each boiler 2 Spring direct Area of each valve See Report Pressure to which they are adjusted 205 1/4 Are they fitted with easing gear Yes
 Smallest distance between boilers See Report and bunkers See Report Mean dia. of boilers See Report Length See Report Material of shell plates See Report
 Thickness See Report Range of tensile strength See Report Are the shell plates welded or flanged See Report Descrip. of riveting: cir. seams See Report
 long. seams See Report Diameter of rivet holes in long. seams See Report Pitch of rivets See Report Lap of plates or width of butt straps See Report
 Per centages of strength of longitudinal joint See Report Working pressure of shell by rules See Report Size of manhole in shell See Report
 Size of compensating ring See Report No. and Description of Furnaces in each boiler See Report Material See Report Outside diameter See Report
 Length of plain part See Report Thickness of plates See Report Description of longitudinal joint See Report No. of strengthening rings See Report
 Working pressure of furnace by the rules See Report Combustion chamber plates: Material See Report Thickness: Sides See Report Back See Report Top See Report Bottom See Report
 Pitch of stays to ditto: Sides See Report Back See Report Top See Report If stays are fitted with nuts or riveted heads See Report Working pressure by rules See Report
 Material of stays See Report Area at smallest part See Report Area supported by each stay See Report Working pressure by rules See Report End plates in steam space: See Report
 Material See Report Thickness See Report Pitch of stays See Report How are stays secured See Report Working pressure by rules See Report Material of stays See Report
 Area at smallest part See Report Area supported by each stay See Report Working pressure by rules See Report Material of Front plates at bottom See Report
 Thickness See Report Material of Lower back plate See Report Thickness See Report Greatest pitch of stays See Report Working pressure of plate by rules See Report
 Diameter of tubes See Report Pitch of tubes See Report Material of tube plates See Report Thickness: Front See Report Back See Report Mean pitch of stays See Report
 Pitch across wide water spaces See Report Working pressures by rules See Report Girders to Chamber tops: Material See Report Depth and thickness of girder at centre See Report Length as per rule See Report Distance apart See Report Number and pitch of stays in each See Report
 Working pressure by rules See Report Steam dome: description of joint to shell See Report % of strength of joint See Report
 Diameter See Report Thickness of shell plates See Report Material See Report Description of longitudinal joint See Report Diam. of rivet holes See Report
 Pitch of rivets See Report Working pressure of shell by rules See Report Crown plates See Report Thickness See Report How stayed See Report

SUPERHEATER. Type See Report Date of Approval of Plan See Report Tested by Hydraulic Pressure to See Report
 Date of Test See Report Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler See Report
 Diameter of Safety Valve See Report Pressure to which each is adjusted See Report Is Easing Gear fitted See Report

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.

5510-246900-0155
006332-006246-0155



IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 propeller shafts, 2 propellers, one set Connecting Rod top & bottom end bolts, one set main bearing bolts, one set Coupling bolts, piston rings for each cylinder, one crank shaft bush, 1 slide valve, bolts & nuts assorted, iron assorted, valves & piston rings for each auxiliary.

The foregoing is a correct description,

PLENTY & SON, LIMITED.

E. Davis SECRETARY

Manufacturer.

Dates of Survey while building: During progress of work in shops -- 1922: FEB 27 MAY 5 19 29 JUNE 22 JULY 3 17
During erection on board vessel --- JULY 25 AUG 2 16 24 31 SEP 12 16 17 25 29 OCT 3 5 6 9 11 12 13 16 26 27 28 30 NOV 1 6 17 20
Total No. of visits *33*

Is the approved plan of main boiler forwarded herewith *Yes*

Is the approved plan of main boiler forwarded herewith *Yes*

Dates of Examination of principal parts—Cylinders *19.5.22* Slides *3.7.22* Covers *19.5.22* Pistons *3.7.22* Rods *5.5.22*
Connecting rods *6.6.22* Crank shafts *19.5.22* Thrust shaft *✓* Tunnel shafts *22.6.22* Screw shafts *25.5.22* Propellers *29.6.22*
Stern tube *29.5.22* Steam pipes tested *19.7.22* Engine and boiler seatings *19.7.22* Engines holding down bolts *19.7.22*
Completion of pumping arrangements *29.9.22* Boilers fixed *19.7.22* Engines tried under steam *29.9.22* ✓
Completion of fitting sea connections *25.7.22* Stern tube *25.7.22* Screw shaft and propellers *25.7.22*
Main boiler safety valves adjusted *25.9.22* ✓ Thickness of adjusting washers *5 3/8 base P 1 3/32*
Material of Crank shafts *Steel* Identification Mark on Do. *LLOYDS 417 14.2.22* Material of Thrust shaft *✓* Identification Mark on Do. *LLOYDS 418 14.2.22*
Material of Tunnel shafts *Steel* Identification Marks on Do. *LLOYDS 22.6.22 7RB* Material of Screw shafts *Steel* Identification Marks on Do. *LLOYDS 418 14.2.22*
Material of Steam Pipes *Steel* Test pressure *600 lbs*

Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150° F. *Yes* ✓
Have the requirements of Section 49 of the Rules been complied with *Yes* ✓
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. *Engin's constructed under special survey, material tested, workmanship good. High pressure cylinders tested hydraulic to 400 lbs, MP cylinders to 200 lbs & LP cylinders to 100 lbs per sq inch & found tight & sound. The fire pumps (2) examined during construction, the cylinders of same tested to 400 lbs & the pumps to 220 lbs & all found tight & sound. Oil fuel fitted & oil fuel pumps duplicated. The vessel was run on the measured mile & a mean speed of 13.18 knots was attained, the machinery & boiler working satisfactory. The fire pumps were tested for delivery each pump discharging about 2090 gallons per min = 4180 gallons for both pumps. The fire pumps & attachments have been removed & fuel tanks (temporary) have been fitted in space & also at forward end of stokehole behind boiler, the plan for same & tanks approved, the tanks have been tested to 5 lbs per sq inch and found tight, this alteration made for the purpose of carrying oil fuel for outward passage. This vessel is in my opinion eligible to have + LMC 11.22 Recorded in the Society's Register. Shaft to be noted OB*

Certificate (if required) referent to *Survey*

The amount of Entry Fee *£ 6 16 0* When applied for, *DEC 1922*
Special *£ 1 0 0*
Electric installation *£ 1 0 0*
Donkey Boiler Fee *£ 9 0 0* When received, *3.12.23*
Travelling Expenses (if any) *£ 8 6 0*
Committee's Minute *FRI. 8 DEC. 1922*
Assigned *+ LMC 11.22*
Lloyd's Register of Shipping

Thomas R. Macfie
Engineer Surveyor to Lloyd's Register of Shipping.

