

## REPORT ON MACHINERY.

JUN 20 1921  
No. 84406

Date of writing Report 25 JUN 1921 When handed in at Local Office 28 JUN 1921 Port of London  
 No. in Survey held at Newbury Date, First Survey Sep 15th 1920 Last Survey May 20th 1921  
 Reg. Book. Engines 72445 S/S FRENCHAM (Number of Visits 11)  
 Master A. E. Mack Built at Sudbrook By whom built C. H. Walker & Co Ltd  
 Engines made at Newbury By whom made Plenty & Son Ltd  
 Boilers made at Stockton By whom made Riley Bros  
 Registered Horse Power 83 Owners C. H. Walker & Co Ltd Port belonging to Monte video  
 Nom. Horse Power as per Section 28 83 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple - Surface Condensing No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 13 - 22 - 34 Length of Stroke 22 1/2 Revs. per minute 23 Dia. of Screw shaft 7 3/4 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 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 Yes If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 2 - 6 1/4  
 Dia. of Tunnel shaft 6.39 Dia. of Crank shaft journals 6.7 Dia. of Crank pin 6 3/4 Size of Crank webs 12 1/4 x 4 1/2 Dia. of thrust shaft under collars 6 3/4 Dia. of screw 8 - 3 Pitch of Screw 10 - 0 No. of Blades 4 State whether moveable No Total surface 26 sq ft  
 No. of Feed pumps Two Diameter of ditto 3 Stroke 10 Can one be overhauled while the other is at work Yes  
 No. of Bilge pumps Two Diameter of ditto 3 Stroke 10 Can one be overhauled while the other is at work Yes  
 No. of Donkey Engines Two Sizes of Pumps 5 1/2 inch & 5 inch & 3 1/2 inch No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 2 1/4  
 In Engine Room 2 1/4 In Hold, &c. Two 2 1/2

No. of Bilge Injections 1 sizes 3 1/4 Connected to condenser, or to circulating pump Yes 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 Below  
 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 Suctions, BB for fuel & Lubrication are they protected Wood 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  
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Machinery aft

BOILERS, &c.—(Letter for record See Letter 9/5/22) Manufacturers of Steel One - Mult. - Single End  
 Total Heating Surface of Boilers 1610 Is Forced Draft fitted No No. and Description of Boilers One - Mult. - Single End  
 Working Pressure 180 lbs Tested by hydraulic pressure to 200 Date of test 25 JUN 1921 No. of Certificate 107  
 Can each boiler be worked separately Yes Area of fire grate in each boiler 107 No. and Description of Safety Valves to each boiler 1  
 Area of each valve 107 Pressure to which they are adjusted 180 Are they fitted with easing gear Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 107 Mean dia. of boilers 107 Length 107 Material of shell plates 107  
 Thickness 107 Range of tensile strength 107 Are the shell plates welded or flanged 107 Descrip. of riveting: cir. seams 107  
 long. seams 107 Diameter of rivet holes in long. seams 107 Pitch of rivets 107 Lap of plates or width of butt straps 107  
 Per centages of strength of longitudinal joint 107 Working pressure of shell by rules 107 Size of manhole in shell 107  
 Size of compensating ring 107 No. and Description of Furnaces in each boiler 107 Material 107 Outside diameter 107  
 Length of plain part 107 Thickness of plates 107 Description of longitudinal joint 107 No. of strengthening rings 107  
 Working pressure of furnace by the rules 107 Combustion chamber plates: Material 107 Thickness: Sides 107 Back 107 Top 107 Bottom 107  
 Pitch of stays to ditto: Sides 107 Back 107 Top 107 If stays are fitted with nuts or riveted heads 107 Working pressure by rules 107  
 Material of stays 107 Area at smallest part 107 Area supported by each stay 107 Working pressure by rules 107 End plates in steam space: 107  
 Material 107 Thickness 107 Pitch of stays 107 How are stays secured 107 Working pressure by rules 107 Material of stays 107  
 Area at smallest part 107 Area supported by each stay 107 Working pressure by rules 107 Material of Front plates at bottom 107  
 Thickness 107 Material of Lower back plate 107 Thickness 107 Greatest pitch of stays 107 Working pressure of plate by rules 107  
 Diameter of tubes 107 Pitch of tubes 107 Material of tube plates 107 Thickness: Front 107 Back 107 Mean pitch of stays 107  
 Pitch across wide water spaces 107 Working pressures by rules 107 Girders to Chamber tops: Material 107 Depth and thickness of girder at centre 107 Length as per rule 107 Distance apart 107 Number and pitch of stays in each 107  
 Working pressure by rules 107 Steam dome: description of joint to shell 107 % of strength of joint 107  
 Diameter 107 Thickness of shell plates 107 Material 107 Description of longitudinal joint 107 Diam. of rivet holes 107  
 Pitch of rivets 107 Working pressure of shell by rules 107 Crown plates 107 Thickness 107 How stayed 107

UPERHEATER. Type 107 Date of Approval of Plan 107 Tested by Hydraulic Pressure to 107  
 Date of Test 107 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler 107  
 Diameter of Safety Valve 107 Pressure to which each is adjusted 107 Is Easing Gear fitted 107



IS A DONKEY BOILER FITTED?

No

*If so, is a report now forwarded?*

SPARE GEAR. State the articles supplied:—

SPARE GEAR. State the articles supplied:— 1 set of coupling bolts & nuts, Two main bearing bolts & nuts, Two top end & Two bottom end bolts & nuts, 1 set air, air: feed & bilge pump valves, One spare ring for each piston, quantity of assorted bolts & nuts, quantity of round iron  
1 Spare propeller.

*The foregoing is a correct description,*

FOR AND ON BEHALF OF

PLANTY & SON, LIMITED.

C. A. Davis

SECRETARY.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1920: Sep 15. Oct 14. 29. Nov. 11. 25 Dec 16. 1921: Jan 24. Feb 15. Mar 10 Apr 4. May 20.  
During erection on board vessel - - - 1921. Jan 25. 1922 June 15. 26. July 7. 14. 27. 28.  
Total No. of visits 18.

*Is the approved plan of main boiler forwarded herewith*

Yes

“ “ “ *donkey* “ “ “

✓

" " " donkey " "

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Dates of Examination of principal parts—Cylinders <sup>27.1.21</sup> 15.2.21 Slides 27.1.21 Covers 27.1.21 Pistons 27.1.21 Rods 10.3.21

Connecting rods 10.3.21 Crank shaft 15.9.20 Thrust shaft 27.1.21 Tunnel shafts ✓ Screw shaft 25.11.20 Propeller 16.12.21

Stern tube 16.12.21 Steam pipes tested 26/67 7/7.12 Engine and boiler seatings 25.1.21. Engines holding down bolts 15.6.22

Completion of pumping arrangements 7. 7. 22. Boilers fixed 7. 7. 22 Engines tried under steam 14. 7. 22

Completion of fitting sea connections 25. 1. 21. Stern tube 25. 1. 21 Screw shaft and propeller 25. 1. 21

Main boiler safety valves adjusted 14-7-22 Thickness of adjusting washers Port  $\frac{1}{8}$  Stk.  $\frac{1}{32}$

Material of Crank shaft Steel Identification Mark on Do. 4960 G.R.E. Material of Thrust shaft Steel Identification Mark on Do. 21-1-21 200

Material of Tunnel shafts ☒ Identification Marks on Do. ☒ Material of Screw shafts Steel Identification Marks on Do. 25.11.21

Material of Steam Pipes S D Copper Test pressure 360 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 r

*General Remarks* (State quality of workmanship, opinions as to class, &c. *Engines constructed under survey*

Material tested, workmanship good. A number of blow holes in Lt Glavin  
hatch drilled & plugged - Owners advised - see letter of acceptance.  
Condenser slightly cold shot on back. a steel plate fitted - owner  
advised & accepted, see letter. Condenser tested to 15-16 per sq inch  
& found tight. Lt Glavin tested by Rankin 45 lb Inf. HP & 300 lb type sound.  
Engines being forwarded to Sudbrook & be fitted on board Rep<sup>in</sup>  
Ct Walker r/o 5/6 241

The Machinery of this vessel has now been fitted on board & effectively secured. The boiler built by Rely Bros Ltd (Inst Rpt 10724) has been examined under steam & safety valves adjusted. During basin & trial runs the machinery worked well & satisfactorily & vessel is now in our opinion eligible for the Record of ~~the~~ L M C. 7.22. (Vessel has been placed in the Eastern Dry Dock (Expt) & propellers & fastenings of sea cow examined & found in order 28.7.22)

The amount of Entry Fee £2. 4 : 2 : 0 When applied for, *£1000*

Special 22.5 ring 22.5 (SE) 4 11 23 JUN 1967 Mongak Black Key Mark A. Johnson

Donkey Boiler Fee ... £ : : When received, £13.18.9 paid 2.8.9 JSM

Traveling Expenses (if any) \$ 7.10 - 7.10 2 6.6.9. paid 4.8.22 Shm. & n.  
was sitting on board 2 6.6.9. paid 4.8.22 Shm. & n.

Committee's Minute FRI. 4 AUG. 1972

Assigned + dmt. 7. 22

MACHINERY DEPT.  
WHITEN.

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