

# REPORT ON MACHINERY

No. 39589

W.C.B. Ed. 1-1920

Received at London Office

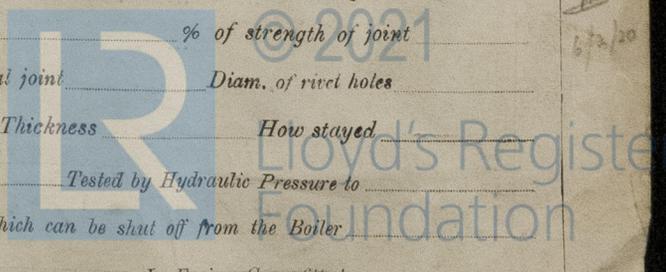
Date of writing Report \_\_\_\_\_ When handed in at Local Office 31. 1. 1920 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 11/12/18 Last Survey 24 Jan 1920  
 Reg. Book. \_\_\_\_\_ on the S.S. ALGERIER (Number of Visits 38)  
 Master \_\_\_\_\_ Built at Glasgow By whom built Lloyd Royal Belg. (No 12) When built 1920  
 Engines made at Glasgow By whom made Do Rowan & Co. Ltd (No 730) when made 1920  
 Boilers made at Do By whom made No. Do when made 1920  
 Registered Horse Power \_\_\_\_\_ Owners \_\_\_\_\_  
 Nom. Horse Power as per Section 28 359 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

**ENGINES, &c.**—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 25"-41"-68" Length of Stroke 45" Revs. per minute 76 Dia. of Screw shaft as per rule 13.5" Material of screw shaft as fitted 14" 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 — 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 — Length of stern bush 60"  
 Dia. of Tunnel shaft as per rule 12.4" Dia. of Crank shaft journals as per rule 13.02" Dia. of Crank pin 13 1/4" Size of Crank webs 27 1/2" x 8 3/4" Dia. of thrust shaft under collars 13 1/4" Dia. of screw 16-0" Pitch of Screw 16-3" No. of Blades 4 State whether moveable No Total surface 75 ft<sup>2</sup>  
 No. of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes  
 No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes  
 No. of Donkey Engines 3 Sizes of Pumps 1 Ballast 10 1/2" x 12 1/2" x 21" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room (3) 3" Stroke (2) 3" In Holds, &c. No 1-2-3 two each 3"  
 No 4 one 3 1/2" Two 2 1/2" Tunnel well one 3"  
 No. of Bilge Injections 1 sizes 11" Connected to condenser, or to circulating pump Pump 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 No  
 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 7 Suctions 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 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 main deck in E.R.

**BOILERS, &c.**—(Letter for record S) Manufacturers of Steel Steel Co. of Scotland Ltd  
 Total Heating Surface of Boilers 5844 ft<sup>2</sup> Is Forced Draft fitted No No. and Description of Boilers 3 Sample ended  
 Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 14.11.19 No. of Certificate 14987  
 Can each boiler be worked separately Yes Area of fire grate in each boiler 50.8 ft<sup>2</sup> No. and Description of Safety Valves to each boiler 2 Spring loaded Area of each valve 4.90" 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 3-0" Mean dia. of boilers 13.9 3/4" Length 11-8 5/16" Material of shell plates Steel  
 Thickness 1/8" Range of tensile strength 28 3/4 to 33 ton Are the shell plates welded or flanged No Descrip. of riveting: cir. seams do R long. seams TR D O S Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 1.8"  
 Per centages of strength of longitudinal joint rivets 86.1 Working pressure of shell by rules 181 Size of manhole in shell 16x12"  
 Size of compensating ring a flanged No. and Description of Furnaces in each boiler 3 Corrugated Material Steel Outside diameter 3-7"  
 Length of plain part top \_\_\_\_\_ Thickness of plates crown 17 bottom 32 Description of longitudinal joint weld No. of strengthening rings  
 Working pressure of furnace by the rules 190 Combustion chamber plates: Material Steel Thickness: Sides 13/16" Back 3/4" Top 13/16" Bottom 13/16"  
 Pitch of stays to ditto: Sides 9 3/8" x 2 1/8" Back 10 3/8" x 9 1/2" Top 9 3/8" x 12 1/8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 228  
 Material of stays Steel Area at smallest part 2.4 Area supported by each stay 98.50" Working pressure by rules 219 End plates in steam space: Material Steel Thickness 1 3/32" Pitch of stays 23 3/4" x 19 1/2" How are stays secured down Working pressure by rules 181 Material of stays Steel  
 Area at smallest part 8.290" Area supported by each stay 4630" Working pressure by rules 186 Material of Front plates at bottom Steel  
 Thickness 31/32" Material of lower back plate Steel Thickness 27/32" Greatest pitch of stays 13 1/2" x 9" Working pressure of plate by rules 203  
 Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" x 4 3/4" Material of tube plates Steel Thickness: Front 31/32" Back 3/4" Mean pitch of stays 9 1/2"  
 Pitch across wide water spaces 14 1/4" Working pressures by rules 189 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10 1/4" x 3 3/4" (2) Length as per rule 2.11 1/2" Distance apart 10" Number and pitch of stays in each (2) 12 1/8"  
 Working pressure by rules 197 Steam dome: description of joint to shell None % of strength of joint  
 Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_  
 Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_  
**SUPERHEATER.** Type None Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_  
 Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler \_\_\_\_\_  
 Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

If apt, state whether, and when, one will be sent

W1330-0164



IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 top end bolts and nuts, 2 bottom end bolts and nuts, 2 main bearing bolts and nuts - 6 coupling bolts and nuts, set of feed and bilge Pump Valves, assorted Iron bolts and nuts and other articles

The foregoing is a correct description,

David Rowan & Co. Manufacturer.

Dates of Survey while building: During progress of work in shops -- 1918 Dec 11, 1919 Jan 22, Feb 11, Mar 11, Apr 16, May 16, June 3, 18, 23, July 14, 16, Aug 11, 25, 29. During erection on board vessel --- Sept 10, 16, 21, 25, Oct 1, 9, 15, 16, 27, Nov 3, 5, 14, 20, Dec 1, 3, 4, 11, 16, 21, 1920 Jan 8, 12, 13, 19, 24. Total No. of visits 38. Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders 16.4.19 Slides 3.6.19 Covers 3.6.19 Pistons 25.8.19 Rods 25.8.19 Connecting rods 25.9.19 Crank shaft 23.6.19 Thrust shaft 27.10.19 Tunnel shafts 4.12.19 Screw shaft 17.9.19 Propeller 17.9.19 Stern tube 5.11.19 Steam pipes tested 11.12.19/13.1.20 Engine and boiler seatings 4.12.19 Engines holding down bolts 13.1.20. Completion of pumping arrangements 29.1.20 Boilers fixed 13.1.20 Engines tried under steam 29.1.20 24.1.20

Completion of fitting sea connections 4.12.19 Stern tube 16.12.19 Screw shaft and propeller 16.12.19 Main boiler safety valves adjusted 29.1.20 Thickness of adjusting washers Pt 15 3/16" 1/8" Centre 15 5/32" 5/4" stars 7/8" 5/8" 2642 AF

Material of Crank shaft Steel Identification Mark on Do. TM 236.19 Material of Thrust shaft Steel Identification Mark on Do. QLS 17.9.19 AF 2642

Material of Tunnel shafts Steel Identification Marks on Do. \* Material of Screw shafts Steel Identification Marks on Do. Q.S. 27.10.19

Material of Steam Pipes Iron Test pressure 540 lb. 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? Yes. Is this machinery duplicate of a previous case? Yes. If so, state name of vessel Junisia

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey in accordance with the Rules and approved plans and has been seen working satisfactorily under steam. Materials and workmanship are good.

The machinery is eligible in our opinion to be classed + L M C 1-20

It is submitted that this vessel is eligible for THE RECORD. + L M C 1-20. JWD 6/2/20. JWS

The amount of Entry Fee ... £ 3 : 0 : When applied for, 2/24/1920. Special ... £ 37 : 19 : When received, 4/2/1920. Donkey Boiler Fee ... £ : : Travelling Expenses (if any) £ : : J. Easthope, J.S. Murray, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 8-FEB 1920 Assigned + L M C 1,20. MACHINERY CERT. WRITTEN 4.2.20

GLASGOW

Certificate (if required) to be sent to ... The Surveyors are requested not to write on or below the space for Committee's Minute.

