

REPORT ON MACHINERY.

No. 73308

Date of writing Report 15.7.1920 When handed in at Local Office 16.7.1920 Port of **NEWCASTLE-ON-TYNE** Received at London Office SAT JUL 17 1920

No. in Survey held at **South Shields** Date, First Survey **5th January** Last Survey **5th July** 1920
 Reg. Book. **20951** on the **S.S. "Mogador"** (Number of Visits **39**)

Master **Built at Kiel** By whom built **Hannoversche** Tons { Gross 2,23
 Net 1,349
 Engines made at **Kiel** By whom made **Hannoversche** When built **1905**
 Boilers made at **Kiel** By whom made **Hannoversche** when made **1905**
 Registered Horse Power **154** Owners **Compagnie Maritime du Protectorat du Maroc** when made **1905**
 Nom. Horse Power as per Section 28 **192** Is Refrigerating Machinery fitted for cargo purposes **No** Port belonging to **Barcelona**
 Is Electric Light fitted **Yes**

ENGINES, &c.—Description of Engines **Triple Expansion** No. of Cylinders **3** No. of Cranks **3**
 Dia. of Cylinders **20 1/2" x 32 1/2" x 51 1/2"** Length of Stroke **35 1/2"** Revs. per minute **10.26** Dia. of Screw shaft as per rule **10 1/2"** Material of screw shaft **as fitted 10 1/2"**
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube **No liner** 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 **6'-6"**
 Dia. of Tunnel shaft as per rule **9 1/2"** as fitted **9 1/2"** Dia. of Crank shaft journals as per rule **7 1/2"** as fitted **10 1/2"** Dia. of Crank pin **10 9/16"** Size of Crank webs **62" x 20 1/2"** Dia. of thrust shaft under collars **10 1/4"** Dia. of screw **12" x 4"** Pitch of Screw **13'-6"** No. of Blades **4** State whether moveable **No** Total surface **as per rule**
 No. of Feed pumps **2** Diameter of ditto **3 3/8"** Stroke **2 1/2"** Can one be overhauled while the other is at work **Yes**
 No. of Bilge pumps **2** Diameter of ditto **4 1/2"** Stroke **2 1/2"** Can one be overhauled while the other is at work **Yes**
 No. of Donkey Engines **2** Sizes of Pumps **CAST 9 1/2" x 7 1/2" x 9 1/2"** No. and size of Suctions connected to both Bilge and Donkey pumps **FEED 5 1/2" x 3 1/2" x 3 1/2"**
 In Engine Room **2-3'** **1-5' (Direct)** In Holds, &c. **No 1 - 2-3'** **No 2 - 2-3'**
 Tunnel well **1-3'**
 No. of Bilge Injections **1** sizes **5 1/2"** Connected to condenser, or to circulating pump **Pump** Is a separate Donkey Suction fitted in Engine room & size **Yes 5"**
 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 **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 **Yes** Is it fitted with a watertight door **Yes** worked from **Upper platform**

BOILERS, &c.—(Letter for record **(S)**) Manufacturers of Steel

Total Heating Surface of Boilers **32,400** Is Forced Draft fitted **No** No. and Description of Boilers **2 Multitubular Single Ended**
 Working Pressure **185 lbs** Tested by hydraulic pressure to **290 lbs** Date of test **22.6.20** No. of Certificate **as per rule**
 Can each boiler be worked separately **Yes** Area of fire grate in each boiler **50 sq ft** No. and Description of Safety Valves to each boiler **2 Spring loaded** Area of each valve **4.66 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 **1'-1"** Mean dia. of boilers **12'-10 1/2"** Length **10'-10"** Material of shell plates **as per rule**
 Thickness **1 1/4"** Range of tensile strength **42-46 tons per sq in** Are the shell plates welded or flanged **No** Descrip. of riveting: cir. seams **DR Lap**
 long. seams **Double Butt Skap** Diameter of rivet holes in long. seams **1 1/4"** Pitch of rivets **16 1/2"** Lap of plates or width of butt straps **20.8"**
 Per centages of strength of longitudinal joint rivets **90%** Working pressure of shell by rules **210 lbs** Size of manhole in shell **16" x 12"**
 Size of compensating ring **4 3/4" x 1 1/4"** No. and Description of Furnaces in each boiler **2 Dighton** Material **Steel** Outside diameter **3'-11 1/4"**
 Length of plain part top **7 1/2"** Thickness of plates crown **7 1/2"** Description of longitudinal joint **weld** No. of strengthening rings **None**
 Working pressure of furnace by the rules **205 lbs** Combustion chamber plates: Material **as per rule** Thickness: Sides **5/16"** Back **5/16"** Top **5/16"** Bottom **5/16"**
 Pitch of stays to ditto: Sides **4 1/2"** Back **4 1/2"** Top **4 1/2"** If stays are fitted with nuts or riveted heads **Nuts** Working pressure by rules **256 lbs**
 Material of stays **as per rule** Area at smallest part **1.22 sq in** Area supported by each stay **54.6 sq in** Working pressure by rules **247.5 lbs** End plates in steam space: Material **as per rule** Thickness **1 1/2"** Pitch of stays **15 3/4" x 15 3/4"** How are stays secured **DN + washers** Working pressure by rules **200 lbs** Material of stays **as per rule**
 Area at smallest part **6.7 sq in** Area supported by each stay **248 sq in** Working pressure by rules **256 lbs** Material of Front plates at bottom **as per rule**
 Thickness **1 1/2"** Material of Lower back plate **as per rule** Thickness **1"** Greatest pitch of stays **as per rule** Working pressure of plate by rules **as per rule**
 Diameter of tubes **3 1/2"** Pitch of tubes **4 1/2"** Material of tube plates **as per rule** Thickness: Front **1"** Back **1"** Mean pitch of stays **14 1/2"**
 Pitch across wide water spaces **14 1/4"** Working pressures by rules **314 lbs** Girders to Chamber tops: Material **as per rule** Depth and thickness of girder at centre **8" x 1 1/2" Equivalent** Length as per rule **26.4"** Distance apart **4 1/2"** Number and pitch of stays in each **3 x 4 1/4"**
 Working pressure by rules **242 lbs** Steam dome: description of joint to shell **None** % of strength of joint **as per rule**
 Diameter **as per rule** Thickness of shell plates **as per rule** Material **as per rule** Description of longitudinal joint **as per rule** Diam. of rivet holes **as per rule**
 Pitch of rivets **as per rule** Working pressure of shell by rules **as per rule** Crown plates **as per rule** Thickness **as per rule** How stayed **as per rule**

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

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS

W 1246 10127



