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REPORT ON MACHINERY

WELL JUL 28 1920

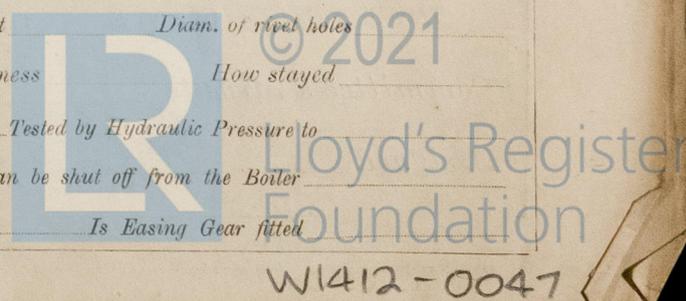
Received at London Office

of writing Report 25th June 1920 When handed in at Local Office 19 Port of Wilmington N.C.
 in Survey held at Wilmington N.C. Date, First Survey 29th Jan 20 Last Survey 29th May 1920
 Book. on the S.S. "City of Joliet" Year # 1448 (Number of Visits 15)
 Master William Logan Built at Wilmington N.C. By whom built George A. Fuller Co. Tons } Gross 6527
 when made 1919 } Net 4049
 Lines made at Hamlet, Ohio By whom made Hoover Owens & Reuschler Co. when made 1919
 Makers made at Buffalo N.Y. By whom made Barber Asphalt Paving Co. when made 1919
 Registered Horse Power 590 Owners U.S. Shipping Board Port belonging to Wilmington N.C.
 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

GINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 24 1/2" 41 1/2" 72" Length of Stroke 48" Revs. per minute 88 Dia. of Screw shaft 14.50" Material of screw shaft O.H. Steel
 as per rule 15 3/8" as fitted 15 3/8" screw shaft
 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
 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
 shafts are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 61"
 Dia. of Tunnel shaft 13.04" as per rule 13.08" as fitted 13.08" Dia. of Crank shaft journals 13.72" as per rule 13.72" as fitted 13.72" Dia. of Crank pin 13.72" Size of Crank webs 13.72" Dia. of thrust shaft under
 shafts 13.72" Dia. of screw 17.0" Pitch of Screw 13.1" No. of Blades 4 State whether moveable Yes Total surface 88.18 sq. ft.
 No. of Feed pumps 2 Diameter of ditto 12" x 8" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 5" Stroke 21" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 12" 8 1/2" 12" 7 1/2" 12" 10 1/2" 12" No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 3 - 3 1/2" Bilge suction, Centre, Port & Star. In Holds, &c. 2 - 4" suction from Fore and Aft Peaks #1, 2.
 3, 5 & 6 double bottom tanks & 3" Bilge suction from Fore and Aft Wells, centre Port & Star.
 No. of Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump Yes 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 Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks locks
 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
 How are pipes carried through the bunkers suctions from Peaks and double bottom How are they protected Wood covering
 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 deck grating in engine room

VALVES, &c.—(Letter for record) Manufacturers of Steel
 Total Heating Surface of Boilers 9150 Is Forced Draft fitted yes No. and Description of Boilers 3 Watertube boilers
 Working Pressure 200 Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to _____
 Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates _____
 Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams _____
 g. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
 Working pressure of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 Pitch of stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____
 Material of stays _____ Area at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: _____
 Material _____ Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____
 Area at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Thickness _____ Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
 Pitch across wide water spaces _____ Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and _____
 Thickness of girder at centre _____ Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
 Working pressure by rules _____ Steam dome: description of joint to shell _____ % 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 _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 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 _____



IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:— 25 Main Condenser tubes. 25 Aux. Condenser tubes. 7 Safety valves springs. 6 Boiler tubes. 1 set of Feed and Bilge pump valves. A quantity of assorted belts and nuts and iron of various sizes.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops -- Jan. 29. Feb. 4. 17. Mar. 5. 17. 29. April 13. 15. 17. 28. May 5. 11. 14. 25. 29. During erection on board vessel -- Total No. of visits

Is the approved plan of main boiler forwarded herewith No.

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods Connecting rods Crank shaft Thrust shaft Tunnel shafts 17. 2. 20. Screw shaft 29. 12. 19. Propeller 30. 12. 20. Stern tube 15. 1. 20. Steam pipes tested 15. 4. 20. Engine and boiler seatings 29. 1. 20. Engines holding down bolts 17. 2. 20. Completion of pumping arrangements 11. 5. 20. Boilers fixed 17. 3. 20. Engines tried under steam 11. 5. 20. Completion of fitting sea connections 29. 12. 19. Stern tube 26. 12. 19. Screw shaft and propeller 27. 12. 19. Main boiler safety valves adjusted 11. 5. 20. Thickness of adjusting washers No washers. Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do. Material of Tunnel shafts O.H. Steel Identification Marks on Do. 133. 173. 136. 145. Material of Screw shafts O.H. Steel Identification Marks on Do. 202. 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 Yes. If so, state name of vessel S.S. Cranford Apt. # 83.

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

The machinery has been properly fitted on board and on completion tried under steam and found satisfactory.

In my opinion the vessel is eligible for the record L.M.C. 5.20.

Engines constructed under survey of American Bureau of Shipping

It is submitted that this vessel is eligible for THE RECORD. L.M.C. 5.20 FI 3 Water tube Boilers 200 lbs. Fitted for oil fuel 5.20 F.P. above 150°F Subject to the Water Tube Boiler being surveyed annually.

GRM 3/8/20

Geo. Allan Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ : : When applied for, Special ... £ \$82.50 : : 19. Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ : : 19.20

Committee's Minute New York JUL 13 1920

Assigned L.M.C. 5.20 subject

MACHINERY CERT. WRITTEN 12/8/20



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