

REPORT ON MACHINERY.

No. 1326.

Received at London Office

15 AUG. 1923

Date of writing Report 13 Aug. 1923 When handed in at Local Office 13 Aug. 1923 Port of Nantes

No. in Survey held at St. Nazaire Date, First Survey 19 May 1922. Last Survey 3 August 1923
Reg. Book. 66951 on the Steel Screw Steamer Maryland (Ex. War Noble) (Number of Visits 36)

Tons { Gross 5446
Net 3367

Master Built at Vancouver B.C. By whom built J. Coughlan & Sons When built 1919-3

Engines made at Wellsville N.Y. By whom made Kerr Turbine Co. when made 1919

Boilers made at By whom made when made 1919

Registered Horse Power 577 N.H.P. Owners Cie Gen. Transatlantique Port belonging to Havre

Shaft Horse Power at Full Power 2650 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Y.

TURBINE ENGINES, &c.—Description of Engines Parsons Impulse Reaction - to original gearing No. of Turbines one.

Diameter of Rotor Shaft Journals, H.P. 125 mm L.P. Diameter of Pinion Shaft original shaft refitted.

Diameter of Journals Distance between Centres of Bearings Diameter of Pitch Circle

Diameter of Wheel Shaft Distance between Centres of Bearings Diameter of Pitch Circle of Wheel

Width of Face Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft as per rule as fitted

No. of Screw Shafts Diameter of same as per rule as fitted Diameter of Propeller Original Propeller Pitch of Propeller

No. of Blades State whether Moveable Total Surface Diameter of Rotor Drum, H.P. 495 to P590 Astern wheel.

Thickness at Bottom of Groove, H.P. L.P. Astern wheel Revs. per Minute at Full Power, Turbine 3600 Propeller 100.

PARTICULARS OF BLADING.

	H. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1ST EXPANSION Imp.		860 (mm)	2				Imp. wheel	920 (mm)	2
2ND " reactive	25	545	4						
3RD "	35	565	4						
4TH "	51	597	3						
5TH "	54	698	2						
6TH "	76	742	2						
7TH "	110	810	2						
8TH "	150	890	2						
9TH "	150	890	1						

No. and size of Feed pumps

No. and size of Bilge pumps Original pumps

No. and size of Bilge suction in Engine Room

In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible

Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

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

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure 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

Each boiler 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

Long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Percentage of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each Boiler Material Outside diameter

Length of plain part top crown 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 Diameter 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

Diameter 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

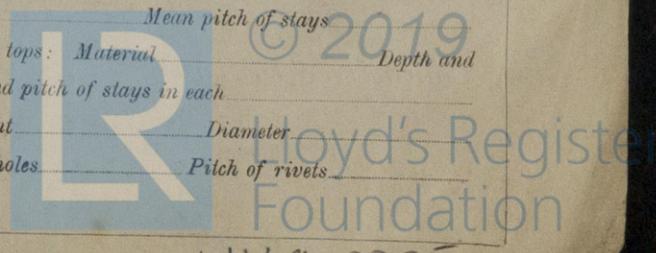
Clearance across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

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 Diameter of rivet holes Pitch of rivets

Working pressure of shell by rules Crown plates: Thickness How stayed



W149-0025

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.

SUPERHEATER. Type _____ 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 _____

IS A DONKEY BOILER FITTED? _____ If so, is a report now forwarded? _____

SPARE GEAR. State the articles supplied:— _____

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1922 May 19 - June 16 - Nov. 28 - Dec. 19-27 - 1923 Jan. 10-16-24-31 - Feb. 9-19 - March, 7-9-12-16 - April, 3-5-17-26 - May, 14-22-28
 { During erection on board vessel - - - 1923 June, 12-13 - July, 12-13-26-31 - August, 1-3
 Total No. of visits 36.

Is the approved plan of main boiler forwarded herewith
 " " " donkey " " "

Dates of Examination of principal parts—Casings 14-5-23 Rotor 8-6-23 Blading 8-9-5-6-23 Gearing _____
 Rotor shaft 28-5-23 Thrust shaft _____ Tunnel shafts _____ Screw shaft _____ Propeller _____

Stern tube _____ Steam pipes tested _____ Engine and boiler seatings _____ Engines holding down bolts 1-8-23
 Completion of pumping arrangements _____ Boilers fixed _____ Engines tried under steam 3-8-23

Main boiler safety valves adjusted _____ Thickness of adjusting washers _____

Material and tensile strength of Rotor shaft Ingot steel 60/52 Kg. per cm². Identification Mark on Do. 1614.

Material and tensile strength of Pinion shaft _____ Identification Mark on Do. _____

Material of Wheel shaft _____ Identification Mark on Do. _____ Material of Thrust shaft _____ Identification Mark on Do. _____

Material of Tunnel shafts _____ Identification Marks on Do. _____ Material of Screw shafts _____ Identification Marks on Do. _____

Material of Steam Pipes _____ Test pressure _____

Is an installation fitted for burning oil fuel _____ 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 a duplicate of a previous case _____ If so, state name of vessel _____

General Remarks (State quality of workmanship, opinions as to class, &c. *Workmanship good. This new turbine has been specially surveyed during construction. It has been built in accordance with the approved plan, fitted onboard in accordance with the Rules & is eligible in my opinion for the record of (new Turbine 8-23 in the Register Book. (see Report form 9. attached)*

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

The amount of Entry Fee	£	When applied for,	19
Special	£	When received,	19
Donkey Boiler Fee	£		
Travelling Expenses (if any)	£		

See Form No. 9 attached

Geo. A. Pang
 Engineer Surveyor to Lloyd's Register of Shipping.

TUES. 9 JUN 1925

TUE AUG. 21 1923

FRI 14 DEC. 1923
 TUES. 29 APR 1924

Committee's Minute

Assigned

FRI 30 MAY 1924

TUES. 18 DEC 1924
 TUES. 23 DEC 1924

