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## REPORT ON MACHINERY.

No. 2823

MON. OCT. 14, 1918

Received at London Office...  
Date of writing Report Sept 12<sup>th</sup> 1918 When handed in at Local Office Sept 12<sup>th</sup> 1918 Port of San Francisco  
To. in Survey held at Los Angeles Date, First Survey June 6<sup>th</sup> Last Survey Sept 3<sup>rd</sup> 1918  
Reg. Book. S.S. "West Galata" (Los Angeles S.B. & D.D. Co. N-6) (Number of Visits 8)  
on the S.S. "West Galata" (Los Angeles S.B. & D.D. Co. N-6) Tons Gross 3898  
Net 4430  
Master W. H. Curtis Built at San Pedro Cal By whom built Los Angeles S.B. & D.D. Co When built 1918  
Engines made at Pittsburg Pa By whom made Westinghouse Electric & Mfg Co when made 1918  
Boilers made at Phoenixville Pa By whom made Heine Boiler Works when made 1918  
Registered Horse Power 600 670 Owners U.S. Shipping Board Port belonging to Los Angeles  
Shaft Horse Power at Full Power 3000 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

TURBINE ENGINES, &c.—Description of Engines Double Reduction Gear Turbines No. of Turbines Two (1-H.P. 1-L.P.)  
Diameter of Rotor Shaft Journals, H.P. L.P. Diameter of Pinion Shaft L.P.  
Diameter of Journals L.P. Distance between Centres of Bearings L.P. Diameter of Pitch Circle L.P.  
Diameter of Wheel Shaft L.P. Distance between Centres of Bearings L.P. Diameter of Pitch Circle of Wheel L.P.  
Width of Face L.P. Diameter of Thrust Shaft under Collars L.P. Diameter of Tunnel Shaft L.P.  
No. of Screw Shafts One Diameter of same as per rule 14.08 14.22 Diameter of Propeller 17-14 Pitch of Propeller 12-4  
No. of Blades 4 State whether Moveable Yes Total Surface 96.6 Diameter of Rotor Drum, H.P. L.P. Astern L.P.  
Thickness at Bottom of Groove, H.P. L.P. Astern L.P. Revs. per Minute at Full Power, Turbine 3655 Propeller 100  
Screw Shaft fitted with continuous liner.

## 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.
T EXPANSION .....									
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No. and size of Feed pumps 2- 12" x 8" x 18"  
No. and size of Bilge pumps 3- 1-12" x 10" x 12" - 1-12" x 8" x 12" - 1-6" x 6" x 6"  
No. and size of Bilge suction in Engine Room 4- 3 1/2"  
Forward copper dam 1-3" After copper dam 1-3" N°3 hold 2-3 1/2" N°4 hold 2-3 1/2" After well 1-3 1/2" After peak 1-3"  
No. of Bilge Injections 1 sizes 12" Connected to condenser, or to circulating pump Cir 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 all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Valves  
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 both  
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 ✓ 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 Top platform of E.R.  
Illinois Steel Co

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Illinois Steel Co  
Total Heating Surface of Boilers 11600 Is Forced Draft fitted No No. and Description of Boilers See Phila Rpt N° 2896 4 W.T.  
Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test August 13<sup>th</sup> No. of Certificate   
In each boiler be worked separately yes Area of fire grate in each boiler  No. and Description of Safety Valves to   
Each boiler 2 Spring loaded Area of each valve 9.62 Pressure to which they are adjusted 200 lbs Are they fitted with easing gear yes  
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   
Pitch of rivets  Lap of plates or width of butt straps   
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  End plates in steam space   
Material of stays  Diameter at smallest part  Area supported by each stay  Working pressure by rules  Material of stays   
Material  Thickness  Pitch of stays  How are stays secured  Working pressure by rules  Material of Front plates at bottom   
Diameter at smallest part  Area supported by each stay  Working pressure by rules  Working pressure of plate by rules   
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  Diameter of rivet holes  Pitch of rivets   
Working pressure of shell by rules  Crown plates: Thickness  How stayed

006552- 006563- 0294



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?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:

1 tail shaft - 4 propeller blades - 40 condenser tubes - 24 boiler tubes  
1 set of check valves for each boiler - 3 sets of large pump valves - 1 set of feed pump valves - 2 sets of gear shaft bearings  
2 sets of turbine bearings - 6 sets of pinion bearings - 6 propeller thrust bearing shoes - 12 turbine thrust bearing shoes - 1/2 set of studs and nuts for turbine bearings - 12 coupling bolts - 10 pedestal cover studs - 1/2 set of studs and nuts for turbine cover - 1/2 set of gear housing joint bolts - 7 pinion frame joint studs - 1 set of main oil pump drive gears - 1 set of valves for auxiliary oil pumps - 1 relief valve spring - 27 spare tubes for lubricating oil cooler

The foregoing is a correct description,

Fred. A. Gardner

Manufacturer.

For Los Angeles S.B. & D.D.C.

Dates of Survey while building

During progress of work in shops -  
During erection on board vessel -  
Total No. of visits

June 6<sup>th</sup> July 3<sup>rd</sup> 23<sup>rd</sup>  
July 9<sup>th</sup> Aug 12<sup>th</sup> 13<sup>th</sup> 31<sup>st</sup> - Sept 3<sup>rd</sup>

Is the approved plan of main boiler forwarded herewith

No

Dates of Examination of principal parts-Casings

Rotors

Blading

Gearing

Rotor shaft

Thrust shaft

Tunnel shafts

Screw shaft

Propeller

Stern tube

Steam pipes tested

Engine and boiler seatings

Engines holding down bolts

Completion of pumping arrangements

Boilers fired

Engines tried under steam

Main boiler safety valves adjusted

Thickness of adjusting washers

No 1 A 1.34 No 2 A 1.23 No 3 A 1.06 No 4 A 1.17

Material and tensile strength of Rotor shaft

Identification Mark on Do.

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 600 lb.

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 a duplicate of a previous case

yes

If so, state name of vessel S.S. West Galore S. 70 Rpt No 2814

General Remarks

(State quality of workmanship, opinions as to class, etc.)

The machinery of this vessel have been

constructed under special survey of materials tested in accordance with the rules and the workmanship was found good throughout - On completion the machinery was tested under working conditions with satisfactory results.

In the opinion of the undersigned this machinery is eligible to be classed in the Register Book with notation of  $\nabla$  L.M.C. 9.18. Fitted for oil fuel 9.18 Electric light.

Lloyd's No 96 5.3.18 T.H.	Lloyd's No 87 5.13.18 T.H.	Lloyd's No 86 5.1.18 T.H.	Lloyd's No 94 5.3.18 T.H.	Lloyd's No 92 5.4.18 T.H.	Lloyd's No 109 5.6.18 T.H.	Lloyd's No 104 5.6.18 T.H.
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The amount of Entry Fee ... \$15

When applied for,

Special  
Less Amount of Entry Fee ... \$166

Sept 12<sup>th</sup> 1918

Donkey Boiler Fee ... £

When received,

Travelling Expenses (if any) \$59.39

14/10/18

1/3 Machinery fee to be credited to Phila. Rpt No 2896

Committee's Minute New York SEP 24 1918

Assigned

+ LMC 9.18

Fitted for oil fuel 9.18 I.L. above 150° F

MACHINERY CERTIFICATE  
WRITTEN 14.10.18

J. Blackett

Engineer Surveyor to Lloyd's Register of Shipping.

this vessel is eligible for

THE RECORD. + LMC 9.18

2 STEAM TURBINES GEARED TO 1 SCREW SHAFT  
FITTED FOR OIL FUEL 9.18 F.P. ABOVE 150° F  
WATER TUBE BOILERS SUBJECT TO ANNUAL SURVEY

Lloyd's Register  
Foundation