

# REPORT ON MACHINERY.

No. 571  
1 AUG. 1919

Received at London Office.....

Writing Report July 10 1919 When handed in at Local Office July 10 1919 Port of Portland, Oregon.  
Survey held at Spokane, Wash. Date, First Survey Jan 6, 1919. Last Survey May 27, 1919  
Book. on the S. S. "WAR COLUMN" (J. Coughlan & Sons No. 9 Hull) (Number of Visits 4)  
Tons { Gross 5757.41  
Net 4247.28  
Built at Vancouver, B.C. By whom built J. Coughlan & Sons When built 1919.  
Machinery made at Spokane, Wash. By whom made Hallidie Co. when made 1919.  
Boilers made at Vancouver. By whom made Vulcan Iron Works. when made 1919  
Registered Horse Power 577 Owners Imperial Mercantile Board Port belonging to London  
Horse Power at Full Power 2500 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes,

L.P. Turbine of Shop No. 6.  
Description of Engines Cross Compound Geared Parson's No. of Turbines One  
Diameter of Rotor Shaft Journals, H.P. L.P. 4" Diameter of Pinion Shaft 4 7/8" & 12 5/8"  
Diameter of Journals 5" & 10" Distance between Centres of Bearings 2' 6" & 5' 1 1/2" Diameter of Pitch Circle 7.75" & 13.2"  
Diameter of Wheel Shaft 13 1/2" Distance between Centres of Bearings Diameter of Pitch Circle of Wheel 46" & 78.8"  
Diameter of Face 15" & 14" Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft as per rule.  
Diameter of Screw Shafts as fitted Diameter of Propeller Pitch of Propeller  
State whether Moveable Total Surface Diameter of Rotor Drum, H.P. L.P. 26" Astern 2' 5" mean  
Thickness at Bottom of Groove, H.P. L.P. Astern Revs. per Minute at Full Power, Turbine 3200 Propeller 90

## 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.
EXPANSION .....			1 7/8"	2' 5 3/4"	2			
" .....			2 1/2"	2' 7"	2	L.P. Turbine astern unit		
" .....			3 5/16"	2' 8 5/8"	2	Impulse Nozzles on a mean		
" .....			4 3/8"	2' 10 3/4"	2	diameter of 2' 5".		
" .....			5"	3' 0"	1	L.P. 1 1/4" Nozzle. 3 rows of		
" .....			5"	3' 0"	1	buckets.		
" .....			5"	3' 0"	1			
" .....			5"	3' 0"	1			

and size of Feed pumps

and size of Bilge pumps

and size of Bilge suction in Engine Room

In Holds, &c.

of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size  
all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible  
all connections with the sea direct on the skin of the ship Are they Valves or Cocks  
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  
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  
at pipes are carried through the bunks How are they protected  
all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges  
the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

ILERS, &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

each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to

h boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

smallest distance between boilers or uptakes and bunks 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

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell plates

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

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings bottom

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

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

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