

## REPORT ON MACHINERY.

No. 14558  
3277

Received at London Office

REC'D NEW YORK  
Date of writing Report May 17 1919 When handed in at Local Office May 24 1919 Port of NEW YORK N.Y.  
No. in Survey held at SCHEMECTADY N.Y. Date, First Survey 6-10-17 Last Survey May 10 1919  
Reg. Book. on the S.S. Henry Clay (Number of Visits 61) Gross 8166.63  
Tons Net 6305.  
Master W. A. Harstedt Built at Gloucester By whom built Pusey & Jones Co When built 1919  
Engines made at SCHEMECTADY N.Y. By whom made GENERAL ELECTRIC CO. when made 1917  
Boilers made at Camden By whom made New York Shipbuilding Corp. when made 1915  
Registered Horse Power 2000 Owners U.S. Shipping Board, Emergency Steamer Corp Port belonging to Gloucester L.I.  
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 GEARED TURBINES No. of Turbines ONE  
Diameter of Rotor Shaft Journals, H.P. 7" L.P. ✓ Diameter of Pinion Shaft 7"  
Diameter of Journals 4.5 PINION 7" Distance between Centres of Bearings GEAR 10" Diameter of Pitch Circle GEAR 37.666"  
Diameter of Wheel Shaft 14" Distance between Centres of Bearings 4.5 PINION 10.75" Diameter of Pitch Circle of Wheel WHEEL 54.75"  
Width of Face 18.450" Diameter of Thrust Shaft under Collars 14.5" Diameter of Tunnel Shaft as per rule 13.2  
No. of Screw Shafts one Diameter of same as per rule 14.5 Containing lines as fitted 15" Diameter of Propeller 17.4 1/2 Pitch of Propeller 13.4  
No. of Blades 4 State whether Moveable Yes Total Surface 84.4 sq ft Diameter of Rotor Drum, H.P. ✓ L.P. astern  
Thickness at Bottom of Groove, H.P. ✓ L.P. ✓ Astern ✓ Revs. per Minute at Full Power, Turbine 3374.5 Propeller 90

## PARTICULARS OF BLADING.

	ACTIVE HEIGHT OF BLADES.	H.P. PITCH DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	L.P. DIAMETER AT TIP.	NO. OF ROWS.	ACTIVE HEIGHT OF BLADES.	ASTERN. PITCH DIAMETER AT TIP.	NO. OF ROWS.
1ST EXPANSION	8.75"-13.75"	2'-11 1/2"	2				8.75"-1.5"	3'-3"	9
2ND	6.25"	3'-9"	1				3.375"	3'-3"	1
3RD	1.250"	3'-10 1/2"	1						
4TH	2.50"	4'-0"	1						
5TH	6.00"	4'-2"	1						
6TH									
7TH									
8TH									

No. and size of Feed pumps 2 @ 12.8-24No. and size of Bilge pumps 2 @ 10x12x12 10x8 1/2 x 10.No. and size of Bilge suction in Engine Room 2 3/2 Boiler room 2 3/2In Holds, &c. 10 @ 3/2

No. of Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump 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 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 Bilge suction How are they protected Ceiling  
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

BOILERS, &c.—(Letter for record (12)) Manufacturers of Steel Carnegie Steel Co  
Total Heating Surface of Boilers 7804.5 sq ft Is Forced Draft fitted Yes No. and Description of Boilers 3 Single Ended  
Working Pressure 210 lbs Tested by hydraulic pressure to 315 lbs Date of test 23-9-18 No. of Certificate 233  
Can each boiler be worked separately Yes Area of fire grate in each boiler 59 sq ft No. and Description of Safety Valves to each boiler Double spring loaded Area of each valve 9.6 sq ft Pressure to which they are adjusted 210 lbs Are they fitted with easing gear Yes  
Smallest distance between boilers or uptakes and bunkers or woodwork 11" Mean dia. of boilers 14.11" Length 11.6" Material of shell plates Steel  
Thickness 7/16 1 1/4 Range of tensile strength 71680 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams DR Lap  
long. seams DR LR Diameter of rivet holes in long. seams 19/16" Pitch of rivets 10 5/16" Lap of plates or width of butt straps 22 3/4"  
Per centages of strength of longitudinal joint 84.8 Working pressure of shell by rules 228 Size of manhole in shell 12 x 16  
Size of compensating ring 3 1/2 x 3 1/2 x 1 3/4 No. and Description of Furnaces in each Boiler 3 Corrugated Material Steel Outside diameter 3.1 1/4  
Length of plain part top Thickness of plates bottom 5/8" Description of longitudinal joint Weld No. of strengthening rings ✓  
Working pressure of furnace by the rules 213 Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 1"  
Pitch of stays to ditto: Sides 7 1/4 x 7 Back 7 x 7 Top 7 1/4 x 7 1/4 Are stays fitted with nuts or riveted heads Nuts Working pressure by rules 252 lbs  
Material of stays Iron Diameter at smallest part 1.99 Area supported by each stay 53.47 sq in Working pressure by rules 250 lbs End plates in steam space  
Material Steel Thickness 1 3/32 Pitch of stays 6 1/2 x 15 1/2 How are stays secured Nuts Working pressure by rules 233 Material of stays Steel  
Diameter at smallest part 6.49 Area supported by each stay 253.5 sq in Working pressure by rules 263 Material of Front plates at bottom Steel  
Thickness 1 1/16 Material of Lower back plate Steel Thickness 1 1/8 Greatest pitch of stays 14 1/4 Working pressure of plate by rules 256  
Diameter of tubes 2 1/2 Pitch of tubes 3 1/8 x 3 1/2 Material of tube plates Steel Thickness: Front 1 1/16 Back 1 1/16 Mean pitch of stays 8.875  
Pitch across wide water spaces 12 3/4 Working pressures by rules 245 Girders to Chamber tops: Material Steel Depth and  
thickness of girder at centre 9 2 @ 1" Length as per rule 2 11" Distance apart 7 1/4 Number and pitch of stays in each 4 @ 7 1/4  
Working pressure by rules 256 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 ✓

W1467-0028



Rpt. 13.

REC'D  
RE

No. in Reg. Book	on the Built
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Owners \_\_\_\_\_  
Yard No. \_\_\_\_\_

### DESCRIPTION OF

7-151

Set

### Capacity of Dynam

*Where is Dynamo*

*Position of Main S*

*Positions of auxil*

*If fuses are fitted*

circuits ve

If vessel is wired on

Are the fuses of n

*Are all fuses fitted*

are permanent.

*all switches and*

Total number of lig

A 121

B 30

C 10

D

E

/ Mast head

Side 1

9

*If are lights what pr*

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1 Gearing

DESCRIPTION OF A

*Joints in cables, how made*

Are all the joints of cab

positions none bei

*Are there any joints in*

*How are the cables led*

102

Register

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