

# REPORT ON BOILERS.

No. 3425

Date of writing Report June 6 1919 <sup>NEW YORK</sup> Sept. 20 1919 When handed in at Local Office 8<sup>th</sup> Ave 1919 Port of Philadelphia  
 No. in Survey held at Lehigh Pa Date, First Survey March 12 1919 Last Survey April 19 1919  
 Reg. Book. on the S. S. "Sharon" (Number of Visits 5)  
 Master Built at Gloucester N.J. By whom built Pusey & Jones Company (C6) When built 1919  
 Engines made at Potomac City N.Y. By whom made General Electric Company When made 1918  
 Boilers made at Lehigh Pa. By whom made Sun Shipbuilding Co. When made 1919  
 Registered Horse Power \_\_\_\_\_ Owners Emergency Fleet Corporation Port belonging to Gloucester City N.J.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Lukens Steel Co.

(Letter for record V) Total Heating Surface of Boilers 5202<sup>sq</sup> Is forced draft fitted yes No. and Description of Boilers 2 SE Scotch Marine Working Pressure 210 Tested by hydraulic pressure to 315 Date of test 19-4-19  
 No. of Certificate 319 Can each boiler be worked separately yes Area of fire grate in each boiler 59.125<sup>sq</sup> No. and Description of safety valves to each boiler double spring loaded Area of each valve 9.6<sup>sq</sup> Pressure to which they are adjusted 210 lbs  
 Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork abt 8" Mean dia. of boilers 14' 11" Length 11' 6"  
 Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 60 to 4680 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams L.T.R. long. seams T.R. DBS Diameter of rivet holes in long. seams 19/16" Pitch of rivets 10 7/16"  
 Gap of plates or width of butt straps 22 3/4" Per centages of strength of longitudinal joint rivets 84.92% Working pressure of shell by rules 219 Size of manhole in shell 12" x 16" Size of compensating ring 36 1/2" x 32 1/2" x 1 1/2" No. and Description of Furnaces in each boiler 3 Monson Material Steel Outside diameter 47 1/4" Length of plain part top Thickness of plates ornon 7/8" Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 213 Combustion chamber plates: Material Steel Thickness: Sides 7/8" Back 7/8" Top 7/8" Bottom 1" Pitch of stays to ditto: Sides 7" x 7/4" Back 7" x 7" 3/4" x 7/8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 256 Material of stays W.I Diameter at smallest part 1.997 Area supported by each stay 50.25<sup>sq</sup> Working pressure by rules 287 End plates in steam space: Material Steel Thickness 1 1/2" Pitch of stays 15 1/2" x 16 1/2" How are stays secured D. Nuts Working pressure by rules 233 Material of stays Steel Diameter at smallest part 6.49" Area supported by each stay 21.75<sup>sq</sup> 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 347 Diameter of tubes 2 1/2" Pitch of tubes 5 3/8" x 5 1/2" Material of tube plates Steel Thickness: Front 1 1/16" Back 13/16" Mean pitch of stays 10 1/2" x 7/4" Pitch across wide end spaces 12.45" Working pressures by rules 248 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2" x 9" Length as per rule 35" Distance apart 7 3/8" Number and pitch of Stays in each 4 - 7 1/4" Working pressure by rules 256 Superheater or Steam chest: how connected to boiler \_\_\_\_\_ Can the superheater be shut off and the boiler worked separately \_\_\_\_\_  
 Diameter \_\_\_\_\_ Length \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Diameter of flue \_\_\_\_\_ Material of flue plates \_\_\_\_\_ Thickness \_\_\_\_\_  
 Fitted with rings \_\_\_\_\_ Distance between rings \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates: Thickness \_\_\_\_\_ How stayed \_\_\_\_\_ Working pressure of end plates \_\_\_\_\_ Area of safety valves to superheater \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_

The foregoing is a correct description,  
Robert H. ... Manufacturer.

During progress of work in shops March 12 19 - April 4 11 19 1919 Is the approved plan of boiler forwarded herewith \_\_\_\_\_  
 During erection on board vessel \_\_\_\_\_ Total No. of visits \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)  
These boilers have been constructed under special survey, in accordance with the approved rules. The workmanship and materials are good.

Survey Fee ... \$ \_\_\_\_\_ When applied for, 191 \_\_\_\_\_  
 Travelling Expenses (if any) \$ 3.00 When received, 191 \_\_\_\_\_

Committee's Minute \_\_\_\_\_  
 Signed \_\_\_\_\_  
See other Rpt Phil 3425

Wm. R. ...  
 Engineer Surveyor to Lloyd's Register of Shipping.

