

## REPORT ON BOILERS.

No. 2496.A

REC'D NEW YORK

Received at London Office

FRI. 3 AUG. 1917

Date of writing Report 17<sup>th</sup> Jan 1917. When handed in at Local Office 20<sup>th</sup> Jan 1917. Port of Philadelphia  
 No. in Survey held at Wilmington Date, First Survey 19<sup>th</sup> July 1916 Last Survey 191  
 Reg. Book. 1/2 Pennsylvania of New York (Number of Visits) Gross 6666  
 on the J.S.H. Tons Net J.S.H.  
 Master Built at Quincy Mass By whom built Fore River S.B.C. When built  
 Engines made at By whom made When made  
 Boilers made at Wilmington Del., By whom made Harlan & Hollingsworth Corp. When made  
 Registered Horse Power Owners Port belonging to

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY—Manufacturers of Steel Lukens Iron &amp; Steel Co.

(Letter for record S.T.) Total Heating Surface of Boilers 7979 sq ft Is forced draft fitted No. and Description of  
 Boilers Three Single ended Working Pressure 190 lbs Tested by hydraulic pressure to 285 lbs Date of test 10-1-17.

No. of Certificate 115 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 In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 15'-4 7/8" Length 11'-1 3/4"

Material of shell plates Steel Thickness 1 7/8" Range of tensile strength 28/32 Are the shell plates welded or flanged No.

Descrip. of riveting: cir. seams d.s. lap long. seams DBS. T.R. Diameter of rivet holes in long. seams 1 7/8" Pitch of rivets 8 1/2"

Top of plates or width of butt straps 20 1/2" Per centages of strength of longitudinal joint rivets 98.7. Working pressure of shell by  
 rules 204.9 Size of manhole in shell 12" x 16" Size of compensating ring 39" x 35" x 1 7/8" No. and Description of Furnaces in each

boiler 3 Morisons Material Steel Outside diameter 4'-1" Length of plain part top Thickness of plates crown 5/8" bottom 7/8"

Description of longitudinal joint weld. No. of strengthening rings Working pressure of furnace by the rules 205.5 Combustion chamber

plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8" Pitch of stays to ditto: Sides 7" x 6 1/2" Back 7 3/8" x 7"

Top 8" x 6 1/2" If stays are fitted with nuts or riveted heads riveted heads Working pressure by rules 193.4 Material of stays Iron Area Diameter at

smallest part 1 7/8" Area supported by each stay 52 sq in Working pressure by rules 202.5 End plates in steam space: Material Steel Thickness 1 1/8"

Pitch of stays 16 3/4" x 16 1/2" How are stays secured DN & W Working pressure by rules 205 Material of stays Steel Area Diameter at smallest part 6 1/4"

Area supported by each stay 246 sq in Working pressure by rules 244 Material of Front plates at bottom Steel Thickness 7/8" Material of

Lower back plate Steel Thickness 1 1/8" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 337. Diameter of tubes 2 1/2"

Pitch of tubes 3 5/8" x 3 1/2" Material of tube plates Steel Thickness: Front 7/8" Back 1 1/8" Mean pitch of stays 8.94 Pitch across wide

water spaces 13 1/2" + dbl Working pressures by rules 277. Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 9 1/2" x 1 3/4" Length as per rule 34 Distance apart 8" Number and pitch of Stays in each 4-6 1/2"

Working pressure by rules 237. 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

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened 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,  
 HARLAN & HOLLINGSWORTH CORP.

W. J. L. President Manufacturer.

Dates of Survey During progress of July 19, Sept 15, 20, Oct 3, 11, 17, 24, Nov 1, 8, 15, 28. Is the approved plan of boiler forwarded herewith  
 while work in shops - - - Dec 6, 13, 22, 29, Jan 4, 10.  
 building During erection on board vessel - - -

Total No. of visits

## GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;c.)

The three main boilers for this vessel have been built by Harlan & Hollingsworth Corp. Wilmington, Del, forwarded to Fore River S.B.C. to be placed on board. The workmanship is sound & good. The boilers have been tested as required by the Rules of the Society, and are in my opinion eligible to be classed as per recommendation on First Entry Machinery Report.

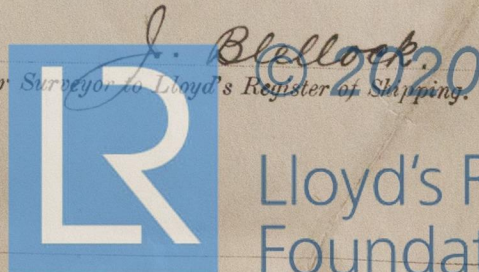
Survey Fee ... \$79.00 : When applied for, 20<sup>th</sup> Jan 1917  
 Travelling Expenses (if any) \$10.00 : When received, Jan 1917

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York JUL 17 1917

Assigned

See other report



Lloyd's Register  
 Foundation