

# REPORT ON WATER TUBE BOILERS.

No. 3551

Received at London Office  
 Writing Report **NEW YORK** Dec. 14, 1919. When handed in at Local Office **Nov. 28** 1919 Port of **New York**

Survey held at **Bayonne, N. J.** Date, First Survey **April 23** 1919.  
 on the **S S "Andrew Jackson"** Number of Visits **32** Tons Gross **8289**  
 Built at **Gloucester** By whom built **Pusey & Jones Co.** When built **1919**  
 Made at **Schenectady** By whom made **General Electric Company** When made **1918**  
 Made at **Bayonne, N. J.** By whom made **Babcock & Wilcox Co.** When made **1919**  
 Owners **U. S. Shipping Board** Port belonging to **Gloucester City**

**WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.**—Manufacturers of Steel **Midvale Steel Co.**  
 Date of Approval of plan **July 18, 1917.** Number and Description or Type  
 of Certificate **Three Water Tube** Working Pressure **200 lbs.** Tested by Hydraulic Pressure to **440 lbs.** Date of Test **11-9-19**  
 Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **8706 sq. ft.**  
 Area of fire grate (coal) in each Boiler **87.5** Total grate area of boilers in vessel including  
 and Auxiliary **525** No. and type of burners (oil) in each boiler **Five** No. and description of safety valves on  
 boiler **double spring loaded** Area of each valve **7.06 sq. in.** Pressure to which they are adjusted **210 lbs.**  
 In case of donkey boilers state whether steam from main boilers can enter the donkey boiler **Yes**  
 Height of Boiler **12'10"** Width and Length **14'7 3/8, 11'7 1/8**  
 Number in each boiler **one** Inside diameter **42"** Material of plates **Steel** Thickness **1 1/2"**  
 Are drum shell plates welded or flanged **No** Description of riveting:  
 long. seams **D.R.D.B.S.** Diameter of rivet holes in long. seams **29/32"** Pitch of Rivets **2 9/32" & 4 9/16"**  
 Thickness of straps **9/16"** Percentage strength of long. joint:—Plate **80.1** Rivet **108**  
 Pitch of tube holes **7"** Percentage strength of shell in way of tubes **84.8**  
 Material **Steel** Thickness **19/32"** Radius or how stayed **42"**  
 Diameter of Rivet Holes in **15" x 11"** Range of tensile strength **55000 - 65000 lbs.** Are drum shell plates welded  
 Description of riveting:—Cir. seams **S.R. lap** long. seams **D.R.D.B.S.** Diameter of Rivet Holes in  
 Pitch of rivets **29/32"** Lap of plates or width of butt straps **9 3/4"** Thickness of straps **9/16"**  
 Diameter of tube holes in drum **4 1/32"** Pitch of tube holes **7"** Percentage strength of shell in way of tubes  
 Headers or Sections:—Number **24** Material of Stays **Steel** Thickness **9/16"**  
 Tested by Hydraulic Pressure to **500 lbs.** Material of Stays **Steel** Thickness **9/16"**  
 Working Pressure by Rules **289 lbs.** Tubes:—Diameter **4"** Number **240**  
 Description of Joint to Shell **Butt** Thickness of shell plates **1/2"** Material **Steel**  
 Diameter of Rivet Holes **29/32"** Pitch of Rivets **2 9/32"** Working Pressure of shell  
 Crown or End Plates:—Material **Steel** Thickness **1/2"** How stayed **Butt**  
 Date of Approval of Plan **Jan in New York** Tested by Hydraulic Pressure to **600 lbs.**  
 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler **Yes**  
 Pressure to which each is adjusted **210 lbs.** Is easing gear fitted **Yes**  
 Number, diameter, and thickness of tubes  
 Gaskets or joints:—Manhole **Handhole** Handhole plates

The foregoing is a correct description,  
**The Babcock & Wilcox Co.** Manufacturer.  
**On Hubbard Marine Dept.**

During progress of survey **1919 Feb. 16, 17, 18, 19 & daily** Is the approved plan of boiler forwarded herewith  
 During erection on board vessel **until 23rd April, 1919** Total No. of visits

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) **The workmanship and material**  
**both of good quality. To complete the survey, the boilers to be reerected on board, and tested**  
**hydraulic pressure. All mountings to be examined and fitted. Safety valves to be adjusted under**  
**Boilers now erected on board mountings examined and fitted**  
**and Safety Valves adjusted to 210 lbs**

Survey Fee **£** : : When applied for, **191**  
 Travelling Expenses (if any) **£** : : When received, **191**

(Signed) **A. MACWATT** **H. Adams**  
 Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute **New York DEC 1 6 1919**  
 signed **See Phil Rpt 3551**

