

REPORT ON BOILERS.

No. 2566

REC'D NEW YORK

Received at London Office

11 JUN. 1917

Date of writing Report 14 May 1917. When handed in at Local Office 15 May 1917. Port of **PHILADELPHIA**

No. in Survey held at **Wilmington Del.** Date, First Survey Last Survey 191

Reg. Book. 555 on the **S/S. "BENJAMIN BREWSTER"** Tons } Gross 5600.
Net

Master Built at **Wilmington** By whom built **Harlan & Hollingsworth** When built 1914.

Engines made at **Wilmington** By whom made **Harlan & Hollingsworth** When made 1914.

Boilers made at **Wilmington** By whom made **Harlan & Hollingsworth** When made 1914.

Registered Horse Power Owners **Standard Oil Co of New York** Port belonging to **Bayonne N.J.**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **Lukens I & Co.**

(Letter for record **S.**) Total Heating Surface of Boiler **1344 sq ft** Is forced draft fitted **no.** No. and Description of Boilers **One Single ended.** Working Pressure **180** Tested by hydraulic pressure to **240** Date of test **16-2-17.**

No. of Certificate **117.** Can each boiler be worked separately **✓** Area of fire grate in each boiler **43.75 sq ft** No. and Description of safety valves to each boiler **Two direct spring** Area of each valve **4.9 sq in** Pressure to which they are adjusted **180.**

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 **8'-0"** Mean dia. of boilers **11'-0 3/2"** Length **11'-9"**

Material of shell plates **Steel** Thickness **3/32"** Range of tensile strength **28/32.** Are the shell plates welded or flanged **no.**

Descrip. of riveting: cir. seams **DR Lap** long. seams **TR. DBS.** Diameter of rivet holes in long. seams **1/8"** Pitch of rivets **6 1/2"**

Lap of plates or width of butt straps **16 1/4"** Per centages of strength of longitudinal joint rivets **93.9** plate **82.6.** Working pressure of shell by rules **184.5** Size of manhole in shell **12 x 16.** Size of compensating ring **30 x 34 x 3/32"** No. and Description of Furnaces in each boiler **2 Morisons** Material **Steel** Outside diameter **46 1/8"** Length of plain part **191** Thickness of plates crown **9"** bottom **16**

Description of longitudinal joint **weld** No. of strengthening rings **✓** Working pressure of furnace by the rules **191** Combustion chamber plates: Material **Steel** Thickness: Sides **3/32"** Back **21"** Top **21"** Bottom **13"** Pitch of stays to ditto: Sides **7 1/2" x 7 1/2"** Back **7 1/2" x 7 1/2"**

Top **7 1/2" x 7 1/2"** If stays are fitted with nuts or riveted heads **riveted heads** Working pressure by rules **196.** Material of stays **Steel** Area at smallest part **1.521** Area supported by each stay **56.25** Working pressure by rules **216.** End plates in steam space: Material **Steel** Thickness **3/32"**

Pitch of stays **15 x 15** How are stays secured **DN & W** Working pressure by rules **184.** Material of stays **Steel** Area at smallest part **4.62 sq in**

Area supported by each stay **225 sq in** Working pressure by rules **213** Material of Front plates at bottom **Steel** Thickness **3/4"** Material of Lower back plate **Steel** Thickness **29"** Greatest pitch of stays **12 1/2"** Working pressure of plate by rules **267.** Diameter of tubes **2 3/4"**

Pitch of tubes **4" x 3 3/4"** Material of tube plates **Steel** Thickness: Front **3/4"** Back **3/4"** Mean pitch of stays **9.75** Pitch across wide water spaces **13"** Working pressures by rules **212.** Girders to Chamber tops: Material **Steel** Depth and thickness of girder at centre **9" x 1 3/4"** Length as per rule **33"** Distance apart **7 1/2"** Number and pitch of Stays in each **3 - 7 1/2"**

Working pressure by rules **239** Steam dome: description of joint to shell **✓** % of strength of joint **✓**

Diameter **✓** Thickness of shell plates **✓** Material **✓** Description of longitudinal joint **✓** Diam. of rivet holes **✓**

Pitch of rivets **✓** Working pressure of shell by rules **✓** Crown plates **✓** Thickness **✓** How stayed **✓**

SUPERHEATER.

Type **✓**Date of Approval of Plan **✓**Tested by Hydraulic Pressure to **✓**Date of Test **✓**Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler **✓**Diameter of Safety Valve **✓**Pressure to which each is adjusted **✓**Is Easing Gear fitted **✓**

The foregoing is a correct description,

H. H. Carnes Chief Engineer **H. H. Carnes** Manufacturer.

Dates of Survey } During progress of work in shops - - -
while building } During erection on board vessel - - -

See Report 4.

Is the approved plan of boiler forwarded herewith

Total No. of visits

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

See Report 4.Survey Fee ... £ : : When applied for, **15-5** 1917

Travelling Expenses (if any) £ : : When received, 191

Committee's Minute **New York MAY 24 1917**Assigned **See other report (Phil. 2566)**

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

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