

# REPORT ON BOILERS.

No. 926.

Date of writing Report Jan 29<sup>th</sup> 1920 When handed in at Local Office Jan 29<sup>th</sup> 1920 Received at London Office Jan 29<sup>th</sup> 1920  
 No. in Survey held at Aberdeen, N.H. Port of Seattle, W. U.S.A.  
 Reg. Book. on the Vertical Dry Boiler of the Barge "FOREST FRIEND" Date, First Survey Jan 28<sup>th</sup> 1920 Last Survey Jan 28<sup>th</sup> 1920  
 Master R. Hutchison Built at Aberdeen, W. By whom built Grays Nautical Workshop Co. (Number of Visits 1)  
 Engines made at East Shore Works By whom made International Boiler Works Tons { Gross 1614.89  
 Boilers made at East Shore Works By whom made International Boiler Works { Net 1436.02  
 Registered Horse Power 100 Owners Grays Nautical Workshop Co. When built 1920  
 When made 1919  
 Port belonging to Aberdeen, W.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—*Manufacturers of Steel*  
(Letter for record)

(Letter for record	) Total Heating Surface of Boilers		Is forced draft fitted		No. and Description of
Boilers	Working Pressure		Tested by hydraulic pressure to		Date of test
No. of Certificate	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		Length		
Material of shell plates	Thickness	Range of tensile strength	Are the shell plates welded or flanged		
Descrip. of riveting: cir. seams	long. seams	Diameter of rivet holes in long. seams	Pitch of rivets		
Lap of plates or width of butt straps	Per centages of strength of longitudinal joint		Working pressure of shell by		
rules	Size of manhole in shell	Size of compensating ring			
boiler	Material	Outside diameter	No. and Description of Furnaces in each		
Description of longitudinal joint	No. of strengthening rings	Length of plain part	top	Thickness of plates	crown
plates: Material	Thickness: Sides	Back	bottom	Combustion chamber	bottom
Top	If stays are fitted with nuts or riveted heads	Pitch of stays to ditto:	Sides	Back	
smallest part	Area supported by each stay	Working pressure by rules	Material of stays	Area at	
Pitch of stays	How are stays secured	Working pressure by rules	End plates in steam space: Material	Thickness	
Area supported by each stay	Working pressure by rules	Material of stays	Area at smallest part		
Lower back plate	Thickness	Greatest pitch of stays	Material of Front plates at bottom	Thickness	Material of
Pitch of tubes	Material of tube plates	Thickness: Front	Working pressure of plate by rules	Diameter of tubes	
Inter spaces	Working pressures by rules	Back	Mean pitch of stays	Pitch across wide	
Center at centre	Length as per rule	Girders to Chamber tops: Material	Depth and thickness of		
Working pressure by rules	Steam dome: description of joint to shell	Distance apart	Number and pitch of Stays in each	% 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	
<b>SUPERHEATER.</b>					
Type	Date of Approval of Plan	Tested by Hydraulic Pressure to			
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					

22 RTICAL DONKEY BOILER-

CRITICAL DONKEY BOILER— No. *The* Description *Vertical Tubular* Manufacturers of steel *Misale Steel*  
at *E. Thomas & Co.* by whom made *International Boiler Works* When made *1919* Where fixed *For 2<sup>nd</sup> (Main Deck) Coasteride, Pa.*  
by hydraulic pressure to *190* Date of test *16-9-19* No. of Certificate *372* (A) *Philad. Resistance* Working pressure *125*  
safety valves *One* Area of each *4.908* Pressure to which they are adjusted *110 to 150* Description of safety valves *Spring Loaded*  
the donkey boiler ✓ Dia. of donkey boiler *53 3/32 (7)* Length *9'-0"* Material of shell plates *Steel* Thickness *1/32"* Range of tensile  
*9000 lb* Descrip. of riveting long. seams *D.R. Butt Joint* Dia. of rivet holes *7/8"* Whether punched or drilled *Drilled* Pitch of rivets *4 3/4 x 2 7/16*  
*h 7680* plating ✓ Per centage of strength of joint Rivets *115%* Plates *82%* Working pressure of shell by rules *145 to 150* Thickness of shell crown plates *1/2"*  
of do *Flat* No. of Stays to do. *24* Dia. of stays ✓ Diameter of furnace Top *4'-0"* Bottom *4'-0"* Length of furnace *27 in*  
vister ss of furnace plates *13 1/2 x 1/2* Description of joint *Ang R. Lap* Working pressure of furnace by rules *129 to 150* Thickness of furnace crown  
*1/2"* Radius of do. *Flat* Stayed by *Tubes bent* Diameter of uptake *24"* Thickness of uptake plates *2 1/8 AS*  
ss of water tubes *13 3/4*

The foregoing is a correct description,  
 Gray's Aggrav. Photograph. Co.  
 Milwaukee Manufacturer.

During progress of work in shops - - }	
During erection on board vessel - - }	
Total No. of visits	

Is the approved plan of main boiler forwarded herewith

" " " donkey "

006654. 006665. 0233



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

The Boiler has been installed on board  
ship together with the necessary mountings & fittings  
& found satisfactory — Safety Valves adjusted  
The Workmanship is  
of Good Quality, Eligible in my opinion to be classed &  
Noted in Register Book as D.B 1-20.. 125th

Philosophia Report No 3465  
attached herewith

also attached  
Philosophia Report No 3466 as  
Boiler covered by this report was  
damaged in transit beyond Repair.

It is submitted that  
this vessel is eligible for  
THE RECORD. + D.B. 1-20 125th

APR 12/3/20  
APR

Certificate (if required) to be sent to  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £  
Special .. £  
Donkey Boiler Fee .. \$15  
(Insulation) ..  
Travelling Expenses (if any) \$21

When applied for,  
July 5<sup>th</sup> 1920  
When received,  
19/7/20

Committee's Minute  
Assigned

New York FEB 17 1920  
+ D.B. 20 - 125#

C. Nastic  
Engineer Surveyor to Lloyd's Register of Shipping



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Foundation