

Donkey Boiler BOX CASE NO. 10496  
**REPORT ON MACHINERY.**

Port of Boston

MON. JUN 22 1896

No. in Survey held at Boston Date, first Survey May 9<sup>th</sup> Last Survey June 16<sup>th</sup> 1896  
Reg. Book. 421 on the Steamer Lizzie & Annie (Number of Visits 3)  
Master                      Built at W. Childs By whom built Coppley & Co Tons { Gross 99  
Net 63  
When built 1877-6  
Engines made at Newcastle By whom made Patterson & Alkinson when made 1897  
Boilers made at Boston By whom made Stimpson & Co when made 1884  
Registered Horse Power 25 Owners London & Boston I. & Co Port belonging to Boston  
Nom. Horse Power as per Section 28                     

**ENGINES, &c.—** Description of Engines No. of Cylinders  
Diameter of Cylinders Length of Stroke Revolutions per minute Diameter of Screw shaft as per rule  
Diameter of Tunnel shaft as fitted Diameter of Crank shaft journals Diameter of Crank pin Size of Crank webs  
Diameter of screw Pitch of screw No. of blades State whether moveable Total surface  
No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work  
No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work  
No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps  
In Engine Room In Holds, &c.  
No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size  
Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible  
Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks  
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line  
Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate  
What pipes are carried through the bunkers How are they protected  
Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times  
Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges  
When were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight  
Is it fitted with a watertight door worked from

**BOILERS, &c.—** (Letter for record) Total Heating Surface of Boilers  
No. and Description of Boilers Working Pressure Tested by hydraulic pressure to  
Date of test 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 Smallest distance between boilers or uptakes and bunkers or woodwork Mean diameter of boilers  
Length Material of shell plates Thickness Description of riveting: circum. 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 rivets Working pressure of shell by rules Size of manhole in shell  
Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter  
Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings  
bottom Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom  
Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules  
Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:  
Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays  
Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom  
Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules  
Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays  
Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and  
thickness of girder at centre Length as per rule Distance apart Number and pitch of Stays in each  
Working pressure by rules 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





**DONKEY BOILER**— Description *Cylindrical Launch Pipe*  
 Made at *Boston* By whom made *A Peck How* When made *1896* Where fixed *Main deck*  
 Working pressure *50 lb* Tested by hydraulic pressure to *100 lb* No. of Certificate *753* Fire grate area *2.6 sq ft* Description of safety valves *Spring loaded*  
 No. of safety valves *one* Area of each *3.14* Pressure to which they are adjusted *50 lb* If fitted with easing gear *No* If steam from main boilers can enter the donkey boiler *No* Diameter of donkey boiler *40"* Length *5' 0"* Material of shell plates *Steel* Thickness *1/2"*  
 Description of riveting long. seams *able in lap* Diameter of rivet holes *13/16* Whether punched or drilled *Drilled* Pitch of rivets *2 1/4"*  
 Lap of plating *1 1/2"* Per centage of strength of joint Rivets \_\_\_\_\_ Thickness of shell ~~end~~ plates *10/16* Radius of do. \_\_\_\_\_ No. of Stays to do. *3 Ways*  
 Dia. of stays *1 1/2"* Diameter of furnace ~~Top~~ *25"* Bottom \_\_\_\_\_ Length of furnace *26"* Thickness of furnace plates *1/2"* Description of joint *welded* Thickness of ~~furnace~~ *lute* plates *10/16* Stayed by *lute stay lute* Working pressure of shell by rules *178 lb*  
 Working pressure of furnace by rules *160 lb* Diameter of ~~uptake~~ *lute* *2"* Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_

**SPARE GEAR.** State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

**General Remarks** (State quality of workmanship, opinions as to class, &c. *Workmanship Good*)

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - -  
 Total No. of visits

*New Donkey Boiler built under special survey in accordance with tracing approved. Tested by hydraulic pressure and found tight and sound and placed on board. The Safety Valve set to blow at 50 lbs per square inch.*

Certificate (if required) to be sent to

The amount of Entry Fee. £ : : When applied for, *20/6/96*  
 Special .. £ *2* : *2* :  
 Donkey Boiler Fee .. £ : : When received, *18/9/96*  
 Travelling Expenses (if any) £ *1* : *8* : *8* : *18/9/96*

*James Lane*  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **TUES. JUN 23 1896**

Assigned

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