

Form No. 93.

*Twin S S. "Bhadra"*

Lloyd's Register of British  
 and Foreign Shipping,  
 3, St. Nicholas Buildings, Newcastle-on-Tyne.

*December 21 1896*

The Surveyors,

*Greenock*

Gentlemen,

Herewith we forward particulars  
 of donkey boiler for *1894*.

*Rankin & Blackmore*

as requested in your letter of the 19<sup>th</sup> inst

We are,

Yours faithfully,

*G. L. Hindmarsh*

MARK ON BOILER.

*No. 4950*

LLOYD'S TEST,

*180 lbs.*

*9th Dec 1896*

DONKEY BOILER.

Description *Vertical Type patent*  
 Made at *Glasgow* By whom made *Clarke Chapman & Co Ltd*  
 When made *8.12.96* Where fixed *Stokholm recess*  
 Working pressure *90 lbs* tested by hydraulic pressure to *180 lbs*  
 No. of Certificate *4950* Fire grate area *6 sq ft* Description of safety  
 valves *Direct spring* No. of safety valves *Two* Area of each *3.14 sq in*  
 Pressure to which they are adjusted *90 lbs* If fitted with easing gear *yes*  
 If steam from main boilers can enter the donkey boiler *no* Dia. of donkey  
 boiler *3-6* Length *10-6* Material of shell plates *Steel*  
 Thickness *3/32* Description of riveting long seams *S. riv lap*  
 Dia. of rivet holes *3/32* Whether punched or drilled *drilled*  
 Pitch of rivets *2 3/32* Lap of plating *3 3/32* Per centage of strength of  
 Rivets *82.4* Thickness of shell crown plates *1/4* Radius of do.  
 joint *30.1* Plates *5 ft* No. of stays to do. *3* Dia. of stays *1/2 x 3/32* Dia. of  
 furnace Top *1-3 7/8* Bottom *3-1 1/4* Length of furnace *3 ft*  
 Thickness of furnace plates *1/4* Description of joint *S. R. lap*  
 Thickness of ~~furnace crown~~ plates *2 1/2 13/32* Stayed by *tubes*  
 Working pressure of shell by rules *108 lbs* Working pressure of furnace by  
 rules *128 lbs* Dia. of uptake *10* Thickness of uptake plates *3/8*  
 Thickness of water tubes *1/4*

*Rankin & Blackmore*  
*per Clarke Chapman & Co*

GRL336-0215