

Lloyd's Register of British  
and Foreign Shipping,

MIDDLESBROUGH-ON-TEES.

April 26<sup>th</sup> 1900.

The Surveyors,

Greenock.

Gentlemen,

Herewith we forward particulars  
of donkey boiler for Messrs Russell & Co's 483.  
S/s 'Panacea' (Revised by Reg. 281).  
as requested in your letter of 25<sup>th</sup> inst.

We are, Sir,  
Yours faithfully,

Henry J. Well

MARK ON BOILER.

No. 2154.

LLOYD'S TEST,

160 lbs.  
19.2.10. R.F.

GRK 351-0175

DONKEY BOILER.

Description *Horiz<sup>l</sup> Nutt<sup>s</sup>. 2 plain furnaces.*  
Made at *Stratton* By whom made *Piley Bros.*  
When made *19.2.10.* Where fixed *on deck*  
Working pressure *80 lbs.* tested by hydraulic pressure to *160 lbs.*  
No. of Certificate *2154.* Fire grate area *20.4* Description of safety  
valves *direct spring* No. of safety valves *two* Area of each *4.2 sq.*  
Pressure to which they are adjusted *80 lbs.* If fitted with casing gear *yes*  
If steam from main boilers can enter the donkey boiler *no* Dia. of donkey  
boiler *9.0"* Length *8.0"* Material of shell plates *Steel.*  
Thickness *1/2"* Description of riveting long seams *Lap. kettle riv<sup>d</sup>*  
Dia. of rivet holes *3/8"* Whether punched or drilled *Drilled.*  
Pitch of rivets *3 1/4"* Lap of plating *6"* Per centage of strength of  
Rivets *46.5* Thickness of *End.* shell plates *3/4"* Rivets *drilled*  
Joint Plates *45.0* Thickness of *End.* plates *3/4"* Radius of do.  
*100"* No. of stays to do *16 1/2" x 16 1/2"* Dia. of stays *2 1/2"* Dia. of  
furnace Top *31"* Bottom *L* Length of furnace *5' 3 1/2"*  
Thickness of furnace plates *3/2"* Description of joint *weld.*  
Thickness of *6.6 back* furnace *15. 17 1/2"* plates *3/2"* Stayed by *13.5 stays 1 1/2" x 4 1/2" pitch Nutt<sup>s</sup>*  
Working pressure of shell by rules *88 lbs.* Working pressure of furnace by  
rules *89.5 lbs.* Dia. of *tubes 3 1/2"* Thickness of *tubes* plates *3 1/4" - 13 1/2"*  
Thickness of *Stay* *5/16"* tubes *5/16"*

SPARE GEAR.

State the articles supplied:

The foregoing is a correct description,

For Piley Bros  
John G. Keicaid & Co  
Manufacturers.