

17863

Port *Sunderland*

Feb'y

787
Rec'd 22/2/1911

Details of Main Boilers of the Steam Ship

"Commonwealth"

1225. tons

Diameter *12' 3"*Length *10' 6"*

Thickness of shell plates

 $\frac{15}{16}$ "

Description of riveting of longitudinal joints

double & double butt straps

of circumferential joints

double.

Pitch of rivets

ditto

4' 8"

ditto

3' 2"

Diameter of rivets

ditto

1' 8"

ditto

1' 8"

Lap of plating

ditto

10' 8"

ditto

5' 8"

Size of manholes in circular shell

16" x 13"

How compensated for

by a ring 7' x 18" thick

Number of furnaces in boiler

3.

Diameter of furnaces

3' 0"

Length of furnaces

7' 6"

Thickness of furnace plates

 $\frac{1}{2}$ "

Description of joint of furnaces

double butt strapped and single riveted.

Whether strengthened with rings

none.

Greatest length between rings

Thickness of combustion chamber plating

 $\frac{7}{16}$ "

Diameter of screw stays to ditto

1' $\frac{3}{16}$ at bottom of thread

pitch of stays

7' $\frac{3}{4}$ x 7' $\frac{1}{4}$.

End plates, thickness

 $\frac{11}{16}$ "

Diameter of longitudinal stays to end plates

2"

pitch of ditto

14" x 14"

How stays are secured

they are bolts extending through both end plates.

Diameter of tubes

3' $\frac{3}{4}$ outside

pitch of tubes

5' $\frac{1}{4}$ x 5"

Thickness of tube plates

 $\frac{5}{8}$ "

Stayed by

stay tubes

pitch of stays

10' $\frac{1}{2}$ x 10"

Description of steam receiver

Horizontal dome.

Diameter of ditto

4' 0"

length of ditto

11' 6"

Thickness of plating of ditto

 $\frac{7}{16}$ "

ends

 $\frac{7}{16}$ "

Ends, how stayed

no stays the ends are spherical.

$$\text{Shells} = \frac{51520 \times 18 \times 726}{145 \times 6.5} = 74 \text{ lbs working pressure.}$$

$$\text{Furnaces} = \frac{89600 \times 12^2}{7 \frac{1}{2} \times 36} = 82 \text{ " " "}$$