

# Steam Ship "Spartan."

16178 Irons.

Rec 10/4/96

Diameter of boilers 12' 11".

Thickness of shell plates  $1\frac{1}{16}$ ".

Description of riveting. double and double butt straps.

Pitch of rivets. longitudinal seams  $3\frac{3}{4}$ ". Circumf.  $3\frac{3}{8}$ ".

Lap of plating. butt straps 10" broad " " 5".

Diameter of rivets " "  $1\frac{1}{8}$ ". " "  $1\frac{3}{16}$ ".

Number of furnaces in each boiler 3.

Diameter of furnaces  $3' 0\frac{1}{2}"$ .

Length of furnaces  $6' 9"$ .

Thickness of furnace plates  $\frac{1}{2}$ " &  $\frac{9}{16}$ ".

Joints of furnace plates. double butted and single riveted.

Length of fire bars  $3' 6"$ .

Whether furnaces are strengthened with rings. none.

Back up plate plates  $\frac{1}{2}$ " thick screw stayed  $7\frac{1}{2} \times 7\frac{1}{2}$ " &  $1\frac{3}{8}$ " dia = 3133 lbs

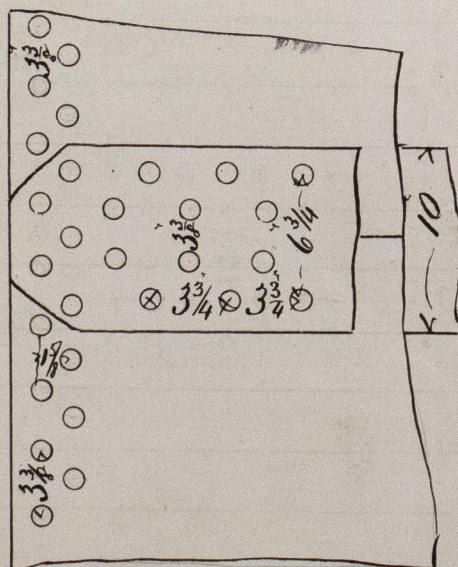
End plates  $\frac{13}{16}$ " thick. bolt stayed  $16\frac{1}{2} \times 16\frac{1}{2}$ " &  $2\frac{3}{8}$ " dia = 4826 "

Flat plates where screw stayed = 112 lbs working pressure. Ends = 73 lbs

Tube plates stayed with stay tubes. screwed into back tube plates but no nuts. Nuts on each side of front tube plates.

$$\text{Shells} = \frac{51520 \times 2\frac{1}{8} \times 70}{153 \times 6.5} = 76 \text{ lbs working pressure.}$$

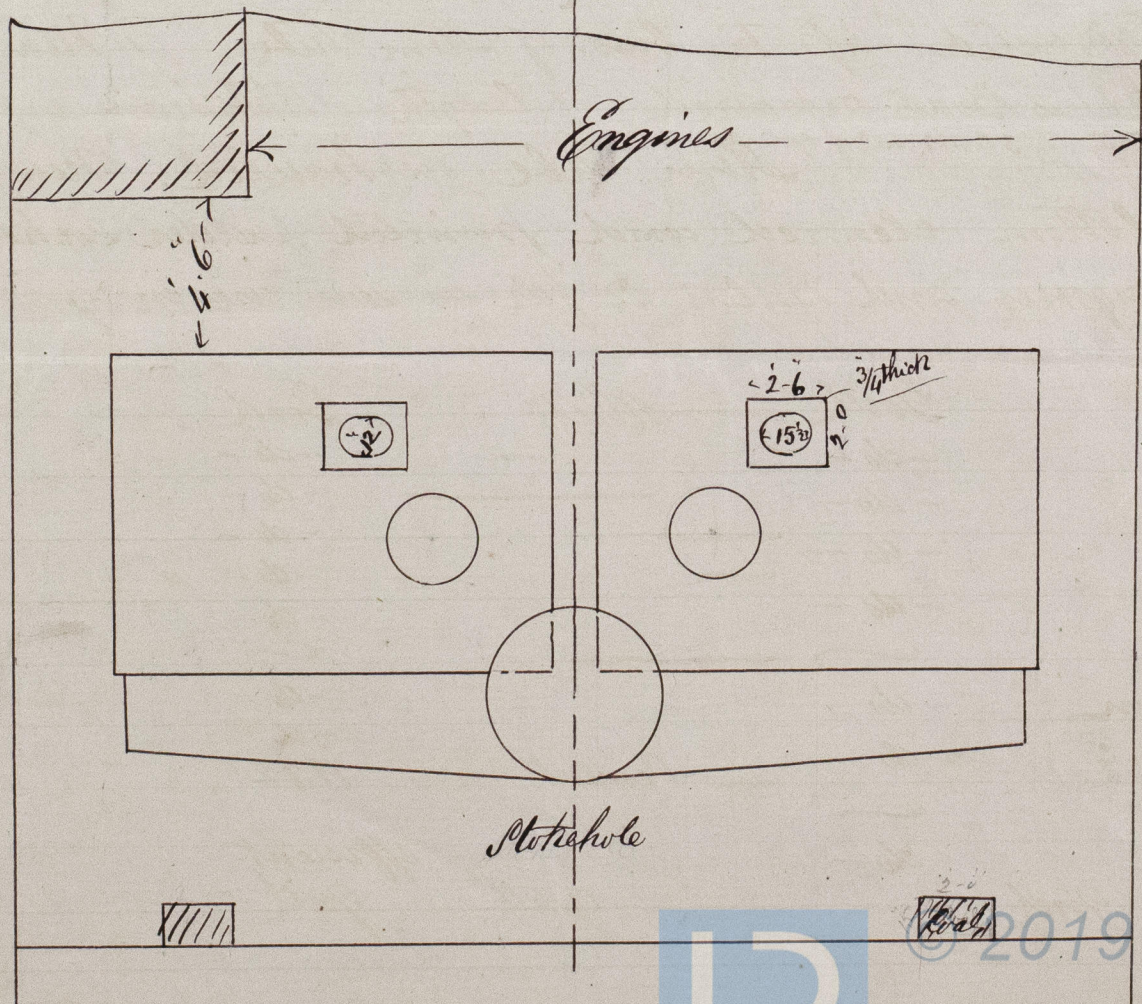
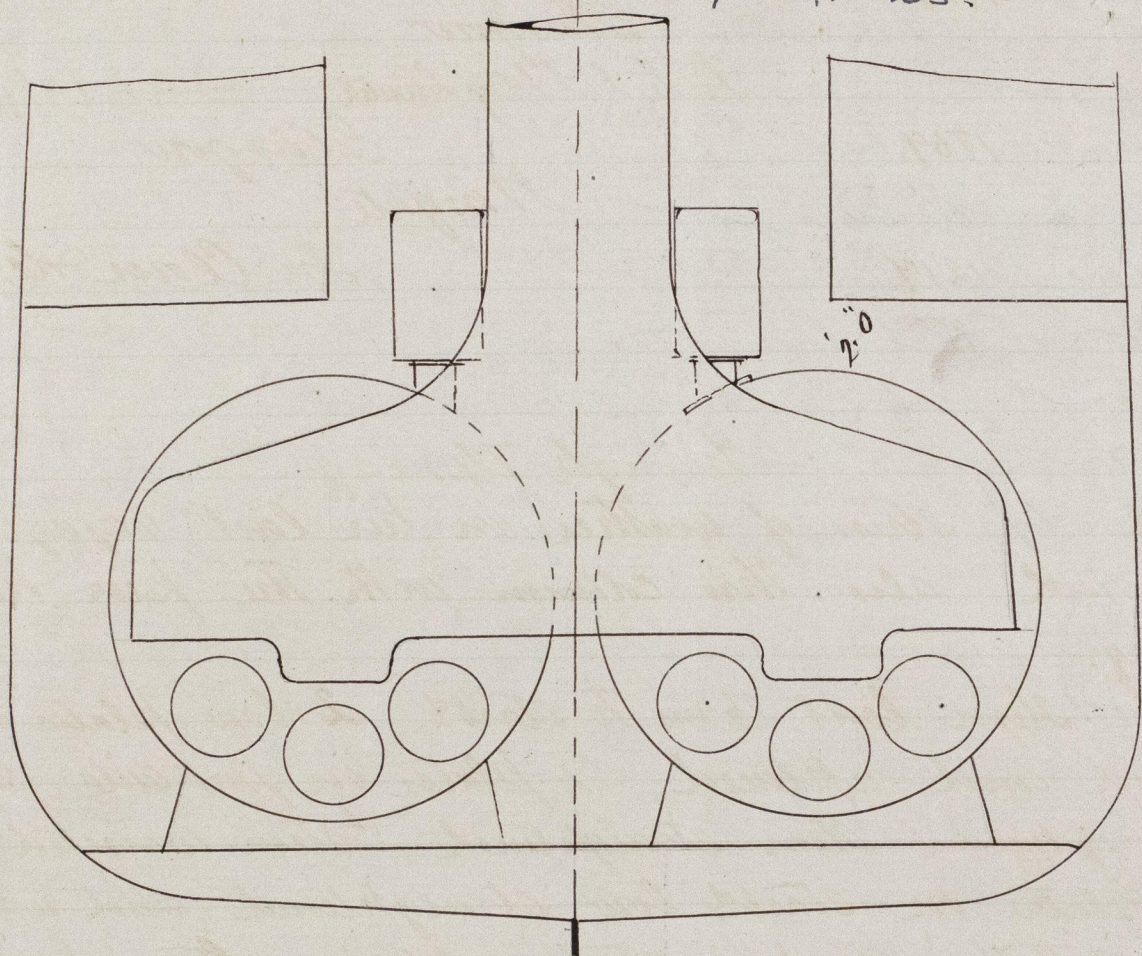
$$\text{Furnaces} = \frac{89600 \times \frac{1}{2}^2}{6\frac{3}{4} \times 36\frac{1}{2}} \quad 91 \text{ " " "}$$



© 2019  
William Allison,  
Engineer Surveyor.  
March 3<sup>rd</sup> / 176  
Lloyds Register  
Foundation



16178. Trans.



© 2019

Lloyd's Register  
Foundation