

Steam Ship Lord Byron,

Diameter of Boiler = 14 feet.

Thickness of shell plates 1".

Description of riveting. double & double butt straps.

Pitch of rivets Longitudinal seams $4\frac{3}{8}$ Circumferential $3\frac{1}{2}$ Lap of plating " " 9" " " $5\frac{1}{2}$

Diameter of rivets " " 1" " " 1"

Number of Furnaces in Boiler 3.

Diameter of Furnaces 3' 5".

Length of Furnaces 6' 3".

Thickness of Furnace plates $\frac{1}{2}$ ".

Joint of Furnace plates. double butt strapped & double riveted.

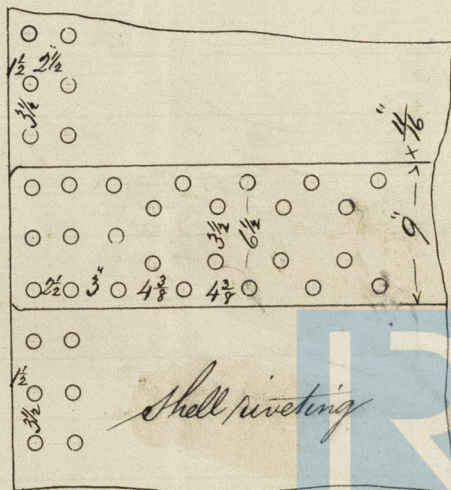
Length of Fire grate 5' 0".

Whether furnaces are strengthened with rings. none.

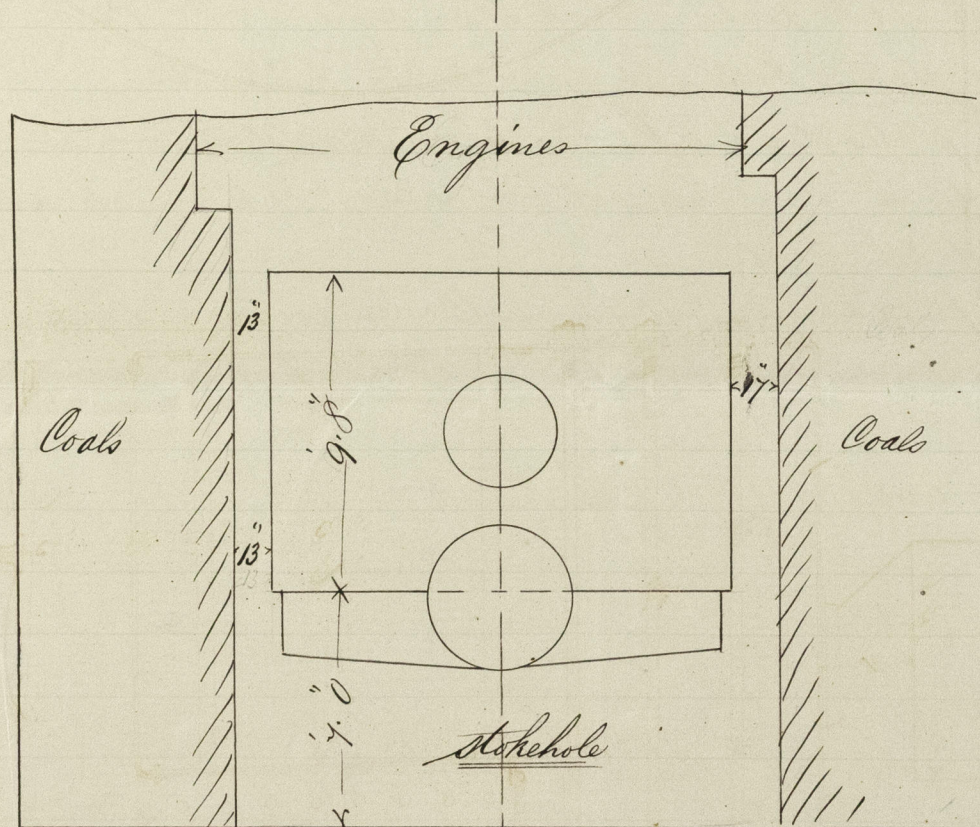
Back uptake plates $\frac{1}{2}$ " thick screw stayed $8 \times 8 \times 1\frac{3}{16}$ dia = 4160 lbsEnd plates $\frac{7}{8}$ " thick bolt stayed $16 \times 15 \times 2\frac{1}{8}$ dia = 4000 "

Tube plates stayed with stay tubes screwed into back tube plate & nuts in flame box. but none inside. Nuts on each side of front tube plate.

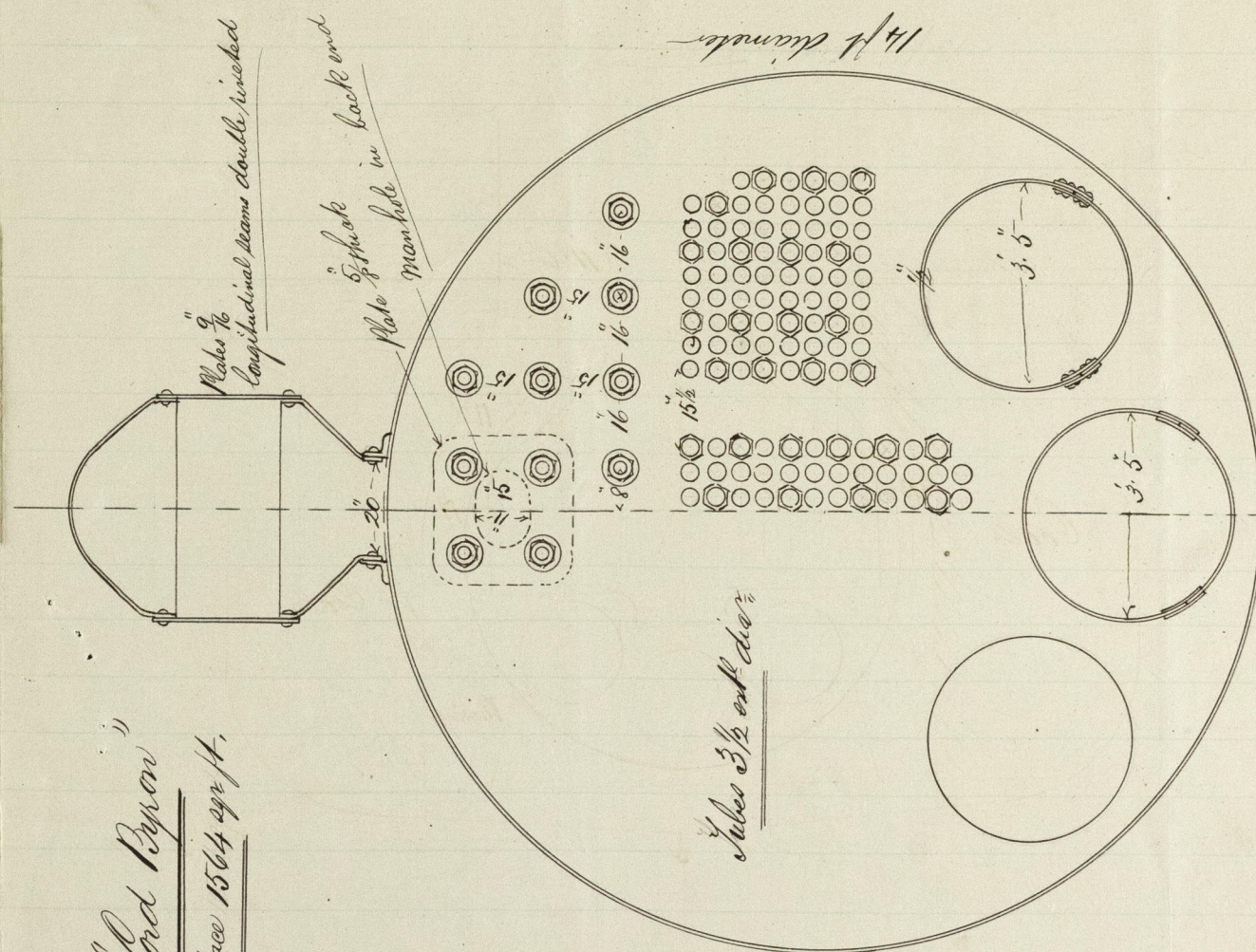
Flat plates where screw stayed = 100 lbs working pressure. Ends = 80 lbs.

Shell = $\frac{51520 \times 2 \times 72}{166 \times 6.5} = 68$ lbs working pressureFurnaces = $\frac{89600 \times \frac{1}{2}^2}{64 \times 41} = 87$ " "

William Allison
Engineer Surveyor.
Oct. 2^d 1875



Donkey Boiler on deck,



Steam Ship "Lord Byron"

Heating Surface 1564 sq. ft.

