

25.  
19/10/88



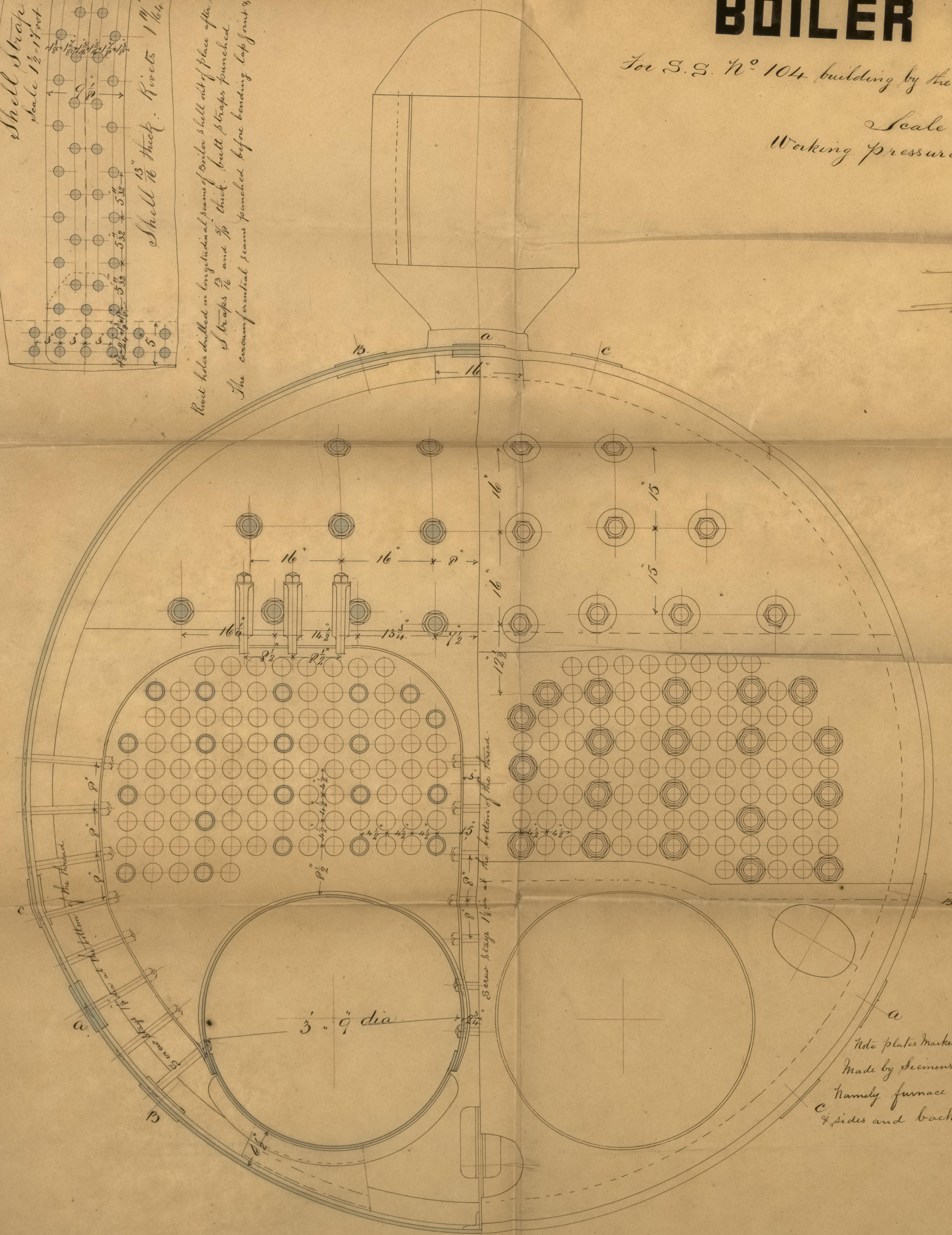
Black holes drilled on longitudinal seams of Oriskany shell with a piece of the binding wire fitted with double-bull stoppers.  
 1 stroke  $\frac{1}{2}$  and 5" thick. bull stoppers punched.


The common pointed spurs punched before bending top joints & double rivets.

**BOILER N° 744.**

See S. S. N<sup>o</sup> 104 building by the North of England Shipbuilding Co. L<sup>d</sup>.  
Sunderland.  
Scale 1" = 1 Foot.  
Working pressure 80 lbs per square inch.

385



The plates marked thus  to be of steel  
made by Siemens Martins process  
namely furnace crowns fire box tops  
& sides and back tube plates.

Dome.

$\frac{25625 - 2125 \times 100}{25625} = 6829$  plate to plate

$\frac{5185 \times 2 \times 100}{25625 \times 4.375} = 92$  knot to plate

$\frac{155 \times 6829 \times 4.375}{36} = 128$  lbs per sq inch

Calculations  
Shell.

$$\frac{5'3.4275 - 1'17'875 \times 100}{5'3.4275} = 47.1 \text{ plate to plate}$$

$$\frac{1'08'475 \times 75 \times 2 \times 90}{5'3.4275 \times 8125} = 47.32 \text{ Rivet to plate}$$

$$\frac{200 \times 8125 \times 47.1}{159 \text{ Furnacer.}}$$

$$\frac{5'3 \times 89600}{46 \times 55} = 89.9 \text{ lbs per sq inch.}$$

$$\frac{5 \times 8000}{46} = 86.9 \text{ lbs per sq inch.}$$

Front Tops.

$$\frac{13 \times 140}{16^2} = 93.4 \text{ lbs per sq inch}$$

Line box sides & tops.

$$\frac{7.5^2 \times 120}{16^2} = 93.4 \text{ lbs per sq inch}$$

853 Main Stays.

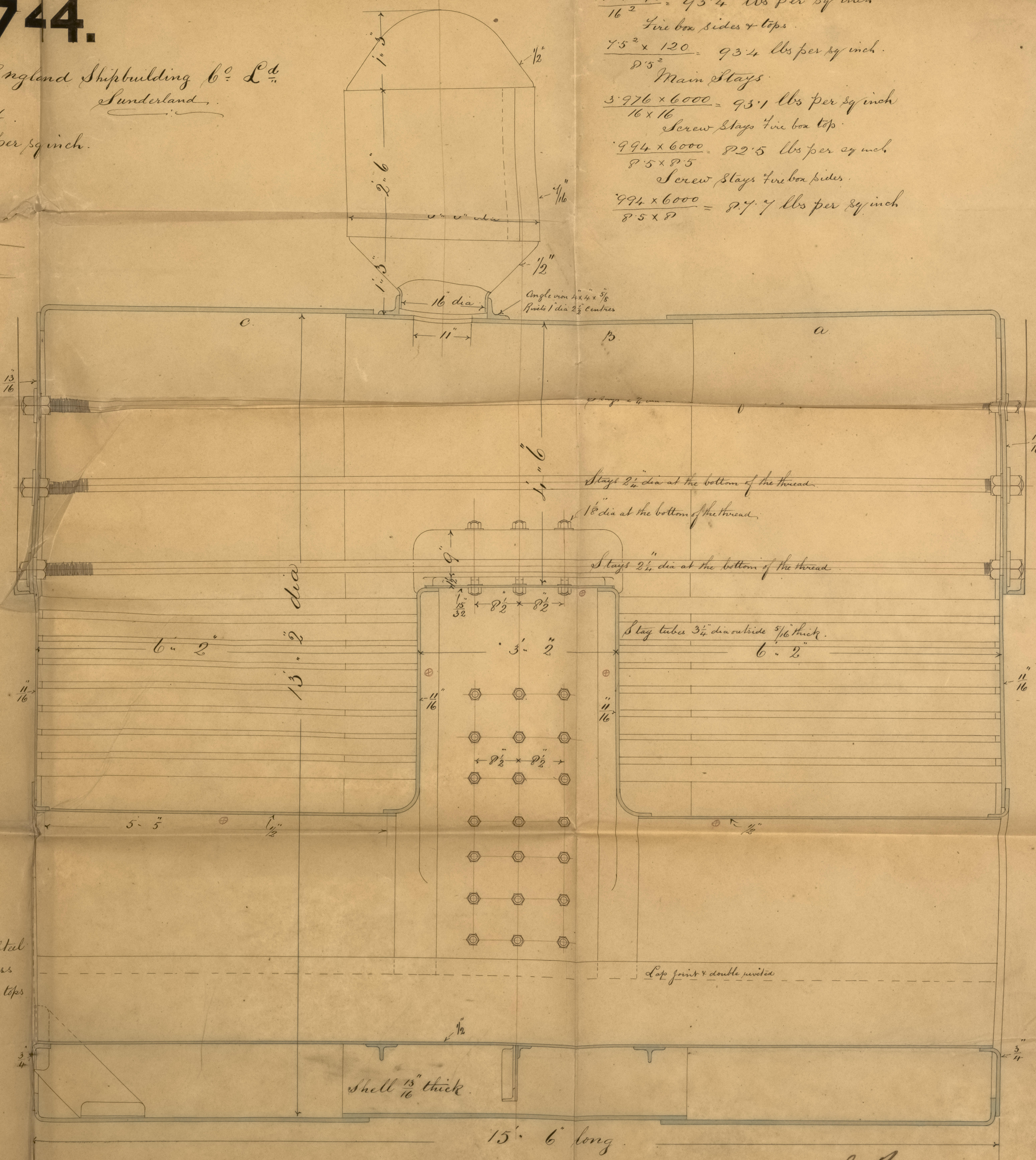
$\frac{3.976 \times 6000}{16 \times 16} = 93.1$  lbs per sq inch

Screw Stays 4 in box top.

$\frac{994 \times 6000}{85 \times 85} = 82.5$  lbs per sq inch

Screw Stays 4 in box sides.

$\frac{994 \times 6000}{85 \times 85} = 84.7$  lbs per sq inch



L.B.  
N. Hpl.  
18.10.82