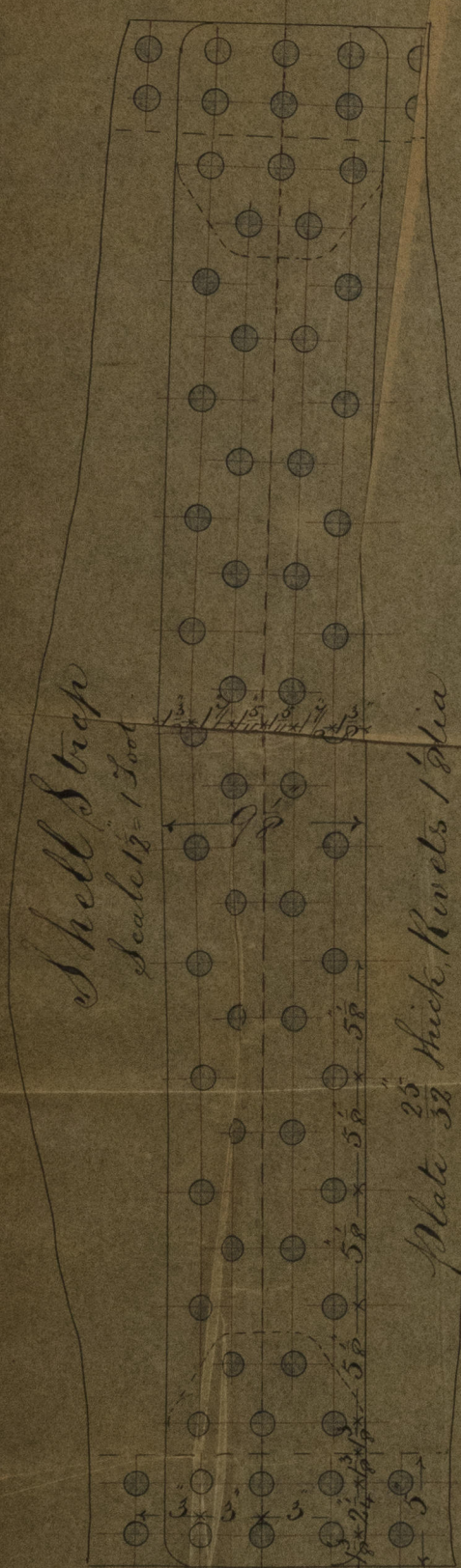
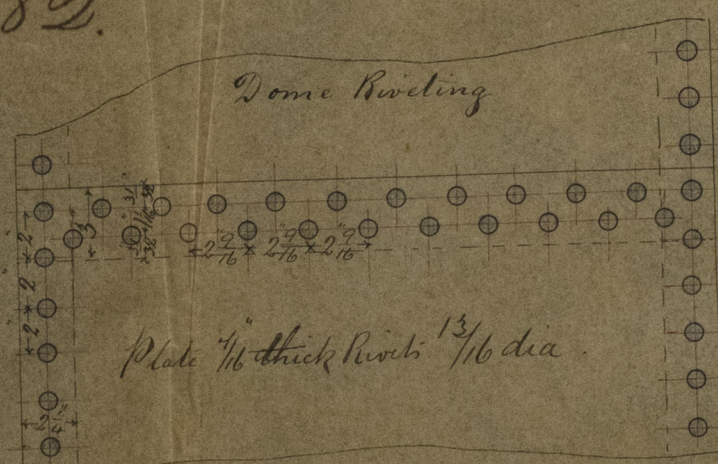


Let. to W. Hops 15/2/82.



Shell strap rivets in longitudinal seams of plates shell and of plates of flange of shell with double butt straps. The circumferential seams of plates shell and of plates of flange of shell with double butt straps rivets.



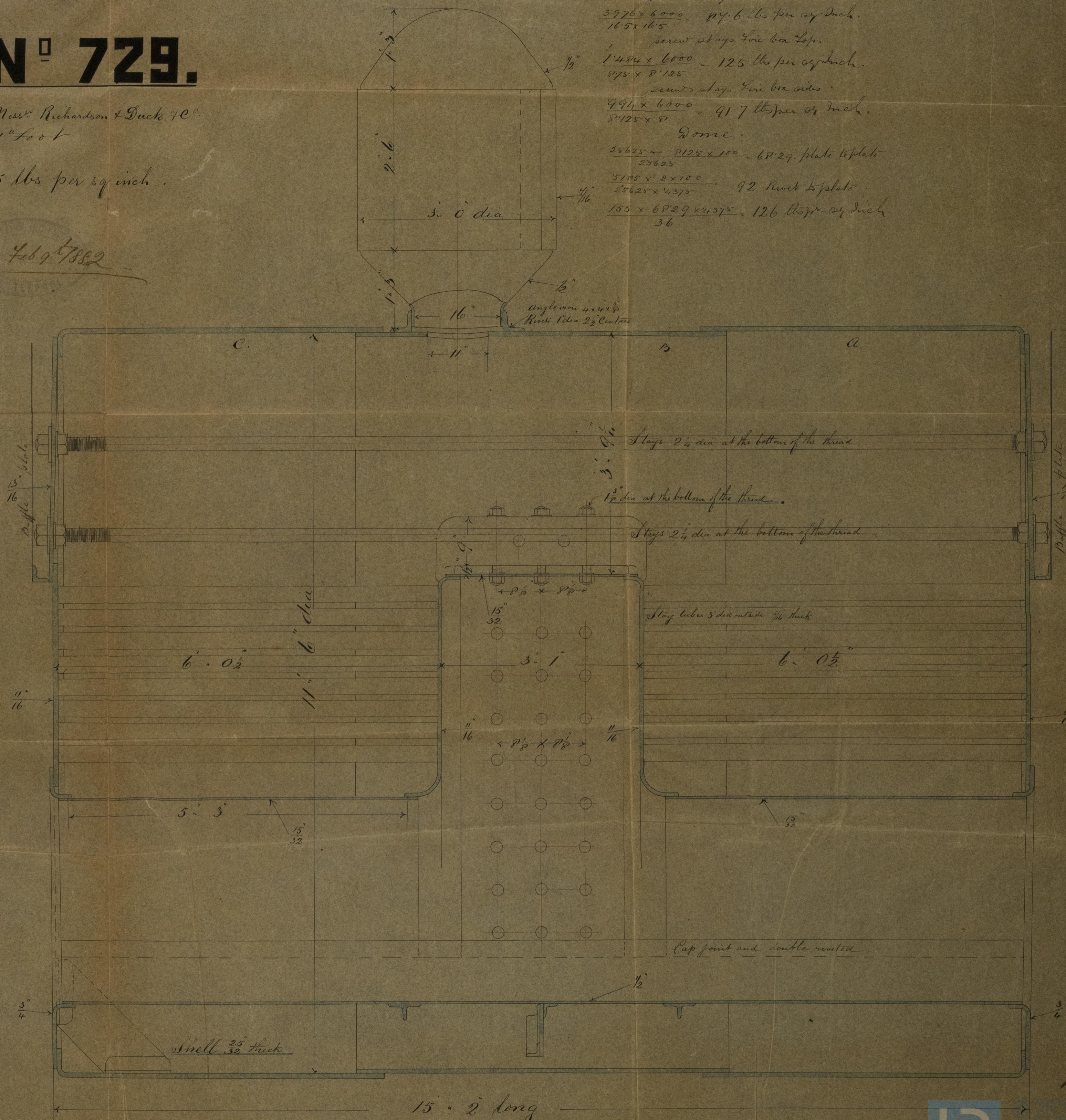
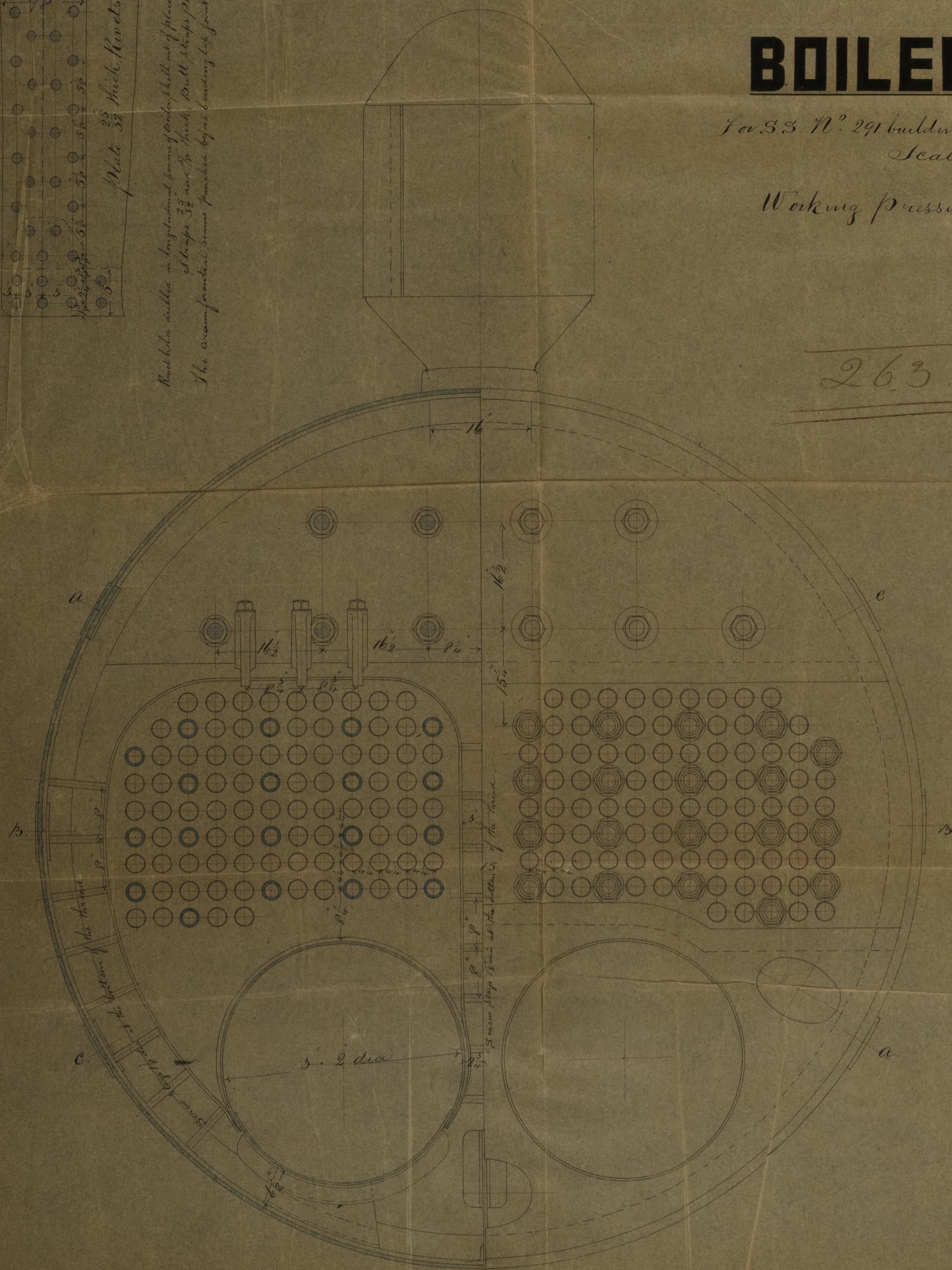
# BOILER N<sup>o</sup> 729.

For S.S. N<sup>o</sup> 291 building by Messrs Richardson & Duck 7C.  
Scale 1" = 1' 0"

Working pressure 85 lbs per sq inch.

Feb 9 1882

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**Calculations**  
 Shell  
 $5'125 \times 1'125 \times 100 = 48'04$  plate to plate  
 $5'125 \times 1'125 \times 100 = 48'04$  rivet to plate  
 $5'125 \times 1'125 \times 100 = 48'04$  lbs per sq inch  
 Furnaces  
 $15'2 \times 8'9600 = 96$  lbs per sq inch  
 $5'23 \times 3'9 = 20'6$  lbs per sq inch  
 Fire box sides  
 $4'5 \times 1'100 = 4'95$  lbs per sq inch  
 $4'125 \times 1'100 = 4'5$  lbs per sq inch  
 Fire box top  
 $4'5 \times 1'100 = 4'95$  lbs per sq inch  
 $4'125 \times 1'100 = 4'5$  lbs per sq inch  
 End plates  
 $13'2 \times 14'0 = 18'4$  lbs per sq inch  
 $16'5 \times 16'5 = 27'2$  lbs per sq inch  
 Main stays  
 $3'76 \times 6'000 = 22'5$  lbs per sq inch  
 $16'5 \times 16'5 = 27'2$  lbs per sq inch  
 Screw stays fire box top  
 $1'404 \times 6'000 = 8'4$  lbs per sq inch  
 $8'75 \times 8'125 = 71'2$  lbs per sq inch  
 Screw stays fire box sides  
 $4'94 \times 6'000 = 29'6$  lbs per sq inch  
 $8'125 \times 8'125 = 66'0$  lbs per sq inch  
 Dome  
 $2'525 \times 2'125 \times 100 = 53'6$  lbs per sq inch  
 $2'525 \times 2'125 \times 100 = 53'6$  lbs per sq inch  
 $3'105 \times 2'125 \times 100 = 66'0$  lbs per sq inch  
 $2'525 \times 2'125 \times 100 = 53'6$  lbs per sq inch  
 $1'50 \times 6'229 \times 4'27 = 4'0$  lbs per sq inch  
 $3'6$