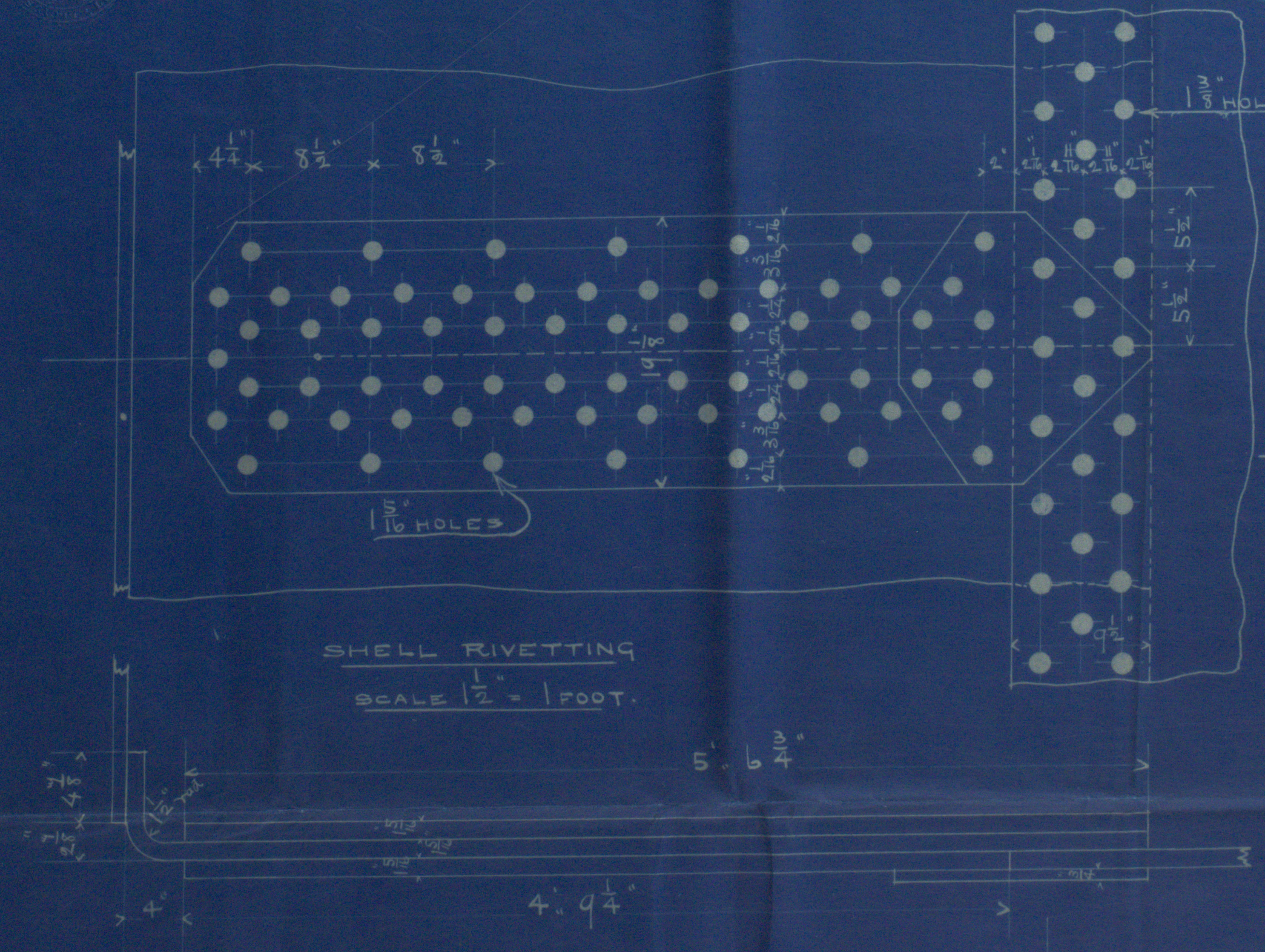


16 lbs 3 1/4

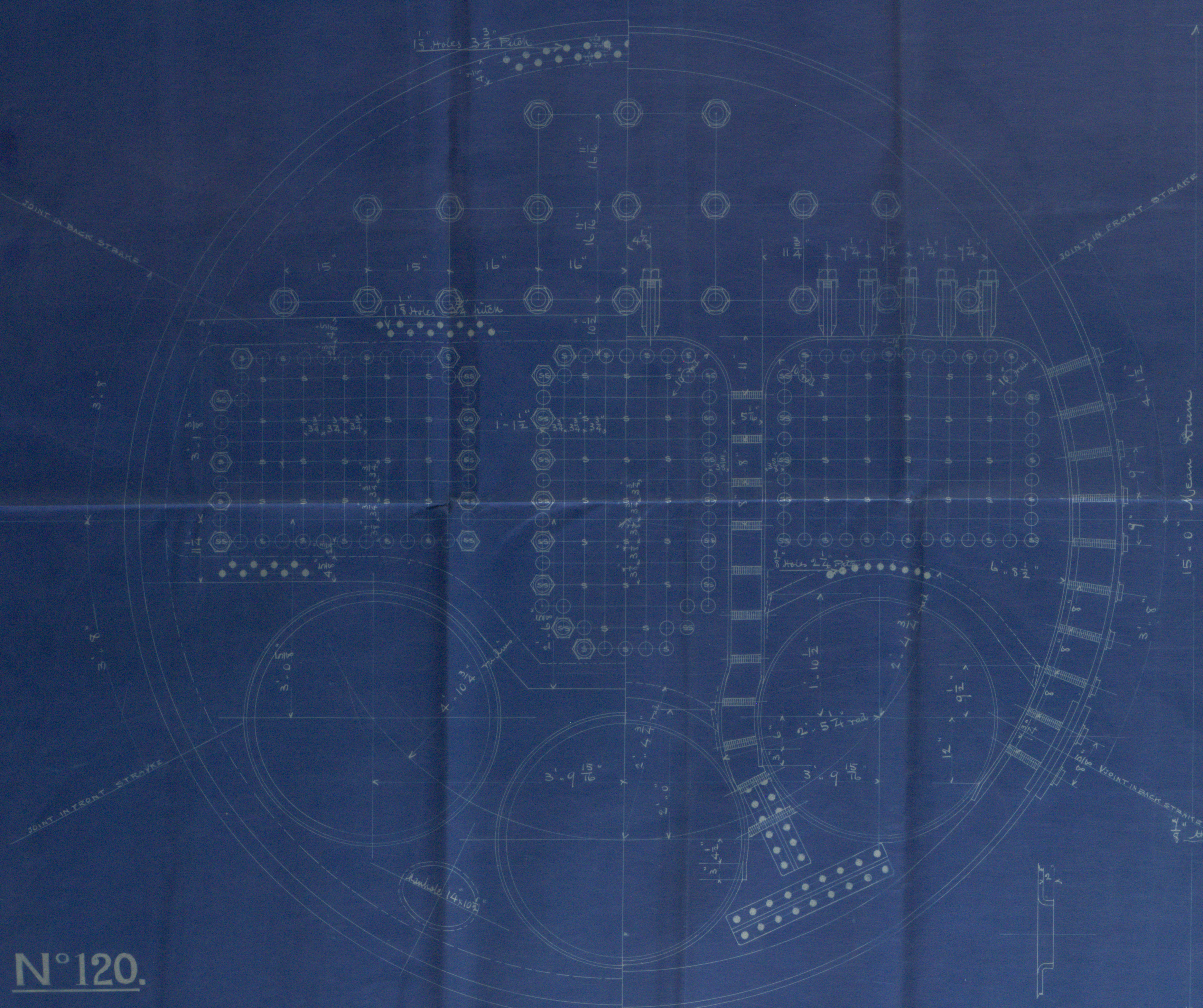


STEEL BOILER N° 120.

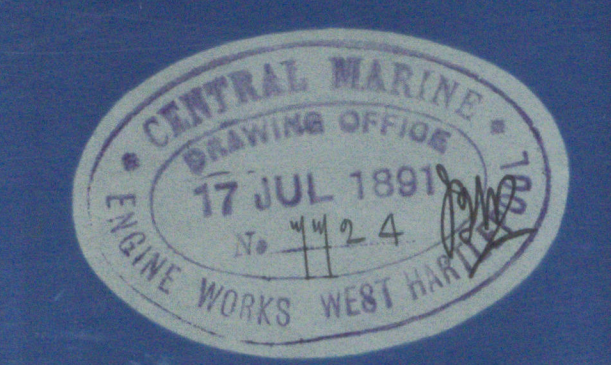
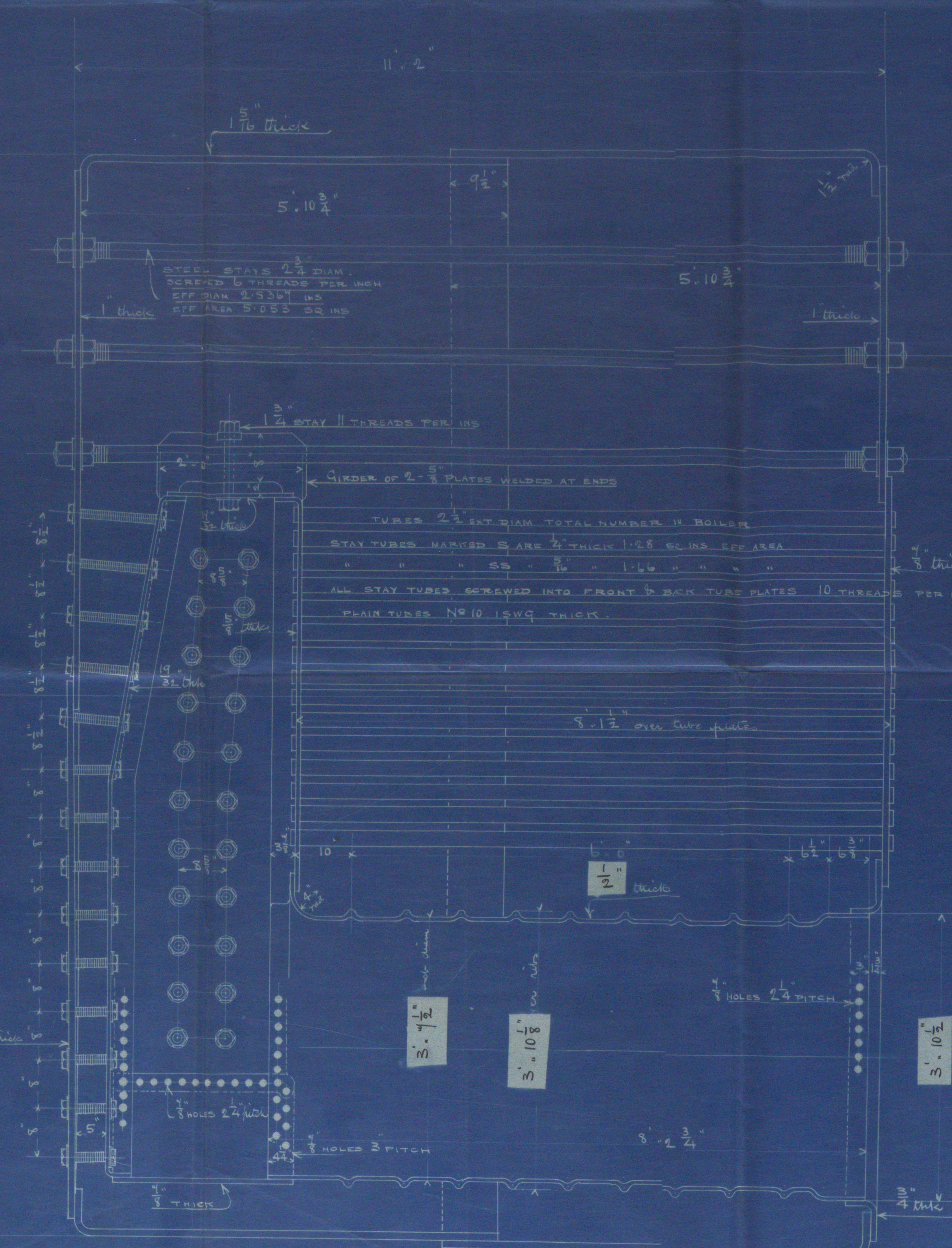
160 LBS TO LLOYDS
SCALE 1 IN. = 1 FT.

THESE PROPORTIONS ARE FOR HOWDEN'S FORCED DRAUGHT

CONSTRUCTED TO LLOYDS NEW RULES OF MAY 1891.



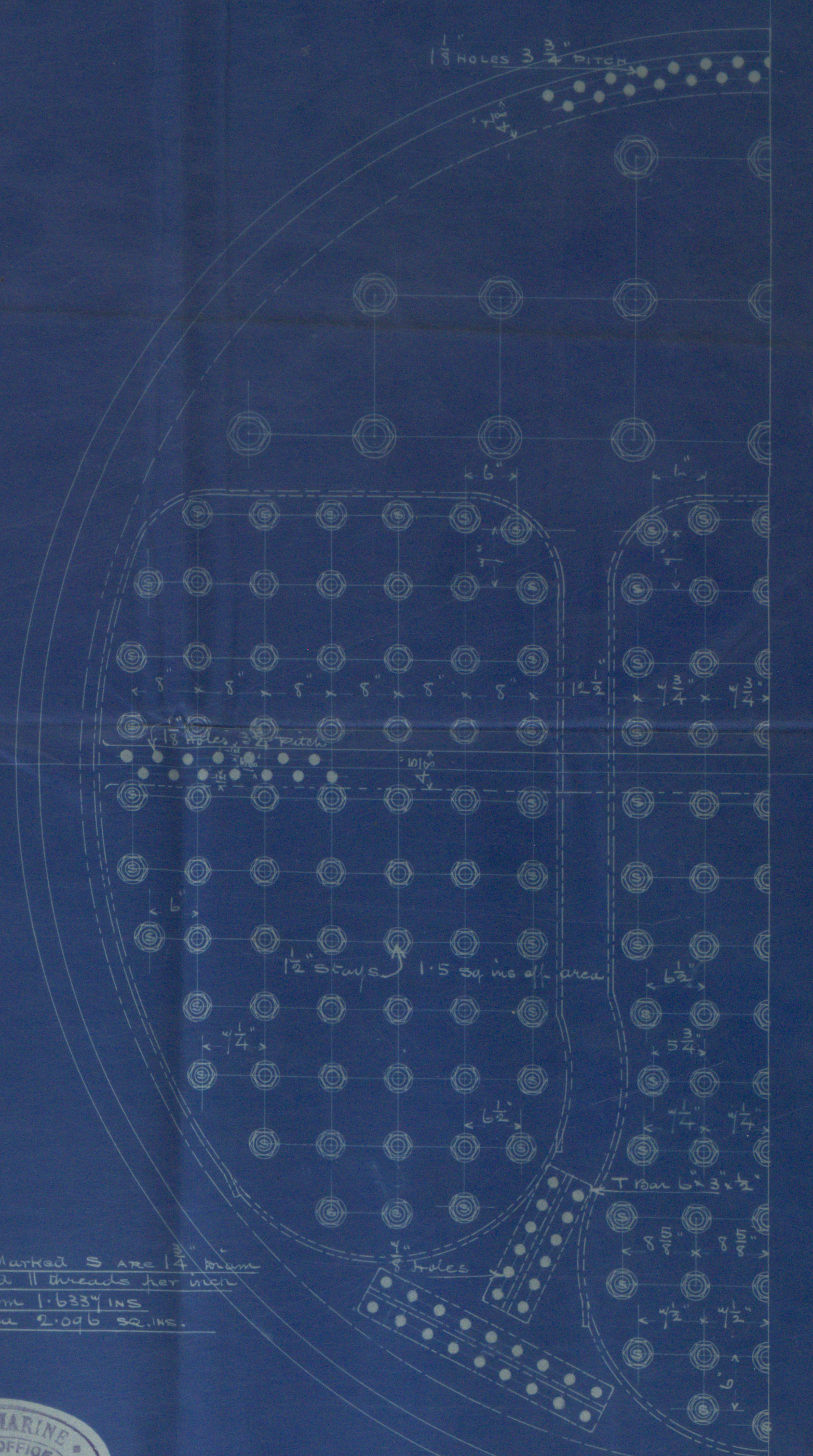
N° 120.



Boiler 75 120.

Plates, Stays, & rivets of Siemens Martin Mild Steel Tubes of iron.

15' 0" diam	11' 2" long	160 lbs to Lloyds.	Shell $1\frac{5}{16}$ " thick	Seams long $5\frac{5}{16}$ " Holes $8\frac{1}{2}$ " Pitch					
Plates	$\frac{P-d}{P}$	$\frac{9.5 - 1.3125}{8.5}$	$\frac{7}{8}$	84.55	Briden	$\frac{c \times d \times t}{(L-P) \times L \times \text{pitch}}$	$\frac{6600 \times 9 \times 1.25}{(24 - 8.625) \times 24 \times 8.5}$	165.34	lbs.
Rivets	$\frac{a \times 70 \times 1.75 \times 88}{P \times 8}$	$\frac{1.353 \times 5 \times 1.75 \times 88}{8.5 \times 1.3125}$	$\frac{7}{8}$	90.4	Turnaces	$\frac{C \times (t-2)}{D}$	$\frac{1160 \times (5-2)}{43.5}$	160.	
Shell	$\frac{C \times t \times 70}{D}$	$\frac{260 \times 1.3125 \times 84.55}{180}$	165.	160.2	Main Stays	$\frac{C \times a}{\text{Surf. Suppt.}}$	$\frac{9000 \times 5.053}{16.6875 \times 16}$	170.3	
4 1/2" Stays	$\frac{C \times t^2}{P}$	$\frac{175 \times 16^2}{16.6875}$	161.6	161.6	Screw Stays	"	$\frac{8000 \times 1.5}{8.625 \times 8}$	173.9	
4 1/2" Plate	"	$\frac{150 \times 14^2}{13.5}$	161.3	"	"	"	$\frac{9000 \times 2.096}{12.5 \times 8.5}$	177.5	
Back 1/2" Plate	"	$\frac{140 \times 10^2}{9.75}$	233.	160.2	Stay Tubes	"	$\frac{9500 \times 1.28}{7.75 \times 7.5}$	165.1	
Grub Cham	"	$\frac{135 \times 9.5^2}{8.625}$	163.78	163.78	Heating Surface in Boiler		2390.	Sq. ft.	
Back Bolt	"	$\frac{135 \times 14^2}{12.5}$	169.3	169.3					

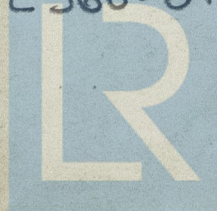


The Steel Boiler (Main)
160 lbs
Central Marine Dry Works
N° 120
Vessel N° 4304 W. Gray & Co

N° 2252
Lloyd's test
326 lbs T.R.B.
6.11.91

S.S. "Spheroid,"
W. Hope Report No. 8682.

HP L366-0161 © 2019



Lloyd's Register
Foundation