

Mills' Steel Main Bolt
No. 798
- 490 Supers

by
Ross & Duncan
for
Smith & Co. 168th St. N.Y.C.

160 lbs. working press.



5/5 "Val de Travers"

Glo rpt No. 14666.

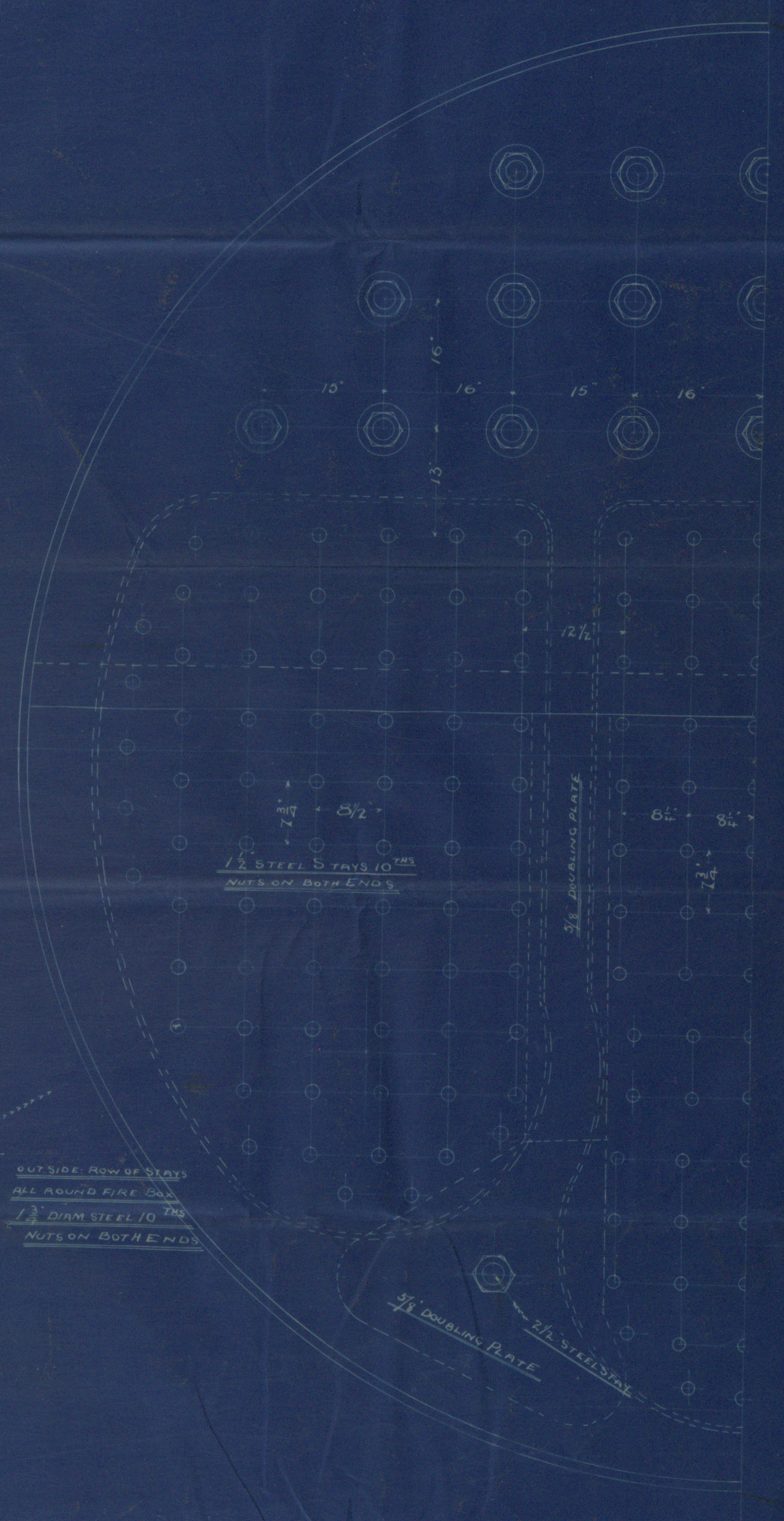
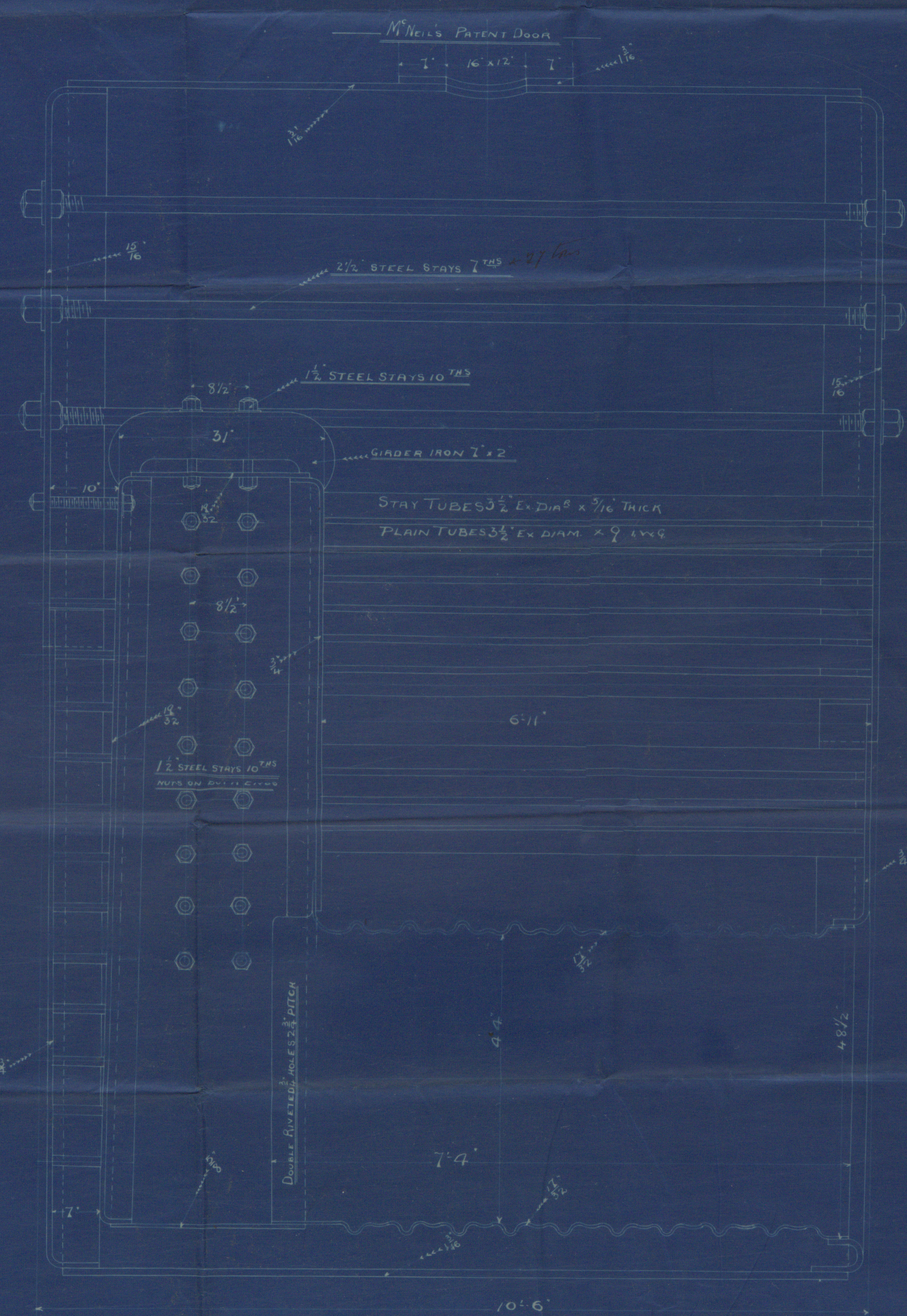
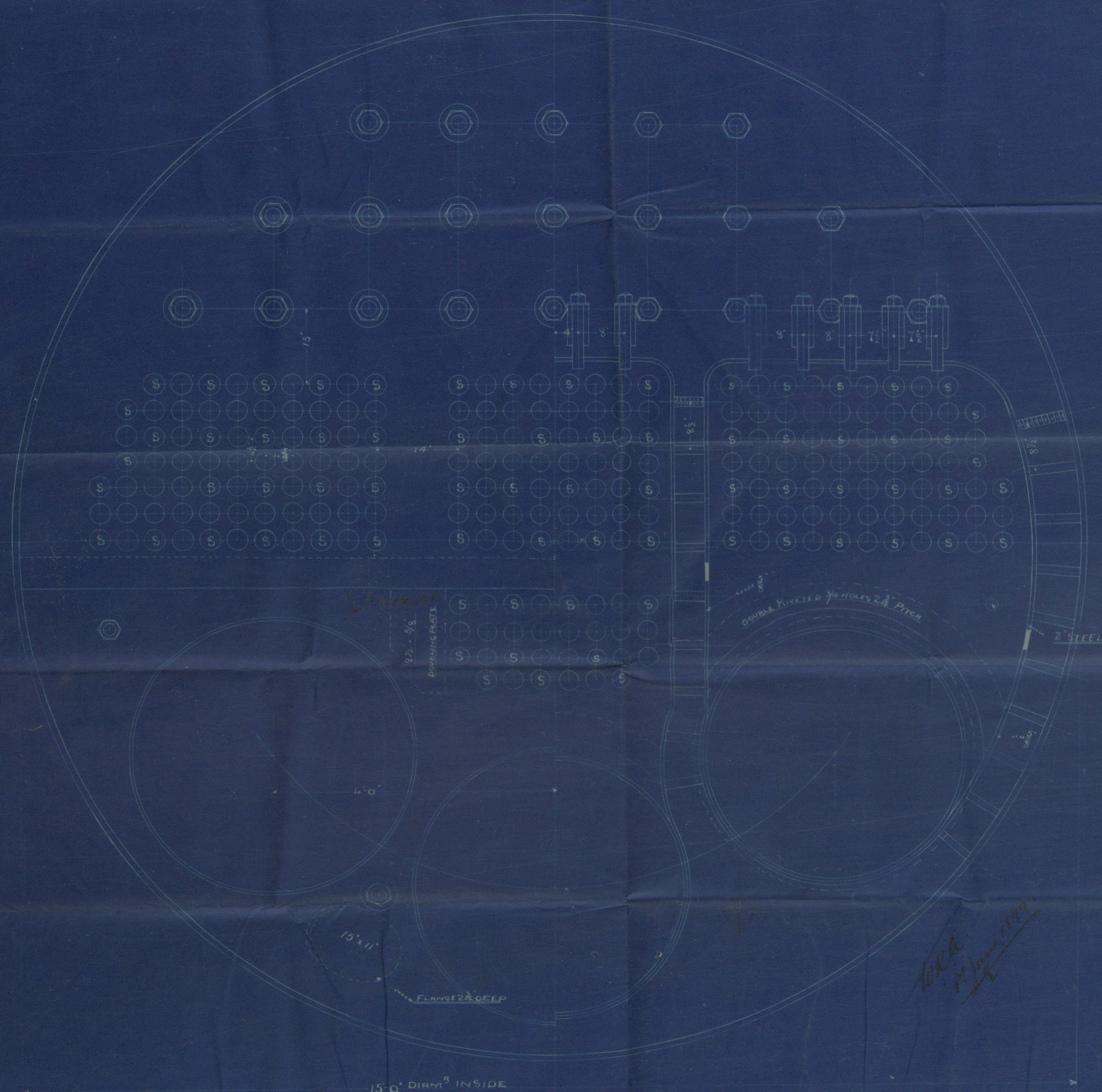
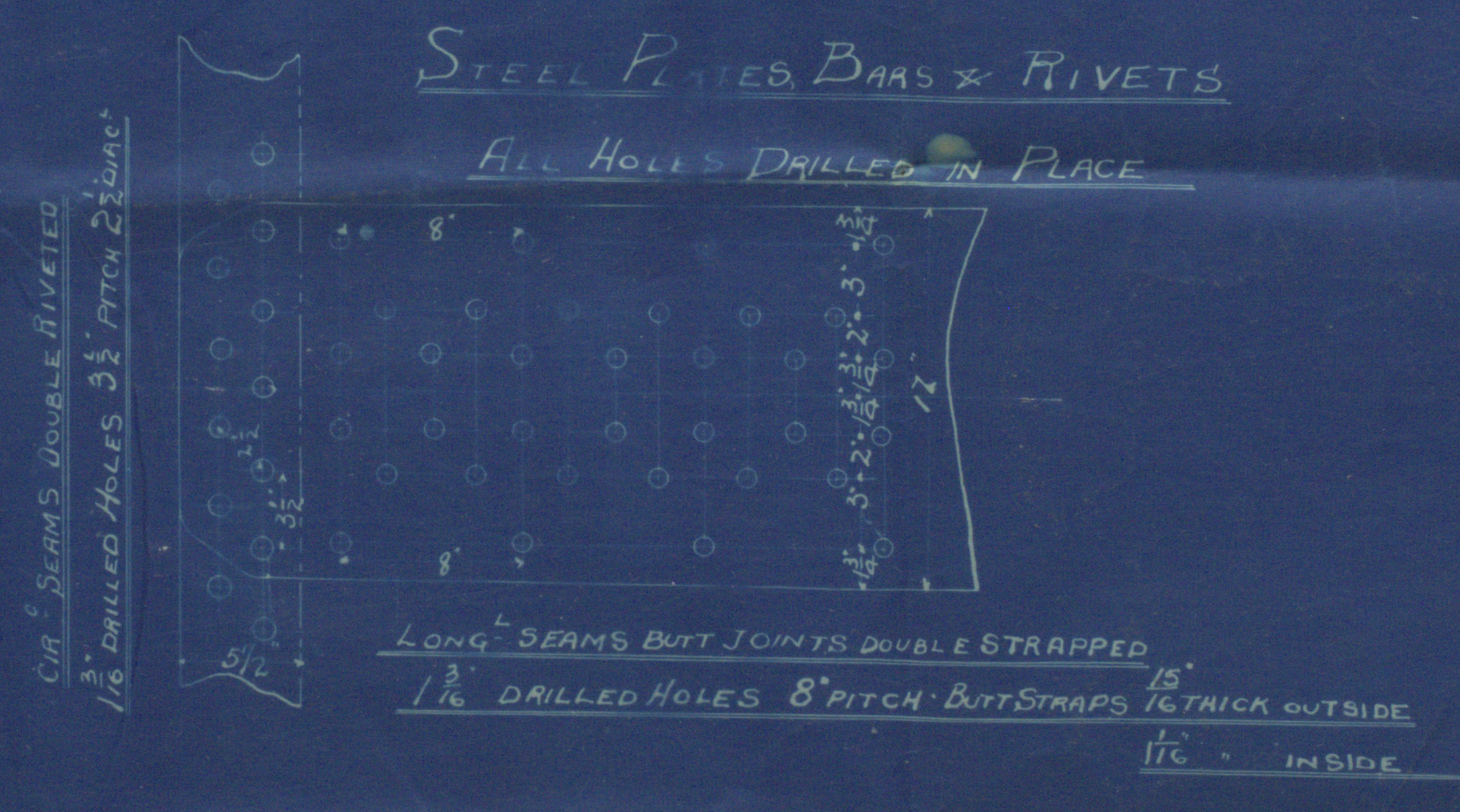
GLS285-0083

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Lloyd's Register
Foundation



Mr. J. H. Knight
3:16



BOILER N° 148
WORKING PRESSURE 160 LBS
SCALE 1 INCH = ONE FOOT

TO HAVE LLOYD'S CERTIFICATE

Build Steel Boiler by Messrs. H. & J. Duncan
for Messrs. J. H. Knight & Co. 11.55 vessel.
160 lbs. working pressure.

Head to $\frac{5 \times 1.571 \times 100}{8} = 86.75$
 Head to $\frac{5 \times 1.11 \times 1.571 \times 85}{8 \times 1.571} = 88$
 Shell $\frac{21 \times 85 \times (10-2)}{160} = 144 \text{ lbs.}$
 Domes $\frac{12.57 \times (5.5-2)}{4.8} = 171 \text{ lbs.}$
 Conical $\frac{10.5 \times 9.5 \times 2}{8 \times 2} = 16.4 \text{ lbs.}$
 Stays $\frac{1.6 \times 5000}{8.5} = 164 \text{ lbs.}$
 Girders $\frac{2000 \times 2 \times 2}{(29.1-5.5) \times 8 \times 2.5} = 174 \text{ lbs.}$
 Front tube $\frac{140 \times 16 \times 2}{16} = 161 \text{ lbs.}$ $\frac{140 \times (12 + \frac{16}{2})^2}{16} = 207 \text{ lbs.}$
 Back $\frac{140 \times 12 \times 2}{10.25 \times 8} = 181 \text{ lbs.}$
 Stay tubes $\frac{2000 \times 2 \times 2}{(9.5 \times 16) \times 2.5} = 174 \text{ lbs.}$
 Boiler Head $\frac{10.5 \times 9.5 \times 2}{8 \times 2} = 16.4 \text{ lbs.}$
 Stays $\frac{20 \times 2000}{16.5 \times 8.5} = 144 \text{ lbs.}$
 Ends to $\frac{155 \times 15 \times 2}{16} = 163 \text{ lbs.}$
 Long $\frac{422 \times 10000}{16} = 164 \text{ lbs.}$