

• *Walter Steel Steam Boilers No 285 by Rankine & Blackmore
for Russell & Co No 604 Vessel.*

180 lbs Working pressure.

$$\text{plate \% } \frac{8.845 - 1.25}{8.845} \times 100 = 85.9$$

$$\text{End top } \frac{185 \times 14.6^2}{244} = \frac{192}{\cancel{244}}$$

$$\text{Rivet \% } \frac{5 \times 1.23 \times 1.45 \times 85}{8.845 \times 1.1845} = 86.8$$

$$\text{" Stays } \frac{4.22 \times 10400}{17.845 \times 16.5} = 256 \text{ lbs}$$

$$\text{Shell } \frac{29.22 \times 85.9 (19-2)}{183} = 182 \text{ lbs}$$

$$\text{Front tier } \frac{140 \times (13 + \frac{2}{2})^2}{13.25^2} = 214 \text{ lbs}$$

$$\text{Furnace } \frac{1259 (9.5-2)}{50.25} = 184 \text{ lbs}$$

$$\text{Back } \frac{140 \times 12^2}{4.34^2} = 373 \text{ lbs}$$

$$\text{Cone bbl } \frac{135 \times 10^2}{72} = 188 \text{ lbs}$$

$$\text{Boiler Back } \frac{135 \times \frac{13.25^2}{8.5}}{12.5 \times 10.375 \times 8.5} = \frac{208 \text{ lbs}}{234 \text{ lbs}}$$

$$\text{" Stays } \frac{2.08 \times 9000}{72} = 262 \text{ lbs}$$

$$\text{" Stays } \frac{2.29 \times 9000}{10.375 \times 8.5} = 245 \text{ lbs}$$

$$\text{" top } \frac{135 \times 11.5^2}{92} = 194 \text{ lbs}$$

$$\text{" Stays } \frac{2.08 \times 9000}{88} = 214 \text{ lbs}$$

$$\text{Girders } \frac{10660 \times 11^2 \times 1.5}{(34625-8)11 \times 34.6} = 195 \text{ lbs}$$

W.R. is up to 1904.

Lloyd's Register
Foundation

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