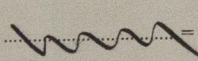
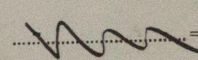
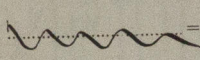
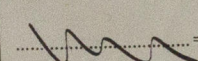


W434-0058

Shipbuilder Messrs Craig Taylor & Co No. 94. Engineer T. B. M. B. C. L^{td} No. 1454.

TENSILE RANGE Shell = 29 tons
Stays = 27 tons.
LBS. LBS.

% Plate.	$\frac{P - d}{P}$	$= \frac{6.3125 - 1.1875}{6.3125} =$	81.8%	Back Bottom with doubling.	$\frac{c \times \left(t + \frac{t}{2}\right)^2}{\frac{1}{2}(P^2 + P^2)}$	$=$		
% Rivets.	$\frac{a \times \text{No.} \times 1.75 \times 85}{P \times t}$	$= \frac{1.075 \times 3 \times 1.75 \times 85}{6.3125 \times 9.375} =$	83.5%	Girders.	$\frac{c \times d \times t}{(L - P) \times \text{dist. apart}}$	$= \frac{9.900 \times 7\frac{3}{4} \times 1.5}{(29 - 8\frac{3}{4}) \times 9\frac{1}{4} \times 29} =$	✓	164
Shell.	$\frac{c(t - 2)}{D}$	$= \frac{22.56 \times (15 - 2) \times 81.8}{146.625} =$	162.3	Plain Furnaces.	$\frac{50(300T - L)}{D}$	$= \frac{50(300 \times 75 - 83)}{42} =$	✓	169
Front and Back Tops.	$\frac{c \times t^2}{\frac{1}{2}(P^2 + P^2)}$	$= \frac{185 \times 16.5^2}{\frac{1}{2}(17\frac{1}{2}^2 + 18\frac{1}{2}^2)} =$	161	Do. where thickness exceeds 120 times plate.	$\frac{1,075,200 \times T^2}{L \times D}$	$=$		
Front Tube Plate.	$\frac{c \times t^2}{P^2}$	$=$		Patent.		$=$		
Front Tube Plate with doubling.	$\frac{c \times \left(t + \frac{t}{2}\right)^2}{P^2}$	$= \frac{140 \times \left(12 + \frac{10}{2}\right)^2}{14\frac{1}{2}^2} =$	192	Main Stays.	$\frac{c \times a}{\text{surface supported}}$	$= \frac{5.05 \times 10,000}{17\frac{1}{4} \times 18\frac{1}{2}} =$	✓	161.5
Back Tube Plate.	$\frac{c \times t^2}{P^2}$	$= \frac{140 \times 12^2}{9\frac{1}{2}^2} =$	223	1 1/2" Screw Stays.	$\frac{c \times a}{\text{surface supported}}$	$= \frac{9000 \times 2.1}{12 \times 9\frac{3}{4}} =$	✓	161.4
Compress. Tube Plate.	$\frac{c(D - d) \times t}{W \times D}$	$= \frac{1600 \times (4.75 - 2.9) \times 12}{30.5 \times 4.75} =$	245	1 1/8" Screw Stays.	$\frac{c \times a}{\text{surface supported}}$	$= \frac{9000 \times 1.79}{10\frac{1}{4} \times 9\frac{3}{4}} =$	✓	161.5
C. Chbr. Plate Sides.	$\frac{c \times t^2}{\frac{1}{2}(P^2 + P^2)}$	$= \frac{135 \times 10.5^2}{\frac{1}{2}(8\frac{3}{4}^2 + 10\frac{1}{4}^2)} =$	163.9	Stay Tubes.	$\frac{A \times c}{P^2}$	$=$		
C. Chbr. Plate Top.	$\frac{c \times t^2}{\frac{1}{2}(P^2 + P^2)}$	$= \frac{135 \times 10.5^2}{\frac{1}{2}(8\frac{3}{4}^2 \times 9\frac{1}{4}^2)} =$	183			$=$		
C. Chbr. Plate Backs.	$\frac{c \times t^2}{\frac{1}{2}(P^2 + P^2)}$	$= \frac{135 \times 11^2}{\frac{1}{2}(9\frac{3}{4}^2 + 10\frac{1}{4}^2)} =$	163.2			$=$		
Back Bottom.	$\frac{c \times t^2}{\frac{1}{2}(P^2 + P^2)}$	$= \frac{135 \times 13^2}{\frac{1}{2}(10\frac{3}{4}^2 + 9\frac{3}{4}^2)} =$	160.4			$=$		

