

# STEEL BOILER NO 397 & S

WORKING PRESSURE = 160 LBS.

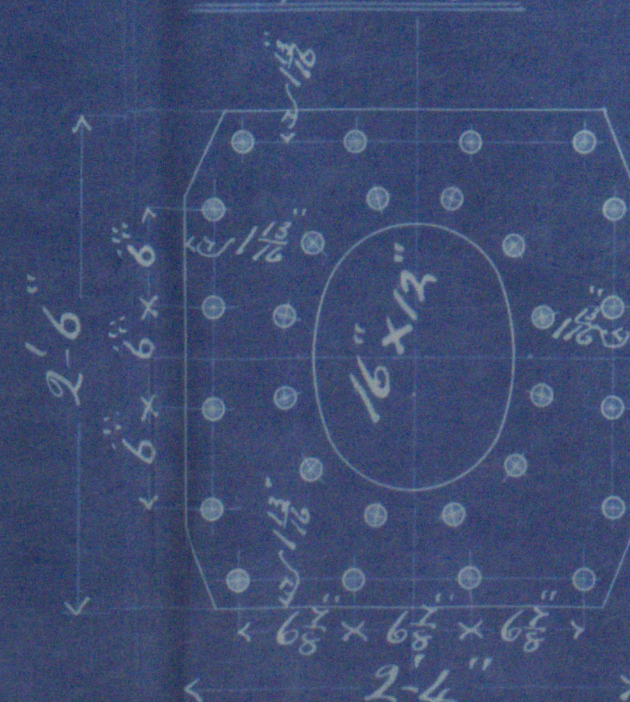
SCALE 1 INCH = 1 FOOT.

## NOTE!

ALL PLATES STAYS AND RIVETS TO BE OF SIEMENS MARTIN STEEL. ALL RIVET HOLES TO BE DRILLED IN LONGITUDINAL SEAMS. ALL OTHERS TO BE PUNCHED OR DRILLED AS MAY BE CONVENIENT. THE DRILLING WILL BE DONE IN PLACE AFTER BENDING, AND ALL PUNCHED OR FLANGED PLATES TO BE ANNEALED AFTERWARDS. IF ANY HOLES ARE PUNCHED AFTER THE PLATES ARE ANNEALED THEY ARE TO BE RIMED OUT SO AS TO REMOVE AT LEAST 1/8" ALL ROUND, MEASURING FROM THE LARGEST PART OF THE PUNCHED HOLE. THE SCREW STAYS ARE 1 1/2" & 1 3/4" EFFECTIVE DIAM. SCREWED INTO BOTH PLATES AND NUTTED AT EACH END. THE TUBES ARE IRON. THE STAY TUBES ARE 2 3/4" INTERNAL DIAM. & 3/16" THICK EFFECTIVE. THE ORDINARY TUBES ARE 3 1/4" EXT. DIAM. AND 1/8" L.S.G. THICK. A MANHOLE IN SHELL 16" X 12" WITH SHORTER AXIS LONGITUDINALLY AND A DOUBLING PLATE 2' 6" X 2' 4" X 2 1/32" THICK FITTED AROUND IT. ALL STAYS OF STEEL EXCEPT THOSE JOINTED WHICH ARE OF IRON. ALL STEEL PLATES & STAY BARS ARE MADE BY W. BEADMORE & CO.

DOUBLING PLATE AROUND MANHOLE.

2 1/32" THICK.

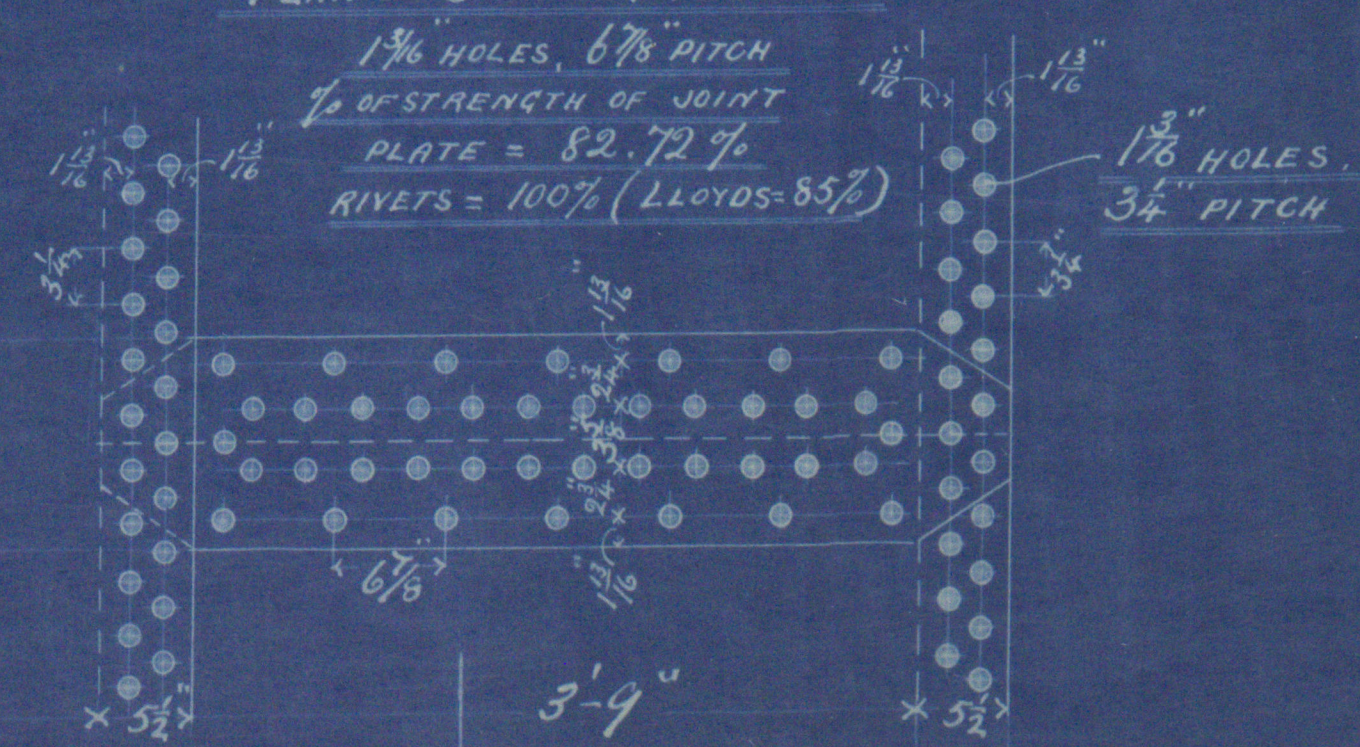


1 1/8" RIVET HOLES  
INNER ROW COUNTERSUNK  
AND FLUSH RIVETED.

EARLES SHIPBUILDING  
ENGINEERING COMPANY  
LIMITED  
H U L L  
2.5.94.

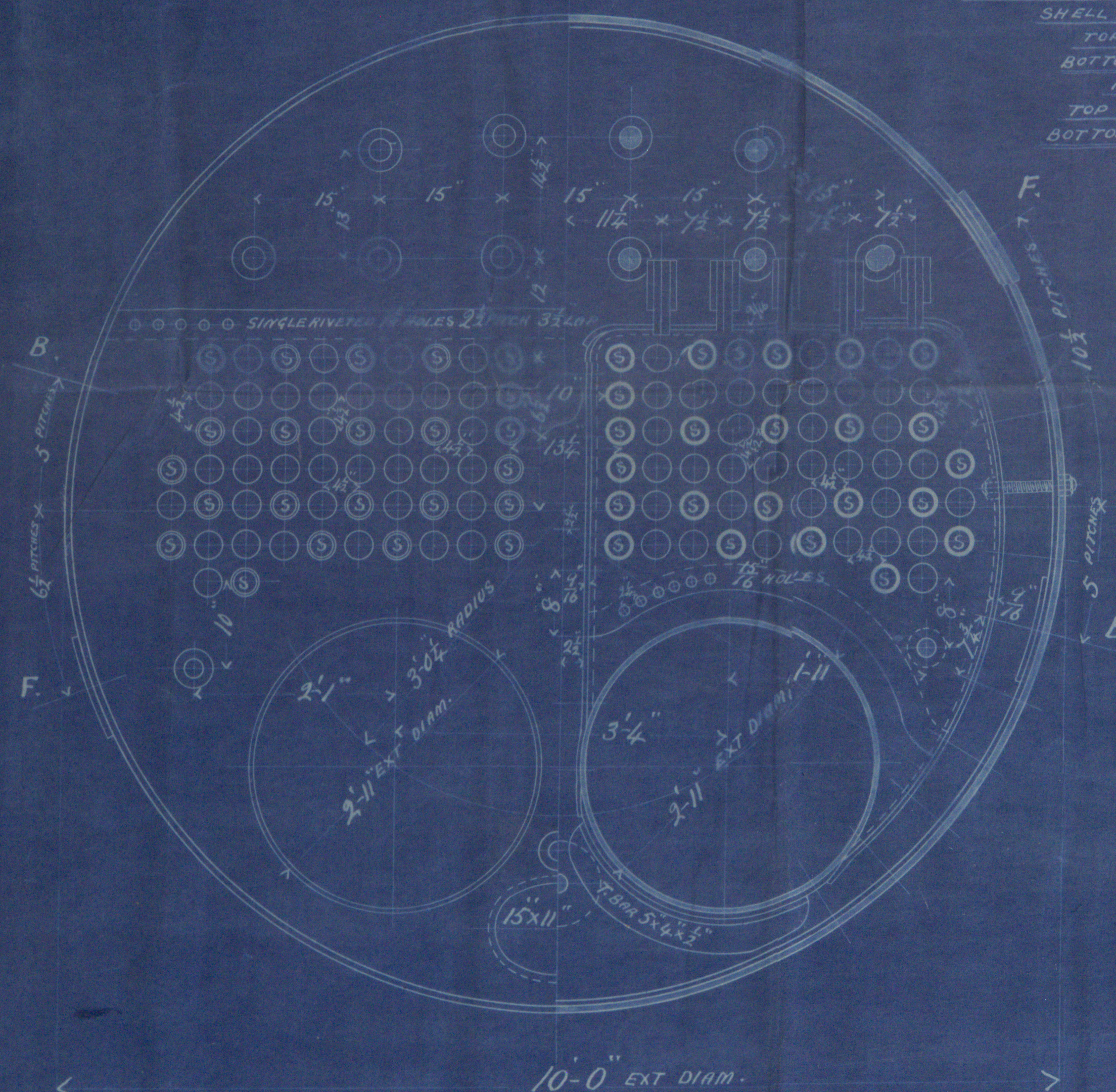
PLAN OF SHELL RIVETING.

1 1/8" HOLES, 6 1/2" PITCH  
1/2" STRENGTH OF JOINT  
PLATE = 82.72%  
RIVETS = 100% (LLOYDS-85%)

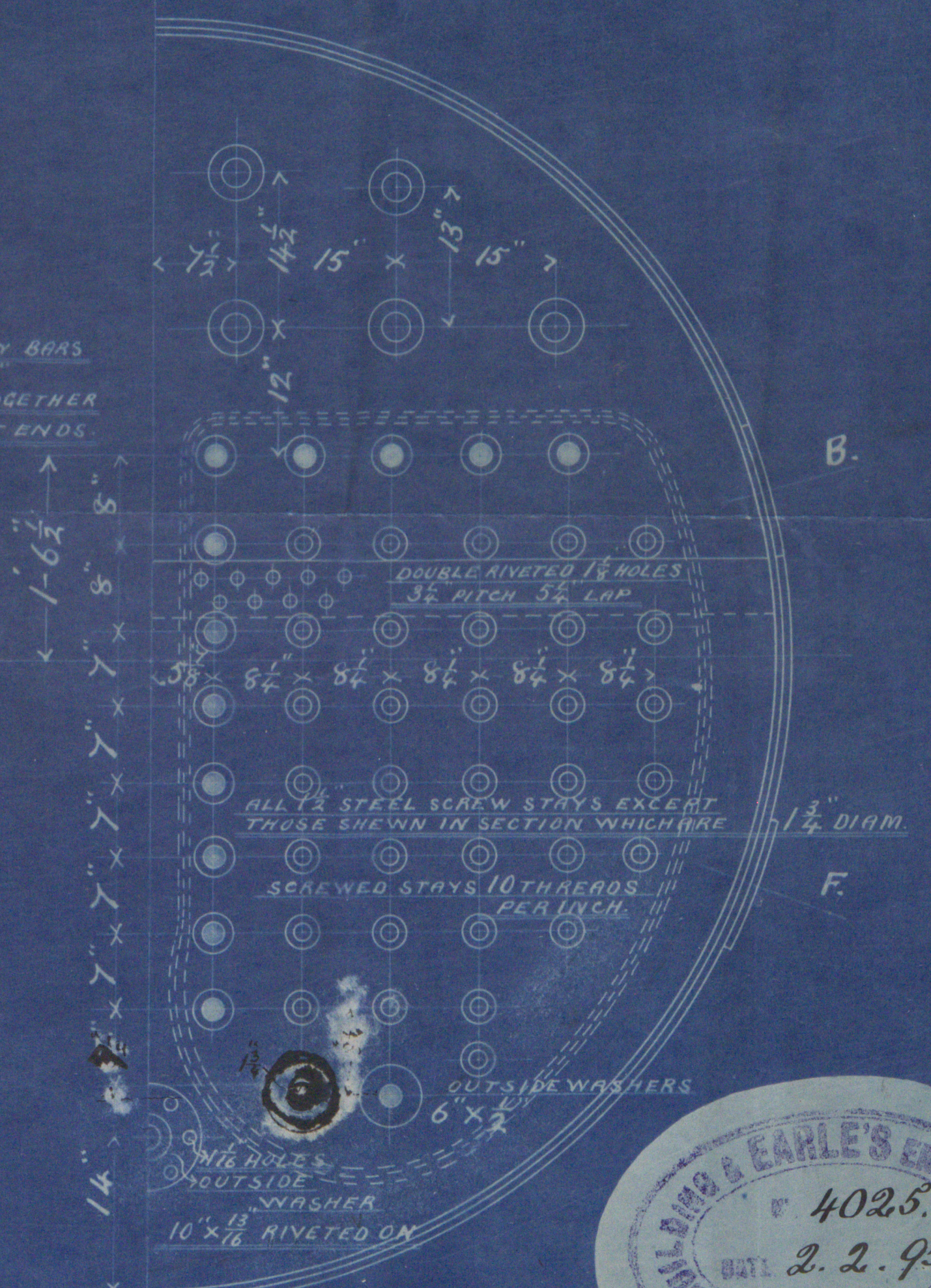
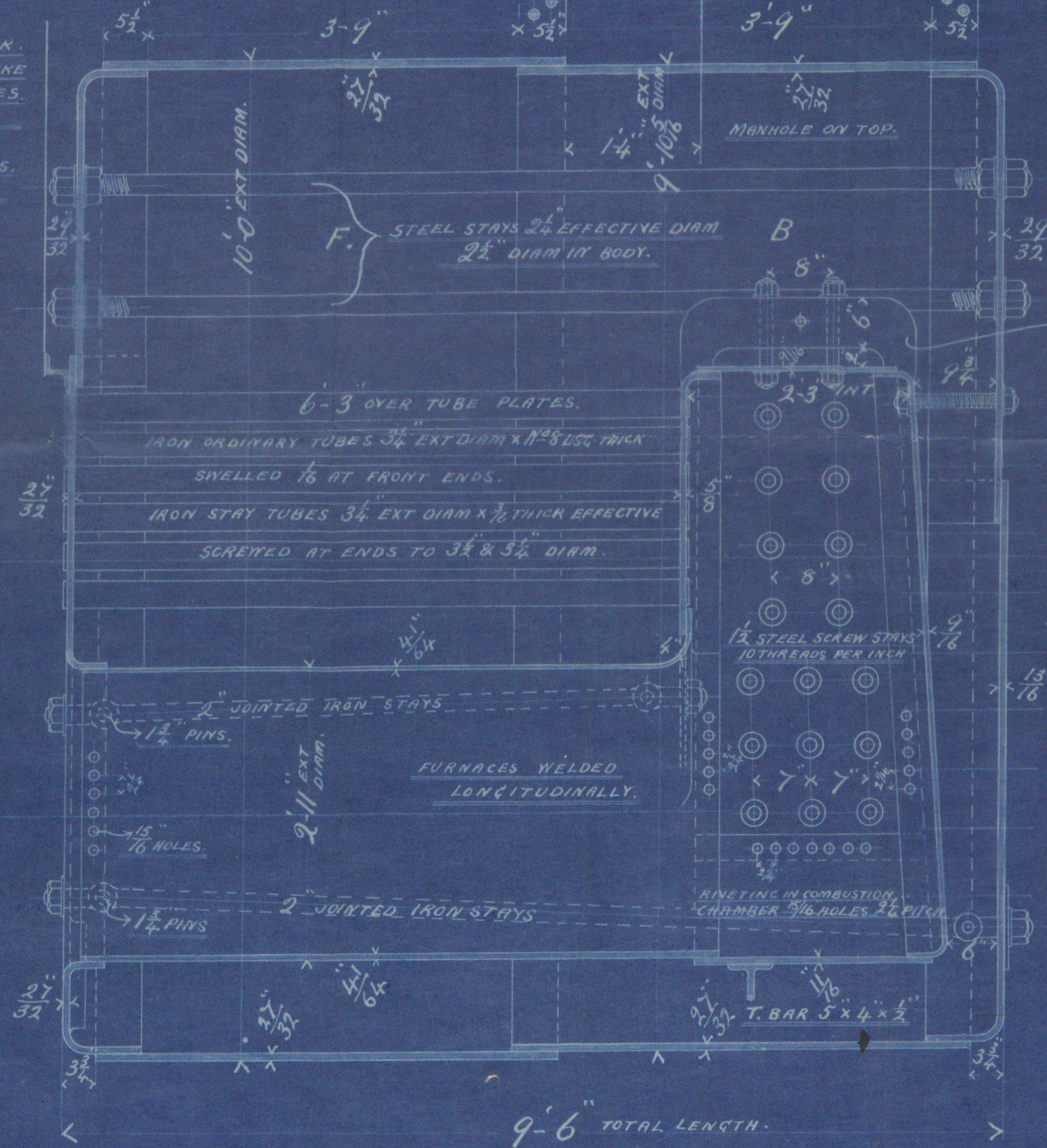


## DIMENSIONS

LENGTH OF FIRE BARS	5-0
AREA OF FIRE GRATE	28 sq. ft.
DIAM. OF TUBES OUTSIDE	3 1/4"
LENGTH OF TUBES OVER PLATES	6'-3"
NO. OF TUBES	118
AREA THROUGH TUBES	6 sq. ft.
SURFACE OF TUBES	616 "
TOTAL HEATING SURFACE	800 "
WORKING PRESSURE	160 LBS.
DIAM. OF SAFETY VALVE EACH	2"



SHELL 2 1/32" THICK  
BUTT STRAPS 12 1/4" X 1/4" THICK.  
SHELL PLATES IN F. STRAKE  
TOP PLATE 53 PITCHES.  
BOTTOM " 61 "  
IN B. STRAKE.  
TOP PLATE 57 PITCHES.  
BOTTOM " 57 "



NO 397 & S  
% Robt Hull Report no. 9704  
% Wm Hull Report no.

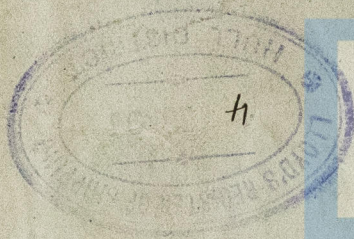




s/s Robin  
Hull Report No. 9704

s/s Wren  
Hull Report No. 9736

HVL 410-0309



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Foundation