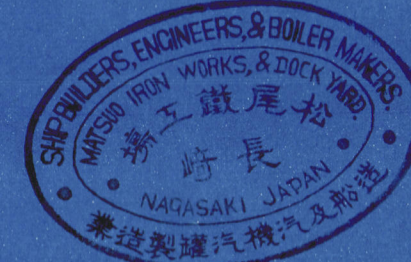


# BUILDER'S NO 57. STEEL MAIN BOILER.

WORKING PRESSURE 180 LBS/SQ IN.  
SCALE 1 INCH TO A FOOT.



8/1/14

PRINCIPAL DIMENSIONS	
MEAN DIA. OF BOILER	14' 0"
MEAN LENGTH OF BOILER	11' 0"
INSIDE DIA. OF CORRUGATED FURNACE	3' 0"
LENGTH OF FIRE GRATE	5' 0"
HEATING SURFACE	1644.632
COMBUSTION CHAMBERS	230.978
FURNACES	14.123
TOTAL	2016.830
GRATE AREA	56.874
RATIO OF H/G/A	35.453

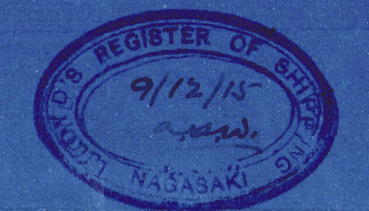
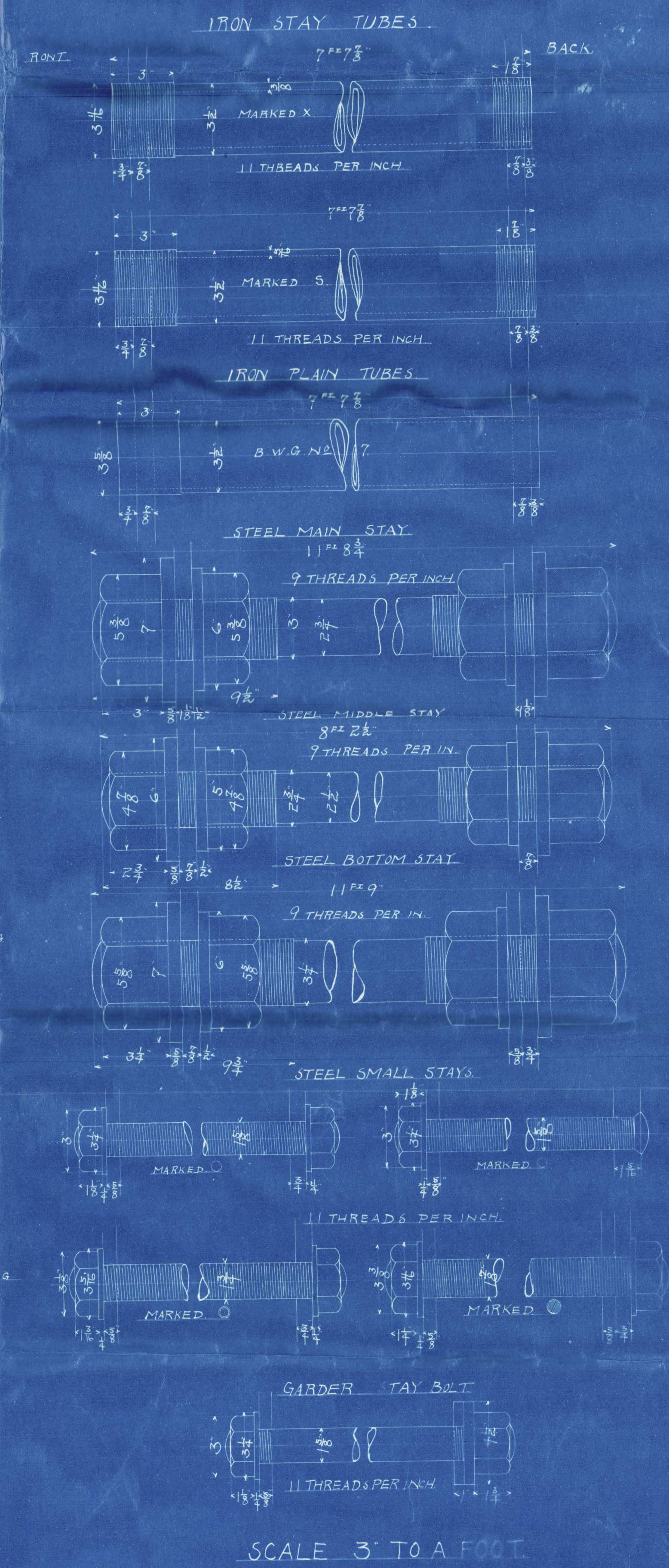
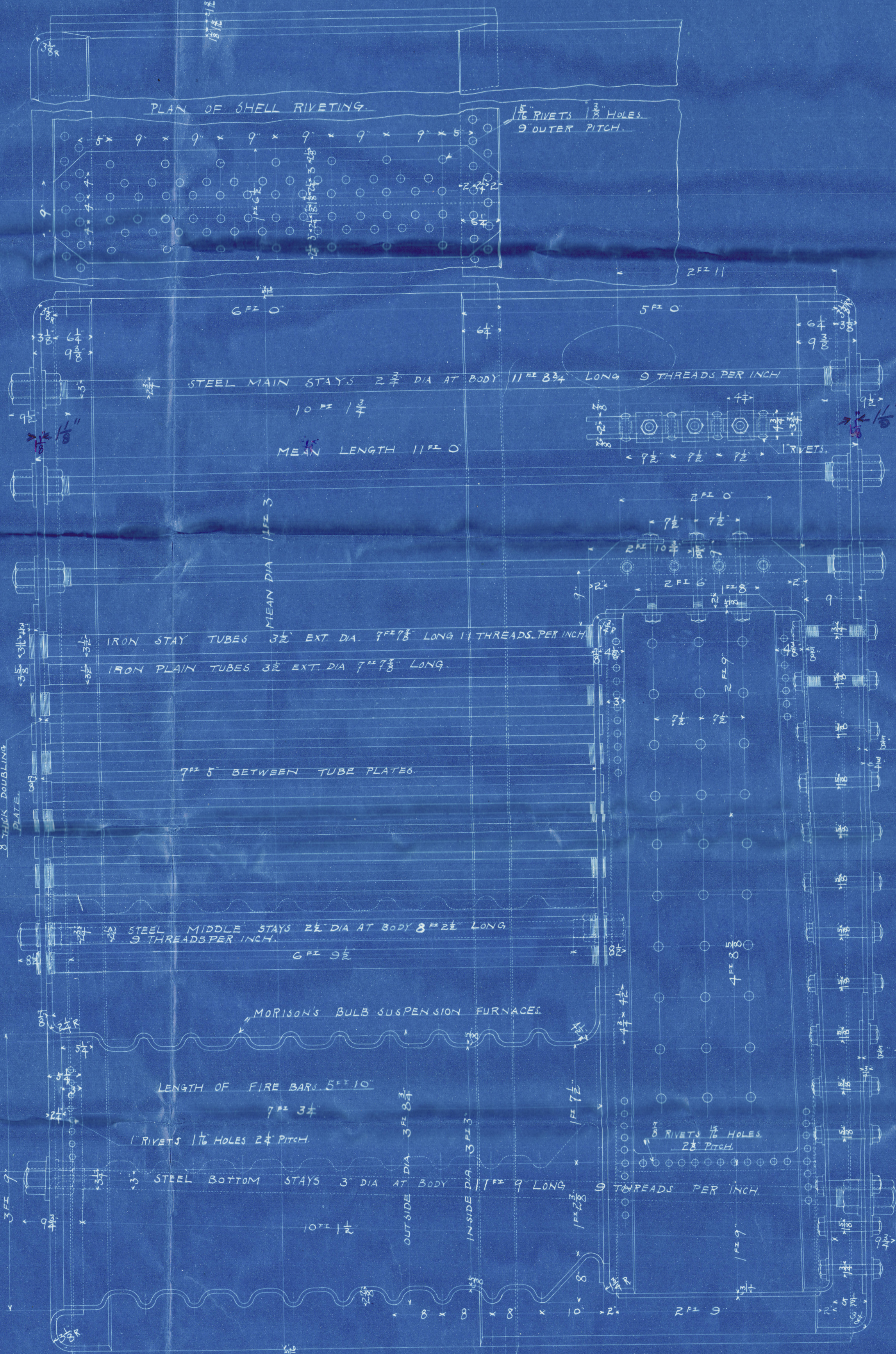
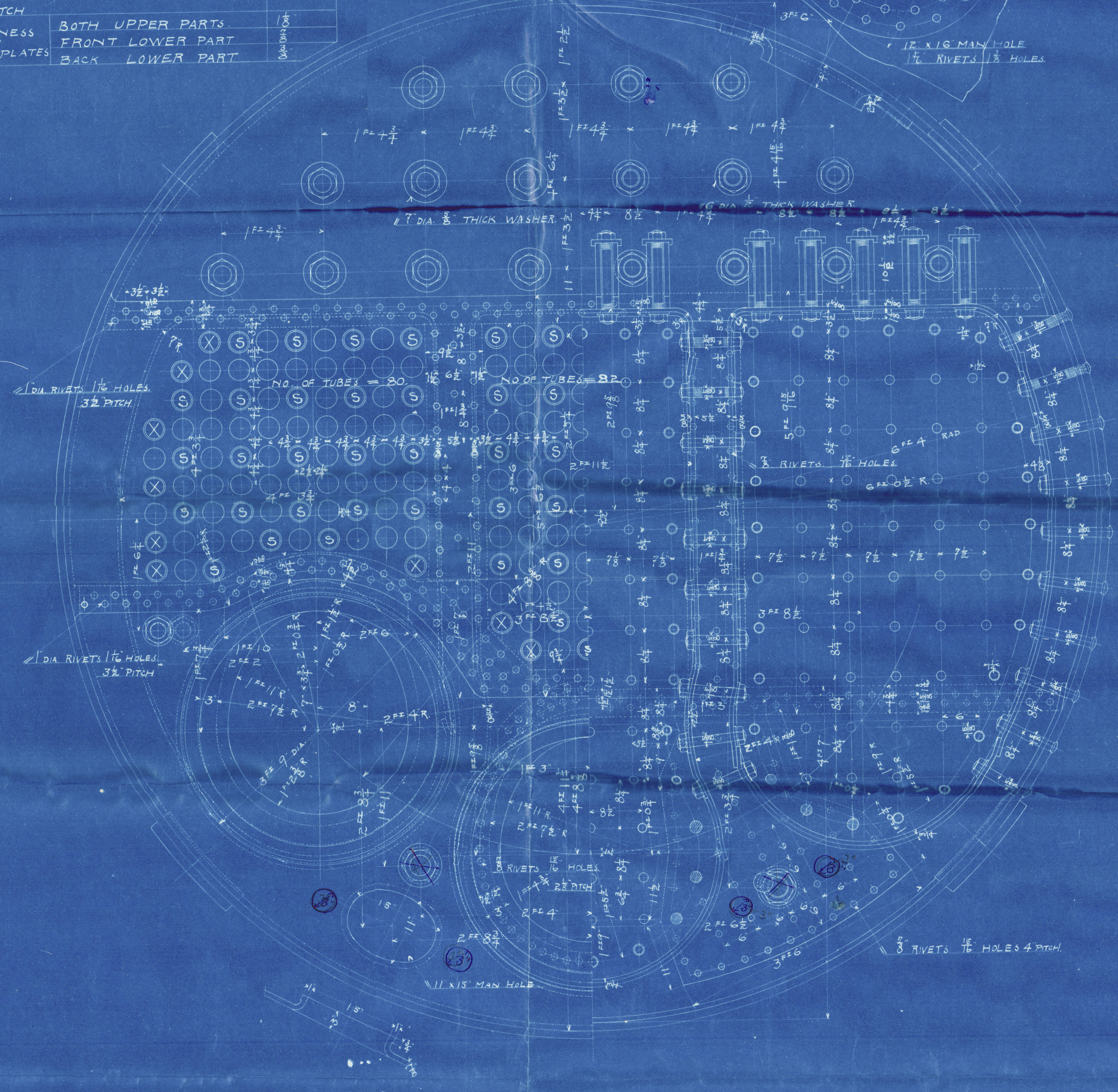
LONGITUDINAL SEAMS	
TREBLE RIVETING	1 1/2" RIVETS 1 1/2" HOLES 9"
OUTER PITCH	1 1/2"
THICKNESS OF SHELL PLATE	1 1/2"
1/2 STRENGTH OF PLATE	84.72
1/2 STRENGTH OF RIVET	85.25
1/2 STRENGTH OF COMBINED	86.49

CIRCUMFERENTIAL SEAMS	
DOUBLE RIVETING	1 1/2" RIVETS 1 1/2" HOLES 4" PITCH
THICKNESS OF END PLATES	1 1/2"
BOTH UPPER PARTS	1 1/2"
FRONT LOWER PART	1 1/2"
BACK LOWER PART	1 1/2"

- TUBES**
- 157 IRON PLAIN TUBES 3 1/2" EXT. DIA. & 7' 0" LONG SWELLED 3/4" AT FRONT 3/4" UP EXPANDED INTO BOTH PLATES.
  - 18 IRON STAY TUBES 3 1/2" EXT. DIA. & 7' 0" LONG SWELLED 3/4" AT FRONT 3/4" UP 11 THREADS PER INCH SCREWED INTO BOTH TUBE PLATES MARKED (X).
  - 67 IRON STAY TUBES 3 1/2" EXT. DIA. & 7' 0" LONG THICK 7/8" LONG SWELLED 3/4" AT FRONT 3/4" UP 11 THREADS PER INCH MARKED (S).
  - 242 IN ALL.

- LONGITUDINAL STAYS**
- 18-STEEL MAIN STAYS 2 1/2" DIA. AT BODY SWELLED 1/2" AT BOTH ENDS.
  - 2-STEEL MIDDLE STAYS 2 1/2" DIA. AT BODY SWELLED 1/2" AT BOTH ENDS.
  - 2-STEEL BOTTOM STAYS 3" DIA. AT BODY SWELLED 1/2" AT BOTH ENDS.
  - 22 IN ALL.

- SCREW STAYS**
- 12 SCREW STAYS 1 1/2" DIA. 11 THREADS PER INCH
  - 74 SCREW STAYS 1 1/2" DIA.
  - 238 SCREW STAYS 1 1/2" DIA.
  - 324 IN ALL.



8/1/14



Main Boilers for No. 57  
Matens Iron Works & Dockyard  
Nagasaki

S.S. "Yoyo Maru No. 2"  
Report No. 1143



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Lloyd's Register  
Foundation

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