

NOTE: STAY TUBES TO BE EXPANDED BY

ROLLER EXPANDER & NOT MADE

TIGHT BY CAULKING ONLY.

MARK	NAME	PAT. NO.	MATERIAL	WEIGHT	REMARKS	SHOP	STOCK
3	FURNACES	B.1108	STEEL		ORDERED OUTSIDE		
2	SHELL PLATES	MARK I					
2	OUTER BUTT STRAPS	2					
2	INNER	3					
1	FRONT MANHOLE PLATE	4					
1	SHELL MANHOLE RING	5					
2	G.C. GIRDERS	6					
1	TOP FRONT PLATE	7					
1	BACK	8					
1	BOTTOM FRONT	9					
1	BACK	10					
1	BACK TUBE PLATE CENTRE	11					
2	WING	12					
1	G.C. BACK CENTRE	13					
2	WINGS	14					
1	TOP SIDES CENTRE	15					
2	WINGS	16					
3	G.C. BOTTOMS	17					
114	PLAIN TUBES	B.1108	WROUGHT IRON		ORDERED OUTSIDE		
28	S STAY TUBES	B.1110	WROUGHT IRON				
42	N	B.1111					
10	STEAM SPACE STAYS	B.1112	STEEL		ORDERED OUTSIDE		
6	1/2" SCREW STAY BARS	B.1113					
14	1 1/2"	B.1114					
2	STAYS ABOVE MANHOLE	B.1126					
1	DOUBLING PLATE	MARK 18					
1	MANHOLE MANHOLE RING	B.1117	FORGED STEEL		ORDERED OUTSIDE		
10	STEAM SPACE STAY WASHERS	B.1493	STEEL		SEE SKETCH 13C		
10		B.1123					
1	COVER FOR RIVETING HOLE	B.1119			FROM STOCK		
33	WASHERS ON GIRDERS	B.1120			SEE SKETCH 13C		
10	OUTSIDE NUTS S.S. STAYS	B.0317	WROUGHT IRON		SEE SKETCH 9D		
10		B.1122					
2		B.1277					
10	INSIDE NUTS S.S. STAYS	B.0541	WROUGHT IRON		SEE SKETCH 9D		
10		B.1128					
2		B.1278					
2		B.1279					
166	NUTS FOR 1 1/2" SCREW STAY	B.0551	WROUGHT IRON		SEE SKETCH 9D		
371		B.1134					
33	ABOVE GIRDERS	B.1135					
4	STUDS FOR FRONT MANHOLE	B.0291	STEEL		SEE SKETCH 13C		
4	BRIDGES	B.0578			FROM STOCK		
4	MANHOLE DOOR NUTS	B.0953	WROUGHT IRON		SEE SKETCH		

NOTE: SCREW STAYS OF COMB CHAMBERS WHEN FITTED WITH NUTS SHOULD BE AS FAR AS POSSIBLE NORMAL TO THE COMB CHAMBER PLATES. WHEN THIS IS NOT POSSIBLE THEY MUST BE FITTED WITH TAPER WASHERS TO PROVIDE A FAIR BED FOR THE NUTS.

MARK	DIA	EFF. AREA	THO PER INCH	POSITION	DEPTH OF NUT
1	1 1/2"	1.22	10	TOP SIDES & BACK	3/4"
2	1 1/2"	1.22	10	GIRDER TOPS	1 1/4"
3	1 1/2"	1.76	10	BOUNDARY STAYS	5/8"

COMB CHAMBER STAYS TO BE SCREWED THRO BOTH PLATES & NUTS FITTED AT EACH END. STAYS NOT WORKED IN FIRE. ALL NUTS TO BE OF IRON & MUST BE WITHOUT WELD WHEN EXPOSED TO FLAME.

NOS 878, 879.

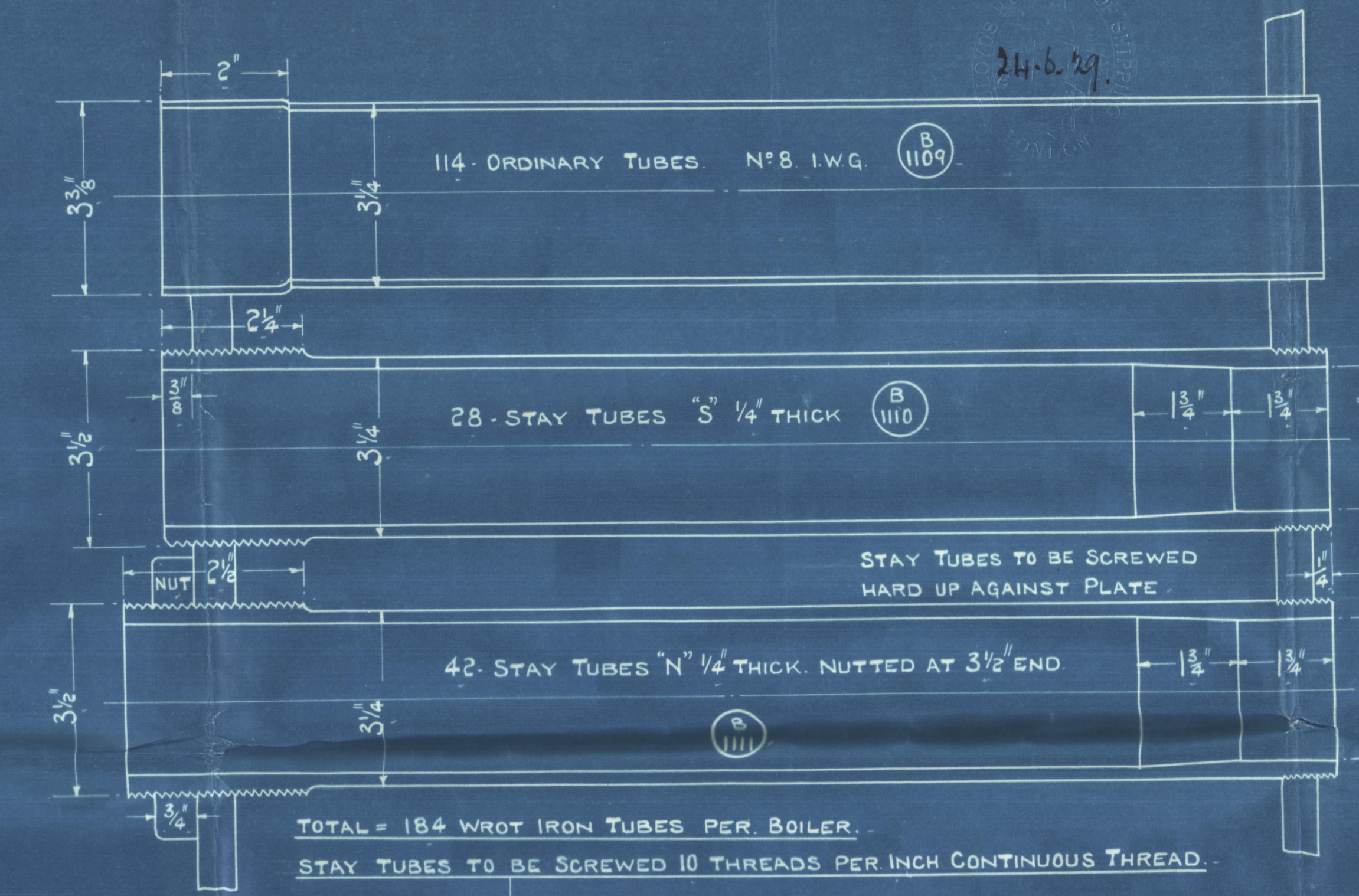
DONKEY BOILER.

1 OFF FOR EACH NO.

UNDER SURVEY OF LLOYDS.

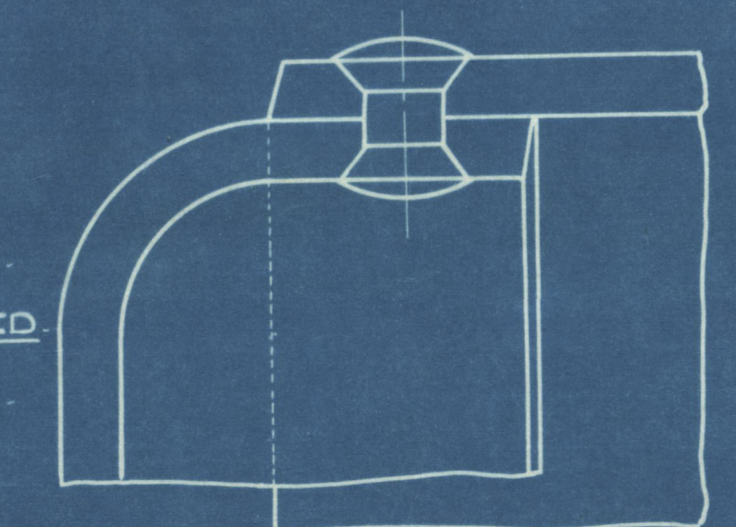
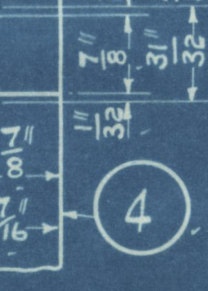
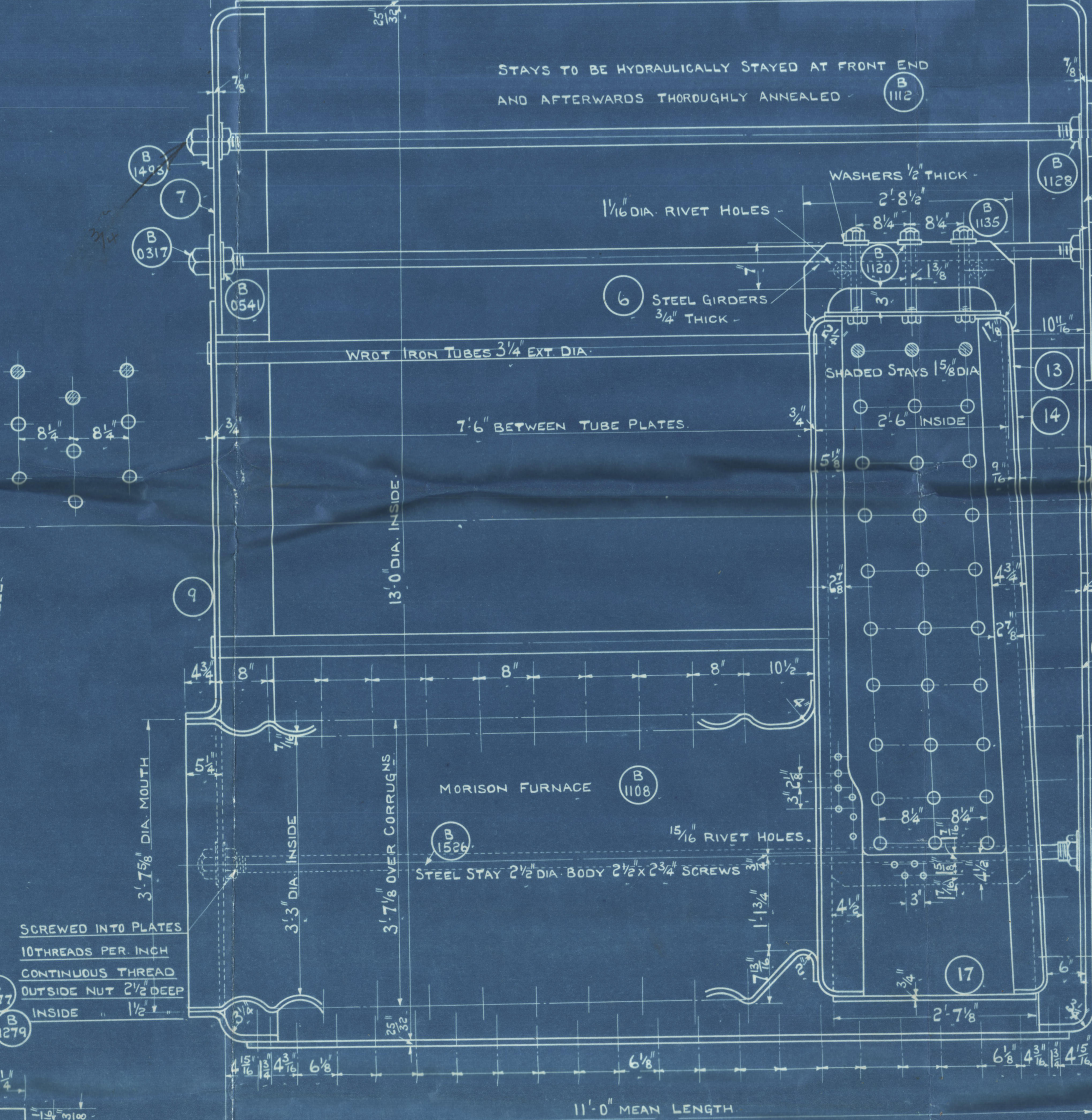
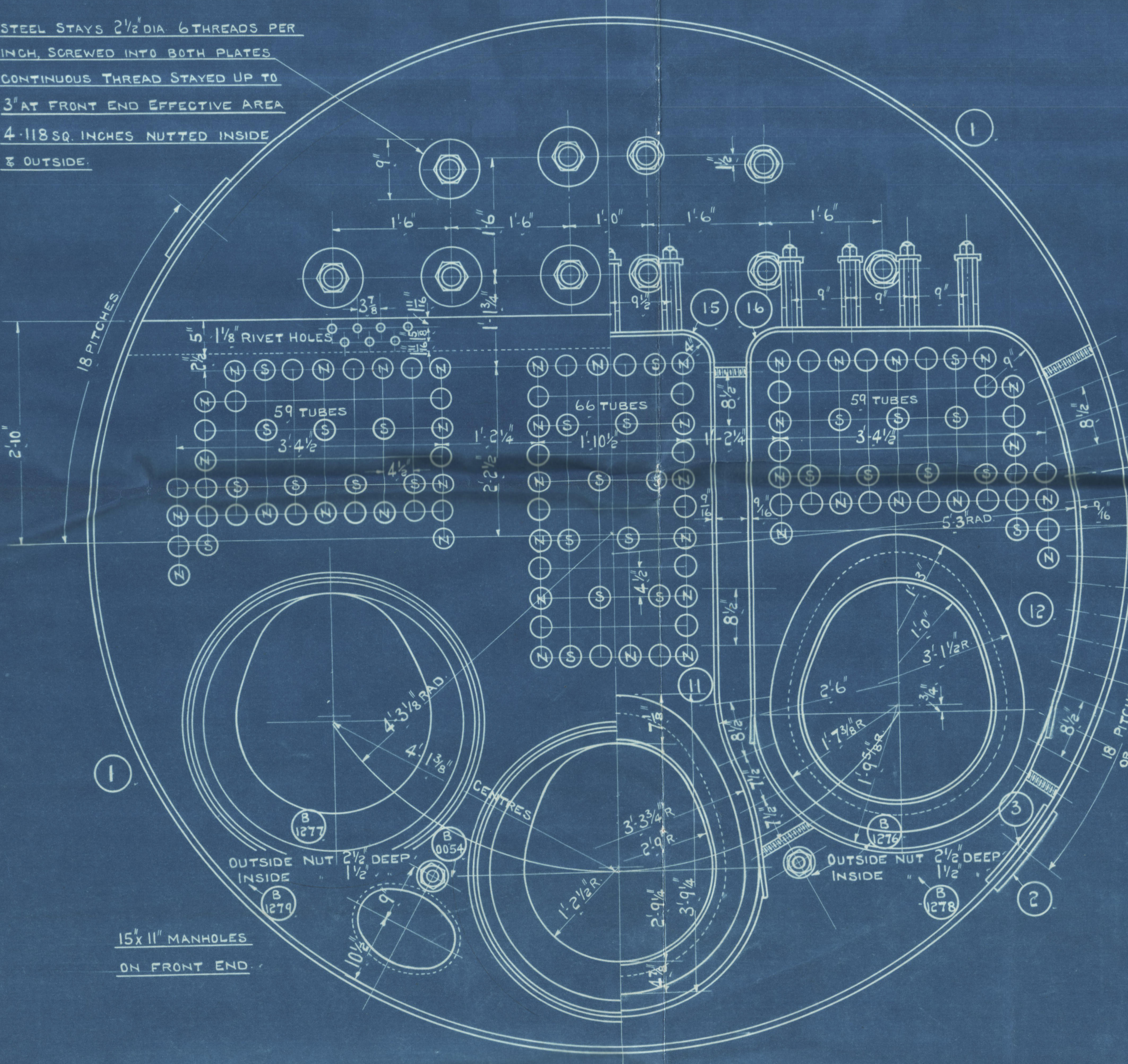
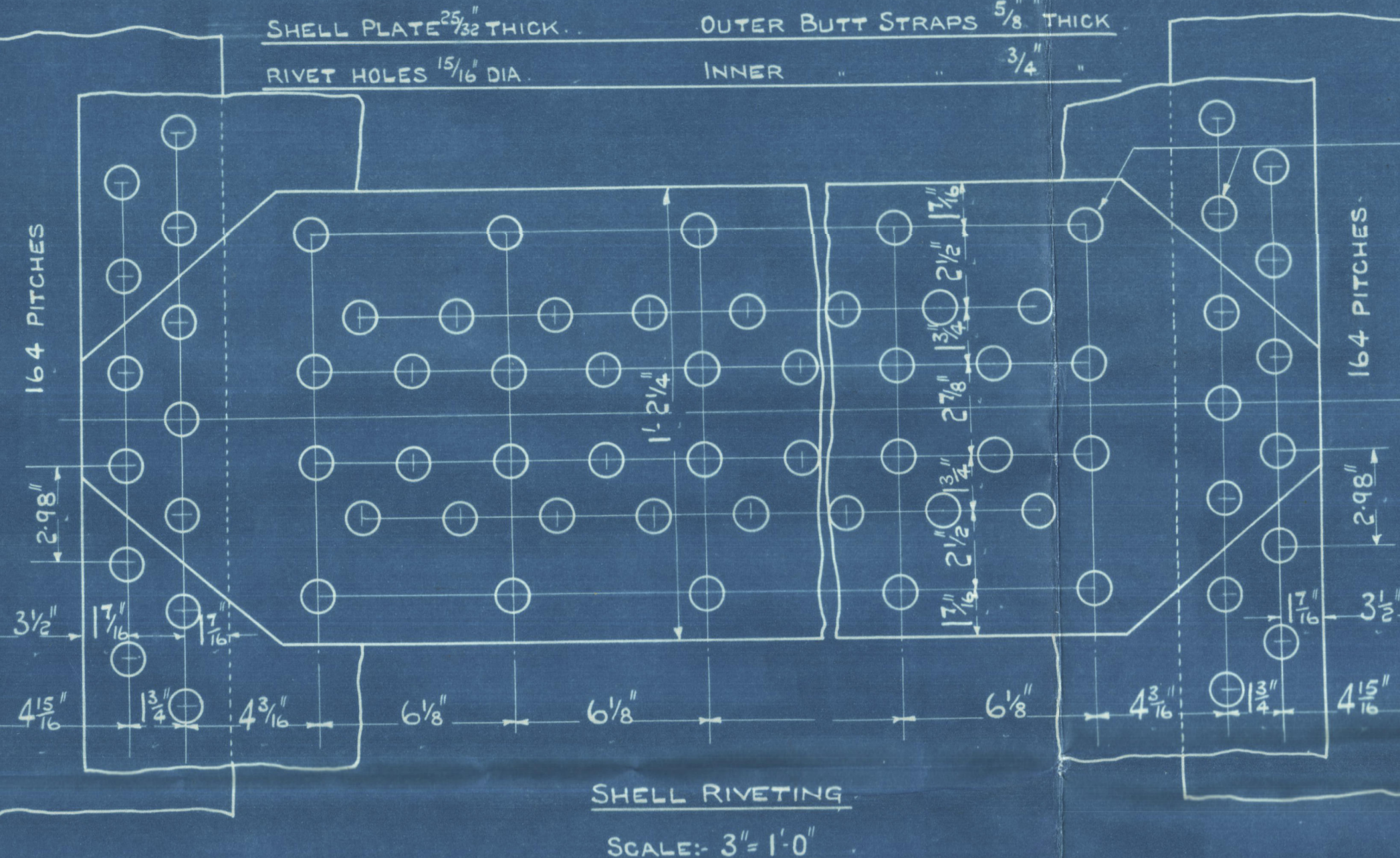
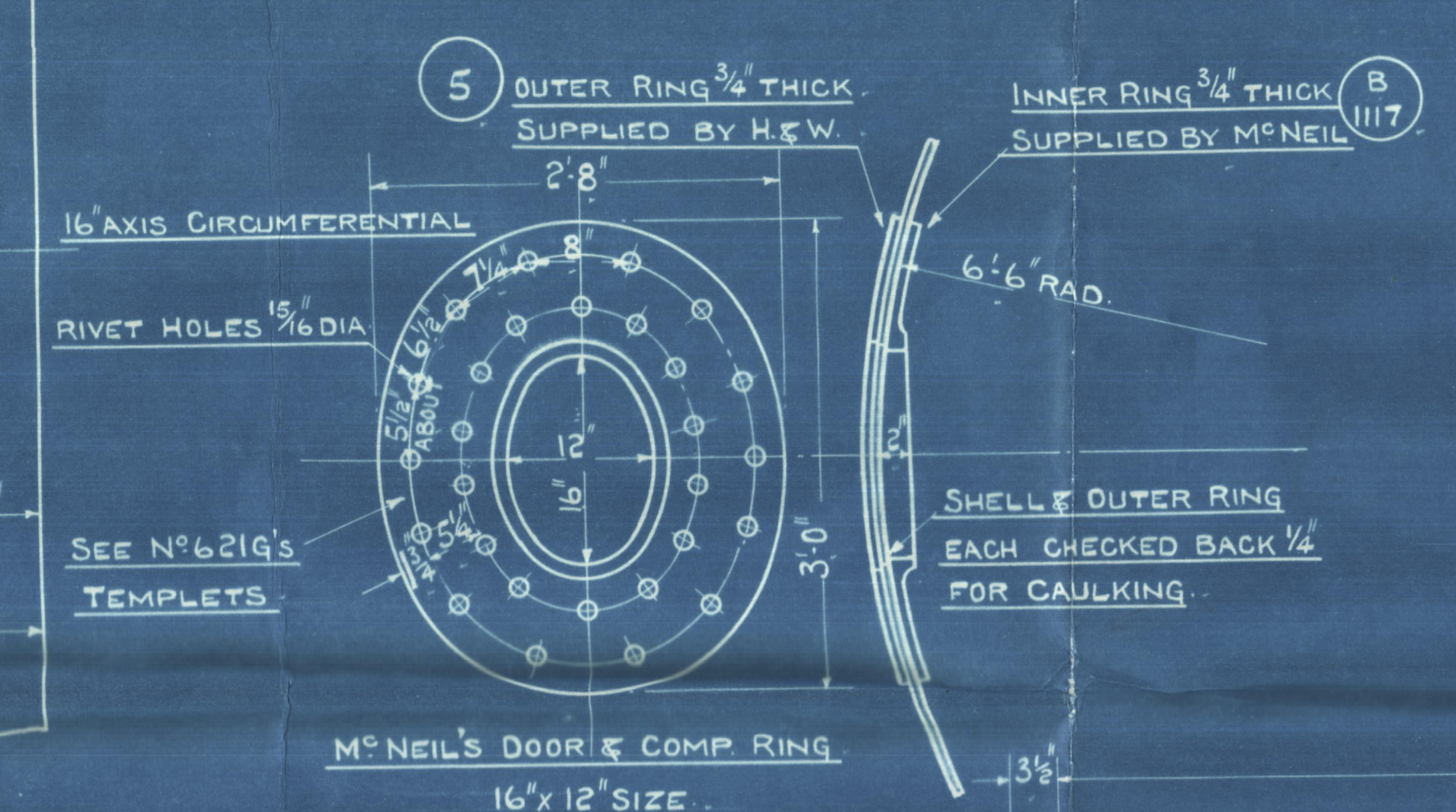
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HEATING SURFACE	1177
TUBES	155
FURNACES	178
COMBUSTION CHAMBERS	30
FRONT TUBE PLATE	1540
TOTAL	1540
GRATE AREA (EQUIVALENT)	44
STEAM CAPACITY	276
AREA THRO TUBES	7.84

SEE N° 685's TEMPLATES



ALL RIVET HOLES MUST BE DRILLED FAIR & AS FAR AS POSSIBLE THEY SHOULD BE DRILLED IN PLACE. AFTER DRILLING THE PLATES, THE BURRS SHOULD BE REMOVED & THE FAYING SURFACES OF THE PLATES CLEANED, AND THE SHARP OUTER EDGES OF THE HOLES CLEANED ALSO. RIVETS IN FURNACES & COMB CHAMBERS TO BE FINISHED AS SHOWN.

WORKING PRESSURE 120 LBS PER. SQ. INCH.  
TEST 230  
SCALE: 1"=1'-0"

LONGITUDINAL SEAMS DOUBLE BUTT STRAPS, RIVETED AS SHOWN	
STRENGTH OF PLATE 84-75% STRENGTH OF RIVET 115%	
CIRCUMFERENTIAL SEAMS DOUBLE RIVETED AS SHOWN	
LAPPED DOUBLE RIVETED 1 1/2" RIVET HOLES, 3 7/8" PITCH	
SINGLE RIVETED 1 1/2" RT. HOLES, 2 1/4" PITCH, DOUBLE RIVETED, 1 1/2" RT. HOLES 3" PITCH	
ALL PLATES & RIVETS STEEL. ALL HOLES DRILLED IN PLACE	
MINIMUM TENSILE STRENGTH OF SHELL PLATES 28 TONS PER SQ. INCH	
32 TONS	
OF GIRDERS & BUTT STRAPS 28 TONS	
32 TONS	
ENDS & CHAMBERS 26 TONS	
30 TONS	
FURNACES 26 TONS	
30 TONS	
SCREW STAYS & RIVET BARS 26 TONS	
30 TONS	
STAY BARS 28 TONS	
32 TONS	

BACK TUBE PLATES TO BE CHAMFERED THUS AROUND TOP HALF OF SEAM SCALE: HALF SIZE

Harland & Wolff Ltd.

ENGS. 878/9

DONKEY BOILERS

APPROVED 24. 6. 29.

"Foylebanks."

Bel 10509

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