

SHELL MANHOLE FLANGED COVER RING
& EMBOSSED DOOR
SCALE 1/2" = ONE FOOT.

SIZE OF SAFETY VALVES. COCKBURN'S IMPROVED HIGH LIFT. 2 @ 2 1/2" DIA.
DIA. OF WASTE STEAM PIPE FROM ONE BOILER = 3 1/4" BORE
" " " " " TWO " " 4 1/2"
" " " " " THREE " " 5 1/2"
" " " " " FOUR " " 6 1/2"

THREE COMBUSTION CHAMBER STAYS
THRO. BUTTSTAYS MARKED THUS X

SHELL 1 1/2" THICK, RIVETS 7/8" DIA., HOLES 1 1/2" DIA.
INSIDE BUTTSTAYS 1 1/2" THICK.
OUTSIDE " 1 1/8"
PLATE SECTION = 85.54%
RIVET " = 86.2%
SCALE 1/2" = ONE FOOT.

HEATING SURFACE	SQ. FT.	
TUBES	1690	1900
FURNACE	166	
COMBUSTION CHAMBERS	262	
TOTAL IN ONE BOILER	2318	2328
" " 4 BOILERS	9272	9312
GRATE AREA WITH 5" G. BAR - ONE BOILER	52.5	
" " " " 4 BOILERS	210.0	
RATIO OF GRATE AREA TO HEATING SURFACE	1.396	

TENSILE STRENGTH OF MATERIAL.	TONS/IN ²
SHELL & BUTTSTAYS	29 TO 33
PLATES FOR FLANGING	26 TO 30
FURNACES	26 TO 30
GIRDES	28 TO 32
LONGITUDINAL STAYS	28 TO 32
SCREWED STAYS.	26 TO 30



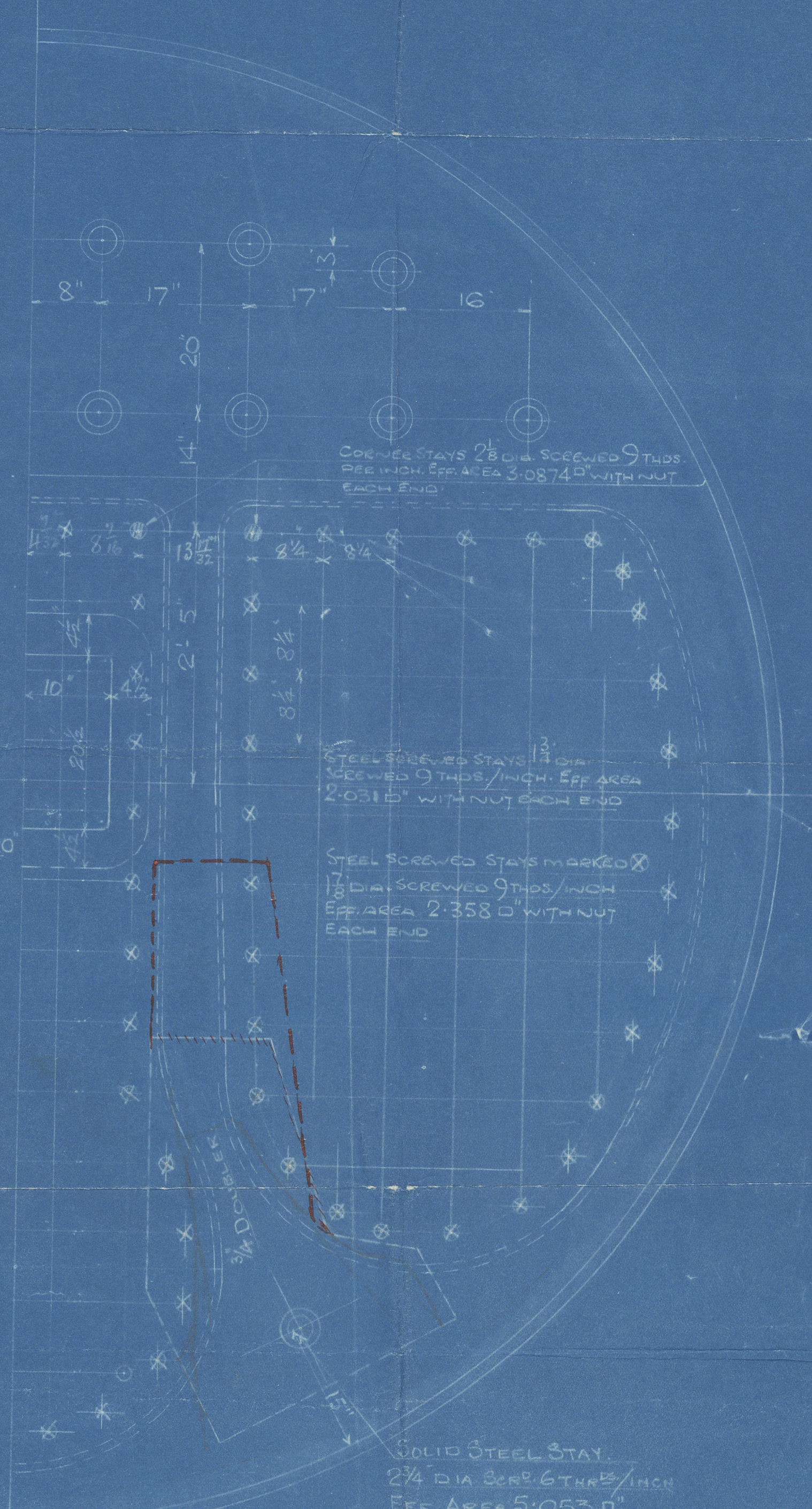
COMB. CHAMBER STAYS
TWO. SHELL TO HAVE
NUT INSIDE C.C. &
TO BE CAULKED ON
SHELL



TOTAL: 352 SOLID DRAWN STEEL TUBES. 22" EXTDIA.
233 2 1/2" PLAIN TUBES NUT W.G. THICK SWELDED 1/8" AT FRONT END.
12 STAY TUBES SS 1/2" THICK SWELDED 3/4" AT FRONT END
55 " TUBES S. 3/8"
52 " " S. 1/2"

ALL STAY TUBES SCREWED 9 THRS/INCH FOR 3" LONG AT FRONT END
AND 2" LONG AT BACK END.

PLAIN TUBES EXPANDED INTO BOTH TUBE PLATES & BEADED OVER
AT BACK END.
STAY TUBES SCREWED INTO BOTH TUBE PLATES & EXPANDED.
STAY TUBES MARKED N HAVE NUT 3/4" DEEP AT FRONT.



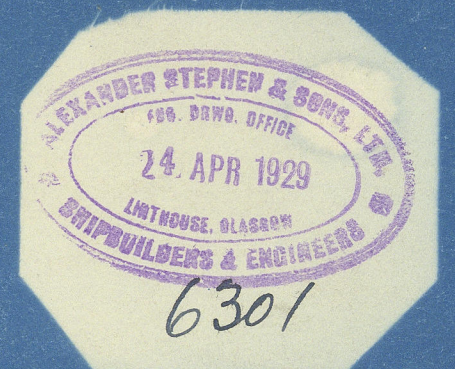
STEEL SCREWED STAYS 1 1/2" DIA.
SCREWED 9 THRS/INCH. EFF. AREA
2.0315" WITH NUTS ON END

STEEL SCREWED STAYS MARKED X
1 1/2" DIA. SCREWED 9 THRS/INCH
EFF. AREA 2.358" WITH NUT
EACH END

SOLID STEEL STAY
2 1/4" DIA. SCRW. 6 THRS/INCH
EFF. AREA 5.053" DIA.

WORKING PRESSURE 230 lbs./D.
TEST PRESSURE 395 lbs./D.
TO PASS BOARD OF TRADE & LLOYD'S SURVEYS

- FOUR OFF -



No 525
- MAIN BOILERS -
SCALE ONE INCH = ONE FOOT.

1929
B. H. M.
2/5/29
Lloyd's Register
Foundation

Glasgow
A. Stephen & Sons Ltd
Boilers No 525.
W.P. 230 H²

St Patrick

GLASGOW REPORT No 50280

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