

Drawn by: William E. Simonton III
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DIMENSIONS OF F386 TAKEN FROM SLIDE VALVE ON CN 1551 WITH "TAPE MEASURE" AND 6" RULE GRADUATED TO 1/32". NO OPPORTUNITY TO CONFIRM WITH CALIPERS. SHOULD BE CONSIDERED GOOD ILLUSTRATION

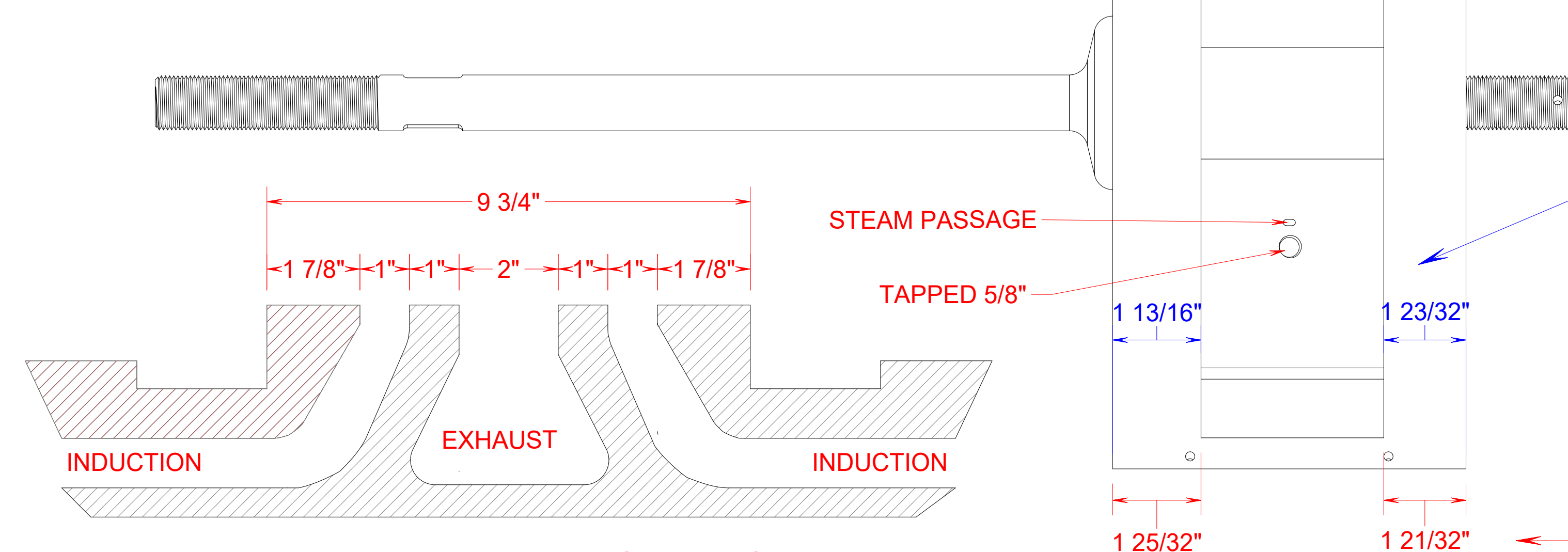
SPECIFICATIONS ON 1904 F8 DWG.

VALVE STEM DIAMETER 1 1/8"
VALVE TRAVEL: 3 1/8"
LAP: 9/16"
LEAD: 1/8"

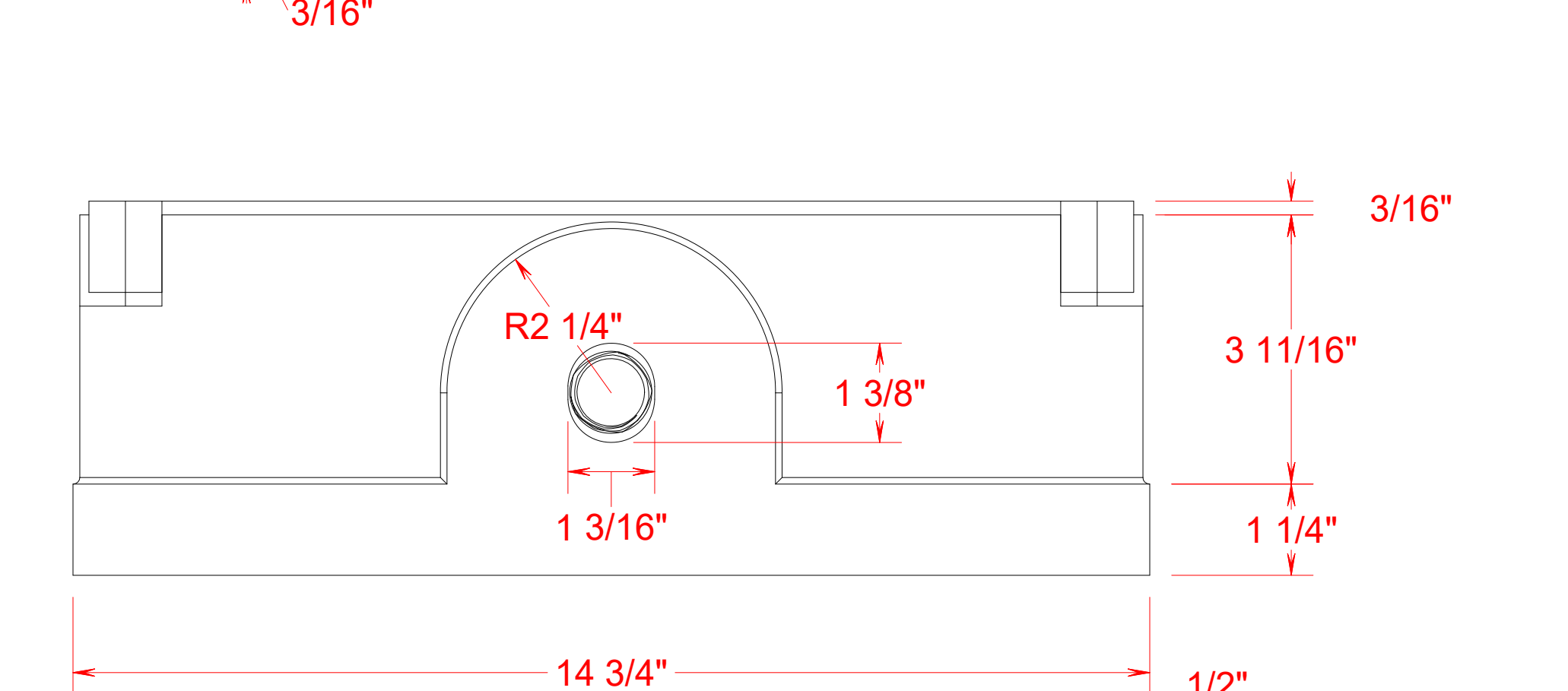
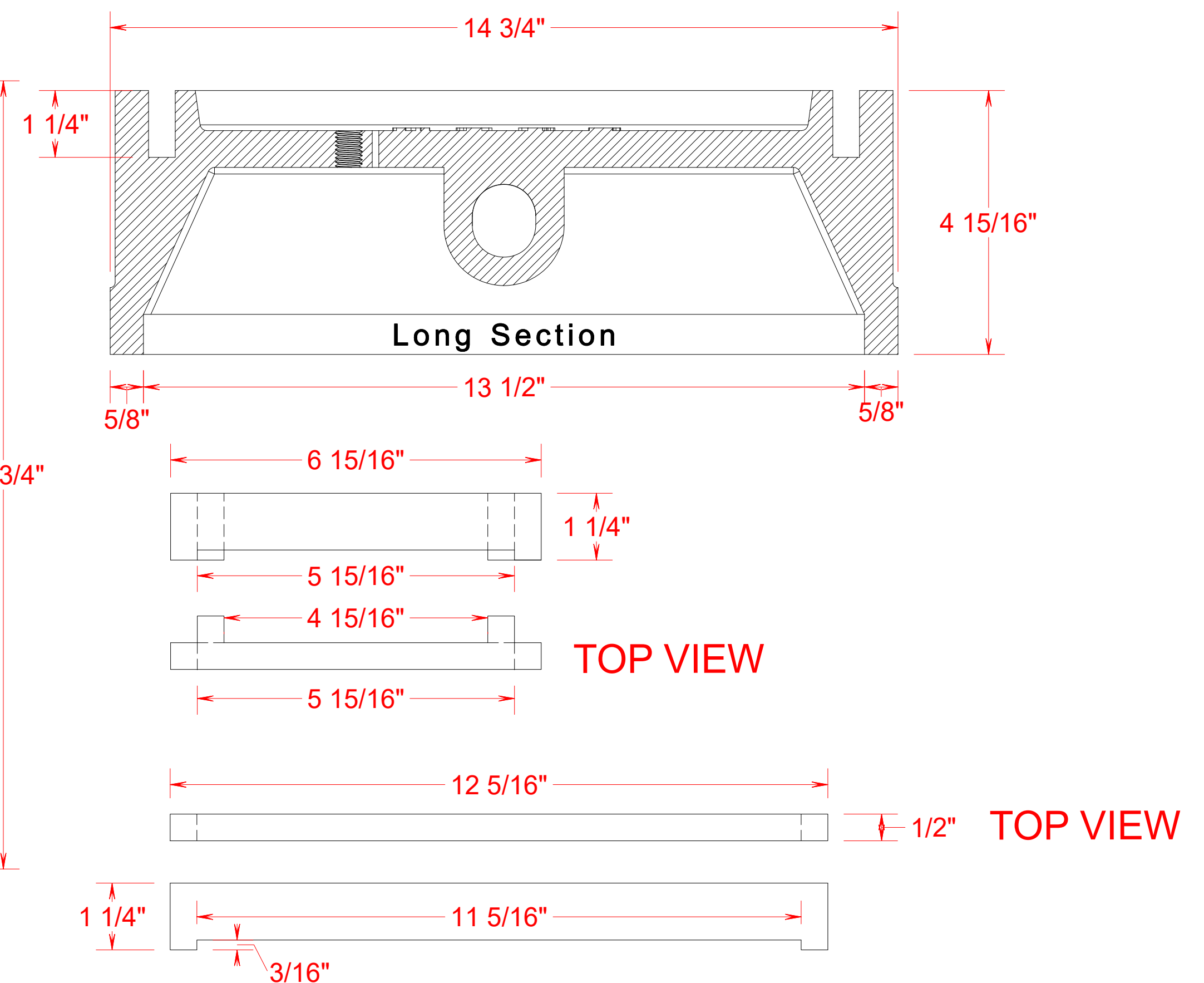
ALL OTHER DIMENSIONS TAKEN FROM VALVE STEM & VALVE

I believe that the D Valve opening was derived from the formula:
Width of Exhaust Opening in Valve Seat (2" in an F8) +
Width of Partition between Exhaust & Induction (1" in an F8) +
Amount of Lap called for (9/16") = 3 9/16" Centered.
The amount of Lead was added (machined from) the leading edge (1/8" for an F8). A total of 3 11/16".

Based on my measurements the Lead was reduced from the original 1/8" specified in 1904 and the build date of CN 1551 in 1919 to 1/16". If my original measurements are correct.

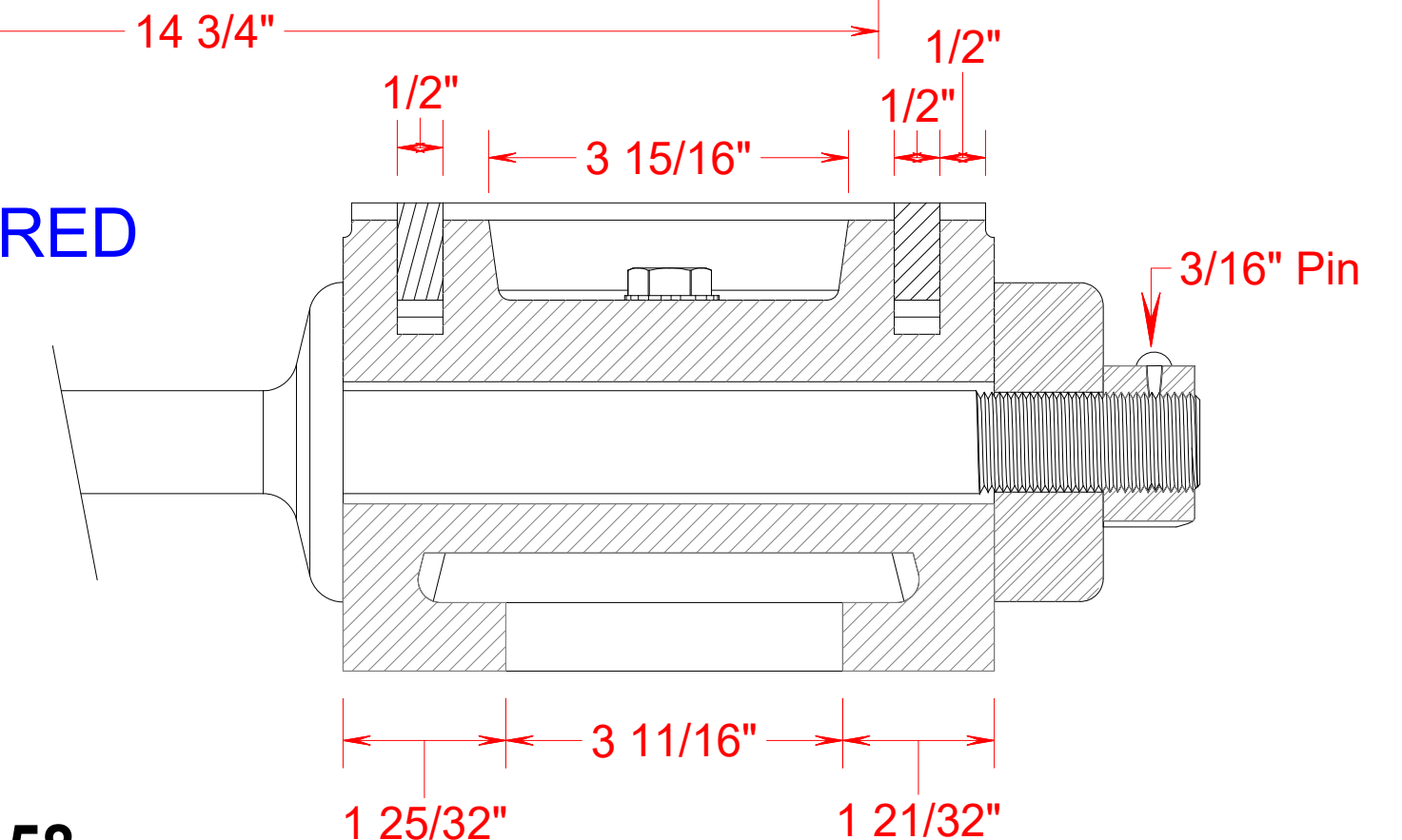


SECTION OF F8 14.5" x 16" CLIMAX VALVE SEAT PER CLIMAX

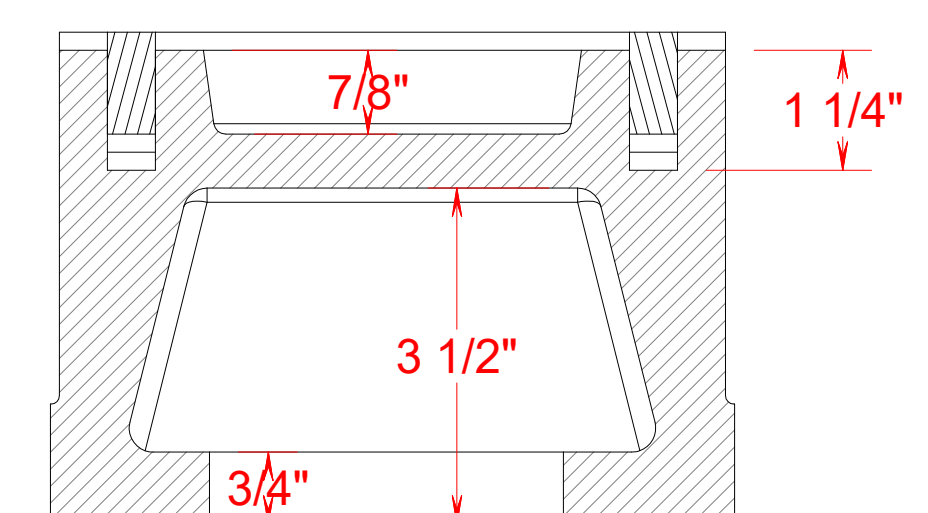


BLUE DIMENSIONS MEASURED

NOTE
CLIMAX DWG. F458
FOR A 15" VALVE
SHOWS SIMILAR
OFFSETS, I.E.
3 19/32" EXHAUST
VALVE OPENING &
1 29/32" & 1 15/16"
ON EITHER SIDE.



Section @ Center



Section @ Off-Center