

* Whitworth form, 12 threads per inch.

The maximum stresses at the allowed working pressure were found by calculation to be as follows:

| | |
|---|--|
| * Stay bolts at root of thread... 6750 ✓ lbs. per sq. in. | Round and rectangular braces... 7670 ✓ lbs. per sq. in. |
| * Stay bolts at reduced section... 7080 ✓ lbs. per sq. in. | Gusset braces... 7570 ✓ lbs. per sq. in. |
| * Crown stays on crown-bar rivets at root of thread or | Shearing stress on rivets... 7890 ✓ lbs. per sq. in. |
| smallest section, top... 5220 ✓ lbs. per sq. in. | Tension on net section of plate in longitudinal direction at |
| Crown stays or crown-bar rivets at root of thread or | lowest efficiency, pounds per sq. in... 12000 ✓ |
| smallest section, bottom... 7770 ✓ lbs. per sq. in. | |

Dimensions and data taken from locomotive were furnished by.....

Data upon which above calculations were made was obtained from drawing No... 15546 and 377.....

dated..... furnished by The Baldwin Locomotive Works.

Thomas H. Walker
Mechanical Engineer

STATE OF PENNSYLVANIA }
COUNTY OF PHILADELPHIA, } SS.:

.... Thomas H. Walker..... being duly sworn says that he is the officer who
signed the foregoing specification, that he has satisfied himself of the correctness of the drawings and data used,
verified all of the calculations, and has examined the record of present condition of boiler dated.....
... January 30th, 1925..... and sworn to by inspectors H. P. Spain and W. H. Wright,
and believes that the design, construction, and condition of boiler No.... 58194 ✓.... renders it safe for a working
pressure of 200 ✓..... pounds per square inch.

Thomas H. Walker
(Name of Affiant)

Suscribed and sworn to before me

this day of *February 6th* 1925

Elton M. Geffer
Notary Public

Approved:

By Commission Expires Feb 23, 1929