(No Model.)

J. A. MAXWELL & J. P. SILLIMAN.

Boiler Setting.

No. 234,136. Patented Nov. 9, 1880.

Fig. 1.

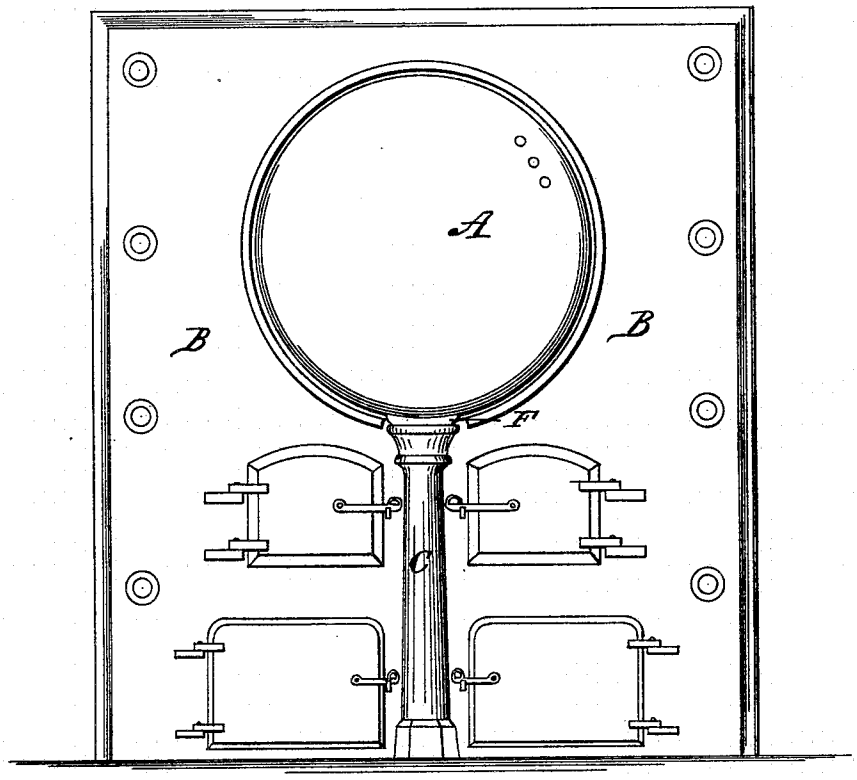


Fig. 2.

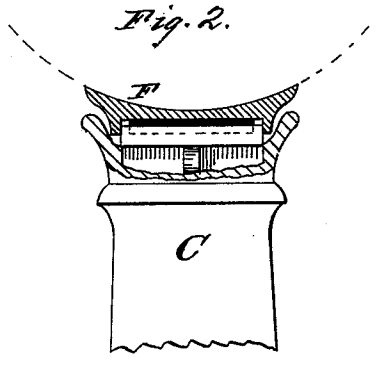
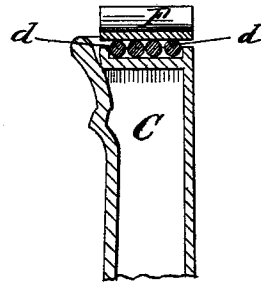


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES A. MAXWELL AND JAMES P. SILLIMAN, OF ALLEGHENY, PA.

BOILER-SETTING.

SPECIFICATION forming part of Letters Patent No. 234,136, dated November 9, 1880.

Application filed August 30, 1880. (No model.)

To all whom it may concern:

Be it known that we, JAMES A. MAXWELL and JAMES P. SILLIMAN, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Boiler-Settings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a front elevation of the boiler-front and column. Figs. 2 and 3 are detail views of the upper part of column, showing the rollers.

This invention relates to the setting of steam-boilers; and it consists in passing the head of the boiler through the fire-front and resting it upon a saddle mounted upon a pillar provided with anti-friction rollers, as hereinafter fully described and claimed.

Boilers as at present set are a fixture, being attached to the front and to the masonry in such manner that there is no freedom to expand and contract under the variations of temperature. The consequence is, that the boiler pushes and drags on the fire-front, warping and straining it or breaking it; the boiler-sheets become warped, and leaks are apt to show at the seams; the anchor-bolts holding the front to the masonry are wrenched, and the masonry becomes loose and unsafe. To avoid these contingencies is the object of our invention, which, more particularly, is as follows:

A designates the boiler, and B the furnace-front, which latter is usually of cast-iron. The opening in front B is made greater in diameter than the boiler A, so that the latter can play freely back and forth.

In Fig. 1 a pillar or ornamental column, C, stands vertically under the boiler-head in front of or behind the furnace-front B, to which it may be bolted, if desired. The top of pillar or column C is cored out, as shown in Figs. 2 and 3, and contains several rollers, *d*, set transversely to the length of the boiler. On the rollers *d* rests a saddle, F, having its top curved to fit the boiler and its bottom flanged to guide itself upon the column C. The saddle occupies such a position that when resting upon it the boiler is not in contact with the front B at any point. Set in this manner the variations of length in the boiler under the different conditions of temperature will not have any straining effect whatever upon the front B of the furnace, or through it upon the anchor-bolts in the masonry, because, resting upon the saddle, the boiler will expand and contract with perfect freedom, and hence no warping of its sheets and consequent leakage will occur.

Instead of the cored-top column a hollow column may be used, and a skeleton filling may be bolted to this, having the cored recess at its upper end.

We do not broadly claim the setting of boilers on movable supports, as that has been done with combined boiler and engine, where the boiler rested at one end upon the cylinders; but our invention is designed for application to that class of boilers which require setting on a masonry furnace, and to such it is especially adapted.

We therefore claim—

1. The combination of the front B, having boiler-aperture larger than the boiler, boiler A, cored column C, provided with rollers *d*, and saddle F, arranged substantially as described.

2. The boiler-support consisting of the recessed or cored column C, rollers *d*, and saddle F, adapted to support a boiler, substantially in the manner and for the purposes set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JAMES A. MAXWELL.
JAMES P. SILLIMAN.

Witnesses:
T. J. PATTERSON,
JOHN E. DUFFY.