

J. S. PLATT.
Heating Stove.

No. 93,742.

Patented Aug. 17, 1869.

Fig. 1.

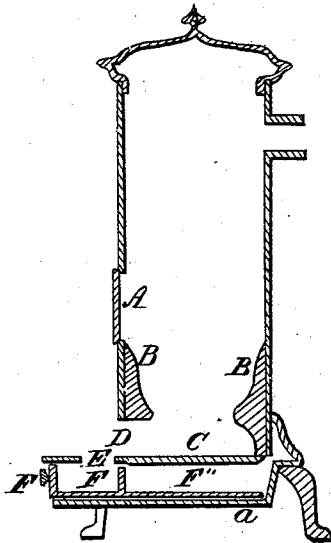


Fig. 2.

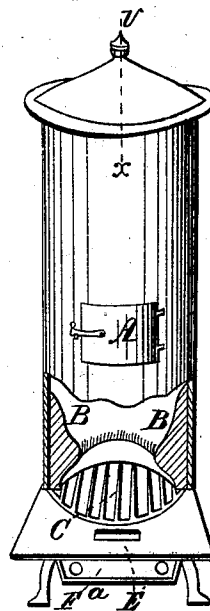


Fig. 3.

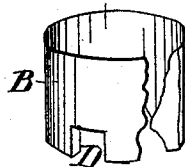
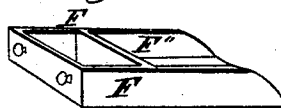


Fig. 4.



Witnesses
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JACOB S. PLATT, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 93,742, dated August 17, 1869.

IMPROVEMENT IN COAL-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, JACOB S. PLATT, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Stoves, Heaters, Ranges, and Furnaces; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical cross-section of my improvement applied to a stove, through the line *x y* of fig. 2.

Figure 2 is a perspective view of my improvement, showing the fire-clay cylinder in section.

Figure 3, a perspective view of the fire-clay cylinder.

Figure 4, a perspective view of the ash-deposit draw.

In the drawings—

A, fig. 1, is the door for inserting the coal into the fire-chamber.

B is the fire-clay cylinder, which not only answers the usual purpose of a fire-clay cylinder, but also, by its bulge or projection, serves to partially support the live coals, thus preventing the rapid burning out of the grate C, which, instead of wholly supporting the burning coal, as heretofore, as well as sifting the ashes, merely separates the ashes from the coal, and has very little weight upon it.

D is the clearing-door, cut through the fire-clay cylinder and side of the stove, through which the cinders are dragged by a poker, and fall, through opening E, into section F¹, of the receiving-draw F, while the ashes fall, through the grate C, into section F², of the receiving-draw, from which section F² the ashes may be emptied, while the unburnt ashes in F¹ may be returned to the fire, through door A.

In order that the cinders may be easily scraped from the grate C, through the door D, it is necessary that the bottom of said door D should be on a line, or nearly so, with the top of grate C. (The bulge of the fire-clay cylinder B, relieving the grate and the burning fuel below said bulge of any heavy pressure, admits of the more easy removal of the cinders through door D.) Or, if preferred, the cinders may be scraped on to a shovel, through door D, and returned at once to

the fire, through door A, instead of falling through aperture E, while the ashes fall into F².

By this means, the fire is kept clear and free from ashes, without the labor of shaking, as in other stoves; and, by this improvement, all the cinders are burned into fine ashes, and no fuel wasted.

If, while the draw F is removed, for emptying it, any ashes should drop into box G, which receives the draw, the said ashes are immediately taken up by the shovel-shaped construction of the draw, fig. 4, when the draw is returned to its place.

Instead of the bulge or projection in the fire-clay cylinder B, a throttled or contracted passage may be secured in various other ways, such as securing a single ring, of iron or other suitable material, to the inside of the cylinder B; or a ring or table, of iron or other suitable material, with legs resting on the edge of the grate; or a cylinder or collar, with its bottom resting on the grate. Any of these devices, or their equivalents, for forming a throttled or contracted passage, for the fuel to arch itself, or be supported upon, may be used; and, by said bulge or contraction, the draught is greatly increased.

Having thus described my improvement,

What I claim as new, and desire to secure by Letters Patent, is—

1. The fire-clay cylinder B, having a bulge or projection, for partially supporting the burning fuel, substantially as and for the purposes described.

2. The clearing-door D, above the fire-grate, having its bottom on a line, or nearly on a line, with the top of said grate, substantially as described.

3. The receiving-draw F, with two sections, for receiving the cinders and ashes, respectively, substantially as described.

4. The combination of a stove or furnace-cylinder, a throttled or contracted passage, a grate below said throttled passage, and an opening on a level or above the grate.

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Witnesses:

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W. A. A. MCKINLEY.