

S. E. PARSONS.

Coal Stove.

No. 44,816.

Patented Oct. 25, 1864.

Fig: 1.

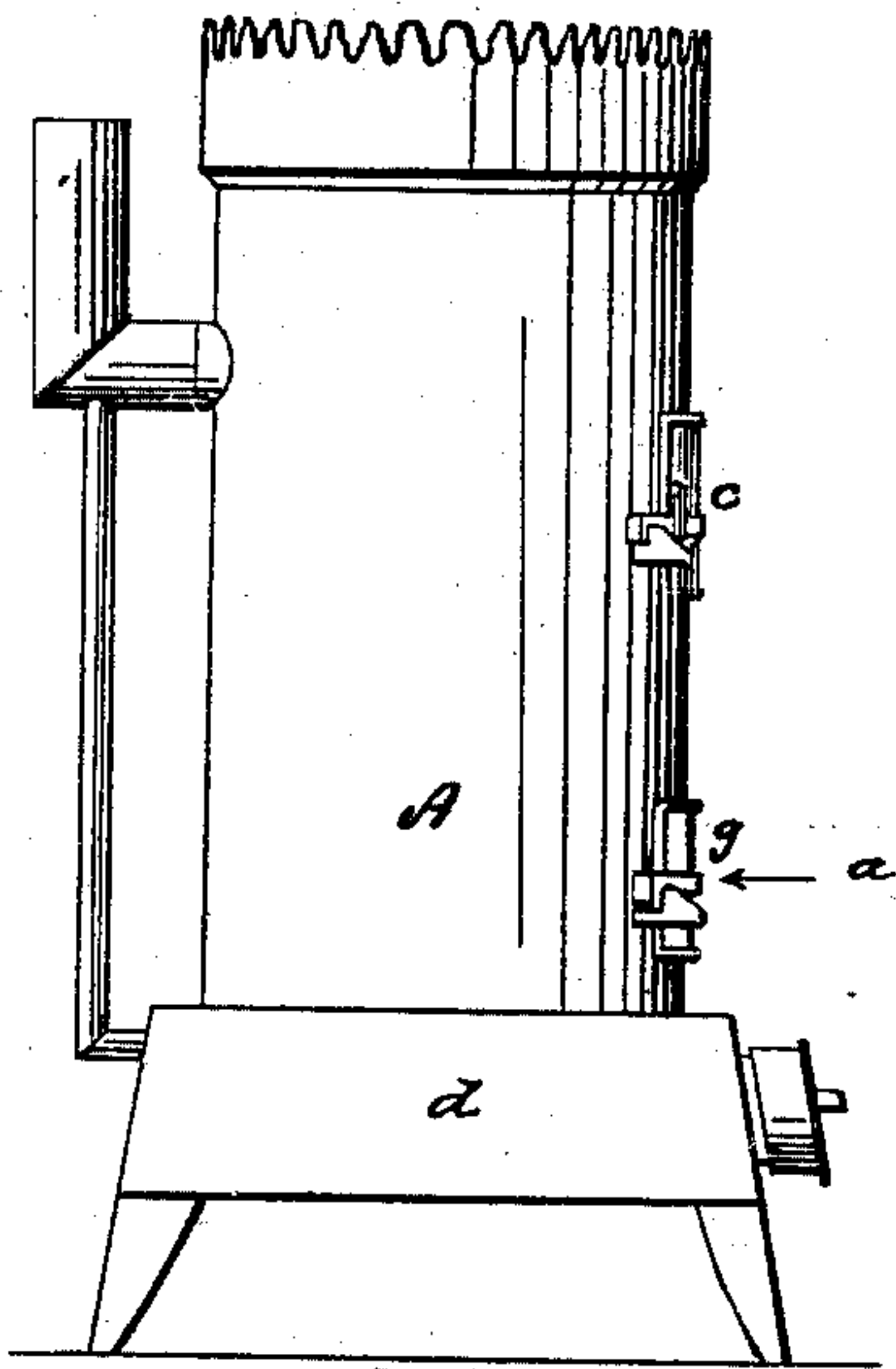


Fig: 2.

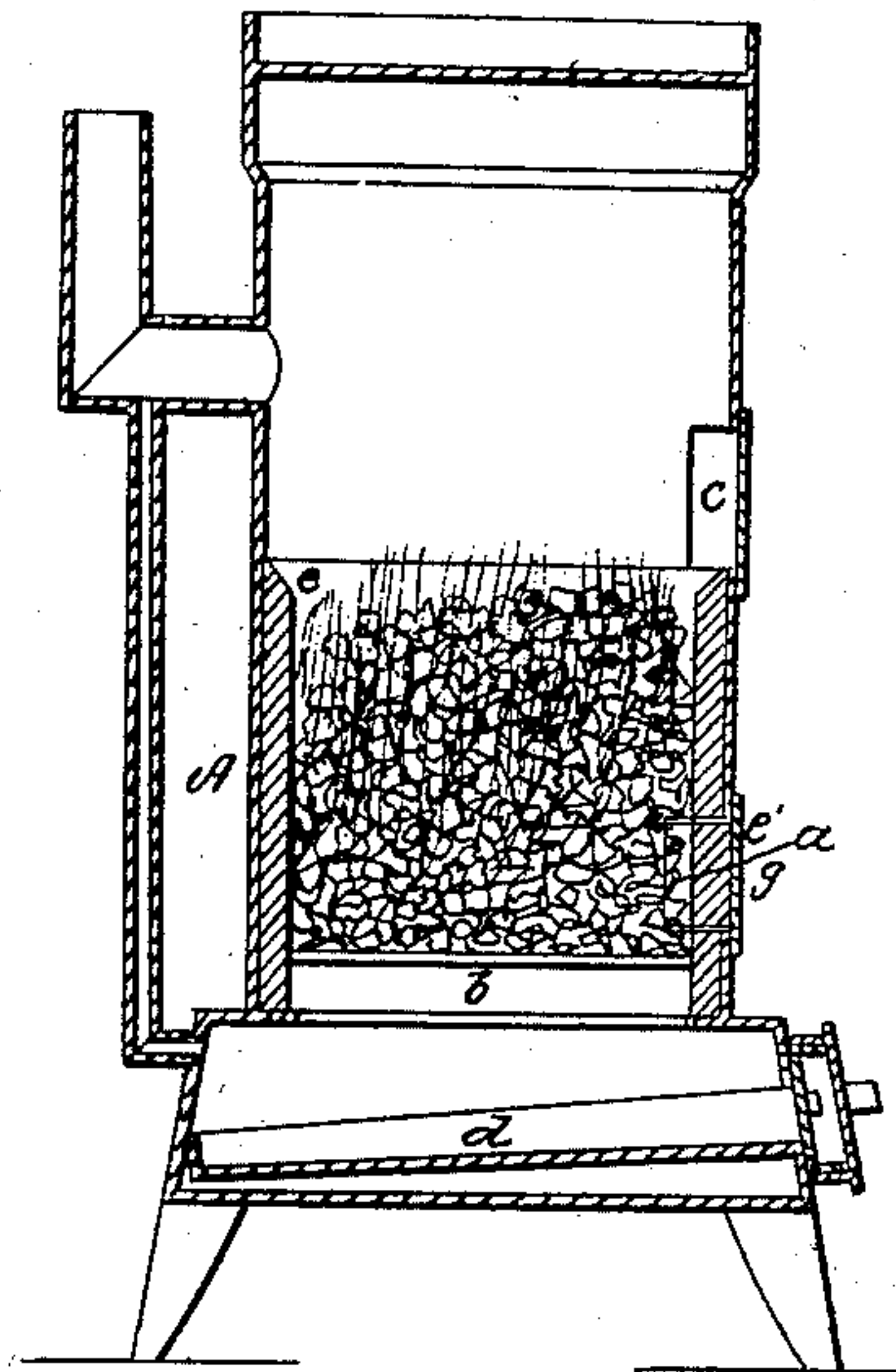


Fig: 3.

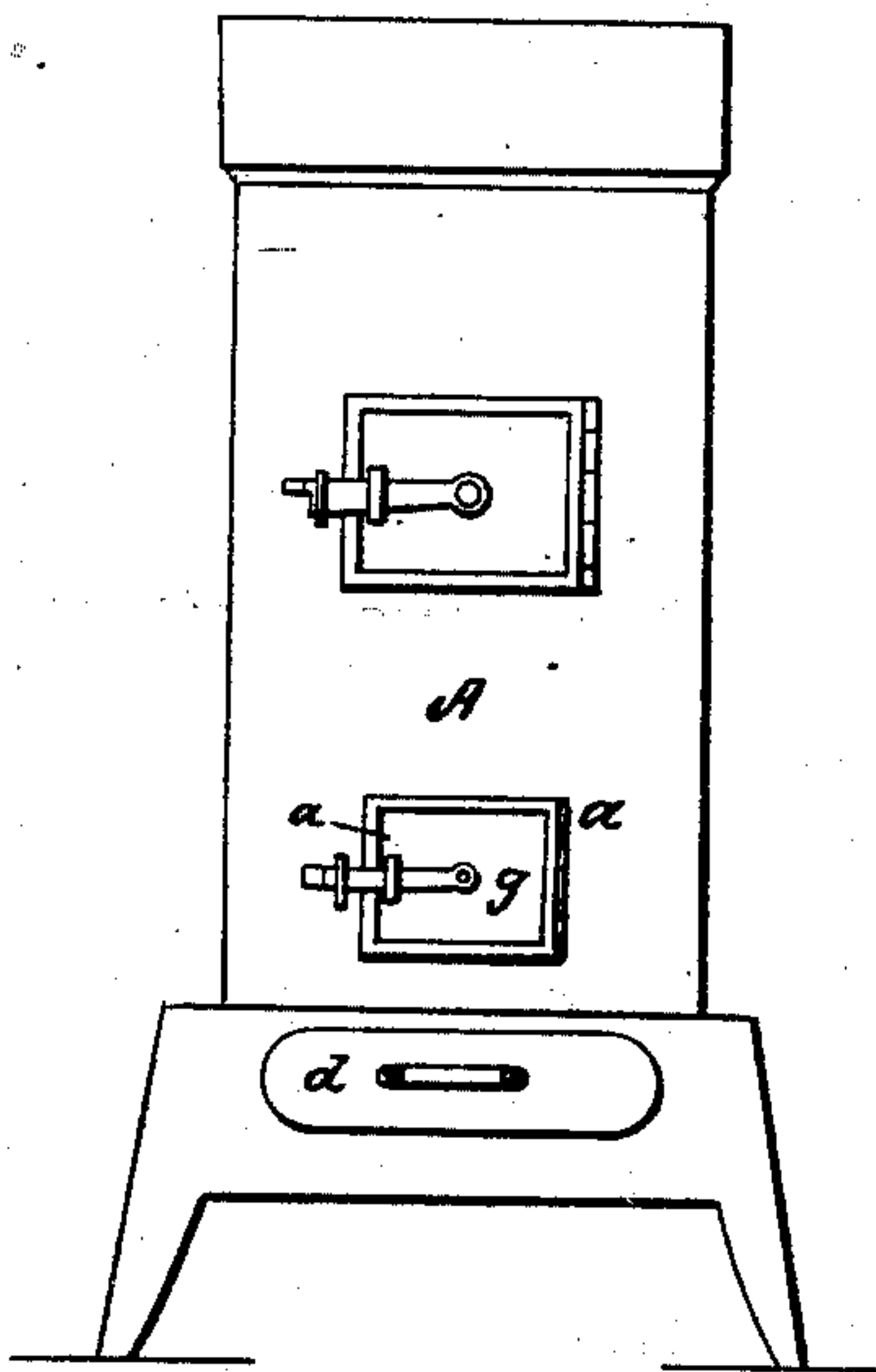


Fig: 4.

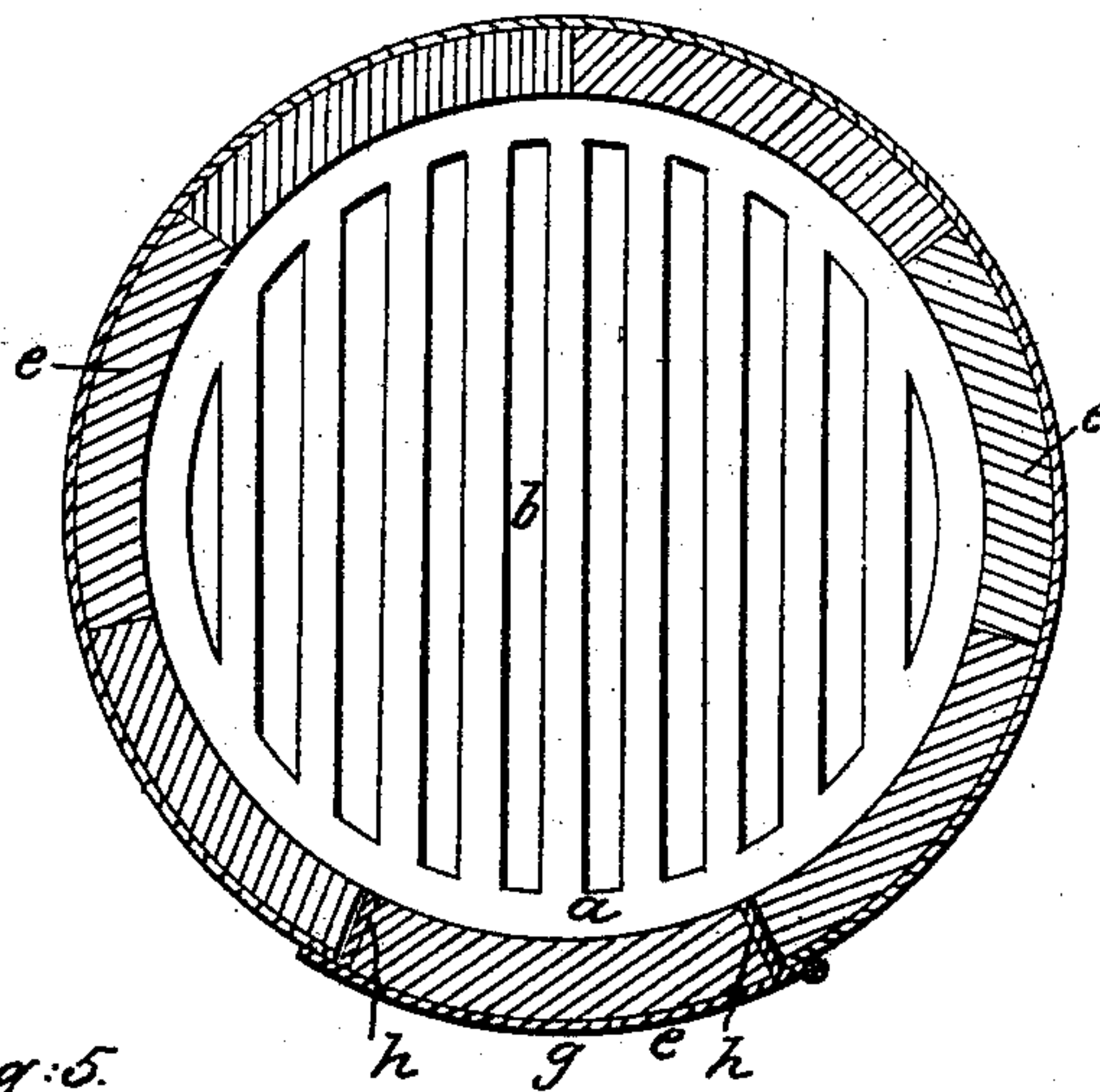
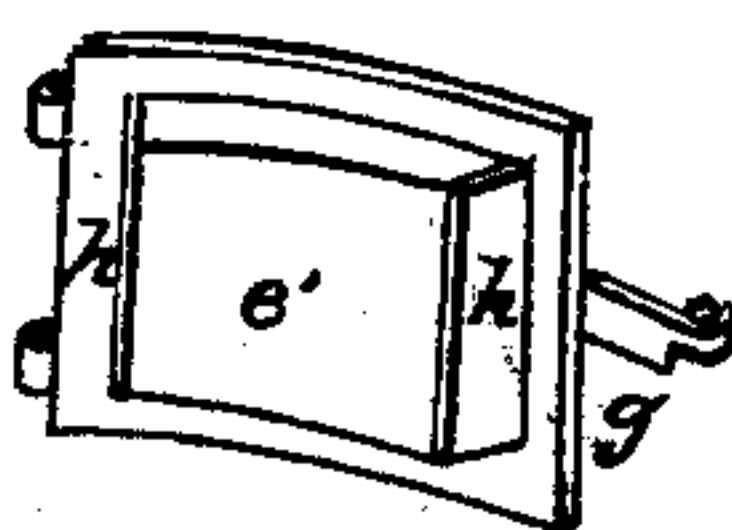


Fig: 5.



Witnesses:  
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SANFORD E. PARSONS, OF WILKES-BARRÉ, PENNSYLVANIA.

## IMPROVED COAL-STOVE.

Specification forming part of Letters Patent No. 44,816, dated October 25, 1864.

*To all whom it may concern:*

Be it known that I, SANFORD E. PARSONS, of Wilkes-Barré, county of Luzerne, State of Pennsylvania, have invented a new and useful Improvement in Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of a stove having my invention applied to it. Fig. 2 is a vertical diametrical section through Fig. 1. Fig. 3 is a front elevation of Fig. 1. Fig. 4 is an enlarged horizontal section through the stove, taken at a point near the grate. Fig. 5 is a perspective view of the lower door of the stove.

Similar letters of reference indicate corresponding parts in the several figures.

The object of my invention is to render practical the use of one or more doors applied to the fire pot or body of a stove for admitting of the ready removal therefrom of cinders, &c., without rendering it necessary to upset the grate or to use the fuel-supply passage for this purpose.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the cylinder of a common sheet-iron cylindrical stove, which is lined with fire-brick inside and furnished with a grate, *b*, and an ash-pan, *d*, which latter slides into an ash-box that constitutes the base of the stove. The fuel is supplied to the stove through an opening which is closed by a door, *c*, and the cinders are removed from the stove through an opening which is closed by a door, *g*, as shown in Figs. 2, 3, and 4 of the drawings. The cinder-door *g* is arranged either on a level with the grate *b* or slightly above this grate, so that after the ashes are removed by shaking them through the grate *b* into the ash-pan *d*, the cinders which remain on the grate can be readily raked out through the cinder-passage, either by the hands or by an instrument adapted to the purpose.

In order to prevent the cinder-door *g* from rapidly burning out, and to render it as durable as that portion of the stove above it, I line the inside of this door with fire-brick, which is indicated by letter *e'*, and attach this

brick to the door, so that it will open and close with it by means of flanges *h* or in any other suitable manner. This brick *e'* being of an equal thickness to the stationary brick lining *e*, and of an exact size to fit and close the opening which is made through the lining *e*, it constitutes a part of this lining and leaves, when the door *g* is closed, a level or smooth surface inside of the stove, and thus prevents the accumulation of clinkers, and renders the whole affair neat and compact. When the lining of the stove requires to be removed, that portion of it which is secured to the door *g* can be readily removed and a new lining or brick introduced in its stead.

In some instances I propose to construct the entire fire-pot of hinged doors lined with fire-brick, so that these doors will not only form the wall of the fire-pot, but also constitute cinder-passages for the removal of cinders from the stove, below the fuel-supply opening and above or in a line with the grate. This arrangement can be made for a sheet-metal stove, or a stove which is made of cast metal and lined with fire-brick.

I have found it absolutely necessary to line the cinder-door with fire-brick, inasmuch as this door is located at the hottest point of the stove and subjected to the intense heat of the coals impinging upon it, and unless it be protected by a lining as I have above described it will soon burn out and require frequent renewing.

By my invention the use of a secondary door for admitting of the removal of cinders from the stove at the point above described is rendered practical and valuable, and all danger from the burning out of such a door is avoided.

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

1. Providing the passage for the removal of cinders from the stove with a door which constitutes a part of the fire-wall *e*, and also a part of the outer wall of the fire-pot, substantially as described.

2. Hinging one of the fire-bricks of the lining *e* to the wall of the stove, substantially as described.

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Witnesses:

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