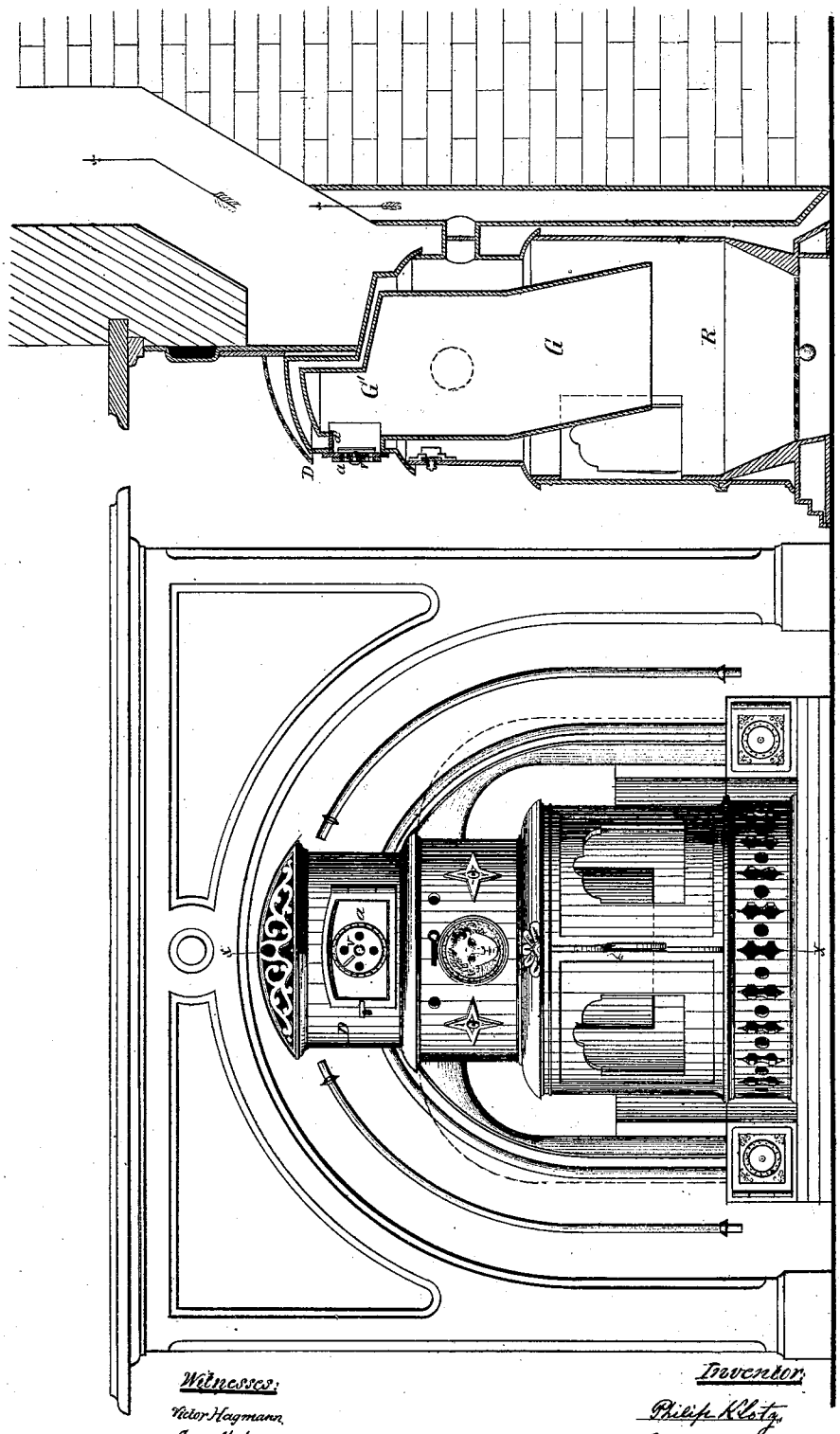
P. KLOTZ.

Fire Place Stove.

No. 111,753. Patented Feb. 14, 1871.



Witnesses:
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United States Patent Office.

PHILIP KLOTZ, OF BALTIMORE, MARYLAND, ASSIGNOR TO BENTLEY C. BIBB, OF SAME PLACE.

Letters Patent No. 111,753, dated February 14, 1871.

IMPROVEMENT IN BASE-BURNING FIRE-PLACE HEATERS.

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, PHILIP KLOTZ, of Baltimore, in the county of Baltimore, and State of Maryland, have invented certain Improvements in Fire-Place Stoves; and I declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, in which—

Figure 1 is a front elevation, and

Figure 2, a vertical section on line *x x* of fig. 1.

Similar letters of reference indicate like parts.

In the drawing—

D represents the top section of the stove, provided with a door, *a*, which has a flange or cut-off, *a'*, applied upon its inner side, and operating, in combination with the space between the wall of the section and the wall of the magazine extension G', in such a manner that when said door is shut the interior of the magazine will not be influenced by the draught of the stove, but when the said door is open the draught of the stove will prevent the escape of the gas from the magazine into the room, substantially as described in my former patent.

I now apply to the door *a* an air-register, *v*, of any approved construction and design, whereby a draught of air can be admitted through the closed door into the extension G', and thence down through the magazine G to the fire-pot R, to support combustion.

It is obvious that when this draught is open the upward draught from the base of the stove may be shut off, partially or entirely, and by a proper adjustment of the two draughts the intensity of combustion in the fire-chamber may be held under the most complete control.

By the downward draught through the magazine the walls of the latter, together with the unconsumed coal within it, are prevented from becoming properly heated, and combustion is limited to the space immediately around the lower end of the magazine.

With the downward draught properly adjusted, a single magazine full of coal in a fire-place stove has been known to burn continuously for two or three days, and when burning with ordinary intensity the fire will heat the coal in the upper part of the magazine so slightly that it may be removed by hand without inconvenience.

It is evident that by thus confining the heat to its appropriate chamber the upper works of the stove are prevented from premature destruction, and the fuel is economized to the utmost possible extent.

This invention, although designed particularly for fire-place stoves, may be applied to other stoves the construction of which is such as to make its application desirable.

Having thus described my invention,

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

1. In connection with a base-burning magazine, G G', the sides and top of which are air-tight when the feed-door is closed, an air-register, *v*, arranged to open directly into the magazine above the coal contained therein, substantially as and for the purposes specified.

2. The combination of the air-register *v* with the door *a* having the flange *a'*, the magazine G G', and the space around the upper end of the extension G', substantially as described, and for the purposes set forth.

PHILIP KLOTZ.

Witnesses:

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