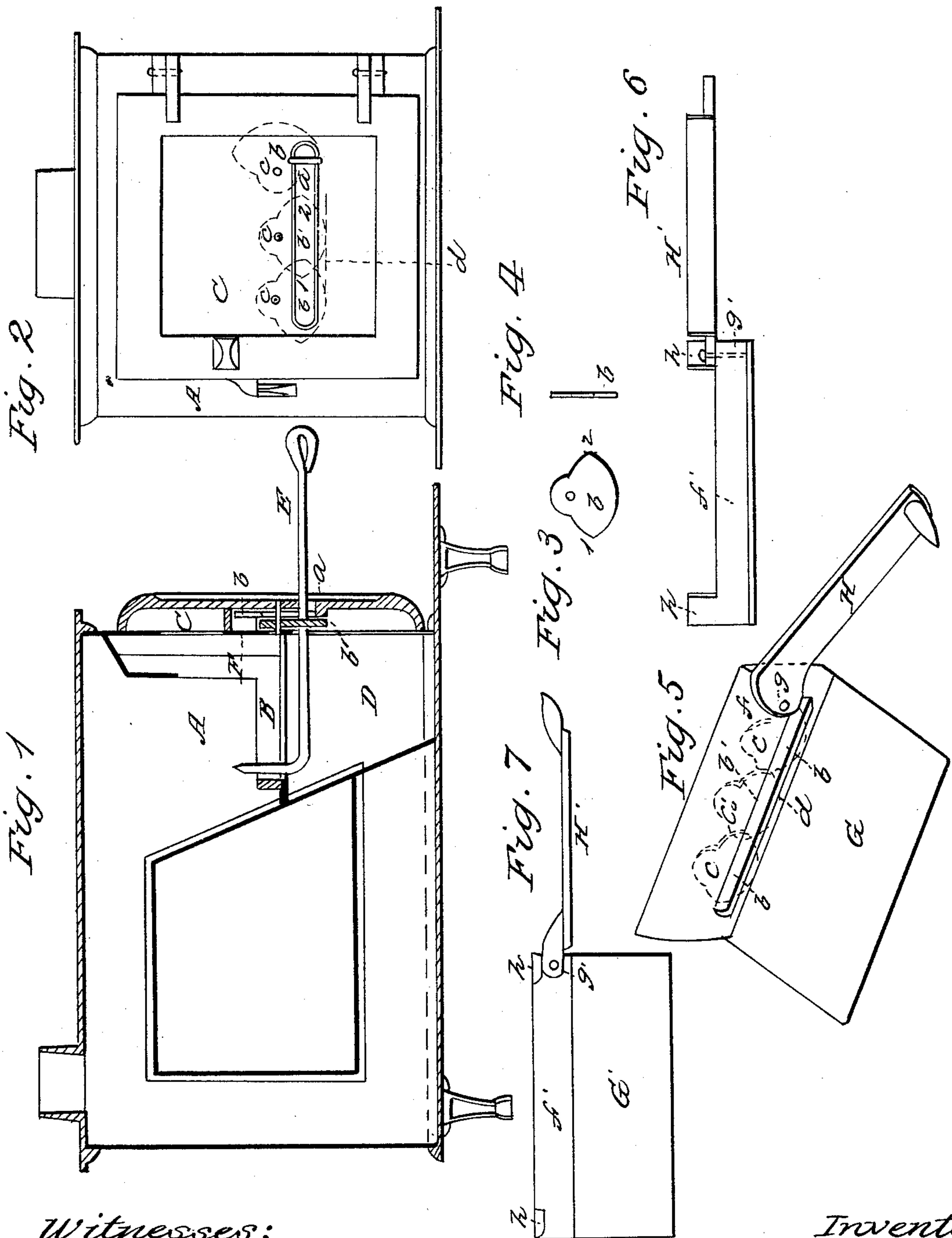


J. MARTINO.
Dust Arrester for Stoves.

No. 62,763.

Patented March 12, 1867.



Witnesses:
J. H. Hageman
J. H. Caffa

Inventor:
John Martino
By his Attorney
Stephen V. Ustick

United States Patent Office.

JOHN MARTINO, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 62,763, dated March 12, 1867.

DUST ARRESTER IN RAKING OF STOVES, FURNACES, &c.

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, JOHN MARTINO, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful improvement in Dust-Arresters in the Raking of Stoves, Ranges, and Heaters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention and improvement consists, in the first place, of a horizontal slot in the door or front of the stove, heater, or range, beneath the horizontal plane of the bottom of the grate, and in length equal to the width of the same, or nearly so, for the insertion and passage of the poker or raker, the said slot being covered on the outside by means of a door or damper when it has no inside covering; and, in the second place, of a series of pendent valves, which cover the slot, and are successively turned partly around by the rod of the poker in its passage from one end of the slot to the other, the valves gaining their perpendicular position as the poker passes from beneath their bottom edges. Various plans have been devised for preventing the escape of dust from the grate while being raked, consisting of a flue or flues for creating a draught. But this mode is very objectionable, as the flues soon become filled with dust. The extra draught also tends to dampen the fire by a rush of cold air. These evils, it will be seen, are got rid of by my arrangement.

My improvement will be understood by those skilled in the art to which it appertains by the following description. In the accompanying drawings, which make a part of this specification—

Figure 1 is a vertical section of a cook stove, with my improvement.

Figure 2 is a front elevation of the same.

Figure 3 is a face view of one of the valves, *b*.

Figure 4 is an edge view of do.

Figure 5 is an isometrical view of a hearth-plate, *G*, with the improvement combined with its vertical projection *f*.

Figure 6 is a front elevation of a modified construction of the hearth-plate *G*.

Figure 7 is a plan of do.

Like letters in all the figures indicate the same parts.

A is the body of the stove; *B* is the grate; *C* is the door in front of the latter, which covers it and the ash-pit *D*. I construct a horizontal slot, *a*, in the door or other vertical plate of a stove, range, or heater, for inserting a poker or raker, *E*, the upper edge of the said slot being in the horizontal plane, or nearly so, of the bottom of the grate. I cover the slot *a* to prevent the escape of dust into the room while the fire is being raked, by means of a series of valves, *b*, in the chamber *F* on the inside of the door, the valves being hung on the pins *c*, and turning freely partially around as the rod of the poker bears against their first vertical edge, as seen in fig. 2, to allow of the passage of the poker from one end of the said slot *a* to the other in the raking of the fire. When the poker has passed from beneath the concentric curve, from 1 to 2 of the valves successively, they assume their normal vertical position, as represented in fig. 2. One of the valves is represented detached from the door in figs. 3 and 4. In consequence of the curved form of the valves, even if placed with their edges touching each other, there will necessarily be spaces, *d*, between them. These spaces I cover by a row of valves, *b'*, in another vertical plane from that of valves *b*, so that, in turning, the contiguous faces of the two rows of valves will just pass each other without binding. The pins *c'*, on which valves *b'* hang, are equidistant between the pins *c* of the valves *b*. There are raised pieces or lugs, *e*, curved at their ends, at the bottom of the slot *a*, which the concentric edges of the valves *b* pass freely. The contiguous faces of the valves *b'* slightly bear against these lugs, so as to prevent their rubbing against the valves *b*. It will be readily seen that many modifications may be given to the construction and arrangement of the parts embraced in my improvement by a skillful mechanic without departing from the characteristic features of the invention. One of these is represented in fig. 5, the slot *a* being in the projection *f* of the hearth-plate *G*. The upper edge of said projection is intended to come under a door or covering in front of the grate. In this figure a door, *H*, is represented for covering the slot *a*, said door turning on the pin *g*. In figs. 6 and 7 the depression *a'* in the elevation or projection *f'* is the proper depth of the slot, which is completed when the hearth-plate is placed in position, the upper edge of the lugs *h h* coming beneath the lower edge of the grate door or front, to which the series of valves

b and *b'* may be hung. *H'* is the door for covering the slot, the former turning on the pin *g'*. The depression *a'* may be made in the lower edge of the door. Instead of placing the valves on the inside of the slot *a* of the door, or other part in front of the ash-pit, they may at option be placed on the outside of the same when desired.

Having thus described my improved dust arrester in the raking of stoves, ranges, and heaters, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination of the horizontal slot *a* and door *H*, or its equivalent, with the fire-door, or other vertical plate of a stove, range, or heater, substantially in the manner described and for the purpose specified.

2. The combination and arrangement of the pendent valves *b* and *b'* with the slot *a*, substantially upon the principle and in the manner above described, and for the purpose set forth.

In testimony that the above is my invention I have hereunto set my hand and affixed my seal this 3d day of December, 1866.

JOHN MARTINO. [L. s.]

Witnesses:

STEPHEN USTICK,
J. R. MASSEY.