

H. C. GARWOOD.

Bottom-Plates for Range-Chimneys.

No. 148,689.

Patented March 17, 1874.

Fig. 1.

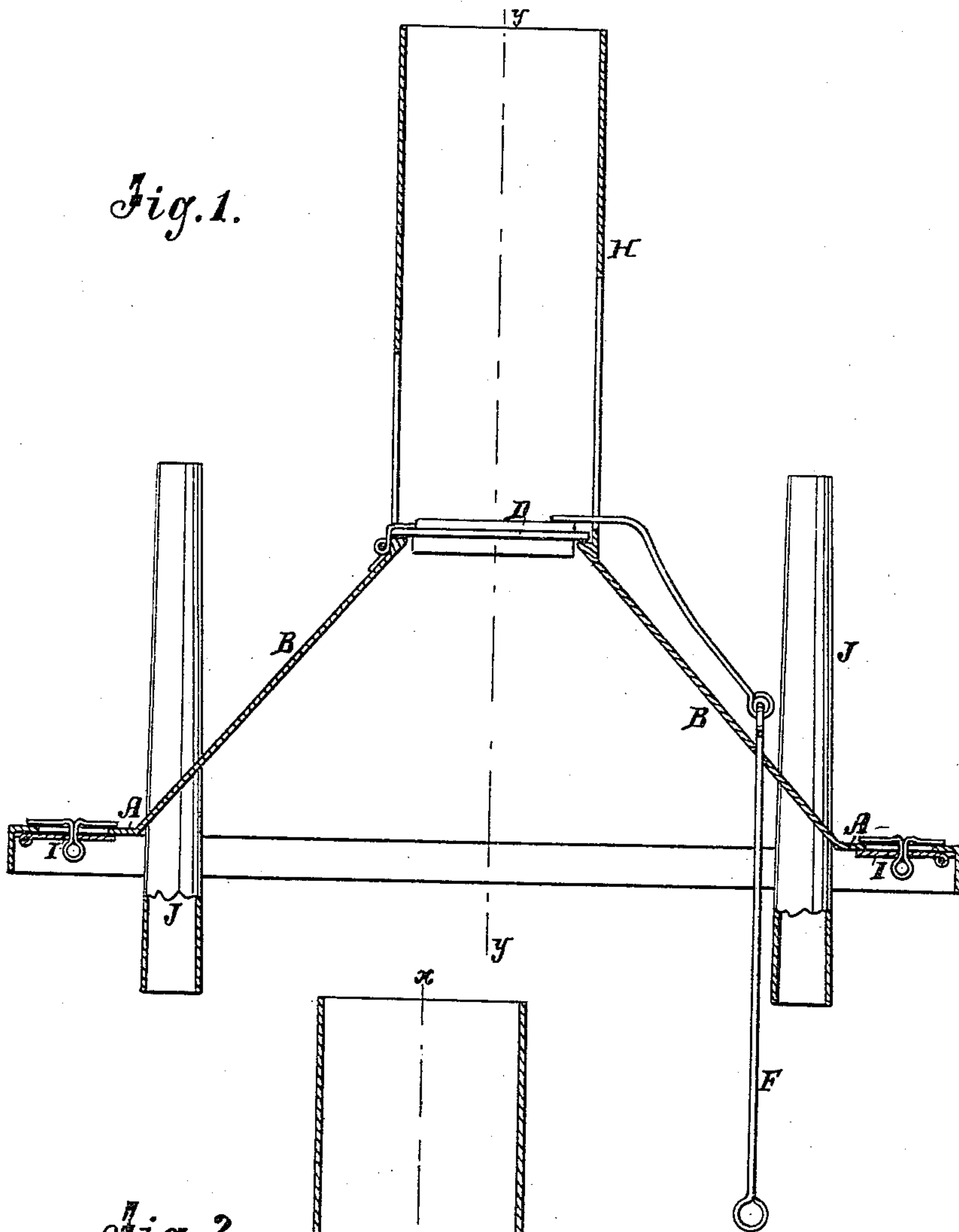
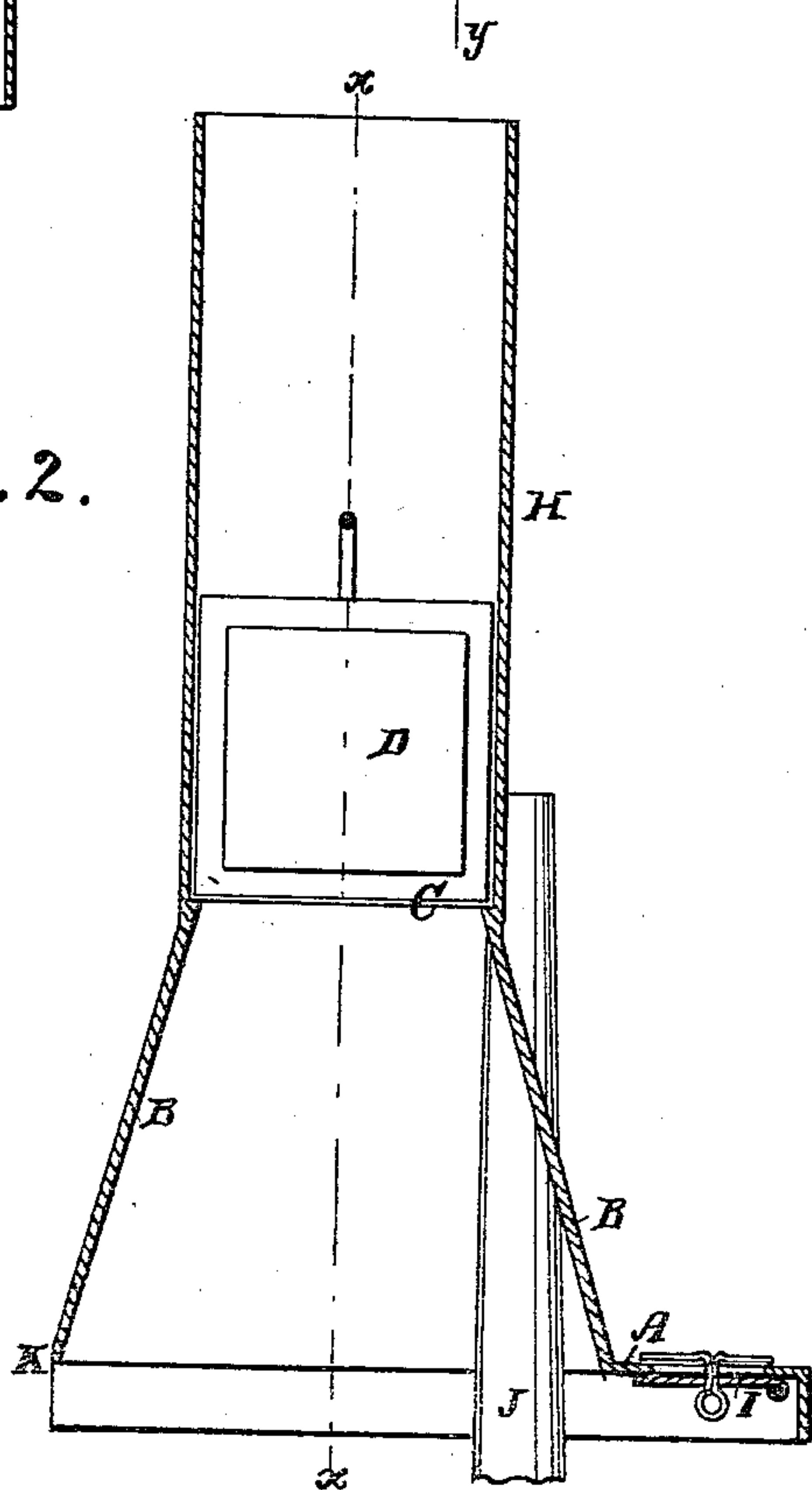


Fig. 2.



WITNESSES:

A Benneimendof.  
Alex F. Roberts

INVENTOR:

H. C. Garwood

BY

*[Signature]*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HAMILTON C. GARWOOD, OF JERSEY CITY, NEW JERSEY.

## IMPROVEMENT IN BOTTOM PLATES FOR RANGE-CHIMNEYS.

Specification forming part of Letters Patent No. 148,689, dated March 17, 1874; application filed January 31, 1874.

*To all whom it may concern:*

Be it known that I, HAMILTON C. GARWOOD, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Bottom Plate for Range-Chimneys, of which the following is a specification:

My invention consists of a pyramidal or conical elevation of the middle portion of the plate at the bottom of a flue or chimney over a range, with a large passage at the top either directly into the chimney or into a pipe extending a short distance from the top and discharging into the flue, and with a valve for closing and opening said passage at will, for a more efficient means of escape for the effluvium, smoke, &c., arising from the cooking on the range below, than is afforded by the ordinary flat plate with a passage in it, whereas with the flat plate the vapors rise up to it, and thence escape in lateral directions, while the escape-passage is filled by a column of comparatively small area rising directly into it from below, so that the object is only partly accomplished. But with my plan the column set in motion by the draft through the passage will extend alike over the whole area and carry off all the odors produced on the range or in its immediate vicinity.

At each side of the base of the said middle elevation, except the front, I will have a valve or damper to open occasionally to remove the accumulations of soot or other deposits that may lodge on the plate from the chimney above. Such a valve may also be fixed at the front, but access may be obtained there without it.

Figure 1 is a sectional elevation of my improved flue-bottom, taken on the line *x x* of Fig. 2; and Fig. 2 is a transverse sectional elevation taken on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the flue-bottom, of sheet metal, in which I make a pyramidal or other equivalent extension, B, embracing nearly the whole area of the said plate, and terminating at a suitable height in a passage, C, of sufficient capacity to ventilate the room thoroughly and afford ample escape for the odors, smoke, &c., evolved by the cooking. Here I arrange a damper or valve, D, with an arm, E, and pendent handle F, or any other equivalent means for operating the damper to regulate the escape of the vapors. This damper is, in this example, arranged on hinges; but it may, if preferred, be connected by a spring or springs instead. Above the passage is a pipe, H, which may be used or not, as preferred. I represents the valve at the sides and back of the base of the elevation B for the escape of the droppings from the chimney. They will be made as narrow as will answer well to allow the base of the extension B to be as wide as may be, for the wider it is the better will be its results. J represents the range-pipes. The device is located in the chimney-flue, with its base-plate even with the edge of the fire-place girder.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the upward extension B in the middle portion of the bottom plate of a range-chimney, of the regulating valve or damper D, the valves I at the sides and back, and with or without a pipe, H, above, as and for the purpose set forth.

HAMILTON C. GARWOOD.

Witnesses:

T. B. MOSHER,  
ALEX. F. ROBERTS.