

(No Model.)

E. WOOD.
GRATE ATTACHMENT.

No. 309,429.

Patented Dec. 16, 1884.

Fig. 1.

Fig. 2.

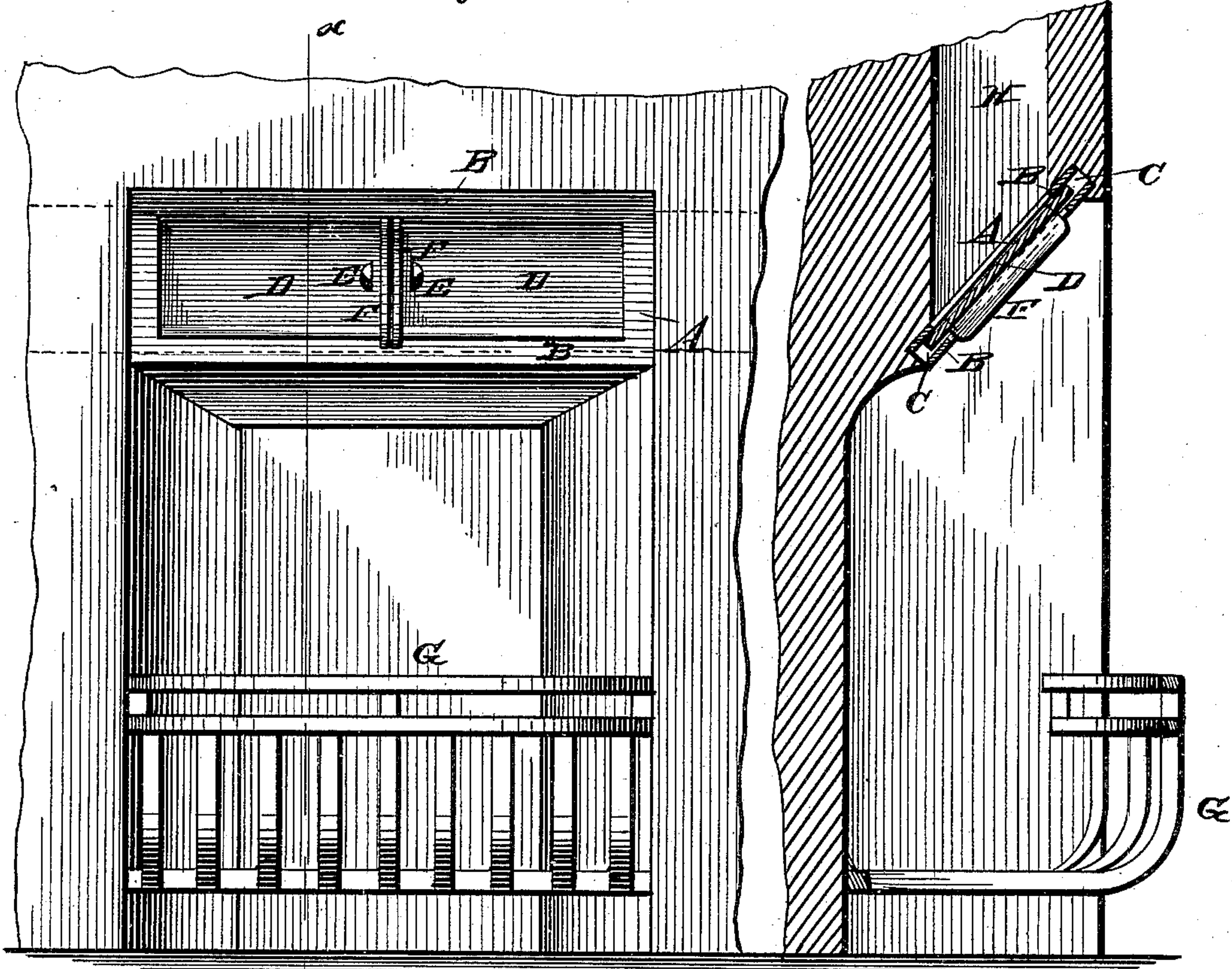


Fig. 3.

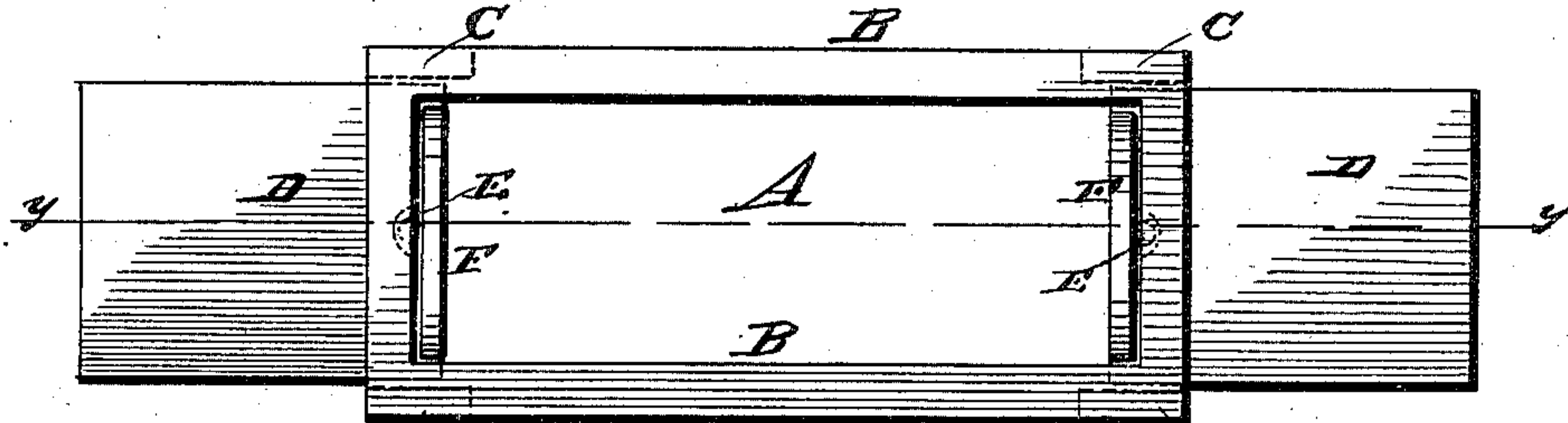
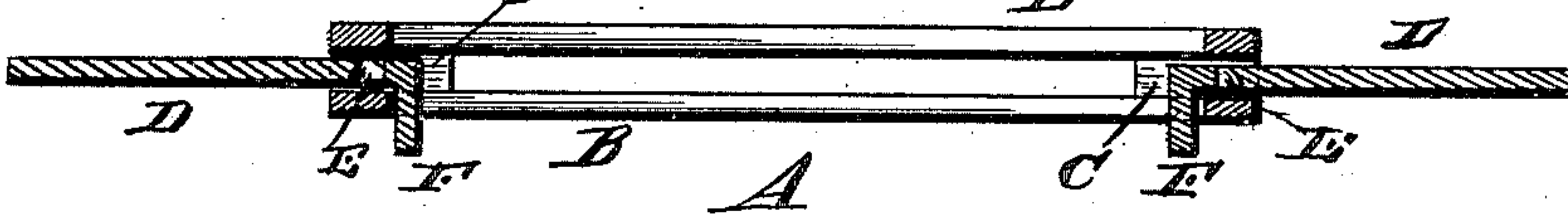


Fig. 4.



WITNESSES

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ELIZABETH WOOD, OF EVANSVILLE, INDIANA.

GRATE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 309,429, dated December 16, 1884.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELIZABETH WOOD, of Evansville, in the county of Vanderburgh and State of Indiana, have invented certain new and useful Improvements in Grate Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The object of this invention is to apply at the throat of an open chimney-flue sliding doors, the flue being constructed to admit of such doors being moved laterally and horizontally free from the flue-space of an open grate.

I am aware that it is not new to use sliding dampers or registers in the throat of a chimney-flue immediately above an open grate; but such devices necessarily involve frames, which are obstructions to the free escape of the products of combustion at all times.

In the drawings hereto annexed, Figure 1 is a front view of an open grate equipped with my improvement, showing the same previous to the ornamental grate-front and mantel having been placed in position. Fig. 2 is a vertical sectional view taken on the line *x x* in Fig. 1. Fig. 3 is a plan view of the attachments, showing the same with the slide-doors open; and Fig. 4 is a sectional view on the line *y y* in Fig. 3.

The same letters refer to the same parts in all the figures.

A in the drawings refers to the frame of the attachments, which is composed of two rectangular frames, B B, which are connected at their corners and upper and lower edges by lugs C C, that leave sufficient space between the frames B B to accommodate a pair of sliding doors, D D, which are provided near their inner edges with recesses E, to receive the point of a poker or other instrument by means of which the said doors may be conveniently manipulated. The inner or adjoining edges of the doors D are provided with flanges F, serving to prevent any possibility of displacement of the doors when they are opened to their full extent.

G designates the grate, and H the chimney.

In practice the frame A is set in the chimney above the grate before the ornamental front of the latter and the mantel-shelf are placed in position in such a manner that the doors D may be opened laterally under the mantel-shelf, and so that when closed they shall completely close the chimney-opening.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed.

When during cold weather the grate is not in use, the doors D D may be closed, so as to prevent cold air from entering through the chimney.

At all seasons when the grate is not in use the doors D, when closed, will prevent soot and dirt from dropping upon the hearth.

When the grate is to be used, the doors are to be opened, and by opening them more or less they will serve to some extent to regulate the draft.

It will be seen by reference to Figs. 3 and 4 that the doors D D can be moved inside of the sides of the chimney-jamb, and thus leave a free space the entire width of and height of the flue-throat.

I am aware that it is not new in fire-places to employ, in combination with chimney-flues, a series of slots at the bottom thereof, provided with removable dampers, and therefore I do not claim such a device. By my invention I am able to employ laterally-sliding dampers, and to leave a free, unobstructed space equal to the full horizontal area of the flue when said dampers are fully opened.

I am also aware that it is not new to employ laterally-sliding doors in a frame located in the flue, which is recessed to receive said frame.

I claim as my invention and desire to secure by Letters Patent—

1. The combination, with an open fire-grate, of a chimney which is provided with recesses, the sliding doors D D, the frame B, constructed of two parts united by lugs C, and the stop-flanges F, all constructed and adapted to operate substantially as and for the purposes described.

2. The combination of the open frame B, constructed of two parts united by corner lugs,

and the sliding doors provided with flanges and with recesses E, substantially as and for the purposes set forth.

5 3. The combination, with the laterally-sliding doors having flanges and recesses, as described, of a frame composed of parallel open plates united by means of lugs C C, and adapted for application to the throat of a chimney, as specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ELIZABETH WOOD.

Witnesses:

ALVAH JOHNSON,
JAMES B. RUCKER.