No. 686,615. Patented Nov. 12, 1901.

R. JAHN.

FIREPLACE DAMPER.

(Application filed Dec. 26, 1899.)

(No Model.)

Fig. 1.

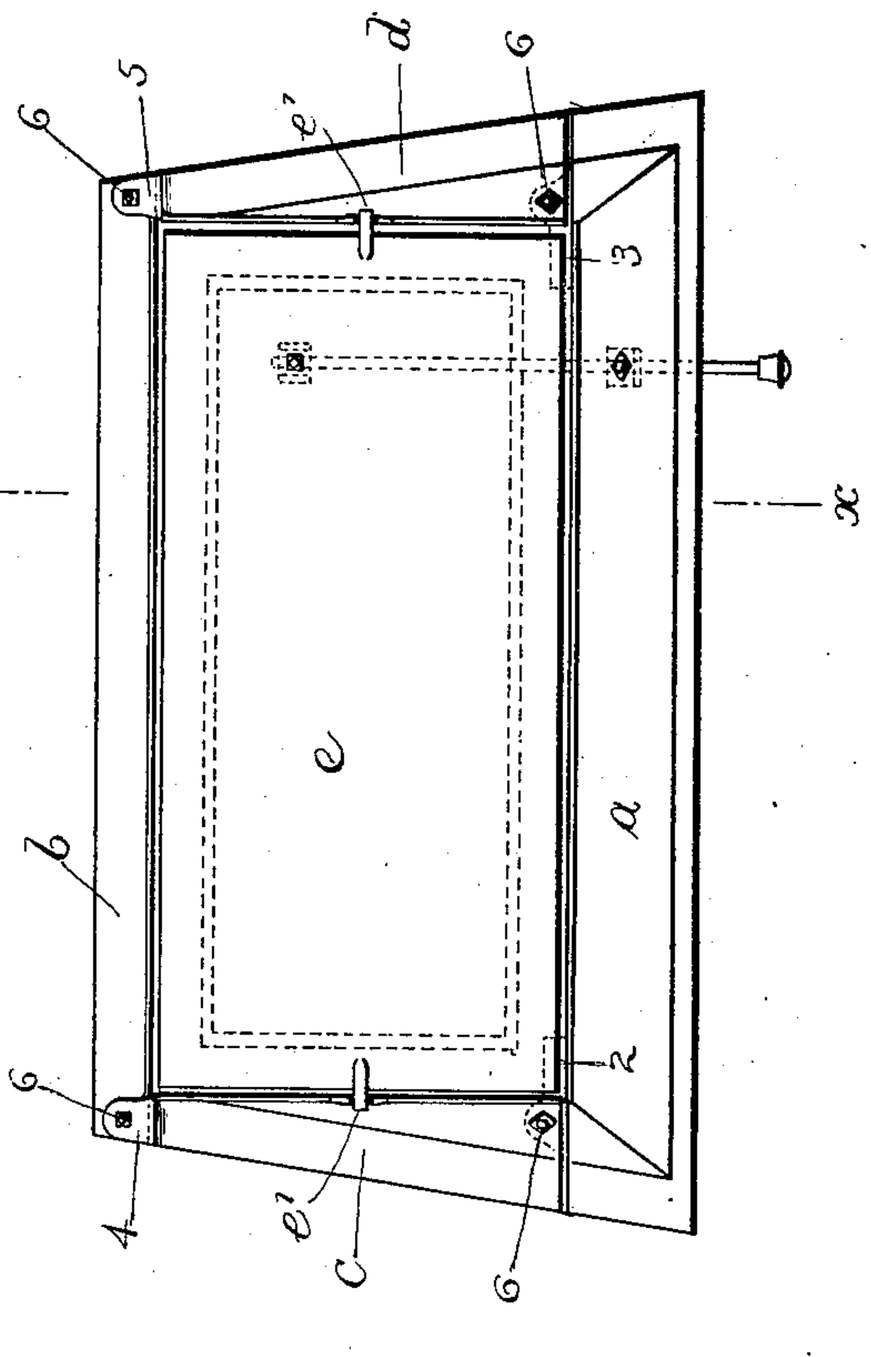


Fig. 2.

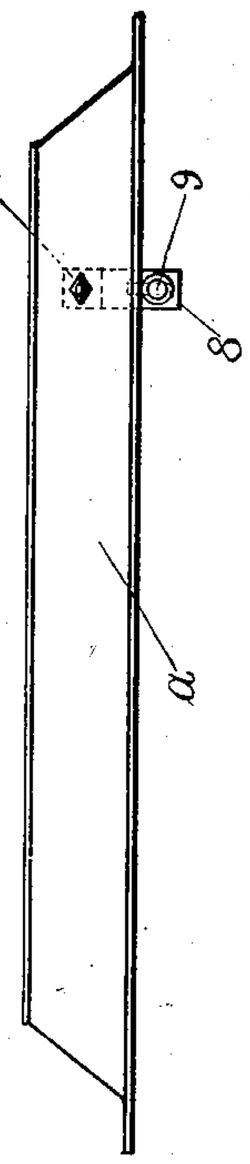


Fig. 4.

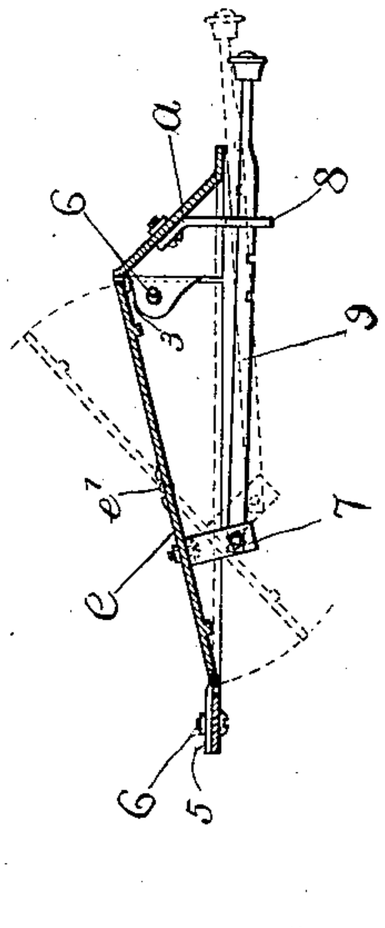
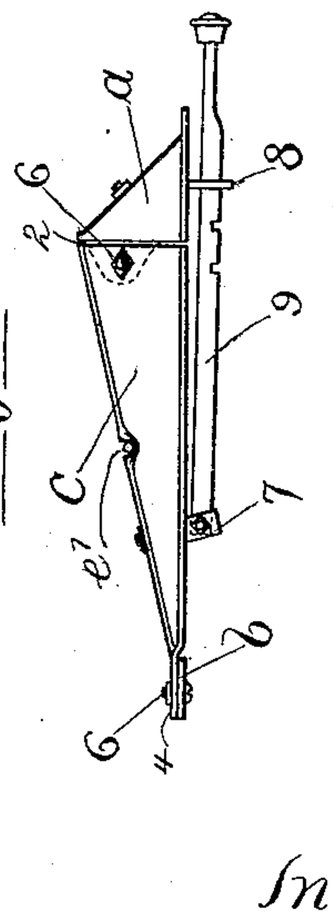


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT JAHN, OF SCOTCHPLAINS, NEW JERSEY.

FIREPLACE-DAMPER.

SPECIFICATION forming part of Letters Patent No. 686,615, dated November 12, 1901.

Application filed December 26, 1899. Serial No. 741,518. (No model.)

To all whom it may concern:

Be it known that I, ROBERT JAHN, a citizen of the United States, residing at Scotchplains, in the county of Union and State of New Jersey, have invented an Improvement in Fireplace-Dampers, of which the following is a specification.

Heretofore fireplace-dampers have usually been made of set sizes with the outer part or frame integral, and besides it has been difficult to fit these frames in place into the chimney of the open fireplace, because owing to this integral character the frames were not adjustable.

My invention relates to a fireplace-damper having a knockdown frame of interchangeable parts, which parts are adjustable both in regard to the length and width of the frame, so as to readily provide for different sizes of fireplace chimney-openings.

The damper-plate is rectangular, with end pivot-lugs, and it is fitted to swing in the end portions of the frame, and it is controlled and regulated by a handle-bar. It is preferable to incline the damper-plate. Consequently the frame is raised at the forward portion and the end portions taper toward the back portion. These damper-frames are adapted to rest upon the upper edge of the iron lining of an open fireplace or upon a brick ledge in the open fireplace provided for that purpose.

In the drawings, Figure 1 is a plan view, and Fig. 2 an edge view, representing my invention. Fig. 3 is a side view of the same, and Fig. 4 a cross-section at *x x* of Fig. 1.

The frame is composed of the forward portion *a*, the rear portion *b*, and the end portions *c d*. The forward portion *a* comprises a rim and an inclined portion, with the rim and inclined portion returned on the ends, and the ends are also made with rims and inclined portions; but the latter inclined portions taper downward from their union with the portion *a* to their union with the rear portion *b*. This rear portion *b* is simply a bar or plate, and the forward portion *a* is made with two lugs 2 3 on opposite corners that are partly inclined and partly horizontal, and the end portions *c d* are made with lugs 4 5, and where the end portions *c d* abut against the edges of the front portion *a* they rest upon the inclined parts of the lugs 2 3, and they are perforated to receive the bolts 6, which pass through the said lugs and the ends *c d* to connect the forward and end portions firmly together. The lugs 4 5 are formed as continuations of the ends and are bent upward, so as to bring the rear portion *b* into the same plane as the rims of the ends *c d*, and said lugs 4 5 are perforated, as well as the ends of the rear portion *b*, for the bolts 6, that connect the said parts of the frame rigidly together. The rear plate *b* is shorter than the front portion *a*, so that the ends *c d* are at slight acute angles with reference to the front portion *a*.

The damper-plate *e* is preferably of rectangular form and provided with end pivot-lugs *e'*, adapted to fit in notches made in the upper edge of the ends *c d*, and this damper-plate is provided with a pivot-plate 7, connected to the under face and extending downward, and the front inclined portion *a* is provided with a mortise-plate 8, connected thereto and extending downward from the under face of the said inclined portion, and a handle-bar with notches in its under edge is pivoted to the plate 7 and passes through the mortise of the plate 8, and this handle-bar 9 and the pivot-plate 7 constitute the means for swinging the damper-plate *e* upon its pivots.

In the section Fig. 4 the damper-plate is closed, with its forward edges resting upon the horizontal portions of the lugs 2 3, and the parts 7, 8, and 9 are shown in the position they will assume when the handle-bar 9 is engaged with the mortise-plate 8 at its first notch to maintain the damper-plate closed, and the second notch shown in the said handle-bar 9 when brought into engagement with the mortise-plate 8 will hold the damper-plate partly open, the last of the three notches holding the damper-plate in a vertical position and fully open, which will be the position in which the plate should be put when a fire is burning in an open fireplace below the said fireplace-damper or when the same is opened for full ventilation. It will be readily seen that the parts *a*, *b*, *c*, and *d* are readily separated and can be packed with the damper-plate *e* into a small compass for transportation.

In the construction of open fireplaces a great diversity of sizes is produced, requiring

that in some instances the portions *a* and *b* shall be longer or shorter in relation to the end pieces *c d* and also that sometimes the end pieces *c d* shall be longer in relation to the front and rear portions *a b*, and it is my purpose to cause the various parts *a b c d* to be made of various lengths, so that the four parts forming the frame may be interchangeably assembled according to the given dimensions of the place where the damper-plate is to be located, so that as close a fit as possible may be thus maintained. The damper-plates *e* will also be made of various lengths and widths, which will maintain their proper relation to the lengths of the parts of the frame, so that they will be as interchangeable as are the parts of the frame. The pivot-plates 7 and 8 will be the same in all cases; but the lengths of the notched handle-bars 9 will also be varied to suit the sizes of the other parts forming the fireplace-damper.

I claim as my invention—

1. A knockdown fireplace-damper, comprising a front portion, a parallel back bar of shorter length, and end portions that taper or are at slightly acute angles to the front portion, the upper edges of said parts being in a plane inclined to the plane of the lower edges of said parts, bolts for connecting the parts together, and a damper-plate pivoted at opposite points to the upper edges of two of said parts, substantially as specified.

2. A knockdown fireplace-damper, comprising a front portion having an inclined face and inclined return ends, a parallel back bar, end portions each having inclined faces tapering in their length with their higher ends adapted to set up against the front portions, bolts for connecting the parts together, and a damper-plate pivoted to and adapted to swing in the frame, substantially as specified.

3. A knockdown fireplace-damper, comprising a front portion having an inclined face and inclined return ends, a parallel back bar of shorter length, end portions each having inclined faces tapering in their length with their higher ends adapted to set up against the front portions and said end portions set at slightly acute angles to the front portion, bolts for connecting the parts together, and a damper-plate pivoted to and adapted to swing in the frame, substantially as specified.

4. A knockdown fireplace-damper, comprising a front portion having a rib and an inclined face and inclined return ends, a parallel back bar, end portions each having a rib and inclined faces tapering in their length with their higher ends adapted to set up against the front portions, bolts for connecting the parts together, and a damper-plate pivoted to and adapted to swing in the frame, substantially as specified.

5. A knockdown fireplace-damper, comprising a front portion having a rib and an inclined face and inclined return ends, a parallel back bar, end portions each having a rib and inclined faces tapering in their length with their higher ends adapted to set up against the front portions, bolts for connecting the parts together, and a damper-plate pivoted to and adapted to swing in the frame, a pivot-plate secured to the damper-plate, a handle-bar pivoted thereto and a mortise-plate through which the handle-bar passes, and means forming part of the handle-bar for engaging the mortise-plate, substantially as specified.

Signed by me this 21st day of December, 1899.

ROBT. JAHN.

Witnesses:
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