(No Model.)

J. J. LEBEAU & C. L. SHANNON.

FIRE PLACE FRAME.

No. 265,834. Patented Oct. 10, 1882.

Fig. 1

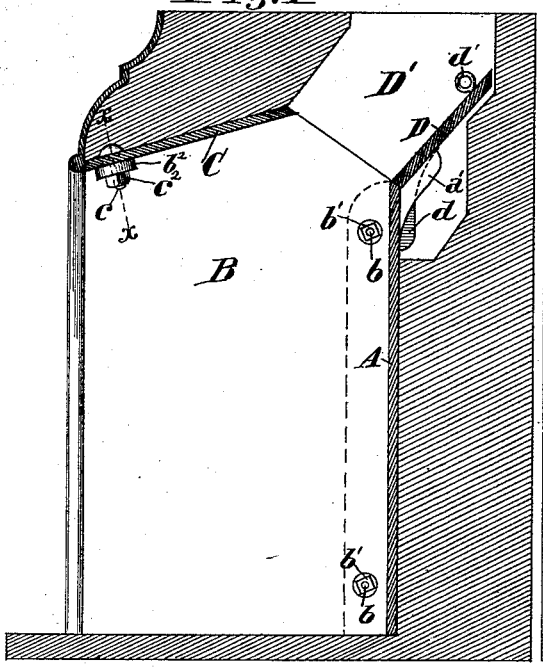


Fig. 2

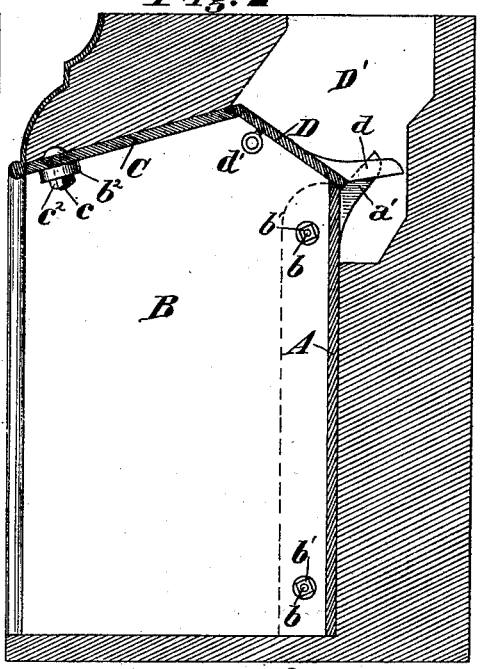


Fig. 3

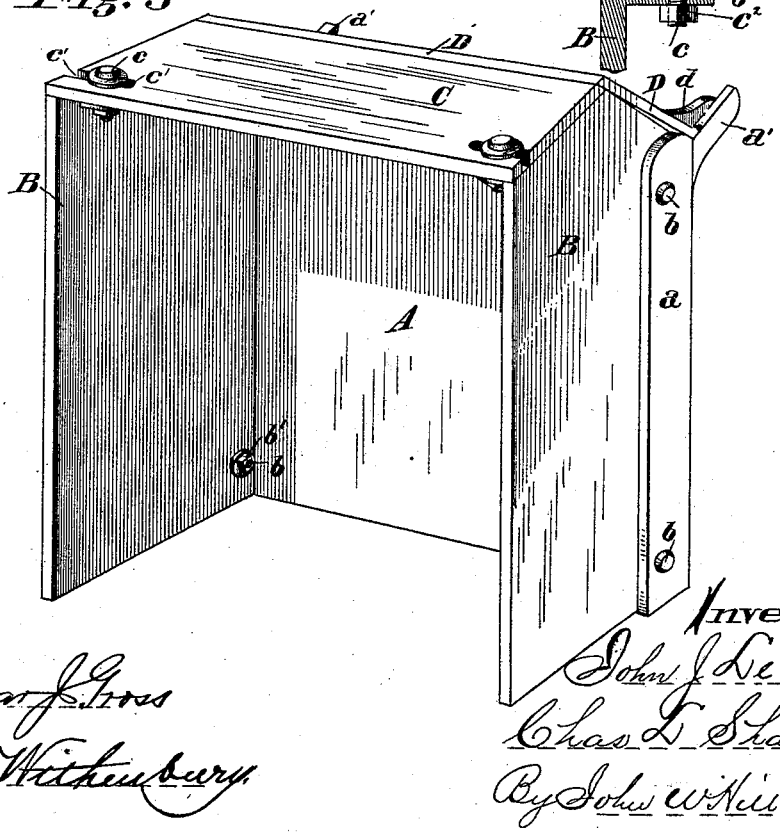
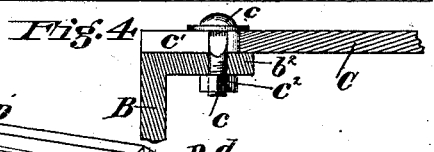


Fig. 4



Attest

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UNITED STATES PATENT OFFICE.

JOHN J. LEBEAU AND CHARLES L. SHANNON, OF CINCINNATI, OHIO, ASSIGNORS TO THE EUREKA CO-OPERATIVE FOUNDRY ASSOCIATION, OF SAME PLACE.

FIRE-PLACE FRAME.

SPECIFICATION forming part of Letters Patent No. 265,834, dated October 10, 1882.

Application filed June 21, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOHN J. LEBEAU and CHAS. L. SHANNON, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Fire-Place Frames, of which the following is a specification.

Our invention is in the nature of an improvement in the frames of grate fire-places, and has for its object, first, the construction and arrangement of the jambs in such a manner that they may be adjusted to slightly varying lengths of fire-baskets; and, second, in providing a throat in the top of the frame, which, in conjunction with a movable plate, enables the fire-place to be effectually closed against downdraft when the grate is out of use, as in summer.

Our invention consists of a back plate of cast-iron, which is furnished at each end with vertical flanges disposed at right angles to the back, to which flanges are attached, by means of screw-bolts, the side jambs of the fire-place. Attached to the top forward edges of the two side jambs, by means of screw-bolts, is a cross-plate, the bolt-holes in which are slotted to permit of moving the jambs inward or outward to receive different lengths of fire-basket. The space between the back edge of the cross-plate and the upper edge of the back plate forms a throat, over which is fitted a tilting plate, which, when closed, rests upon the edges of the throat, and when opened is supported by brackets on the back plate and by brackets cast upon its upper surface, which latter are so disposed with relation to the brackets on the back plate as to guide the tilting plate and retain it in position on the frame, all of which will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a sectional elevation of our improved frame, showing the tilting plate thrown back and the throat open. Fig. 2 is a similar section, showing the tilting plate down and the throat closed. Fig. 3 is a perspective front view of the frame, showing the devices for adjustment of the side jambs; and Fig. 4 is a section on the line *x x* of Fig. 1, showing the means of fastening the jamb and cross-plate together.

Similar letters of reference indicate similar parts.

A is the back plate of the frame, of which *a a* are the vertical flanges, preferably cast with the back plate.

B B are the side jambs, secured to the flanges *a a* by screw-bolts *b b*. The bolts *b b* are provided with a squared neck or shank fitting corresponding square holes in the flanges *a a*, by which means the bolts *b* are prevented from turning during the screwing of the nut *b'* in either direction.

C is the cross-plate, secured to the side jambs by the bolts *c*. The squared necks of the bolts *c* are fitted to the slots *c' c'* in the ends of the plate C to prevent turning. Lugs b^2 b^2, cast with the jambs B B, receive the round portions of the bolts *c c*, against which the nuts c^2 impinge when screwed up to secure the parts B B and C in position.

In adjusting the frame to a basket of length greater or less than the clear space between the side jambs, the nuts c^2 and *b'* are first loosened slightly and the jambs B B pressed outward or inward to adapt the space between them to the exact length of the basket, when the nuts c^2 are tightened, and then the nuts *b'* are set up to secure the parts A, B B, and C firmly together.

D is the tilting plate, of such length and width as to rest upon and cover the edges of the throat D'.

d d are brackets or lugs cast with the plate, and so proportioned as to rest against the rear surface of the back plate, A, when the upper surface of the tilting plate rests upon the inclined faces of the brackets or lugs *a' a'*. The brackets *a' a'* are preferably cast with the back plate, A. The separation of the outer surfaces of the brackets *d d* is slightly less than the separation of the inner surfaces of the brackets *a' a'*, whence the brackets *d d* and *a' a'* mutually serve as guides and stops to limit the motion of the plate D and to retain it in position on the frame. An eye, *d'*, which may be cast with the tilting plate D, enables it to be drawn forward to close the throat when the fire-place is out of use.

The throat D′ connects the grate and the flue formed in the chimney-breast, as clearly shown in Figs. 1 and 2. So long as the grate or fire-place is in use the throat D′ is open, as shown in Fig. 1; but when it is out of use—as, for instance, in the summer season—the throat is closed, as shown in Fig. 2, whereby all down-drafts from contrary gales are avoided. The necessity of closing the connection between the fire-place and the flue is generally recognized by housekeepers, who, for the lack of a better means, are accustomed to stuff the throat of the fire-place with rolls of paper or rags to prevent the downdrafts and avoid the consequent injury and inconvenience of showers of soot and dust.

The advantage of the adjustable side jambs to compensate for slight variations in the length of fire-baskets will be appreciated by grate-setters, who frequently find fire-place frames furnished with baskets so long as to refuse to enter the frame, or so short as to have a precarious support on the customary hooks cast upon the backs and side jambs, as shown at b^3 and a^2.

Having described our invention, what we claim is—

1. In a fire-place for grates, the combination of the horizontal top plate, C, the side jambs, B B, having their upper ends adjustably connected with the ends of the top plate, and the vertical back plate, A, connected with the rear ends of the side jambs, substantially as described.

2. In a fire-place for grates, the combination of the top plate, C, having slots c' at its ends, the side jambs, B, having flanges b^2 adjustably connected with the top plate by bolts c passing through the slots in the latter, and the back plate, A, having flanges a connected with the rear ends of the side jamb by means of bolts b, substantially as described.

3. In a fire place frame for the reception of a fire basket or grate, the tilting plate D, provided with brackets d d, in combination with the back plate, A, having brackets a' a', substantially as and for the purpose described.

In testimony whereof we have signed our names to the foregoing specification in the presence of two subscribing witnesses.

JOHN J. LEBEAU.
CHARLES L. SHANNON.

Witnesses:
JOHN W. HILL,
EDGAR J. GROSS.