

A. J. REDWAY.

Linings for Fire-Places.

No. 135,587.

Patented Feb. 4, 1873.

Fig. 1

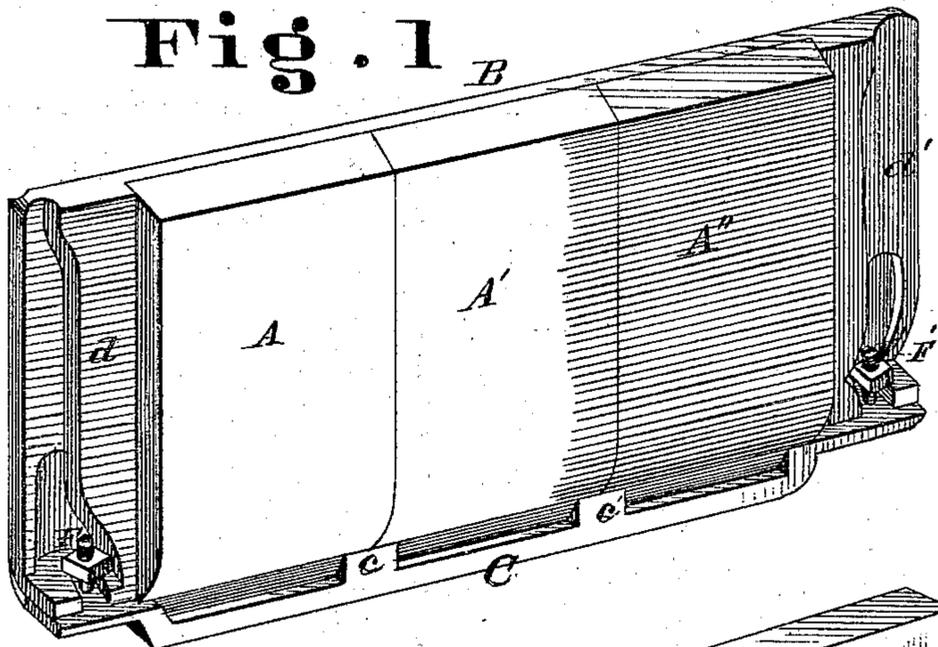


Fig. 4

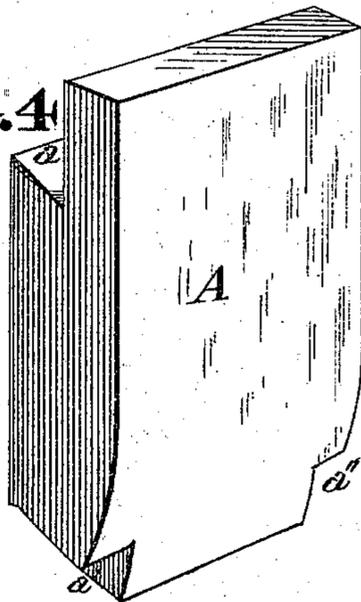


Fig. 3

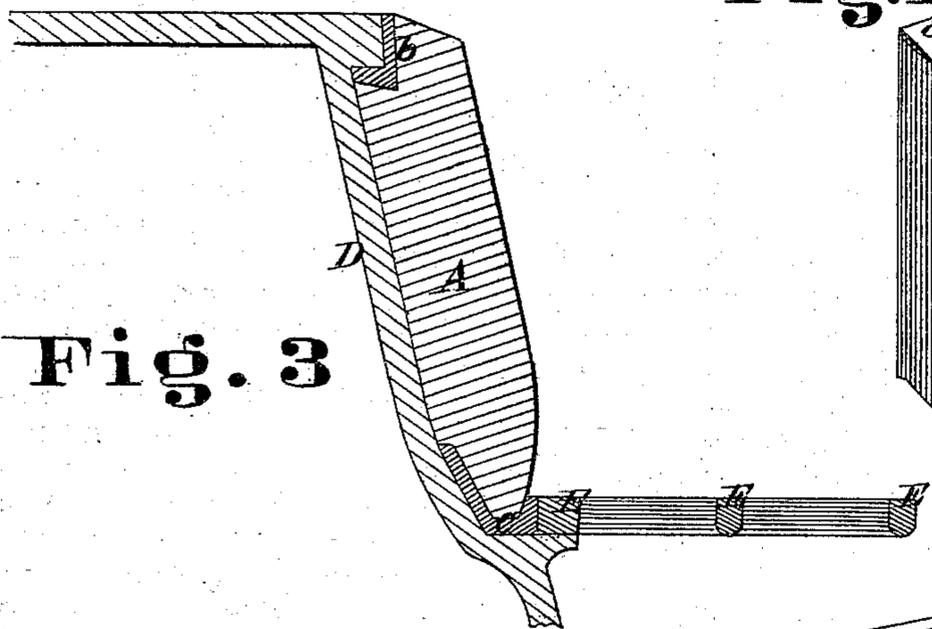
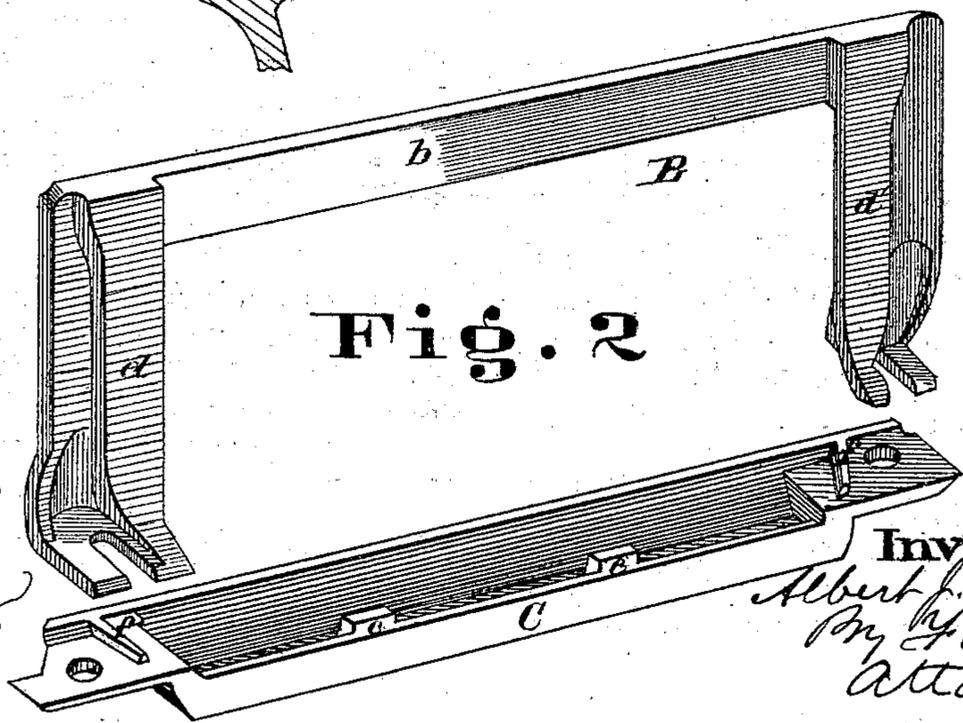


Fig. 2



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# UNITED STATES PATENT OFFICE.

ALBERT J. REDWAY, OF CINCINNATI, OHIO, ASSIGNOR TO REDWAY AND BURTON, OF SAME PLACE.

## IMPROVEMENT IN LININGS FOR FIRE-PLACES.

Specification forming part of Letters Patent No. 135,587, dated February 4, 1873.

To all whom it may concern:

Be it known that I, ALBERT J. REDWAY, of Cincinnati, Hamilton county, Ohio, have invented a certain new and useful Improvement in Linings for Fire-Places, of which the following is a specification:

### *Nature and Object of Invention.*

My invention relates to devices for connecting fire-tiles together to form a fire-back for a cooking-stove; and consists of a two-part frame of such construction and shape that, when placed in position in the cooking-stove, the fire-brick is alone exposed to the flame, the tiles caused to rest close against the back of the fire-chamber to the exclusion of air, and the iron entirely protected, the frame being such that a proper fire-tile lining for any size or shape of fire-back may be safely transported and fitted to its place, while the frame being made in separate parts bolted together serves to lock firmly the tiles to their respective positions for use without any other fastening or connection whatever. The tiles, when in use, rest solidly against the oven-plate, and are thereby supported firmly and permit of being struck by the operator in stirring the coal without danger of fracture.

### *Description of Drawing.*

Figure 1 is a perspective view of a complete fire-back embodying my invention. Fig. 2 is a perspective view of the frame by which my tiles are transported and held in place when in use, showing the upper and lower parts detached. Fig. 3 is a vertical section through a fire-back embodying my invention. Fig. 4 is a perspective view of a single tile detached.

### *General Description.*

A A' A'' are tiles of some incombustible material, preferably of fire-brick, having a dovetail-rabbit, *a*, near their tops, to receive the thin angle-iron *b*, of which the top bar of the connecting-frame B C is formed, and rab-

bets *a' a''* at the bottom to receive the lugs or projections *c c'* in the bottom bar C. D, Fig. 3, is the customary plate forming the back of the fire-chamber of the stove, showing the manner in which the frame is placed in position for use; and E E are the grate-bars, which, rising to the full height of the lower bar C, prevent its exposure to the heat of the fire, while the top *b* is equally shielded by the upper portion of the tiles and the uprights *d d'* covered by the sides of the grate. The two-part frame B C consists of the following portions—*i. e.*, two uprights, *d d'*, and top bar *b*, forming the upper part B, and the lower bar C. The uprights *d d'* have recessed and slotted lugs or projections at their lower extremities, which slots receive the ends of the screw-bolts F F', by which said lugs are secured to the ends of the lower bar C, on which are, besides, two small ribs or projections, *f f'*, corresponding to the sides of the lugs, which assist to hold them in place.

It will be seen that the proper tiles and frame for any size or shape of fire-back may be prepared and the tiles immovably locked in the frame for shipment and fitting. When once fitted to the desired place only an unbroken surface of fire-brick is exposed to the action of the fire, and the back is of such a character, the tiles being close together and having no frame surrounding them, that air is not admitted either at the back of or between the tiles.

### *Claim.*

The refractory blocks recessed at *a a' a''*, in combination with the metallic frame B *b d d'* and detachable clamping-bar C *c c'*, substantially as specified.

In testimony of which invention I hereunto set my hand.

ALBERT J. REDWAY.

Witnesses:

FRANK MILLWARD,  
H. G. WEBBER.