

W. P. CHADWICK.  
Mantle Bar for Fire Places.

No. 20,404.

Patented June 1, 1858.

Fig. 1.

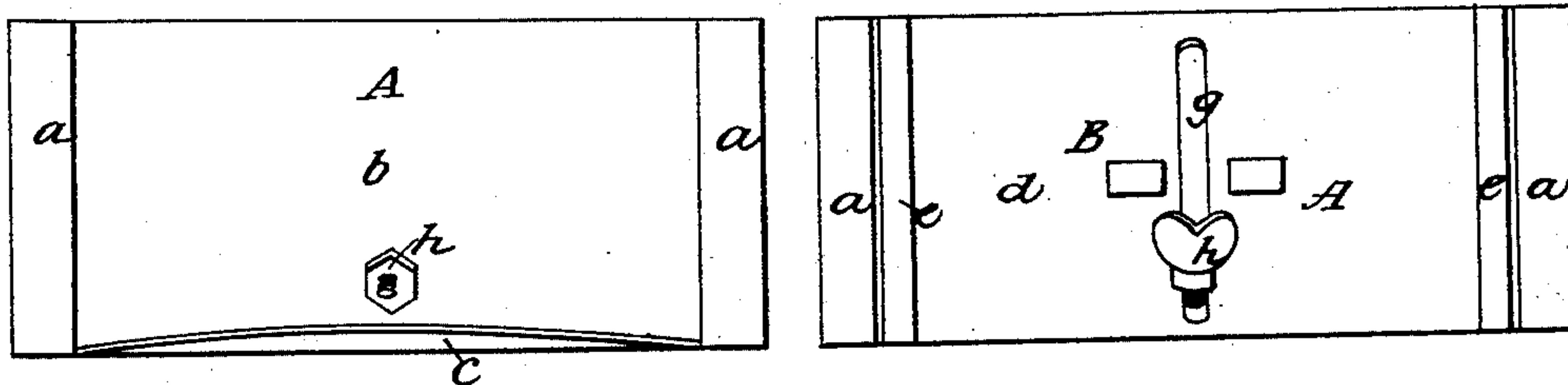


Fig. 2.

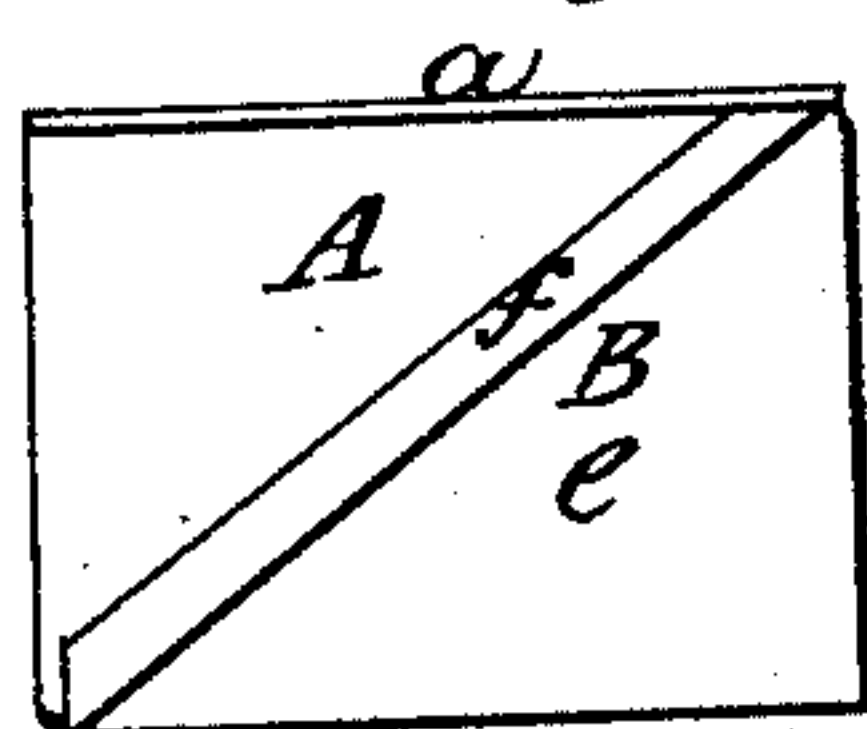


Fig. 4.

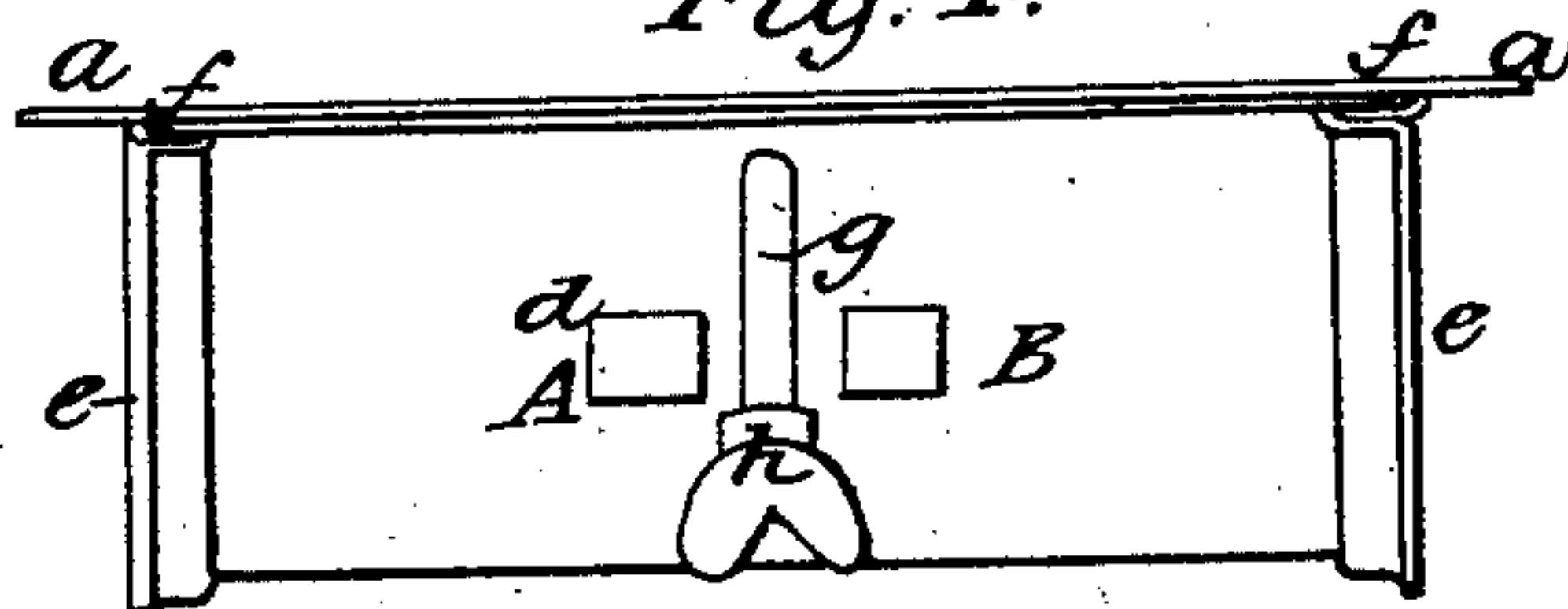


Fig. 6.

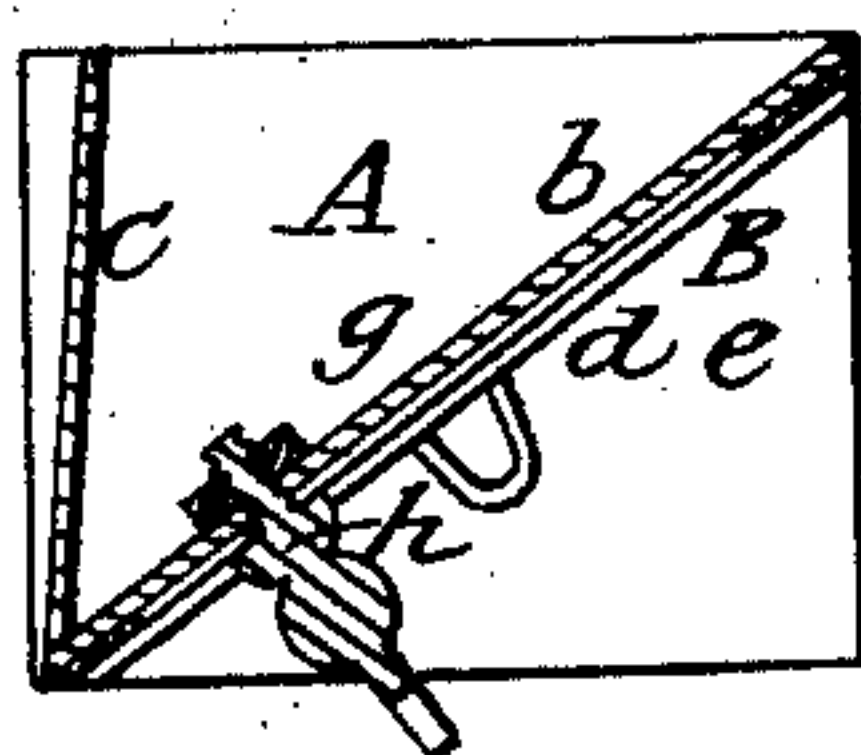


Fig. 5.

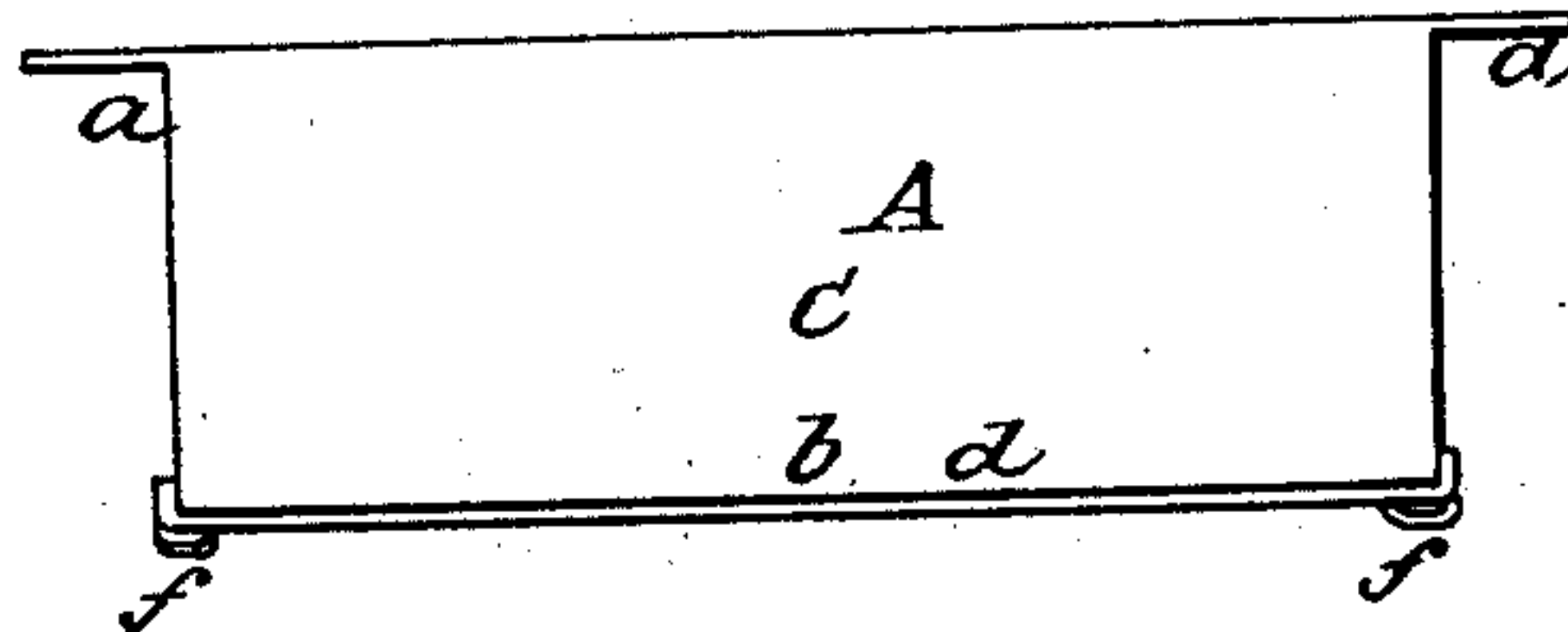
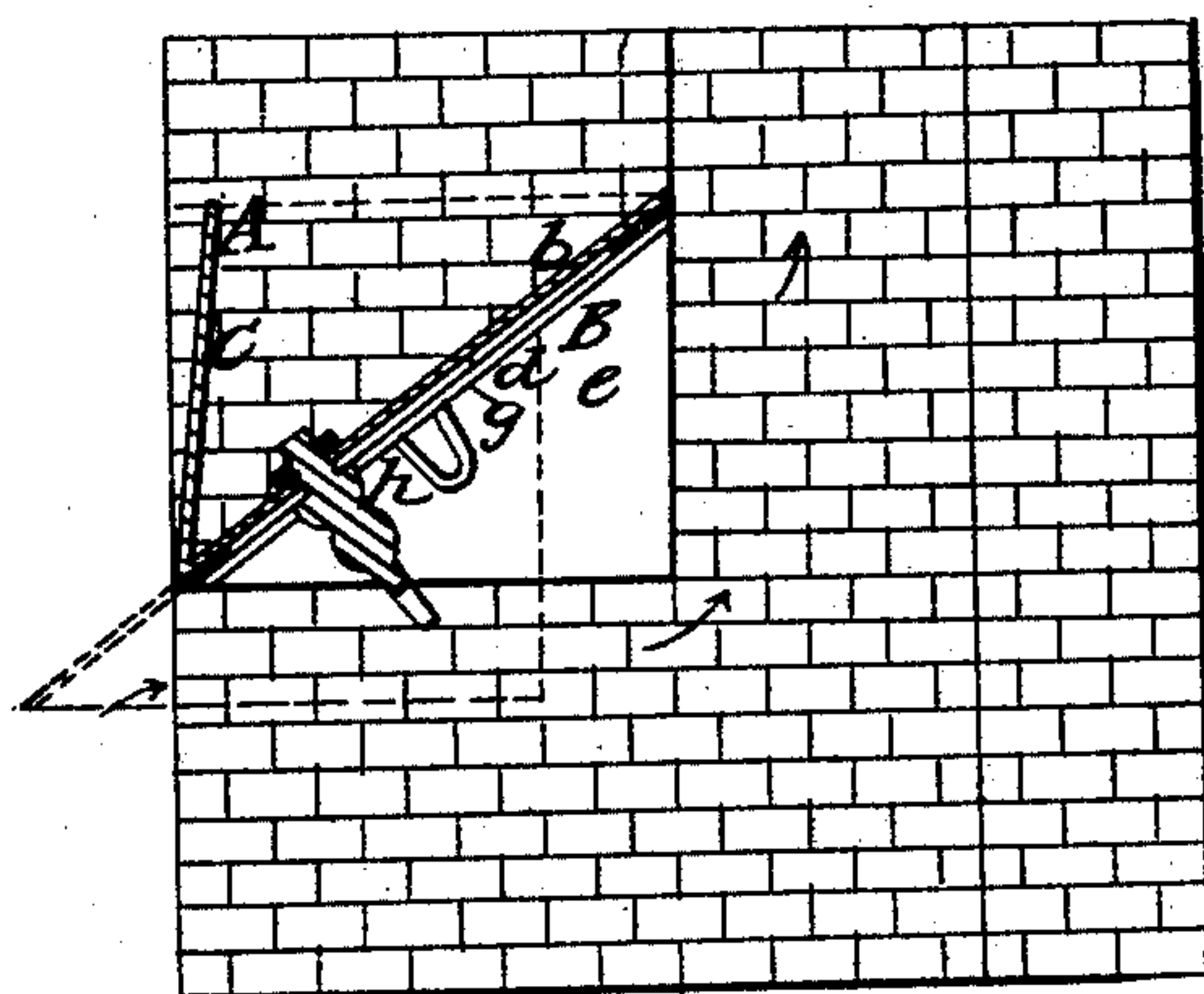


Fig. 7.



# UNITED STATES PATENT OFFICE.

W. P. CHADWICK, OF EDGARTOWN, MASSACHUSETTS.

## MANTEL-BAR.

Specification of Letters Patent No. 20,404, dated June 1, 1858.

*To all whom it may concern:*

Be it known that I, WILLIAM P. CHADWICK, of Edgartown, in the county of Dukes and State of Massachusetts, have invented  
an Improved Mantel-Bar for a Chimney and Fireplace; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, is a top view; Fig. 2, an end view; Fig. 3, a bottom view; Fig. 4, a rear elevation; Fig. 5, a front elevation; and Fig. 6, a vertical and transverse section of it. Fig. 7, is a transverse section of a fireplace with the mantel bar arranged therein.

A mantel bar is that piece of metal which usually extends across the front of a fireplace and serves to support the brickwork or front part of the chimney of such fireplace. Generally speaking, it is a wrought iron bar, but it is sometimes constructed of cast iron.

The object or purpose of my invention is to facilitate the passage of smoke up the chimney of the fireplace, or in other words, to prevent the smoke from passing into the room in which such fireplace may be.

In the drawings such a bar is shown at A, as made of cast iron and in the form of a box having a bottom, one side and two ends and flanges *a, a*, projecting beyond the ends as shown in the drawings. The bottom *b* is made sloping or is arranged so as to incline upward at an acute angle, and backward from the front or side *c*. This sloping bottom has applied to it an adjustable smoke chute or guard B, which consists of a plate *d*, and two triangular projections or plates *e, e*, extended downward from such plate *d*, and near its two ends. The said ends extend under lips *f, f*, projecting from the mantel bar, such lips serving to connect the chute and the bar in a manner to allow the former to be slid or moved

on the latter as a drawer moves into and out of its case. Furthermore, the chute is made with a straight slot *g*, made horizontally through its middle. A clamping screw *h* extends transversely through the slot and screws into the mantel bar and so projects into or beyond the sides of the slot as to enable the screw when screwed up to confine the chute to the bottom of the mantel bar and in such position thereon as circumstances may require. The box mantel bar so made is to take the place of the ordinary solid mantel and when open at top may have the brickwork of the mantel built within it, while the flanges, *a, a*, extend into the side walls of the fireplace and serve to support the mantel bar in the walls, while it sustains the brickwork of the mantel or front of the chimney.

From the above, it will be seen that when the bar is fixed in a chimney, its inclined bottom serves to facilitate the escape of smoke up the chimney or causes much of it that would escape into the room, were the bar made with a horizontal bottom, to pass up the flue. Furthermore, by drawing forward and downward the chute any smoke, which might otherwise escape into the room, will be reflected back by the chute into the chimney. When entirely back into place, the chute also serves to facilitate the passage of the smoke up the chimney.

I claim—

Making the mantel bar A, with an inclined back or bottom as explained, and combining therewith a sliding or adjustable smoke chute B to operate therewith substantially in manner as specified.

In testimony whereof, I have hereunto set my signature.

WM. P. CHADWICK.

Witnesses:

R. H. EDDY,  
F. P. HALE, Jr.