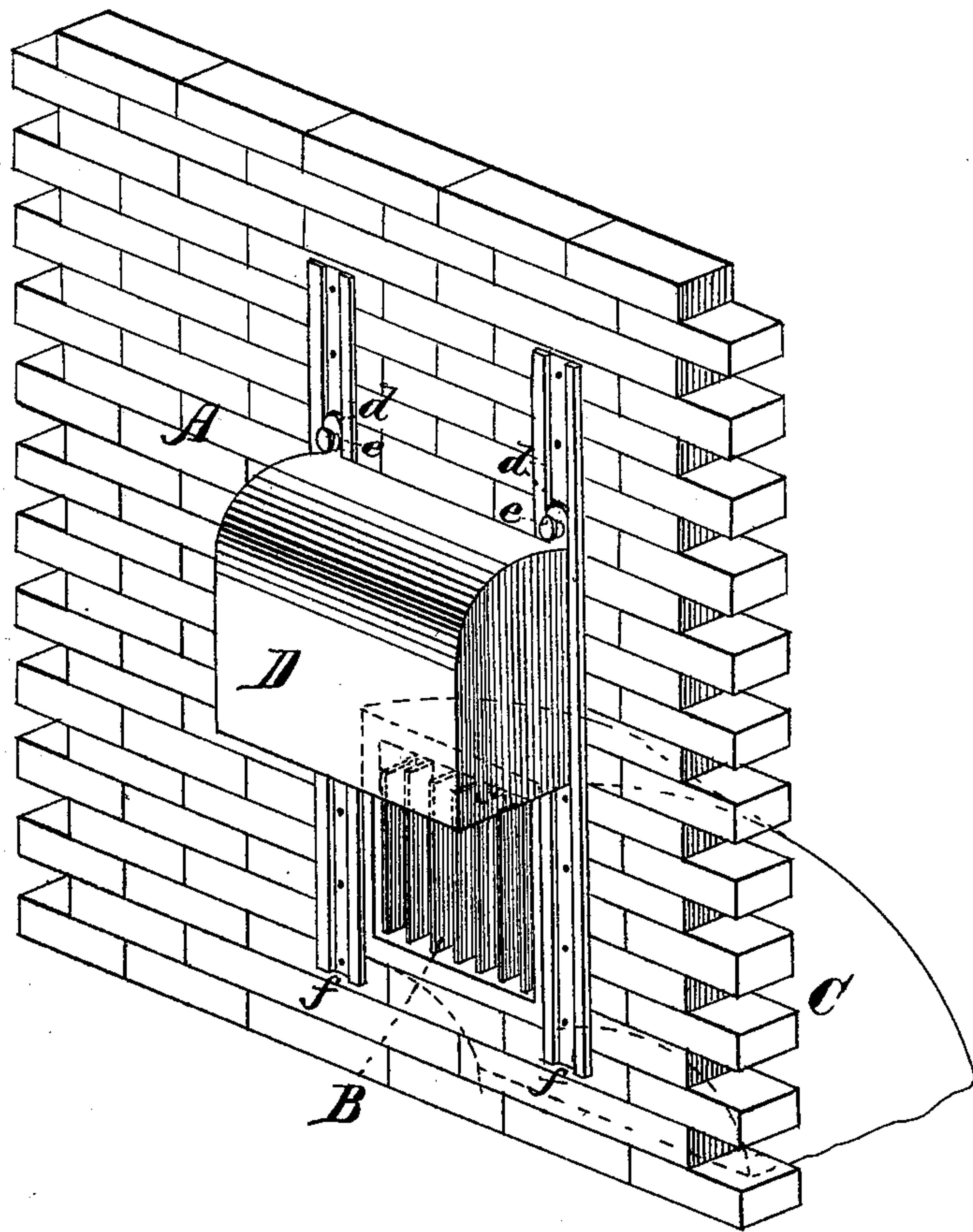


B. C. BIBB.

Shield for Feed Air-Pipes for Hot-Air Furnaces.

No. 126,373.

Patented May 7, 1872.



Witnesses

Amos
James F. Rowley

Inventor:

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UNITED STATES PATENT OFFICE.

BENTLEY C. BIBB, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN SHIELDS FOR FEED-AIR PIPES FOR HOT-AIR FURNACES.

Specification forming part of Letters Patent No. 126,373, dated May 7, 1872.

To all whom it may concern:

Be it known that I, BENTLEY C. BIBB, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful device for controlling the action of the air in feed-air pipes for furnaces, fire-places, stoves and steam-heaters; and I do hereby declare that the following is a full, clear, and exact description thereof.

Most furnaces, steam-heaters, fire-places, stoves, &c., obtain their cold air from outside the building through an exposed register inserted in the wall. This arrangement is liable to serious objections and inconvenience. When the wind blows heavily facing the register it enters the furnace through the feed or cold-air pipe with such force as to carry the cold air, sand, and dust into the rooms or interior of the building. Again, when the wind blows from the opposite direction this action is reversed. The cold-air pipe becomes a hot-air pipe, the hot air being, by a natural law, drawn or sucked through this conduit or feed-air pipe into the street. It is manifest, in either case, not only is a serious inconvenience occasioned, but great discomfort ensues in consequence of the partial and defective heating caused thereby.

My invention overcomes this eccentric influence of the air by so controlling it at its entrance into the feed-air pipe as to insure steady and uniform action, and has been found, after a thorough practical test, to meet all the requirements of the case. It consists in an adjustable hood or cover, made of metal, wood, or any other material desired, and of any shape preferred, placed over the mouth of the opening of the feed-air pipe, or over the surface of the register, its size being proportionate to the size or capacity of the feed-air pipe or conduit, so that it will not interfere with the free and unobstructed ingress of the air. This hood is made adjustable by means of the arrangement as shown in the drawing accompanying this specification, as follows:

A represents a section of the wall of a building, with the register B and opening C of the feed-air pipe or conduit to the furnace, &c. D represents an adjustable hood, placed in working position, showing the projecting ends of its slide-plate *d d*, which are attached to

each side of the hood, with holes perforated therein for the reception of the thumb-screws or stop-pins *e e*, which are used to keep the hood in position. *e e* represent thumb-screws or stop-pins, inserted in the holes of the slide-plates of the hood alluded to. *f f* represent upright straps or plates of metal or any other material desired, having their sides bent over in front, or flanged so as to form dovetailed grooves for the slide-plates of the hood to work in. These grooved uprights should be of sufficient length to enable the hood to be moved upward and downward in the grooves any required distance. They are perforated at desired intervals, as shown in the drawing, for the purpose of receiving the thumb-screws or stop-pins, which are intended to stop, fix, and adjust the hood at any point desired. All or any of the parts of this hood can be made of metal, wood, or other desired material.

It is manifest that by the foregoing device, which is simple and cheap, the hood can be moved easily up and down the track or upright plates *f f*, and fixed or adjusted by means of the thumb-screws or stop-pins at any point desired. By properly adjusting this hood to suit the changes of the weather, the violent and eccentric influence of the atmosphere upon the feed-air pipe is prevented, and steady and uniform action thereof is secured. During calm weather the position of the hood is immaterial, but during stormy weather it should descend even with or somewhat below the button of the register or opening of the feed-air pipe.

Claim.

Having thus described my device, what I claim as my invention, is—

The hood D, with its devices for its attachment to the feed air-pipe and its adjustment upon or to the same, as and for the purpose described.

The foregoing is the specification of my invention signed by me this 2d day of January, 1872.

BENTLEY C. BIBB.

Witnesses:

AUG. J. SMITH,
W. H. BAYZAND.