

(No Model.)

H. C. OLSEN & J. B. GOODWIN.
HEAT DEFLECTOR.

No. 555,967.

Patented Mar. 10, 1896.

Fig. 1.

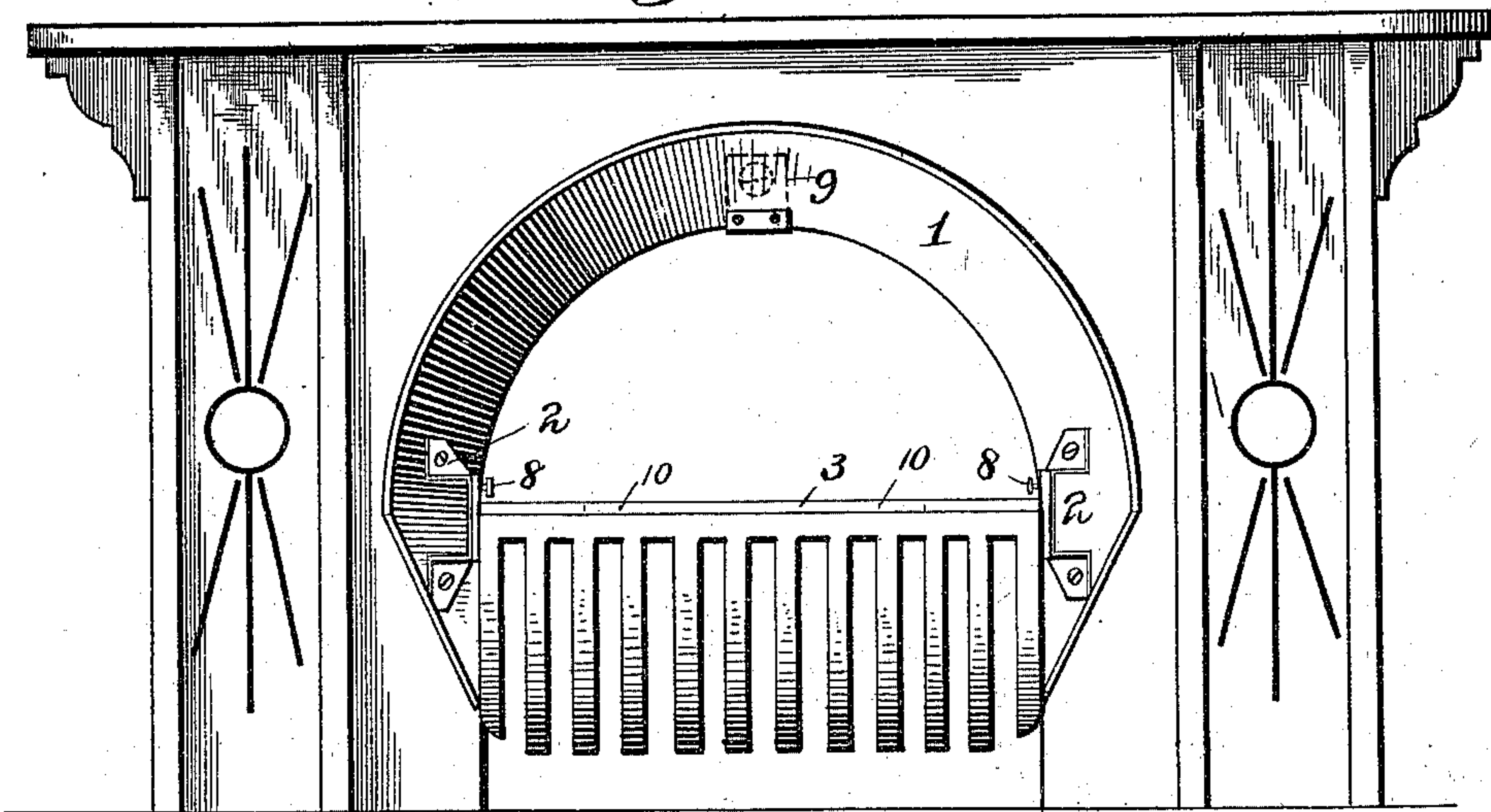


Fig. 2.

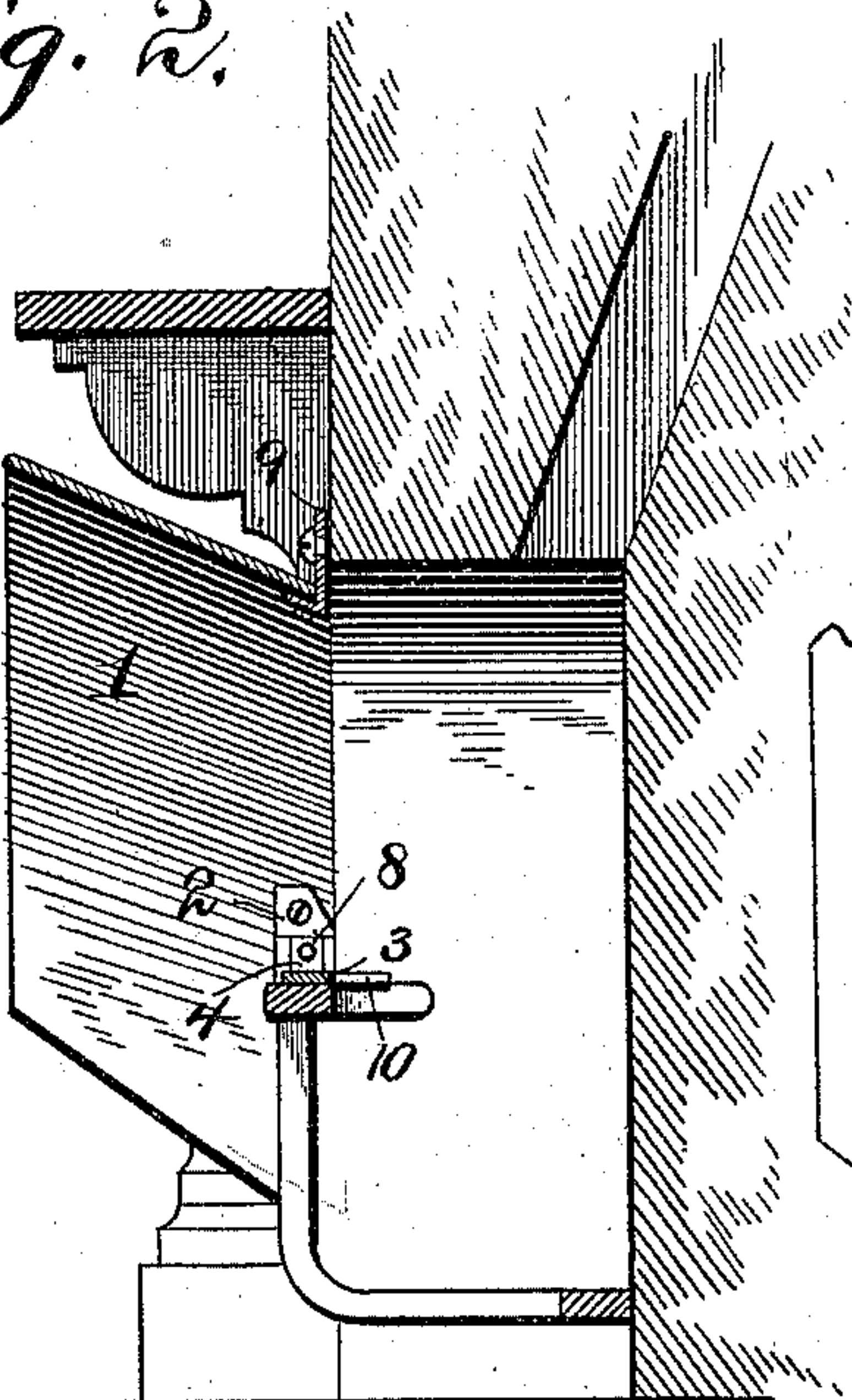


Fig. 3.

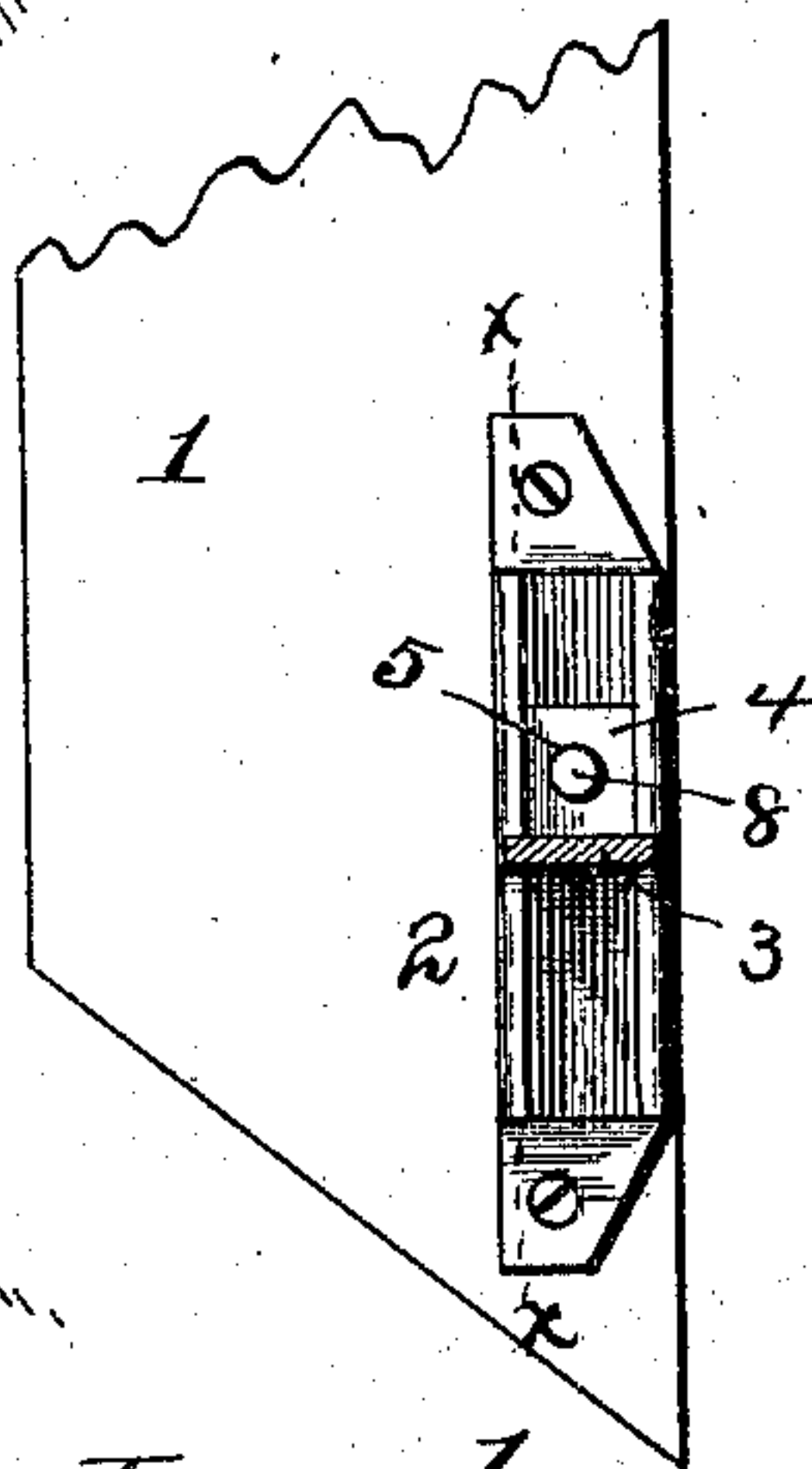
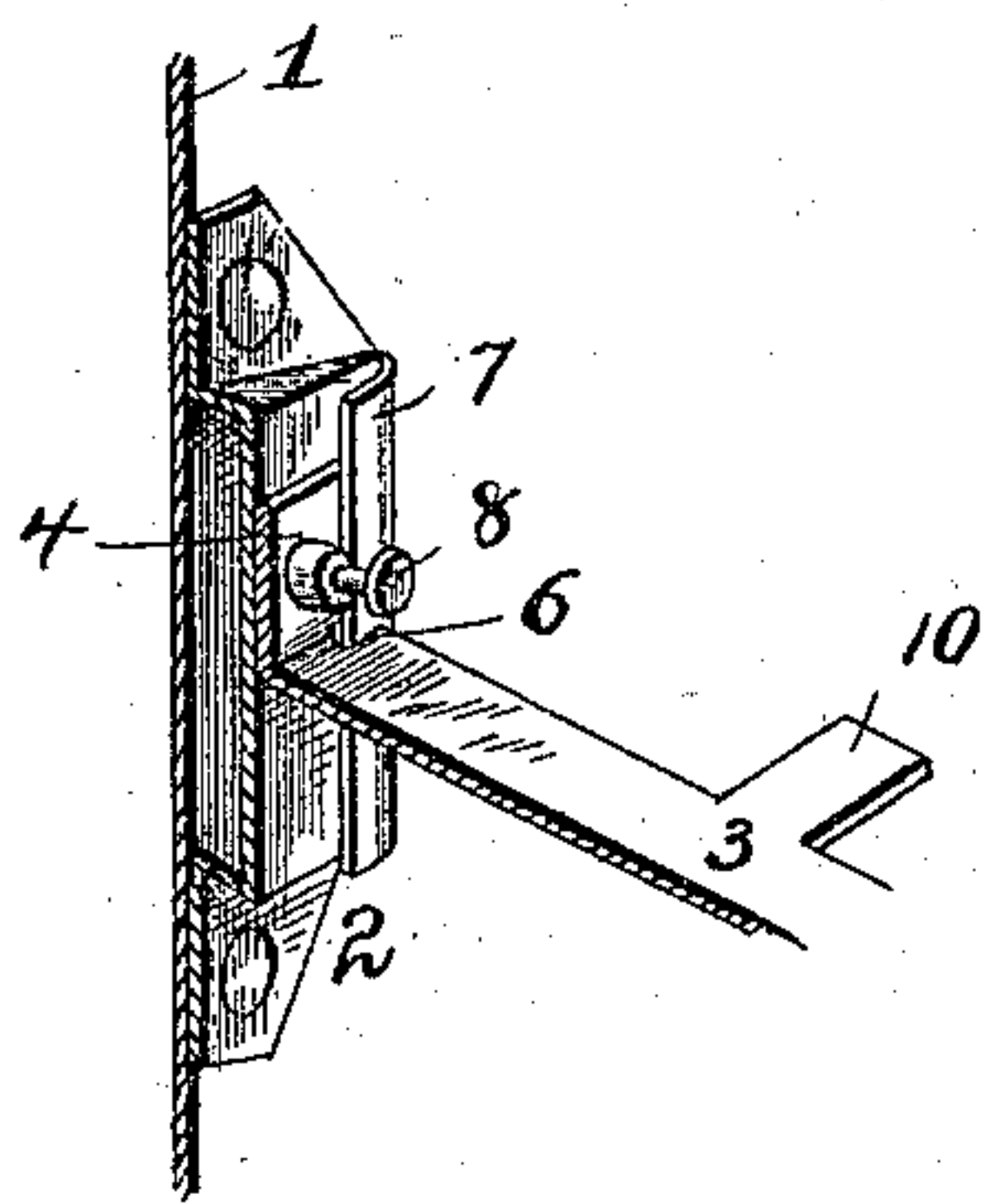


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY C. OLSEN AND JOHN B. GOODWIN, OF PITTSBURG, PENNSYLVANIA.

HEAT-DEFLECTOR.

SPECIFICATION forming part of Letters Patent No. 555,967, dated March 10, 1896.

Application filed January 30, 1895. Serial No. 536,632. (No model.)

To all whom it may concern:

Be it known that we, HENRY C. OLSEN and JOHN B. GOODWIN, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Heat-Deflectors, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in grate attachments, and more particularly to that class known as "heat-deflectors."

The invention has for its object the provision of novel means whereby the heat may be greatly increased where open fires are used.

The invention has for its still further object to design a deflector for open hearths that will be extremely simple in its construction, strong and durable, possessing further advantages in points of cheapness and durability.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts, to be hereinafter more particularly described, and specifically pointed out in the claims.

Referring to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, Figure 1 is a front elevation of our improved heat-deflector. Fig. 2 is a vertical sectional view of the same, showing the device adjusted in position in the grate. Fig. 3 is a detail view of the movable bar operating in guides of the deflector. Fig. 4 is a detail view in perspective of the guide and a section of the bar, taken on the line *x x*, Fig. 3.

In the drawings, 1 represents the deflector proper, which is semicircular in form.

2 2 represent the guides riveted to the interior walls of the deflector, the latter being adapted to receive the cross-bar 3, said cross-bar having its free end bent at right angles, as shown at 4, and provided with apertures 5. Said cross-bar is further provided with notches 6, to operate in the guide. The

guides have outwardly-projecting wings serving as means for fastening the guides to the deflector.

7 7 represent the grate-bars.

8 represents set-screws, which are adapted to fit in the apertures of the cross-bar and operate against the inner walls of the guides.

9 represents an upwardly-extending lug, rigidly attached to the top of the deflector.

10 10 represent lugs attached to the movable cross-bar.

When applying this invention to actual use, the cross-bar will rest on the upper grate-bar and will be adjusted in position vertically, so as to fit the upwardly-extending lug in the rear of the grate-front, the device being then in position for use.

As will be seen, the device will cause the heat to be deflected into the room, thereby producing a greater degree of heat, saving the fuel, and cause the fuel to be consumed more evenly by reason of the additional draft that is caused by the deflector. Furthermore, a uniform heat is produced at all times.

The deflector may be made of any suitable fireproof metal, such as tin-plate, copper, and the like.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of our invention. For example, the deflector may be slightly changed in form so as to be attached to grates having a square front as well as those semicircular in form, and in cases where the grate-bars project a considerable distance the lugs of the movable bar will retain the deflector in proper position.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A heat-deflector consisting of a semicircular hood, vertical guides arranged on either side of the hood and in combination therewith a cross-bar having angular extremities adapted to operate in the guides, and provided with lugs for the purpose described and a set-screw entering apertures in the extremities of the bar and the guide as specified.

2. A heat-deflector, consisting of a semicircular hood provided with vertical guides attached to the inner walls thereof, a cross-bar having its free end bent at right angles
5 adapted to operate in said guides, apertures in the said cross-bar for the reception of the set-screws, all parts being arranged and operating substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY C. OLSEN.
JOHN B. GOODWIN.

Witnesses:

JOHN W. MOORE,
J. M. DEVINNY.