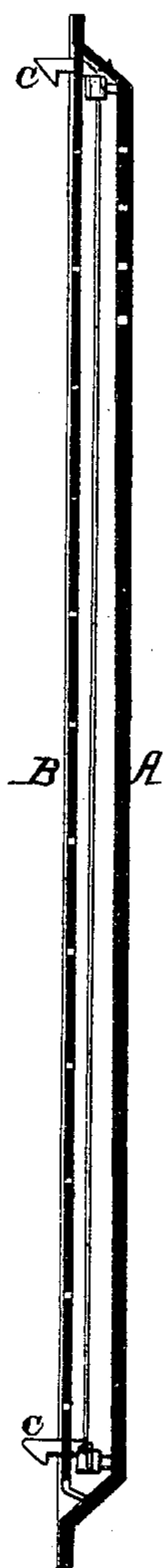


*E. Perkins.*  
*Window Shutter.*

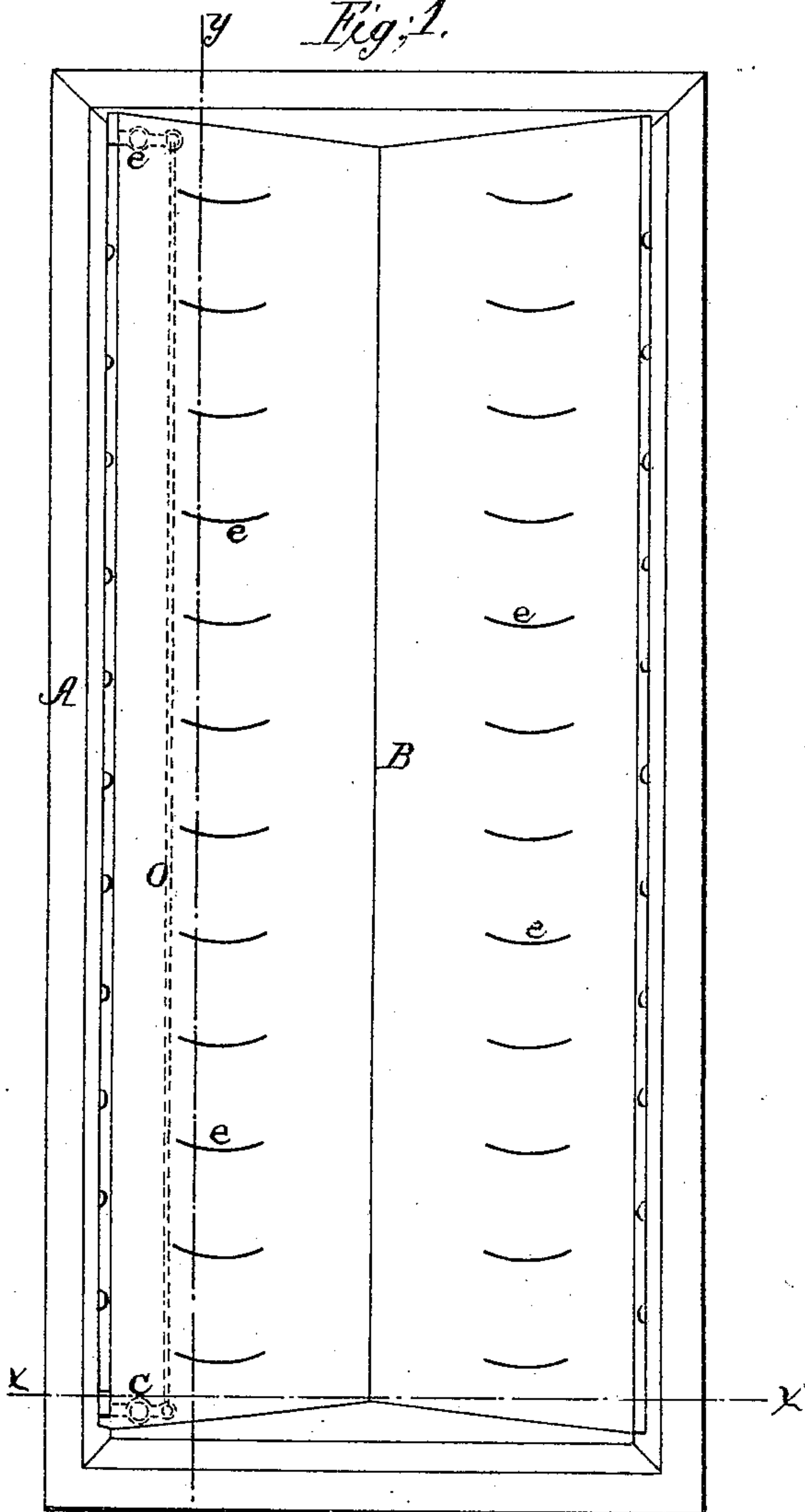
*N<sup>o</sup> 96,723.*

*Patented Nov. 9, 1869.*

*Fig. 3.*



*Fig. 1.*



*Fig. 2.*



*Witnesses;*  
*L. Hailer*  
*W. T. Dodge*

*Inventor;*  
*Eliab Perkins*  
*by Dodge Munn*  
*his attys.*

# United States Patent Office.

ELIAB PERKINS, OF FOND DU LAC, WISCONSIN.

*Letters Patent No. 96,723, dated November 9, 1869.*

## IMPROVED WINDOW-SHUTTER.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, ELIAB PERKINS, of Fond du Lac, in the county of Fond du Lac, and State of Wisconsin, have invented certain new and useful Improvements in Metallic Shutters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My present invention relates to improvements in metallic or fire-proof shutters; and

The invention consists in placing in the interior of the shutter a metallic reflector, to prevent the passage of the heat through the shutter, for the purpose of rendering it more thoroughly fire-proof, as hereinafter more fully explained.

In the accompanying drawings—

Figure 1 is a front elevation of a shutter, with the face-plate removed, to show the reflector;

Figure 2 is a transverse section of the same, on the line *x-x* of fig. 1; and

Figure 3 is a vertical section on the line *y-y* of fig. 1.

This invention is applicable to any metallic shutter or door, but is more especially intended as an improvement on the shutter for which a patent was issued to me on the 15th day of September, 1868. As described in that patent, my shutter was made of two

sheets of metal, made into the form represented by A, figs. 1, 2, and 3, the two plates then being riveted together around their edges.

In order to render the shutters thus made more effectually fire-proof, I take a sheet of bright metal, preferably of tin, and place within the interior of the shutter, as represented by B, in the several figures of the drawing.

This plate B may be left whole, or it may have slits or perforations *e* in it, as shown in figs. 1 and 2, to permit the circulation of air through it.

By placing in the shutter a bright plate, in the manner described, the heat which passes through the outer plate A, instead of being absorbed and transmitted to the inner plate, will be reflected back to the outer plate, more or less, and thus the shutter will be rendered more nearly or effectually fire-proof.

Hooks *c* may be pivoted at top and bottom, inside of the shutter, and connected by a wire or chain, *o*, as shown in dotted lines in fig. 1, for fastening the shutters either closed or open, the hooks projecting through the inside plate, to engage with any suitable fastening, properly located for that purpose.

Having thus described my invention,

What I claim, is—

The reflector B, applied to a metallic shutter, substantially as and for the purpose herein described.

ELIAB PERKINS.

Witnesses:

H. B. MUNN,  
W. C. DODGE.