

W. L. SMITH, Jr.
Illuminating Roof-Plates.

No. 156,954.

Patented Nov. 17, 1874.

Fig: 1.

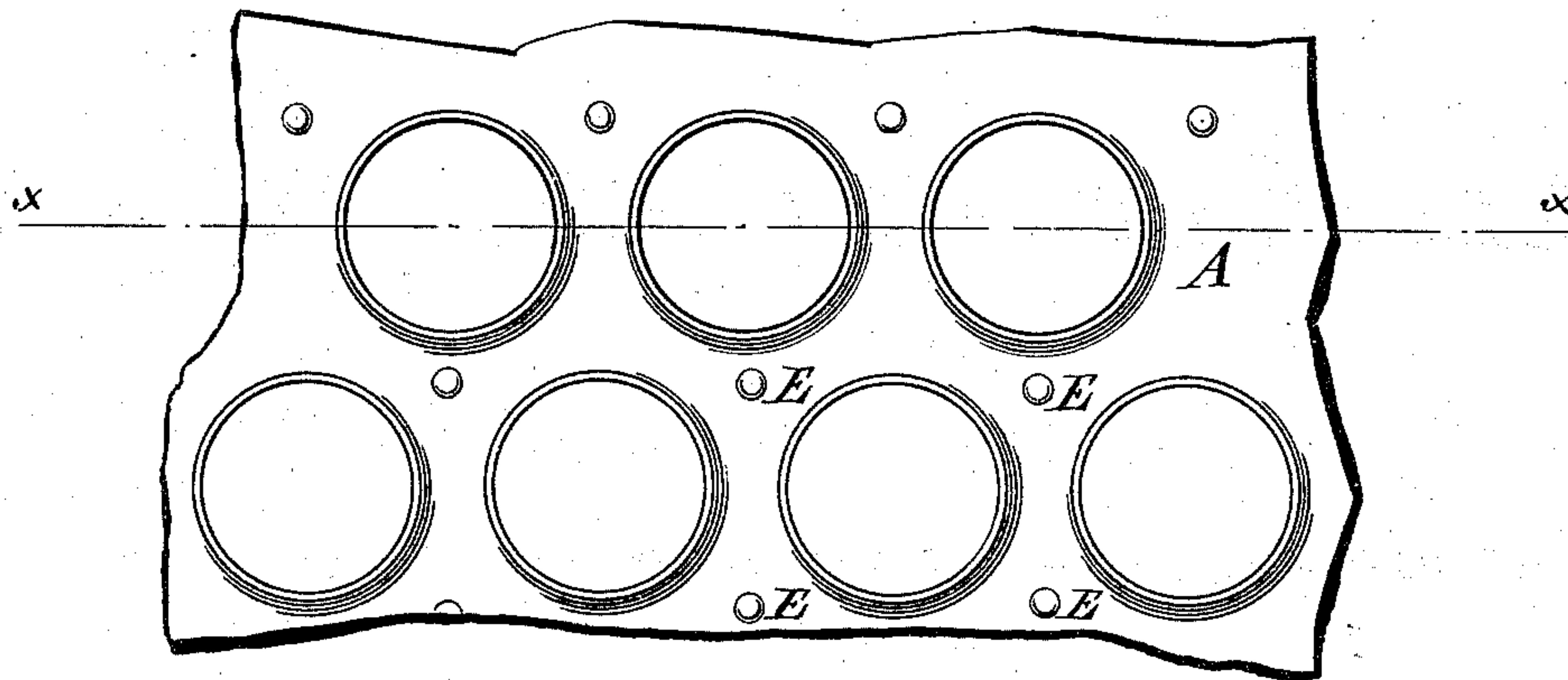


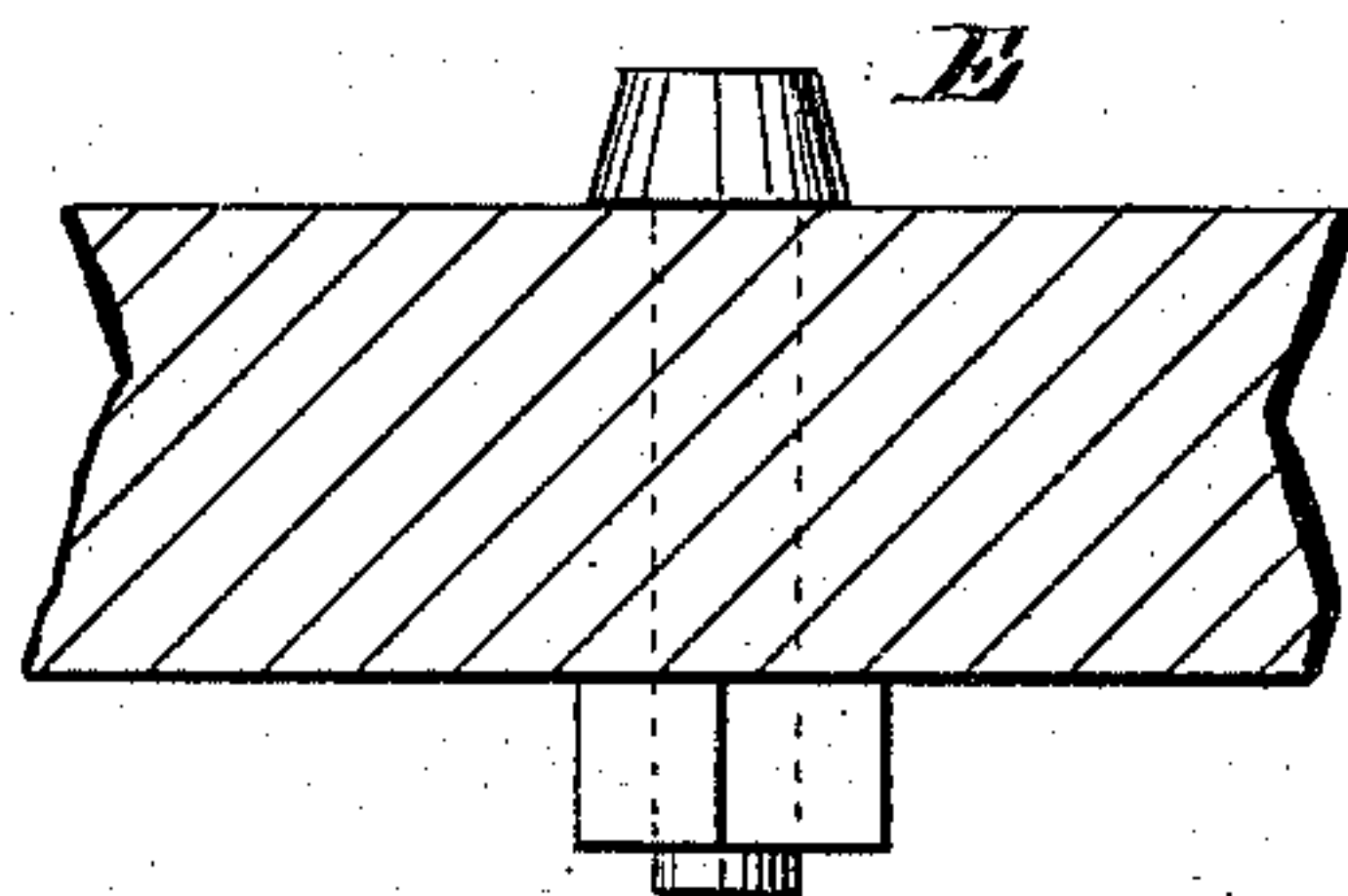
Fig: 2.



Fig: 3.



Fig: 4.



WITNESSES:

Chas. Nida.
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WILLIAM L. SMITH, JR., OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ILLUMINATING ROOF-PLATES.

Specification forming part of Letters Patent No. **156,954**, dated November 17, 1874; application filed September 5, 1874.

To all whom it may concern:

Be it known that I, WILLIAM L. SMITH, JR., of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Illuminating-Tile, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

In the accompanying drawing, Figure 1 is a top view. Fig. 2 is a cross-section of Fig. 1, taken on the line *xx*. Fig. 3 is a cross-section, showing the plates separated. Fig. 4 is a view of my improved guard introduced into a cast-iron vault-light.

Similar letters of reference indicate corresponding parts.

This illuminating tile is made of wrought or malleable iron, or other malleable metal, so as to make it lighter and less liable to break than when made of cast-iron. It also allows of ventilation, and the applying of new guards or protectors for the glass at any time.

In the first place I take a sheet of iron or other suitable metal, A, of sufficient thickness, and form holes, with collars or wings B in it, of a size to suit the glass. C is another sheet, in which holes are made of a size to prevent the glass from falling through, thus forming seats D for the glass to rest upon. The holes in the two sheets are punched, so as to correspond with each other in position, and I then fasten the two sheets together by any suitable means, as bolting, riveting, soldering, or galvanizing.

To allow of ventilation, the two sheets are placed with the collars B, concealed, and so that the sheets are separated by them, as seen in Fig. 3. Instead of forming the collars on one of the sheets, the collars may be made separate, and placed between the sheets of either wrought or cast metals.

E represents the guards for the glass, and they may be made of rivets, bolts, or screws. Guards made in this manner may be applied to old vault-lights that are worn off smooth, to afford a foothold and prevent slipping.

Illuminating-tiles constructed in this manner may be applied to a variety of purposes. It is light, and adapted for roofs and all similar fixtures, as well as sidewalks and vault-lights, and many other purposes.

For purposes of ventilation corrugated iron may be used, but in ordinary cases flat sheets put together, as described, with collars on one, will answer the desired purpose.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of two wrought-metal and connected sheets, A C, having glass seats D and collars B, constructed substantially as shown and described.

WM. L. SMITH, JR.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.