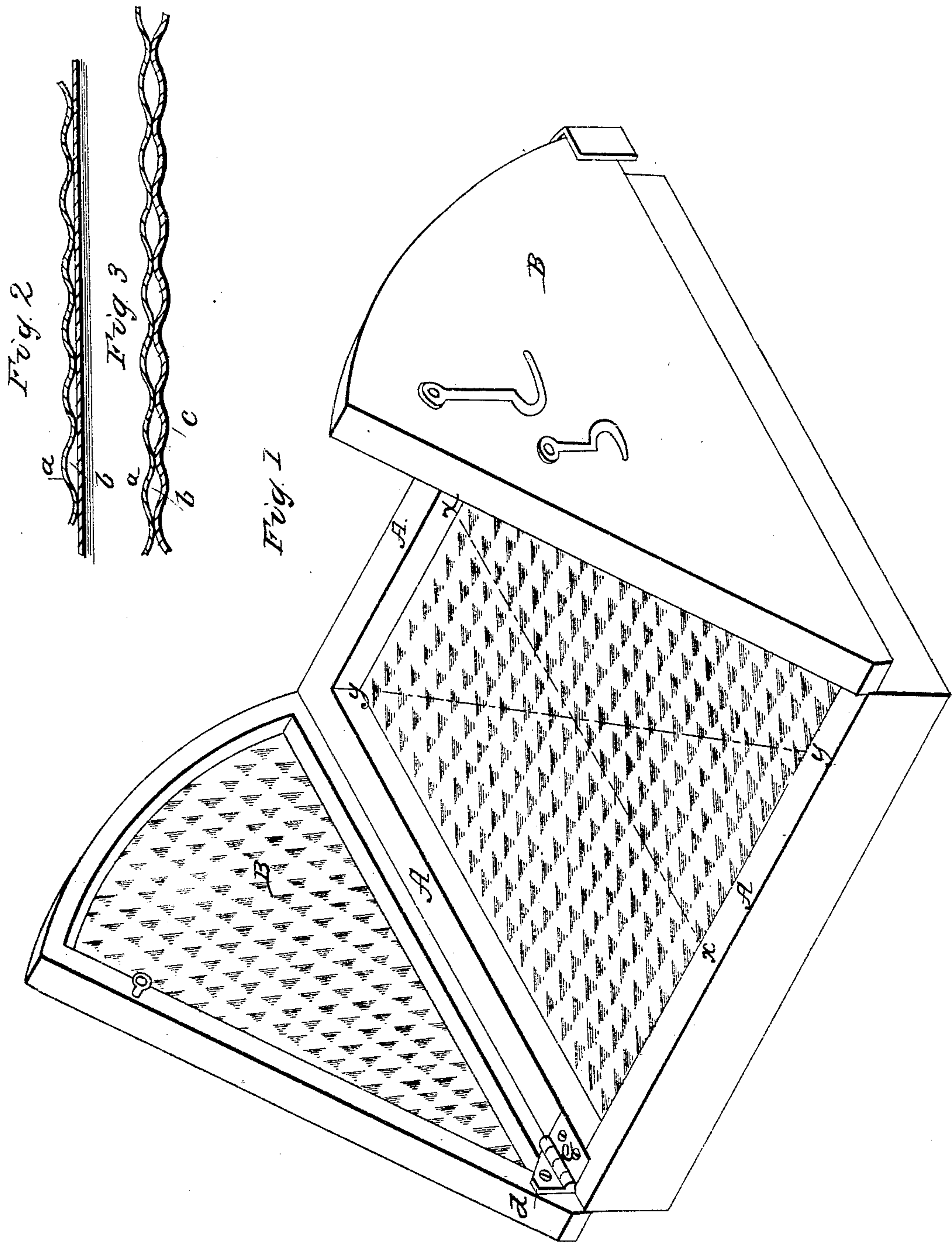


E. R. PICHLER.

Reflector.

No. 16,451.

Patented Jan. 20, 1857.



UNITED STATES PATENT OFFICE.

EMIL R. PICHLER, OF BOSTON, MASSACHUSETTS.

REFLECTOR FOR VAULTS.

Specification of Letters Patent No. 16,451, dated January 20, 1857.

To all whom it may concern:

Be it known that I, EMIL R. PICHLER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Daylight-Reflectors for Vaults, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1, represents a perspective view of one of my reflectors. Fig. 2, represents a section taken through the red line x, x , of Fig. 1, and, Fig. 3, represents a section taken through the red line y, y , of Fig. 1.

The nature of my invention relates to a reflector made of glass, and having double corrugations in it so made, as to break up, and soften the rays of light reflected by it, and shed a more pleasant, and less glaring light, into the vault, cellar, or other dark apartment.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents a frame of wood, or metal in which, are set two plates of glass in such manner as to represent the diamond-formed surface shown in the drawings, which are produced by crossing the corrugations in the glass, either at right angles, or at any other angle, or inclination that will effect a similar purpose, viz: give to the reflecting surface the appearance of diamond-shaped plate. A simple method of making these double corrugations is as follows: Take two glass plates a, b , Figs. 2, 3, which have straight parallel grooves or depressions in them, and so arrange the two plates that the corrugations in one shall stand at an inclination, or at right angles to the other, and you have the effect at once of double corrugations, when in reality the plates have only single corrugations in them. The reflecting surface, or silvered surface as it is

termed, is behind the second glass—as represented by the blue line at c Figs. 2 and 3. A straight section through the reflector as at x, x , Fig. 1, would show the corrugations in only one viz. the plate a ; but a diagonal section at the line y, y , of Fig. 1, will show the corrugations of each plate as in Fig. 3. I make no claim to the kind of reflecting surface I use, for it may be of tin foil, (which I prefer), or of any other of the well known materials used for a similar purpose, and properly protected from damp, &c.

To the sides of the frame A, I connect wing reflectors B, also protected in a frame, and made in all its essentials like the main frame. These side reflectors, show also the double corrugations, as in the main reflector. The object of the side reflectors, is to throw back the lateral rays onto the main reflector, and thus direct them into the vault or passage to be lighted. And in order to make these side reflectors more available, they are pivoted at d , to a hinge attached to the main frame A, and working on said pivot may be made to show more or less reflecting surface, and throw, to a greater or less extent, the rays of light back onto the main reflector, or allow them to escape laterally if desired.

Having thus fully described the nature of my invention, I would state that I am aware that glass plates with single corrugations have been used. I do not claim such plates but

What I do claim is—

The so arranging of the glass plates herein described in a frame or frames, as to have the appearance and effect of double corrugations—when said plates are backed by any reflecting material as herein set forth.

E. R. PICHLER.

Witnesses:

JOHN A. DREW, Jr.,
JNO. W. EMERSON.