

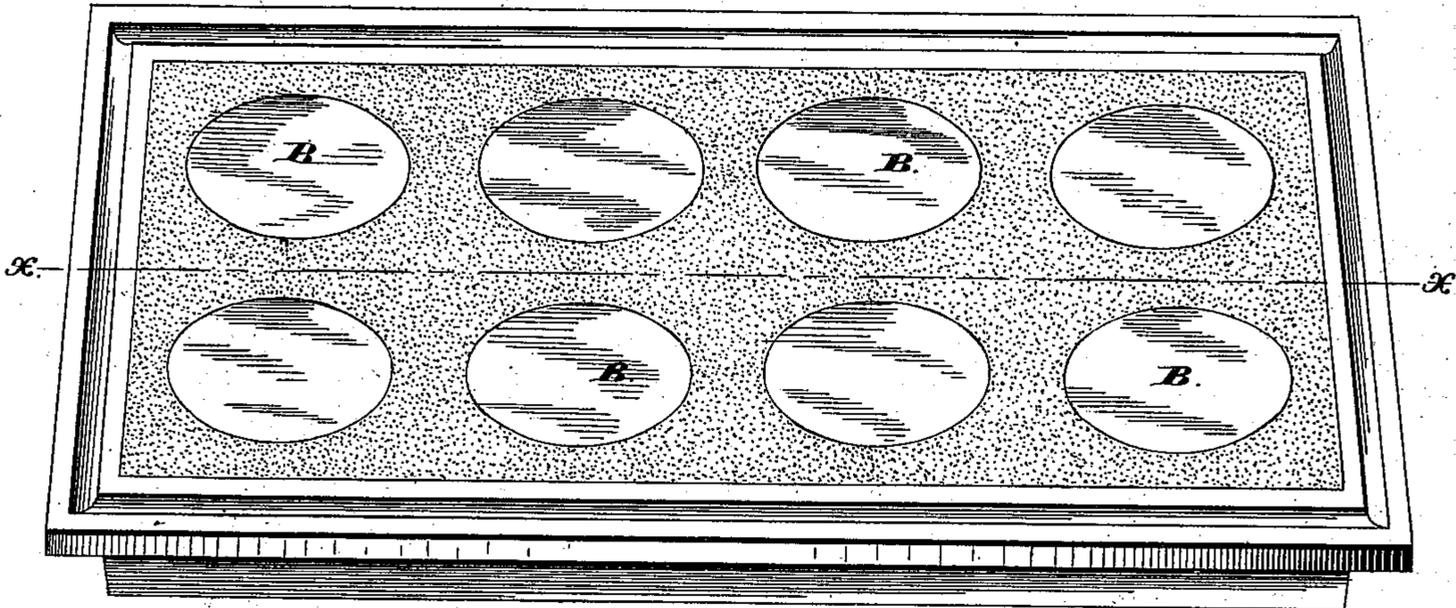
(No Model.)

J. JACOBS.  
ILLUMINATING TILE.

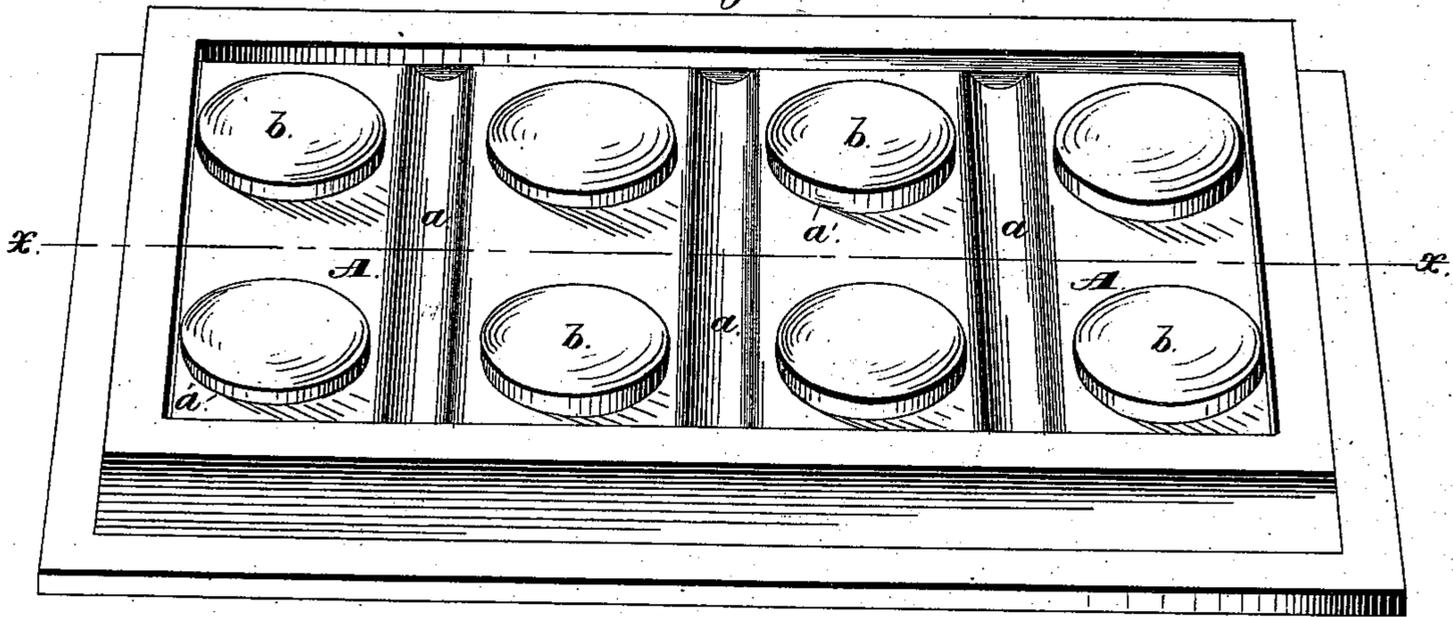
No. 377,939.

Patented Feb. 14, 1888.

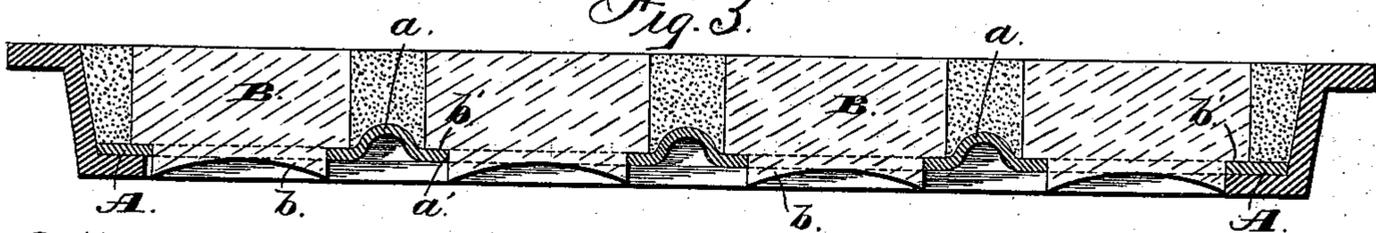
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
Jas. E. Hutchinson  
Henry C. Hazard

Inventor:  
Jacob Jacobs, by  
Crindle and Russell, his Attys

# UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

## ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 377,939, dated February 14, 1888.

Application filed February 16, 1884. Serial No. 120,985. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB JACOBS, of New York city, in the county of New York and in the State of New York, have invented certain new and useful Improvements in Illuminating-Tiles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the upper side of my improved tile separated from its supporting-frame. Fig. 2 is a like view of the lower side of the same, and Fig. 3 is a vertical section through a row of lenses.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable illuminating-tiles to be more easily and cheaply constructed than has heretofore been practicable; and to this end it consists, principally, in an illuminating-tile composed of a corrugated sheet-metal bottom provided with lens-filled light-openings, in combination with a superimposed body of cement which fills the space between and around said lenses, substantially as and for the purpose hereinafter specified.

It consists, further, in a vault or area cover composed of a supporting-frame containing one or more tiles, which are each constructed from a corrugated sheet-metal bottom provided with lens-filled light-openings, and a superimposed body of cement which fills the space between and around said lenses, substantially as and for the purpose hereinafter shown.

In the construction of my tiles I take a sheet of metal, A, and provide it with corrugations or ribs *a*, that are arranged in parallel lines and at suitable distances from each other, and between such corrugations form light-openings *a'*, which correspond in size and shape to the like features of the glass lenses B to be used. Each lens B has such form of its lower end, *b*, as to adapt the same to be contained within one of the openings, *a'*, and immediately above said part is provided with a shoulder, *b'*, which bears upon the upper side of the plate A and operates to hold said lens in vertical position.

Said shoulder may be formed by the enlargement of the entire upper portion of said lens, or by means of a radial flange, as desired. After the lenses B are in place the space between and around the same is filled with plastic cement and the same permitted to harden before use of the tile. When said cement has become sufficiently hard, the tile is found to possess all needed strength and rigidity, and to be capable of any use to which illuminating-tiles are adapted.

While my tile may be constructed separately and then placed within its supporting-frame, I usually prefer to construct it in place, and in such event secure the bottom plate, A, firmly to said frame and afterward apply the lenses and cement.

I am aware that it is not new to use a corrugated sheet-metal plate provided with curved light-openings containing lenses, and that lenses have heretofore been secured in place upon a metal plate by cement which extended to and was flush with their upper ends, and therefore do not claim such constructions broadly.

I am also aware that an illuminating-tile composed of a metal plate provided with glass-covered or filled light-openings and having a superimposed body of cement around the lenses is old, and therefore do not claim the same broadly.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. An illuminating-tile in which is comprised a metal base that has upwardly-curved parallel ribs or corrugations with intervening plane horizontal portions that are provided with light-openings, lenses placed within or over such openings and resting upon the adjacent plane portions of the base, and cement placed upon said base around and between the lenses and flush with their upper ends, so as to form a walking-surface which is composed wholly of glass and cement, substantially as and for the purpose specified.

2. A vault or area cover composed of a supporting-frame that contains one or more tiles, each of which consists of a metal base that has upwardly-curved parallel ribs or corruga-

tions, with intervening plane portions that are provided with light - openings, lenses placed within or over such openings and resting upon the adjacent plane portions of the base, and  
5 cement placed upon said base around and between the lenses and flush with their upper ends, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of January, A. D. 1884.

JACOB JACOBS.

Witnesses:

GEO. S. PRINDLE,  
HENRY C. HAZARD.