(Model.)

J. JACOBS.

ILLUMINATING GRATING.

No. 265,090. Patented Sept. 26, 1882.

Fig. 1.

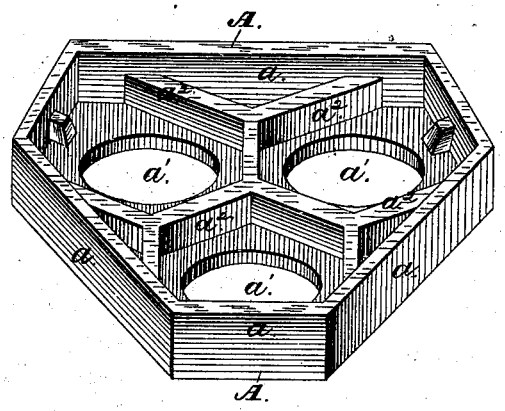
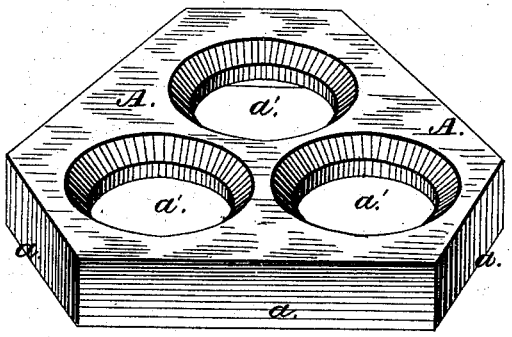


Fig. 2.



WITNESSES:
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INVENTOR.
Jacob Jacobs, by
Geo. B. Prindle, his Atty

UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

ILLUMINATING-GRATING.

SPECIFICATION forming part of Letters Patent No. 265,090, dated September 26, 1882.

Application filed October 13, 1880. (Model.)

To all whom it may concern:

Be it known that I, JACOB JACOBS, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Illuminating-Gratings; 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, and Fig. 2 is a like view of the lower side of the same.

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

The design of my invention is to secure a maximum of strength by use of a given weight of metal, and to enable a larger number of illuminating-lenses to be placed in a given area than has heretofore been practicable, to which end it consists in an illuminating-grating having its face recessed for the reception of a non-slippery filling, provided with light-openings which are arranged in rows, and the openings of contiguous rows "dodged," and having between said openings vertical intersecting flanges, which are each arranged at right angles to the radius of two of the same, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents a metallic plate, having any desired size or horizontal shape, and provided around its edge with a vertical flange, *a*. Within the plate or grating A are provided a number of light-openings, *a'*, which are arranged in rows, and the openings of contiguous rows dodged or caused to alternate, by which arrangement said openings are brought closely together and are all equidistant from the adjacent openings. Between each pair of openings *a'* is provided a flange, a^2, which is cast upon and extends upward from the grating A, and is arranged at a right angle to the radius of each opening. Each flange a^2 intersects at each end with two other flanges, except that such flanges as are adjacent to the outer flange or rim, *a*, are connected at their outer ends with the latter. The flanges a^2 perform the double office of strengthening the plate or grating A to resist downward pressure, and of guides for the lens to be placed over each opening *a'*, and they may be made flush with the flange *a*, so as to form part of the walking-surface of the completed grating or tile; or they may have their upper edges below said flange and be covered entirely with and hidden by plastic material. It is believed that there is no other form in which a given quantity of metal can be fashioned that will insure an equal amount of vertical strength in a tile or grating.

I am aware that gratings have before been used in which the light-openings have been dodged and the upper recessed surface has been filled with a non-slipping filling, and therefore do not claim such features.

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

An illuminating-grating having its face recessed for the reception of a non-slippery filling, provided with light-openings which are arranged in rows, and the openings of contiguous rows dodged, and having between said openings vertical intersecting flanges, which are each arranged at right angles to the radius of two of the same, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of September, 1880.

JACOB JACOBS.

Witnesses:
D. G. BEECHING,
MICHAEL A. KOFFMAN.