

No. 634,054.

Patented Oct. 3, 1899.

P. BRIGANTI.
ILLUMINATING TILE.
(Application filed Jan. 5, 1899.)

(No Model.)

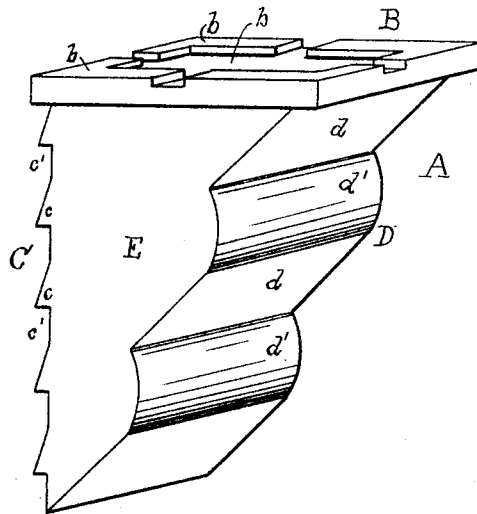


Fig: 1.

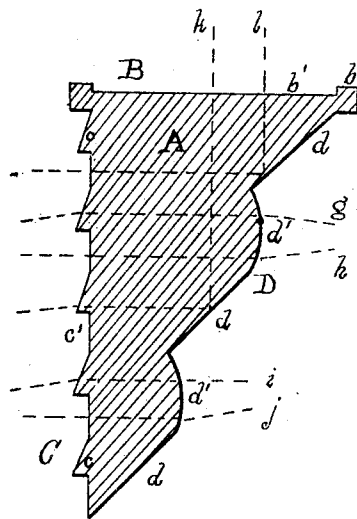


Fig: 2.

WITNESSES

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ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 634,054, dated October 3, 1899.

Application filed January 5, 1899. Serial No. 701,202. (No model.)

To all whom it may concern:

Be it known that I, PASQUALE BRIGANTI, a citizen of the United States, residing in the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Illuminating-Tiles, of which the following is a specification.

My invention relates to improvements in illuminating-tiles, and especially to tiles for illuminating basements and cellars.

The object of my invention is to produce an increased illumination, and I accomplish this by the peculiar formation of the tile described in this specification and by employing a number of these tiles incased in a suitable frame.

Another object is to produce a tile that is protected from injury. The frame containing the tiles may be set in the sidewalk or other similar place where a large amount of daylight is present, and by suitably constructing the tiles in accordance with the following description the light incident upon the frame may be directed to any desirable place within the frame.

I shall first describe a tile embodying my invention and then point out the novel features in the claims.

In the drawings, Figure 1 is a perspective view of a tile embodying my invention. Fig. 2 is a vertical section of the same, showing its action upon light-rays.

Similar letters of reference are used to designate corresponding parts in both figures.

A represents the body of the tile, which may be made of glass. It has an upper surface B, which is preferably rectangular, although I desire not to confine myself to that form. This upper surface B has a raised portion or border *b*, the function of which is to protect from wear and injury a sunken portion *b'*, which latter is flat and smooth and forms the main entrance for the light-rays. The raised portion may be employed in connection with a frame to support the tile.

A front surface C of the tile, which I prefer to make perpendicular to the top B, but do not confine myself thus, may be provided with a number of prismatic ribs *c*, which may

be in any number or size, depending upon the particular use made of the tile, or they may be omitted, if desirable. *c'* represents a plane surface alternating with the prisms *c*.

Opposite to the face C of the tile and extending also from the top B downward is a back surface D. This back surface is composed of inclined faces *d*, alternating with the upright surfaces *d'*, which latter surfaces may be plane, but are preferably cylindrical, and they afford an entrance for rays of light from the rear, such as *g*, *h*, *i*, and *j*, which may come from another source of light or from the next tile behind. The inclined surfaces *d* serve as mirrors and reflect forward the entering rays, as *k* and *l*. These rays, together with those from the rear, *g*, *h*, *i*, and *j*, strike the interior of the surface C and are deflected upward or downward to any desired extent, depending upon the form of the prism *c*. The rays passing through the surface *d'* will, with the construction shown, converge upon entering the tile. It will be seen that the effect of a series of these tiles will be to take a large portion of the entering light and project it forward and downward in a manner desirable for a cellar or basement.

E represents the side of the tile, which may be flat, as it has no particular function. In arranging the tiles this face is placed parallel and adjacent to the corresponding face of the next tile.

What I claim as my invention is—

1. In an illuminating-tile the combination of an upper surface for admitting rays of light to said tile; a rear surface composed of alternate inclined portions for reflecting forward said rays, and upright portions for admitting rays to said tile from the rear thereof; and a front surface provided with horizontal prismatic ribs, substantially as described.

2. In an illuminating-tile the combination of an upper surface for admitting rays of light to said tile, said upper surface provided with elevated strips for the protection thereof; a rear surface composed of alternate inclined portions for reflecting forward said rays, and upright portions for admitting rays to said tile from the rear thereof; and a front surface, substantially as described.

3. In an illuminating-tile the combination
of an upper surface for admitting rays of light
to said tile; a rear surface composed of alter-
nate inclined portions for reflecting forward
5 said rays, and upright portions for admitting
rays to said tile from the rear thereof; and a
front surface, substantially as described.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

PASQUALE BRIGANTI.

Witnesses:

H. COUTANT,
D. CAMPBELL.