

J. FREUND.

TILE.

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979,280.

Patented Dec. 20, 1910.

Fig. 1.

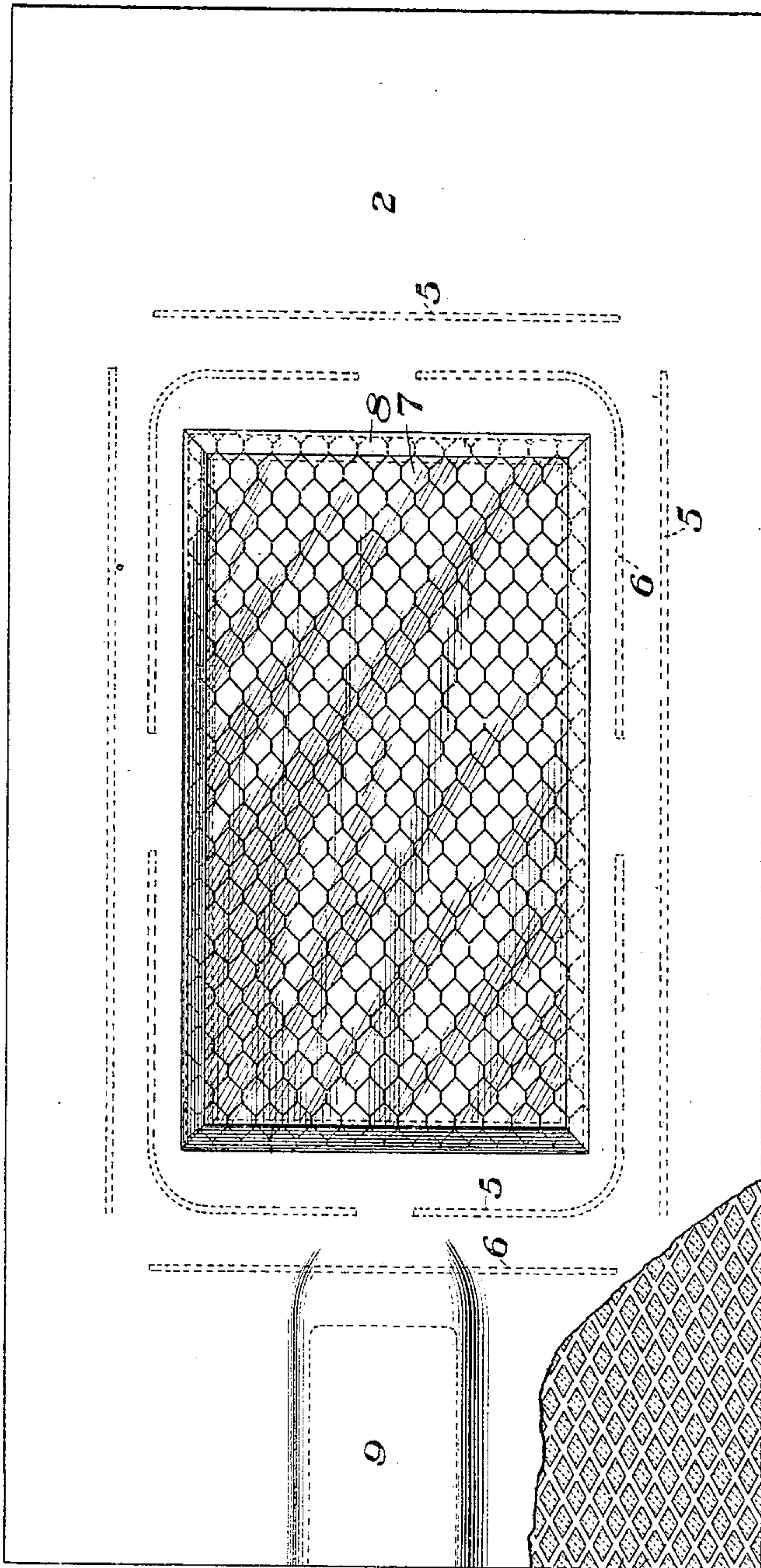
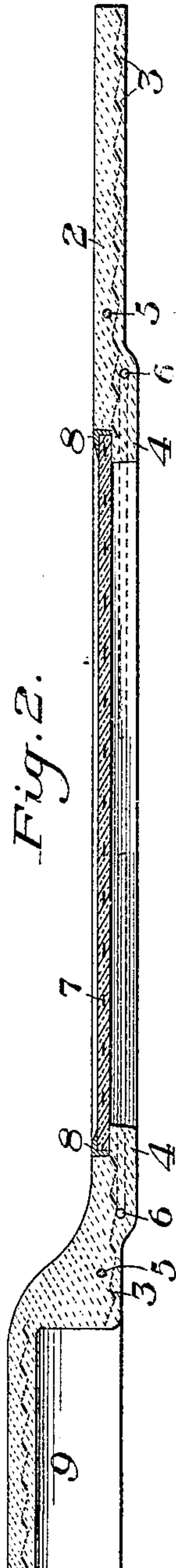


Fig. 2.



WITNESSES

R. A. Balderson
Walter Famariss

INVENTOR

Joseph Freund
by Nathan Brown & Barnette
his attys

UNITED STATES PATENT OFFICE.

JOSEPH FREUND, OF ST. LOUIS, MISSOURI.

TILE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH FREUND, of St. Louis, Missouri, have invented a new and useful Improvement in Tiles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of my improved tile partly broken away; and Fig. 2 is a central longitudinal section of the same.

My invention relates to that class of tiles which contain plates of glass or translucent material.

The object of the invention is to prevent cracking and breaking of such tiles owing to unequal expansion and contraction of the glass and tile material, and also to provide a simple, cheap and effective construction.

In the drawings, 2 represents the tile, which may be of clay or any suitable material, and which is preferably formed about a reinforcing fabric 3 of expanded metal, wire mesh or similar material. The central portion of the tile is left open, and is preferably thicker than its outer portion, as shown at 4, this thickened portion preferably containing metal strengthening rods. I have shown two series of these rods, the outer ones 5 are preferably straight and extend substantially parallel with the edges of the opening. The inner set of wires 6 are preferably bent around the corners of the opening; both sets being embedded in the tile material. Around the opening the tile is recessed to form a ledge, this ledge preferably being of greater dimensions than the sheet of glass to be inserted. The glass, which may be wire glass, as shown at 7, is laid on the ledge, and is secured within the opening by surrounding cement or holding material 8, which is preferably somewhat elastic, to allow expansion and contraction. I have shown the tile as provided with a raised channel or rib portion 9 in one end portion thereof, this also containing expanded metal or reinforcing mesh; but the shape and size

of the tile is not material in my broad invention.

The advantages of my invention result from the use of the reinforcing wires or rods, and from the particular manner of securing the glass.

Changes may be made in the form and arrangement of the parts without departing from my invention.

I claim:—

1. As a new article of manufacture, a tile having an opening therein, a reinforcing bead surrounding said opening, a plate of translucent material secured therein, angular strengthening rods or wires in the tile adjacent to the opening for the translucent plate, each of said wires being adjacent to two sides of the opening; substantially as described.

2. As a new article of manufacture, a tile having an opening, a plate of translucent material secured therein, angular strengthening rods or wires in the tile adjacent to the opening for the translucent plate, each of said rods being adjacent to two sides of the opening, and a second set of strengthening rods adjacent to the first set of rods, each of the last set of rods overlapping the ends of two of the other rods; substantially as described.

3. A roofing tile having an opening therein, a reinforcing bead surrounding said opening, a plate of translucent material secured therein, angular strengthening rods or wires in the tile, the ends of each of said rods being adjacent to two sides of the opening, and a second set of strengthening rods, each of said rods of the second set lying adjacent to one side of the opening, and overlapping the ends of two of the first set of rods; substantially as described.

In testimony whereof, I have hereunto set my hand.

JOSEPH FREUND.

Witnesses:

A. CRUMP,
C. A. GAPEN.