No. 850,273. PATENTED APR. 16, 1907.

G. B. STAPLES.

TILE OR STAIR TREAD.

APPLICATION FILED MAR. 24, 1905. RENEWED MAR. 21, 1907.

Fig. 1.

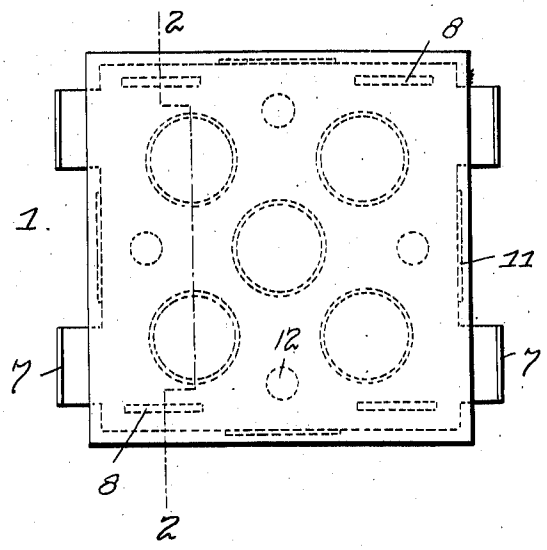


Fig. 2.

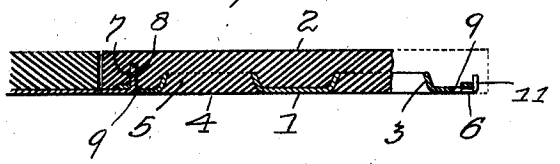


Fig. 4.

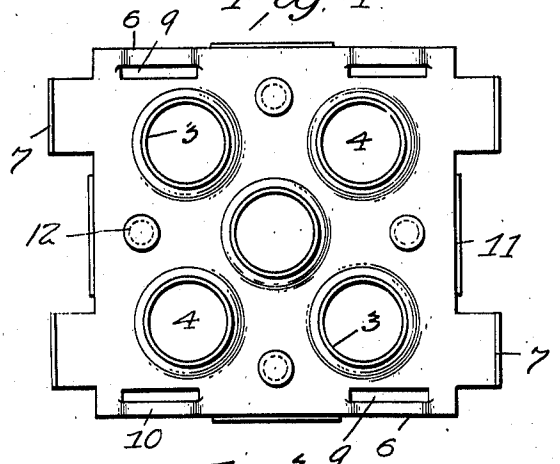
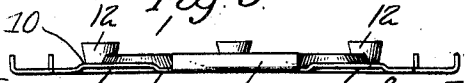


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE B. STAPLES, OF PHILADELPHIA, PENNSYLVANIA.

TILE OR STAIR-TREAD.

No. 850,273. Specification of Letters Patent. Patented April 16, 1907.

Application filed March 24, 1905. Renewed March 21, 1907. Serial No. 363,746.

To all whom it may concern:

Be it known that I, GEORGE B. STAPLES, a citizen of the United States, residing at Philadelphia, Pennsylvania, have invented certain new and useful Improvements in Tiles or Stair-Treads, of which the following is a specification.

My invention relates to improvements in tiles for flooring or for stair-treads or other purposes, and comprises a sheet-metal plate faced with rubber or other composition, which composition is held in place by projections on the sheet-metal plate extending into the composition facing.

The invention consists in the features and combination and arrangement of parts hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the tile embodying my invention, and Fig. 2 is a sectional view of the same on line 2 2 of Fig. 1 with a part of the adjacent tile. Fig. 3 is a side view of the foundation-plate. Fig. 4 is a plan view of the foundation-plate with the composition facing removed.

The tile is made up of a foundation-plate 1, of sheet metal or other suitable material, faced with a composition of rubber or other appropriate material, as indicated at 2. The sheet metal is struck up at various points (indicated at 3) to form conical projections, spurs, or rings, which provide perforations, as at 4. In forming the tile, the plate prepared with these perforated projections or edges is placed in position and the rubber composition is applied thereto, so that in addition to covering the surface of the plate and the projections or edges formed thereon the said composition will pass down through the perforations in the projections, as indicated at 5, so as to underlie the said projections, down to the lower face of the plate. This securely holds the composition to the metal, and in addition to this the said composition finds a rest or support upon the surface to which the tile is applied, and thus furnishes a resilient tread or tile, the resilient material of which extends from the floor up through the metal plate to the top face of the tile. The base or foundation plate of metal is preferably formed with its outer edges upturned, as at 11, though I do not limit myself in this respect, and when so formed the composition material extends above the plane of these edges.

The tile as above described is intended for use in the manner set forth in my application, Serial No. 228,371, filed October 13, 1904, with which locking-tongues and recesses are combined so that the adjacent tiles may be locked together.

In the application referred to I show a metallic foundation-plate having the composition or other facing thereon, the metal foundation having thereon the interlocking tongues and the recesses to receive said tongues being formed in parts of the composition facing which overhangs indented portions of the foundation-plate. In my present construction I embody the features just mentioned, though in a modified form. Instead of cutting the metal entirely away to form the indents in the present case I leave the edge portion of the metal, but press it up out of the horizontal plane of the body of the plate, as at 10. This provides an indent at 6, for the reception of the tongue 7 on the adjacent tile, the upturned end of said tongue passing up into the recess 8, formed in the overhanging portion of the composition facing. My present method of forming the indent provides an opening through the foundation metal or plate at 9, through which the upturned end of the tongue on the adjacent tile extends vertically. This provides a stronger construction than that described in my former application, for while in both cases I provide an indent to receive the tongue on the adjacent tile I provide in the present case a bridge piece or margin 10, extending over the indent and behind which the end of the tongue locks.

I do not wish to limit myself to the precise form of the parts extending up into or through the composition on the face of the plate.

I may use tapered wearing-pins, such as shown at 12, attached to the foundation.

I claim as my invention—

1. A tile comprising a foundation-plate having an indented side and a facing material overhanging the indented side, the indented side of the foundation-plate being bridged by a part of the metal of said plate leaving an opening for a locking-tongue to pass up therethrough, substantially as described.

2. A tile comprising a foundation-plate having an indented side and a facing material overhanging the indented side, the indented side of the foundation-plate being

bridged by a part of the metal of said plate leaving an opening for a locking-tongue to pass up therethrough, said opening extending up into the facing material, substantially as described.

3. A tile having a foundation-plate and a facing material applied thereto, said facing material having a recess in its under face and a foundation-plate having an opening therethrough registering with the said recess to receive a locking-tongue, substantially as described.

4. A tile comprising a foundation-plate having an indented side and a projecting tongue and a facing material overhanging the indented side and provided with a recess to receive a tongue said indent being bridged by a part of the metal plate leaving an opening for the tongue of an adjacent tile to pass up through, substantially as described.

5. A tile having a foundation-plate and a facing material applied thereto, said foundation-plate having an opening formed therethrough to receive the tongue of an adjacent tile and having a tongue to engage the opening of an adjacent tile, substantially as described.

6. A tile having a foundation-plate and a facing material applied thereto said facing material having a recess in its under face and the foundation-plate having an opening therethrough registering with the said recess and a tongue on the plate to engage the opening and recess of an adjacent tile, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE B. STAPLES.

Witnesses:
J. WALTER DOUGLASS.
THOMAS M. SMITH.