L. J. D. HEALY.

TILE.

APPLICATION FILED NOV. 23, 1921.

1,437,304. **Patented Nov. 28, 1922.**

Fig. 3

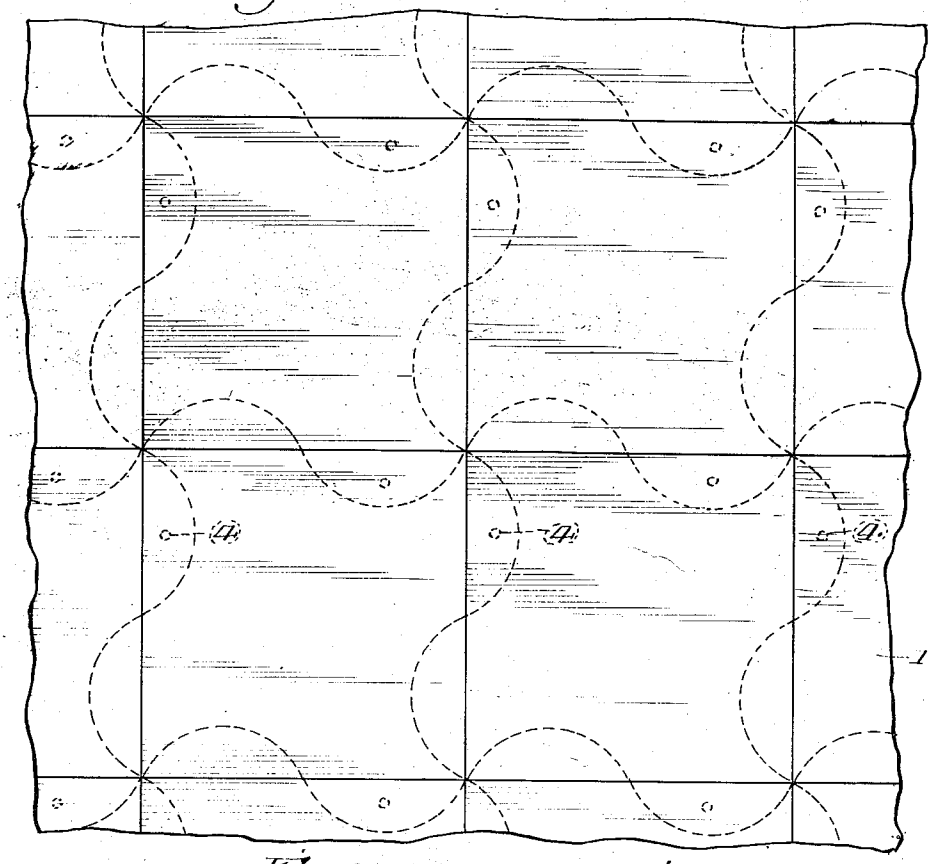


Fig. 1

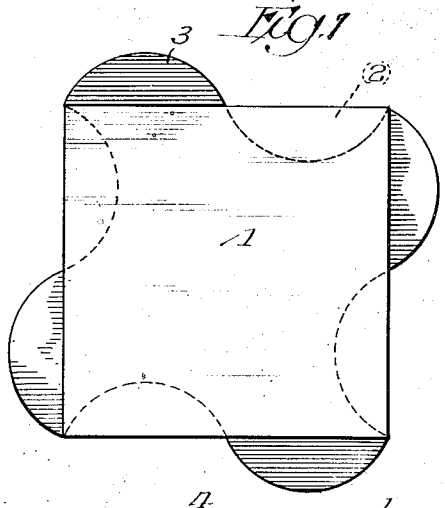


Fig. 2

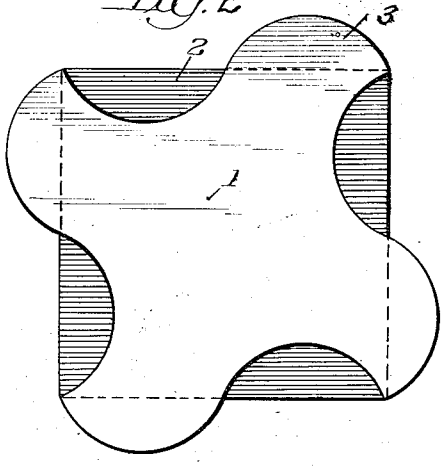




Fig 4

Inventor

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By Edwin B. H. Lowe Jr Atty.

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UNITED STATES PATENT OFFICE.

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TILE.

REISSUED

Continuation of application Serial No. 490,038, filed August 5, 1921. This application filed November 23, 1921. Serial No. 517,249.

To all whom it may concern:

Be it known that I, LEON J. D. HEALY, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented new and useful Improvements in Tiles, of which the following is a specification.

This invention relates to a tile, such as employed for covering a floor or wall.

Among the objects of the invention is to provide a resilient interchangeable interlocking tile which will readily adapt itself to the surface to be covered, which is firmly held in place and in which the interlock is concealed.

This application is a continuation of application Serial No. 490,038, filed August 5, 1921.

The views of the drawings are:

Fig. 1 is a top plan of the floor or wall covering unit;

Fig. 2 is a bottom plan thereof;

Fig. 3 is a top plan of a section of floor covering made up of interchangeable interlocking units;

Fig. 4 is a transverse vertical section on line 4—4 of Fig. 3.

The floor or wall covering unit, as illustrated in the drawings, is made of flat, square units. The units or tiles may, of course, be made in other forms.

The tile may be made of a composition of rubber and glue although any other ingredients which will make a resilient tile may be employed. The particular composition, however, forms no part of the present invention.

The floor covering comprises a flat square resilient tile 1, having in each edge thereof a recess or depression 2 open to the bottom of the tile. The depth of the recesses or depressions is less than the thickness of the tile itself.

Each edge of the tile is also provided with a corresponding projection 3 formed thereon; the thickness of the projection being less than the thickness of the tile and substantially the same as the depth of the recess or depression 2.

The length of the depressions and projections are substantially the same, the length of each being substantially one-half that of the tile.

The width of the depressions and projections are substantially the same. Thus, when the projection of one tile is received within the depression of another unit arranged adjacent thereto, the edges of the units will register and the edge of the projection will fit snugly within the depression.

The bottom surfaces of the projections and of the floor covering unit are in the same plane, so that when laid on a floor or wall the bottom surface of the unit and its projections lies flat thereon.

Thus the tile has a lower portion in which the interlocking recesses and projections are formed, and an upper portion which covers the interlocking projections and recesses. The upper and lower portions have substantially the same area, so that when the tiles are laid a firm resilient covering without pockets is formed.

The continuous edge of the recess and projection on each side of the lower portion of the tile, as illustrated, is substantially sinusoidal or S-shaped.

In order that each tile may be held in place on the floor or wall which it covers, nails or screws 4, or other fastening means, may extend through the projections and into the floor or wall.

After one tile has been securely fastened to the floor or wall, another tile may be arranged alongside thereof so that the projection thereof enters the recess or depression of the tile already fastened to the floor, and the projection of the tile already fastened to the floor fits into the recess or depression of the tile being arranged in place.

Ordinary when laying the tiles on the wall or floor fastening means are provided for only two of the projections of each tile, as the other two projections of the tile being arranged in place must be inserted in corresponding recesses or depressions of adjacent tiles already laid and fastened.

Thus, when laying the tiles from left to right, no fastening means would be provided for the projections on the left and upper edges, while if laying the tiles from right to left, no fastening means would be provided for the projections on the right and upper edges of the tile, assuming that the upper projection is inserted within the recess or depression of one of the tiles of a layer already laid.

As the floor or wall covering tiles are be-

ing laid, the edges of adjacent tiles may be cemented together so as to prevent water or other liquid finding its way down through any cracks between adjacent tiles and under the floor covering.

Figure 3 shows a section of floor or wall covering made up of tiles like those shown in Figures 1 and 2.

It will be noted that the exposed surface of the floor covering units entirely covers the projections and cooperating recesses which form the interlocking means for the floor or wall covering units.

Therefore, the surface of the floor covering which is exposed is free from any projections by means of which there might be a tendency for the tile to be displaced.

While the drawings show the tiles as having plain upper surfaces, any desired form of raised or depressed design might be provided therefor.

The depressions 2 are of equal size and the projections are of equal size, each projection being adapted to fit the depression of any tile.

Thus, when laying the floor or wall covering units any of the edges of any tile may be placed adjacent the edges of the tiles already laid. Thus the time and expense of laying the floor covering is reduced.

By providing on each edge a projection extending for substantially half the length of the edge and forming a complemental depression extending throughout the other half, an interchangeable interlocking tile is obtained, wherein the interlocking means extends substantially the entire distance of the periphery of the tile. The shape of the projections is such that the projections of a tile being laid may be inserted readily into the depressions of the tiles already fastened to a surface being covered thereby.

Such interlocking means extending throughout the periphery of the tile insures that each tile will be held more firmly against the surface covered thereby.

Any tendency for the tiles to buckle or warp is thus reduced.

The invention contained herein is of course susceptible of other embodiments and adaptations.

The invention claimed is:

1. A flat resilient tile having an upper portion whose straight edges are substantially normal to the surface thereof, and a lower portion provided with projections on the sides thereof and recesses therein for receiving the projection of adjoining tiles, the upper and lower portions being of substantially the same area.

2. A flat resilient tile having an upper portion whose straight edges are substantially normal to the surface thereof, and a lower portion provided with a projection on each side thereof extending substantially one half the length thereof and a complemental recess in each side occupying the remainder of the length thereof, the recesses being adapted to receive the projections of adjoining tiles whereby such projections are entirely covered by the upper portion of the tile.

3. A flat resilient tile having an upper portion whose straight edges are substantially normal to the surface thereof, and a lower portion having throughout the length of each side thereof a substantially sinusoidal edge one lobe of which is located under the upper tile portion and forms a recess and the other lobe being located beyond the boundary of upper tile portion and forming a projection to fit within a recess of an adjoining tile.

4. A flat resilient tile having a square upper portion whose edges are substantially normal to the surface thereof, and a lower portion having along each side thereof an S-shaped edge one lobe of which is located under the upper tile portion and forms a recess and the other lobe being located outside the boundary of the upper tile portion and forming a projection to fit within a recess of an adjoining tile, the upper and lower portions being of substantially the same area.

5. A flat resilient tile having an upper portion whose straight edges are substantially normal to the surface thereof, and a lower portion provided with projections on the sides thereof and complemental recesses therein for receiving the projections of adjoining tiles, the projections being adapted to have means extended therethrough to fasten the tile to a surface to be covered thereby, the projections and fastening means being covered by the upper portions of adjoining tiles.

In witness whereof, I have hereunto subscribed my name.

LEON J. D. HEALY.