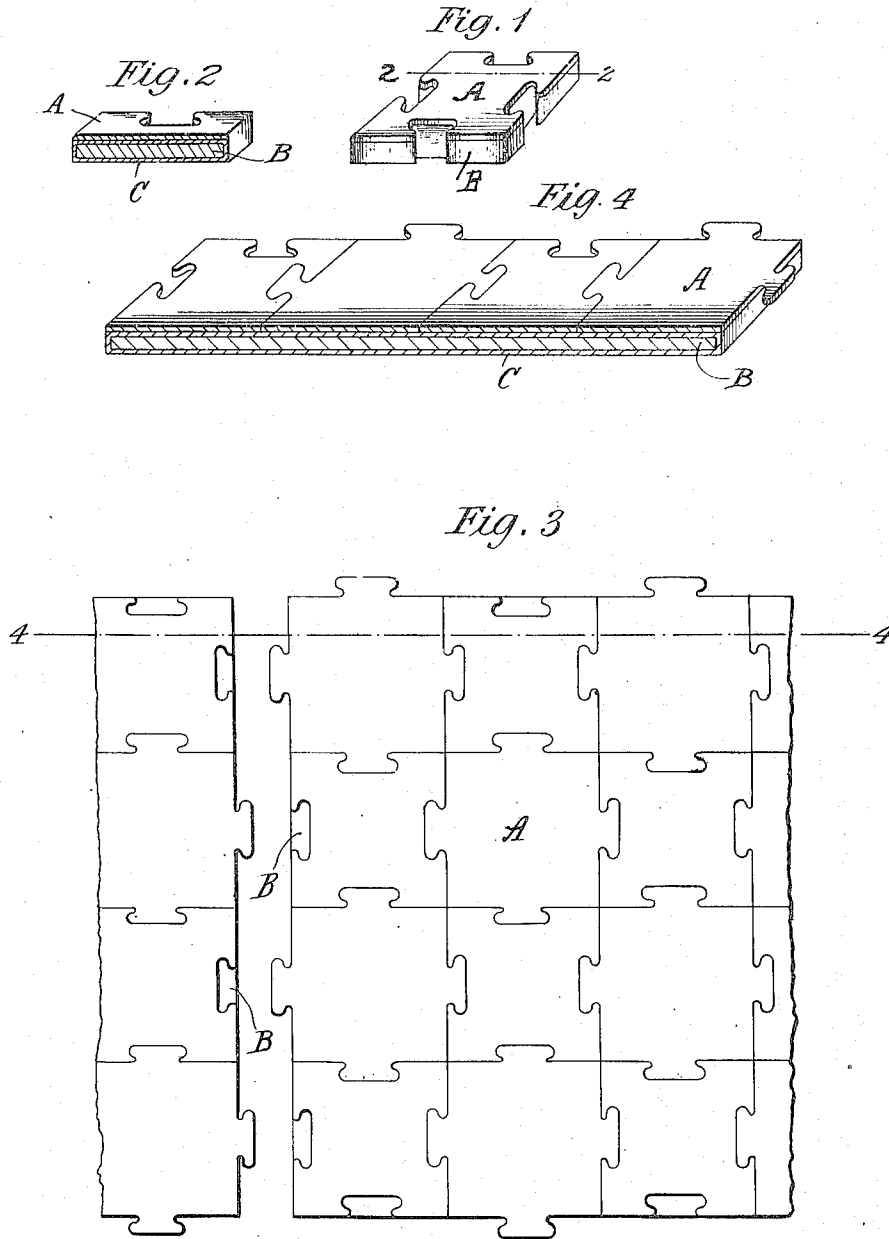


E. HOPKINSON.
FLOOR COVERING.
APPLICATION FILED SEPT. 23, 1911.

1,158,051.

Patented Oct. 26, 1915.



Witnesses:
B. V. Mohau.
Geo. Rengel.

Inventor
Ernest Hopkinson

UNITED STATES PATENT OFFICE.

ERNEST HOPKINSON, OF EAST ORANGE, NEW JERSEY.

FLOOR-COVERING.

1,158,051.

Specification of Letters Patent.

Patented Oct. 26, 1915.

Application filed September 23, 1911. Serial No. 650,908.

To all whom it may concern:

Be it known that I, ERNEST HOPKINSON, a citizen of the United States, and a resident of East Orange, in the county of Essex, State of New Jersey, have invented certain new and useful Improvements in Floor-Coverings, of which the following is a full, clear, and exact description, reference being had to the drawings accompanying this specification.

The present invention relates to floor coverings and has for its object to provide a floor covering which shall present a slightly wearing surface, and which at the same time shall be capable of withstanding, in an efficient manner, the wear to which floor covering is subjected, and at the same time be cheap.

Another object of the invention is to provide in such a cheap floor covering, a surface simulating that of solid rubber tiles.

In accomplishing my object, I make tiles of thin rubber or linoleum, and preferably of the usual shape in which interlocking rubber tiles have been made. The thin tiles which I use constitute a pliable, elastic surfacing material which I secure, preferably by cement, to a relatively inelastic, non-pliable and rigid backing or support which is preferably either of waterproof material, or material which is coated so as to render it waterproof.

The floor covering of rubber tiles now in use is made of individual tiles of a very substantial thickness (approximately $\frac{3}{8}$ of an inch), so that the tiles constituting the floor covering must have a presentable and slightly surface and at the same time must be inherently strong enough to lie flat and be self-supporting. The rubber compound of which such tiles are made is very expensive, and therefore a floor covering of solid rubber tiles is prohibitive in price except for very expensive structures.

My invention provides a floor covering which has the appearance of solid rubber tiling and has abundant wearing qualities for use in all locations where the wear is not of the heaviest, such as kitchens, bath-rooms, etc., in dwelling houses. I have found that tiles of sheet rubber $\frac{1}{16}$ of an inch may be cemented or otherwise secured to a rigid support such as tar paper, preferably of about $\frac{1}{4}$ inch thick will give the most satisfactory service for domestic purposes, or in fact, in any location where the floor covering

is not subjected to extraordinary wear. I prefer to make the tiles in the shape of the usual interlocking tile, but it is evident that this is not essential. Again, instead of using a substance like tar paper of the thickness specified, I may use an equivalent such as ordinary cardboard coated with a rubber cement or similar material, to render the backing waterproof.

I also prefer to make the backing material in large sheets and cover the surface with individual tiles, but it will be apparent that the backing material may be also made in tile form.

In the drawings Figure 1 shows in perspective an individual tile made up of an individual surface tile and an individual tile of backing material; Fig. 2 is a view in cross-section along the line 2—2 of Fig. 1; Fig. 3 is a plan view showing a plurality of tiles of surfacing material secured to a sheet of backing material, this view showing portions of two sheets of backing material whose surfaces are covered with individual tiles, and illustrating how the male members of one sheet come opposite the female members of another sheet for engagement; Fig. 4 is a view partially in cross-section and partially in perspective, of a structure such as illustrated in Fig. 3, and taken along the line 4—4 of that figure.

In the drawings like letters of reference refer to like parts.

Referring to the drawings in detail, A designates the surfacing material which is preferably formed of thin rubber in the usual form of interlocking tiles. This surfacing material of rubber is, relatively to the backing material, pliable and elastic. B designates the backing material which may be of stiff cardboard or other cheap material, and as shown in the drawings, is provided with a coating of rubber cement or similar material C in order to render it waterproof. This backing material may be, however, of a substance impregnated or saturated with a material rendering it as a whole, waterproof. Such a substance would be tar paper or board built up to the requisite thickness and rigidity. I have used tar paper or tar board with very good results. Whatever the backing material may be, it should be, relatively to the surfacing material, inelastic and non-pliable and of such thickness and rigidity as to form an efficient support for the surfacing material.

In practice I prefer to take a large sheet of backing material and cover the sheet with a plurality of tiles of surfacing material. Some of the tiles along the edges of the sheet have portions projecting beyond the edge of the backing material and designed to lap over the joint of the backing material and be secured to a contiguous sheet, so that the joints in the backing material are not evidenced on the surface.

What I claim as new is:

1. A floor covering comprising a backing of comparatively thick material formed in sections, a coating of water-proofing material covering the upper surface of the sections, and a comparatively thin covering superimposed upon and secured to each of said backing sections composed of interlocking sections and provided with projections and recesses extending respectively beyond and within the edges of the backing section, the said backing section serving as bottom walls for the recesses, the extensions and recesses upon the respective edges of said backing section being adapted to engage complementary recesses and extensions of an adjacent section to maintain the two sections against lateral displacement and to aid in securing a flush upper surface along the contacting edges of the sections.

2. A floor covering comprising a backing of comparatively thick material formed in sections, a coating of water-proofing material covering the upper surface of the sections, and a comparatively thin covering superimposed upon and secured to each of said backing sections composed of interlocking sections and provided with dovetailed

projections and recesses extending respectively beyond and within the edges of the backing section, the said backing section serving as bottom walls for the recesses, the extensions and recesses upon the respective edges of each backing section being adapted to engage complementary recesses and extensions of an adjacent section to maintain the two sections against lateral displacement and spreading and to aid in securing a flush upper surface along the contacting edges of the sections.

3. A floor covering comprising a backing of comparatively thick, inelastic, rigid, fibrous material, formed in sections, a coating of water-proofing material covering the upper surface of the sections, and a comparatively thin rubber covering superimposed upon and secured to each of said backing sections composed of interlocking sections and provided with projections and recesses extending respectively beyond and within the edges of the backing section, the said backing section serving as bottom walls for the recesses, the extensions and recesses upon the respective edges of each backing section being adapted to engage complementary recesses and extensions of an adjacent section to maintain the two sections against lateral displacement and to aid in securing a flush upper surface along the contacting edges of the sections.

In witness whereof I hereunto affix my signature in the presence of two witnesses, this 22d day of September, 1911.

ERNEST HOPKINSON.

Witnesses:

ANNA BERGER,
B. V. MOHAN.