

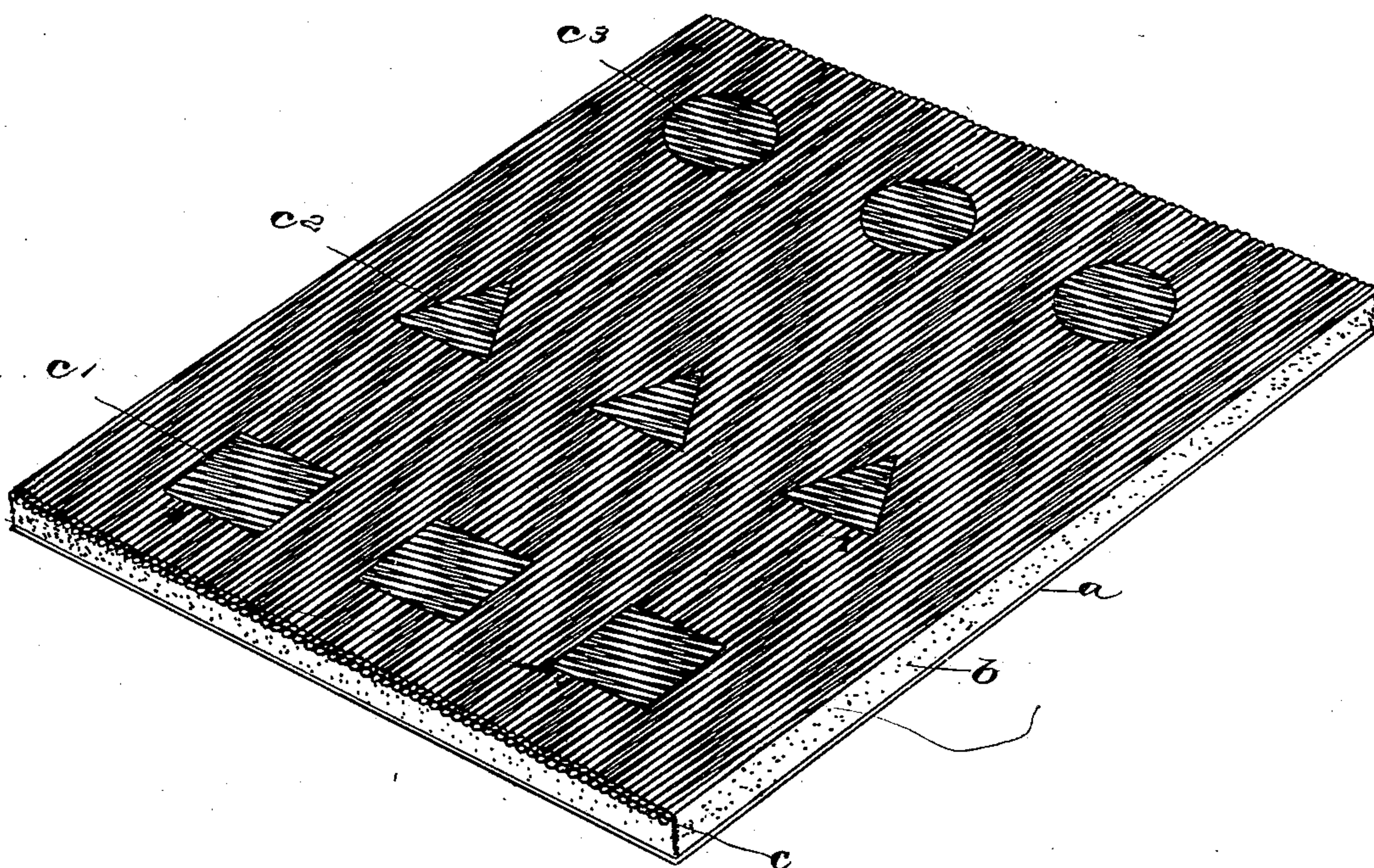
No. 656,162.

Patented Aug. 21, 1900.

E. BERLINER.  
FLOOR COVERING.

(Application filed Dec. 5, 1899.)

(No Model.)



witnesses:  
J. M. Fowler Jr.  
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# UNITED STATES PATENT OFFICE.

EMILE BERLINER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## FLOOR-COVERING.

SPECIFICATION forming part of Letters Patent No. 656,162, dated August 21, 1900.

Application filed December 5, 1899. Serial No. 739,232. (No specimens.)

*To all whom it may concern:*

Be it known that I, EMILE BERLINER, a citizen of the United States, and a resident of Washington, District of Columbia, (whose post-office address is No. 1717 P street north-west,) have invented a certain new and useful Improvement in Floor-Coverings, of which the following is a specification.

My invention has reference to improvements in floor-coverings designed to take the place of carpet or matting, and more particularly to that class which consists of mattings backed with a linoleum paste or other adhering material which fixes the fiber of the matting, such as covered by my Patent No. 621,316, dated March 21, 1899.

The object of my invention, specifically stated, is to produce such a floor-covering which shall be more ornamental than those commonly in use and in which the ornamentation shall partake of a geometrical character. To this end I take a matting of any commercial form—such as straw or grass matting—and I back it with linoleum or other pasty material which is plastic when originally applied, but which becomes elastic when seasoned. As the manner of doing this has been fully described in my previously-mentioned patent, it need not be again described at this point. It will be sufficient to observe that by backing the matting with a paste which becomes elastic when seasoned the backing is intimately joined with the matting, passing into the interstices thereof and holding the fibers together and against displacement. In accordance with my present invention I produce from such a backed matting a highly-ornamented matting by a process which is at once cheap and effective. To this end I remove from the backed matting above described pieces of suitable shape, it being most expedient to remove such pieces by a punch. Such pieces may have the shape of squares, circles, triangles, or polygons, so long as they fit into the aperture from which they have been cut in more than one position. The character of my invention will become plain when I say that the pieces which have been removed from the backed matting are replaced in the apertures from which they have been removed or other like apertures, but in a new position. Thus if a

square has been punched out from the backed matting it will be replaced in a square orifice, but turned around a quarter of a turn. The fibers of the matting which will now fill the aperture will therefore be at right angles to those in the surrounding body of the matting. Should a triangle have been removed from the backed matting, it will be replaced after having been turned through an angle of one hundred and twenty degrees. If a polygon has been removed, it will be replaced after having been turned through a corresponding number of degrees. Thus I may produce all kinds of geometrical designs. I may make a matting which is filled with displaced squares, the squares themselves forming a geometrical design. I may construct a matting in which the displaced pieces are all polygons of a given number of sides, or I may, as shown in the drawing, construct a matting in which triangles, squares, and circles are combined in the same structure. After the process so far described has been carried out the parts are further secured by being fastened to an additional backing, which is preferably of pasteboard, but which may be of some strong textile material. Any cement may be used to secure the pasteboard backing to the linoleum or other pasty backing on the matting; but, if preferred, the pasteboard backing may be applied to the pasty backing and united thereto before the same has dried.

The drawing shows a piece of matting constructed in accordance with my invention.

The matting C has had cut from its squares C' triangles C<sup>2</sup> and circles C<sup>3</sup>. These parts have been replaced in a displaced position into apertures from which they have been cut or like apertures. In consequence the grain of the pieces runs at an angle to the grain of the body of the matting. The backing of linoleum or other pasty material is indicated at *b*. The backing of pasteboard or the like is indicated at *a*.

It will be noticed that my invention makes it possible to produce a matting with an almost infinite variety of patterns. By uniting the linoleum or pasty backing with the matting before punching the pieces therefrom there will be no danger of having the ends of the fibers of the matting which are made



by the punching process fray out or become displaced. The pasty backing holds all these fibers in a fixed position and unites them solidly, just as if they were not woven from a number of strands. These pieces can therefore be punched out and the punched pieces be handled with about the same ease as could punched pieces of leather or any other solid material. They can be replaced in a displaced position into the apertures of the matting without any danger of producing a frayed appearance at the edges. They may also be replaced before the linoleum or pasty backing of the matting is dry, in which case the entire pasty backing of the matting can be caused to unite under the entire under surface of the matting by rolling the same or subjecting it to pressure.

While I have given linoleum as one of the materials which I may use for the backing, it is to be understood that this is only by way of example and that many other materials will answer my purpose as well.

Instead of removing the pieces from a matting and inserting them into the apertures of the same matting from which they have been cut, I may take two mattings of different colors or carrying different surface designs. I may thereupon remove pieces of like shape from each of these mattings and insert the pieces which have been removed or punched from the matting of one color or design into the apertures formed in the matting of the

other color or design, and vice versa. The effect will thus be produced either by the differing colors of the inserted pieces in the body of the matting or by different directions of the grains in these parts, or by both. The displacement of the pieces in the apertures is then brought about by the transposition of the pieces from one matting to the other and not necessarily by the rotation of the piece within its aperture to give the fibers a different direction.

What I claim is—

1. A floor-covering composed of matting backed by a material which fixes its fibers, said matting having apertures therein, and pieces of matting correspondingly backed, inserted in and filling the apertures in a displaced position, substantially as described.

2. A floor-covering composed of a matting backed by a material which fixes its fibers, said matting having apertures therein, pieces of matting correspondingly backed inserted in and filling the apertures in a displaced position and additional backing to which the parts are secured, substantially as described.

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

EMILE BERLINER.

Witnesses:

F. T. CHAPMAN,

EDWIN S. CLARKSON.