

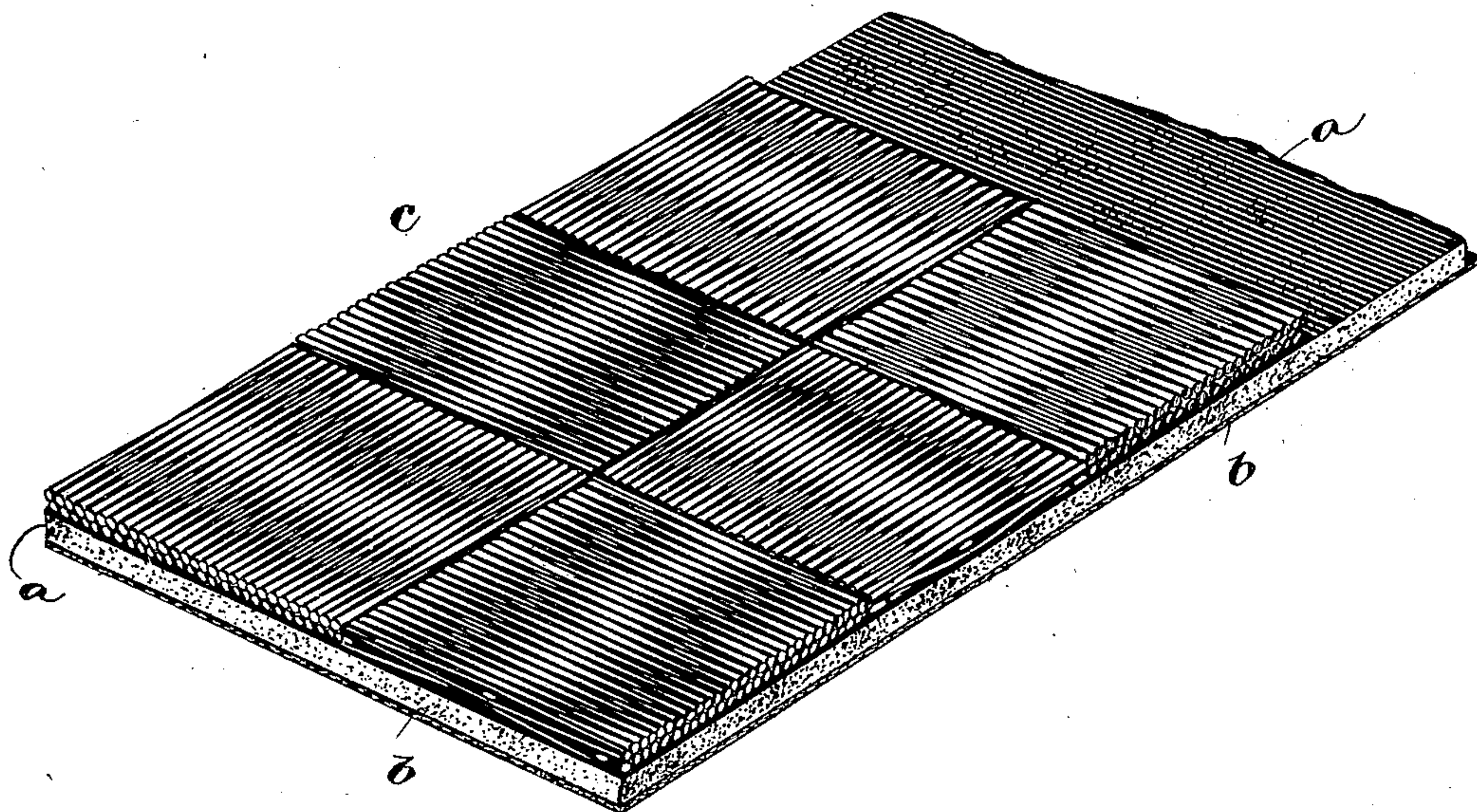
No. 621,316.

Patented Mar. 21, 1899.

**E. BERLINER.**  
**FLOOR COVERING.**

(Application filed Oct. 14, 1898.)

(No Model.)



*witnesses:*

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# UNITED STATES PATENT OFFICE.

EMILE BERLINER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## FLOOR-COVERING.

SPECIFICATION forming part of Letters Patent No. 621,316, dated March 21, 1899.

Application filed October 14, 1898. Serial No. 693,520. (No model.)

*To all whom it may concern:*

Be it known that I, EMILE BERLINER, a citizen of the United States, and a resident of Washington, in the District of Columbia, have invented certain new and useful Improvements 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 carpets or matting.

The invention consists in a floor-covering composed of webs or sheets of any kind of straw, grass, or other form of commercial matting fixed to a base of flexible material. The flexible material which I employ and which coöperates in a most superior manner with the matting is linoleum. As is well known, linoleum is composed of ground cork held together by an adhesive substance, such as oxidized linseed-oil, which is pressed into thin flat sheets and is preferably backed by some textile fabric. Matting which has been backed with linoleum in the manner hereinafter described may by reason of the flexibility of the linoleum be put upon the floor and used in every way like commercial matting. It has, however, the great advantage that it is much stronger than ordinary matting, permitting heavy furniture to be rolled over it without tearing or distorting it. This is a matter of considerable importance to housewives, who are now compelled to sweep under beds and the like on matting-covered floors in positions most inconvenient to themselves and with results that are not entirely satisfactory by reason of the fact that they cannot roll the bed or other furniture away from its location without injury to the matting. The linoleum backing holds the separate strands of the matting in place and their relative positions are therefore not changed by wear or hard usage, so that such wear as takes place is merely on the upper face of each individual strand. In mattings as now constructed a great portion of the wear makes itself evident in a distortion of the fabric of the matting, the originally straight strands being pressed into unsightly curves. Moreover, in my linoleum-backed matting the wear on the face of the matting is reduced to a minimum by reason of the somewhat yield-

ing character of the backing, as distinguished from the hard-wood floors with which mattings are now laid directly in contact. Furthermore, a matting backed as herein described is substantially dust-proof and offers a firmer and more satisfactory sweeping-surface. In ordinary mattings the dust seeps through onto the floor, where it accumulates in quantities. In the floor-covering of this invention, which has all the ornamental features of matting, the dust cannot penetrate down into the interstices beyond a point which the broom can reach by reason of the linoleum which has penetrated up into the interstices from below in a manner which will hereinafter appear.

In the drawing the figure shows a perspective view of a portion of a strip of floor-covering made in accordance with my invention.

In order to manufacture a floor-covering of the character above pointed out, I first size strips or rolls of matting with any suitable sizings, such as oil-varnish. I thereupon take a mixture of ground cork and linseed-oil reduced to a putty-like consistency and apply it to the back of the matting. This I may do by laying the matting, back up, upon a table or bed, laying the putty-like pasty mass of cork and linseed-oil upon it, and spreading this mass in a thin sheet over the back of the matting by a roller or the like, so that it flows into the crevices or interstices thereof. The matting, with its backing of a thin sheet of ground cork and linseed-oil, is then dried in an oven or otherwise to oxidize the linseed-oil, to dry the sizing, and to thereby secure a firm and intimate adhesion between the matting and its backing, which, as above stated, has flowed into its interstices.

The linoleum may in turn be backed with a strip of cotton cloth or other textile fabric, applied either before or after the drying operation. If desired, the intimacy of the union of linoleum and matting may be increased by passing the product through rolls to press the parts together while the linoleum is yet in a moist condition.

Instead of applying the linoleum composition in the manner above described I may first roll or otherwise form this composition into sheets, back these sheets while yet moist



onto the matting in any suitable way, effect a more intimate union with the matting by passing through rolls, and then dry the resulting compound fabric as above described.

5 In view of what has been said, the drawing is almost self-explanatory. The linoleum backing is denoted by *a*, its cotton-cloth cover by *b*, and the matting by *c*. The linoleum strip is usually of the width of floor-coverings  
10 of this class. The matting may be of the same width, or for the purpose of getting a parquet effect I may cut the matting after the linoleum backing has dried into squares or other shapes and put them together in geo-  
15 metrical designs cemented to a cloth backing, which holds them in place. A strip of such linoleum, with the blocks of matting or with a simple strip of matting of corresponding width joined thereto, may, by reason of  
20 the flexibility of the linoleum, be rolled up into rolls and sold and laid and be taken up from the floor precisely as an ordinary piece of carpet or matting. The flexibility of the linoleum backing of my invention is in fact  
25 a matter of some importance.

What I claim is—

1. A floor-covering composed of matting and a backing of putty-like material intimately joined thereto, substantially as described.  
30 scribed.

2. A floor-covering composed of matting, and a backing intimately joined thereto and consisting of a material characterized by being in a plastic condition when first applied

to the matting and by becoming elastic when seasoned, substantially as described. 35

3. A floor-covering composed of matting and a backing of linoleum intimately joined thereto, substantially as described.

4. A floor-covering composed of matting and a backing of linoleum filling the underside interstices thereof, and intimately united therewith, substantially as described. 40

5. A floor-covering composed of matting, a backing of linoleum joined thereto and a backing of cotton cloth secured to the linoleum, substantially as described. 45

6. The process of making floor-coverings which consists in sizing matting, applying a pasty sheet-like mass of backing material thereto and then drying and hardening the same to secure a compound sheet having an intimate union between the matting and its backing, substantially as described. 50

7. The process of making floor-coverings which consists in applying a pasty sheet-like mass of linseed-oil and ground cork to matting to partially fill its interstices and then drying the same, to secure an intimate union of the linoleum and matting thus formed. 55

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 60

EMILE BERLINER.

Witnesses:

F. T. CHAPMAN,  
C. E. MARSHALL.