No. 798,387. PATENTED AUG. 29, 1905.

J. H. BEALE.

LINING FOR RUGS AND THE LIKE FLOOR COVERINGS.

APPLICATION FILED APR. 14, 1905.

2 SHEETS—SHEET 1.

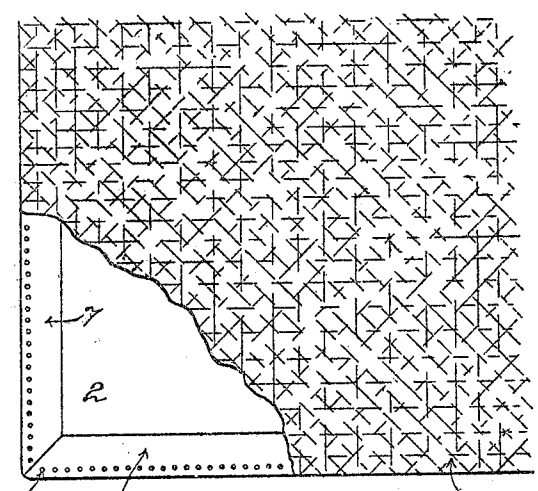


Fig. 1.

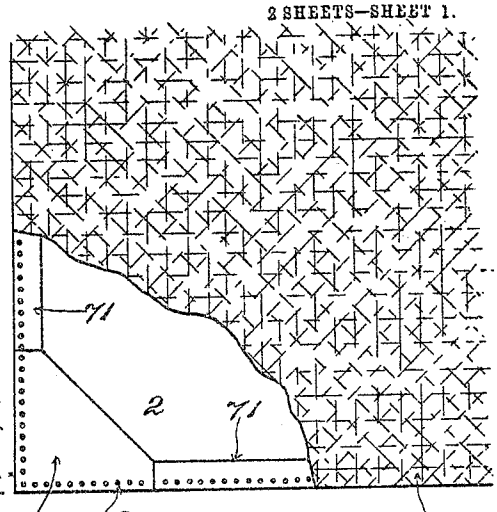


Fig. 2.

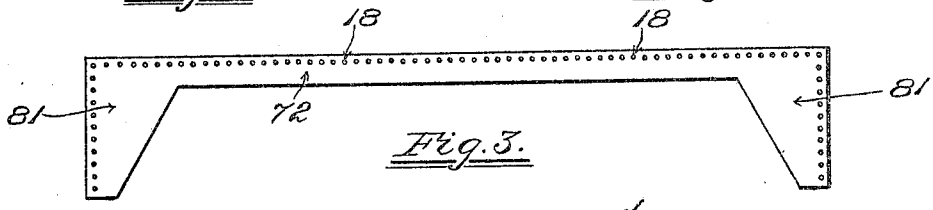


Fig. 3.

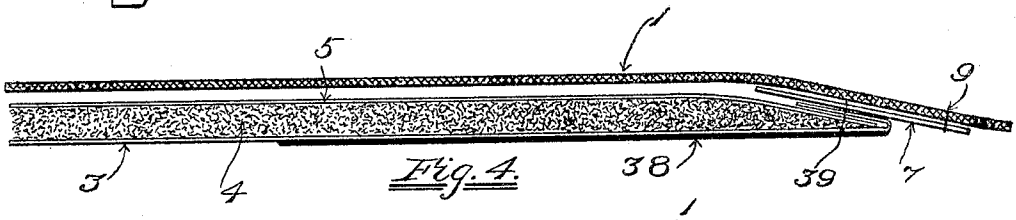


Fig. 4.

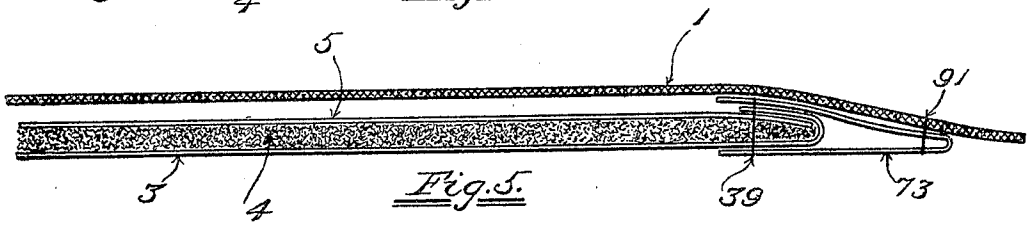


Fig. 5.

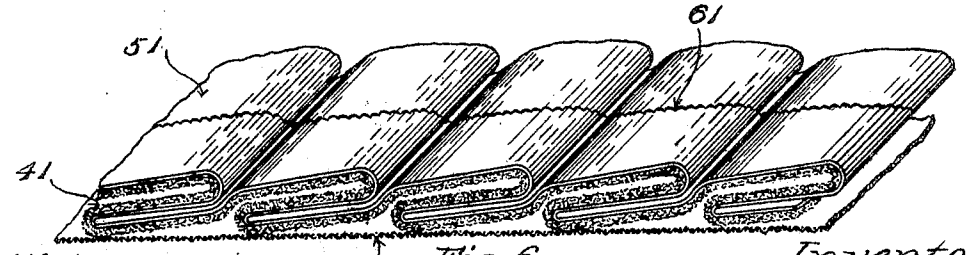


Fig. 6.

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2 SHEETS—SHEET 2.

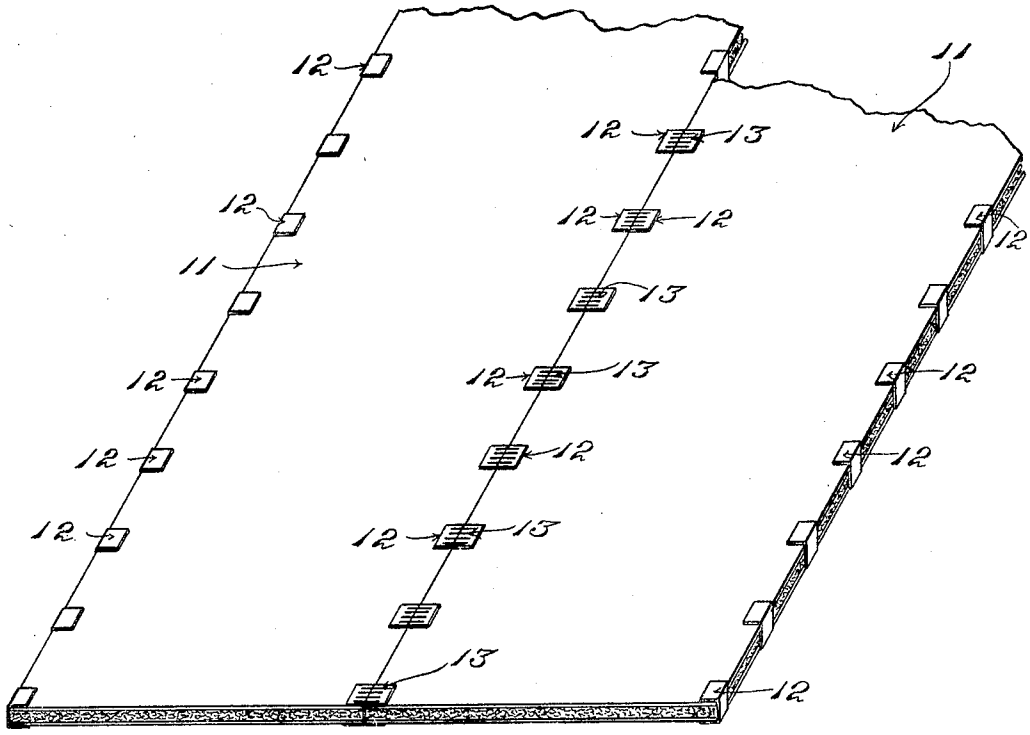


Fig. 7.

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UNITED STATES PATENT OFFICE.

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LINING FOR RUGS AND THE LIKE FLOOR-COVERINGS.

No. 798,387. Specification of Letters Patent. Patented Aug. 29, 1905.

Application filed April 14, 1905. Serial No. 255,523.

To all whom it may concern:

Be it known that I, JOSEPH H. BEALE, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Linings for Rugs and the Like Floor-Coverings, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists, essentially, in a novel lining or underlie for floor-coverings.

The invention has been designed more especially to be applied in connection with rugs or other like movable or readily-removable floor-coverings; but certain of the features thereof are adapted to be employed also in the case of linings or underlies for other varieties of floor-coverings.

At the present time there is on the market nothing in the shape of a prepared lining or underlie especially fitted for use with a rug or the like, and in most instances the employment of a lining or underlie in such connection is dispensed with. Sometimes ordinary carpet-lining material, which usually is about one yard wide, is utilized by laying several breadths thereof side by side upon a floor until the width of a given rug is attained, the rug being placed upon the same. This use of such material is unsatisfactory for several reasons. The different breadths tend to work out of place, not being fastened together or to the rug, and portions are liable to become exposed at the margins of the rug. When the rug is removed from the floor on which it lies, the said breadths have to be handled separately in being taken up and in being subsequently relaid. This is inconvenient.

The objects of the invention are in general to provide a lining or underlie of improved character for floor-coverings; also, to provide a lining or underlie for a rug or the like floor-covering which shall be particularly adapted to meet the requirements of use in such connection and shall be free from the drawbacks and disadvantages of ordinary carpet-lining; also, to provide for enabling the corners and edges of the rug to lie close to the floor and for holding the corners and edges flat and smooth.

In the drawings, Figure 1 shows part of a rug having my invention applied thereto, a portion of the rug being broken away in order to show the lining and its stiffeners at one corner of the rug. Fig. 2 is a view similar to Fig. 1, showing a different form of stiffeners. Fig. 3 shows a further form of stiffener. Fig. 4 is a view, on an enlarged scale, in vertical section at and near one edge of the rug, showing a flat stiffener-strip applied to one surface of a margin of the lining. Fig. 5 is a view similar to Fig. 4, showing a stiffener-strip which is doubled longitudinally and applied to an edge of the lining as a binding therefor. Fig. 6 is a view showing one form of lining material. Fig. 7 shows portions of two breadths of carpet-lining material laid side by side, with their adjoining edges butted together and united by stitches and with the marginal portions thereof reinforced.

Having reference to the drawings, a portion of a rug or the like floor-covering is represented at 1, and a portion of a lining or underlie beneath the same is represented at 2 in Figs. 1 and 2 where exposed by the removal of a portion of the rug 1. The said lining or underlie as prepared for application to a rug corresponds in length and also in width with the latter, as contradistinguished from a plurality of unconnected narrower widths together equaling the width of the rug. The material or materials of which the lining or underlie is composed and the construction of the lining or underlie—*i. e.*, the manner in which such material or materials is or are incorporated therein—may vary in the case of different embodiments of the invention.

Figs. 4 and 5 show the general construction of a suitable lining or underlie, the latter being represented as composed of a foundation sheet or backing 3, a padding or filling 4, and a facing-sheet 5. The padding or filling 4 in the present instance is supposed to be a continuous fibrous filling; but its character may vary, as deemed advisable. For a low-priced lining or underlie the padding or filling 4 will consist of a bat or lap of any of the fibrous substances which heretofore have been utilized in carpet-linings, in which case the upper sheet 5, by intervening between the back of the rug and the padding or filling, will prevent portions of such substance from becoming attached to the said back. In Figs. 4 and 5 the marginal portion of the foundation sheet or backing 3 projects beyond the padding or filling 4 and top sheet 5 and is turned over upon the said facing-sheet at the edge, so as to inclose and confine the padding or filling and form a binding for the edge of the lining or underlie, the turned-over portion being

secured by stitches 39 or other means. For strength and durability, as well as other reasons, the foundation sheet or backing 3 may advantageously be composed of woven fabric, although other material may be substituted. Any of the known carpet-lining materials may be employed as padding or filling in lieu of the fibrous filling at 4—such, for instance, as paper, felt paper, felting, or cloth, either plaited, crimped, or embossed and either alone or combined with other substances. When the material thus employed is not liable to adhere to the back of the rug, the facing-web 5 may be dispensed with. When such material is of sufficient durability and strength to endure the wear that is incident to service and to withstand handling and other usage—for instance, such as is incident to the taking up of the rug, its treatment for effecting removal of dust, and its replacement—the separate foundation or backing web 3 may be dispensed with. I have shown in Fig. 6 an advantageous material for the lining, it comprising a facing-web 51, a backing-web 31, and a continuous fibrous filling 41, with the said fibrous filling and said facing-web together formed into a succession of plaits or folds, the whole being secured together by stitches 61. This construction provides the plaits or folds with yielding cushions of fibrous material contained therein, which render the said plaits or folds elastic and obviate the tendency of the facing-web to break down and flatten, with loss of elasticity. In Fig. 6 the backing-web is indicated as woven material and is suitable to constitute the foundation-sheet of the rug lining or underlie. When a separate foundation-sheet, as 3, is employed in connection with the material of Fig. 6, the backing-sheet 31 of the said figure may be of paper.

The lining will correspond substantially in width with the rug, and I contemplate that different widths thereof, corresponding with the usual widths of rugs on the market, shall be manufactured and carried in stock in readiness for application to rugs. In the production of the lining or underlie material of Figs. 4 and 5 the padding or filling may be prepared of the full width of the lining, or it may be produced in narrower widths, the latter being placed side by side between the wide sheets or webs 3 and 5. So, also, the material of Fig. 6 may correspond in width with the rug with which the same is used, or two or more widths thereof may be combined with a backing web or sheet of the width of the rug. When narrow widths of carpet-lining material are employed, they preferably will be joined together edge to edge, as by seaming or otherwise, in the production of a combined web or lining of the intended width, in order to prevent displacement thereof, or such narrow widths may be otherwise held in proper place in the completed lining.

For the purpose of causing the corners and edges of the rug to lie flat and smooth I employ stiffeners, which latter are formed of stiff paper, metal, wood, or other suitable material. The said stiffeners may be variously formed and are applied to the portions which are to be prevented from curling, kinking, or turning over or under. Fig. 1 illustrates the application of flat strips 7 7, lying upon marginal portions of the lining or underlie and meeting with a mitered joint at a corner or angle of the rug. The said strips may extend from one corner to another along all the edges of the lining or underlie or from a corner along desired portions of the lengths of adjoining margins. Strips of the desired length or lengths may in some instances be applied to opposite margins instead of to all four margins and, if preferred, may extend only along portions of the length of a given margin. Fig. 2 illustrates the use of angular corner-pieces 8 in conjunction with straight strips 71, extending along the margins of the lining or underlie. Fig. 3 illustrates a stiffener in which two corner-pices 81 81 and a straight intermediate strip 72 are formed in one.

For the purpose of enabling the edges of the rug to lie close to the floor the marginal portions of the lining or underlie are of reduced thickness. The reduction in thickness is attained in Fig. 4 by diminishing the thickness of the fibrous filling 4 at the edge, so that a tapered thickness results. In Fig. 4 a flat stiffener-strip 7 is applied to the margin of the lining or underlie and projects somewhat beyond the same, the said strips being attached to the lining or underlie by stitches 39 or other suitable means. In Fig. 5 a stiffener-strip 73, doubled upon itself longitudinally, is applied to the margin of the lining or underlie and attached thereto by stitches 39 or other suitable fastenings. The bent portion of the said strip projects beyond the edge of the lining or underlie and being compressed, and thereby flattened vertically, forms an edge portion of reduced thickness. The edge of the rug extends slightly beyond the stiffener-strip in each of Figs. 4 and 5, so as to rest upon the floor. The doubled strip 73 of Fig. 5 constitutes a binding for the lining and when stiffness is not a requisite may be composed of cloth or other suitable binding material. It serves advantageously as a means of enabling the lining to be attached properly to the rug or other floor-covering with which the lining is used. When chiefly employed as a binder and means of attachment, a continuous length or short lengths thereof may be utilized as found convenient.

I do not claim herein the lining material which is shown in Fig. 6, inasmuch as it is made the subject of claim in my application for United States Patent for carpet-lining, filed April 10, 1905, Serial No. 254,659.

The complete lining or underlie is attached to the rug around the edges of the latter. Thereby displacement of the lining with relation to the rug is prevented, and when the rug is moved or taken up the lining or underlie accompanies it. The attachment may be effected by means of stitches 9, Fig. 4, or 91, Fig. 5. To facilitate the operation by which the attachment is effected, holes 18 18, Figs. 1, 2, and 3, are formed in the stiffeners, through which the stitches may pass. These holes may or may not be furnished with eyelets, as deemed desirable in practice. Hooks and eyes or clasp-pins, such as safety-pins or pins resembling the latter, may be employed, if desired.

Ordinary carpet-lining material, such as commonly is found in the market, has the top and bottom layers thereof composed of webs or sheets of paper. When two or more breadths of such material are laid side by side and secured together by stitching through their edges, the stitches are likely to tear through the paper, thus leaving the breadths free to separate. So, also, stitches passing through the external margins of a rug-lining composed of such material and serving to connect the said rug-lining with a rug would be likely to tear loose. Fig. 7 illustrates the manner in which I reinforce the margins of the material, so as to enable the same to hold the stitches. In the said figure, 11 11 are two breadths of ordinary carpet-lining material, with paper surfaces, as usual, or the said surfaces might be lightly-woven cloth, and 12 12 are reinforcing-pieces of paper, cloth, or other suitable material. The said pieces 12 12 are applied to the marginal portions of the surfaces of the lining material and the stitches 13 13, which unite the breadths to each other, pass through such pieces. In some instances the stitches by which the lining is attached to the rug may pass through pieces 12 12 upon the outer margins of the rug-lining.

When the foundation sheet or backing 3 consists of woven fabric, tendency of the lining and rug to slip upon a floor on which it is laid will be reduced. In some instances I make special provisions against slipping by attaching strips or sections of sheet-rubber or other frictional material to the exposed or under surface of the lining, as at 38, Fig. 4. These strips or sections may be attached at or adjacent the corners or sides of the rug, as found most desirable in practice.

I claim as my invention—

1. A lining or underlie for a floor-covering, corresponding substantially in both length and breadth with the latter, having a padding or filling of yielding material and having the said material confined at all the edges of the lining or underlie.

2. A lining or underlie for a floor-covering, corresponding with the latter in both length and breadth, having a padding or filling of yielding material, a facing-web, and a backing-web, and closed at all the edges thereof to confine the said material.

3. A lining or underlie for a floor-covering, corresponding substantially in length and breadth with the said floor-covering and having all its margin reduced in thickness to permit the edges of the floor-covering to lie close to the floor.

4. The combination with a rug or the like floor-covering, of a lining or underlie therefor, corresponding substantially in both length and breadth therewith and attached thereto, and having all of the margins thereof reduced in thickness to permit the edges of the rug to lie close to the floor.

5. A lining or underlie for a floor-covering, corresponding substantially in both length and breadth with the latter and having applied to marginal portions thereof thin flat stiffeners to hold the corresponding portions flat and smooth.

6. The combination with a rug or the like floor-covering, of a lining or underlie corresponding substantially in both length and breadth with said rug or the like and attached thereto, and thin flat stiffeners applied at or adjacent the margins of the same and serving to hold the corresponding portions of the rug or the like flat and smooth.

7. A lining or underlie for attachment to a rug or the like floor-covering, made rug size, and having thin flat corner-stiffeners applied to the corner portions thereof.

8. The combination with a rug or the like floor-covering, of a lining or underlie therefor, corresponding substantially in size therewith and attached thereto, and having the thin flat corner-stiffeners whereby the corners of the rug are caused to lie flat and smooth.

9. A lining or underlie for a floor-covering, corresponding in both length and breadth with the latter and having secured to all the edges thereof the stiffener-strip doubled upon itself longitudinally, inclosing the said edges, and constituting a projecting margin of reduced thickness.

10. A lining or underlie for a floor-covering, corresponding substantially in both length and breadth with the latter, and having all the margins thereof bound.

11. A lining or underlie for a floor-covering, corresponding substantially in both length and breadth with the latter, and having all the margins thereof reinforced.

12. A lining or underlie for a floor-covering, corresponding substantially in both length and breadth with the latter, and having all the margins thereof provided with attaching strips or pieces.

13. A lining for a floor-covering composed of a plurality of breadths laid side by side to produce the required width for said floor-covering, with the said breadths attached together margin to margin whereby separation

and relative displacement thereof are prevented.

14. A lining for a floor-covering composed of a plurality of breadths laid side by side to produce the required width for said floor-covering, with the said breadths attached together margin to margin, and having the said margins reinforced to retain the attaching means, with the said attaching means passed through the reinforcements.

15. A lining or underlie for a rug or the like floor-covering having antislipping frictional surfacings applied thereto for contact with the floor upon which the rug and its lining are placed.

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

JOSEPH H. BEALE.

Witnesses:
CHAS. F. RANDALL,
EDITH J. ANDERSON.