No. 793,870. PATENTED JULY 4, 1905.

J. H. BEALE.

CARPET LINING.

APPLICATION FILED APR. 10, 1905.

2 SHEETS—SHEET 1.

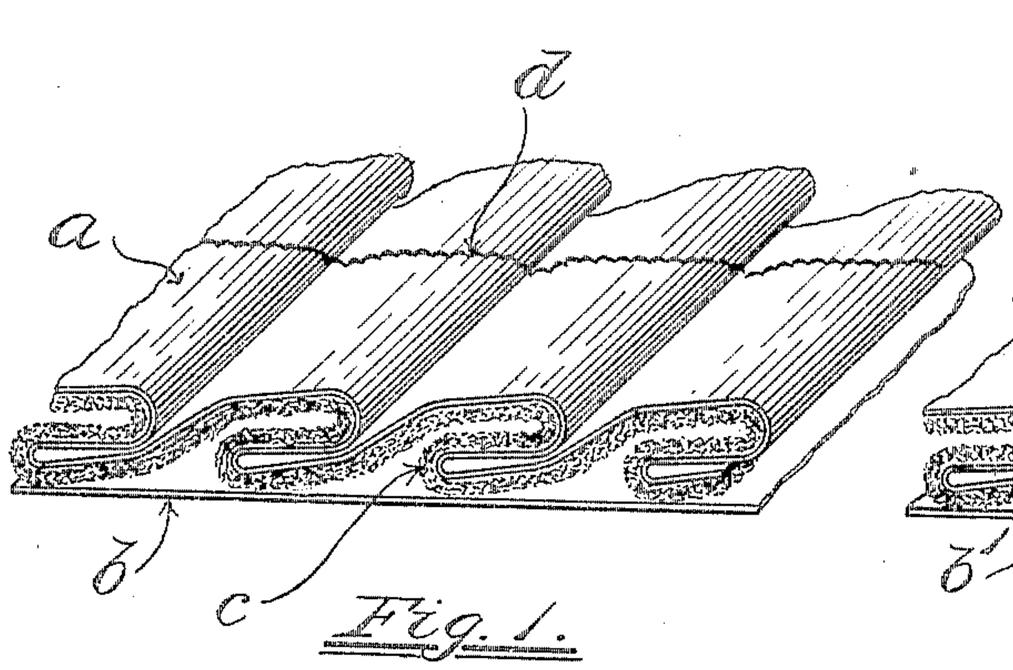

Fig. 1.

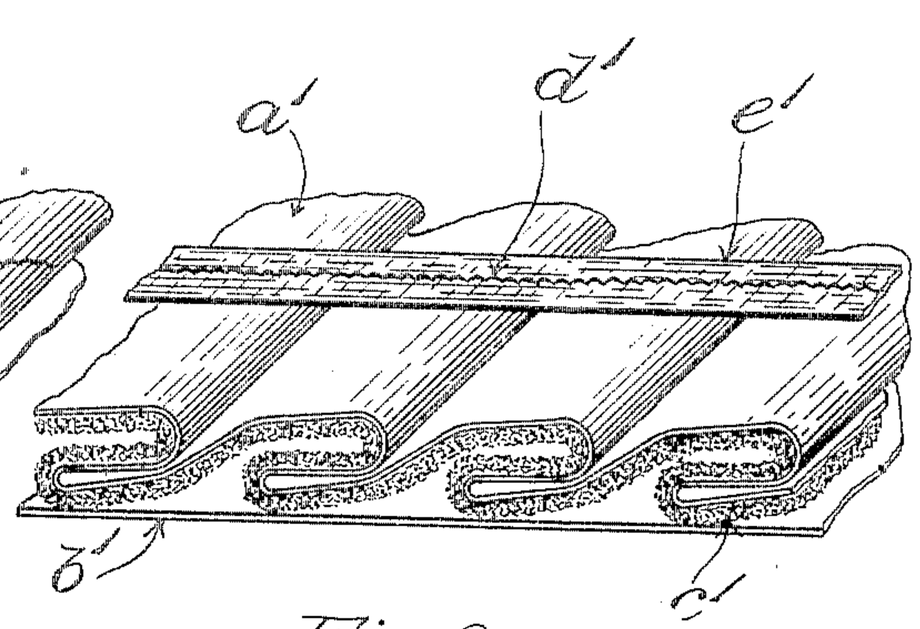

Fig. 2.

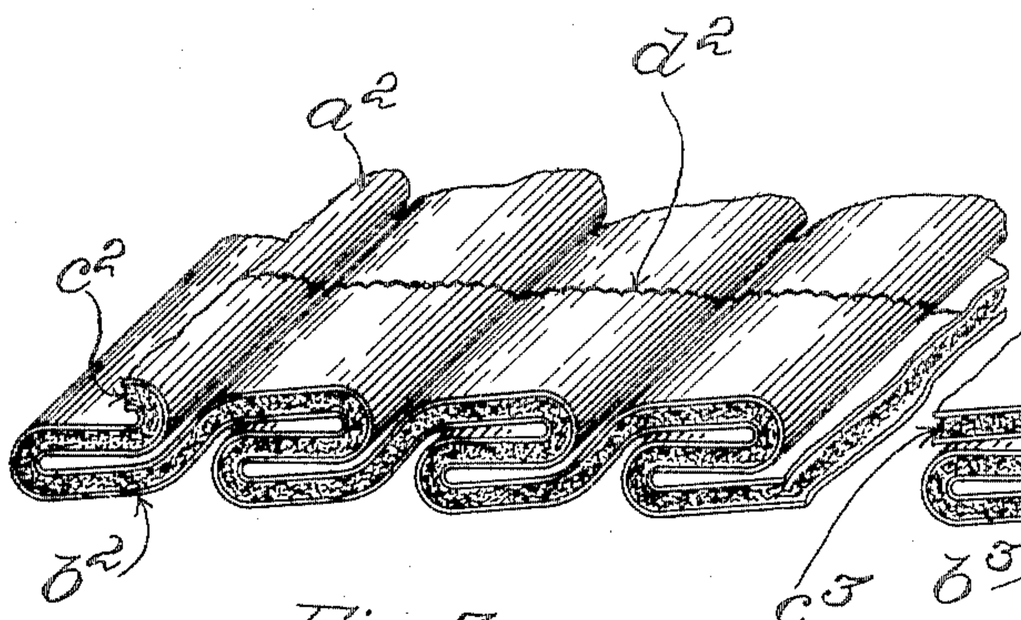

Fig. 3.

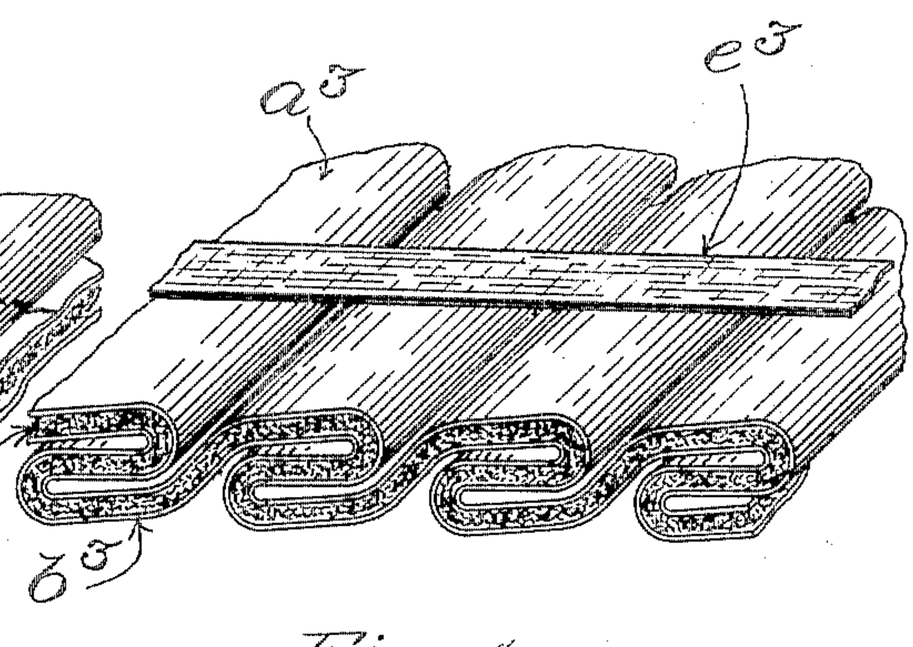

Fig. 4.

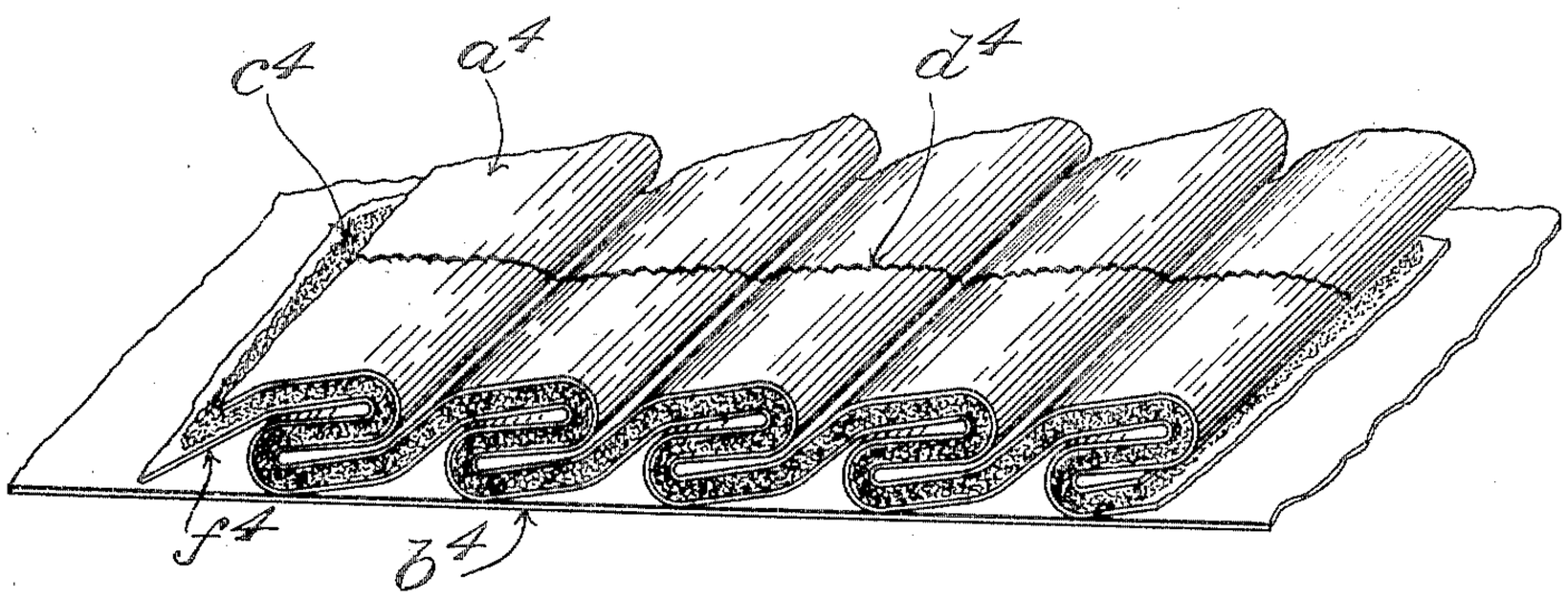

Fig. 5.

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2 SHEETS—SHEET 2.

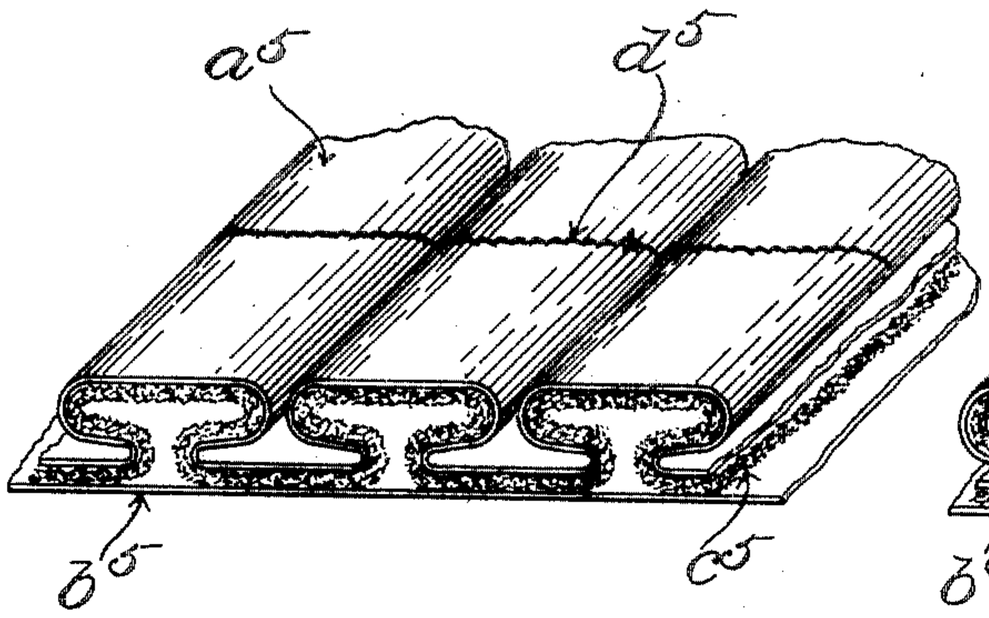

Fig. 6.

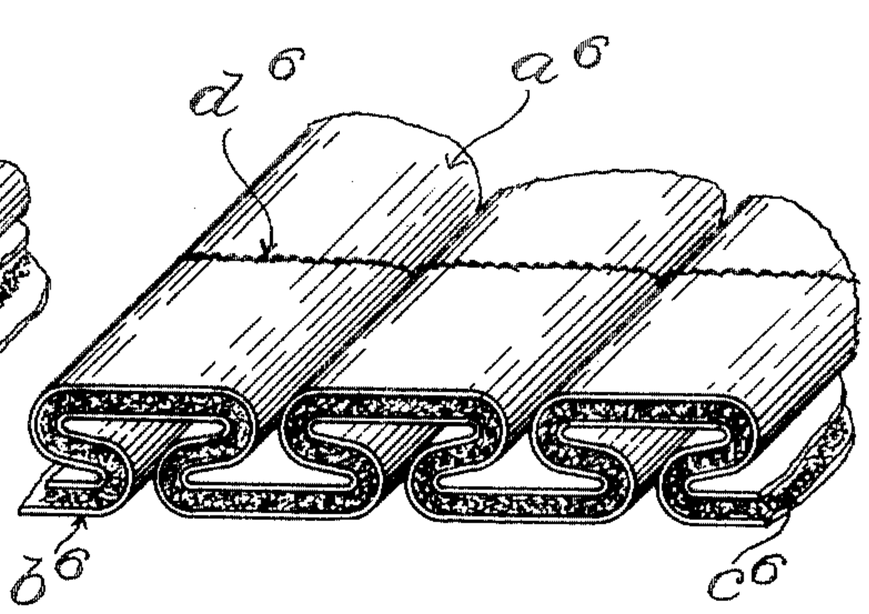

Fig. 7.

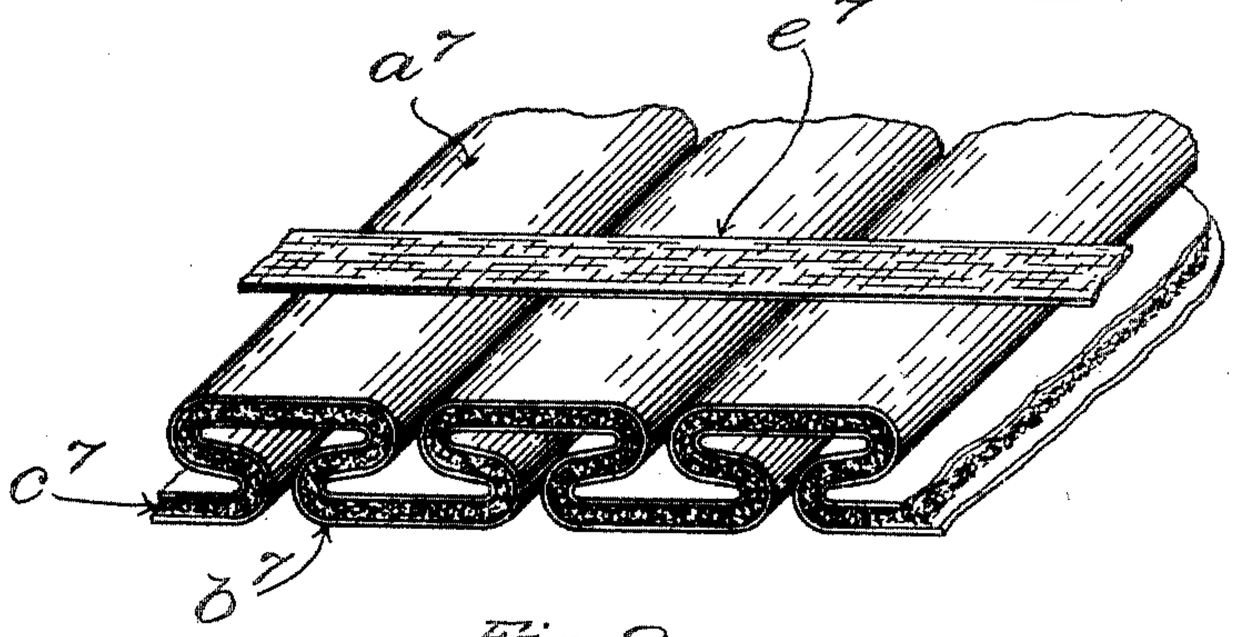

Fig. 8.

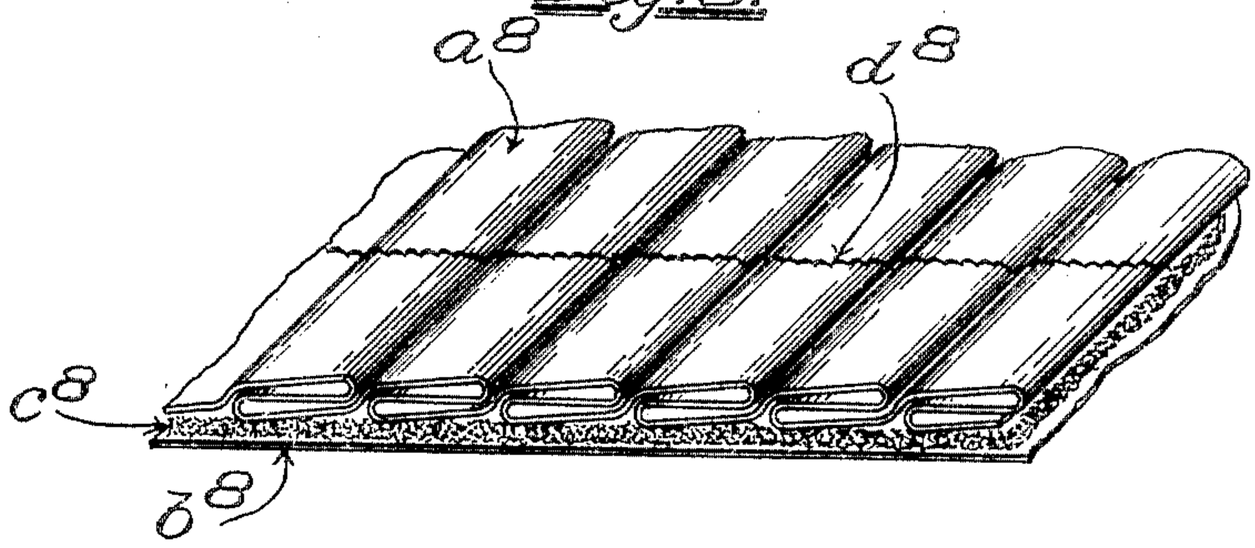

Fig. 9.

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No. 793,870. Patented July 4, 1905.

UNITED STATES PATENT OFFICE.

JOSEPH H. BEALE, OF BOSTON, MASSACHUSETTS.

CARPET-LINING.

SPECIFICATION forming part of Letters Patent No. 793,870, dated July 4, 1905.

Application filed April 10, 1905. Serial No. 254,659.

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 Carpet-Linings, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in a carpet-lining comprising a facing-web, a backing-web, one or both of such webs being formed into plaits or folds, and a filling composed wholly or in part of a lap of fibrous material serving to afford a yielding and elastic tread, and preferably with the fibrous lap also plaited or folded together with the said exterior web or webs, so that a plurality of thicknesses of the fibrous lap overlie one another at each plait or fold and so that the said fibrous lap is included within each plait or fold and constitutes an elastic padding or cushion therefor.

Heretofore plaited or folded webs of paper have been employed in the manufacture of carpet-linings; but through wear the plaits or folds soon become flattened and crushed, so that they lose their elasticity, and the usefulness and value of the lining thereby are materially lessened.

By my invention the utility of the plaited or folded web or webs is enhanced through the employment of a permanently-yielding and elastic filling, which enables the lining to retain its desirable qualities so long as it may be continued in service. With the fibrous lap folded within the plaits or folds, as in the preferred embodiments of the invention, the said plaits or folds are prevented from crushing and flattening, with loss of elasticity and cushioning property. The fibrous filling, folded within and forming part of the plaits or folds, remains soft and yielding, enhancing the utility of the lining in consequence of saving wear of the carpet or rug with which the lining is used and increasing the serviceability of the lining.

In the drawings, Figure 1 shows a portion of carpet-lining composed of a facing-web, a backing-web, and a filling composed of a fibrous lap, with the face and filling formed into simple plaits and the whole secured together by stitches. Fig. 2 shows tapes applied to the upper surface of the carpet-lining and stitches passing through the said tapes, securing the plaits or folds in place and uniting the different thicknesses of material. Fig. 3 shows the facing-web, backing-web, and fibrous lap filling all plaited together and united by stitches. Fig. 4 shows all the layers of material plaited together as in Fig. 3, but secured in place by tapes pasted to the exterior surfaces of the plaits or folds. Fig. 5 shows a carpet-lining having a filling which is composed in part of a fibrous lap and in part of a web of sheet material, as paper, it otherwise being constructed as in Fig. 1. Fig. 6 shows the face and filling together formed into box-plaits with the layers united by stitches. Fig. 7 shows all the layers of material together formed into box-plaits and united by stitches. Fig. 8 shows all the layers of materials together formed into box-plaits and secured by pasted tapes. Fig. 9 shows a plaited facing-web and straight filling and backing-web.

Having reference to the drawings, in Fig. 1 the facing-web is designated *a*, the straight backing-web *b*, and the fibrous filling *c*, the said facing-web and continuous fibrous filling being together formed into simple plaits or folds, as previously mentioned. The stitches by which all the layers are secured together to form the lining are designated *d*. As many longitudinally-extending lines of stitches may be employed in a series across the width of the lining as may be deemed desirable in practice.

In Fig. 2 the facing-web *a'*, backing-web *b'*, and continuous fibrous filling *c'* correspond with the like parts in Fig. 1, the facing-web and fibrous filling being together formed into simple plaits or folds, as in the latter figure. The lining of Fig. 2 is provided in addition in connection with each line of stitches with a tape *e'*, extending in the direction of the length of the lining, and the stitches *d'* of such line are caused to pass through the said tape. Thereby the lining is reinforced and the tendency of the stitches to cut or tear through is reduced.

In Fig. 3, in which all the layers of the lin-

ing are together formed into simple plaits or folds and secured by stitches, the facing-web is designated a^2, the backing-web b^2, the continuous fibrous filling c^2, and the stitches d^2.

In Fig. 4, in which the layers are together formed into simple plaits or folds, as in Fig. 3, and secured by tapes extending longitudinally of the lining and pasted to the exterior surfaces of the said plaits, the said facing and backing webs, respectively, are designated a^3 and b^3, the fibrous filling c^3, and one of the said tapes is indicated at e^3. As many tapes may be employed in a series across the lining as found desirable in practice to secure the plaits or folds and layers of the lining effectually in place and the tapes may be applied to either or both surfaces of the lining.

In Fig. 5, in which the facing-web is designated a^4, the backing-web b^4, the continuous fibrous filling c^4, and the stitches d^4, the continuous web of sheet material, as paper, which is combined with the fibrous material as part of the filling, is designated f^4.

In Fig. 6, which shows a lining corresponding with that of Fig. 1, save that the facing-web and continuous fibrous filling are together formed into box plaits or folds instead of simple ones, the facing-web is designated a^5, the backing-web b^5, the fibrous filling c^5, and the stitches d^5.

In Fig. 7, which shows the different layers together, all formed into box plaits or folds, the facing-web is designated a^6, the backing-web b^6, the fibrous filling c^6, and the stitches d^6.

In the lining of Fig. 8, which differs from that of Fig. 4 simply in being formed with box plaits or folds instead of simple ones, the facing-web is designated a^7, the backing-web b^7, the fibrous filling c^7, and the securing-tape e^7.

Fig. 9 shows a lining in which one exterior web alone, herein the facing-web a^8, is formed into plaits or folds, the backing-web b^8 and continuous fibrous filling c^8 both extending straight throughout the length of the lining. The layers are secured together in Fig. 9 by stitches d^8.

I claim as my invention—

1. A carpet-lining comprising, essentially, facing and backing webs, one or more thereof formed into successive plaits or folds, and a filling inclosed between said webs and composed wholly or in part of a continuous lap of fibrous material.

2. A carpet-lining comprising, essentially, facing and backing webs, and a filling inclosed between said webs and composed wholly or in part of a continuous lap of fibrous material, with one or more of said webs and the said filling together formed into successive plaits or folds.

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

JOSEPH H. BEALE.

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