

(No Model.)

B. S. BRYANT.
CARPET LINING.

No. 360,757.

Patented Apr. 5, 1887.

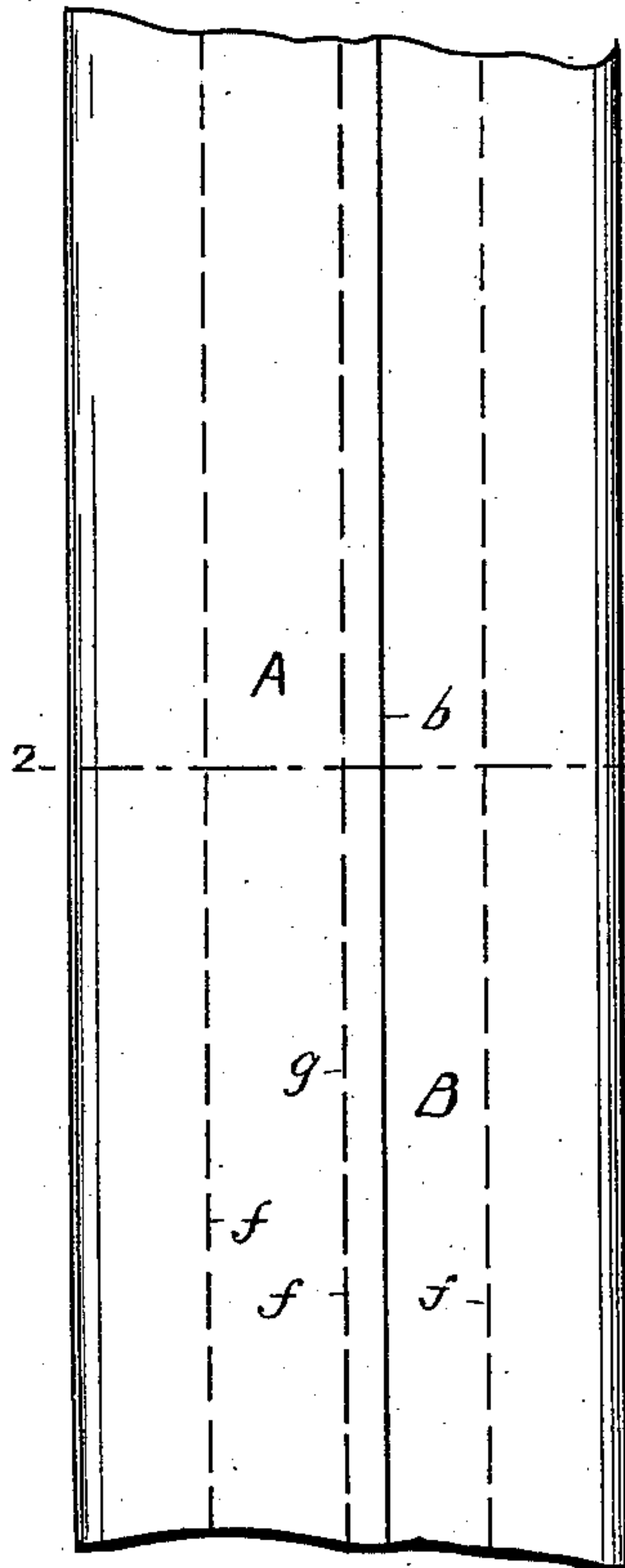


Fig. 1.

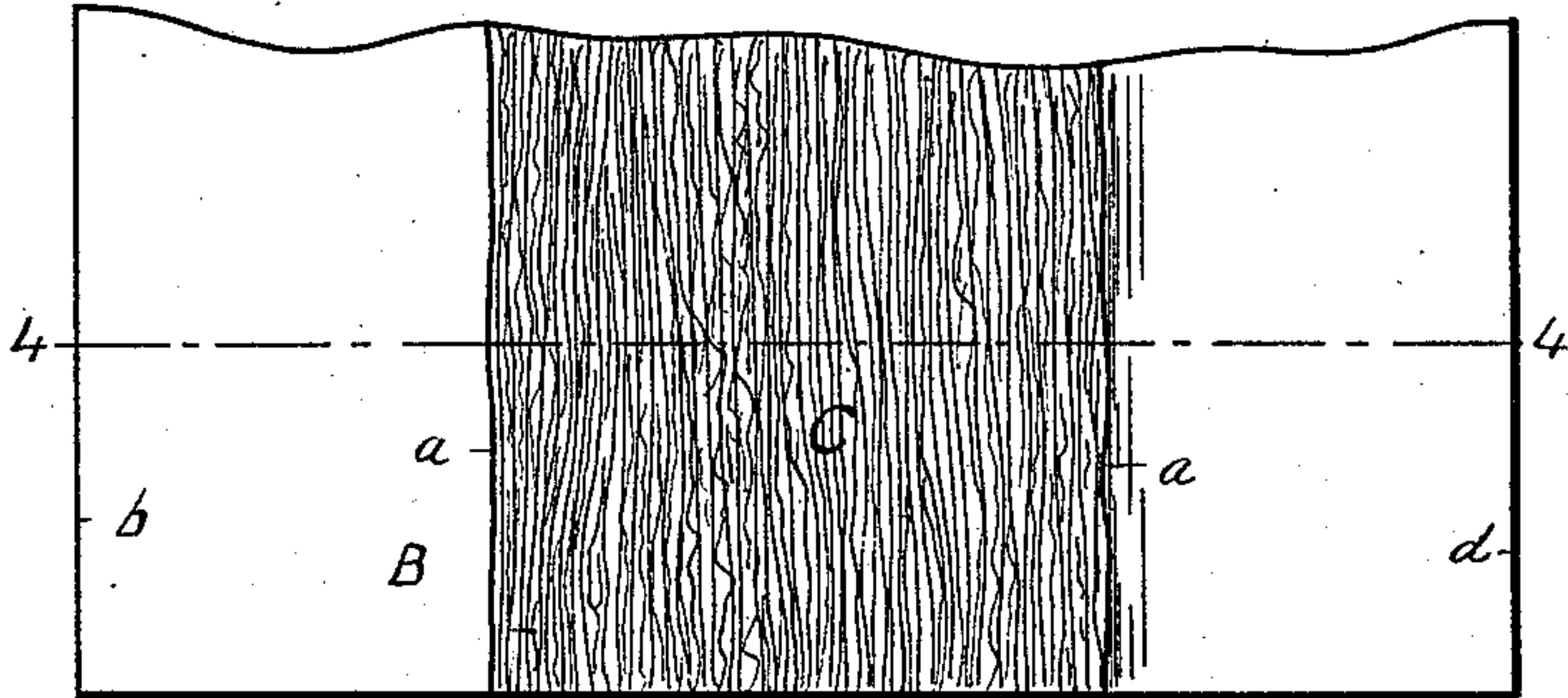


Fig. 3.



Fig. 4.

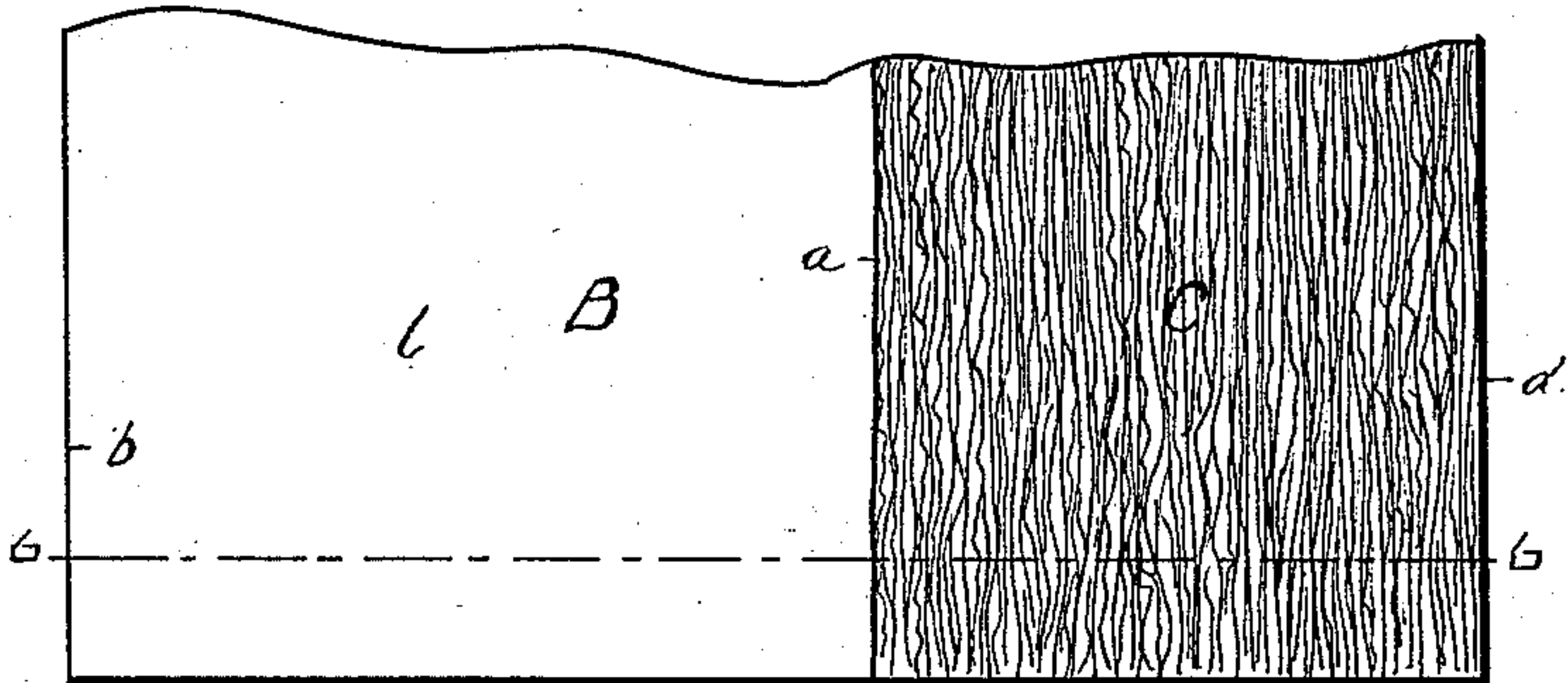


Fig. 5.



Fig. 2.



Fig. 6.



Fig. 7.

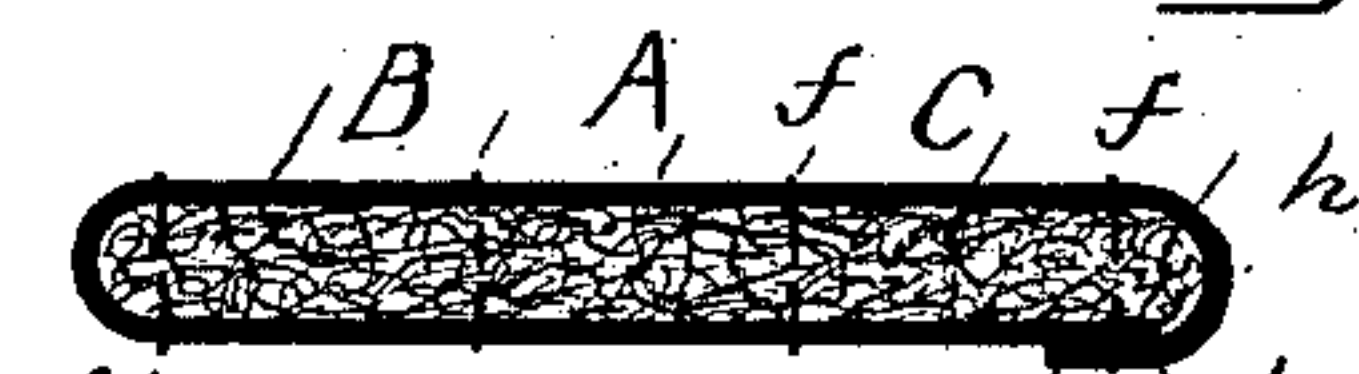


Fig. 8.

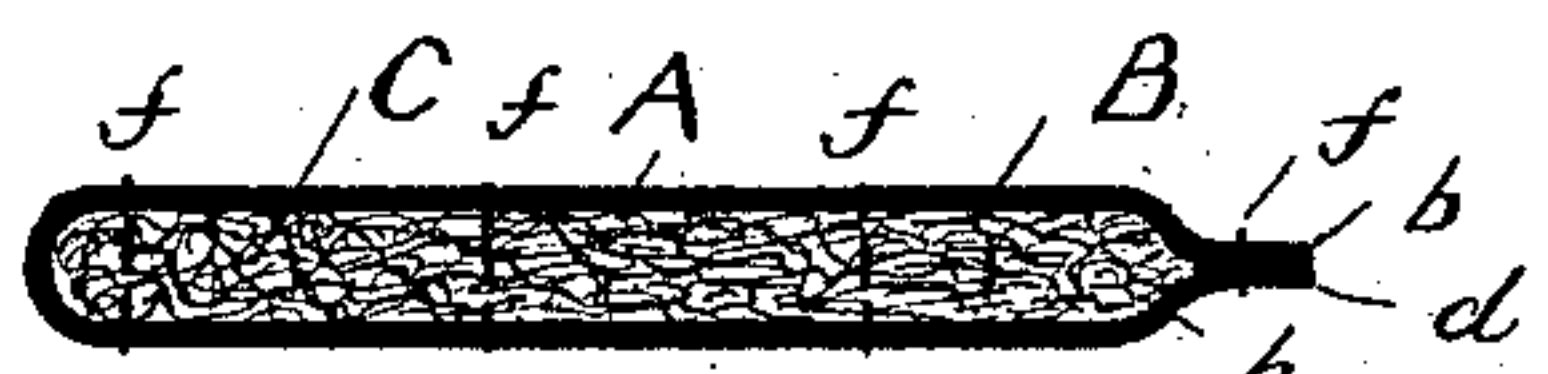


Fig. 9.

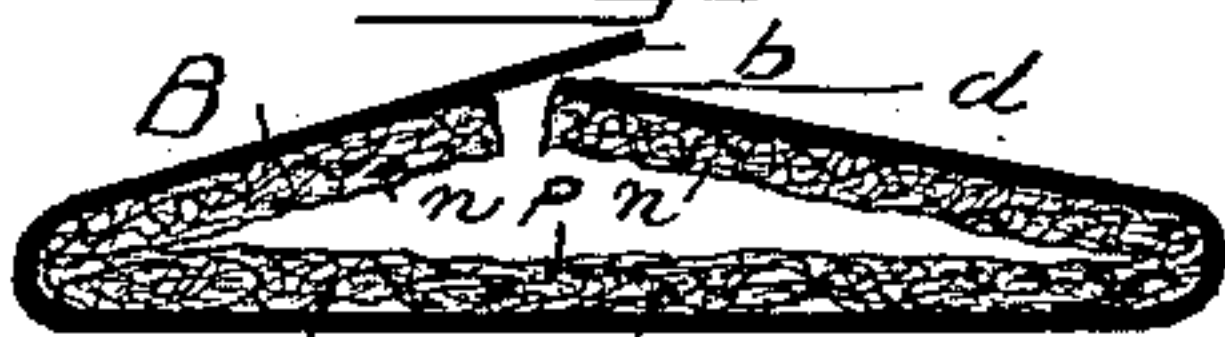


Fig. 10.

WITNESSES

Percy Bryant
Elbridge Harris

INVENTOR

Bradley S. Bryant
per Edmund W. Brown.
Attorney.

UNITED STATES PATENT OFFICE.

BRADLEY S. BRYANT, OF BOSTON, MASSACHUSETTS.

CARPET-LINING.

SPECIFICATION forming part of Letters Patent No. 360,757, dated April 5, 1887.

Application filed May 19, 1886. Serial No. 202,666. (No model.)

To all whom it may concern:

Be it known that I, BRADLEY S. BRYANT, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Carpet-Linings, of which the following is a specification.

This invention consists of a carpet-lining composed of a sheet or sheets or layer of batting or lap of loose fibrous material inclosed within a sheet of paper, the lap or bat of fibrous material being secured to a portion or a whole of one side of the sheet of paper when in the condition of a wet pulp sheet, and, after being dried, folded over and upon the bat or lap of fibrous material inclosing the same and its edges secured, all substantially as herein-after fully described.

In the accompanying sheet of drawings is illustrated a carpet-lining constructed according to this invention—

Figure 1 being a plan view of the carpet-lining complete; Fig. 2, a cross section on line 2 2, Fig. 1; Fig. 3, a plan view of the sheet of paper before being folded, with the lap secured to it; Fig. 4, a cross-section on line 4 4, Fig. 3; Fig. 5, a plan view similar to Fig. 3, but with the lap secured to a different portion of the paper sheet; Fig. 6, a cross-section on line 6 6, Fig. 5; Fig. 7, a cross-section similar to Figs. 4 and 6, but with the fibrous lap or bat secured to nearly the whole of the side of the paper sheet; Figs. 8 and 9, cross-sections similar to Fig. 2, but showing modifications in securing the edges of the paper sheet. Fig. 10 shows in cross-section a carpet-lining partially folded, with the lap or bat of fibrous material secured to it, as shown in cross-section in Fig. 7.

In the drawings, A represents a carpet-lining constructed according to this invention, of which B is the paper sheet, and C the bat of fibrous material.

In the manufacture of this carpet-lining a paper-machine of any of the usual constructions is used, for which the paper stuff or pulp is prepared in the usual manner of manufacturing paper. After the pulp is made into a sheet form by the paper-machine of the required width, it is run onto a suitable traveling apron, and when of the right consistency—

that is, before being dried, or in a wet condition—the bat or lap of the fibrous material, which has previously been made into a sheet form of the required width and thickness, is then run onto the sheet of paper-pulp longitudinally, and preferably centrally, as shown in Fig. 3, and the whole is then passed to and between suitable rolls and pressed together, by which the fibers of the fibrous lap or bat will enter into and become mingled and incorporated with the pulp sheet, and the water expressed from the pulp sheet. It is then passed, with its bat of fibrous material, to and over the usual driers of the paper-machine, which dries up all the moisture in the fibrous bat and the pulp sheet, and hardens and forms the paper sheet, and the whole is then preferably passed between the usual calender-rolls to give finish and surface to the paper sheet. This paper sheet, with the fibrous bat or lap secured to it, is then, at each side of the lap or bat, folded over and upon the lap or bat, along the edges *a* of the bat, inclosing and enveloping the bat, and one edge, *b*, of the paper sheet overlapping the other edge, *d*, at and along the middle of the lap or bat, as shown more particularly in Fig. 2 in cross-section. The folded paper sheet and lap or bat are then secured together by three rows of stitches, *f*, the middle row, *g*, passing through the lapped edges of the paper, the lap or bat, and the middle portion of the paper sheet, and one row of stitches between said middle row, *g*, and each edge *h* of the carpet-lining, the stitches passing through all the thicknesses of material.

In lieu of lapping the edges *b* *d* of the paper sheet at the middle, as shown in Fig. 2, they can be lapped at or near one edge, *h*, of the carpet-lining, as shown in Fig. 8; but in such case the bat or lap of fibrous material must be run onto the pulp sheet next to one of its edges in lieu of at the central portion, as shown in Figs. 5 and 6, and then the one side *l* of the paper sheet turned over and upon the fibrous material along its edge and around the other edge, *d*, of the paper sheet, and there the lapped edges of the paper sheet and the bat secured, as shown in Fig. 8, by stitches. In such case it is preferable to secure the several parts together by three other rows of stitches, as shown in said figure.

In lieu of lapping the edges of the paper sheet, as shown in Fig. 8, the two edges b & d of the paper sheet can, after the paper sheet is folded upon the lap, as shown in Fig. 8, extend, 5 as shown in cross-section in Fig. 9, a little distance beyond the edge of the lap or bat and be secured by stitches f outside of the bat, as shown in such figure, the other portions of the carpet-lining being secured by stitches, as 10 shown in said figure, or as desired.

In Fig. 7 is shown in cross-section the sheet of paper B before being folded, but with the lap or bat of fibrous material secured to nearly the whole of one side of the sheet, leaving a 15 narrow strip or portion, m , of the paper sheet at one edge, d , clear of the lap or bat, as shown in said figure.

The fibrous lap or bat is secured to the paper sheet, as before described, when it is in 20 the condition of a wet pulp sheet, and after being dried it is folded upon itself, as before described, to produce any of the forms of carpet-lining shown in the several figures; but in this case the lap or bat of fibrous material is 25 also folded upon itself, the side of the bat of the two side portions, n , of the bat lying against the same side of the bat of the other or middle portion, p . When folded as described, it can be secured by stitches, as before described, 30 or only secured at the lapping of the two edges of paper. The narrow strip or portion m of the paper is left free of the bat to allow the lap of such edge over the other edge of the paper sheet when folded, and in making the 35 lining shown in Fig. 9 both edges of the paper sheet should be free of the lap or bat of the fibrous material.

In the last manner of attaching the fibrous material to the pulp sheet such lap or bat is 40 preferably made of about half the thickness the lap or bat should be for the carpet-lining when completed, as the folding of the lap or bat upon itself to form the lining doubles it up and makes it of the necessary thickness.

In lieu of securing the edges of the paper sheet where they lap by stitches, as described, they can be secured by paste or any suitable adhesive material. It is preferable, how- 45 ever, to secure it by stitches, and also other portions of the lining by stitches, as in linings having the lap or bat secured to only a portion of the paper sheet, as shown in Figs. 3, 4, 5, 6. The portions of the paper sheet not 50 attached to the lap or bat should preferably be secured to the rest of the lining in some form or other; but in the lining formed by having the lap or bat secured to the whole of one side of the paper sheet, as shown in Figs. 7 and 10, the necessity of securing the several 55 parts together, except at the lap of the edges of the paper sheet, is obviated, as the bat is secured to the paper sheet over its whole surface on one side, and when folded the fibers of the two contiguous surfaces of the folded 60 lap or bat intermingle and entwine with one another, which practically makes one bat or lap within the paper sheet, and thus serves to

keep the whole together and intact. A more or less number of rows of stitches can be used, or only the one at the lapped edges of the 70 paper.

In making the carpet-lining from the paper sheet with the lap secured to it, as shown in Figs. 3, 4, 5, and 6, the lap or bat is preferably of a width a trifle less than the width de- 75 sired for the lining when finished to allow for the turning and the lapping of the paper sheet at its edges. Any fibrous material suitable for the filling of the carpet-lining can be used, and the paper sheet may be made of any 80 suitable material.

A carpet-lining constructed according to this invention, having its layer or lap of fibrous material attached to the paper sheet, as described, secures a carpet-lining that is 85 closely connected together in its several parts compact and firm, and does not shake apart, and yet retains its requisite puffiness and elasticity; also, by attaching the paper-pulp sheet in the paper-machine to only one side of the 90 fibrous lap or bat the whole can be easily and quickly dried by the driers in the paper-machine, and without wrinkling or roughening the paper sheet.

A carpet-lining composed of two sheets of 95 paper having a lap or bat of fibrous material secured to each paper sheet when in a condition of a wet pulp sheet, and secured together at their edges, being the subject-matter of a pending application of mine, Serial 100 No. 214,765, such is not claimed in this application.

I am aware it is not new in carpet-linings to secure the lap or bat of fibrous material to the 105 paper sheet when in the condition of a wet pulp sheet; nor is it new to inclose the lap or bat of fibrous material in a sheet of paper.

Having thus described my invention, what I claim is—

1. A carpet-lining composed of a lap or bat 110 of fibrous material inclosed within a sheet of paper, the fibrous material being secured to said paper sheet when in the condition of a wet pulp sheet, and the paper sheet folded over and upon said fibrous lap or bat and its 115 edges secured, substantially as described.

2. A carpet-lining composed of a lap or bat of fibrous material inclosed within a sheet of paper, the fibrous material being secured to said paper sheet when in the condition of a 120 wet pulp sheet, and the paper sheet folded over and upon said fibrous lap or bat, its edges overlapping each other and secured, substantially as described.

3. A carpet-lining composed of a lap or bat 125 of fibrous material inclosed within a sheet of paper, the fibrous material being secured to one side of said paper sheet at its central longitudinal portion when in the condition of a wet pulp sheet, and the paper folded over and 130 upon said fibrous lap or bat and its edges secured, substantially as described.

4. A carpet-lining composed of a lap or bat of fibrous material inclosed within a sheet of

paper, the fibrous material being secured to
said paper sheet when in the condition of a
wet pulp sheet, and the paper sheet and fibrous
lap or bat folded over and upon said fibrous
5 lap or bat, and the edges of the paper sheet
secured, substantially as described.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing
witnesses.

BRADLEY S. BRYANT.

Witnesses:

EDWIN W. BROWN,
PERCY BRYANT.