

(No Model.)

B. S. BRYANT.

CARPET LINING.

No. 365,966.

Patented July 5, 1887.

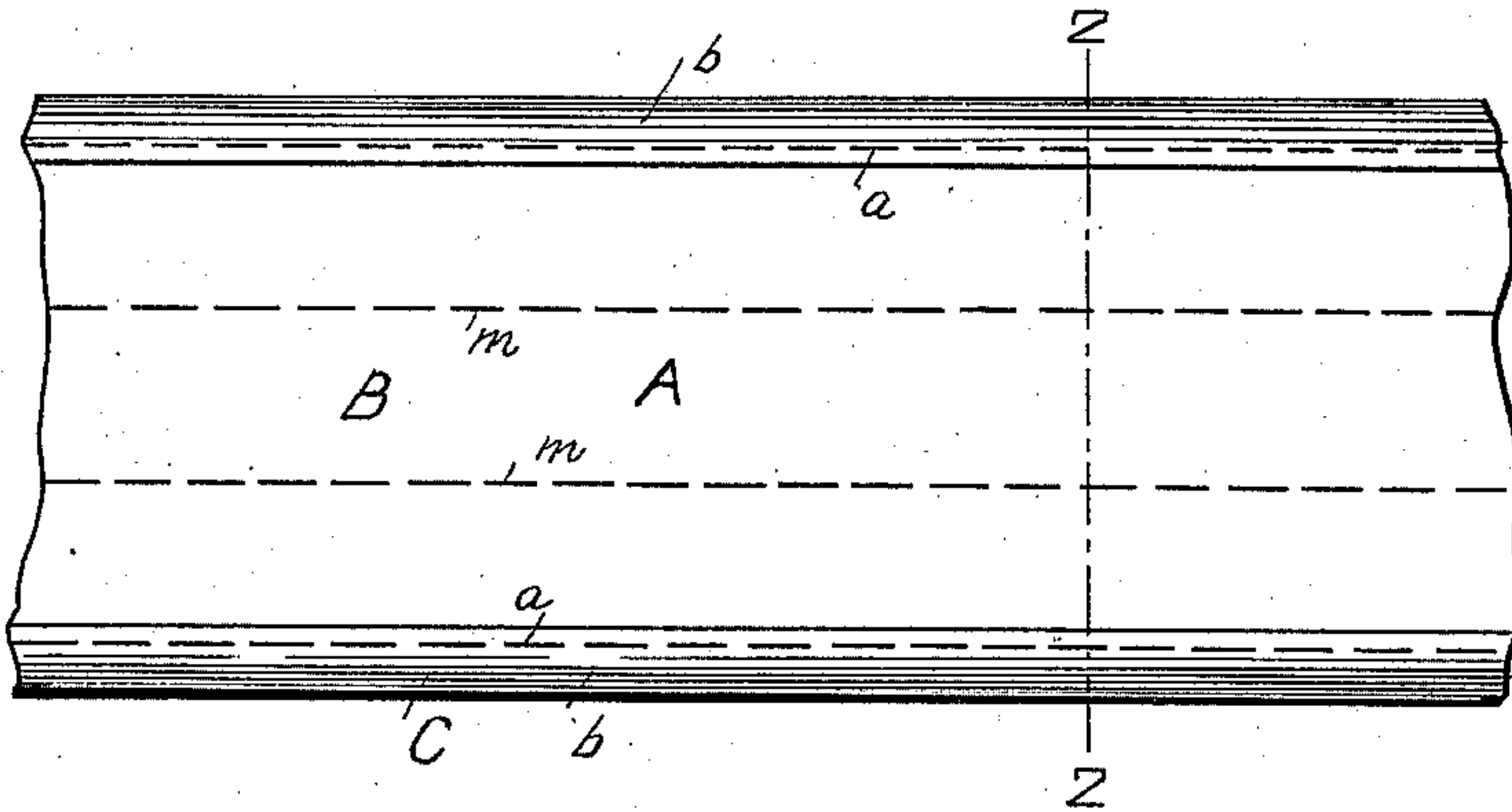


Fig. 1

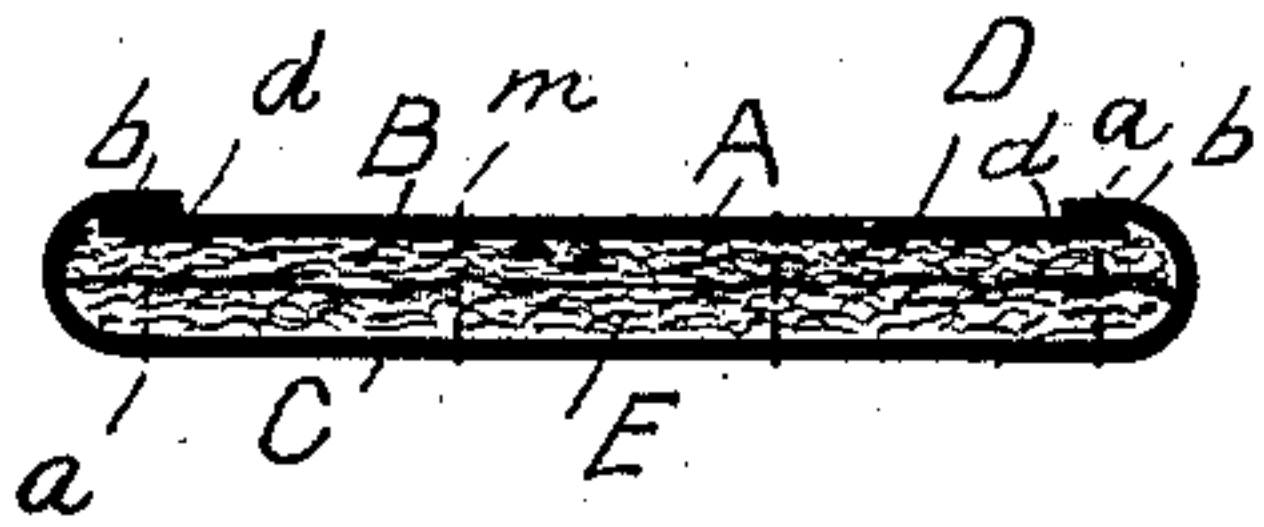


Fig. 2.

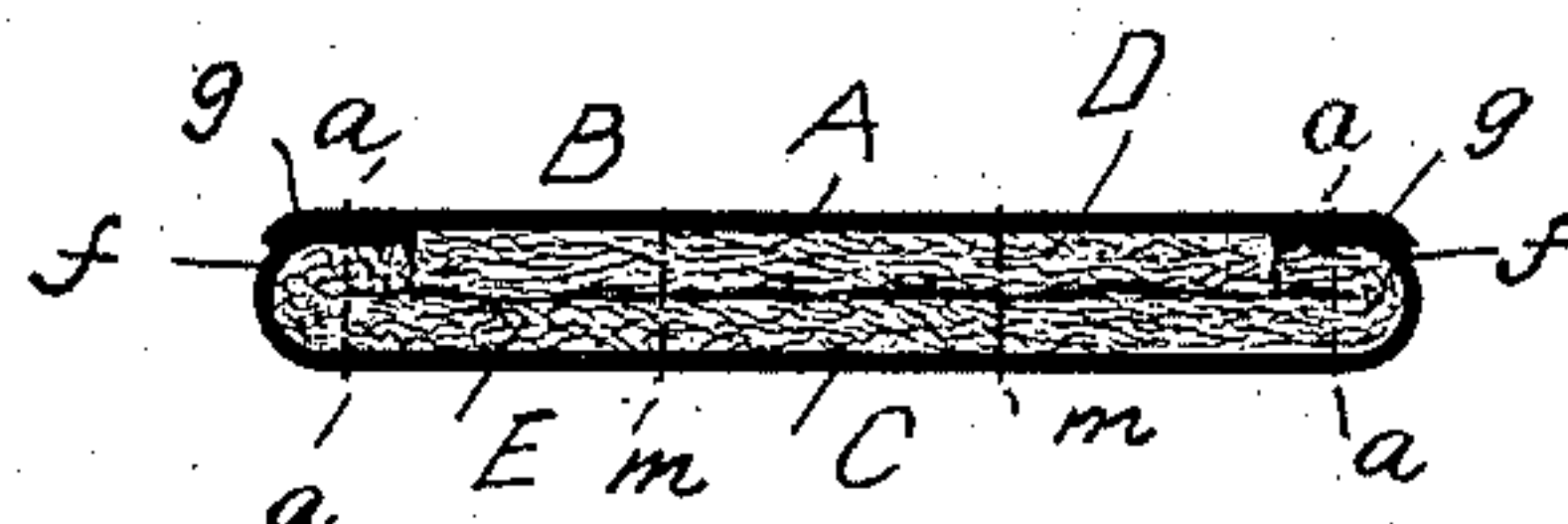


Fig. 3.

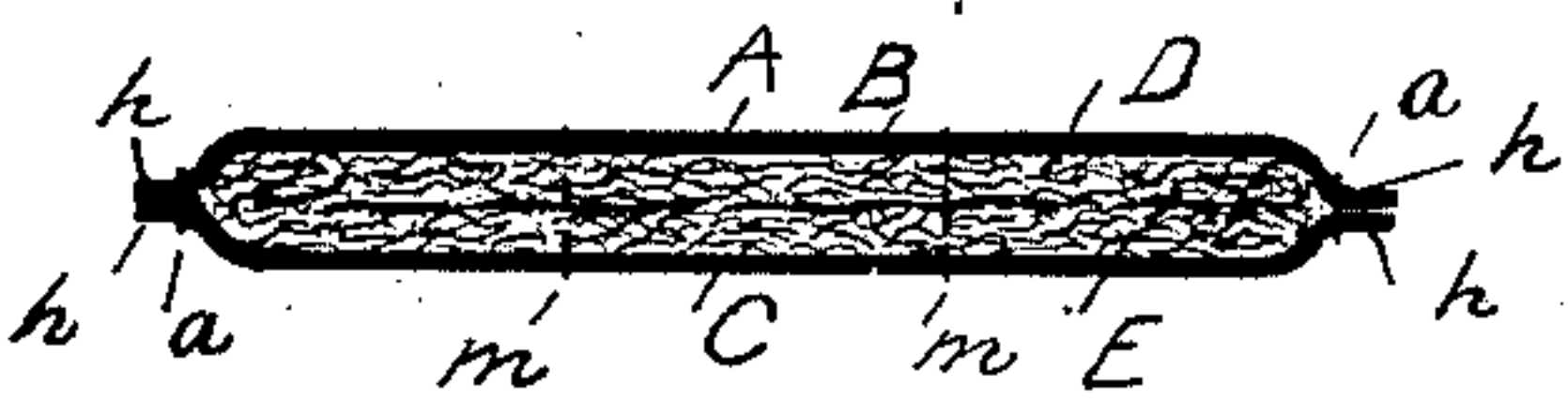


Fig. 4.

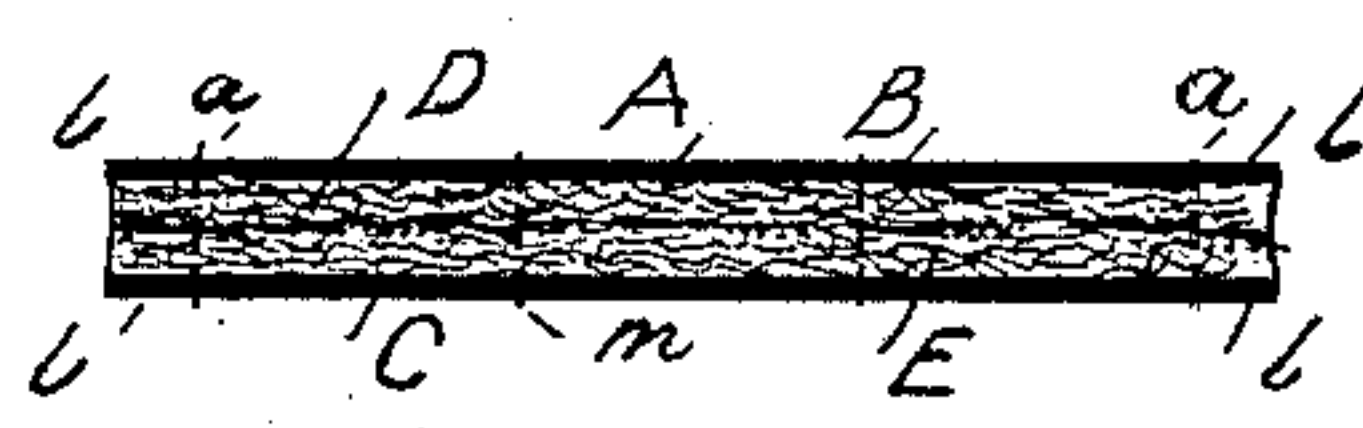


Fig. 5.

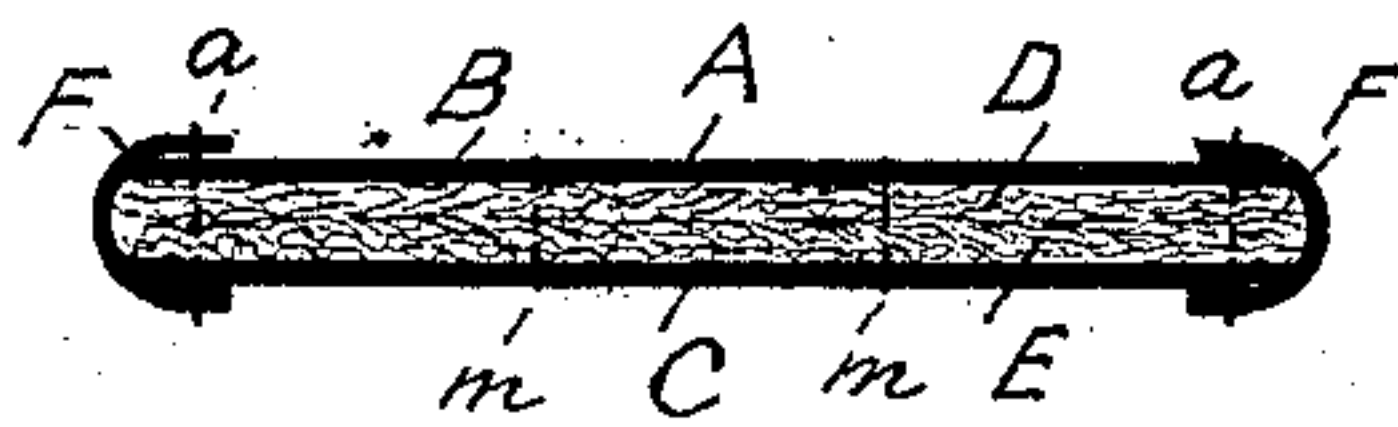


Fig. 6.

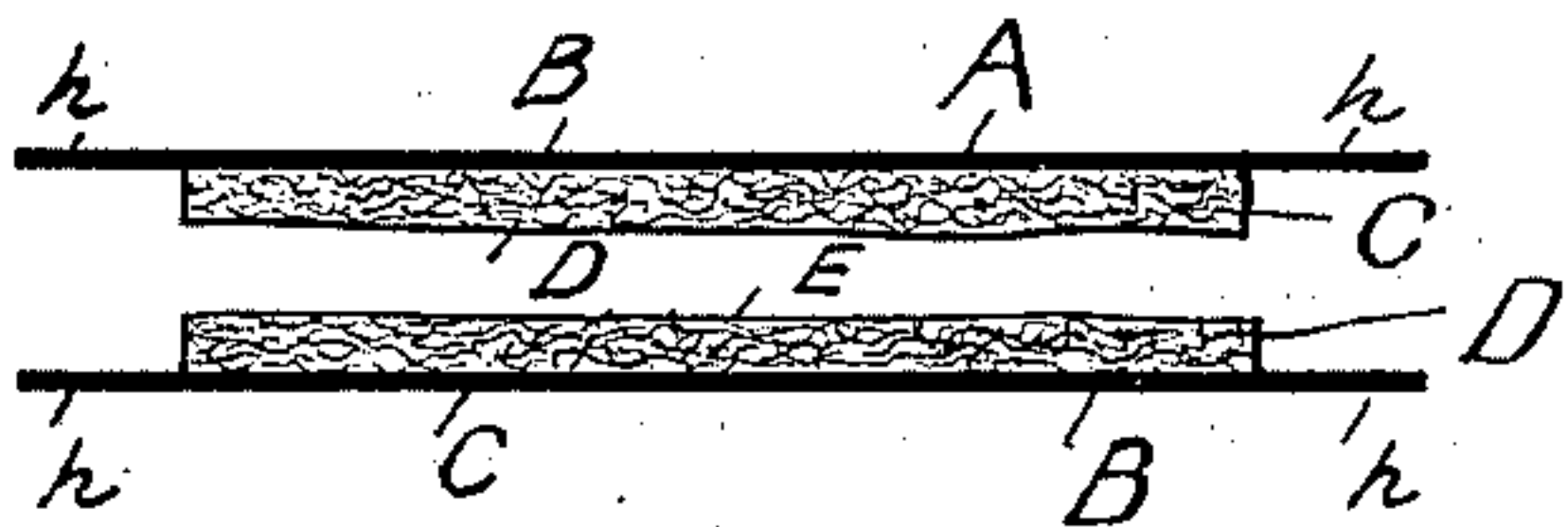


Fig. 7.

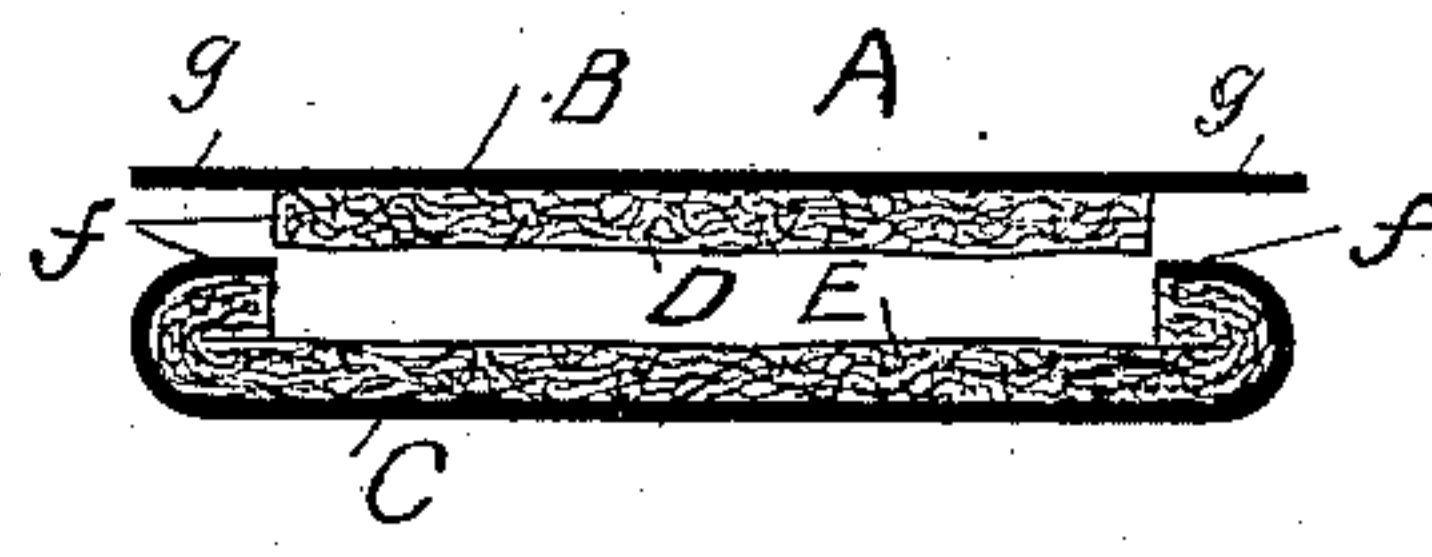


Fig. 8.

Witnesses
Percy Bryant
A. M. M. M.

Inventor
Bradley S. Bryant
per Edwin W. Brown.
Attorney

UNITED STATES PATENT OFFICE.

BRADLEY S. BRYANT, OF BOSTON, MASSACHUSETTS.

CARPET-LINING.

SPECIFICATION forming part of Letters Patent No. 365,966, dated July 5, 1887.

Application filed September 28, 1886. Serial No. 214,765. (No specimens.)

To all whom it may concern:

Be it known that I, BRADLEY S. BRYANT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Carpet-Lining, of which the following is a full, clear, and exact description.

Carpet-lining has been made of a lap or bat of loose fibrous material between two sheets of paper, the fibrous lap or bat being secured to the sheets of paper when they were in a condition of partially hardened or wet pulp sheets by pressing or embedding the lap or bat of fibrous material into the wet pulp sheets in the paper-machine, all being dried and the paper sheets having their edges secured together by the pressure-rolls in the machine outside of the edges of the lap or bat. Such carpet-lining was very difficult to make, and to a certain extent impractical, for the reason that in drying the pulp sheets with the fibrous lap or bat secured to them over the driers of the paper-machine steam or vapor was generated in the lining, which would swell and puff up the paper sheets so much that in afterward passing the lining through the pressure-rolls the paper sheets would be more or less wrinkled or broken, thereby injuring the appearance and practical value of the carpet-lining.

The object of the present invention is to overcome these objections and to make a carpet-lining having its bat or lap of fibrous material secured to the paper sheets while in a condition of wet pulp sheets, and yet dry and finish the carpet-lining smoothly without wrinkling or breaking the paper sheets.

This invention consists of a carpet-lining composed of two sheets of paper, a sheet or layer of batting or lap of loose fibrous material secured to one side of each sheet of paper when in the condition of a wet pulp sheet, the laps or bats of fibrous material being between the paper sheets, and the paper sheets secured together in any suitable manner at or near or along their edges, all substantially as herein-after fully described, reference being had to the accompanying sheet of drawings, in which is illustrated a carpet-lining constructed in accordance with the present invention.

Figure 1 is a plan view of such carpet-lining, and Fig. 2 a cross-section on line 2 2, Fig. 1; Figs. 3, 4, 5, and 6, cross-sections similar

to Fig. 2, but showing different ways of securing the edges of the paper sheets together; Figs. 7 and 8, cross-sections of two sheets of paper separated from each other, each sheet having its lap or bat of fibrous material secured to it preparatory to the sheets being secured together at their edges to make the carpet-lining shown in Figs. 4 and 3, respectively.

In the drawings, A represents a carpet-lining constructed according to this invention, in which B and C are the two paper sheets, and D E the two laps or bats 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 for manufacturing paper. After the paper-pulp is made into a sheet form by the paper-machine of the required width, it is run onto the apron of the machine or any suitable traveling apron, and when of the right consistency—that is, before being dried, or in a wet condition—the bat or lap of fibrous material, which has been made into a sheet form of the required width and thickness in any suitable manner, is then run onto the sheet of paper-pulp, and the whole is then carried by the apron to and between the pressure-rolls of the machine and pressed together, by which the fibers of the fibrous lap or bat are forced into and become mingled and incorporated with the pulp sheet and the water pressed therefrom. It is then passed to and over the usual driers of the machine, which dry out all the moisture in the fibrous lap or bat and the pulp sheet, and hardens and forms the paper sheet. It is then, if desired, passed between the calender-rolls to give finish to the surface of the paper sheet. This paper sheet, with its fibrous lap or bat secured to it, is then placed upon another paper sheet having a lap or bat of fibrous material secured to it in the same manner, the two laps or bats being next to each other and between the two paper sheets, and then the two paper sheets are secured together at or near or along the edges by stitches, or by paste or cement, or any suitable adhesive material, or in any suitable manner, to inclose the fibrous lap or bat between the two paper sheets and secure and hold the several parts together.

In the several figures in the drawings are

illustrated several ways of securing the paper sheets at their edges, with their respective laps or bats of fibrous material, together, as will now be described.

5 In Figs. 1 and 2 the lap or bat D, of fibrous material, is of the same width as the sheet B, of paper, to which it is secured, as described; but the lap or bat E is a little narrower than its paper sheet C, the edges *b* of which are
10 turned up and over and upon the edges *d* of the paper sheet B, as shown, and the whole at such edges secured together by the stitches *a*, as shown.

In Fig. 3 the lap or bat D, of fibrous material,
15 secured to the sheet of paper B, is of less width than the paper sheet B, while the lap or bat E, secured to the paper sheet C, is of the same width as its paper sheet C, the two (the lap or bat and paper sheet) being of a width sufficient
20 for each edge *f* to be turned up and folded upon itself, as shown in cross-section in Fig. 3, and also in Fig. 8, the free edges *g* of the paper sheet B lying over and upon the outside of the turned edges *f* of the other paper sheet C,
25 to which it is secured by the stitches *a*, as shown in Fig. 3.

Fig. 8 represents in cross-section the carpet-lining shown in Fig. 3, the two paper sheets, with their respective laps or bats secured to each, before being secured together at their
30 edges by the stitches *a*, as separated from each other.

In Fig. 4 each lap or bat D E is of a little less width than its sheet of paper to which it
35 is secured, as described, the two sheets of paper being of the same width, and the two laps or bats of the same width, the edges *h* of the paper sheets being secured together outside of the two laps or bats, as shown in said figure.

40 In Fig. 7 is shown in cross-section the carpet-lining shown in Fig. 4, the two paper sheets, with their respective laps or bats secured to each, before being secured together at their edges by the stitches, and as separated
45 from each other.

In Fig. 5 the laps or bats D E and the paper sheets are all of the same width, and the parts secured together at or near or along the edges
50 *l* by the stitches *a*.

50 In Fig. 6 the laps or bats D E and the paper sheets are of the same width as shown in Fig. 5; but at each edge of the same a strip, F, of paper or other suitable flexible sheet material, is placed over such edge and secured
55 thereto and the parts together by the stitches *a*. At intermediate lines along the length of the carpet-lining between the two edges the several parts are secured together by the stitches *m*, as shown in the several figures.

60 In the manufacture of this carpet-lining each sheet of paper has secured to it, in the manner described, its lap or bat of the fibrous

material, which is one-half or substantially one-half of the thickness required for the lap or bat when the carpet-lining is finished, so
65 that when the two sheets of paper with their respective laps or bats are placed and secured together, as described, the carpet-lining will be of the requisite thickness. A more or less number of lines or rows of stitches can be
70 used, or they can be dispensed with altogether; also, in lieu of securing the edges of the paper sheets by stitches, they can be secured by paste or cement, or any suitable adhesive material, or in any suitable manner, but by
75 stitches is preferable; also, the edges can be secured together in other ways than as shown, and this invention is not to be limited to any particular manner of securing the edges of the paper sheets together, nor to the stitching or
80 to fastening or securing the parts together between the edges, nor to any particular machine in which to make it.

In lieu of having the bat or lap E secured to the paper sheet C of the same width as the
85 paper sheet, as shown in Fig. 3, it can be narrower, and only turn up and fold over the edge of the paper sheet and secure it to the other sheet of paper; but it is preferable to make it
90 as shown in said figure, as the lap or bat will be of the full width of the lining.

A carpet-lining composed of a lap or bat of fibrous material inclosed within a sheet of paper having the fibrous material secured to said
95 paper sheet when in the condition of a wet pulp sheet being the subject-matter of a pending application of mine, Serial No. 202,666, I do not claim such in this application.

Having thus described my invention, what I claim is—

1. A carpet-lining composed of two sheets of paper, a lap or bat of fibrous material secured to each sheet of paper when in a condition of a wet pulp sheet, the two laps or bats
100 between the paper sheets, and the paper sheets secured together at or near or along their edges, substantially as described.

2. A carpet-lining composed of two sheets of paper, a lap or bat of fibrous material secured to each sheet of paper when in a condition of a wet pulp sheet, the two laps or bats
110 between the paper sheets, the edges of one sheet of paper turned up and folded over and upon the edges of the other sheet of paper, and the paper sheets secured together at or
115 near or along their edges, 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.