

(No Model.)

2 Sheets—Sheet 1.

H. S. HALE.

FABRIC FOR WALLS OF APARTMENTS.

No. 299,382.

Patented May 27, 1884.

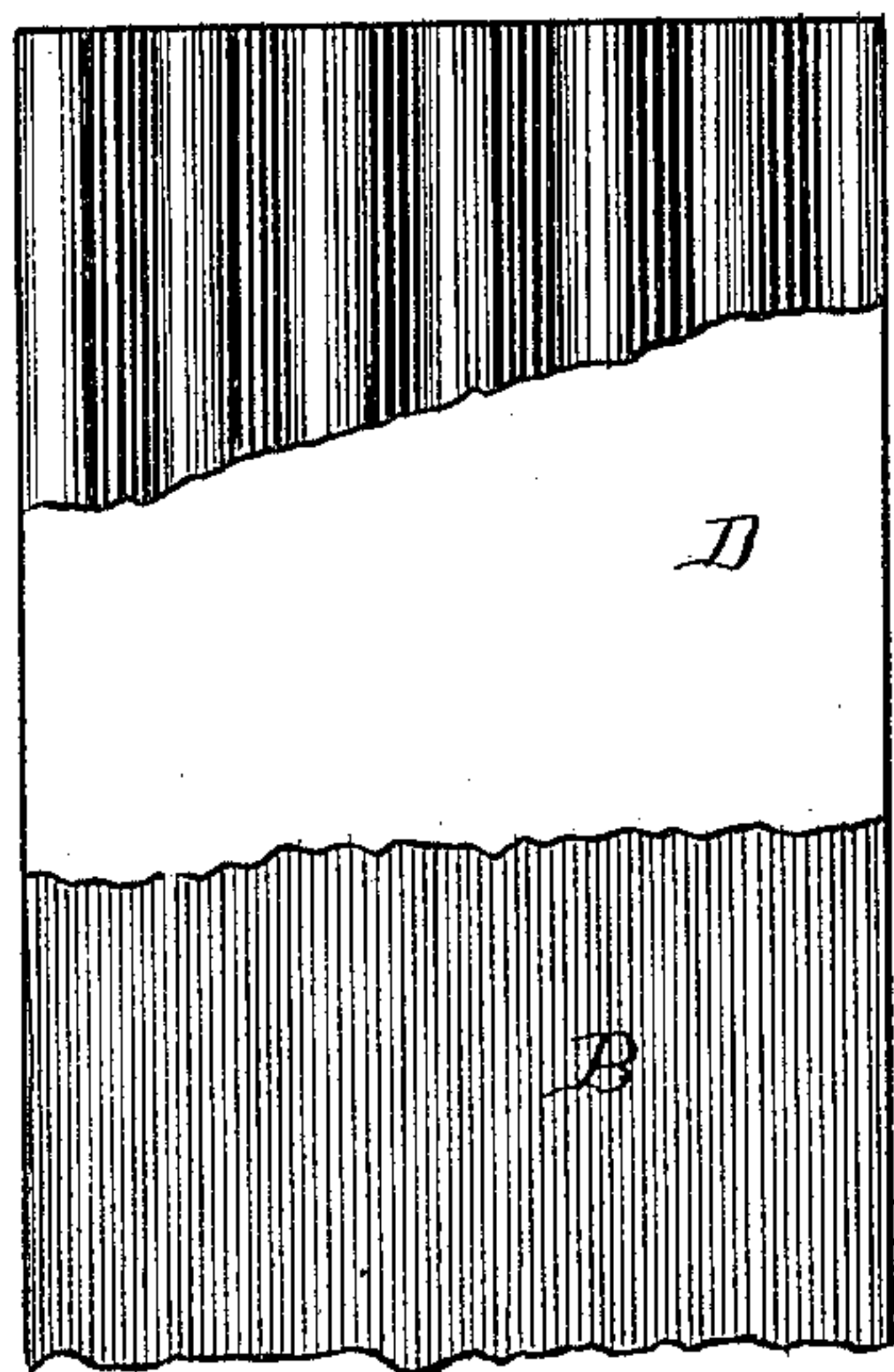
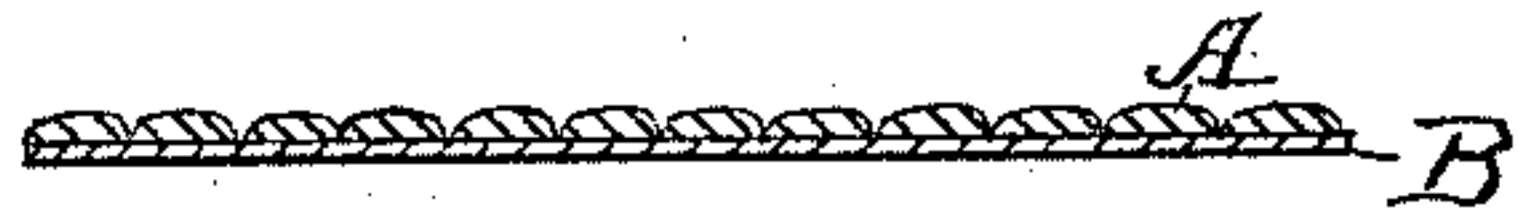
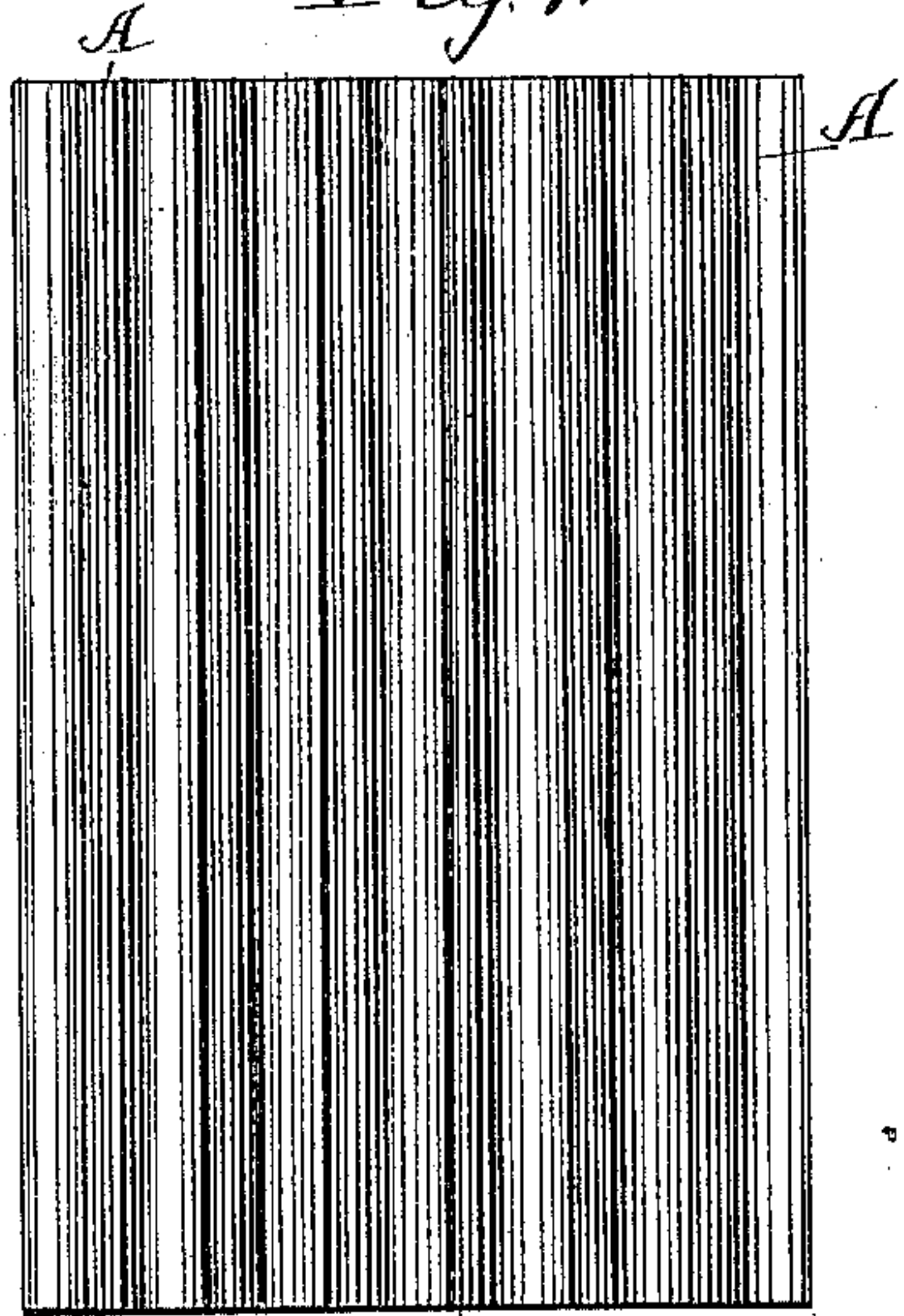
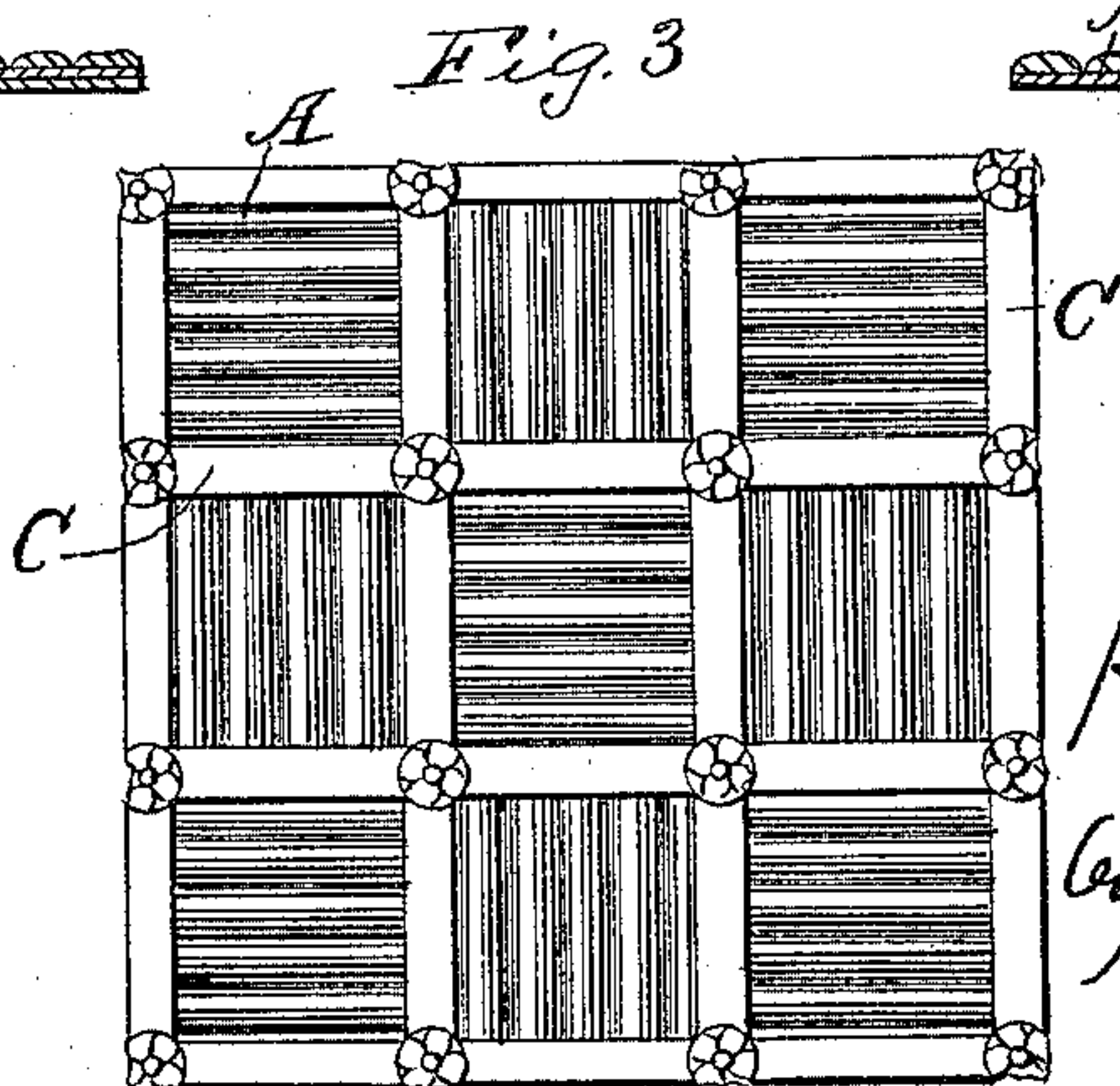
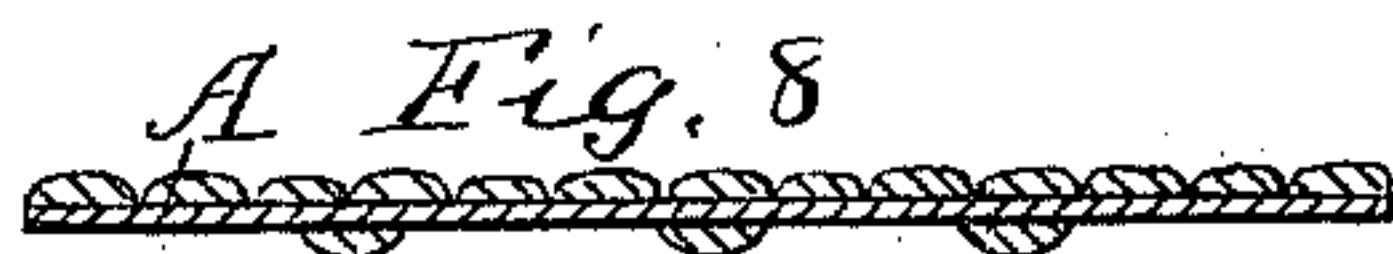
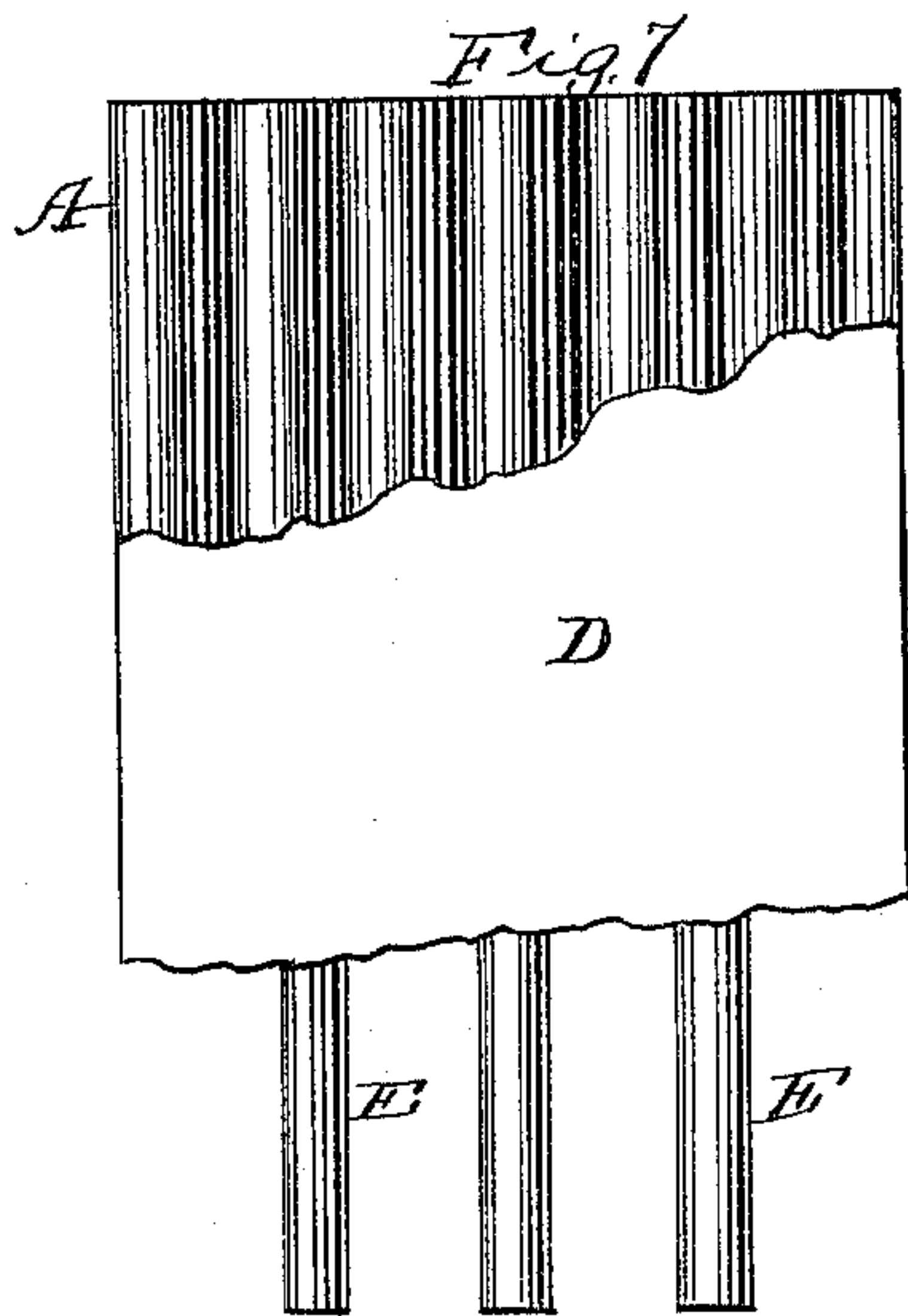
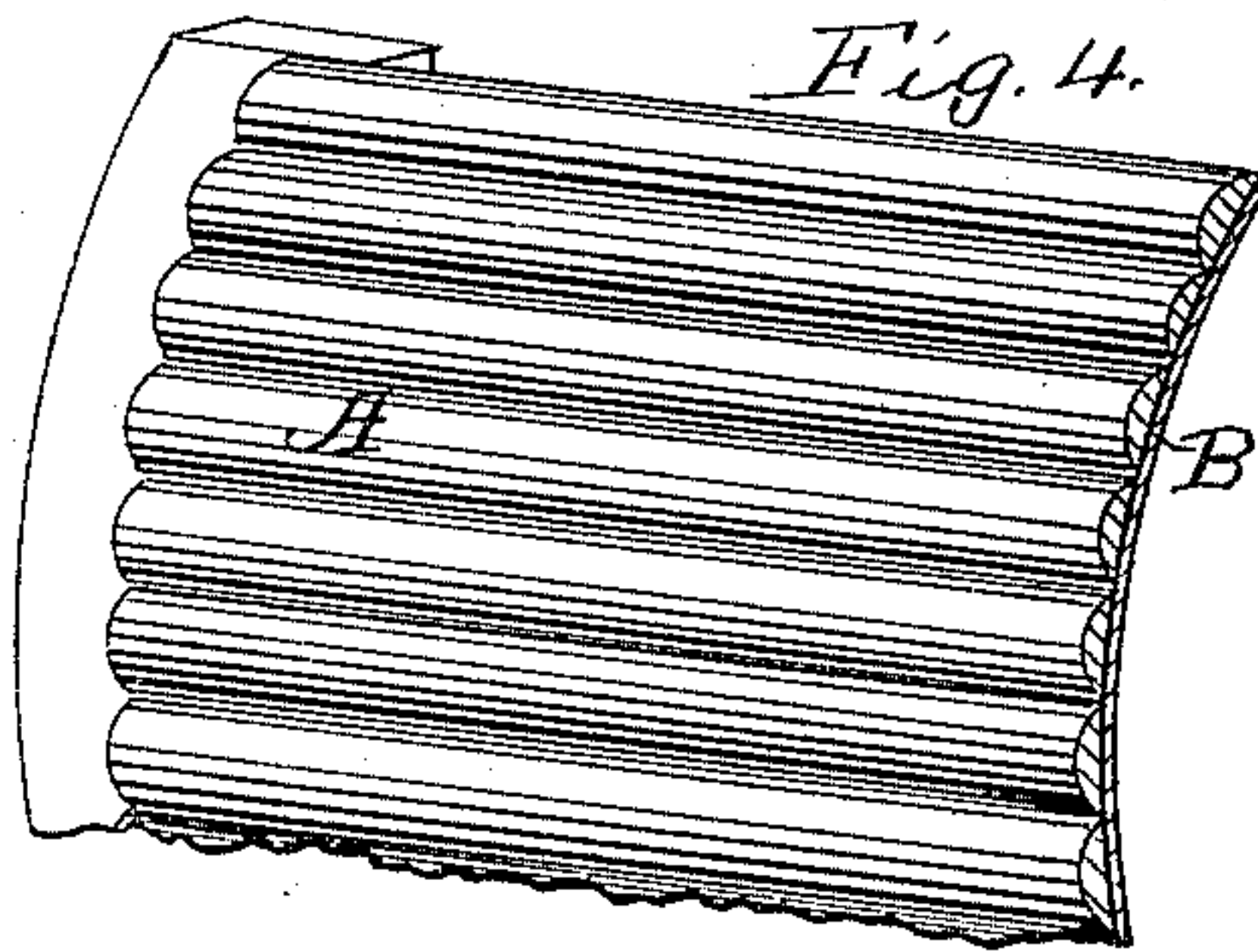
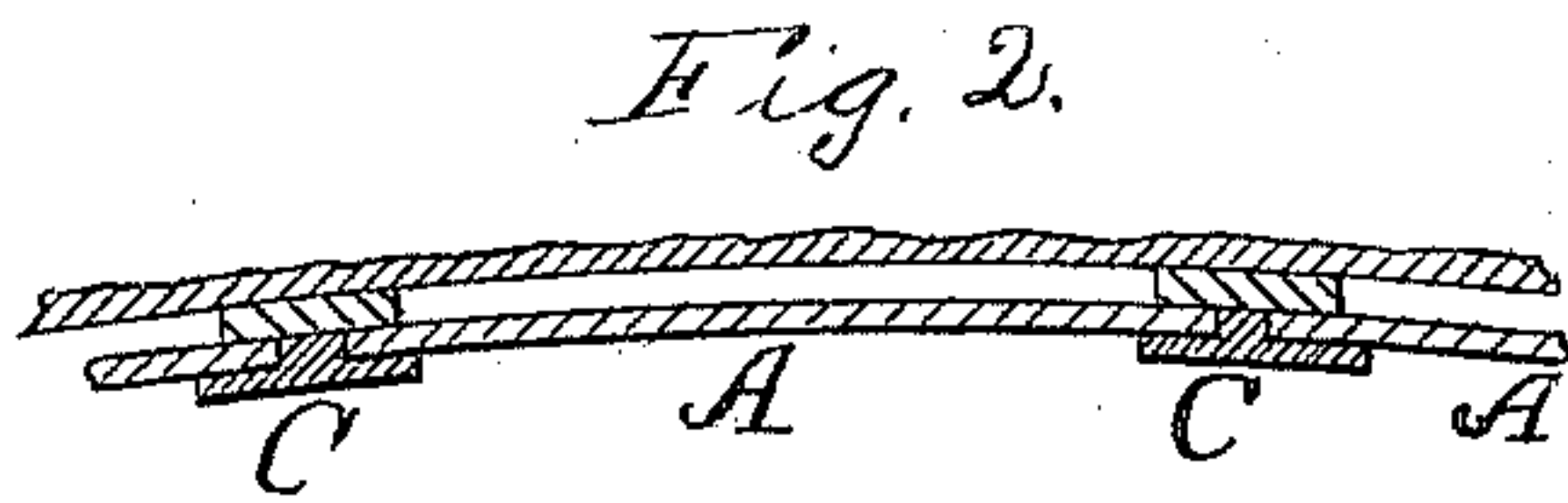
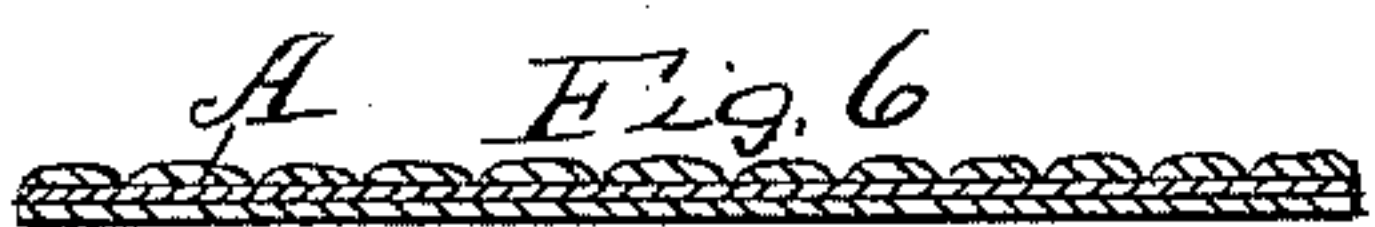


Fig. 5.



Witnesses:
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J. S. Barker.

Inventor:
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(No Model.)

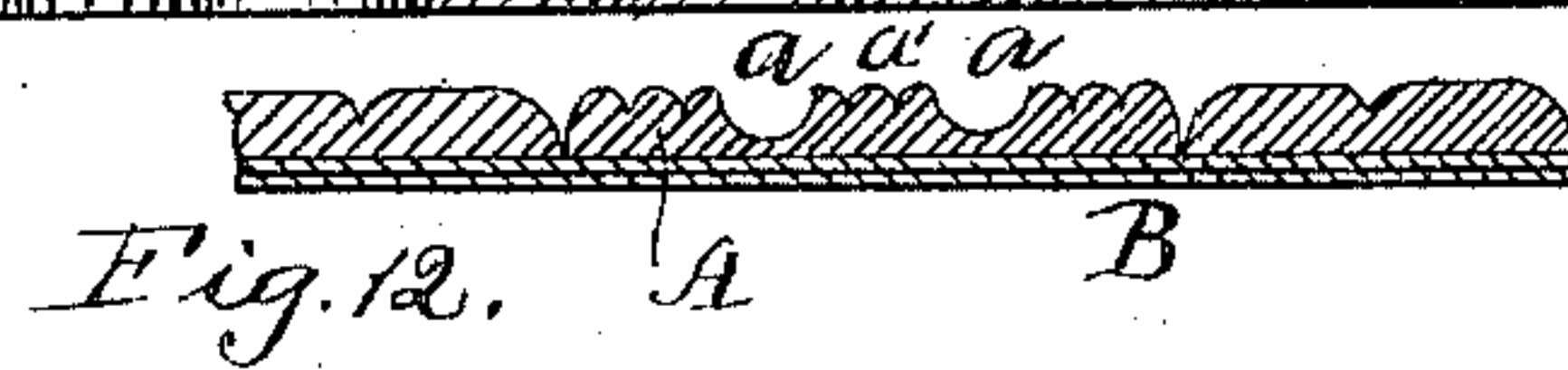
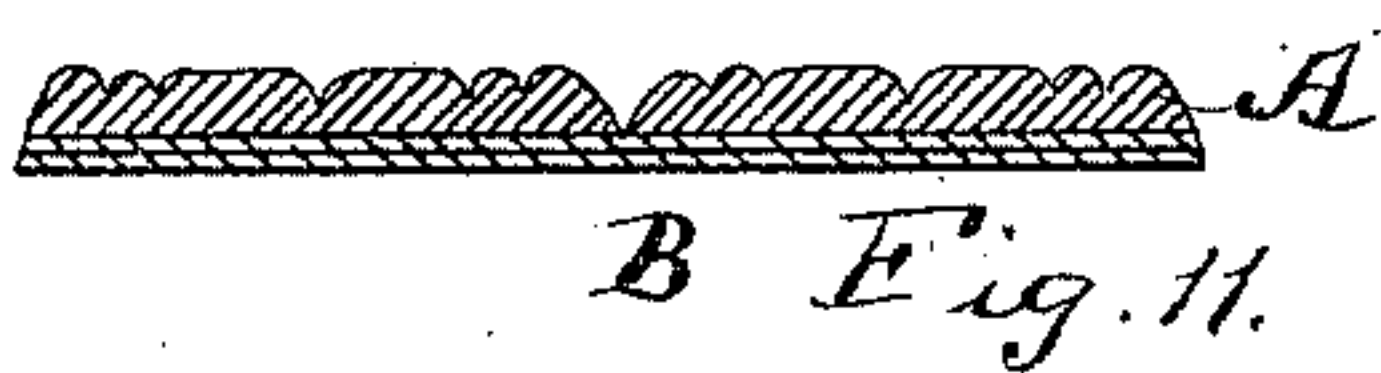
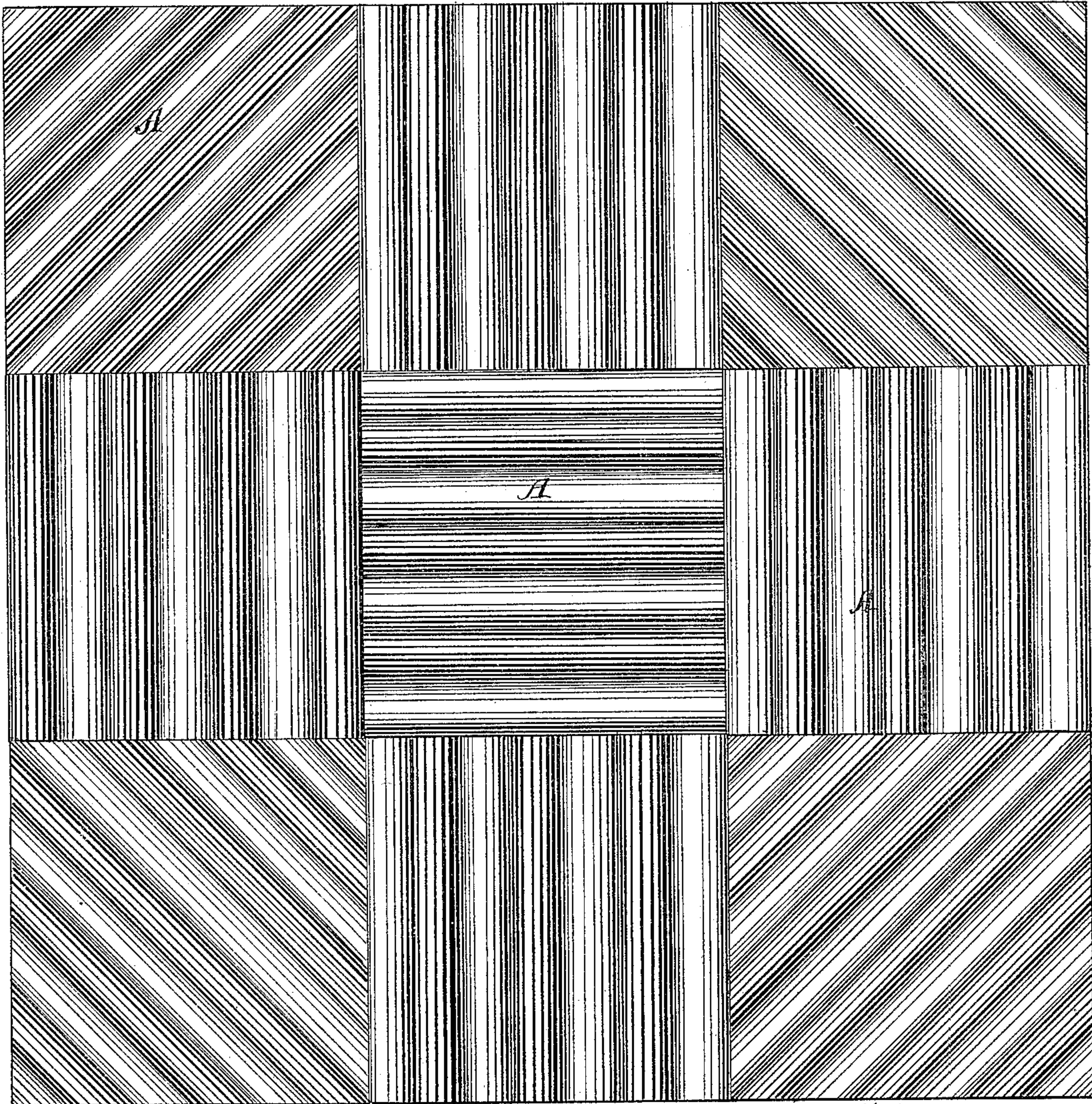
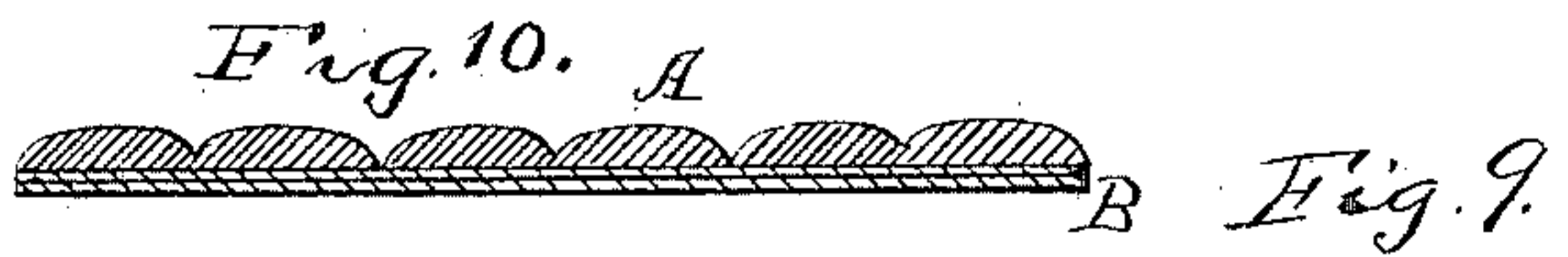
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Inventor:

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UNITED STATES PATENT OFFICE.

HENRY S. HALE, OF PHILADELPHIA, PENNSYLVANIA.

FABRIC FOR WALLS OF APARTMENTS.

SPECIFICATION forming part of Letters Patent No. 299,382, dated May 27, 1884.

Application filed January 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. HALE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fabrics for Walls of Apartments, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to a novel and peculiar fabric or material adapted to be used as a head-lining in cars, and also to be used in "inside" work, where a surface of wood is to be produced, which shall be both serviceable and at the same time capable of being made highly ornamental.

One of the objects of the invention is to provide a lining or facing material which shall be cheaper than the veneers and other fabrics or materials that have been heretofore used, and which shall be more durable by not being liable to blistering or "buckling," and which, furthermore, can be readily applied to surfaces which present curved lines in section.

25 Referring to the drawings, Figure 1 represents a face view of the fabric or material. Fig. 2 is a section through a portion of a head-lining of a car, showing the method of securing in place a fabric or material of my improved character. Fig. 3 is a face view of a section of lining or facing, illustrating the manner in which the material can be used to produce ornamental designs. Fig. 4 is a sectional perspective illustrating the method of applying it to a curved surface. Figs. 5, 6, 7, and 8 show modified forms of the fabric or material. Fig. 9 shows a modified face view of the lining.

In the construction shown in Fig. 1, A A represent strips or slats of wood which are arranged side by side, and which at the contiguous or adjacent edges are rounded or beveled for purposes that will be understood after considering the matter set forth below. In order to rightly permit the use of these strips as a lining or facing material, they are secured to a backing, as shown at B. In the construction shown in the last-said figure this backing consists of a sheet of wood veneer, which may be of any suitable thickness, the latter varying according to the purposes for which it is intended to use the lining or facing after it is

completed. Upon this backing the strips or slats A are placed, and to it they are firmly secured by means of glue, cement, or other adhesive material of sufficient strength to properly hold them. As shown in said figure, the backing material (it being in this case a wood veneer) has the grain therein (the backing) arranged to run parallel with the strips or slats A of the lining or facing. When thus arranged, the fabric that is produced is flexible on lines longitudinally of the slats or strips—that is to say, can bend readily on the longitudinal lines. For some reasons, however, it is preferable to have the grain of the backing-veneer run transversely to the slats or strips A, as will be more fully described herein below.

The fabric, consisting of the slats or strips and the backing-veneer, can be made in sheets of any required dimensions, although for most purposes for which it is to be used it is desirable to have the sheets not very large, in order that the surface produced thereby may be broken up—that is to say, composed of several sections of the fabric arranged in such manner as to produce ornamental designs.

After the fabric has been produced, as above described, it can be secured to the surface where it is to be used by nails, glue, cement, or other fastening material.

By referring to Figs. 2 and 4, wherein is shown a section of a head-lining of a car, it will be seen that my lining fabric is, after being cut to the proper shape, fitted into the places between the strips of molding ordinarily used to break up the surface of the wall or ceiling, the edges of the lining material A B being situated beneath the edges of the molding C, so that the latter cover up the cut edges of the lining, and therefore a neat and finished appearance is attained. This may be used also as a facing or lining material for the inside work of houses of all descriptions, where it can be also applied in the ways above described or in any ordinary manner.

By referring to Fig. 4 it will be seen that the material could be readily applied and secured in such manner as to produce a curved surface, it, owing to its peculiar construction, being adapted to bend to a considerable extent without danger of fracture.

This lining or facing material is superior to

those heretofore in use, made of sheets of veneer secured together, inasmuch as, first, it can be manufactured much more cheaply, it being well known that the manufacture of veneer is exceedingly troublesome and very expensive, it requiring great pains to have the sheets of veneer thoroughly joined together at all points. Again, the veneer is more expensive, in that it requires large pieces of wood from which to cut the sheets, whereas in making my fabric I can employ narrow strips of wood, and therefore can utilize much of the valuable and ornamental wood which is otherwise wasted and worthless; secondly, it is superior, in that it will permit its being bent to conform to curved surfaces without necessitating that the wood upon one side shall yield more or less, while that upon the other side must have its fibers more or less crowded together, as is the case when compound veneer is applied to such surfaces. In my case the slats or strips A having the beveled or curved edges can at the upper edges separate sufficiently to conform to any of the ordinary surfaces, and at the same time will not separate at the base to such an extent as to impair the appearance of the lining or facing; thirdly, this fabric presents a new field for designing in the manufacture of inside wood-work and lining and facing material, the curved, rounded, or beveled edges of the slats imparting a peculiar appearance, which can be made very pleasing to the eye, and which present the possibility of a great number of variations in appearance, and in addition is the fact that woods of various species and colors may be used in making the strips or slats A in order to heighten the effect of the surface produced.

The fabric is superior to that which has been heretofore known, consisting of flat pieces of wood secured to a textile backing, which fabric, although capable of use as a floor-covering, and as a surfacing material where the surfaces are perfectly flat, yet does not present the same opportunities for ornamentation. This is owing to the fact that the wooden portions are rectilinear and angular in cross-section, and to the further fact that when the fabric is curved in a direction opposite to the slats it will have disagreeable angular projections prominent, and that they cannot be curved in the opposite direction—that is to say, toward the wooden slats, the edges of the latter not being rounded or beveled to permit sufficient flexibility for this purpose. As said above, the veneer backing B may have the grain running transversely to the strips or slats A. In this case, while there may be somewhat less of flexibility on lines longitudinal of the slats or strips, there is an increase in the strength of the fabric and less liability of warping, cracking, and buckling. I prefer for most purposes to construct the fabric as shown in Fig. 5, in which D represents a canvas or fibrous fabric, to which the strips or slats A

are secured upon one side and the wood veneering B is secured upon the other. This acts to give a thorough binding between the opposite parts of wood, and at the same time does not decrease the flexibility of the fabric as a whole.

When the material is to be used as a lining or facing in places where it will be subjected to extremes in temperature and humidity, I may employ narrow strips of wood, E E, instead of the wood veneer B in the construction, as above described. These strips operate to hold the strips or slats A firmly together and prevent their being moved by any agency to an undesirable extent. The strips E may be arranged transversely, if preferred.

As shown in Fig. 1, the strips or slats A have continuous unbroken upper surfaces, a section of each disclosing for the edges and the top a curved line from side to side, the curve along the upper surface being somewhat flatter than at the edges. I do not wish, however, to be limited to a surface of that character, inasmuch as it may be varied largely without departing from the spirit of the invention; and, in fact, there are other forms of strips or slats which, while embodying the generic features, have also incident to them other special advantages. Thus in Fig. 10 there is shown a slat or strip having a central longitudinal recess, which may be cut down to any desired depth, and which acts to increase the flexibility of the fabric, and at the same time allows of an increase in the ornamentation, it breaking up the continuity of the surface.

In Fig. 11 several small grooves are shown running parallel with and near to the edges of the slat. In Fig. 12 there are shown large recesses or grooves, *a a*, and between them sets of smaller grooves, as at *a' a'*. Thus it will be seen that the character of the surface may be greatly varied, there being room for varying the design and the flexibility of the fabric to a great extent.

I claim—

1. As a covering for the walls of an inclosed apartment, the herein-described fabric, having narrow strips of wood which are flat upon one side, and having their opposite sides formed in curved or broken lines, in combination with a backing, and secured to the strips and forming a support therefor, substantially as set forth.

2. As a covering for the walls of an inclosed apartment, the herein-described fabric, having narrow wooden slats combined with and supported by a thin sheet of wood, substantially as set forth.

3. As the covering for the walls of an inclosed apartment, the herein-described fabric, having narrow strips of wood combined with and supported by a thin sheet of wood arranged with its grain transverse to the grain of the wooden strips, substantially as set forth.

4. As a covering for the walls of an inclosed

apartment, the herein-described fabric, having thin strips of wood combined with and supported by a flexible backing, curved supports, and means for attaching the fabric to the
5 curved supports, substantially as set forth.

5. As a covering for the walls of an inclosed apartment, the herein-described fabric, having thin strips of wood combined with and supported by a flexible backing, means for attaching the fabric to the walls of the apart-
10

ment, and a molding covering the joints which unite cut portions of the fabric, substantially as set forth.

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

HENRY S. HALE.

Witnesses:

JAS. S. BREEN,

H. G. BARNES.