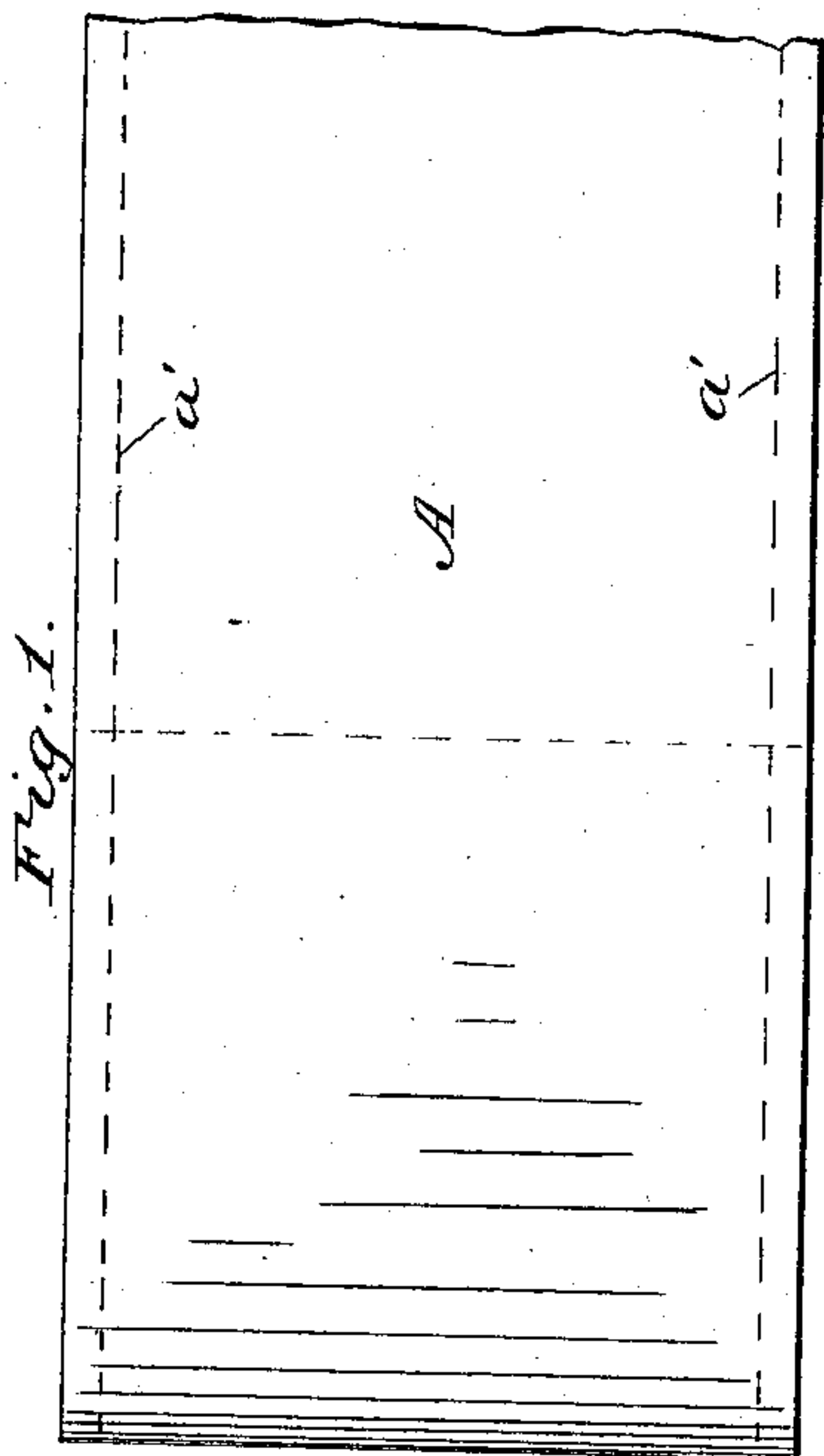
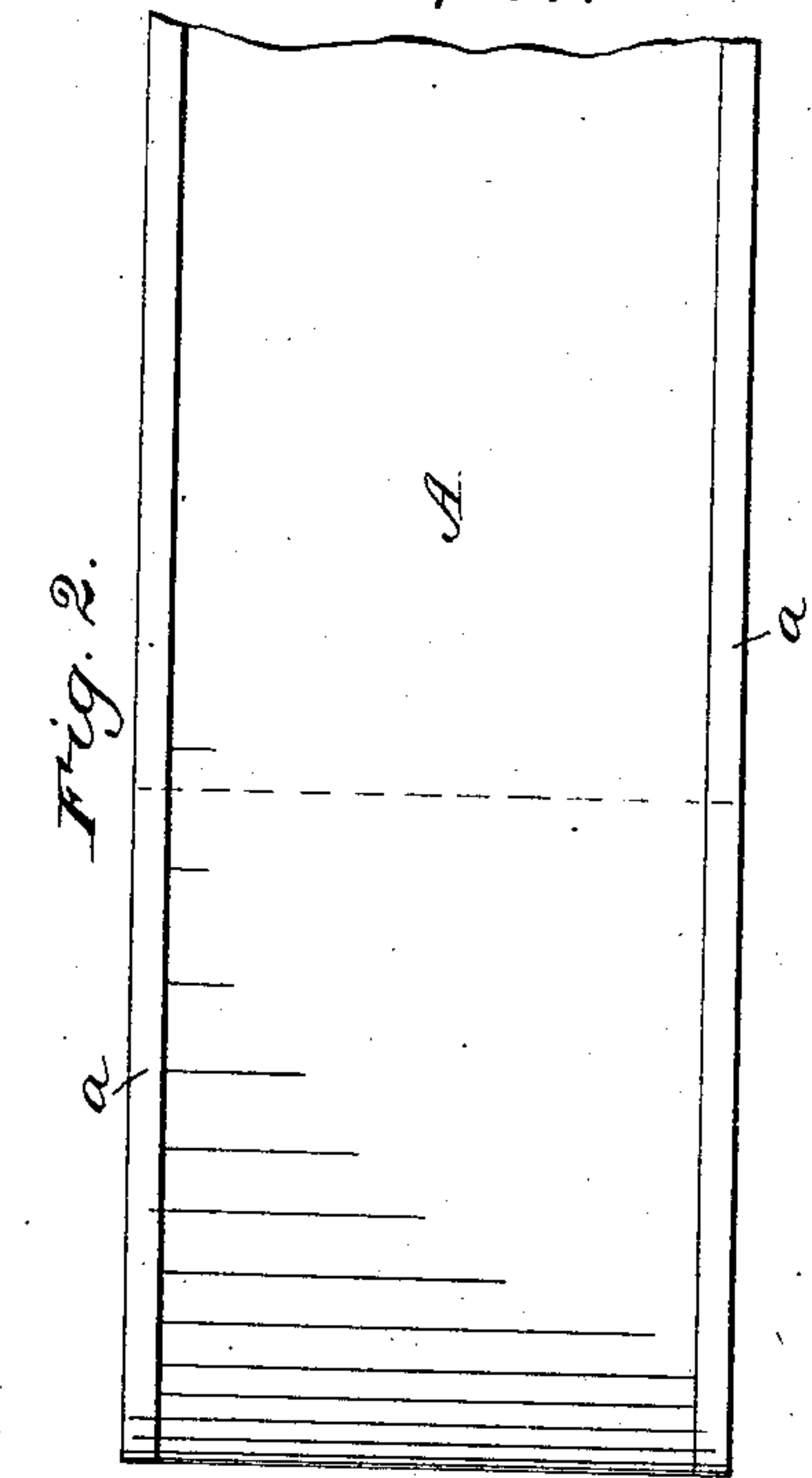


(No Model.)

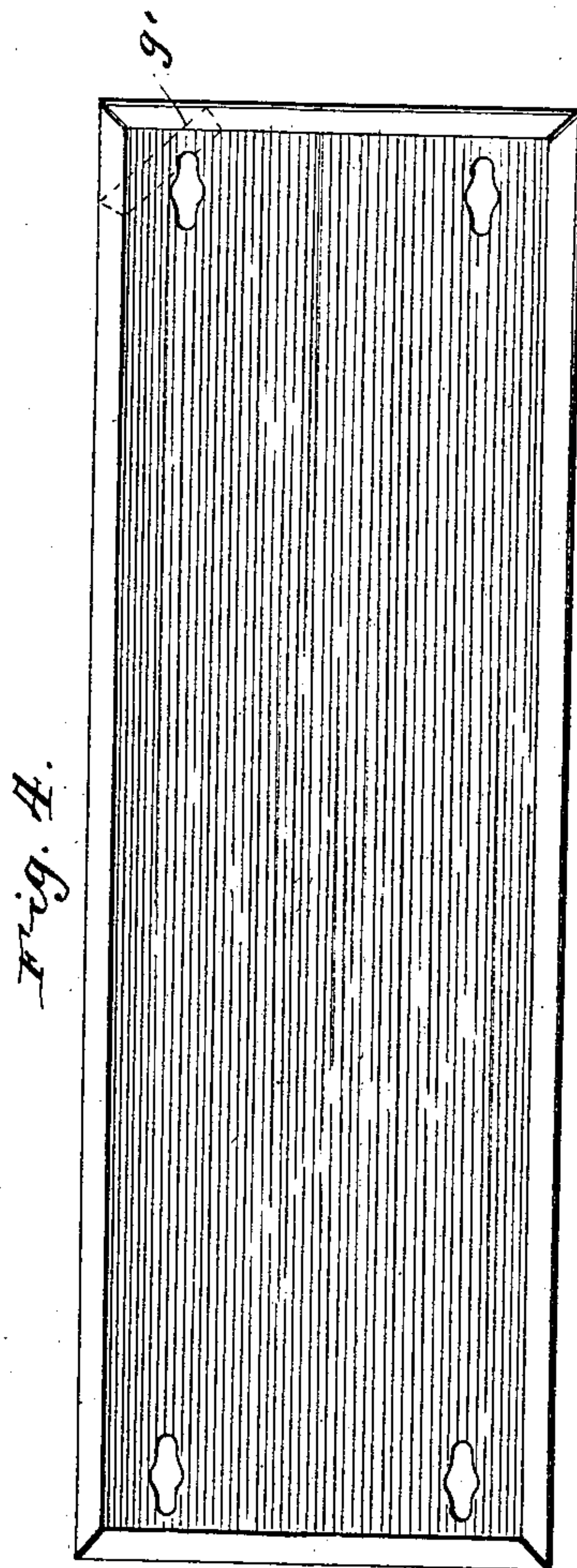
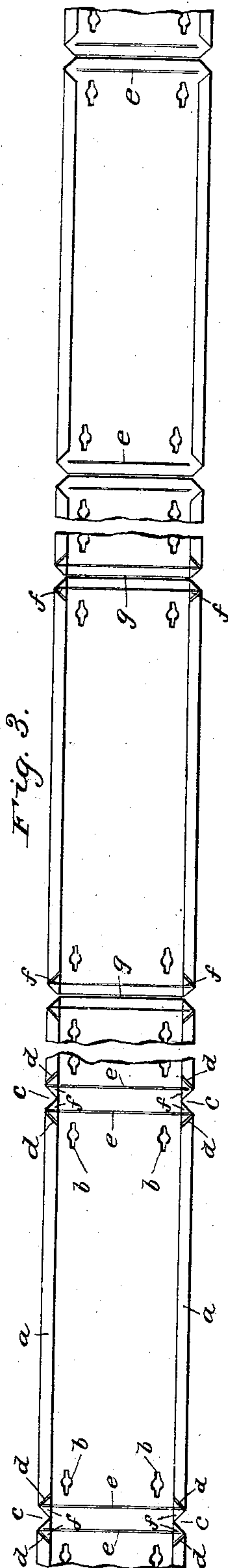
A. K. MERRILL.
MANUFACTURE OF PAPER CUFFS.

No. 324,267.

Patented Aug. 11, 1885.



WITNESSES
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Ewell & Son



INVENTOR
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by Marshall Bailey, Atty.

UNITED STATES PATENT OFFICE.

ALFRED K. MERRILL, OF BROOKLYN, ASSIGNOR TO GUSTAVUS A. GOLD-SMITH, OF NEW YORK, N. Y.

MANUFACTURE OF PAPER CUFFS.

SPECIFICATION forming part of Letters Patent No. 324,267, dated August 11, 1885.

Application filed November 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALFRED K. MERRILL, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in the Manufacture of Paper Cuffs, of which the following is a specification.

What are commonly known as "paper cuffs" are made from combined muslin and paper, sometimes made water-proof by a coating of suitable material.

The object I have in view in this invention is to provide an easy, simple, and convenient method of making such a cuff with folded edges on all four sides. It is desirable to thus fold not only the longer edges, but also the ends of the cuff, in order to prevent the material from fraying, and also to obtain a more exact imitation of a linen cuff. Difficulty, however, is experienced in doing this. It is not an easy matter to obtain the proper finished appearance at the corners of the cuff, the folds must be so formed and laid that they will not overlap, and the operation is apt to take considerable time and labor.

By the mode of procedure which I have devised and am about to describe I am enabled to lessen the time and labor required for the production of the cuff, and at the same time to obtain a well-finished article.

The manner in which I proceed can best be explained and understood by reference to the accompanying drawings, in which—

Figure 1 represents a portion of the strip of compound fabric from which the cuffs are to be made. Fig. 2 represents the same after its longer edges are pasted and folded. Fig. 3 represents diagrammatically the subsequent operations to which the strip is subjected in order to obtain from it cuff-blanks having ends formed in such manner as to permit of their being folded. Fig. 4 represents the completed cuff.

The compound strip from which the cuffs are to be cut is a long strip in roll form of a width equal to the width required for the finished cuff plus the width of the fold at each of its longer edges. A portion of such a strip is shown at A, Fig. 1. The lines on which its longer edges are to be folded are indicated by

dotted lines *a'*. This strip is drawn from the roll, and by suitable means known in the art to which this invention pertains is creased and folded along the lines *a'* (paste or gum being previously applied to the inner face of the folds.) The pasted folds *a* are pressed down upon the inner face of the body of the fabric. The strip thus folded, after passing over a calender or drier to set the gum and insure the adhesion of the folds, is again rolled up. The strip thus prepared is, as shown in Fig. 2, a strip of a width equal to that of the cuffs to be made from it, having pasted and folded longer edges. This strip is then run or drawn from a roll over a table, where it is acted on by dies which form the two sets of button-holes *b*, cut in the folded edges triangular nicks *c*, and at the same time make in the folded edges on each side of these nicks the cuts *d*, which go only half through the thickness of these edges—that is to say, they go through the inwardly-folded parts *a*, and not through the body of the fabric beneath. I may also at the same time form the cross-creases *e* in the fabric on the intended lines of fold for the ends of the cuff. I prefer to make these creases because they facilitate the subsequent operation of folding the ends of the cuffs, but they are not indispensable. By making the half-cuts *d*, I separate from the main portion of each fold *a* on each side of the nick *c*, a triangular piece *f*, which is to be removed so as to prevent the end folds from overlapping the folds *a* at the corners of the cuff.

After the operation above described I next cross-cut the strip along line *g* from the apex of one nick to that of the opposite nick, thus obtaining a cuff-blank having at its corners the separable pieces *f* of the folds *a*. These pieces are first removed and the ends of the cuff are then pasted and folded down upon the body of the cuff along the lines *e*, the folds being pressed down tightly so as to insure their permanent and thorough adhesion to the body of the cuff. The cuff thus finished is represented in Fig. 4.

In this cuff the corners are sharp. In some instances it may be desired, however, to make cuffs with one or both of the corners at each end truncated, as indicated by the dotted line

g' in Fig. 4, still preserving, however, the practically-continuous folded edge. Such a cuff can be produced readily by a suitable formation of the dies which make the nicks and half-cuts.

Having described the best way known to me of carrying my improvement into effect, what I claim as new and of my own invention is—

The improvement in the manufacture of paper cuffs from a strip in the roll, which consists in first pasting and folding said strip along its longer edges, then at proper intervals (determined by the length of cuff required) nicking said strip and half-cutting the

folded longer edges so as to separate from the main folds those parts which would otherwise overlap when the ends of the cuff are folded, cross-cutting the strip, and finally pasting and folding the ends of the cuff, after removing the pieces separated from the longer folds *a* by the half-cuts, substantially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 22d day of October, 1884.

ALFRED K. MERRILL.

Witnesses:

LOUIS LEOPOLD,
DANIEL BRADY.