

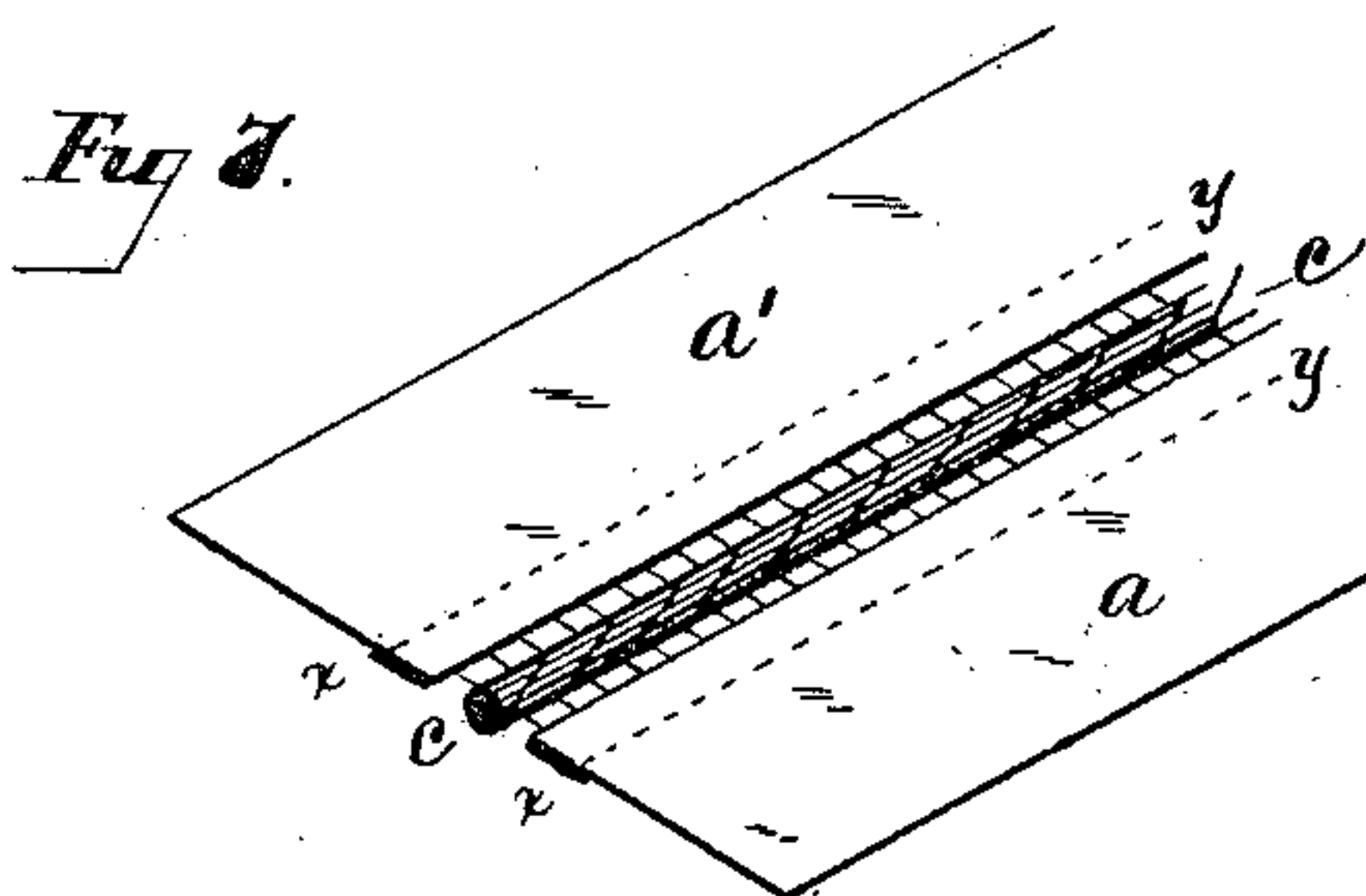
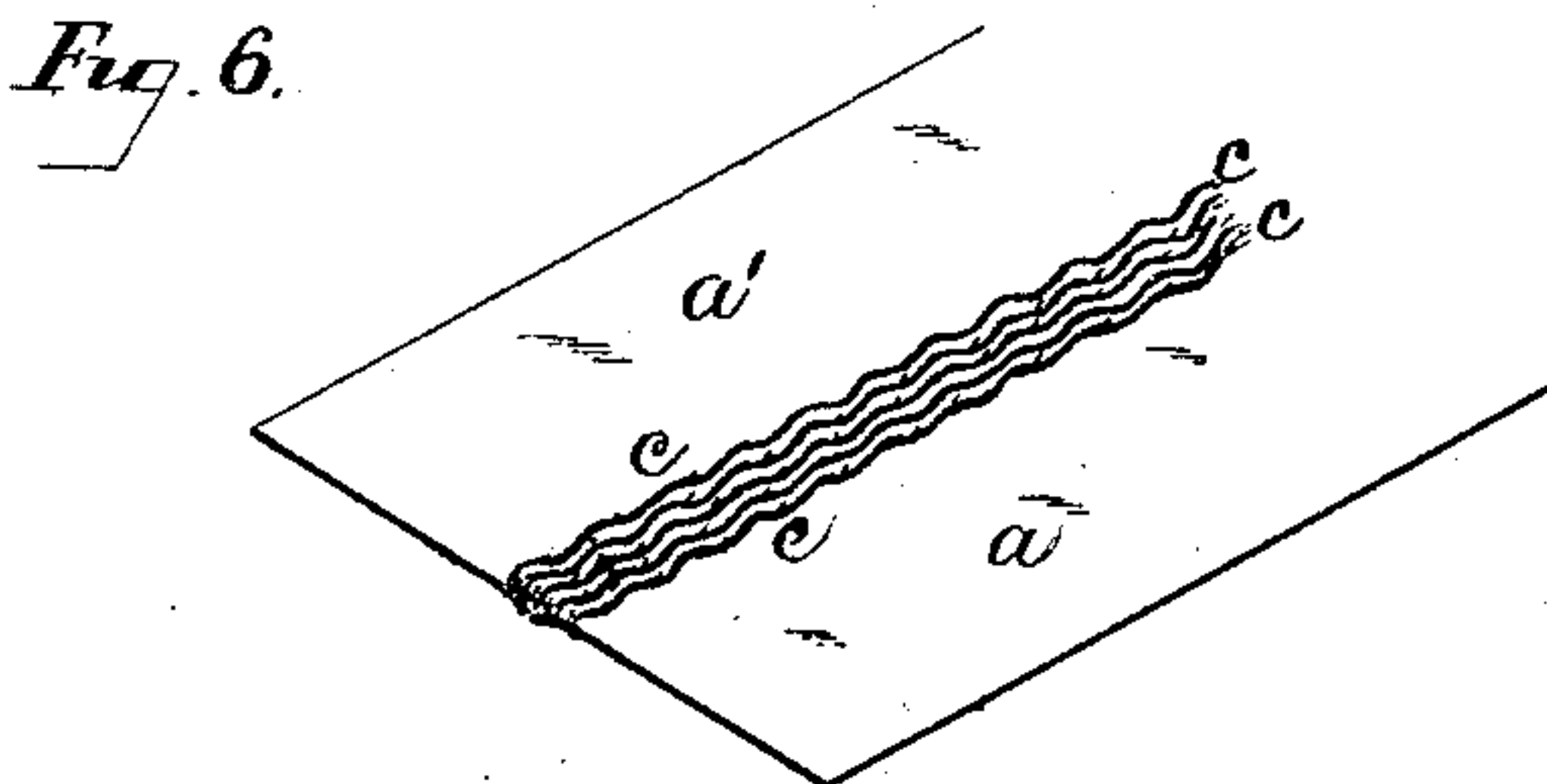
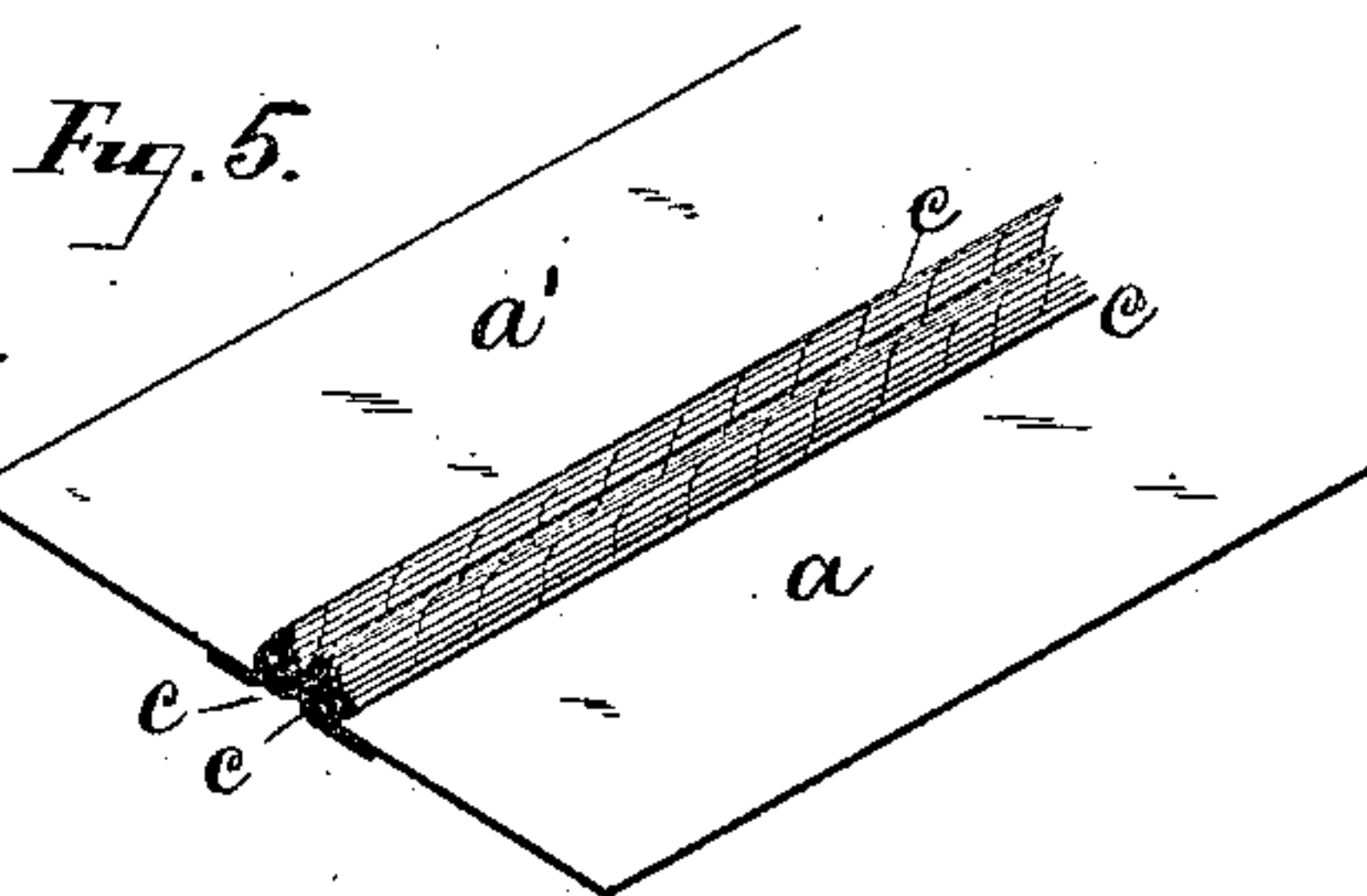
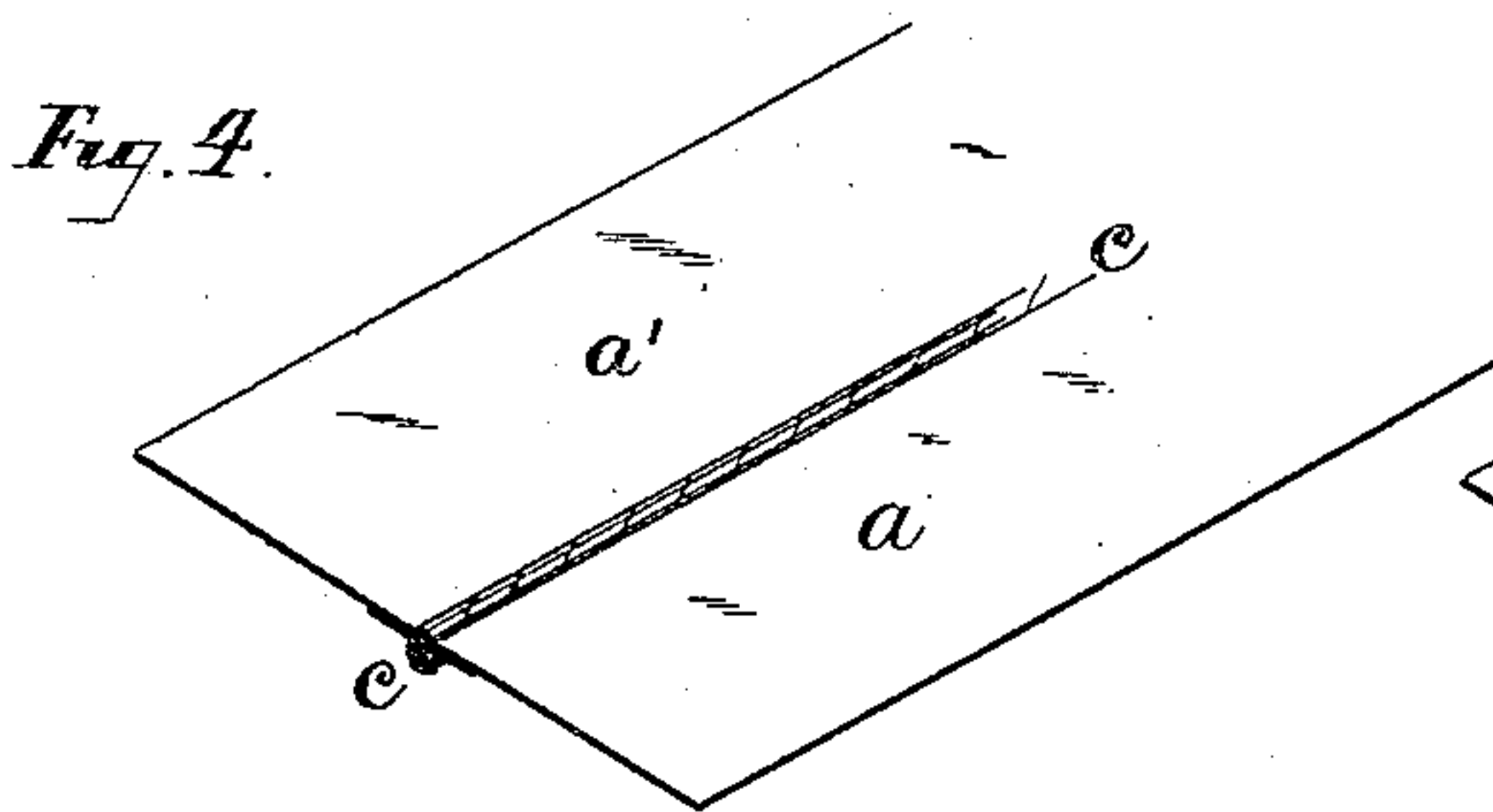
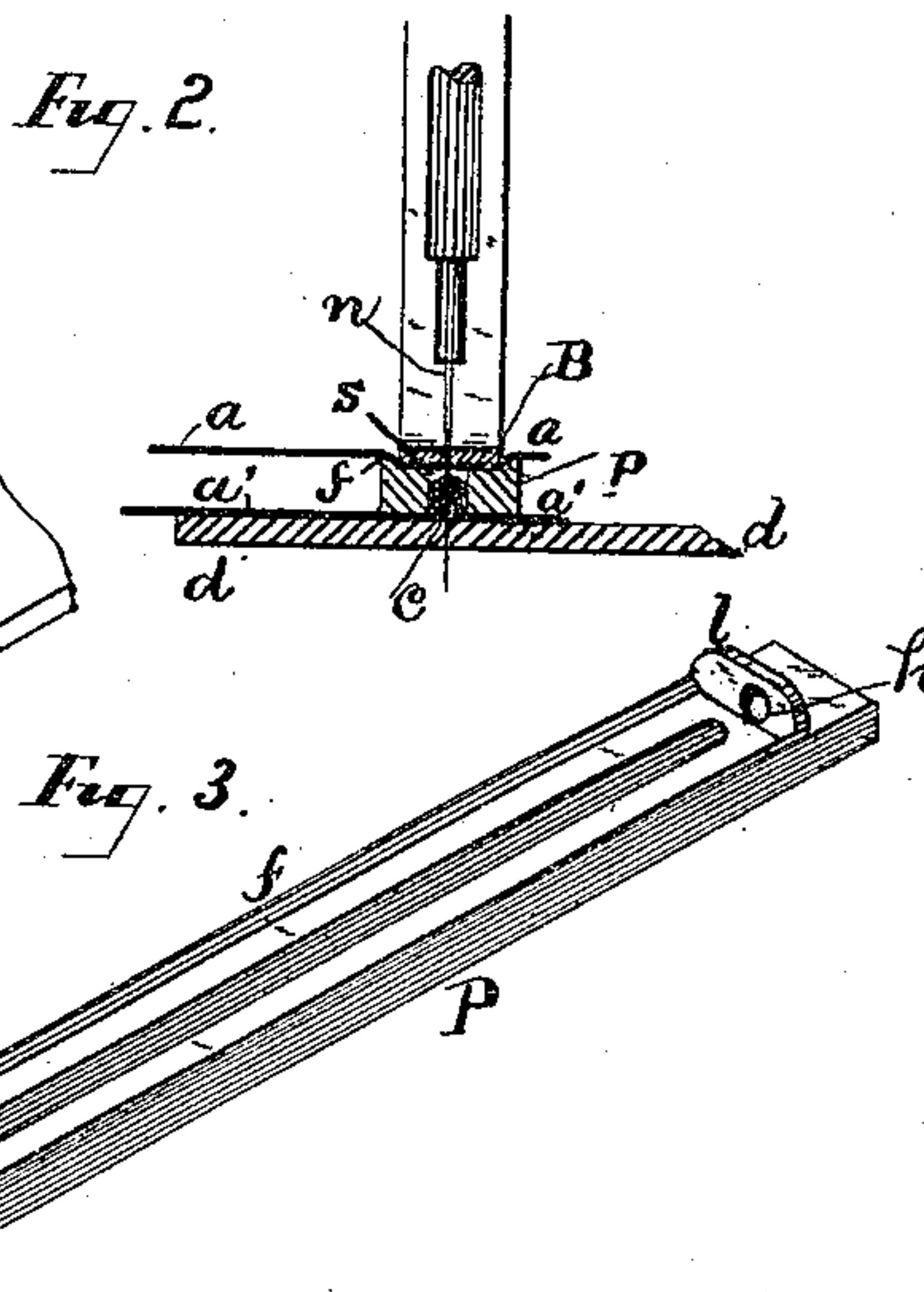
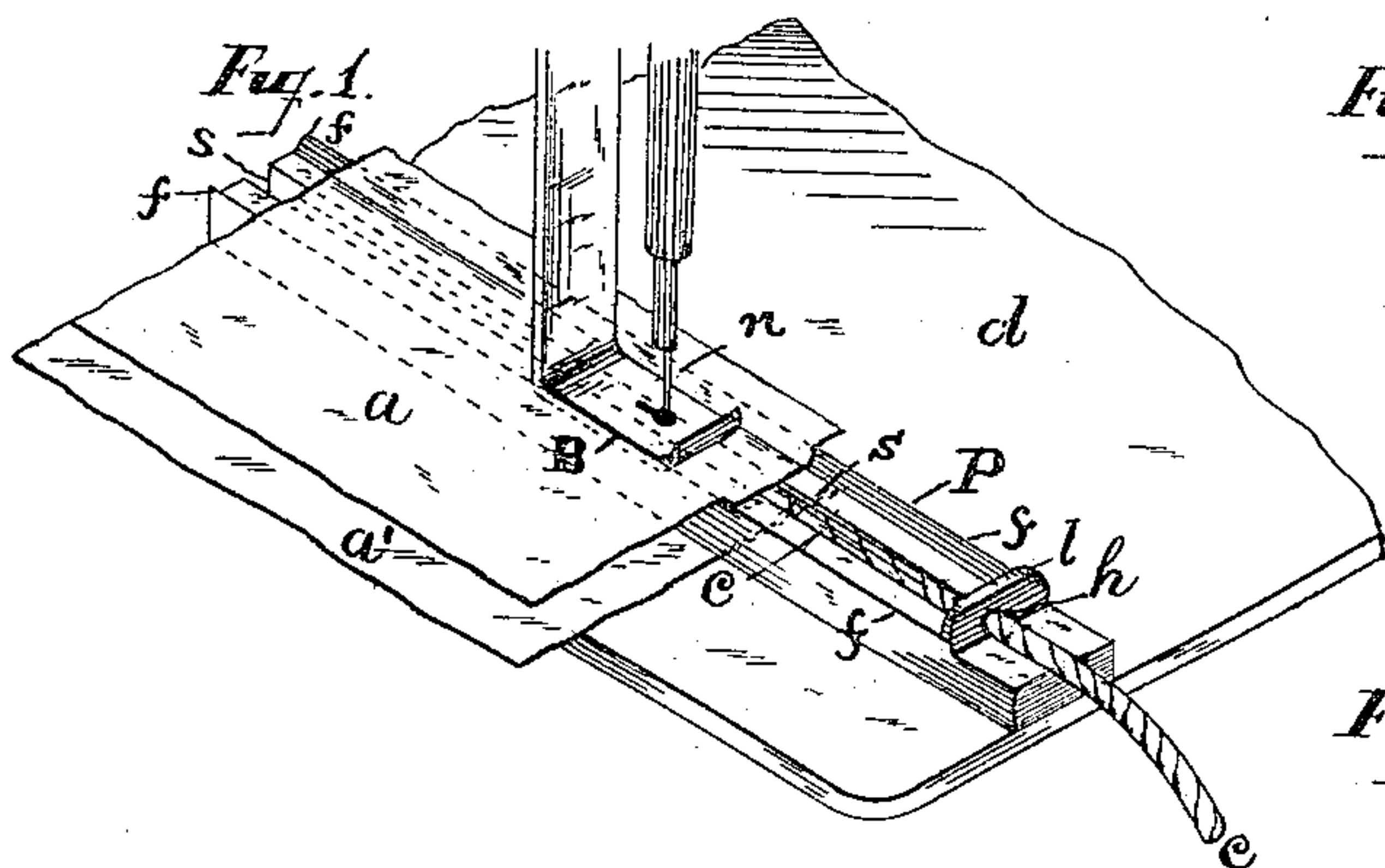
(No Model.)

J. PUSEY.

METHOD OF INSERTING CORDS IN THE SEAMS OF TEXTILE AND OTHER FABRICS.

No. 338,613.

Patented Mar. 23, 1886.



WITNESSES

WITNESSES
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METHOD OF INSERTING CORDS IN THE SEAMS OF TEXTILE AND OTHER FABRICS.

SPECIFICATION forming part of Letters Patent No. 338,613, dated March 23, 1886.

Application filed August 27, 1885. Serial No. 175,426. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA PUSEY, a citizen of the United States, residing in the city and county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in the Method of Inserting Cords in the Seams of Textile and other Fabrics, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The nature of my invention is an improved method of inserting cords in the seams of textile and other fabrics continuously with the sewing of such seams, whereby one or several cords simultaneously are inserted speedily, evenly, and regularly therein.

The invention will be clearly understood by those familiar with the art to which it appertains from the following description and claims, reference being had to the annexed drawings, of which—

Figure 1 is a perspective view showing the presser-foot, needle, and bed-plate of an ordinary sewing-machine, together with an auxiliary device—to wit, a slotted plate suitable to be used in connection therewith—and also two pieces of textile fabric, in the seam of which a cord is being inserted according to my improved method. Fig. 2 is a vertical section of the parts shown in Fig. 1 immediately in front of the needle. Fig. 3 is a perspective view of the aforesaid slotted-plate device. Fig. 4 is a perspective view of a piece of fabric having a cord inserted in the seams thereof according to my invention, the main portion of said cord being thrown on the under side of the seam. Fig. 5 is a view differing from Fig. 4 only in that two cords instead of one are shown as inserted in the seam, and in that the main part of said cords is thrown on the upper side of the seam. Fig. 6 is a like perspective view, in which a number of fine cords or threads are inserted in the seam. Fig. 7 is a like perspective view showing a cord inserted according to my method, the same being less in diameter than the width of the seam, and the margins of the fabric beyond the line of stitching being turned back and sewed to the sides, respectively, of the two pieces or parts of the fabric.

In one mode of carrying out my invention, I take a piece with its edges turned over and

brought together, or two pieces of textile, knit leather, or other stuff capable of being sewed together, superpose the two edges or layers *a a'*, and insert between them, previous to beginning the sewing of the layers together, or, preferably, continuously therewith, a suitable device adapted to keep them (said layers) separated from each other, and at the same time allowing the needle to pass through said device, as hereinafter explained. I then, or continuously as the sewing proceeds, insert between the layers and within said separating device a cord, and sew directly through the two layers and the cord with straight-ahead stitches. When the sewing is completed, I remove the said device and open out the two layers *a a'*, when the cord will appear inserted in the seam—as, for example, in Fig. 4.

By the aid of one form of said separating device, (seen in Figs. 1, 2, and 3—entirely in the latter figure,) I am enabled to practice my invention in a speedy, effectual, and economical manner in connection with any ordinary straight-ahead sewing-machine. Other suitable slotted or guiding plates may be substituted therefor.

The present device consists of a plate, *P*, of wood, metal, or other sufficiently firm material, having a longitudinal slot, *s*, therein, and preferably provided with lateral upturned flanges *f*. The thickness of this plate, independent of the flanged portion and the width of the slot therein, should not be less—or, at least, not much less—than the diameter of the cord to be inserted. Its forward end, being that next the open end of the slot, is passed between the layers *a a'* of the fabric to be united, and in the seam of which the cord is to be inserted, in such position that slot *s* will come directly beneath the needle *n* of the sewing-machine. The object of flanges *f* is to guide the plate longitudinally, the distance between said flanges being somewhat greater than the width of the presser-foot *B*, and, as will be obvious, the plate will thus be not only guided straight, but will be prevented from escaping from its proper position.

Before the sewing is begun, the end of the cord *c* is inserted between the layers into slot *s*, as indicated in Fig. 1 and shown clearly in Fig. 2. The sewing being proceeded with, the needle passes through the upper layer, *a*,

then through the cord, and finally through the lower layer, *a'*, which rests upon the plate *d* of the machine. At the same time the two layers will be advanced by the usual feed-motion, and the cord will obviously be continuously drawn into slot *s*. It will be understood that the feed carries forward the under layer, which by friction carries the slotted plate, and with it the upper layer. When the slotted plate has moved forward until the needle approaches the closed end of the slot, the plate is drawn back again until the needle is more or less close to the open end of said slot, whereupon the sewing is proceeded with as before. Although not essential, I prefer to provide said plate with a projecting lug, *l*, so located that it will stop against the presser-foot before the needle reaches the closed end of the slot, in order to avoid any possibility of the needle striking the body of the plate. Although preferable, it is not essential to provide said lug with a hole, such as *h*, through which the cord is passed. This hole simply serves to aid in guiding the cord and preventing it from "kinking." I may here state that this slotted-plate device is also of my invention, for which I filed an application for Letters Patent on the 27th day of August, 1885, the serial number of which is 175,427; and I may also state that I have used other means or devices for suitably guiding the cord or cords, so as to insure their continuous and uniform passage directly beneath the needle.

It will be obvious that in order to produce perfect uniformity in the result the cord should be held to its place as the sewing proceeds.

When the sewing is completed, the sides or layers *a a'* of the stuff are opened out in the same plane, when the appearance seen in Fig. 4, for example, is presented. In this figure it will be observed that the cord *c* lies mainly on the under side of the seam or fabric—that is to say, it is in bas-relief. In Fig. 5 the two cords are in high relief, while in Fig. 7 one-half of the diameter of the cord projects above the upper surface of the fabric. These different positions of the cord are secured by simply guiding the same, (or the vertical line of cords in case more than one is used,) so that in the first instance, Fig. 4, the needle will pass through on the left or inner side thereof, in the second instance, Fig. 5, on the outer or right side, and in Fig. 7 directly through the middle of the cord. In Fig. 2 the needle is also seen in this latter position.

It will be understood that when a slotted plate such as that shown in the drawings is used it is necessary that the slot *s* and the lateral flanges (in case said flanges are used) should be in such relation to each other that the needle will pass through the cord and slot on the particular line desired—that is to say, through the middle of the cord, or to the right or the left of the middle thereof, accordingly as the said plate shall be guided.

Fig. 6 is designed to represent a fabric with

a bunch of fine tinsel cords inserted in the seams. Although it is practically impossible to maintain such fine cords in position, so that every stroke of the needle will pass through all of them at once, yet I find that they are sufficiently caught, as it were, in the aggregate by the stitches, so as to hold them securely. A pretty effect is produced by inserting these numerous cords in this way.

Another ornamental effect obtained is illustrated by Fig. 7, in which the stitches are lengthened, as in ordinary hemstitching, and a space is left between the sides of the inserted cord and the adjacent edges of the two sides of the fabric. This is accomplished by using a cord considerably less in diameter than the depth of the slot of the separating-plate. I prefer, when the cords are inserted in this manner, to lay back the free margins of the stuff and sew them, respectively, as on the line of stitching *x y*, Fig. 7, to the sides of the fabric, as in ordinary hemstitching.

That by means of my improvement numerous very neat and ornamental effects may be produced, and which heretofore have been impracticable, will, I think, be apparent to those familiar with the arts to which it appertains, or to which it is applicable.

It will be observed that as the threads which unite the layers of fabric pass directly through the cord or cords, while the latter stand out from the seam, on either or both sides thereof, as the case may be, the threads are invisible from either side of the united fabric, (except when it is desired to produce the ornamental effect illustrated in Fig. 7.) Such insertion of the cord or cords is accomplished with that evenness and regularity so desirable in this character of ornamentation only by keeping the cord accurately in line with the stitching, so that the latter will always come a predetermined uniform distance from the edges of the cord.

I am aware of the fact that it is common to sew in piping and welts between two pieces or layers of leather and other fabrics, and also that the usual mode of inserting a cord in the seams of textile fabrics is to insert the cord in or close to the seam by passing the same within a piping before the latter is sewed into the seam. I may also add that if the two sides of the fabric *a a'*, Figs. 4 and 5 of the annexed drawings, be folded over against each other the cord or cords will stand out from and be on the edge of the seam. In this way the edges of the sleeves of dresses and other articles of apparel may be beautifully ornamented, and at the same time that the cord thus stands out the threads which secure it are concealed.

Having thus described my invention, that which I claim as new, and for which I desire protection by Letters Patent, is—

1. The method of ornamenting the seams of textile and similar fabrics which consists

in superposing the margins or edges of such fabrics and interposing and guiding between the same, as the sewing proceeds, a cord, and then sewing directly through said layers and
5 cord with straight-ahead stitches on a line parallel with the sides of said cord, substantially as and for the purpose set forth.

2. The method of ornamenting the seams of fabrics which consists in interposing be-
10 tween two pieces or layers thereof two or more cords maintained in superposition, and

then sewing directly through said layers and cords, substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed 15
my signature this 26th day of August, A. D.
1885.

JOSHUA PUSEY.

Witnesses:

ANDREW ZANE, Jr.,
JOHN NOLAN.