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PATENTED NOV. 19, 1907.

G. J. STEVENS.

COMBINED PRESSER FOOT AND GUIDE FOR SEWING MACHINES.

APPLICATION FILED OCT. 13, 1902.

Fig. 1.

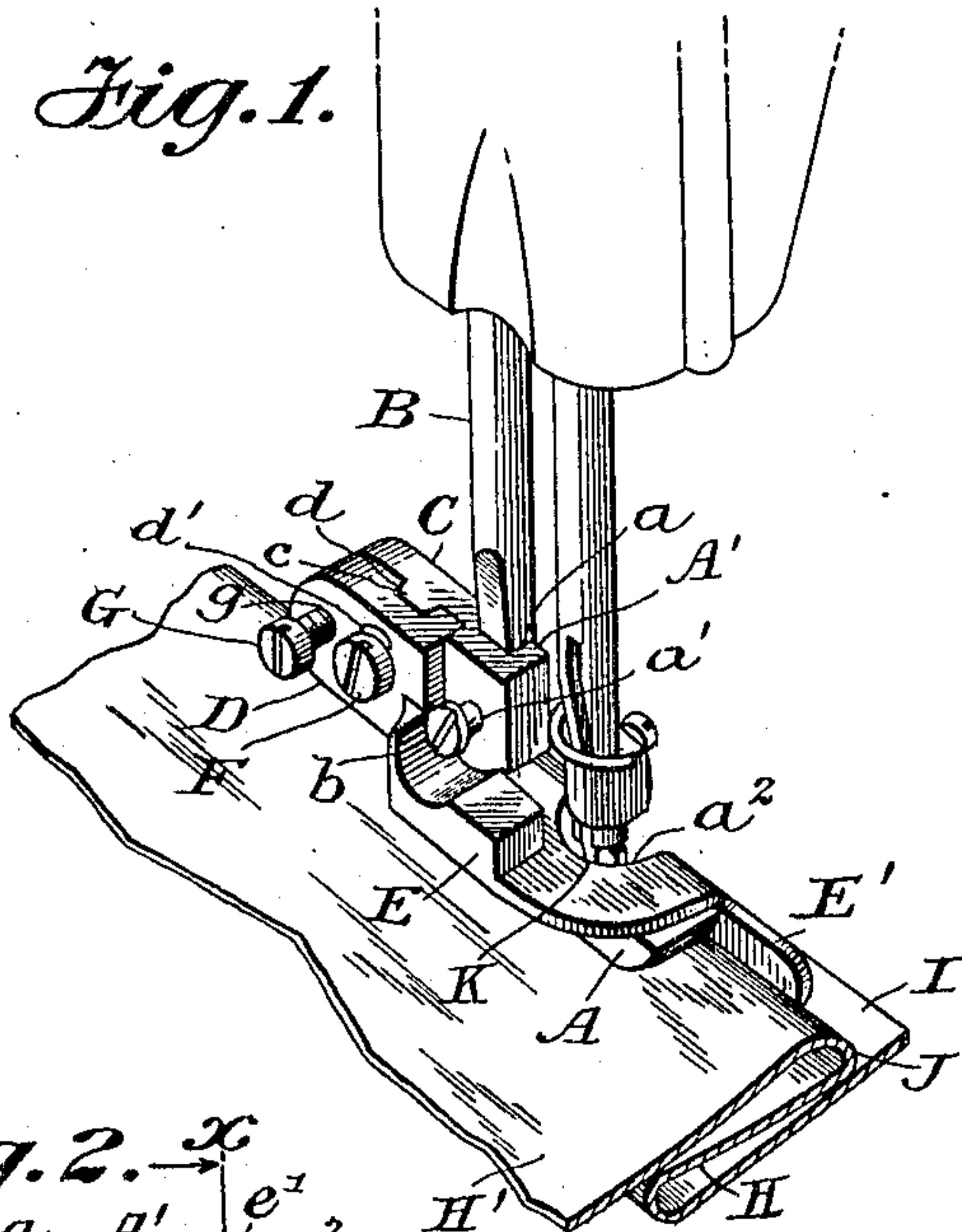


Fig. 2.

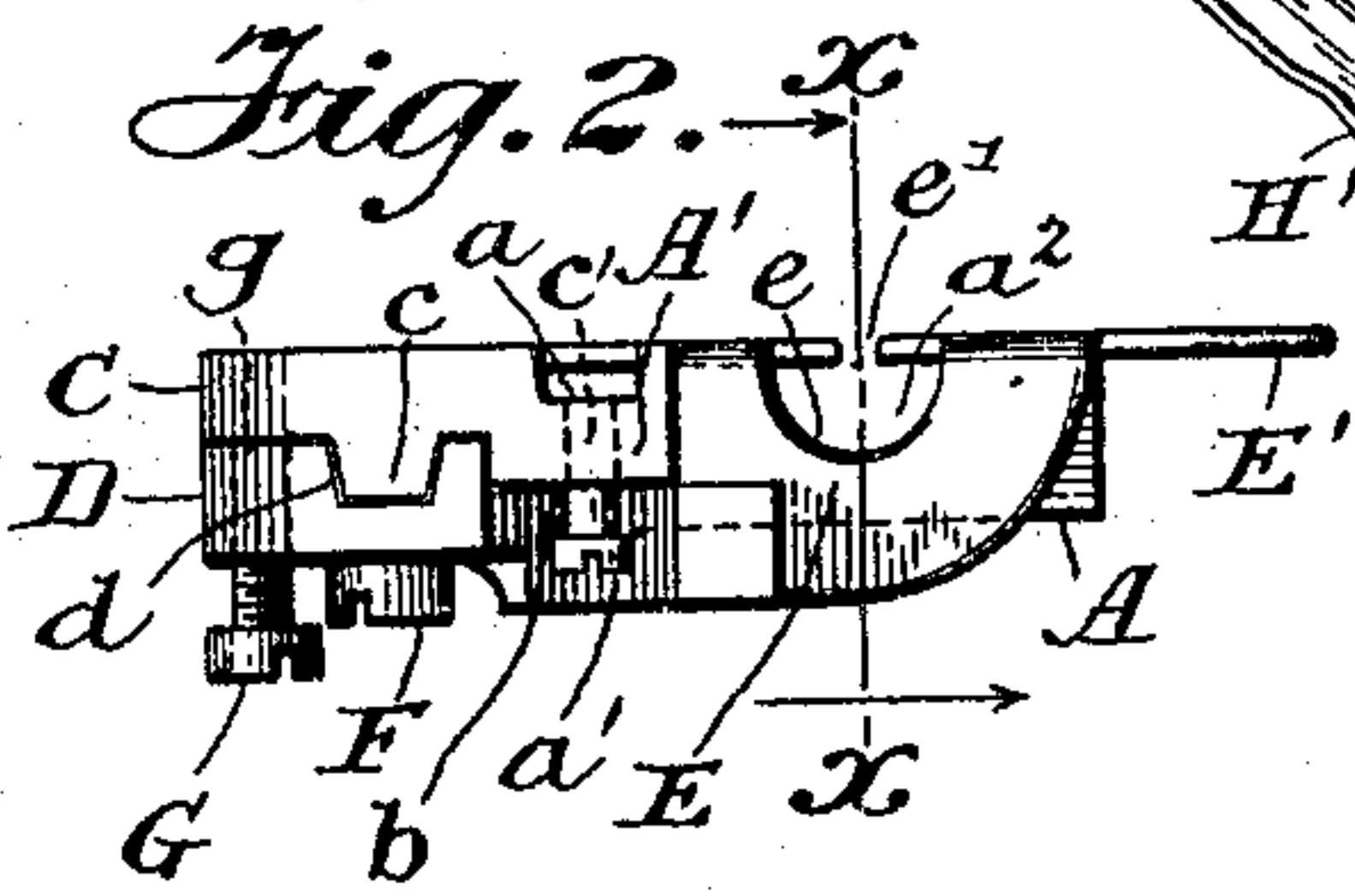


Fig. 3.

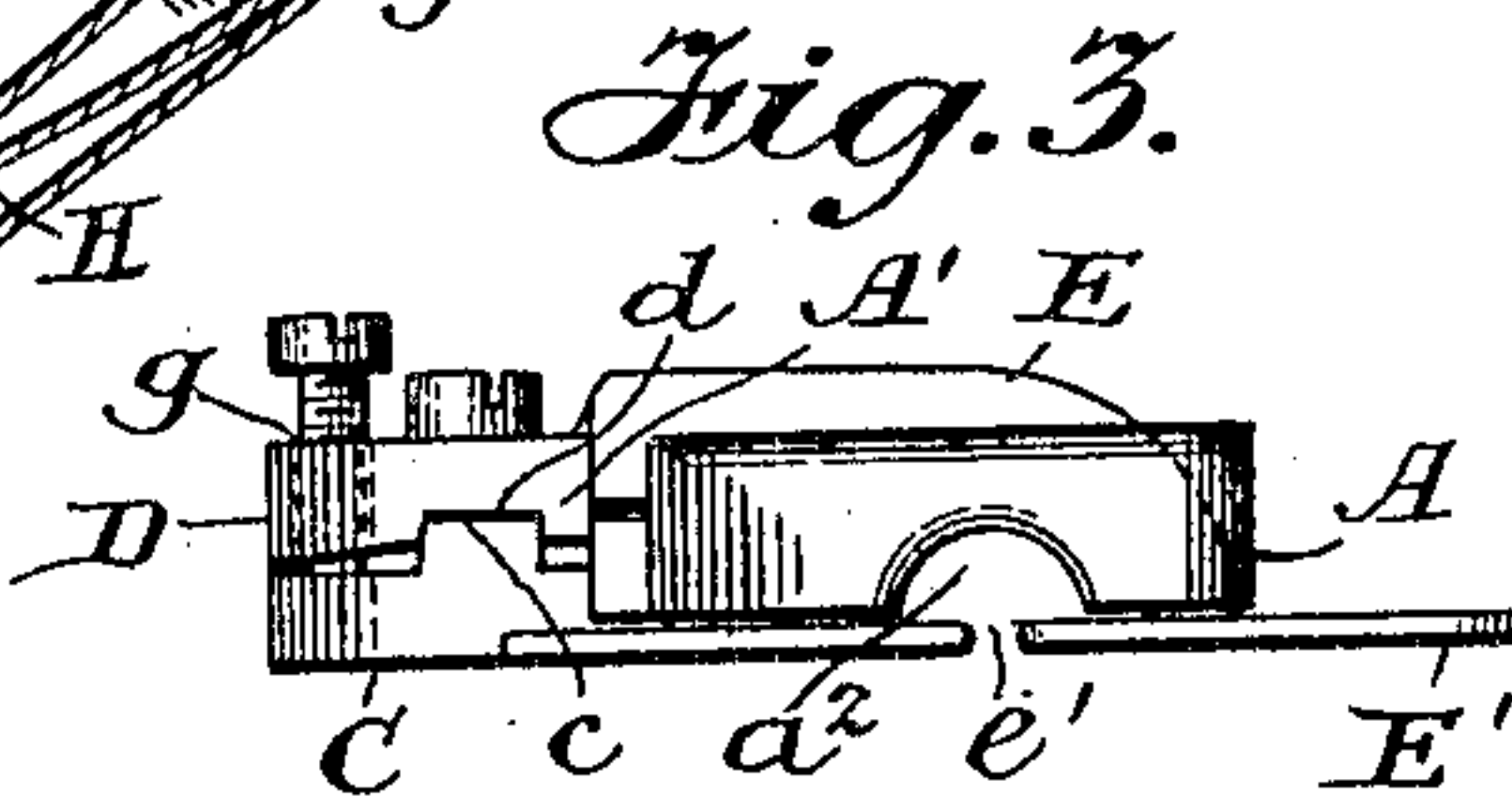


Fig. 4.

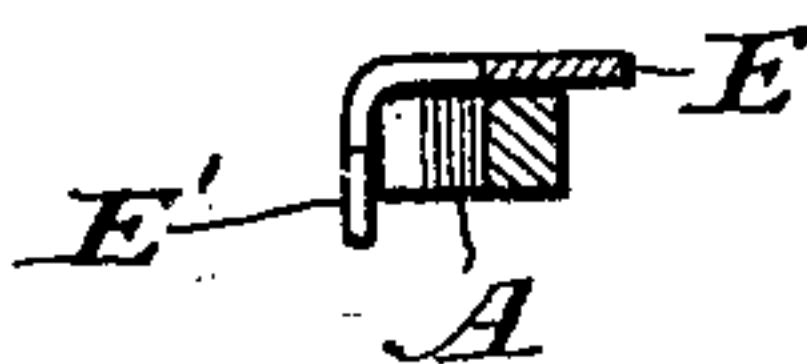


Fig. 5.

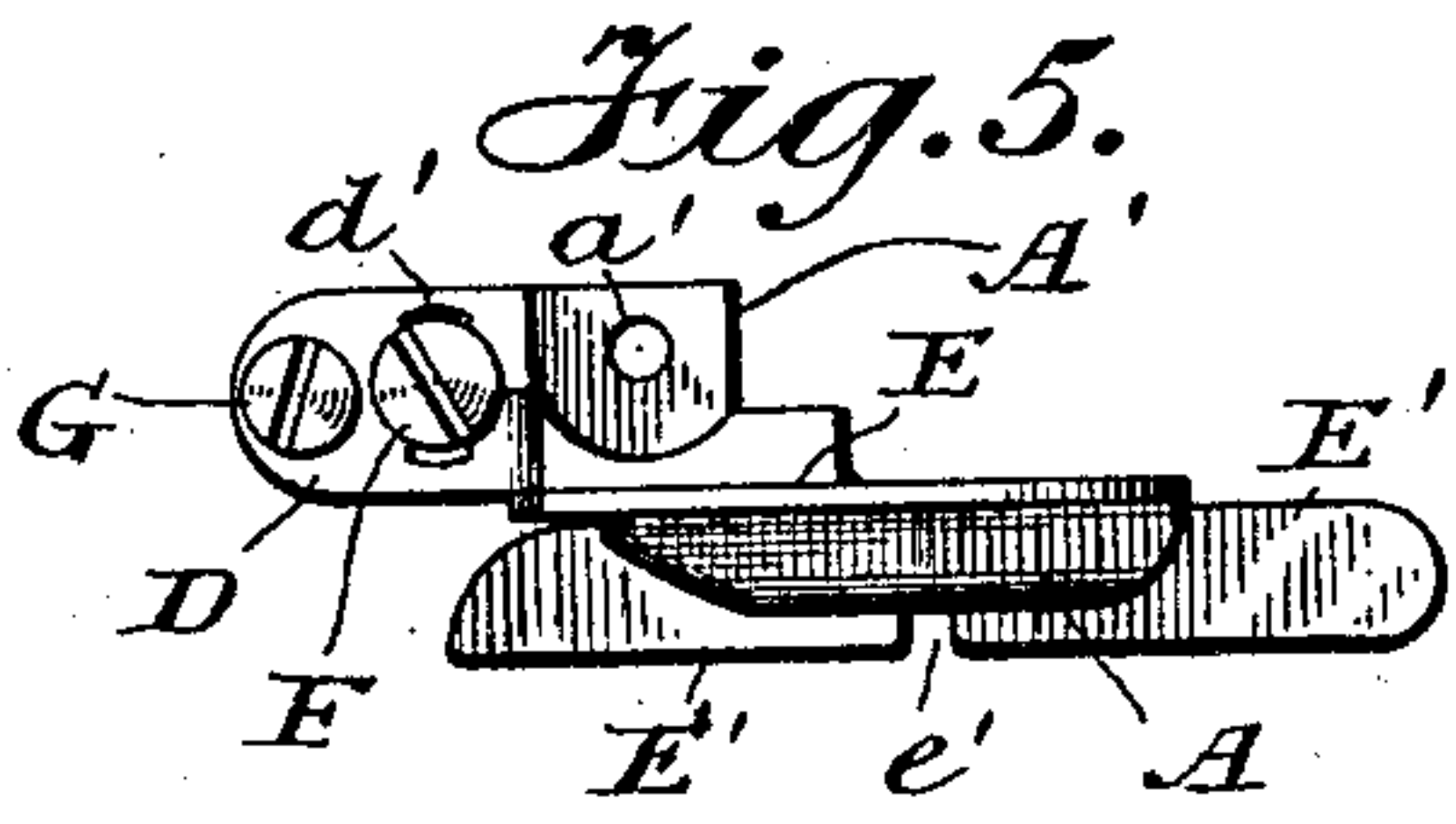


Fig. 6.

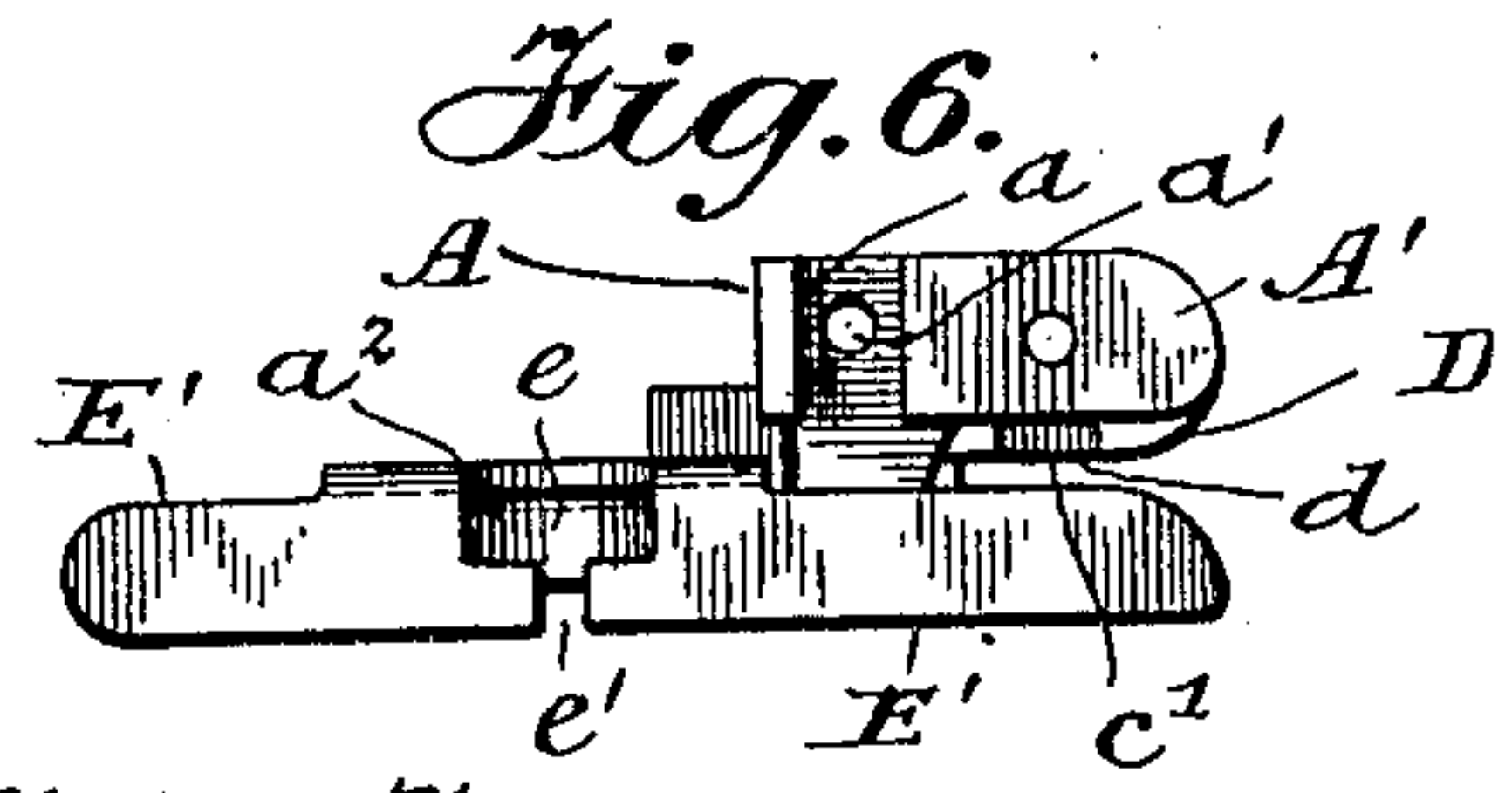
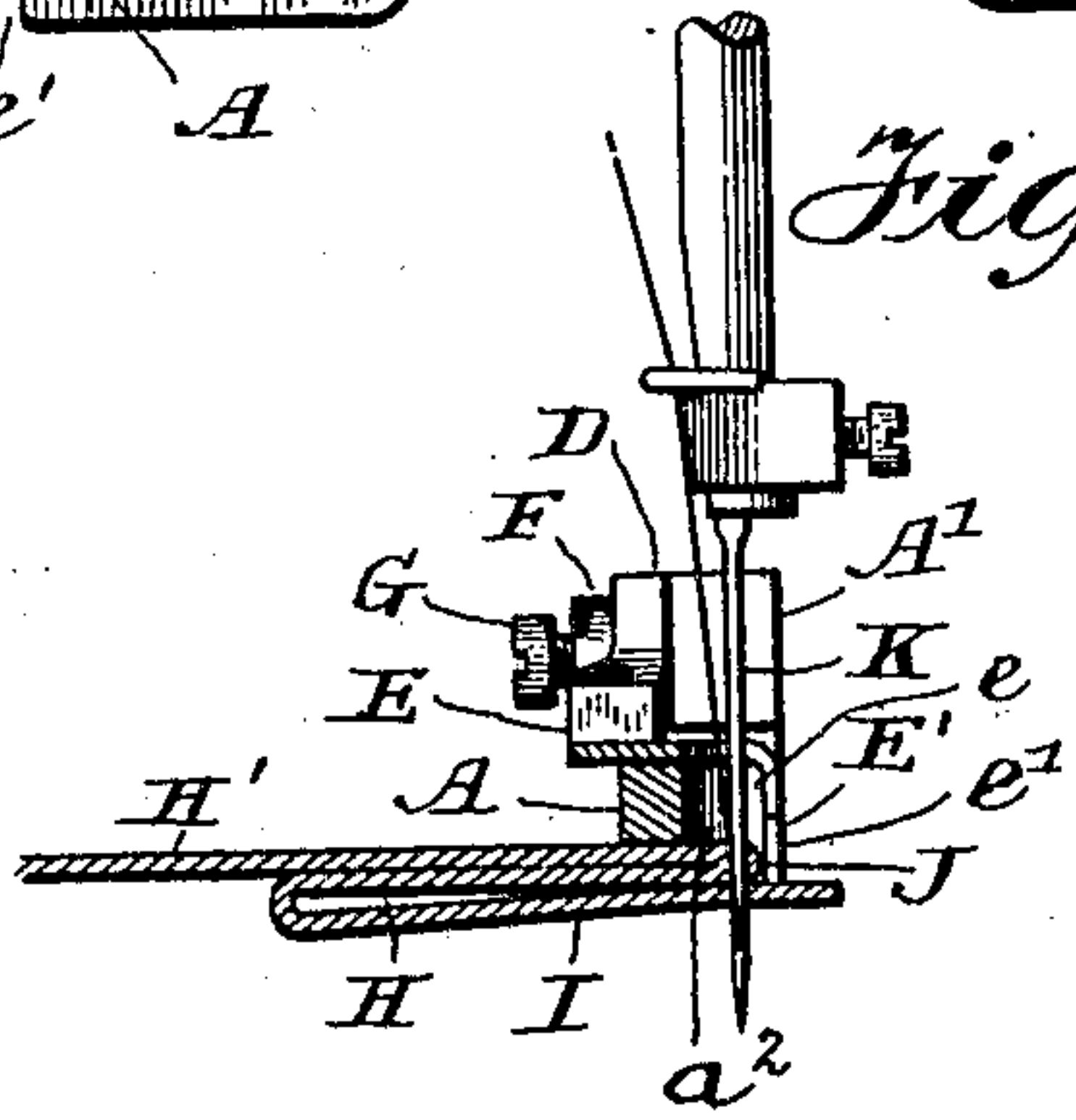


Fig. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE JOHN STEVENS, OF LONDON, ENGLAND, ASSIGNOR, BY MESNE ASSIGNMENTS, TO AMERICAN ATTACHMENT COMPANY, OF PORTLAND, MAINE, A CORPORATION OF MAINE.

COMBINED PRESSER-FOOT AND GUIDE FOR SEWING-MACHINES.

No. 871,454.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed October 13, 1902. Serial No. 127,165.

To all whom it may concern:

Be it known that I, GEORGE JOHN STEVENS, of London, England, now temporarily residing in the city, county, and State of New York, have invented a certain new and useful Combined Presser-Foot and Guide for Sewing-Machines, adapted for blind stitching; and I do hereby declare the following to be a full, clear, and exact specification of the same.

The object of my invention is to construct a simple and inexpensive combined presser-foot and guide for sewing machines by means of which blind stitching or felling may be done, while at the same time the said presser-foot and guide may be used for plain stitching. A further object of my invention is to so construct the said presser-foot and guide that the said guide shall be adjustable toward and away from the needle of the machine so that various thicknesses of cloth may be successfully felled or blind stitched.

I accomplish the above objects by the novel construction, arrangement, and operation of the parts hereinafter described, the particular features of novelty which constitute my invention being particularly pointed out in the claims at the end of this specification.

Referring now to the drawings which form a part of this specification, and in which similar letters refer to similar parts wherever they occur:—Figure 1 is a perspective view showing my combined presser-foot and guide secured in place upon the presser bar of a sewing machine, and a piece of cloth under the same and in position to be stitched; Fig. 2 is a plan view of the combined presser-foot and guide; Fig. 3 is a plan view looking at the bottom of the same; Fig. 4 is a transverse section taken on the line $x-x$ Fig. 2 looking in the direction pointed by the arrow; Figs. 5 and 6 are side elevations of the presser-foot and guide, and Fig. 7 is a detail view partly in section illustrating the proper folding and guiding of the cloth and the manner of stitching.

My invention comprises a presser-foot A, which may be of any desired or preferred length and form, which is adapted to engage with and be secured upon the lower end of the presser bar B, of the sewing machine.

In the drawings I have shown my inven-

tion as applied to a Singer sewing machine, and in such case the presser-foot A, is constructed with an upwardly projecting stem A', which extends upwardly from the rear end of the foot, having a channel or groove a to receive the lower end of the presser bar B. The presser-foot A, may be secured to the presser bar B, by means of the usual screw b , which passes through an aperture a' in the stem A', and engages in the usual screw-threaded hole in the lower end of the presser bar B.

The stem A' is constructed with a rearwardly projecting extension piece C, which is provided with a vertical rib c about midway of its length. Upon a block D, which about midway of its length, is provided with a groove d adapted to fit and receive the rib c on the extension piece C, I form or secure a guide plate E, which extends forward over the presser-foot A, and terminates in a downwardly extending guide E', which passes down by the side of the presser-foot A, and extends to a short distance beyond the front and rear ends of the said presser-foot.

I construct the presser-foot A, with a recess a^2 in its side next to the needle, and form the guide plate E, with a corresponding recess e , which registers with the said recess a^2 . I also form the guide E', with an opening e' to receive the bulge of the cloth when blind-stitching as will be hereinafter more fully explained. Instead of forming an opening e' in the guide plate E', the latter may be bent at this point (opposite the needle) forming a recess which may receive the bulge of the cloth.

The guide plate E, is secured to the extension piece C, by a set screw F, which passes through a slot d' formed in the block D, and engages in a screw threaded hole e' (see Fig. 6) in the rib c on the extension piece C. The slot d' permits of the adjustment of the guide plate E, up and down upon the said extension piece C.

The guide E', is intended as a guide for the cloth to be stitched, and in order that the guide E', may be properly adjusted, so that cloths of various thickness may be blind stitched, I provide an adjusting screw G, which engages in a screw threaded hole g (see Fig. 2) in the rear end of the block D, and has a bearing against the side of the extension

piece C. By simply turning the adjusting screw G, the one way or the other, the rear end of the block D, may be caused to move away from or toward the extension piece C, and consequently the guide E', will be moved toward or away from the side of the presser-foot A, and therefore toward or away from the needle of the machine, which occupies a fixed position with relation to the presser-foot.

In carrying my invention into operation the cloth to be blind stitched is folded as follows:—First a hem H, is folded up, and then the cloth H', is folded back over the hem H, and the cloth is fed to the needle in this position, care being taken that the single layer of cloth I, projects a little beyond the edge of the fold J, and that the fold J, is kept against the guide E'. The guide E', must be adjusted by the adjusting screw G, with relation to the needle K, (see Fig. 7) so that the needle K, in passing through the cloth in the fold J, will not pass entirely through the cloth from side to side, but will split the same, passing into and out of the cloth on one side of the cloth only, and then pass down through the lower single layer I, of the cloth to make the stitch with the shuttle thread. In this way the fold J, will be firmly united to the single layer I, of the cloth and a true blind stitching be produced, no stitches being visible on the right side of the cloth, as the needle K, passes through the cloth in the fold J, the bulge of the cloth is received in the opening e' in the guide E'. I have found in practice that a very slight turning of the adjusting screw G, will give me all the adjustability needed to perfectly blind stitch any kind of cloth from a thin to a very thick cloth.

It should be observed that I do not confine myself to the precise manner of screwing the guide plate to the presser-foot, or of adjust-

ing the guide that I have herein described, as it will be obvious that many modifications in these constructions may be made without departing from the spirit of my invention.

Where in the appended claims I use the term "recess" I do so generically to include a recess or opening to receive the bulge of the cloth whatever the form of such means or recess may be.

Having now described my invention what I claim as new and desire to secure by Letters Patent is:

1. In combination with a presser foot, a guide supported by said presser foot, extending across its top and having a depending flange on the needle side of the presser foot, thereby providing a vertical guiding face for the cloth, means for adjusting said guide vertically and laterally.

2. In combination with a presser foot, a guide secured to one side of the same extending across its top and vertically upon its other side and provided with a vertical recess to receive the bulge on the cloth, and having an opening in its horizontal portion for the passage of the needle substantially as described.

3. In combination with a presser foot having a horizontal extension, a guide having a slot, a screw F for holding the guide to the extension to allow the same vertical adjustment and a screw G passing through the guide and bearing against the extension to adjust the guide laterally substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

GEORGE JOHN STEVENS.

Witnesses:

OTTO MUNK,
E. B. BOLTON.