

(No Model.)

C. E. FINKLE.

BUTTON HOLE FINISHING, CORDING, AND STAYING DEVICE.

No. 328,304.

Patented Oct. 13, 1885.

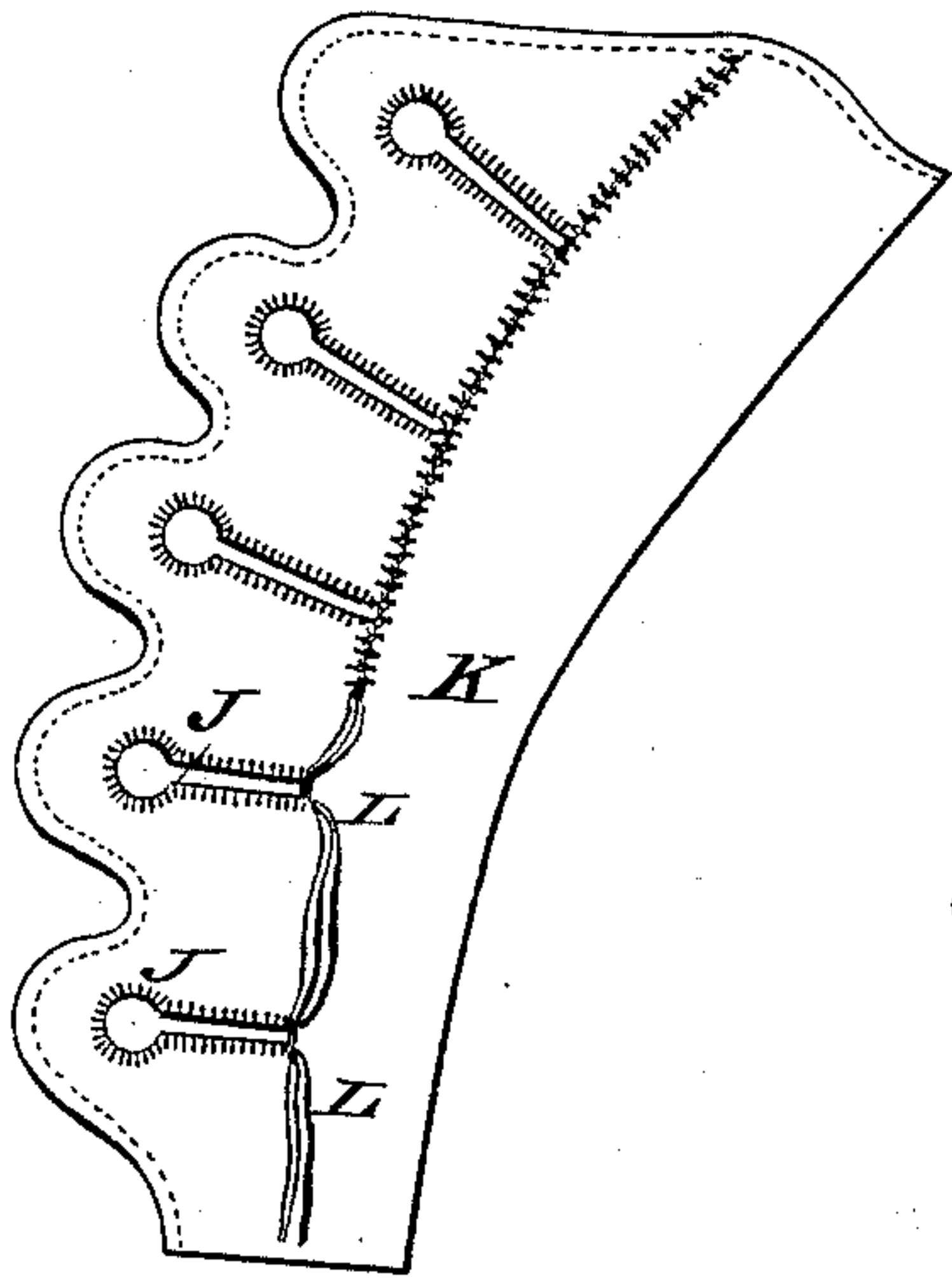


Fig. 4

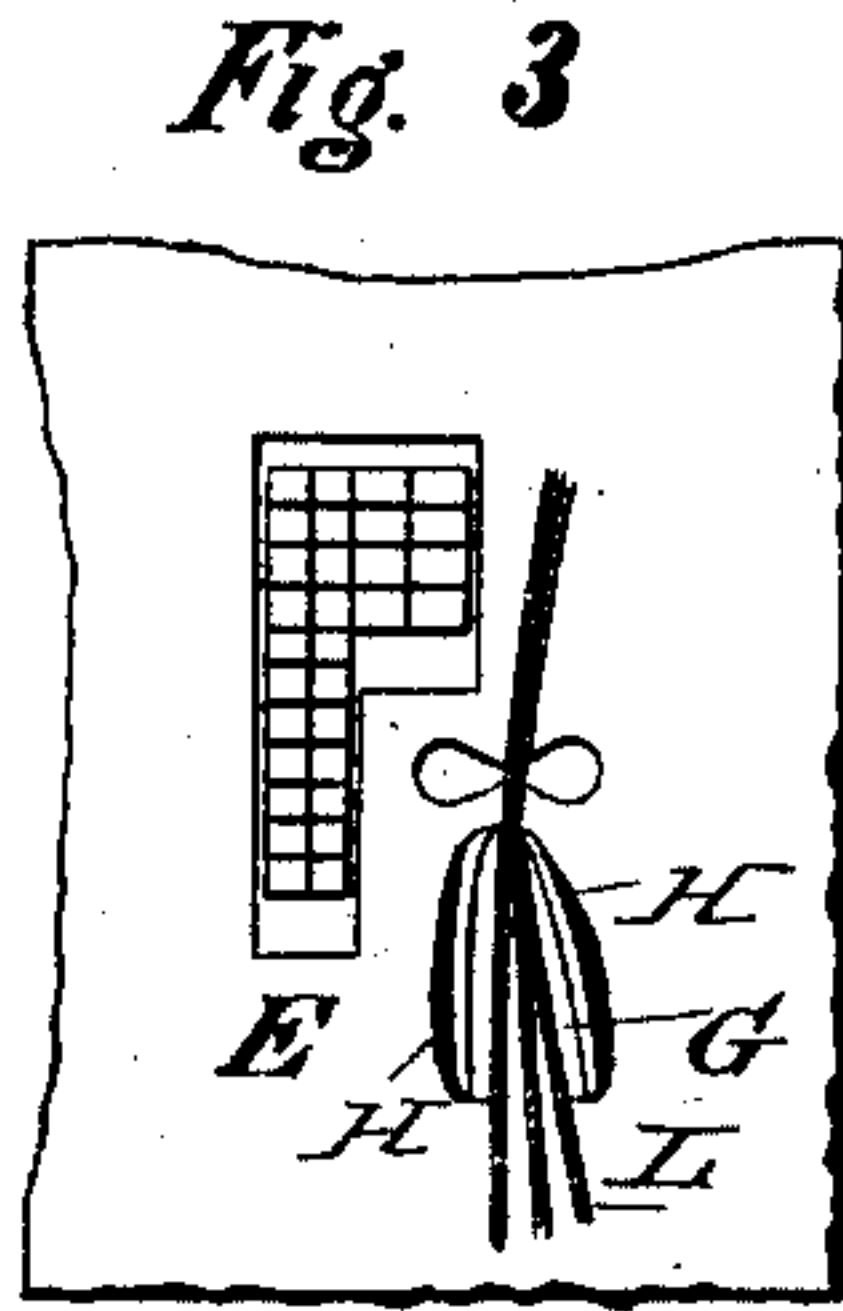


Fig. 3

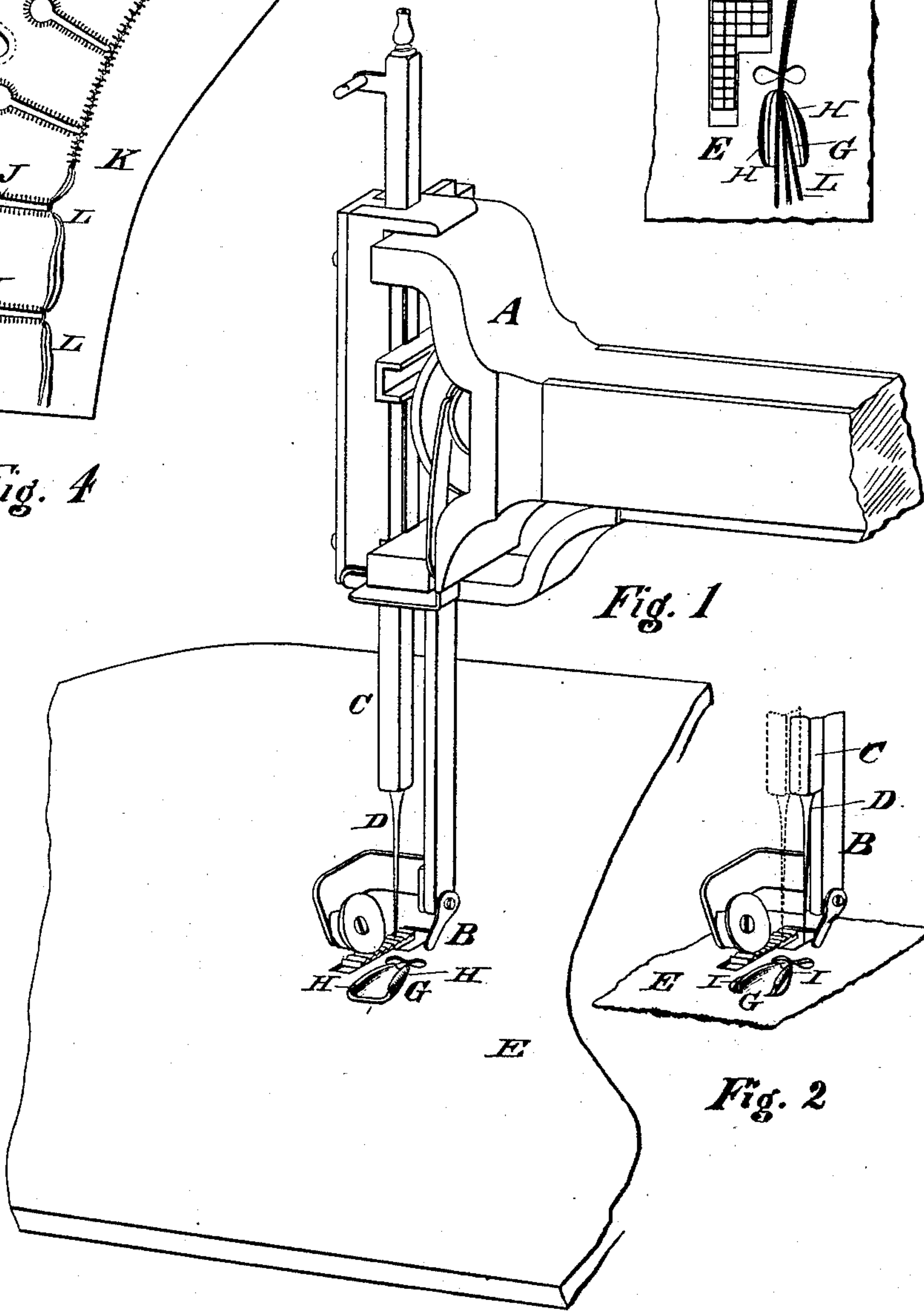


Fig. 1

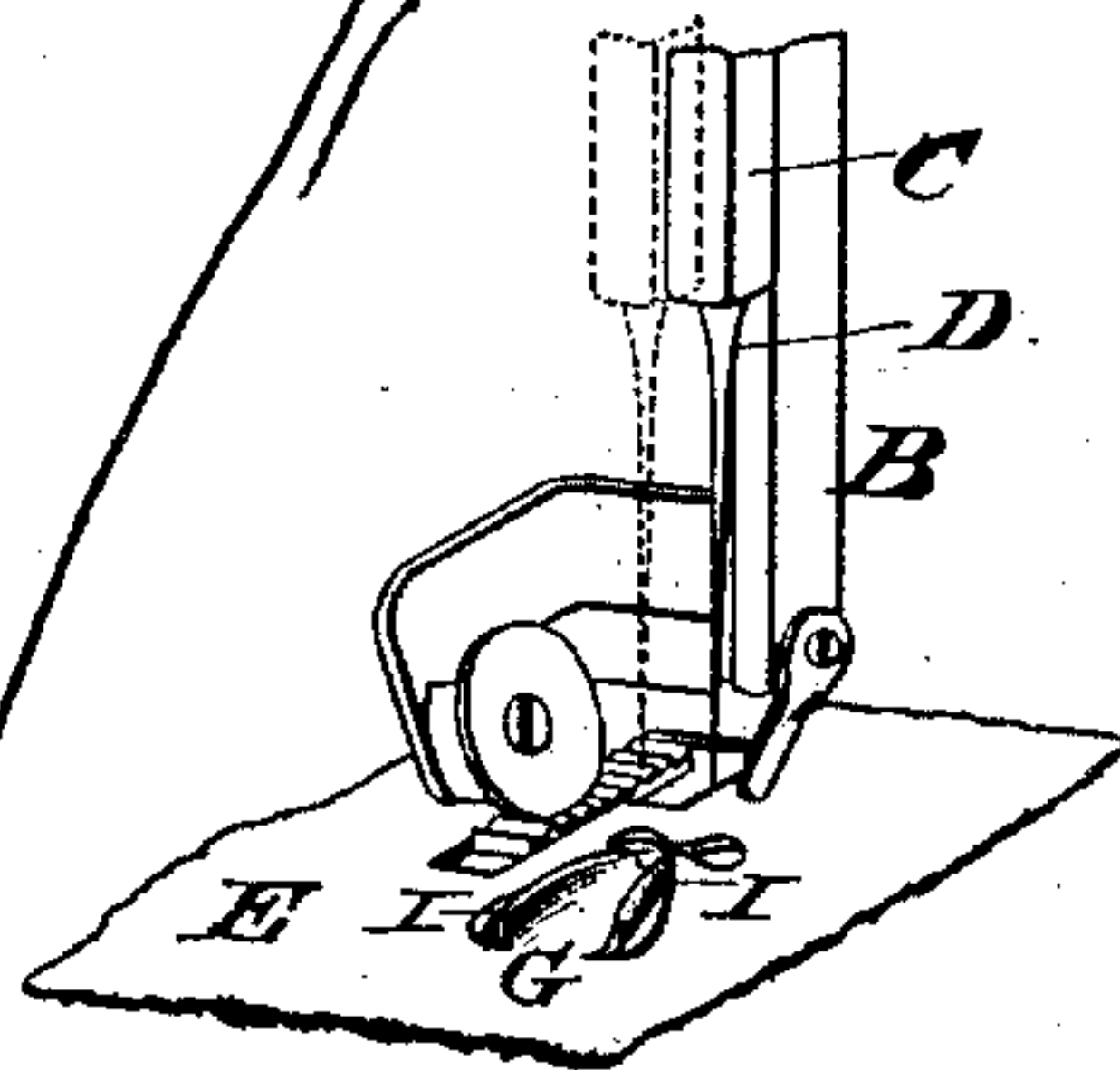


Fig. 2

Witnesses.  
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# UNITED STATES PATENT OFFICE.

CHARLES E. FINKLE, OF ROCHESTER, NEW YORK.

## BUTTON-HOLE FINISHING, CORDING, AND STAYING DEVICE.

SPECIFICATION forming part of Letters Patent No. 328,304, dated October 13, 1885.

Application filed February 25, 1885. Serial No. 157,007. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. FINKLE, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Button-Hole Finishing, Staying, and Cording Devices; and I do hereby declare the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the head of a button-hole machine having my invention applied thereto in position for operation. Fig. 2 is a perspective view illustrating a modification in the construction of my invention, and showing the two positions of the needle in taking the stitch. Fig. 3 is a plan view of the device shown in Fig. 2, illustrating the method of operation; and Fig. 4 is a portion of a shoe, showing the work done by my improved attachment, and the thrum or loose ends, as they appear before its use.

The same letters refer to the same parts in all the figures.

This invention relates to an improved attachment for button-hole machines, having for its object to gather, hold, and guide the thrums and cord while they are being covered by a stitch crossing and recrossing in the usual manner; and the invention consists in the improved construction and arrangement of the said attachment which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A designates the head of an ordinary button-hole machine. B is the foot and feeding device of the same. C is the needle-bar; D, the needle; E, the base-plate, and F the needle-opening in the latter.

G designates my improved attachment, which, as shown in Fig. 2, may consist simply of a small metallic plate having upturned concavo-convex edges or flanges H H, converging toward the rear end, as shown, so as to present the appearance of a flattened and

longitudinally slotted funnel. This device is secured in any suitable manner upon the base-plate E, directly in front of the needle-opening, as clearly shown in Fig. 1 of the drawings.

In Figs. 2 and 3 I have shown a modification in the construction of the invention, which simply consists in providing the base-plate E with struck-up concavo-convex and converging flanges I I, forming a funnel-shaped guide of substantially the nature above described; or, the said flanges might be struck up from a separate plate of sheet metal, which might afterward be secured to the base-plate of the machine.

The operation of the invention will be readily understood from the foregoing description taken in connection with the drawings hereto annexed. After the button-holes J have been formed in the fabric or leather K, the thrum ends and cord, as shown at L in Fig. 4 of the drawings, are loose and liable to catch and break, making it necessary to "whip them over." This has usually been done by hand. The guide G, which is the subject of my invention, will serve to gather and guide the said thrum ends and cord or cords in a straight line along the under side of the fabric or material to which it is to be fastened, to a point directly in front of the needle-opening, and directly between the points at which the needle will alternately enter the same, thus enabling the work of whipping over to be performed by the machine in a neat and rapid manner.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A device for gathering and guiding the thrums and button-hole cord, the same consisting of a plate having struck-up concavo-convex and converging flanges, in combination with a reciprocating and vibrating needle, and button-hole stitch-forming mechanism, substantially as and for the purpose set forth.

2. The combination, with the stitch-forming mechanism of a button-hole sewing-machine, of a device for gathering and guiding



the thrums and button-hole cord, the same  
consisting of a plate secured directly in front  
of the needle-hole upon the base-plate, and  
having upturned concavo-convex flanges con-  
5 verging toward the center of the front edge of  
the needle-hole, substantially as and for the  
purpose set forth.

In testimony that I claim the foregoing as  
my own I have hereunto affixed my signature  
in presence of two witnesses.

CHARLES E. FINKLE.

Witnesses:

CHAS. A. WIDENER,  
L. N. DUNBAR.