

(No Model.)

H. M. ESSINGTON.

CLAMP CENTERING DEVICE FOR SEWING MACHINES.

No. 377,891.

Patented Feb. 14, 1888.

Fig. 1.

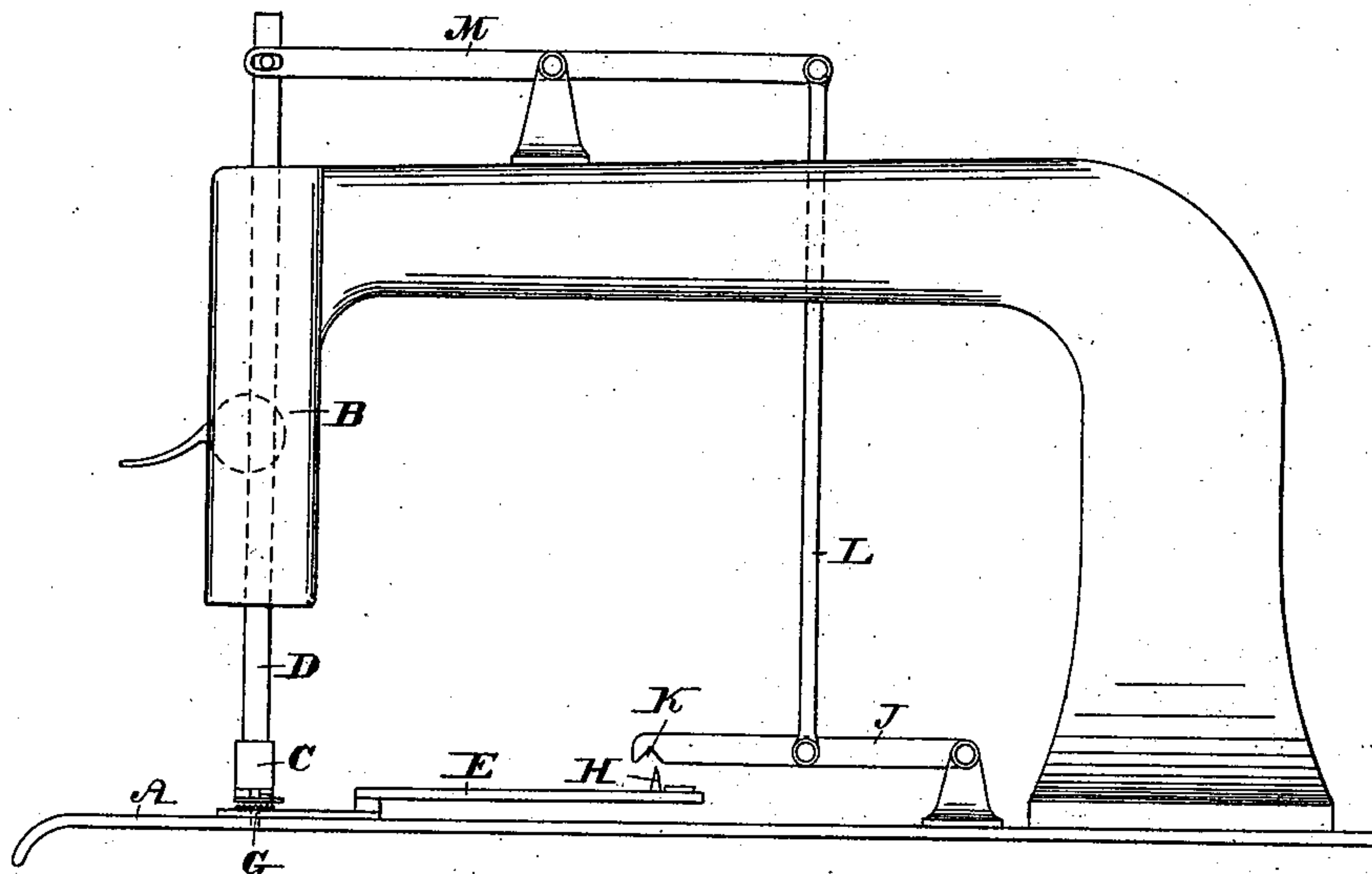


Fig. 2.

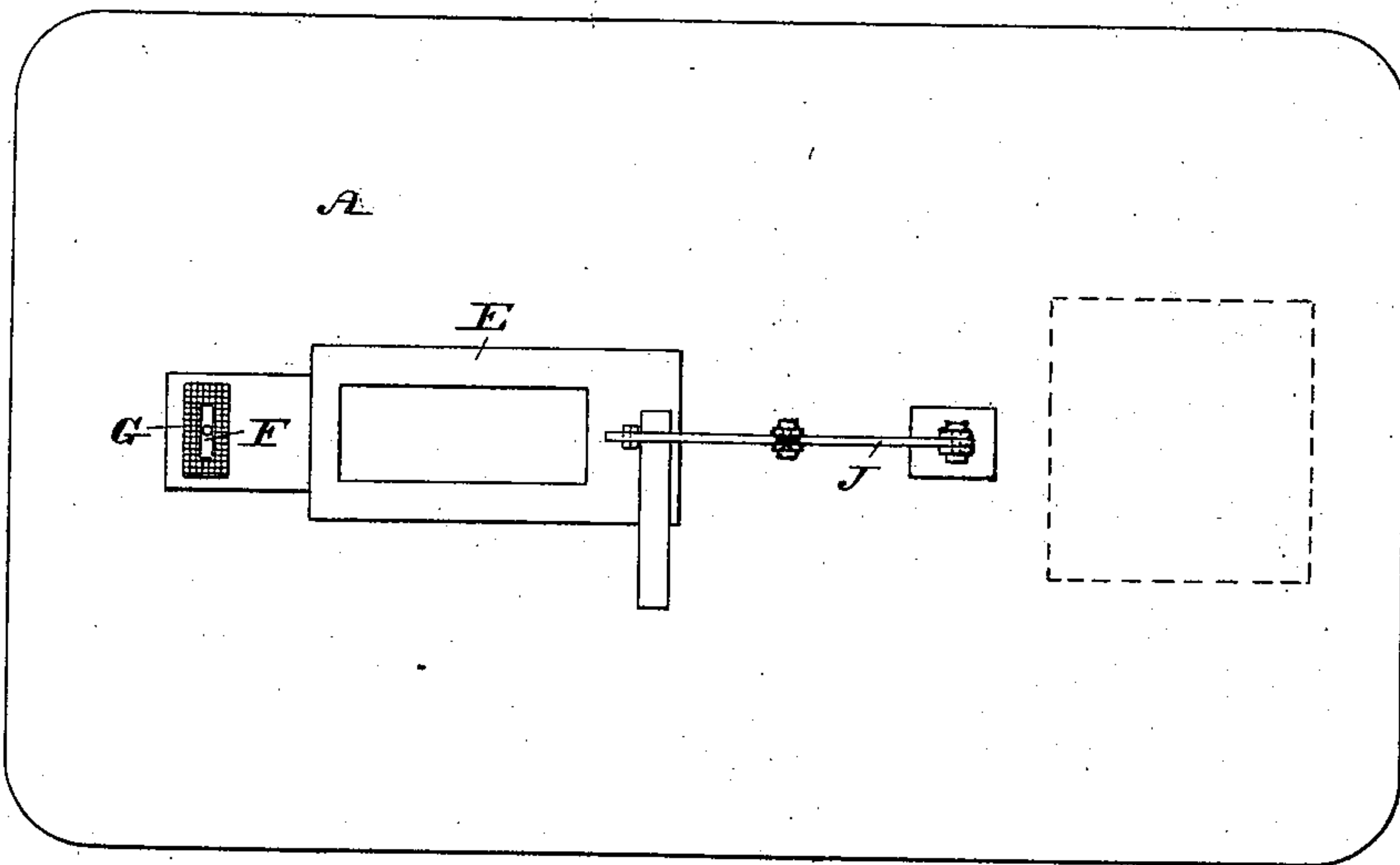
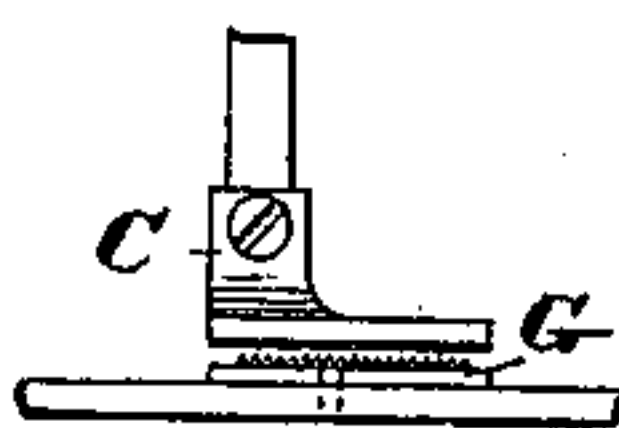


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## CLAMP-CENTERING DEVICE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 377,891, dated February 14, 1888.

Application filed February 8, 1887. Serial No. 226,935. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY M. ESSINGTON, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Sewing-Machines for Stays of Pockets and other Parts of Garments, Shoes, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation of a portion of a sewing-machine embodying my invention. Fig. 2 represents a top or plan view thereof. Fig. 3 represents a front view of a portion thereof.

Similar letters of reference indicate corresponding parts in the several figures.

In an application for Letters Patent filed by me the 24th day of June, 1886, Serial No. 206,109, there are described means for imparting motions to a plate in both longitudinal and transverse directions, said plate having a clamp for the cloth or fabric, whereby stitches are formed first on the cloth or fabric in one direction and next over said stitches at a right angle thereto.

In the present application I employ a plate which may be moved in both longitudinal and transverse directions, and dispense with the clamping device, substituting therefor a toothed surface, which is secured to or formed with said plate and operated in connection with a presser-foot as a feeding device, this being one of the features of my invention.

Another feature of my invention is a device for centering the throat of the sliding plate in relation to the needle or needle-opening, said operation being automatic when the machine stops, whereby the work is invariably started on the garment at the proper place, producing uniformity in said work.

Referring to the drawings, A represents the cloth plate or table of a sewing-machine, and B the stationary arm rising from and secured thereto.

C represents a presser-foot, whose bar D is guided in said arm B.

E represents a plate or slide to which motions are imparted in both longitudinal and transverse directions, this feature, however, not being new, as it is shown, for example, in

the application for Letters Patent above referred to, and hence, broadly considered, forms no part of my present invention.

The slide rests on the cloth-plate A, and is provided, at the end adjacent to the needle, with a throat, F, of oblong form, the upper side of said slide surrounding said throat having formed with or secured to it a toothed surface, G, which, as will be seen, is beneath the presser-foot, whereby the cloth, garment, leather, &c., to be stitched is held by the presser-foot in contact with said surface G, said foot, however, having its contact-face smooth and unbroken, so as not to prevent the cloth, &c., from being carried by the surface G beneath the presser-foot, it being seen that the surface G, in connection with the downward action of the presser-foot, is sufficient to cause the cloth, &c., to be carried by the slide, and thus, when the machine is in operation, as the cloth, &c., follows the diametrically-opposite motions of the slide, two sets of stitches are made on the cloth, &c., forming a reinforced stay for the latter, said stay being admirably adapted for the ends of pockets, button-holes, flaps of shoes, and other places and purposes.

In order to cause the throat F to be centered on the needle-opening of the cloth-plate when the machine stops, so that when the machine is again started the stitches are begun at the same place, thus causing uniformity in the work, I employ the following mechanism:

Attached to the inner or heel end of the slide E, and on the upper face thereof, is a wedge-block, H, which extends transversely, and is preferably V-shaped.

Pivoted to the cloth-plate A is a lever, J, which extends parallel with the arm B, and has in the under face of its forward end a groove, K, the walls of which are inclined or V-shaped and so disposed that when the lever is lowered the rear wall of said groove engages with the tongue H.

To the lever J is pivoted a link, L, whose upper end is pivoted to a lever, M, the latter having its axis on the arm B, it being seen that the bar D of the presser-foot is pivoted to said lever M.

The operation is as follows: When the machine stops, the presser-foot is raised, as usual



in sewing-machines. This imparts motion to the lever M, the link L, and lever J, whereby the inclined wall of the groove K bears against the wedge-block H and advances the same, 5 and with it the slide E, whereby the throat-plate of the latter is centered on the needle-opening of the cloth-plate, whereby the next stitches are formed at the proper place, producing uniformity of work. When the presser- 10 foot is again lowered, the lever J is caused to clear the wedge-block H, so that the slide E may be operated in its usual manner.

In referring to the toothed surface of the slide it includes any serrated or roughened surface capable of taking firm hold of the cloth, 15 &c., to be stitched.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is--

20 1. An attachment to a sewing-machine for the purpose herein set forth, consisting of a slide having at its front end an oblong throat and the toothed surface G and at its rear end the

wedge-shaped wedge-block H, the lever J, pivoted at one end to a standard connected with 25 the table of the machine and having the recess K, and the pivoted lever M, having its rear end connected by the link L to the lever J and its front end being slotted for engagement with the bar of the presser-foot, said parts being 30 combined substantially as described.

2. In a sewing-machine, the table A, the slide E, having oblong throat F and a wedge-block, H, a lever pivoted to the table and having a V-shaped recess on under face, the rear 35 wall of which is adapted to be brought in contact with the said wedge-block, and means, substantially as described, for connecting said lever and the guiding-bar of the presser-foot, whereby when the said presser-foot is raised 40 said slide is moved forward, as stated, the parts being combined as set forth.

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Witnesses:

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