

T. G. PERKINS.

Rufflers for Sewing-Machines.

No. 135,359.

Patented Jan. 28, 1873.

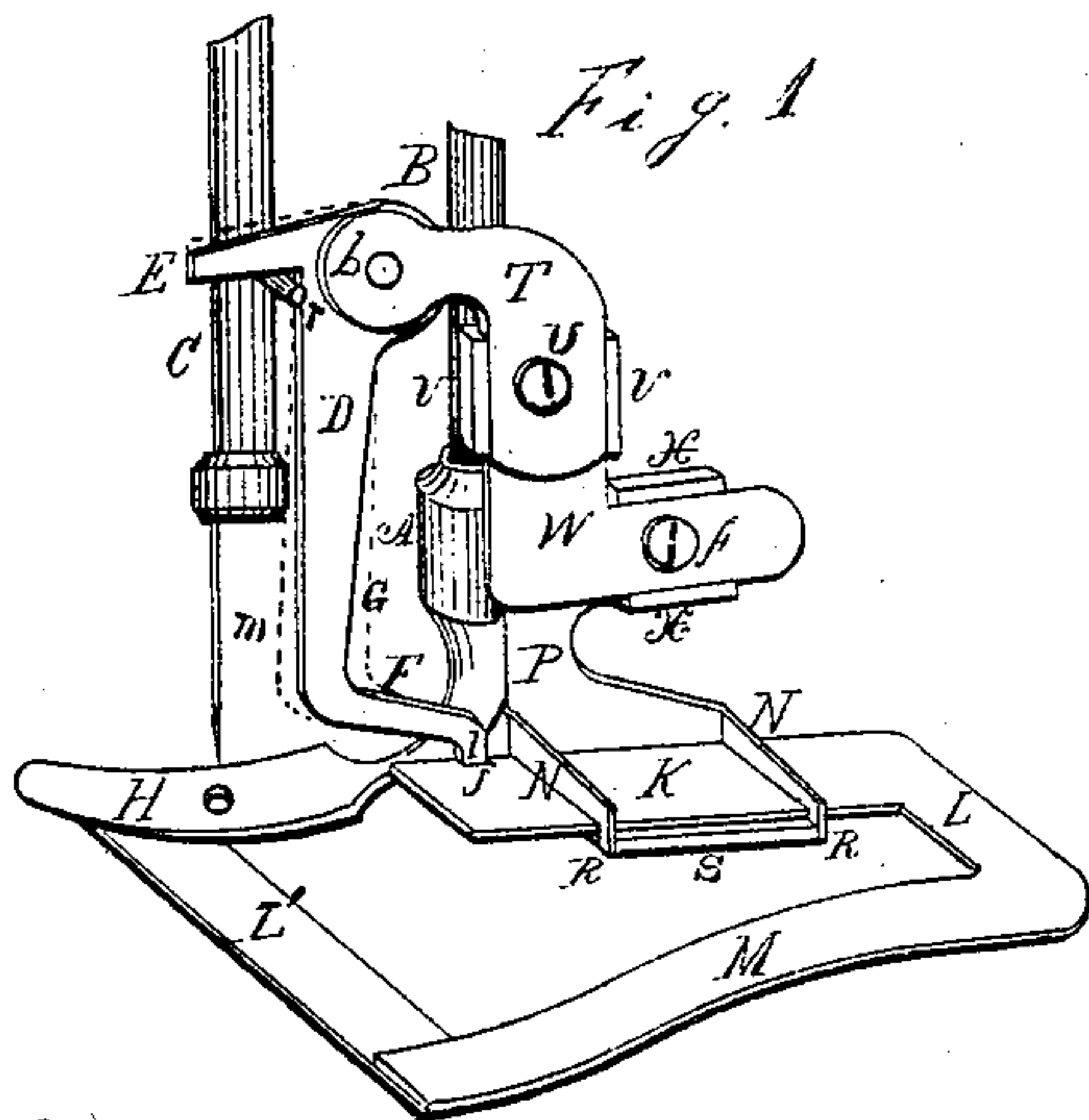


Fig. 2

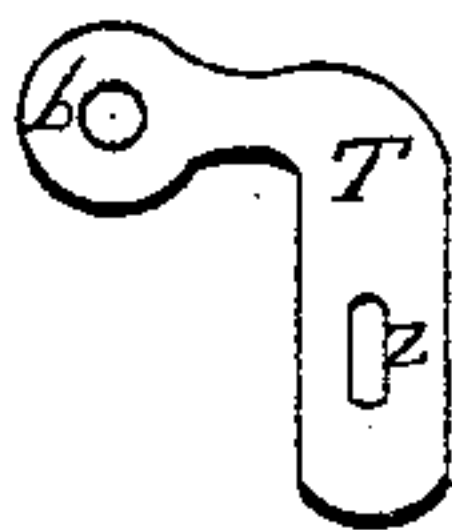


Fig. 3

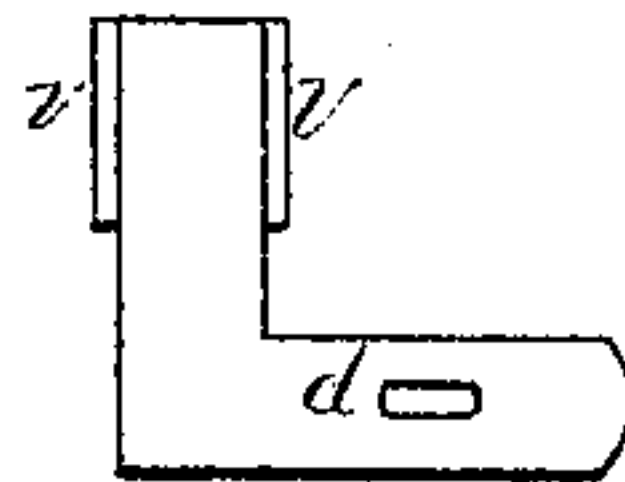
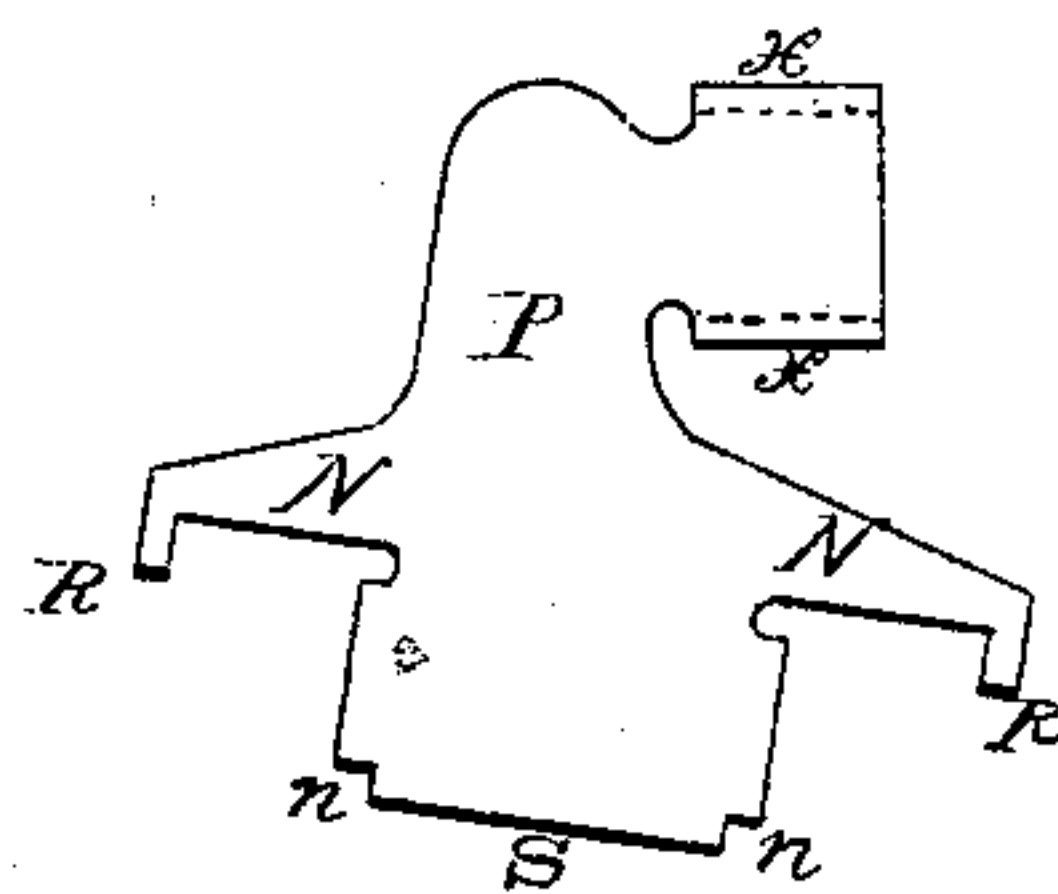


Fig. 4



Witnesses

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THOMAS G. PERKINS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN RUFFLERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 135,359, dated January 28, 1873.

To all whom it may concern:

Be it known that I, THOMAS G. PERKINS, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Sewing-Machine Attachment, of which the following is a specification:

The present invention relates to a novel device which is to be used in connection with any ordinary sewing-machine for gathering, ruffling, plaiting, &c.; and it consists in an elbow-lever combined with an adjustable support or arm, as hereinafter described, by means of which the lever can be adjusted to the pin in the needle-bar when it becomes worn, and thus secure a continuous even working of the lever, notwithstanding any wear it may receive from the pin.

In the drawing, Figure 1 is an isometrical view of my improved sewing-machine attachment; Fig. 2, an elevation of the arm used to adjust the elbow-lever to give the proper stroke to the feed-frame; Fig. 3, an elevation of the arm which adjusts the elbow-lever to its pin on the needle-bar; Fig. 4 is a plan view of the plate from which the guide for supporting the feed-frame is formed, and subsequently by a die it is bent to assume the form shown by the same letters in Fig. 1.

A represents the socket which is fastened to the presser-bar B of the machine, and H is the presser-foot cast with the socket A. The plate shown in Fig. 4 is, by means of suitable dies or a die, formed in the shape shown in Fig. 1, the parts N being brought at right angles to the part S, and the nibs R fitting into notches *n n*, and the frame K passing through between the parts N and the plate S. Flanges X X are formed on the upper part of the plate to form a guide for the arm *w*. The plate thus formed is soldered fast to the socket A, uniting the parts firmly. K L M represent the feed-frame, and L' is the feed-bar, by means of which and the presser-foot H the ruffling, gathering, &c., are done. Nothing, however, is claimed to be new in this regard independent

of the means for operating them. This frame—that is, the side K—slides in the guide N S when operated upon by the elbow-lever D E F. This lever is composed of a bar, D, which is pivoted to an arm, T, and has an elbow, E, to engage a pin, *r*, of the needle-bar C, to swing the lever D outward, and an elbow, F, to engage and move the feed-frame. This arrangement is such that the upward movement of the needle-bar C will bring the pin *r* against the elbow E, and throw the lever D forward in direction of dotted lines *m*, and such that when the pin *r* is brought down it will press against the edge of the lever D and force it back in the direction of dotted lines G, thus giving the frame K L M a reciprocating motion. The elbow-plate T is provided with a slot, Z, so as to move up and down in guides V V formed on the plate W, the plate T being held in a fixed position by a set-screw, U. By this means the lever D is raised or lowered so that the pin *r* will move it only the required distance to make a ruffle of the desired width. The plate W is slotted at *d*, Fig. 3, so that it may slide longitudinally in guides X X of the main lower plate, a screw, *f*, fastening the plate when at the proper place.

The plate W is an important feature in the attachment; otherwise if the edge of lever D became worn it could not be adjusted to pin *r*.

I claim—

1. The lever E D F, constructed as described, and combined with the adjustable elbow T, for the purpose of adjusting the lever to the pin *r* to regulate the length of stroke of the feed-frame.

2. The lever E D F, constructed as described, combined with the elbow T and adjustable plate W, for setting the lever to the pin *r*, as and for the purpose specified.

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Witnesses:

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