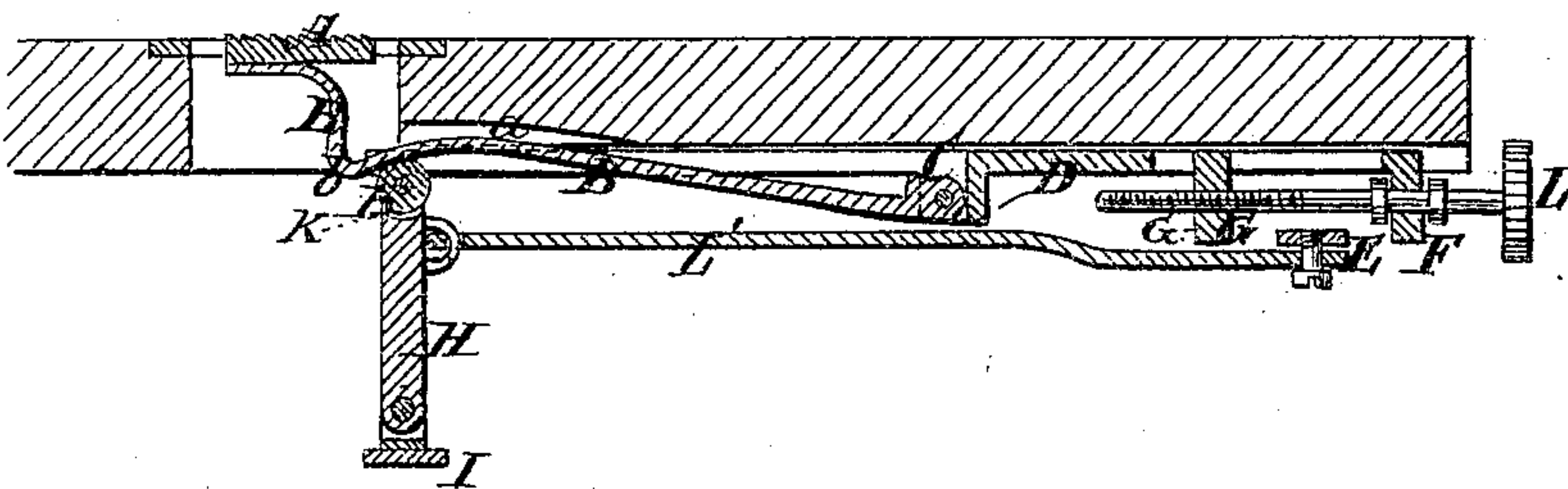
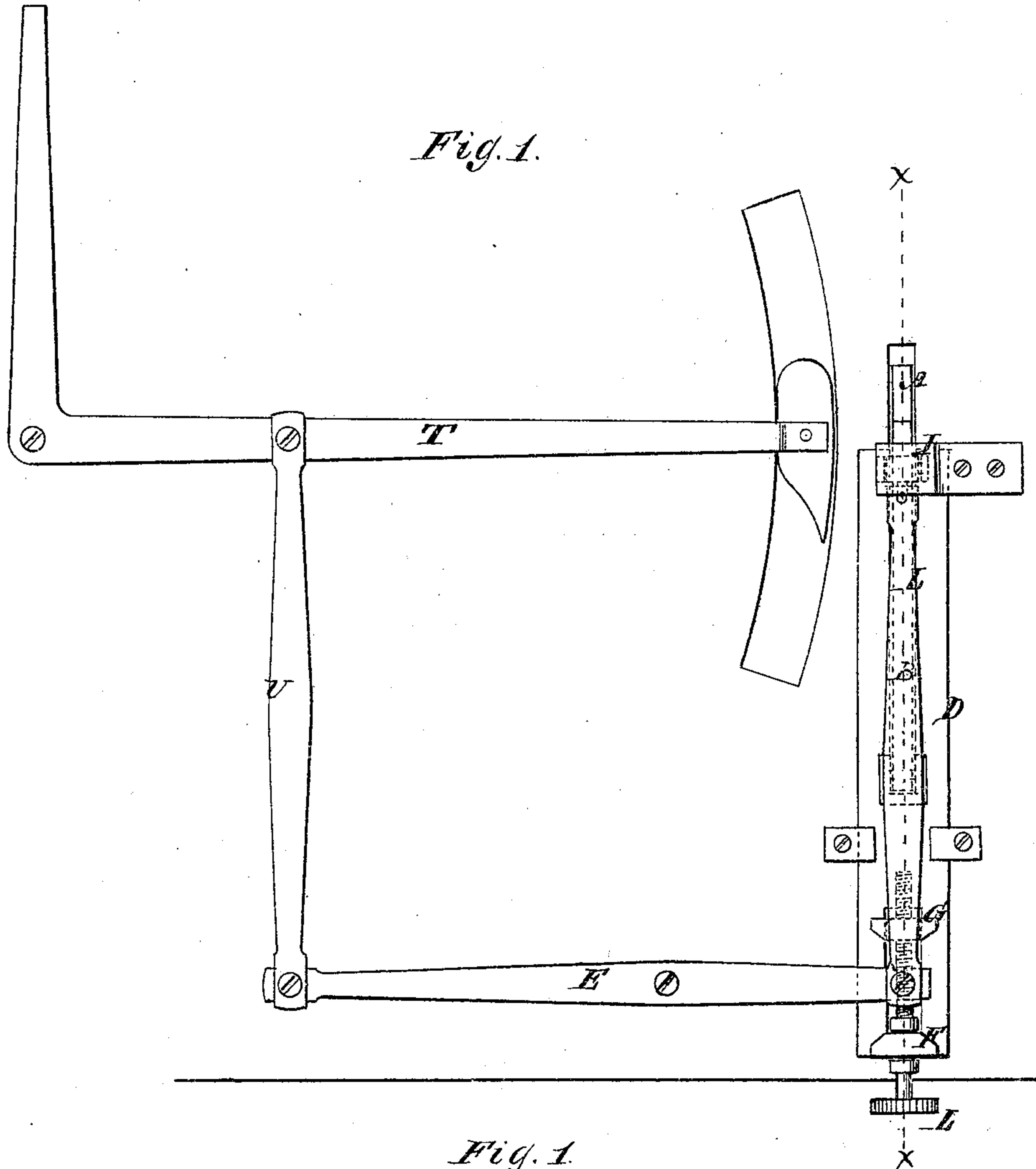


E. W. BEEBE.
Sewing-Machines.

No. 139,040.

Patented May 20, 1873.



Witnesses:

E. Wolff.
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Inventor:

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UNITED STATES PATENT OFFICE.

EUGENE W. BEEBE, OF EVANSVILLE, WISCONSIN.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **139,040**, dated May 20, 1873; application filed March 29, 1873.

To all whom it may concern:

Be it known that I, E. W. BEEBE, of Evansville, in the county of Rock and State of Wisconsin, have invented a new and useful Improvement in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

The invention consists in the improvement of sewing-machine feed mechanism, as hereinafter described and pointed out in the claim.

Figure 1 is a plan of the under side of part of a sewing-machine, showing my improved feed-motion; and Fig. 2 is a sectional elevation, taken on the line *xx* of Fig. 1.

A is the feed-plate, secured to one end of a crooked bar, B, hinged at C to the plate D, by which the forward-and-back motion is imparted to the feed-plate through a lever, E, one end of which works between the stationary lug F on said plate D and the movable one G. H is a vertical bar, pivoted at its lower end to a stand, I, under the bar B, near the end, and has a roller, K, in its upper end, on which bar B rests, and near the upper end it is connected by a rod, L', with the lever E, so that at the same time that said lever works the plate D it will work the bar H. The bar H swings with the lever the full measure of its movement and raises the feed-plate, while the plate D only moves a short distance, owing to the lost motion of lever E in the space between the lugs F G. The bar

B is curved downward from the point *a* to the bend *b*, so that during the movement of the bar H to the left it will raise the feed-plate up to the cloth just before the lever E comes to the lug G, so that when the plate D is moved forward, after the lever strikes this lug, the plate will move the cloth; then, during the back movement of the lever E, and before it comes up to the lug F to move the feed-plate back, it will pull the bar H and roller K back along the curve *a b*, so as to let the feed-plate fall away from the cloth. The length of the stitch is regulated by moving the adjusting lug G along the plate D with an adjustable screw, L. In this example the lever E is connected to the shuttle-lever T by a rod, U, so that it is operated directly by said lever, and saves the employment of a cam; it also performs the offices of both the cam and spring commonly used. In practice, I will have the lugs F G (on the lever E) cushioned, so as to deaden the sound of the contact.

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

The combination of a bar, D, feed-plate A, lugs G F, and rock-stand H with the feed-plate D, link L', and the lever E, as and for the purpose described.

EUGENE W. BEEBE.

Witnesses:

J. O. SHARP,

FRANK H. WINSTON.