

W. A. SPRINGER.

Trimming-Attachments for Sewing-Machines.

No. 142,290.

Patented August 26, 1873.

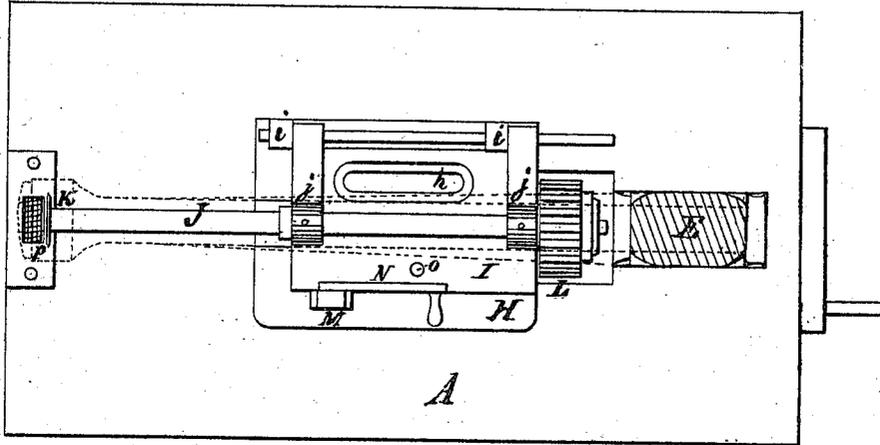


Fig. 1.

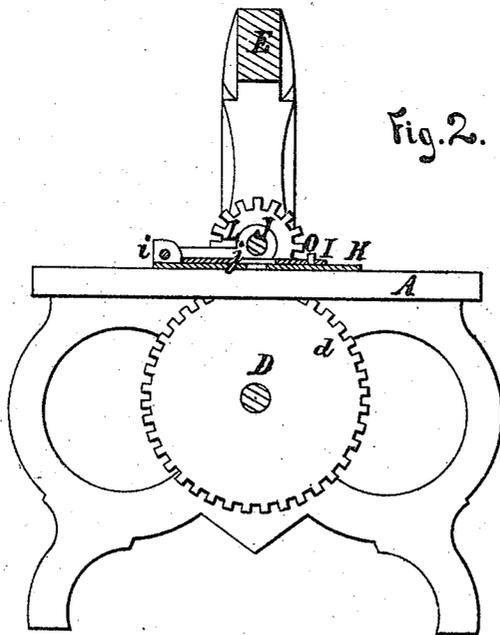


Fig. 2.

Witnesses.  
*Chas. P. Steele*  
*George E. Upham.*

Inventor.  
*W. A. Springer*  
*Chapman & Forman & Co.*  
*Attys*

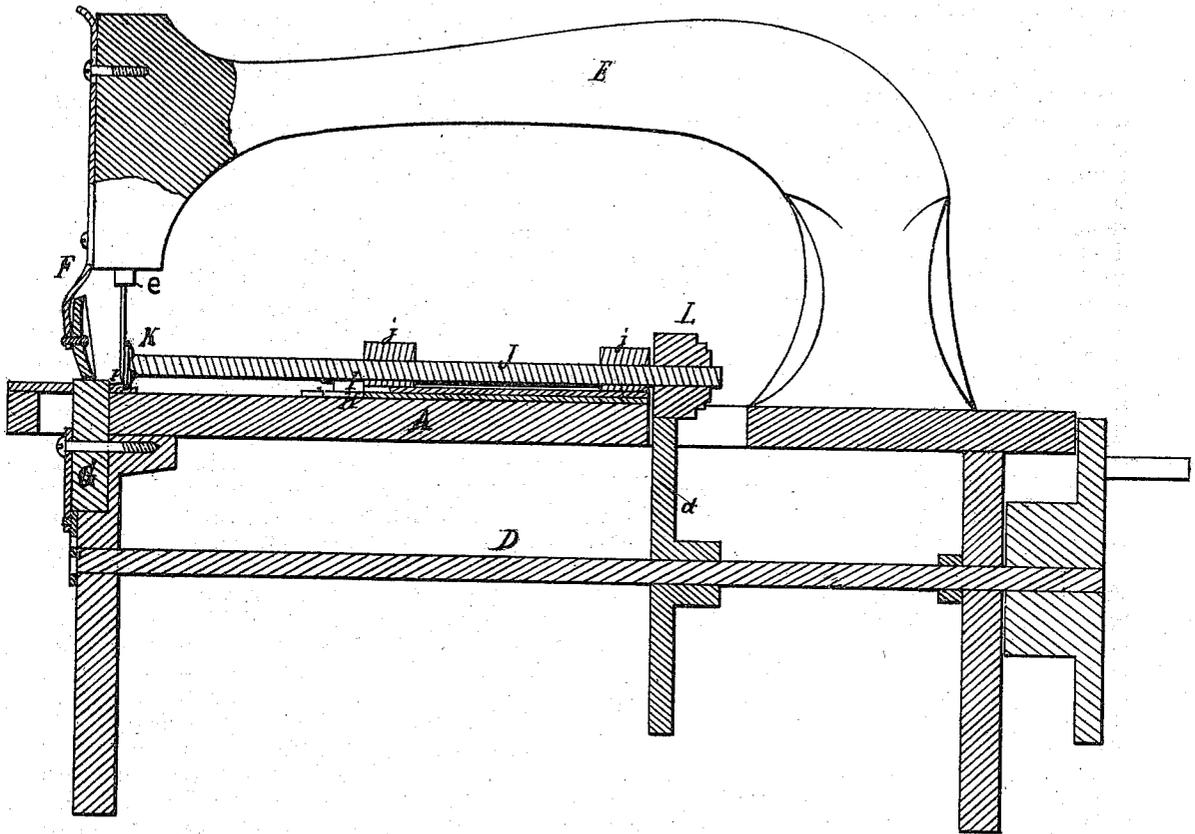
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Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

WILLIAM A. SPRINGER, OF MARLBOROUGH, MASSACHUSETTS.

## IMPROVEMENT IN TRIMMING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 142,290, dated August 26, 1873; application filed June 19, 1873.

*To all whom it may concern:*

Be it known that I, WILLIAM A. SPRINGER, of Marlborough, in the county of Middlesex and State of Massachusetts, have invented a new and valuable Improvement in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon

Figure 1 of the drawings is a representation of a top view of my trimming attachment for sewing-machines. Fig. 2 is a cross-section of the same. Fig. 3 is a longitudinal section of the same.

My invention relates to attachments for trimming seams on sewing-machines; and it consists in the combination and arrangement of the parts hereinafter described and claimed.

The object of my invention is to trim the seam of the fabric sewed in a sewing-machine by a rotary cutter, which, for motion, does not depend on the force of the feed to the detriment of the same and of the fabric, which is easily caused to run in curves, and which receives motion from the main shaft of the sewing-machine, and thereby aids the feed-motion in its performance.

In the drawings, A represents the table of a sewing-machine, to which, in the ordinary manner, the main shaft D is attached, which carries a gear-wheel, *d*. The needle-arm E, the needle-bar *e*, the presser-foot F, and the feed-wheel G are of ordinary construction. The trimming apparatus consists of a plate, H, which may be screwed or otherwise fastened to the sewing-machine table under the needle-arm E. To this plate H the pressure-plate I is hinged or pivoted at *i*, so that it may be swung over when there is no pressure required. I prefer to lift the pressure-plate I by a spring fastened below it, which bears on the plate H. The plate I has two bearings, *j*, for a shaft, J, which has a circular cutter, K, at one end, and a gear-wheel, L, on the other end, which gears into the wheel *d* on the main

shaft. The plate H is provided with a lug, M, to which a cam-lever, N, is pivoted, which serves to bring the pressure-plate I down when it is turned over. To keep the plate I from swerving to either side, it is steadied by a pin, O, on the plate H, which penetrates the plate I at some suitable place. The cam on the lever N is so constructed that its greatest lever can be moved beyond the perpendicular line between its fulcrum and the pressure-plate, which serves to lock it securely. When the plate I is raised, the wheels L and *d* are out of gear and the cutter K is inactive. When the plate I is pressed down by the cam-lever N, the cutter K is pressed down on the sewing-machine plate and the wheels L and *d* are geared together, and the cutter K commences to operate on the cloth or leather as soon as the sewing begins. The gear-wheels *d* and L may be substituted by two friction-wheels, or by pulleys and belt and a tension-pulley. The cutter K has a straight face on the needle side, and is beveled off on the other side to a sharp edge, which bears against a shoulder, P, of the needle-plate on the needle side. The said shoulder, which may be square or ridged, serves as the second or counter blade, as in a pair of scissors. The plate H is fastened to the sewing-machine table by a thumb-screw, which is passed through a slot, *h*, to facilitate the adjustment of the cutter. The material of the pressure-plate I is cut away to make room for the thumb-screw above described.

What I claim as new is—

In a sewing-machine trimmer, the combination of the fundamental plate H, having slot *h*, the hinged or pivoted pressure-plate I, the depressing and locking cam-lever *n*, the rotating shaft J, the circular cutter K, and the shoulder P on the needle-plate, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM A. SPRINGER.

Witnesses:

EDMUND C. WHITING,  
CLIFTON D. HUNTER.