

(No Model.)

2 Sheets—Sheet 1.

R. W. RIESS.

TRIMMING ATTACHMENT FOR SEWING MACHINES.

No. 259,775.

Patented June 20, 1882.

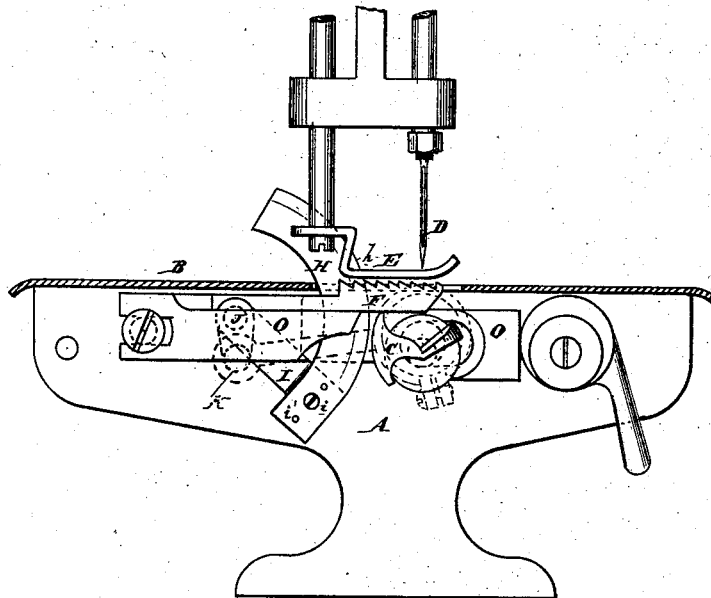


Fig. 1

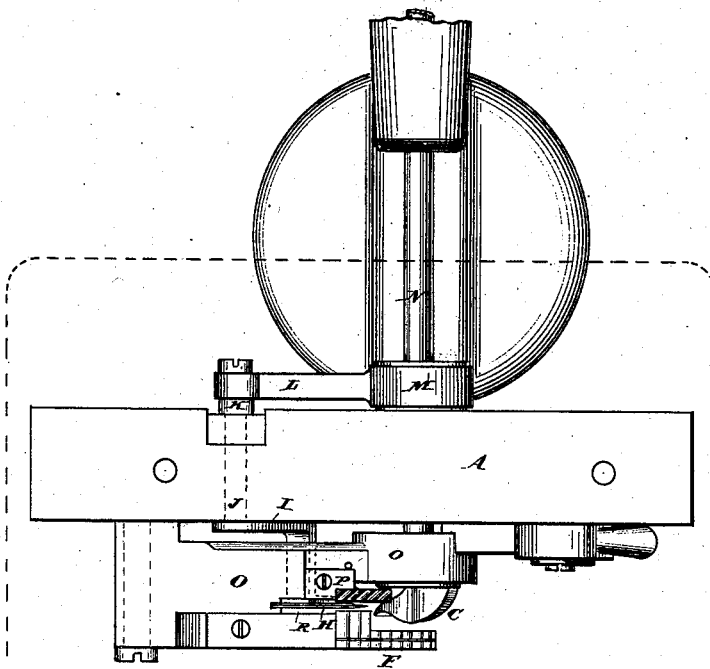


Fig. 2

Attests

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(No Model.)

2 Sheets—Sheet 2.

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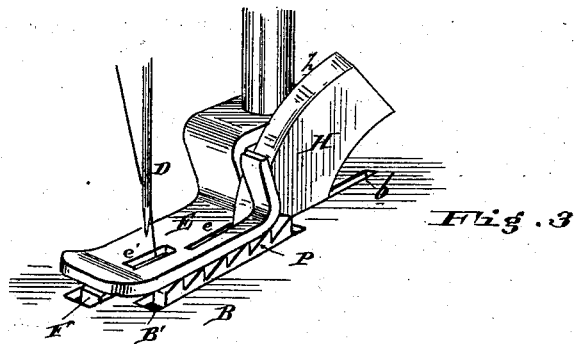


Fig. 3

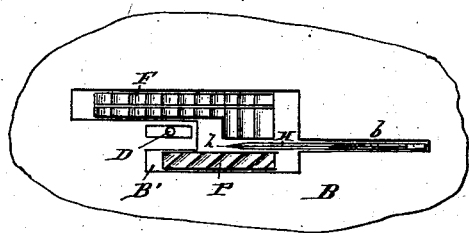


Fig. 4

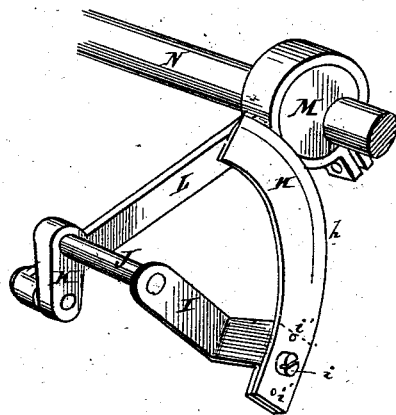


Fig. 5

Attests

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UNITED STATES PATENT OFFICE.

R. WILLIAM RIESS, OF PHILADELPHIA, ASSIGNOR OF ONE-HALF TO JOHN E. JONES, OF GERMANTOWN, PENNSYLVANIA.

TRIMMING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 259,775, dated June 20, 1882.

Application filed February 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, R. WILLIAM RIESS, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Trimming Attachments for Sewing-Machines, of which the following is a specification.

My invention has reference to trimming or cutting attachments for sewing-machines; and it consists in combining with a sewing-machine a reciprocating cutter or knife which constantly presents new cutting-edges to the fabric to be cut, but does not advance upon or recede from the said fabric, and which mechanism constitutes an improvement upon Letters Patent granted to me on June 14, 1881, and numbered 242,791; further, in combining such a cutter as above specified with two feeds, one of which is located on each side of said cutter; and, finally, in minor details of construction, all of which are fully set forth in the following specification and shown in the accompanying drawings, which form part thereof.

The object of my invention is to provide means to trim or cut off the edge of the material sewed in a line parallel to the seam, and at a specified distance to one side thereof, as is required in the manufacture of stockings, hose, or other articles of a similar nature; also, to perform the above function with a knife or cutter which constantly presents fresh cutting-edges without advancing upon the material to be cut; and, finally, to provide suitable feeding devices to keep the material between the seam and the edge taut, and feed it in that condition against the sharp cutting-edge of the knife to prevent the edge being dragged down by the cutter or the cutting-edge clogged, and at the same time to separate the waste part which has been cut off from the rest of the goods.

In the drawings, Figure 1 is a front elevation of a sewing-machine embodying in it my invention. Fig. 2 is a plan of same with the plate removed. Fig. 3 is a perspective view of the presser-foot and its adjacent parts. Fig. 4 is a plan view of the feeds and a part of the plate; and Fig. 5 is a perspective view, showing my improved knife-operating mechanism.

A is the bed of the sewing-machine. B is the plate. C is the looper. D is the needle.

E is the presser-foot, which is provided with the usual aperture, *e'*, through which the needle passes, and with a slot, *e*, open in the back, through which the knife or cutter H reciprocates.

O is the usual feeder-bar, and carries the usual feed, F, and my improved feed P, a space or slot, R, being left between them and extending back into the feed-bar, and through which the cutter H reciprocates. The feed F is provided with teeth at right angles to the seam, but the feed P has its teeth at an angle thereto, as shown, so that during the feeding of the goods the threads from which the material is knit or woven are fed under tension, as they lie across the teeth. These feeds F and P work through slots in the plate B, that through which feed F works being the same as heretofore used, but that one, B', through which the feed P works is used only upon machines of this construction and that set out in my patent hereinbefore specified.

N is the looper-shaft, and is provided with an eccentric, M, which rocks the shaft J, through the agency of crank K and eccentric-rod L. To the other end of shaft J is a crank or arm, I, carrying the curved cutter or knife H, which is secured to it by a screw, *i*, and pins *i'*, or by any other suitable means. The cutting-edge *h* of the knife or cutter H is concentric with the axle or shaft J, so that when the shaft J rocks the cutter is reciprocated, its cutting-edge moving in a curved line concentric with the shaft J, and the cutting-edge neither advances nor recedes. The cutter works through a slot, *b*, in the plate B, between the feeds F and P and through the slot *e* in the presser-foot E, which slot is open in the rear, as shown in Fig. 3.

The operation is as follows: The machine being put in motion and the goods to be sewed and trimmed fed thereto, the same are passed between the feeds F and P and presser-foot E, and after being sewed by the needle D and looper or other devices used on sewing-machines the goods are held taut and fed against the moving cutter H, which constantly presents a new cutting-edge *h* and prevents clogging; and after the waste edge is severed from the article it is fed to one side of the cutter and the article passes to the other side.

Having now described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. In a trimming attachment for sewing-machines, a reciprocating curved cutter or knife which constantly presents a fresh cutting-edge to the goods to be cut, the cutting-edge of said cutter being concentric with its axis, in combination with means to reciprocate said cutter, substantially as and for the purpose specified.

2. In a trimming attachment for sewing-machines, a moving cutter which constantly presents new or fresh cutting-edges to the goods to be cut, said cutting-edge neither advancing nor receding during the act of cutting, in combination with means to move said cutter, and two feeds, one of which is arranged on each side of said cutter, substantially as and for the purpose specified.

3. The combination of cutter H, having the cutting-edge *h* concentric with its axis J, with the plate B, having slot *b*, and devices to rock said axis J and sew and feed the sewed goods against the cutting-edge *h*, substantially as and for the purpose specified.

4. The combination of the curved cutter H, having the cutting-edge *h* concentric with its axis J, with presser-foot E, having slot *e*, open in the rear, as shown and described.

5. The combination of the curved cutter H, having the cutting-edge *h* concentric with its axis J, with said axis, mechanism to rock said axis J, presser-foot E, having slot *e*, plate B, having slot *b*, and feeds F and P, one located on each side of said cutter H, as described.

6. The combination of shaft N, eccentric M, rod L, crank K, axle or shaft J, crank I, curved cutter H, having its cutting-edge *h* concentric with the axle J, presser-foot E, having slot *e*, and feeds F and P, one located on each side of said cutter H, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

R. WILLIAM RIESS.

Witnesses:

R. M. HUNTER,
R. S. CHILD, Jr.