

(No Model.)

T. B. GARRETSON.

RUFFLER FOR SEWING MACHINES.

No. 259,124.

Patented June 6, 1882.

Fig. 1.

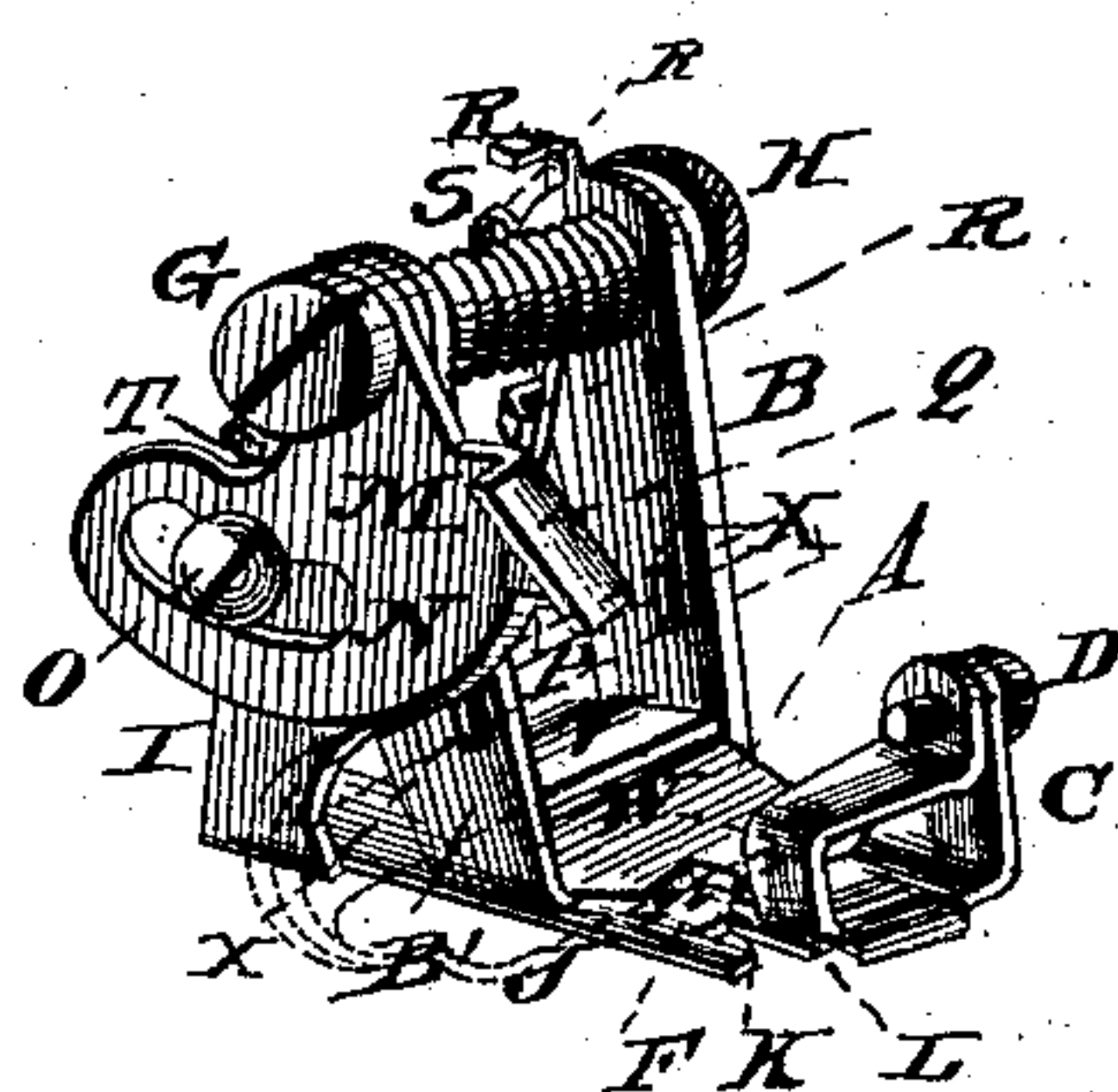


Fig. 2.

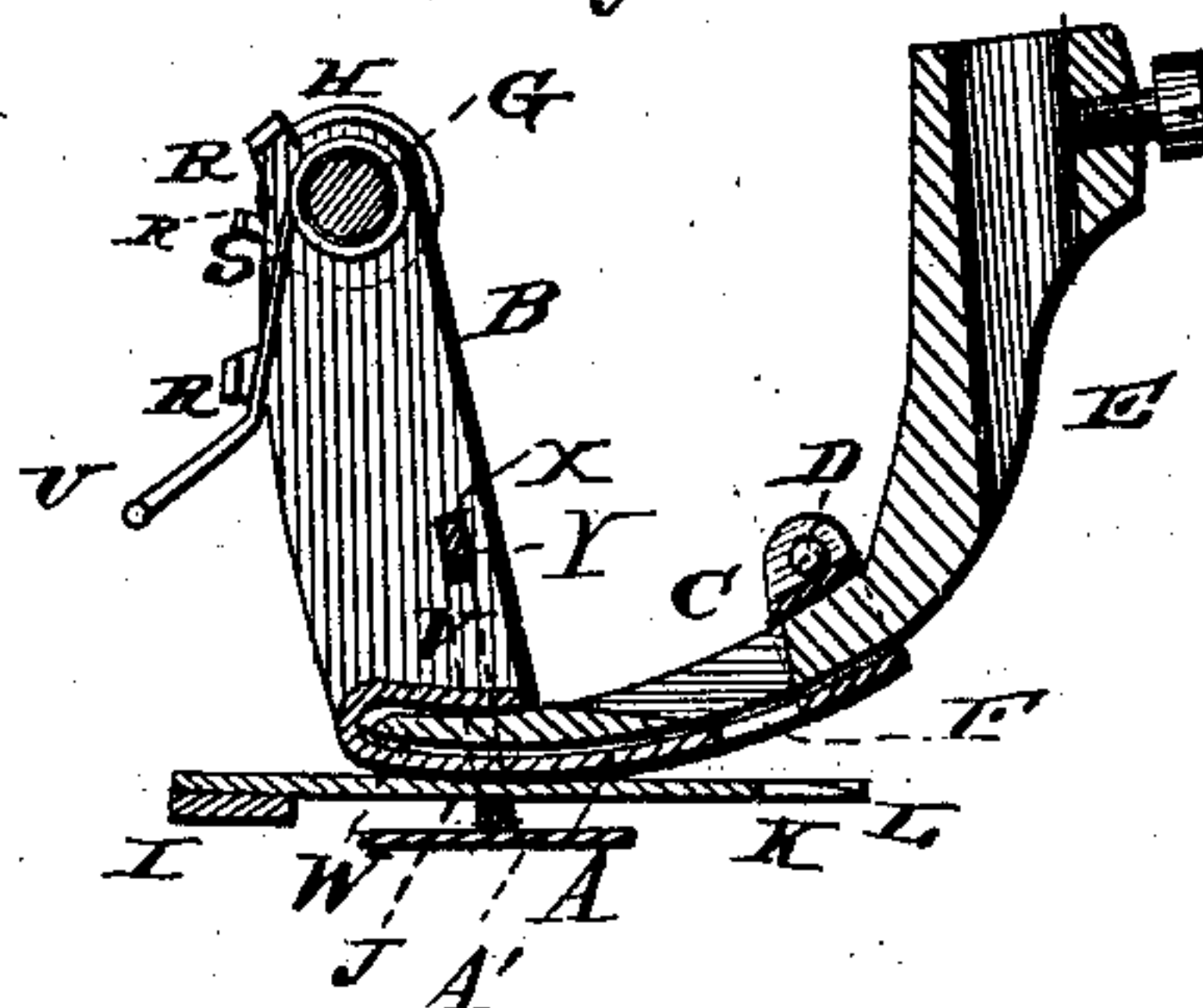


Fig. 3

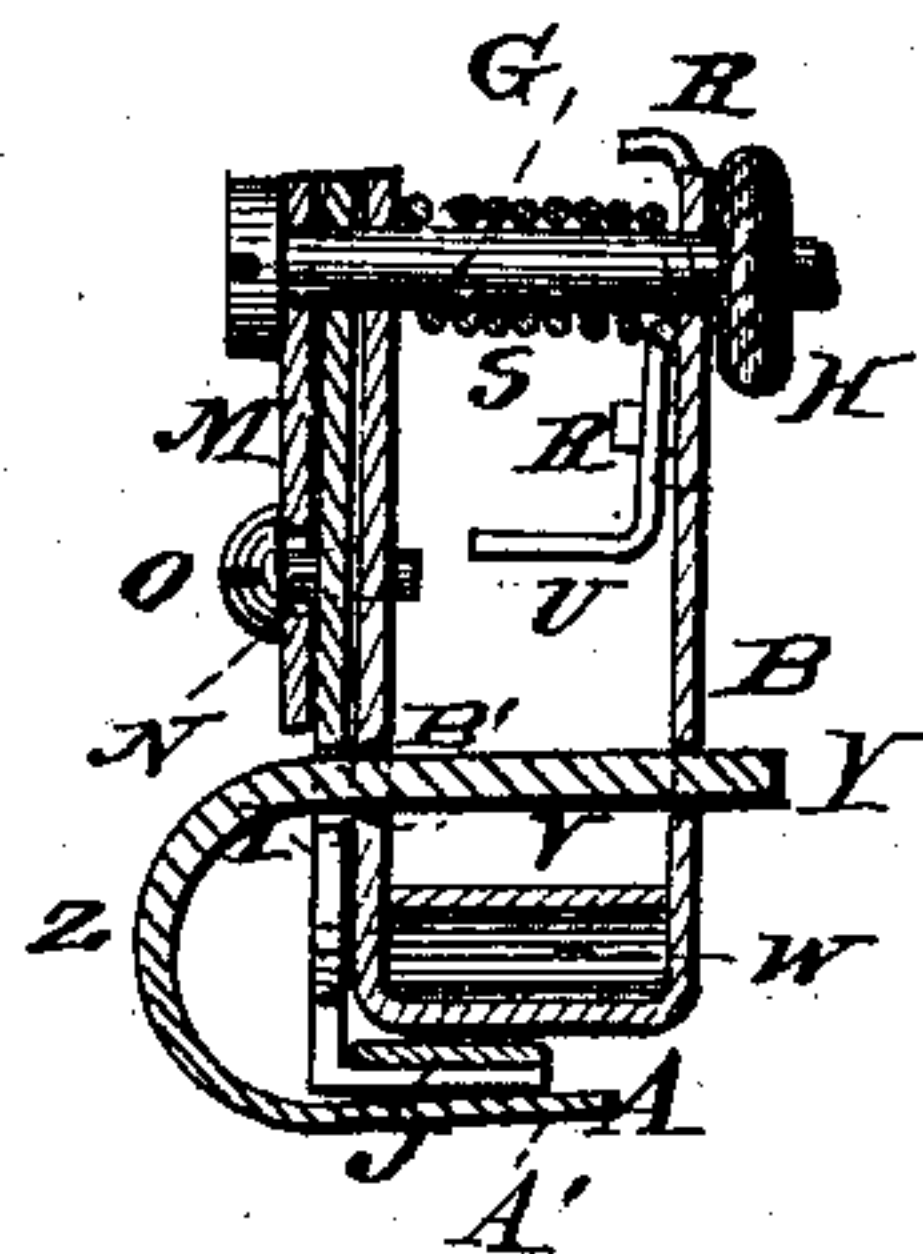


Fig. 4.

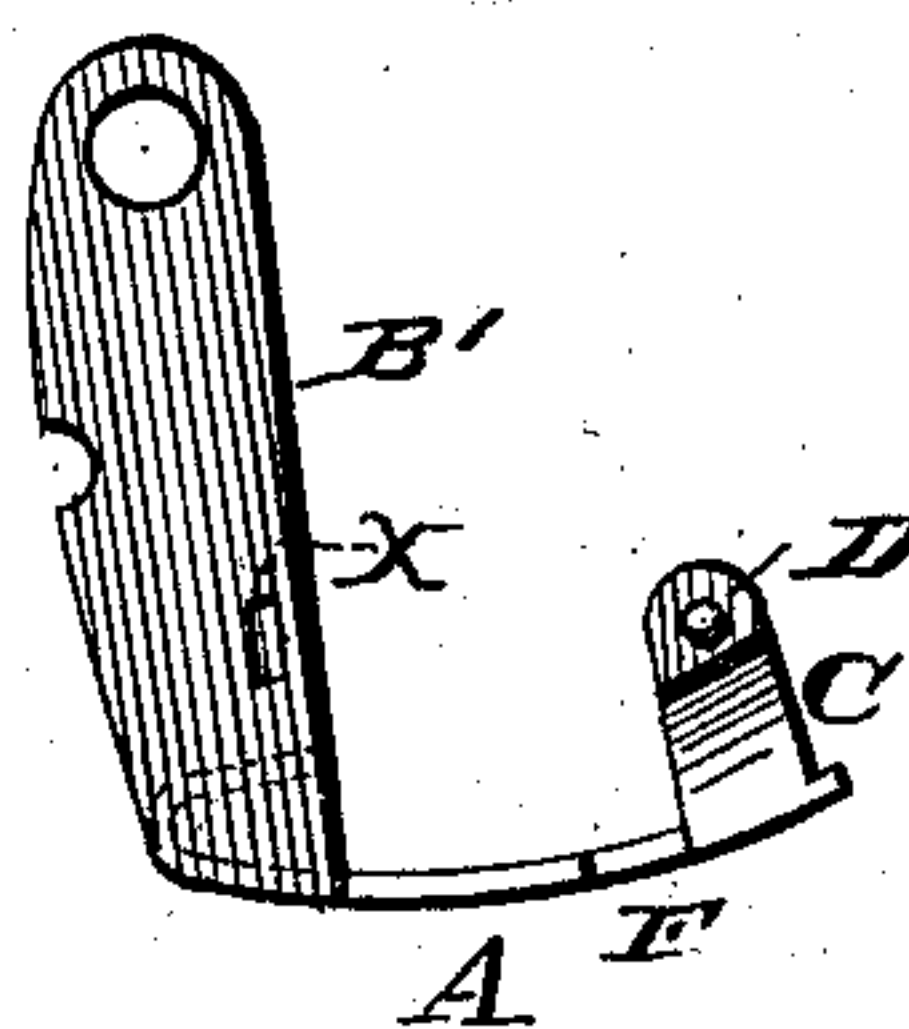


Fig. 5.

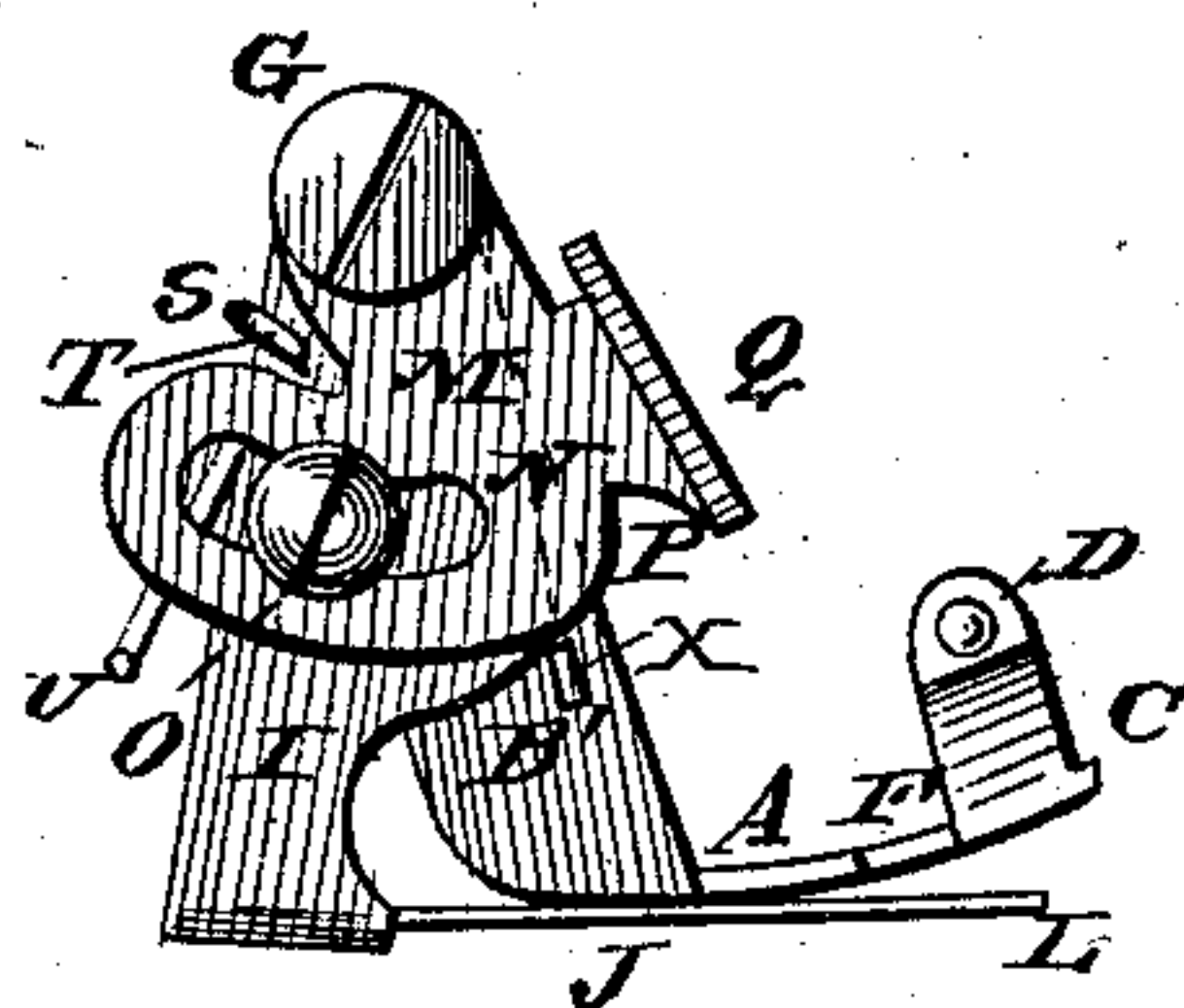
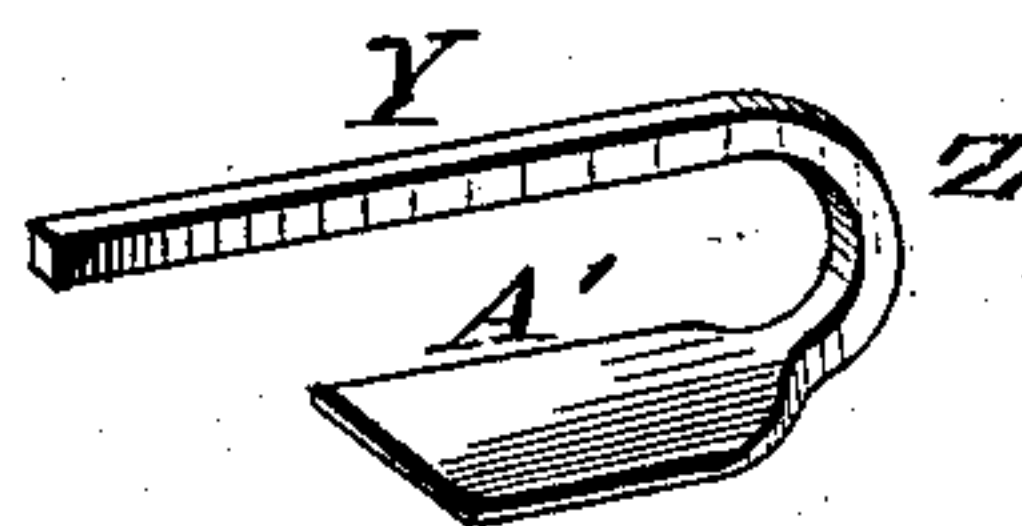


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS B. GARRETSON, OF OSKALOOSA, IOWA, ASSIGNOR TO THE GARRETSON RUFFLER COMPANY, OF SAME PLACE.

RUFFLER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 259,124, dated June 6, 1882.

Application filed October 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. GARRETSON, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Sewing-Machine Attachments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my improved ruffling or shirring attachment. Fig. 2 is a vertical longitudinal sectional view, showing the same in position upon the presser-foot of a sewing-machine. Fig. 3 is a vertical cross-section. Fig. 4 is a detail view of the frame. Fig. 5 is a side view, and Fig. 6 is a view of the gage detached.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to ruffling and shirring attachments for sewing-machines; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

My improved attachment, which is made separate from and capable of being secured to the presser-foot of a sewing-machine, consists of a base-plate, A, provided near its front end with two upward and forward projecting arms or brackets, B B', and at or near its rear end with brackets C, forming a clamp, which may be tightened by means of a set-screw, D, so as to secure the device upon the presser-foot E, as will be seen in Fig. 2 of the drawings. Plate A is provided with a notch or slot, F, which coincides or registers with the needle-slot in the presser-foot. The upper ends of the arms or brackets B B' are connected by a bolt, G, having a thumb-nut or tightening-nut, H. Upon the bolt G, outside of and adjoining the bracket B', is pivoted an arm, I, carrying at its lower end a horizontal flat spring, J, forming the pushing-blade of the device. Said blade is provided at its front end with a notch, K, to accommodate the nee-

dle, and teeth or points L to engage the material and push or feed it forward, as will be hereinafter described.

Adjoining the carrier I, upon the bolt G, is a pivoted plate, M, having a segmental slot, N, to receive a set-screw, O, adjusted in the carrier I. By tightening the said set-screw the plate M may be fastened securely in any position to which it may be adjusted in relation to the carrier I. Plate M is provided, as shown, with a rearward-projecting arm, P, carrying a laterally-projecting inclined plate, Q, the object of which will be presently described.

The arm or bracket B is provided with laterally-projecting lugs R, two or more in number, located at or near its upper end, a short distance apart. S is a spring coiled upon the bolt G, and having one of its ends adjusted under one of the lugs R, while its other end is formed with a hook, T, adjusted around the front side of the carrier I, so that the latter shall be forced in a rearward direction by the tension of the spring. To adjust or regulate the tension of the spring, and thereby the force with which the carrier I is impelled rearward, the end of the spring may be adjusted, under any one of the lugs R, the lowest one of which strains the spring to its highest tension, and the end of the spring thus adjustable is bent inward to form a convenient finger-piece, U.

The base-plate A of the frame is provided at its front end with a lip, V, which is bent rearward, as shown, between the brackets B B', thus forming a recess, W, to receive the front end of the presser-foot, and serving, in conjunction with the clamp C, to secure the device in position for operation.

The brackets B B' are to be provided near their lower ends with slots X, to receive a gagging attachment, which I sometimes find it desirable to use when ordinary ruffling is to be performed. Said attachment consists of a stem, Y, adjustable transversely in the slots X, where it may be secured in any suitable manner, and provided at one end with a downward-projecting arm, Z, carrying a horizontal blade, A', which is thus adjustable under the pushing-blade. The material to be ruffled is fed between the blade A' and the pushing-blade,

and the arm Z gages or regulates the distance between the stitching and the edge of the material.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation of my invention and its advantages will be readily understood by those skilled in the art to which it appertains.

I would invite attention to the fact that the main part or frame of the device, comprising the base-plate A, brackets B B', brackets C, lip V, and lugs R, is conveniently stamped or formed of a single piece of plate-metal, the brackets, lugs, and lip being simply bent to their proper respective positions, thus rendering the manufacture of the device economic and convenient.

In operation, the fabric to be ruffled or shirred is fed under the pushing-blade J. The needle-bar on its downstroke strikes the inclined face-plate Q of plate M, forcing the latter with the carrier I and pushing-blade J, in a forward direction. When the needle-bar rises, and its pressure upon plate M is released, the spring S forces the parts M I J rearward, causing the pushing-blade to feed the fabric and form a ruffle, the fullness of which may be regulated by properly adjusting the plate M in relation to the pushing-blade carrier I, and regulating the extent of the motion of the latter.

It will be observed that owing to the inclined face Q the plate M receives the blow of the needle-bar in an inclined direction, thus making the motion of the pushing-blade steady and gradual and free from any sudden shock.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a ruffling and shirring attachment for sewing-machines, the base-plate A, having at its front end a rearward-turned lip, V, and provided near its rear end with upward-projecting clamping-brackets C, connected by a screw, D, substantially as set forth.

2. In a ruffling and shirring attachment for sewing-machines, the frame comprising the base-plate A, brackets B B' C, lip V, and lugs R, stamped or otherwise formed of a single piece of metal, substantially as shown and specified.

3. In a ruffling and shirring attachment for sewing-machines, the combination of the plate A, having brackets B B', the former of which is provided with lugs R, the bolt G, the pivoted carrier I, having pushing-blade J, the regulator-plate M, adjustable, as shown, in relation to the carrier I, and the spring S, coiled upon bolt G, and having one end adjustable under any one of the lugs R, and the other end hooked around carrier I, forcing the latter rearward, substantially as herein shown and specified.

4. The spring S, having hook T, and finger-piece U, when arranged in a frame having arm B, provided with lugs R, substantially as herein described, for the purpose set forth.

5. The combination, with the bolt G, having thumb-nut H, connecting the frame A B B' R C V with the pushing-blade, carrier, and regulator-plate, of the adjustable spring S, having hook T and thumb-piece U, substantially as shown and specified.

6. The combination, with a ruffling and shirring attachment constructed substantially as described, and having brackets B B', provided with slots X, of the gage Y Z A', substantially as described, for the purpose shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOMAS B. GARRETSON.

Witnesses:

J. R. LITTELL,
C. K. ALLEN.