

(No Model.)

E. J. TOOF.
RUFFLER FOR SEWING MACHINES.

No. 410,619.

Patented Sept. 10, 1889.

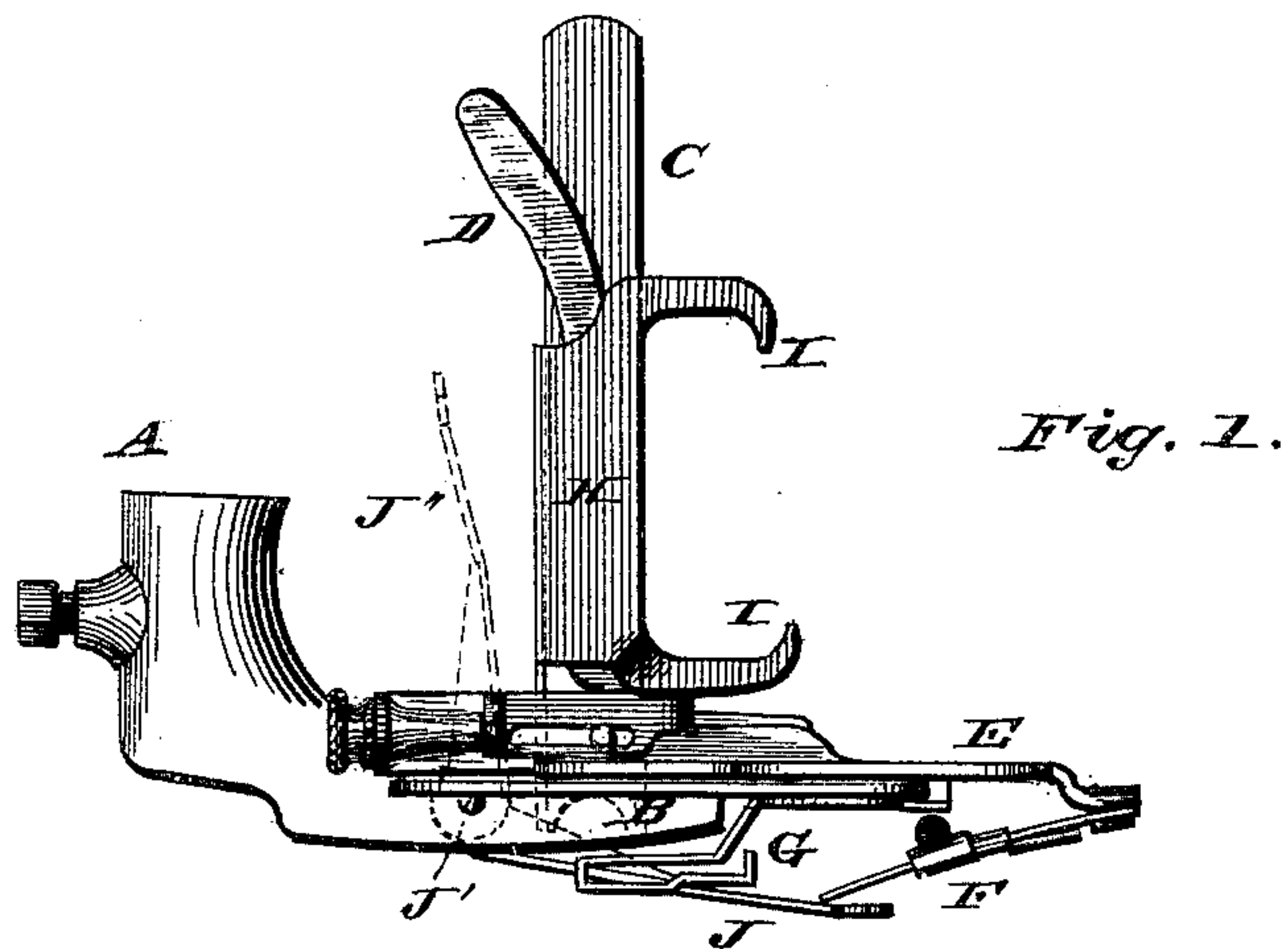


Fig. 1.

Fig. 2.

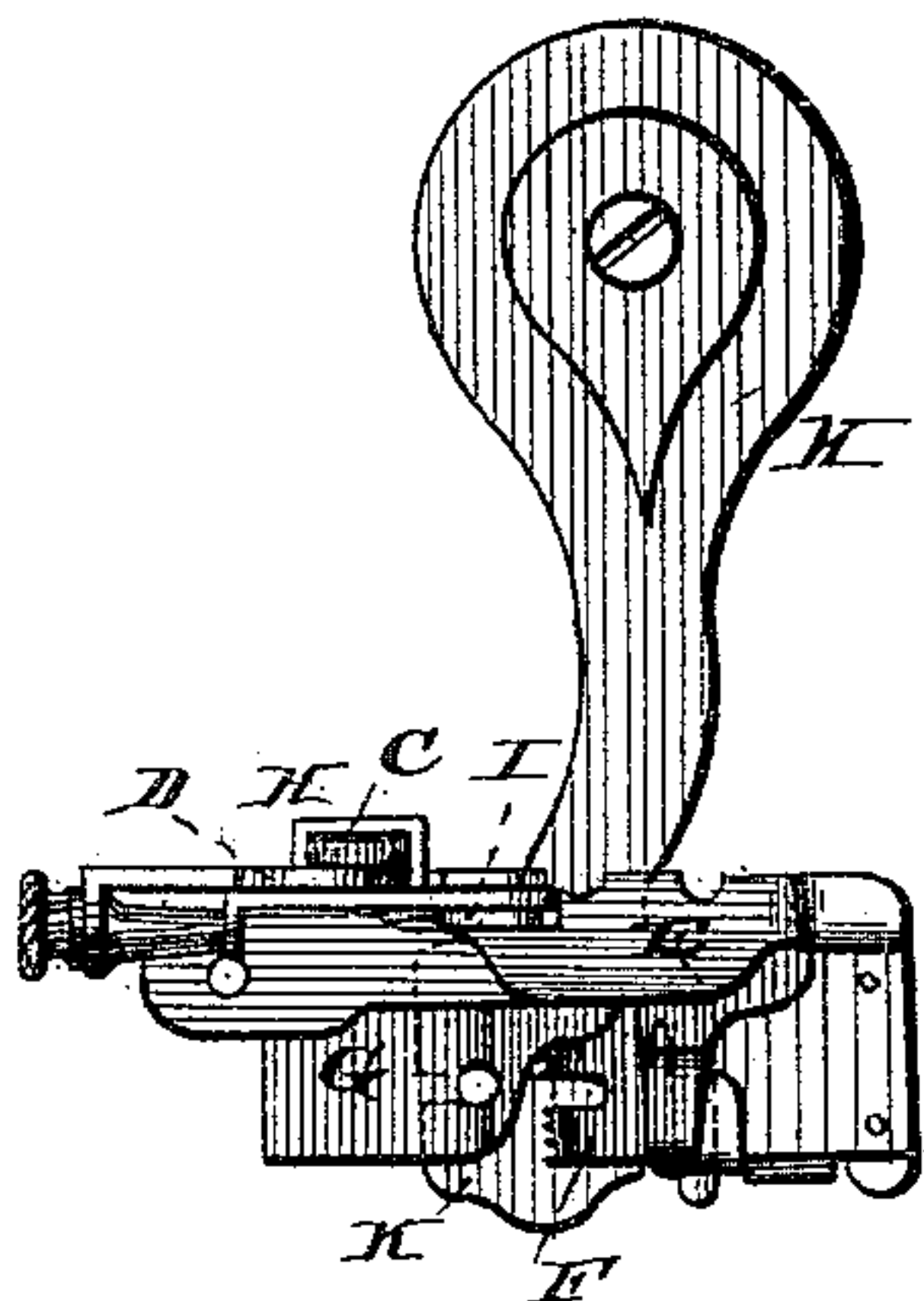
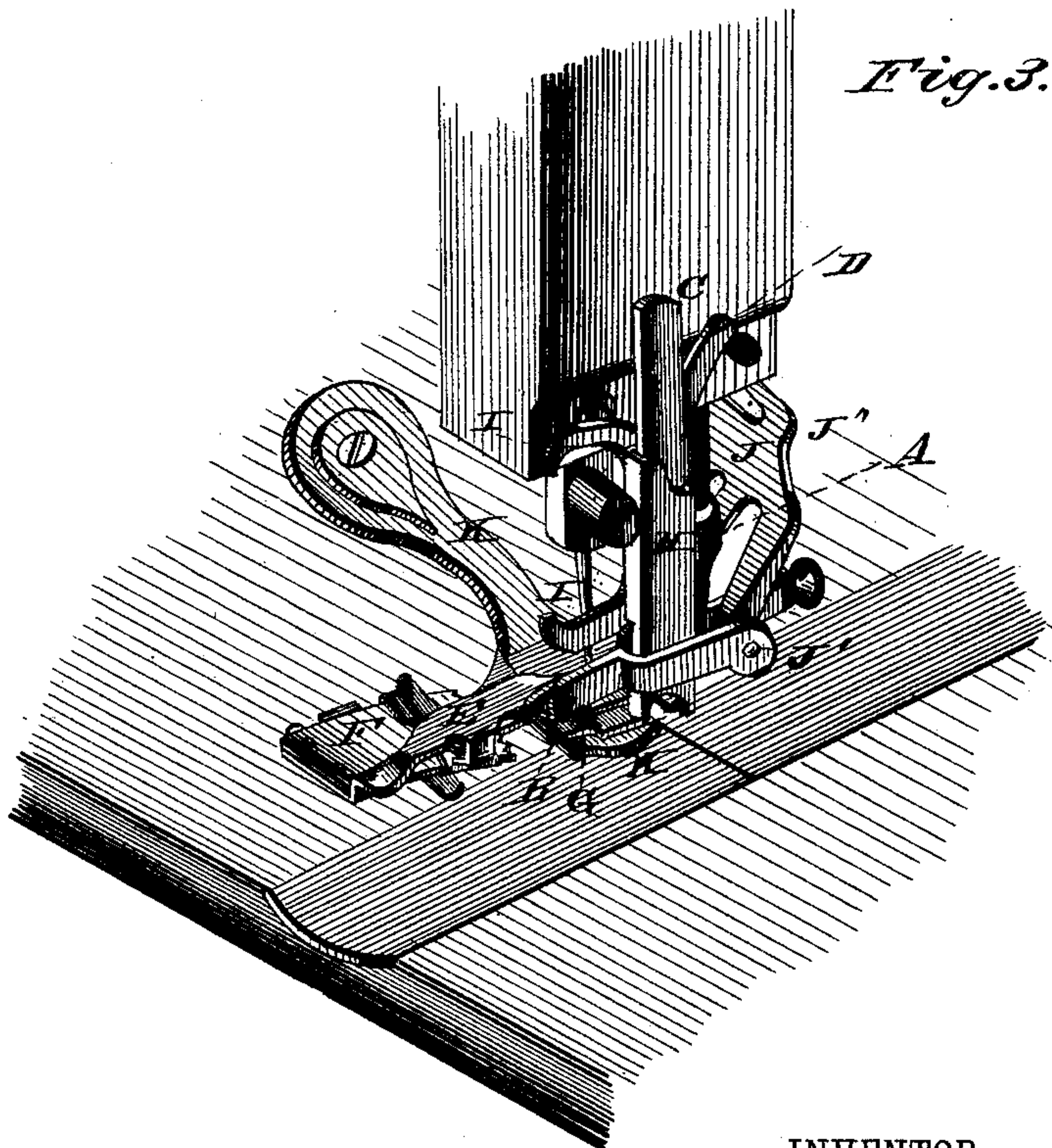


Fig. 3.



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RUFFLER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 410,619, dated September 10, 1889.

Application filed May 29, 1882. Serial No. 62,795. (No model.) Patented in England March 11, 1882, No. 1,194.

To all whom it may concern:

Be it known that I, EDWIN J. TOOF, a citizen of the United States of America, residing in the city and county of New Haven, State of Connecticut, have invented new and useful Improvements in Ruffling and Gathering Attachments for Sewing-Machines, (for which I have obtained a patent in Great Britain, No. 1,194, bearing date March 11, 1882,) of which the following, taken in connection with the drawings, is a specification.

My invention relates to attachments for sewing-machines adapted to ruffle and shirr, which in this instance is provided with a hinged separator-plate adapted to be thrown out of position when not required to serve to separate a plain strip from the strip to be ruffled, so that "shirring" may be done with the same attachment; and my improvement consists, further, in the combination, with said ruffler and sewing-machine, of a plate for covering the feed-dog when shirring is to be done instead of ruffling, as will be hereinafter more fully set forth, and specified in the claims.

Referring to the drawings, Figure 1 represents a side elevation of a ruffling and gathering attachment containing my improvement. Fig. 2 represents a gathering attachment, with a plate for covering the feed-dog of the sewing-machine; Fig. 3, a perspective view of the device in position for operation upon the sewing-machine.

A is the presser-foot, to and by which the attachment is held in position for operating; B and C, frame for connecting with the presser-foot and the post forming a part of the former, to which all of the operative parts (with the exception of the plate for covering the feed-dog) are connected and held together.

D is a lever, pivoted about centrally to the post C, which post and lever are inclosed by a sliding sleeve H, as shown.

I I are ears forming a part of sleeve H, between which ears the nut or screw for clamping the needle to the needle-bar of the sewing-machine reciprocates, thereby imparting motion to the carrier E and gatherer F, which are secured together.

G is a supplemental spring-presser resting

against and acting beneath the toe of the presser proper by which the attachment is held, all of which parts, as well as their mode of operation, are more fully and in detail set forth in a previous application of mine, Serial No. 51,727, now pending in the United States Patent Office.

J and J' is a separator-plate hinged to the frame B at J', which, when to be used as a means to separate the strip to form the ruffle or gather from the band or strip upon which the gather is to be stitched, will rest in the position shown more clearly in Fig. 1 of the drawings at J, or where not in use for the purpose indicated, or when the attachment is to be used for shirring fabrics, the separator may be thrown or swung back and out of position, as shown at J'' in the drawings, which will then leave the entire space beneath the arm of the sewing-machine free for the manipulation of the goods to be operated upon, so as to enable the operator to shirr the goods at any desirable distance from its edge which the space between the arm-post and needle will permit. This separator-plate is substantially the same as those in general use as regards form and its relative position to the feed-dog of the machine and the gathering-blade which acts thereon; but when used in combination differs in manner of connection and mode of operation from the fact that it is adapted to be thrown out of position, when desired.

I use a guard or plate over the feed-dog of the machine while shirring after the separator J has been moved out of position to operate, for the purpose of protecting the gathering-blade from the roughened surface of the feed-dog, which plate is clearly shown in the drawings at K, and is adapted to be held upon the cloth-plate of the sewing-machine by screw or other suitable means usually adopted for holding the usual attachment thereon.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

1. The combination, with a ruffling and shirring attachment for sewing-machines, con-

sisting of a frame, gathering-blade, and operating-levers adapted to be supported in position by the presser-bar of said machine, of a separator-plate hinged to said frame upon
5 a bearing which is at right angles to the line of feed, the said separator-plate being thus parallel with and operating in direction with said blade, substantially as and for the purpose set forth.

10 2. The combination, in a ruffling and shirring attachment for sewing-machines, consisting of a supporting-frame adapted to be secured to the presser-bar of said machine, and a gathering-blade operated by connecting-le-
15 vers, of a separator-plate the shank of which forms a part of the same and is hinged to the supporting-frame at one side thereof to permit the operator to swing said plate from beneath said blade, substantially as described,
20 and for the purpose set forth.

3. The combination, in an attachment adapted to ruffle and shirr, of a supporting-frame adapted to be held in position by the presser-bar of a sewing-machine, a gathering-blade operated by a connecting-lever, an
25 adjustable separator-plate hinged to the foot part of the said frame, and a supplemental or guard plate adapted to be independently secured to the cloth-plate of the machine, whereby the said attachment may be oper-
30 ated for shirring with the hinged separator-plate moved out of operative position without operating the blade against the feed-dog, substantially as set forth.

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Witnesses:

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