

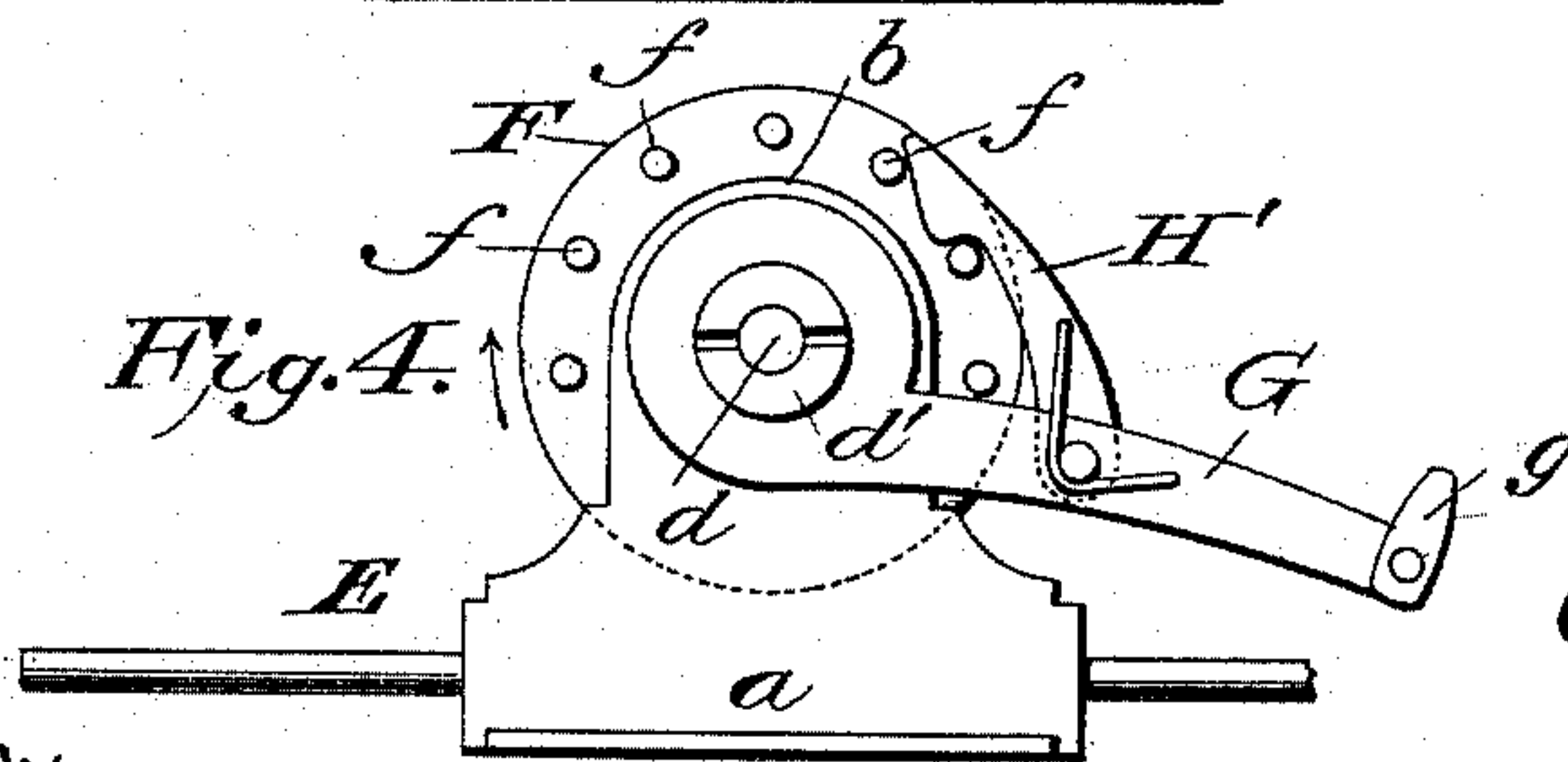
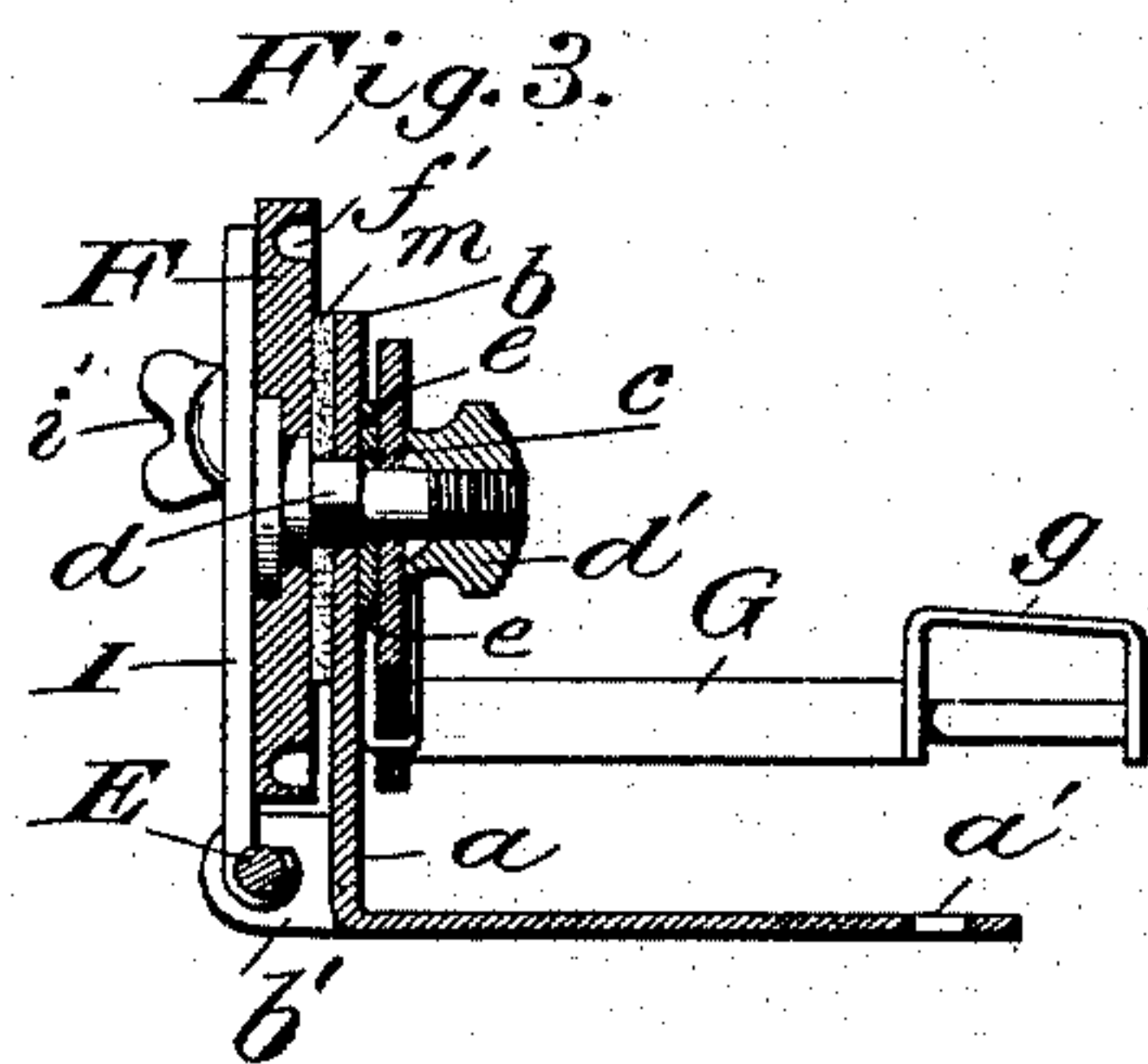
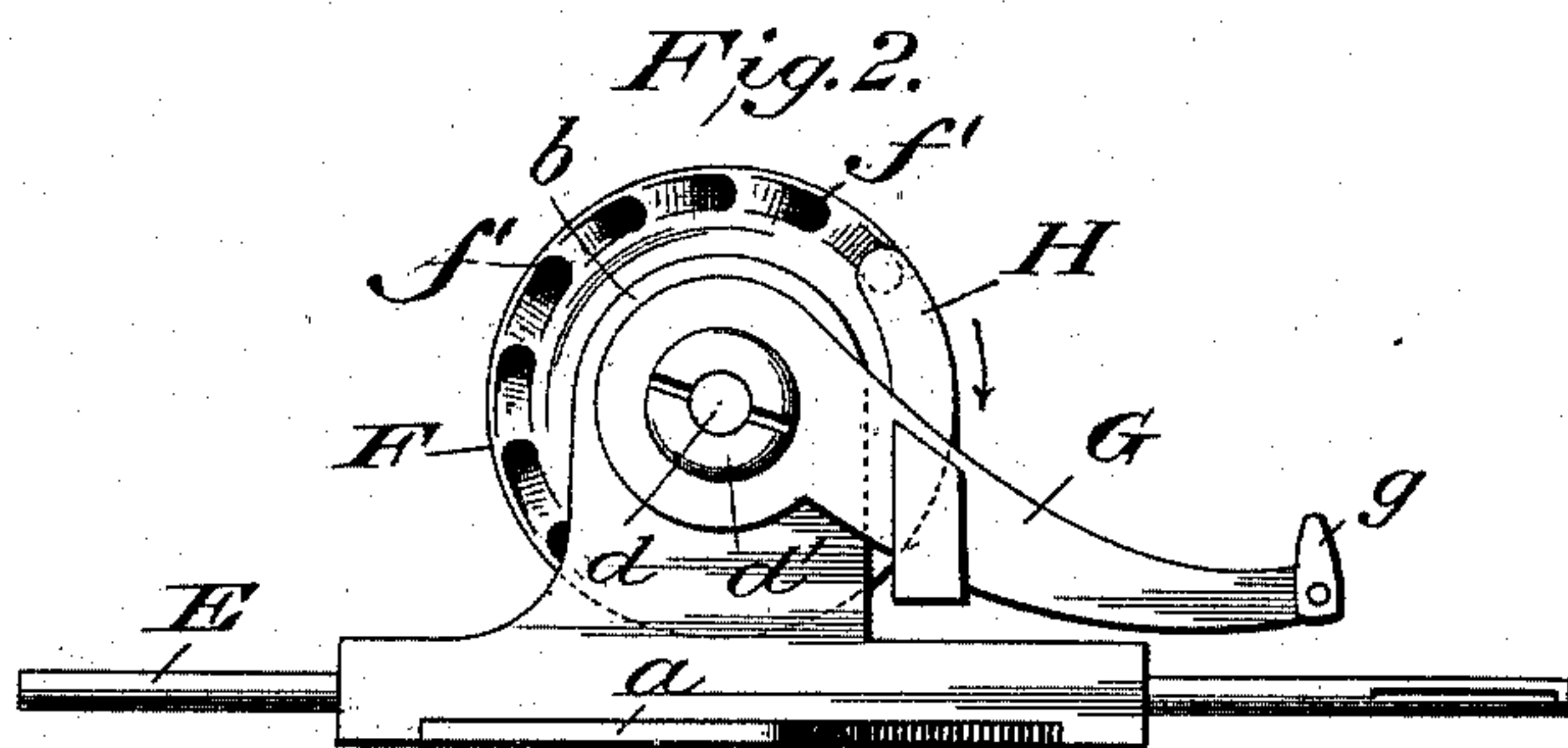
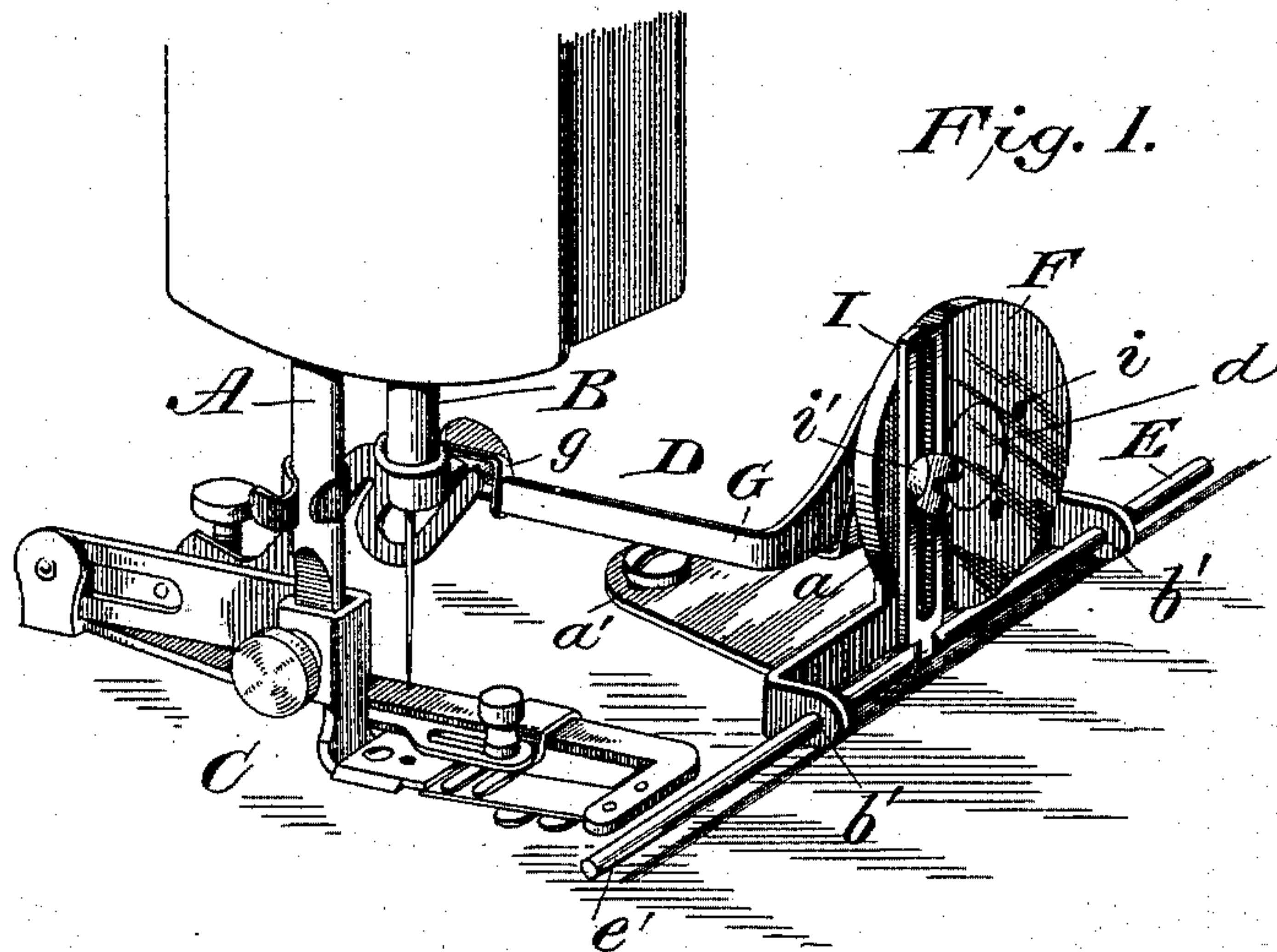
(No Model.)

G. W. KEMP.

SCALLOPING ATTACHMENT FOR SEWING MACHINES.

No. 483,496.

Patented Sept. 27, 1892.



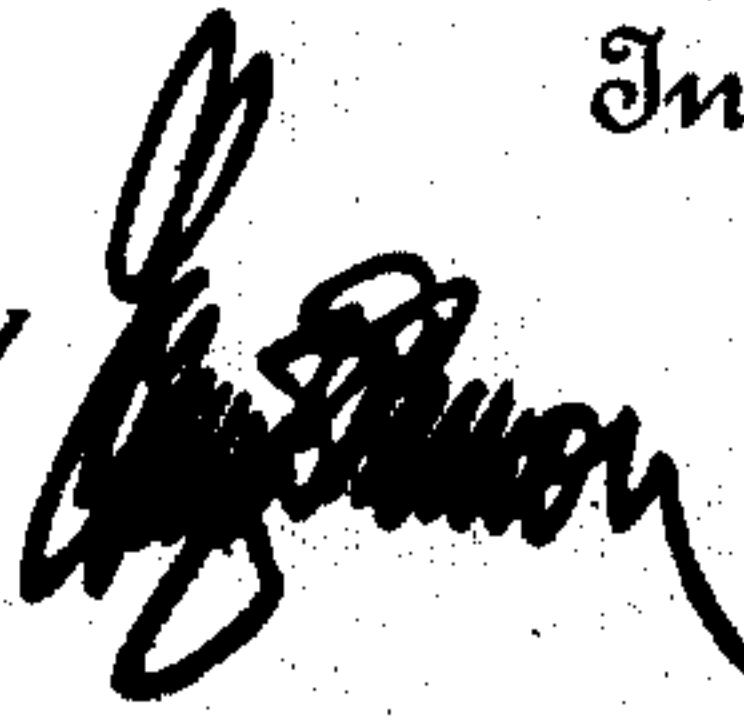
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Witnesses

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UNITED STATES PATENT OFFICE.

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TO ALEXANDER G. FORBES, OF SAME PLACE.

SCALLOPING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 483,496, dated September 27, 1892.

Application filed April 7, 1892. Serial No. 428,204. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. KEMP, a citizen of the United States of America, residing at Montgomery, in the county of Montgomery and State of Alabama, have invented certain new and useful Improvements in Scalping Attachments for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in attachments for sewing-machines.

The object of the invention is to provide an improved scalloping device which may be used with other attachments, preferably rufflers, for scalloping the fabric as it is being ruffled; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view showing my improved scalloping device applied to a sewing-machine to which the ruffler has been attached. Fig. 2 is a side elevation. Fig. 3 is a vertical section, and Fig. 4 is a side elevation, of a modification.

A designates the presser-bar of a sewing-machine, and B the needle-bar. To the presser-bar and needle-bar I have shown attached a ruffler C, which may be of any approved construction, the ruffler shown for the purpose of illustration being substantially the same as that patented to John M. Griest December 25, 1888, No. 394,969.

My improved scalloper is attached to the bed-plate D of the sewing-machine, so that the reciprocating bar E thereof will move in front of the ruffler. The frame *a* of the scalloper has a portion which lies upon the bed-plate of the sewing-machine and is provided with an aperture *a'*, through which a set-screw passes for attaching said plate to the bed-plate. The frame *a* has an upwardly-projecting portion, which forms the bearing for a

disk F. This upwardly-projecting portion *b* has a rectangular aperture *c*, in which fits the rectangular portion of a retaining-bolt *d*, said retaining-bolt having a stepped head and a threaded end, with which engages the thumb-nuts *d'*, said nut bearing against the arm G, between which and the plate *b* is interposed a washer *e*. The disk F is provided on one side with projections *f* or with recesses *f'*, either in the form of ratchets *f'*, as shown in Fig. 2, or outwardly-projecting pins *f*, as shown in Fig. 4, and with the same engages a spring-actuated dog H or H', carried by the arm G, so that when said arm is oscillated the dog will engage with the detents *f* or *f'* to give the disk F a rotary movement. The arm G is bent, as shown, and is provided with a loop *g* or other equivalent means for engaging the set-screw or other portion of the needle-bar B. The opposite side of the disk F from the projections *f* or recesses *f'* is provided with apertures *i*, located at different distances from the center of said disk, and with these apertures a set-screw *i'* is adapted to engage, said set-screw passing through a slot in the bar I, which bar is attached at its lower end to the reciprocating rod E, which is retained in a horizontal position by lugs or ears *b'*. The rod E has the end thereof which is located forward of the needle-bar and presser-foot apertured, as shown at *e'*, through which the fabric to be scalloped is passed and from there fed to the ruffler or other attachment which may be applied to the machine.

In Figs. 1, 2, and 3 of the drawings I have shown the dog H as consisting of a single plate having a bent end for engagement with the ratchet-teeth *f'*. The dog or pawl H, as shown in the figures above referred to, is preferably made up of a single piece of flat spring metal, the upper end of which is bent slightly outward or provided with a projecting portion, which engages with the ratchet-teeth, and the lower end of this spring-plate is bent or looped upon itself to engage with an arm G and may be rigidly secured thereto by solder or otherwise. The normal tendency of the spring is to push the outer end to one side, so that it will engage with the ratchet-teeth, and in Fig. 4 the identical results are secured by the employment of a spring-actuated dog or pawl

H', which is pivoted to the arm G, and adjacent to said pivot is a spring for throwing the same in engagement with the projecting pins *f*. The upper or free end of this dog has a curved end, which rides upon the outwardly-projecting pins which are used when such construction is employed.

Between the disk F and the vertical portion of the frame is interposed a cushion or friction-disk *m*, which may be of felt, rubber, or other suitable material, and when the parts are placed together the tension exerted by the set-screw and cushion should be sufficient to hold the disk against rotary movement caused by the friction of the dog or pawl against the disk when the arm G is moved upwardly by the needle-bar of the machine. On the downward movement of the needle-bar of the machine the dog or pawl carried by the arm G engages with the ratchet-teeth, so as to give an intermittent rotary movement to the disk in the direction of the arrows indicated on Figs. 2 and 4 of the drawings.

In operation the scalloper is attached to the machine, as shown, and the proper adjustment made by setting the screw *i'* in the desired aperture *i* of the disk. This adjustment will determine the throw of the rod E and determine the depth of the scallop. The fabric to be scalloped is passed through the aperture *e'* in the rod and from there passed into the attachment, as the ruffler, and as the machine is operated the disk F will be turned and a reciprocating motion given to the rod E. A guide may be used in connection with this device for piping or welting.

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

1. An attachment for sewing-machines, consisting of a supporting-frame comprising a base-plate, an upwardly-projecting portion which is apertured for the reception of a pivot-bolt, and outwardly-extending portions *b'*, through which passes a reciprocating bar having a slotted end, a disk provided centrally with an aperture countersunk to receive the head of the pivot-bolt, a friction-disk located between the disk and upwardly-projecting portion of the frame, a vertical bar having a slot through which passes a set-screw for holding the same in engagement with the disk, and an actuating-arm upon the bolt which connects the disk to the frame, said arm

being bent and provided with means for engagement with the needle-bar of the sewing-machine, said arm carrying a pawl which engages with the face of the disk, whereby the vertical reciprocating motion of the needle-bar horizontally reciprocates the bar E, said attachment being in combination with a ruffler, the ruffler being carried by the presser-bar, the parts being combined and organized substantially as shown.

2. In a scalloping attachment for sewing-machines, the combination, with a ruffling-blade and means for operating it, of the frame made up of a single piece and provided with an upwardly-projecting portion *b*, apertured for the reception of a pivot-bolt, said frame also having outwardly-projecting portions *b'*, a disk F, having a recessed aperture with which the head of the bolt engages, and a friction-disk *m*, a slotted bar I, connected to the disk by a set-screw *i'*, the lower end of said bar being attached to a reciprocating bar E, having a slotted end, and an actuating-arm pivoted upon the bolt *d*, said arm being bent and adapted to engage with the needle-bar, the parts being organized substantially as shown, and for the purpose set forth.

3. In a ruffling attachment for sewing-machines, the combination of a base-plate having an upwardly-projecting portion with a rectangular aperture, a bolt adapted to engage with said aperture and retain upon the upwardly-projecting portion a rotary disk F, a bent arm mounted upon the pivot-bolt, said arm carrying a spring-pawl which is adapted to engage with the disk F, washers *m* and *e*, interposed between the upwardly-projecting portion of the frame and the disk F and actuating-arm, means for adjusting the tension of the parts, and a slotted bar I and set-screw for holding the same in engagement with the plane face of the disk F, said slotted bar being connected to the reciprocating bar E, said bar having at one end a slot *e'*, through which the fabric to be ruffled passes, the parts being organized substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. KEMP.

Witnesses:

A. G. FORBES,

THEO. G. BESSON.