

A. WEBBER.

Thread-Cutting Mechanisms for Sewing-Machines.

No. 143,046.

Patented September 23, 1873.

Fig. 1

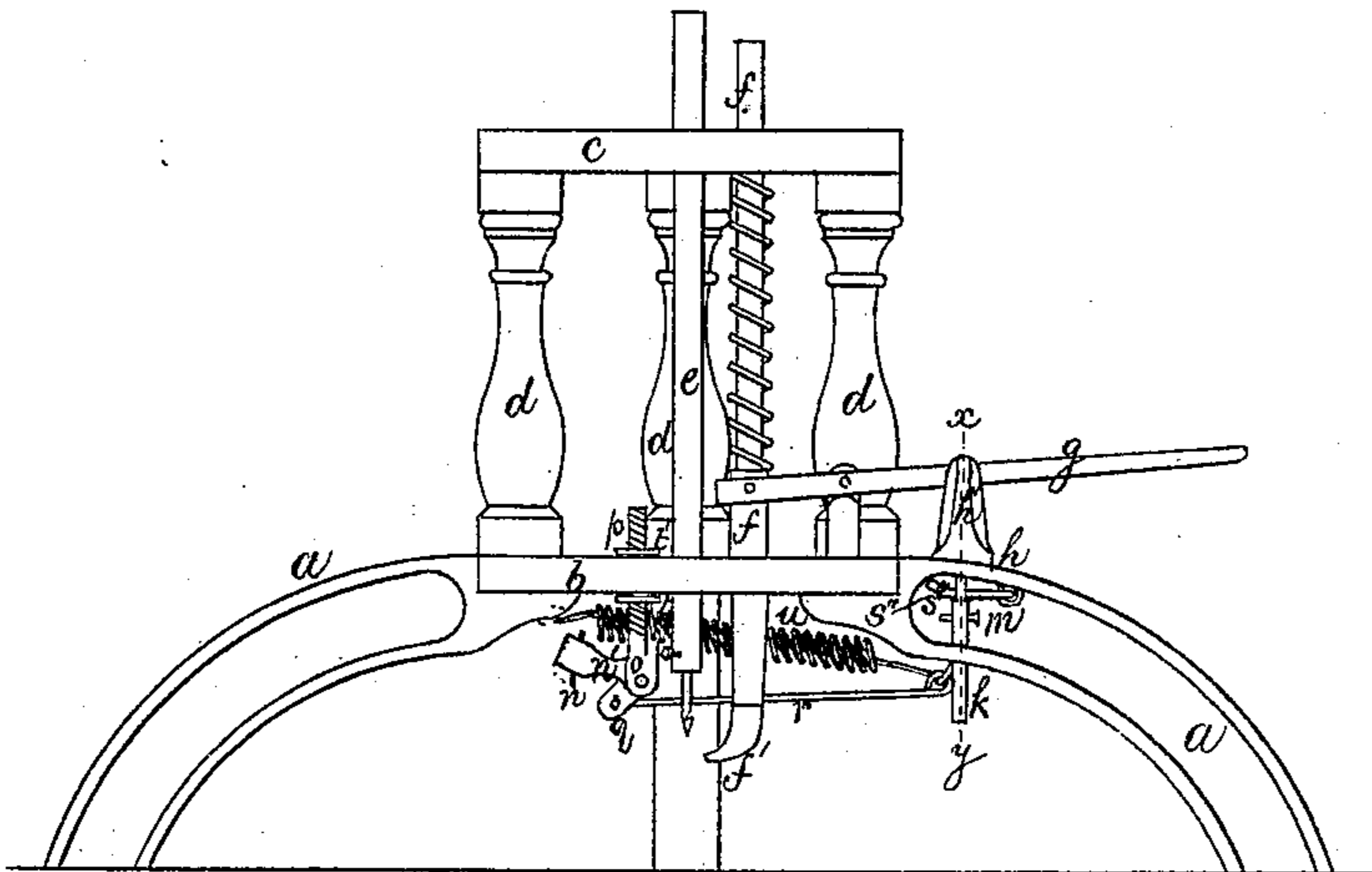


Fig. 2

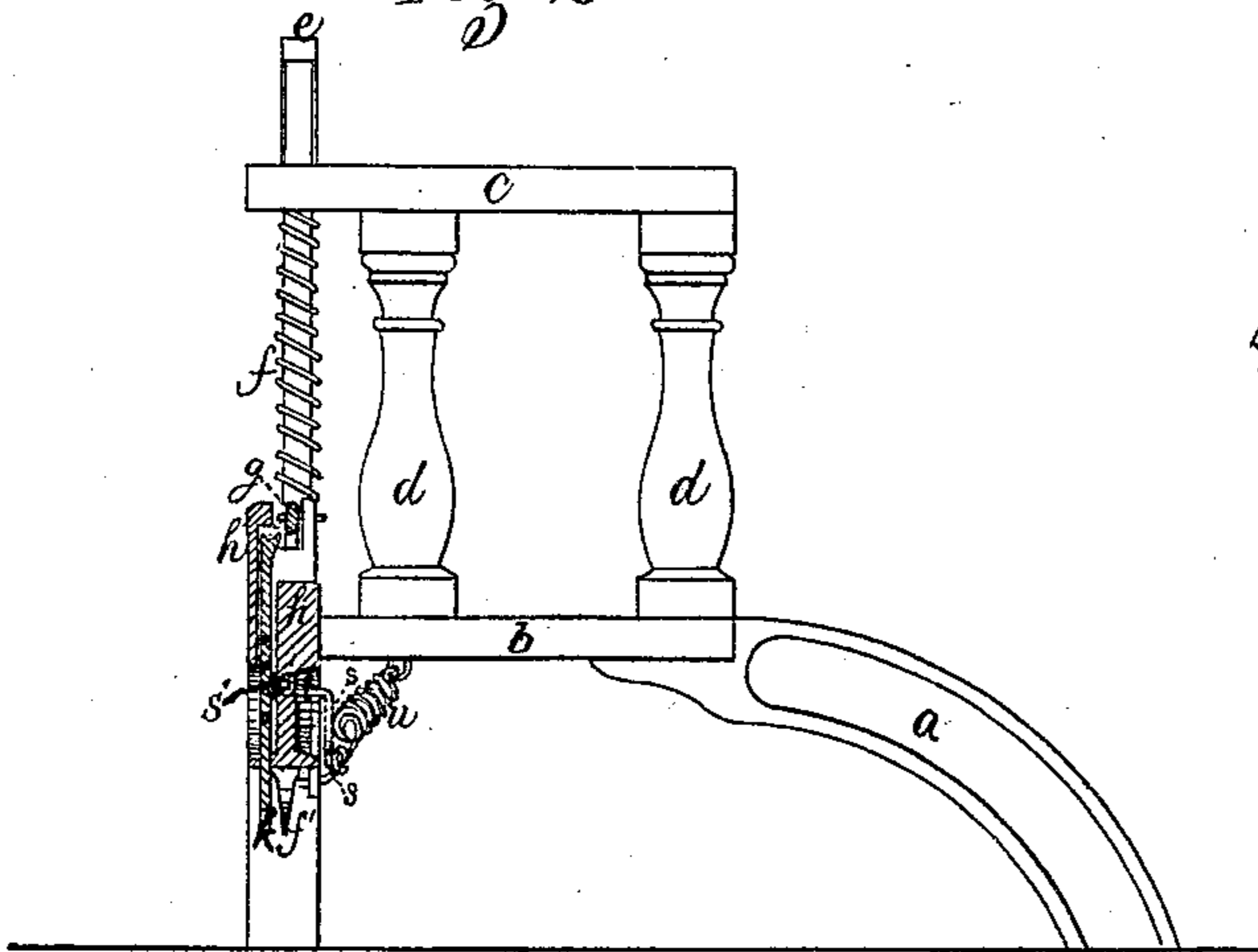
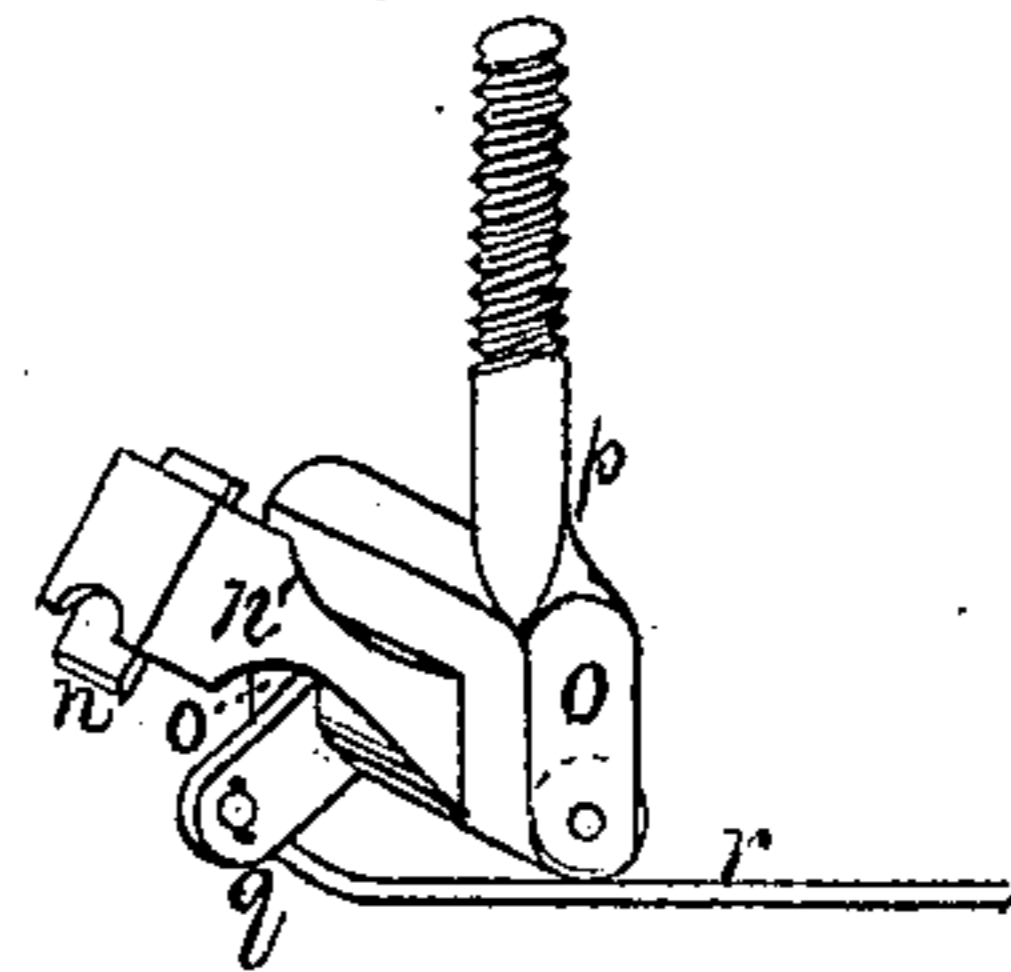


Fig. 3



Witnesses
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ALEXANDER WEBBER, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN THREAD-CUTTING MECHANISMS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **143,046**, dated September 23, 1873; application filed May 15, 1873.

To all whom it may concern:

Be it known that I, ALEXANDER WEBBER, of Lynn, in the county of Essex and State of Massachusetts, have invented certain Improvements in Thread-Cutting Mechanism for Machines for Sewing Boots and Shoes, &c., of which the following is a specification:

Figure 1 of the drawings is a front view. Fig. 2 is a transverse vertical section taken in the line *xy*; and Fig. 3 is a perspective view of a part in detail of my invention.

The present invention relates to a certain new and useful improvement in machines for sewing boots and shoes, &c.; and has for its principal object the saving of time and labor heretofore expended in cutting by hand the thread connected with the work of the machine. My improvement consists, mainly, in a knife so arranged and operated, as will be hereinafter more fully described, in connection with a boot and shoe or other similar sewing-machine, as to cut the thread connecting the needle and work, by one and the same movement of the lever operating the presser-foot to release the boot or shoe.

In the drawings, *a* represents the frame of a "McKay," or other sewing-machine, of which *b* is the bottom, and *c* the top plate, supported by standards *d*. *e* is a needle-bar; *f*, the presser-foot bar; *f'*, the presser-foot; and *g*, a hand-lever. *h* is a standard, having an outer vertical upper bearing, *h'*, to prevent the slipping to one side of the hand-lever *g*, and formed with a vertical socket to receive and allow the up and down movement of a vertical rod, *k*, which extends through the top and bottom flanges of the frame *a*. The rod *k* is arranged with apertures to receive a pin, *m*, or may be formed with screw-threads to receive, between the flanges, a check-nut, to adjust the rod so as to vary and regulate the length of the stroke of the knife *n*, which is arranged to be readily adjusted to the lower portion of a swinging bar or knife-holder, *n'*, turning on a pivot held by bifurcated arms *o* of a vertical standard or bar, *p*, connected with the bottom plate *b*. Radiating from the top of the knife-holder *n'* is a downward-extending arm, *q*, to which is attached one end

of a connecting-rod, *r*, the other end of which connects with the bottom of a vertical rod or arm, *s*, formed or provided at the top with a transverse rod or arm, *s'*, extending through the frame *a*, and connecting with a horizontal longitudinal arm or rod, *s''*, that connects with the rod *k*. The connecting-rod *k* and, consequently, the knife *n*, is carried back into position by means of a spiral or other suitable spring, *u*, connecting with the bottom of the plate *b* and the rod *r*, or arranged between the top and bottom flanges of the frame *a*, or otherwise, so as to carry up the rod *k* and return the knife to its original position. The upper portion of the standard *p* is formed with screw-threads, and provided above and below the plate with nuts *t t'*, for the purpose of adjusting the knife in proper position.

In operating a boot and shoe sewing-machine as ordinarily arranged, it is necessary, after the boot or shoe, &c., is sewn, to cut the thread by hand and press down the hand-lever, which raises the presser-foot and releases the boot or shoe.

By my improvement the thread is cut by the same motion of the hand-lever that raises the presser-foot and releases the boot or shoe, the lever *g* being drawn slightly toward the operator when desiring to cut the thread, and working free of the rod *k* at other times.

By the above description, reference being had to the drawings, it will readily be seen that when the lever *g* is brought to bear on the top of the rod *k*, the latter is carried down the required distance, determined by the adjustment of the pin *m*, or a suitably-arranged check-nut, and, by means of the rods or arms *s'' s' s* and connecting-rod *r*, actuates the swinging knife-holder *n'* so as to bring the knife *n* against the thread and sever it from the work; the knife *n* being carried back to its former position by the release of the pressure of the lever *g*, and by the action of the spiral or other spring *u*.

Having thus fully described my improvements, what I claim as my invention, and desire to have secured to me by Letters Patent, is—

The swinging knife-holder *n'*, having the

knife *n* and arm *q* journaled in the adjustable standard *p*, and connected by the rod *r* with the bent arm or lever *s s'*, in combination with the vertical rod or plunger *k*, spring *u*, and lever *g*, substantially as described, for the purpose specified.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

ALEXANDER WEBBER.

Witnesses:

CARROLL D. WRIGHT,
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