

T. S. PARKER.
SEWING MACHINE TRIMMER.

No. 270,465.

Patented Jan. 9, 1883.

Fig. 1.

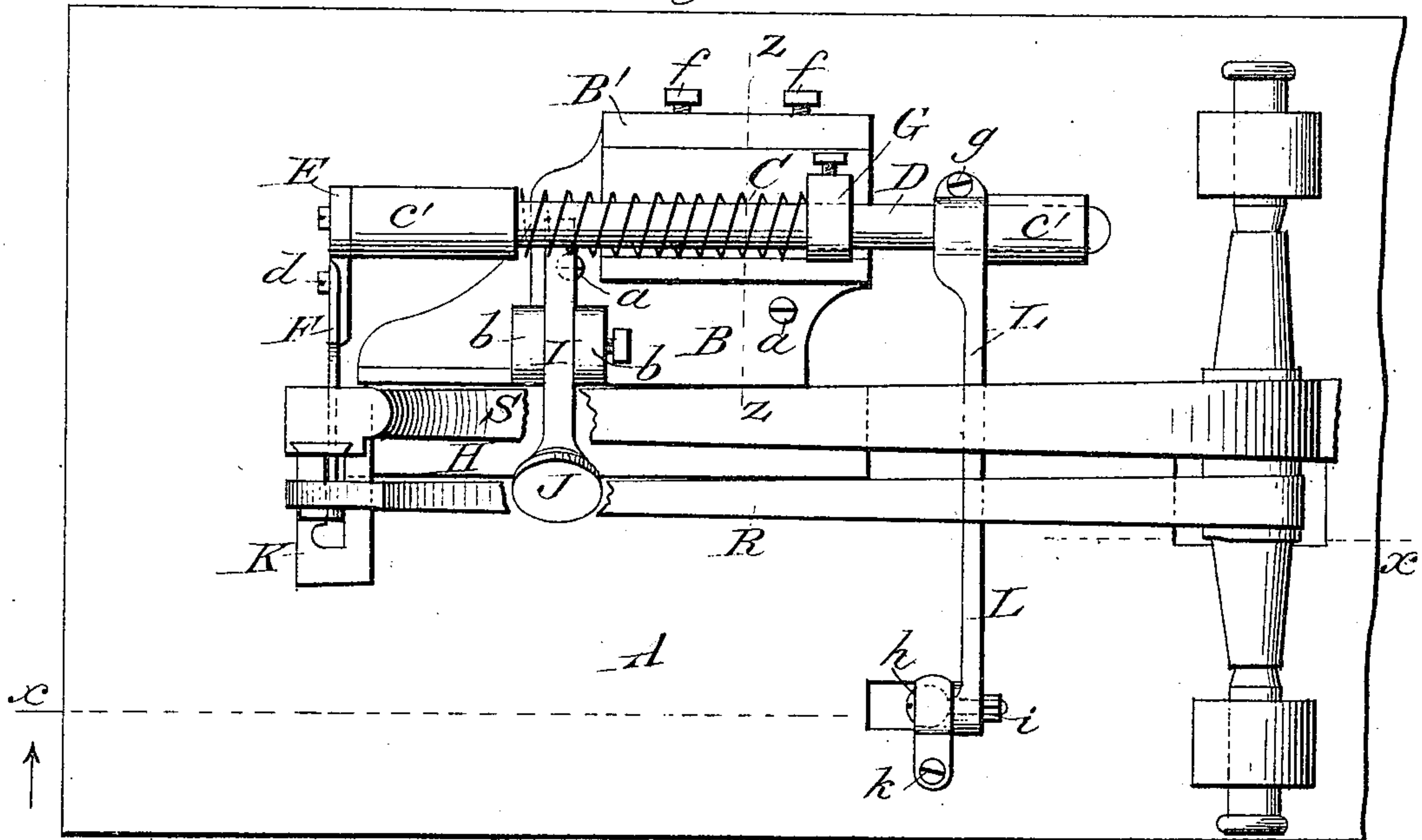
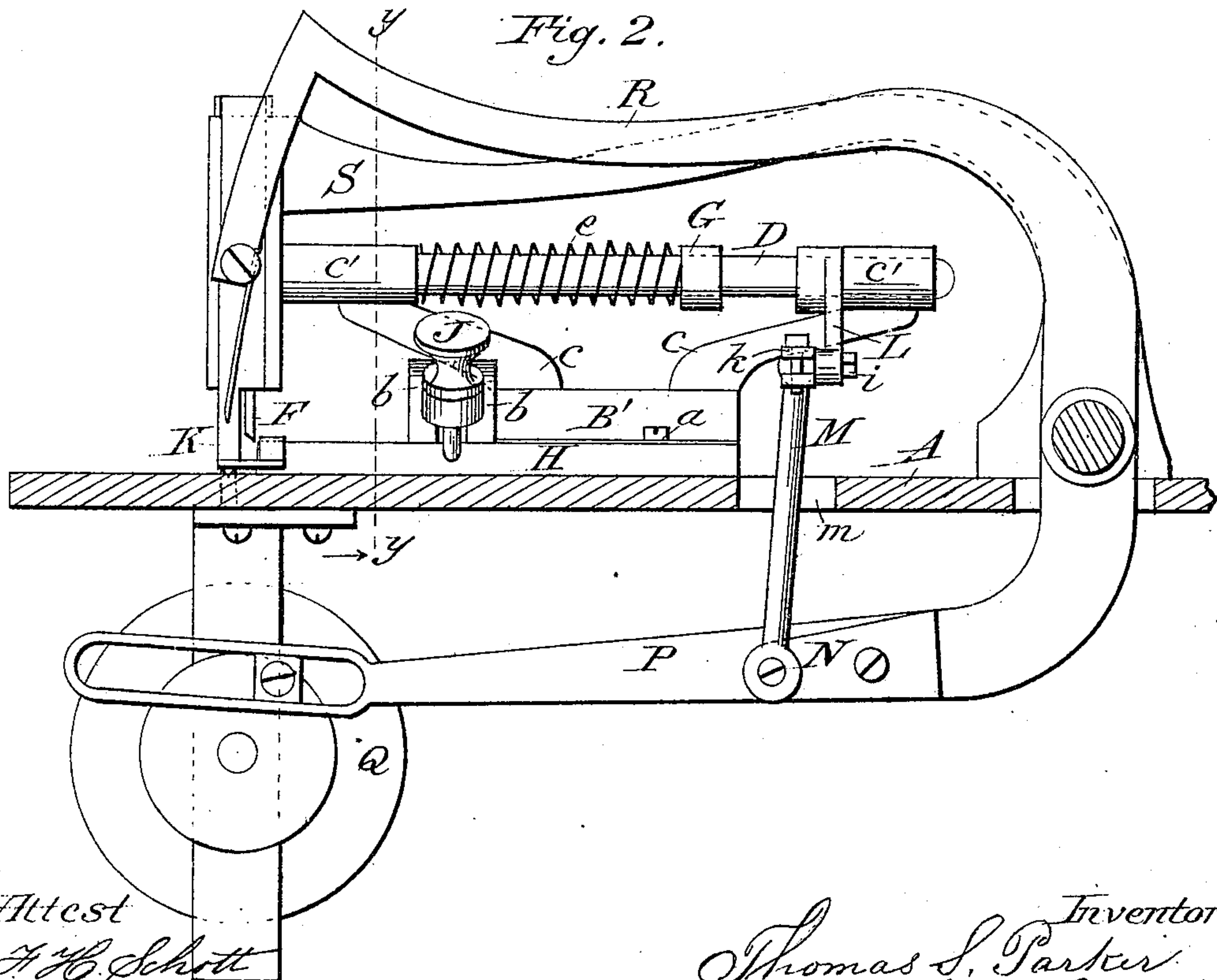


Fig. 2.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

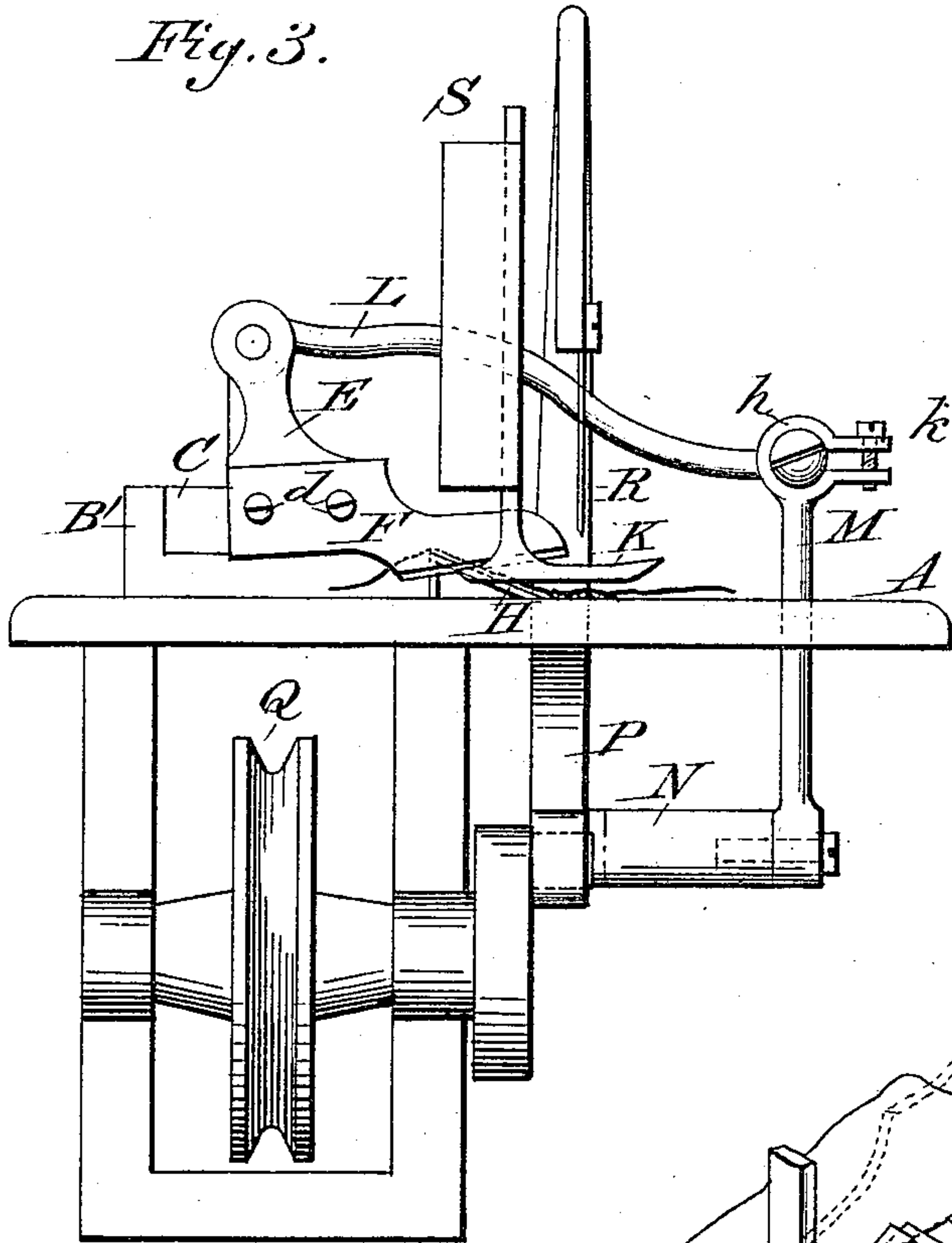


Fig. 6.

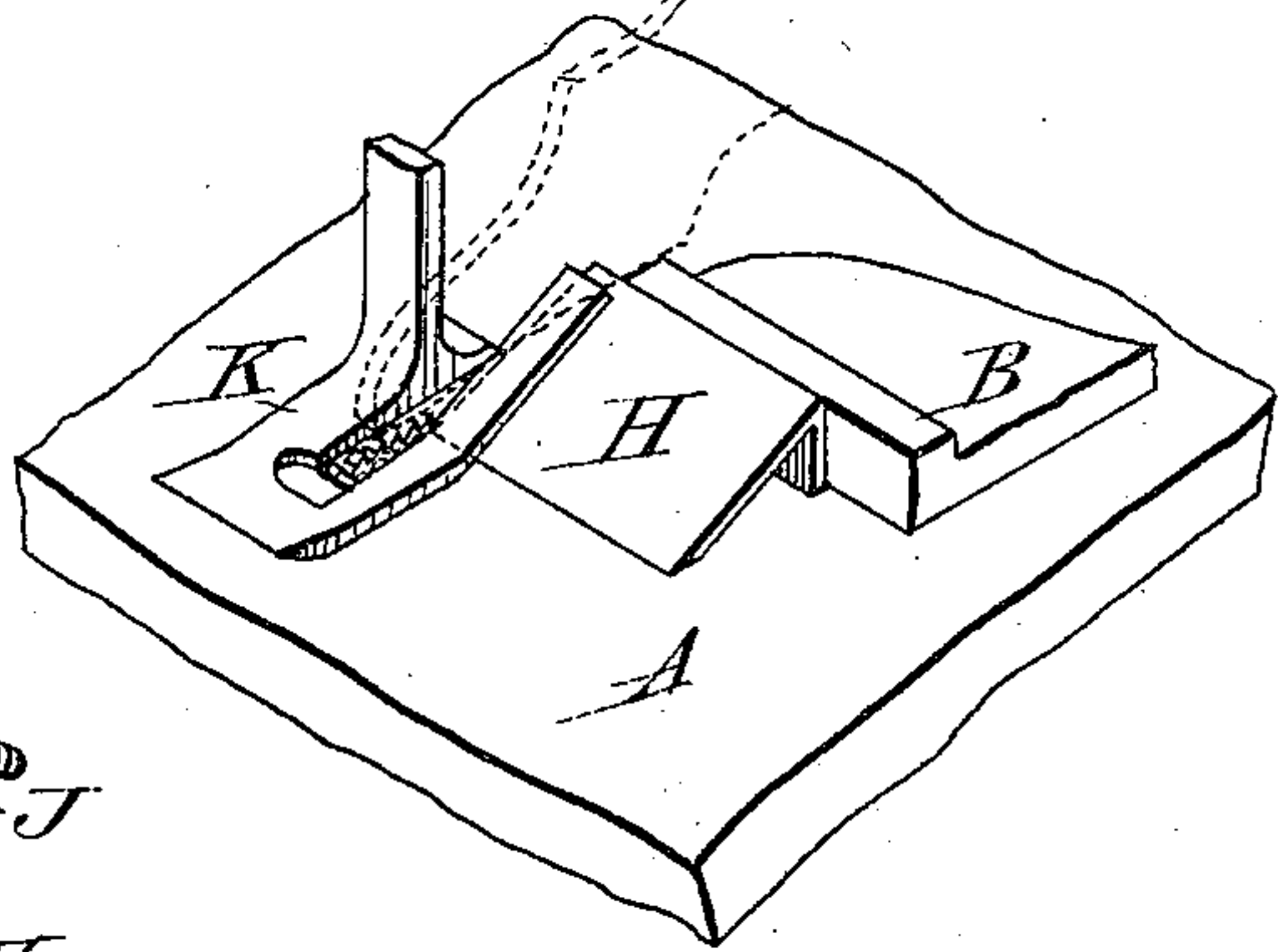


Fig. 4.

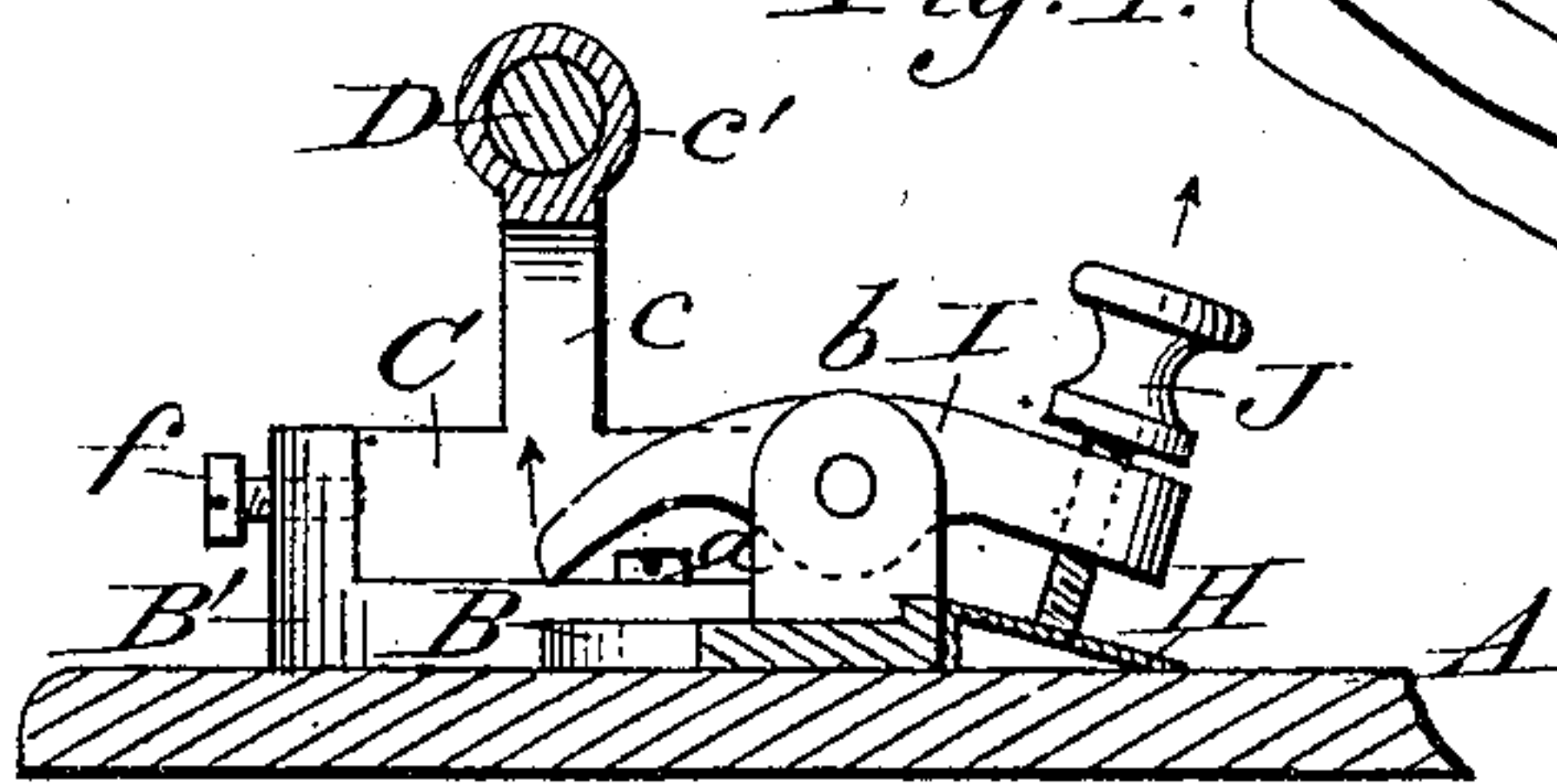
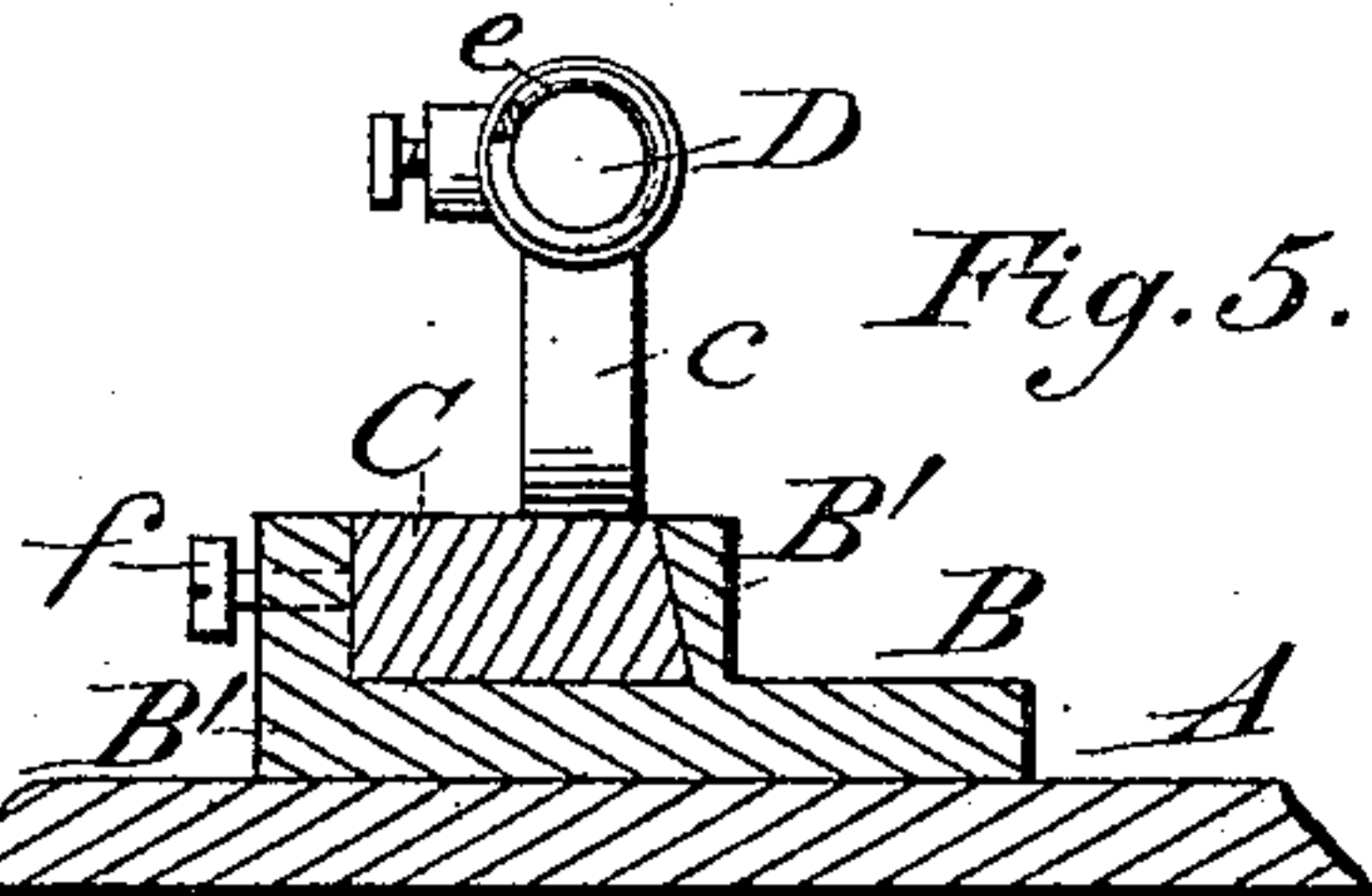


Fig. 5.



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UNITED STATES PATENT OFFICE.

THOMAS S. PARKER, OF SCHENECTADY, NEW YORK.

SEWING-MACHINE TRIMMER.

SPECIFICATION forming part of Letters Patent No. 270,465, dated January 9, 1883.

Application filed July 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. PARKER, a citizen of the United States, residing at Schenectady, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Sewing-Machine Trimmers; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to trimming attachments for sewing-machines, whereby the edges of fabrics are trimmed while being stitched; and the invention consists in certain peculiarities in the construction, combination, and arrangement of parts, as hereinafter more fully described and claimed.

In the annexed drawings, illustrating the invention, Figure 1 is a plan of a sewing-machine furnished with my improved trimming attachments. Fig. 2 is a vertical longitudinal section on the line *xx* of Fig. 1. Fig. 3 is an end elevation. Fig. 4 is a transverse sectional elevation taken on the line *yy* of Fig. 2. Fig. 5 is a section on the line *zz* of Fig. 1. Fig. 6 is a perspective of a portion of the bed-plate with bracket, knives, and presser-foot.

Like letters indicate like parts in the several views.

A represents the work-bed of the machine, to which is attached by suitable means a plate, B, having a grooved bracket or projection, B', on its rear side. This plate is preferably secured to the bed A by means of screws *a a*, as shown. In the grooved bracket or upwardly and rearwardly projecting portion, B', of the plate B is arranged an adjustable head or block, C, having curved arms *c c*, extending outward and upward, and provided at their ends with sleeves or tubular bearings *c' c'*, for the reception of the rock-shaft D. This rock-shaft carries at its forward end a shoe, E, which is attached by means of a pin or a left-hand screw, and is provided at its lower end with a plane surface at right angles to the rock-shaft, for the purpose of supporting the upper or movable knife, F, which is detachably

secured to the shoe by means of screws *d*, as shown in Figs. 1 and 3. On the rock-shaft D is an adjustable collar, G, between which and the forward sleeve or bearing, *c'*, is arranged a spiral spring, *e*, for the purpose of holding the upper or movable knife, F, against the lower or stationary knife, H, while the former is in operation. The stationary knife H is capable of adjustment to any desired position with relation to the movable or vibratory knife F, and consists preferably of a plate having the form of an inclined plane, being turned or bent over and down at the back to correspond with the vertical front edge of the plate B, against which it rests, the front side of the knife-plate being beveled to a fine edge, as shown in Figs. 4 and 6, thus allowing the goods or fabrics operated upon to pass under the presser-foot and over the lower or stationary knife without being obstructed.

On the front edge of the plate B are lugs *b b*, between which is journaled or pivoted, by means of a body-screw, an arm, I, carrying at its forward end a thumb-screw, J, that may be made to bear against the lower knife, H, so as to hold it firmly in contact with the bed A and plate B. It will be seen that by manipulating the thumb-screw J the knife H can be readily detached or replaced when desired. The form and position of the knife H are such that the action of the vibrating knife F in contact therewith will produce a regular shear-cut, the cutting edge or end of the lower knife not being exactly parallel with the upper knife, but being ground obliquely back or away from the upper knife on its lower and rear edge. The lower knife is so adjusted that when the upper or vibrating knife is at its highest point or travel it will be in contact with the upper rear edge of the lower knife, the shoe E resting against the adjacent sleeve or bearing *c'* and the position of the two knives being crossed. When the upper knife descends in contact with the lower knife, H, it will cause the shoe E to draw away from the sleeve *c'*, thereby producing a slight motion endwise to the rock-shaft D, the spiral spring *e* being strong enough to hold the two knives together for the purpose of cutting or trimming the goods and at the same time allow the requisite end motion to the rock-shaft. The upper or vibrating knife

can be readily and instantly adjusted to or from the line of stitch, the slot in the presser-foot K, through which the knife F passes, being wide enough to allow of any adjustment
 5 necessary by simply loosening the screws *ff* in the bracket B' and moving the head C into the required position, the set-screw *g*, by which the adjustable arm L is held, being also loosened to permit the required adjustment. That
 10 end of the arm L, which is attached to the rock-shaft D, is provided with lugs for the passage of the set-screw *g*, while its opposite end is connected to the link M by means of a screw, *h*, that is held in place by a nut, *i*, on
 15 the back of the arm L, thus forming a joint in which the lost motion can be taken up by means of a screw, *k*, that passes through two lugs at the upper end of the link. This link passes through a slot or opening, *m*, in the
 20 work-bed of the machine, and is connected at its lower end to a driving-block, N, by means of a body-screw, ball-joint, or other suitable device. The driving-block N is attached by suitable means to the driving-lever P or other
 25 convenient moving part of the machine. The lever P is connected at one end with a driving-wheel, Q, and is preferably cast in one piece with the needle-carrying lever R, which is arranged in the usual manner in proximity to
 30 the stationary arm S, that supports the presser-foot. Those parts of the machine which have not been particularly described may be of any suitable construction.

It will be seen that when the driving mechanism is actuated, the fabric operated upon,
 35 while being fed in the usual manner, will be simultaneously stitched and trimmed, the cutting mechanism being caused to act so as to trim the goods close to the line of stitching.
 40 The simplicity in the construction and arrangement of the devices forming the cutting mechanism is such that any necessary adjustment can be readily and instantly secured.

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

1. In a sewing-machine trimmer, the combination, with the bed A, plate B, secured thereto, and having bracket B', and the stationary
 50 knife H, having a cutting-edge at one end, and adapted to be adjustably secured in contact with said bed and plate, of the adjustable head C, supported in the bracket B', and having arms *c c*, provided with bearings *c' c'*, the
 55 rock-shaft D, journaled in said bearings, and having adjustable collar G and spring *e*, the vibratory knife F, supported by said rock-shaft, and means for actuating the same, substantially as described.

60 2. In a sewing-machine trimmer, the combination, with the bed A and plate B, having a pivoted arm, I, provided with thumb-screw J, of the stationary and adjustable knife H,

composed of a plate bent into the form of an inclined plane and having a cutting-edge at
 65 one end, substantially as described.

3. In a sewing-machine trimmer, the combination, with the bed A, of a plate, B, having a bracket, B', for supporting an adjustable
 70 head adapted to carry a rock-shaft and its attached vibratory cutter, and provided with a pivoted arm, I, having a thumb-screw, J, for adjustably securing the stationary cutter, substantially as described.

4. In a sewing-machine trimmer, the combination of the adjustable head C, having
 75 curved arms *c c*, provided with sleeves or bearings *c' c'*, rock-shaft D, journaled in said bearings and having spring *e* and collar G, the shoe E, secured to said rock-shaft and carrying
 80 the vibratory knife F, and means for actuating the rock-shaft, substantially as described.

5. In a sewing-machine trimmer, the combination, with the rock-shaft D, provided at
 85 one end with a vibratory knife, F, and at its opposite end with an adjustable lever or arm, L, of a link, M, passing through the machine-bed and connected with the driving-lever P, substantially as described.

6. In a sewing-machine trimmer, the combination, with the bed A, plate B, having bracket
 90 B' and pivoted arm I, provided with thumb-screw J, and the adjustable head C, supporting the rock-shaft D and vibrating knife F, of the slotted presser-foot K and the stationary
 95 knife H, composed of a plate having the form of an inclined plane, substantially as described.

7. In a sewing-machine trimmer, the combination of the rock-shaft D, arm L, adjustably
 100 secured thereto, link M, connected to said arm by means of screws *h k* and nut *i*, the driving-lever P, having block N attached thereto, and means for connecting said block and link, substantially as described.

8. In a sewing-machine trimmer, the combination of the bed A, plate B, secured thereto,
 105 and having bracket B', and pivoted arm I, provided with thumb-screw J, the stationary knife H, adjustably secured by means of said thumb-screw, the adjustable head C, adapted to be
 110 secured in the bracket B' and supporting a rock-shaft, D, having shoe E, spring *e*, adjustable collar G, and adjustable arm L, the vibratory knife F, detachably secured to the shoe, the slotted presser-foot K, link M, block N,
 115 levers P R, and suitable connecting and operating mechanism, whereby the fabric is simultaneously stitched and trimmed, substantially as described.

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

THOMAS S. PARKER.

Witnesses:

BENJ. PARKER,
 GEO. E. DURYEE.