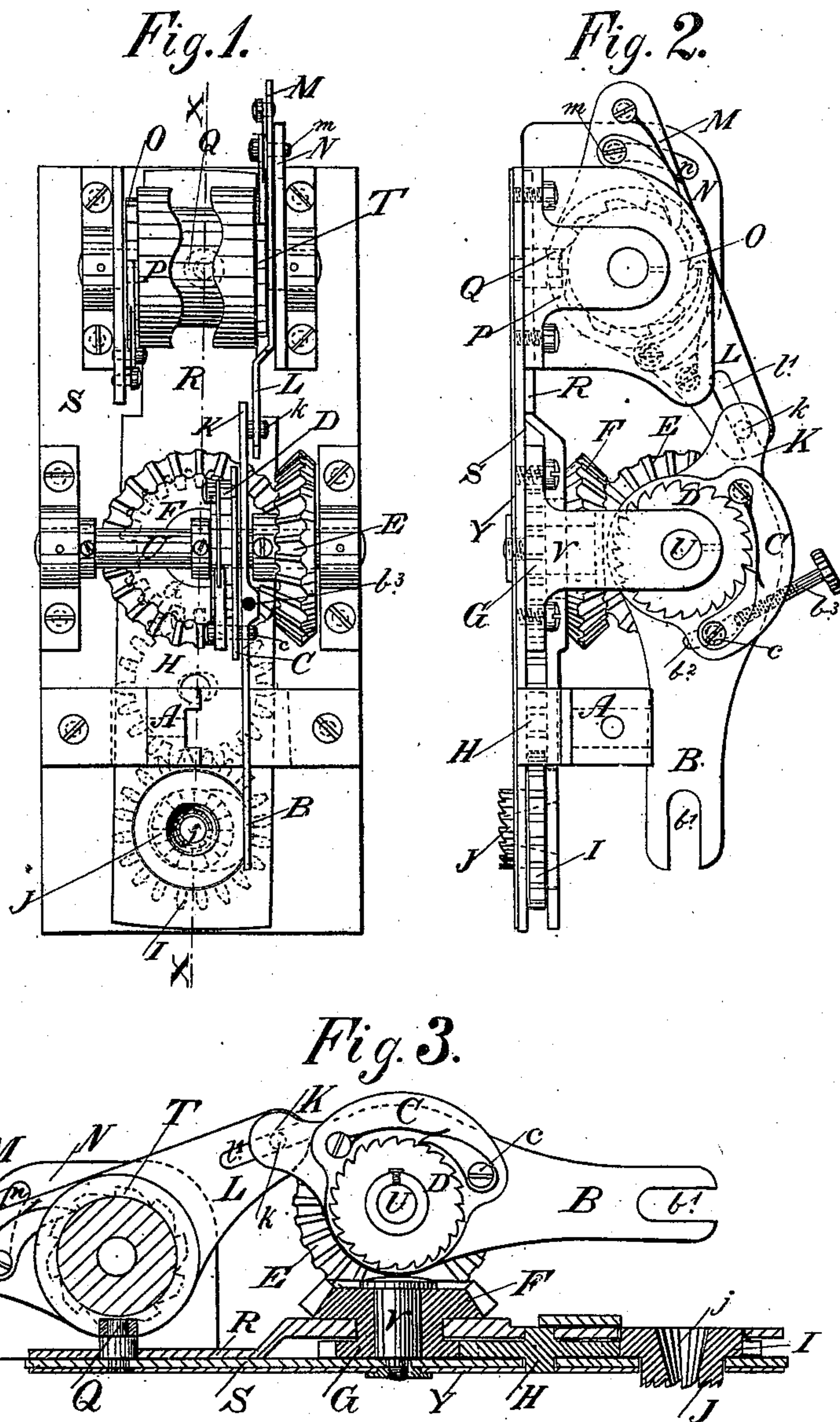


(No Model.)

H. T. REUTERMANN.
EYELET HOLE ATTACHMENT FOR SEWING MACHINES.

No. 574,451.

Patented Jan. 5, 1897.



WITNESSES;

James Frost
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BY

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UNITED STATES PATENT OFFICE.

HEINRICH THEODORE REUTERMANN, OF SAN ANTONIO, TEXAS.

EYELET-HOLE ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 574,451, dated January 5, 1897.

Application filed September 2, 1892. Serial No. 444,903. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH THEODORE REUTERMANN, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Eyelet-Hole Attachment for Sewing-Machines, of which the following is a specification.

My invention relates to improvements in eyelet apparatus which is screwed to the presser-bar and operates by the movements of the needle-bar of a sewing-machine.

The object of my invention is to construct a simple and perfect eyelet apparatus which can be attached to any sewing-machine. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the entire apparatus. Fig. 2 is a side view of the same, and Fig. 3 is a vertical section on the line X X of Fig. 1.

Similar letters refer to similar parts throughout the several views.

The block A is shaped in such a form as to fit the presser-bar of a sewing-machine, and it requires only to be screwed to the same to attach the apparatus to a sewing-machine.

The letter B designates the actuating-lever, which is loosely fitted on shaft U, so that its slot *b'* shall be engaged by the screw, whereby the needle is secured to the needle-bar. To the shaft U is also loosely fitted a plate C, carrying a pin *c*, the end of which is adapted to operate in a radial slot *b²*, formed in the lever B. The movement of the pin *c* in the slot *b²* is limited by a regulating-screw *b³*. To the pin *c* is fitted a pawl which is adapted to engage a ratchet-wheel D, fixed to shaft U. The aforesaid pawl is held in contact with the teeth of the ratchet-wheel by means of a spring, as usual in such mechanism. To the shaft U is also fixed a beveled cog-wheel E, which inserts its teeth into a similar beveled cog-wheel F. This beveled cog-wheel F is united underneath with a plain cog-wheel G, which turns horizontally in base-plate R and around axle V, which axle is screwed to base-plate Y.

The horizontal cog-wheel G transmits its

motion to a similar cog-wheel H, and this again to a similar cog-wheel I, of which the lower hub is provided with teeth J to serve as a feed-dog for turning the cloth around, and through a conical hole *j* in the center of the hub passes the needle up and down to make the stitches.

The lever B carries opposite the slot *b'* a pin K, which is inserted into a slot *l'* of another lever which carries on its opposite arm M a pin *m*, which passes into a slot *n* of the standard N to limit the movements of this lever. As often as the needle-arm of the sewing-machine raises, this lever L M turns the cam P for one curve and thereby moving through the stud Q the base-plates R and Y—in which the cog-wheel I with the conical needle-hole and the feed-teeth is held in position—to the side and at the same time making a partial turn.

The movement to the side of the feed cog-wheel I produces the length of the stitch and the partial turn of same the distance between each stitch on the eyelet.

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

The combination in an eyelet-hole attachment for sewing-machines, of a base-plate, means whereby it is adapted to connect with the sewing-machine presser-bar, a frame pivoted to the base-plate, the connecting-pivot having a united cog-wheel and bevel cog-wheel F loosely fitted thereon, one end of the pivoted frame provided with a stud Q, and its opposite end with a feed-wheel I provided with a cog-wheel, and a cog-wheel H cooperating with the cog-wheels on the feed-wheel and on the pivot, as described, a cam P, connected with the base-plate, so as to engage the stud Q, and the pivotally-connected levers, with means substantially as described, whereby motion is transmitted from the said levers to the cam P and the beveled cog-wheel F, and feed-wheel, as set forth.

H. THEODORE REUTERMANN.

Witnesses:

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