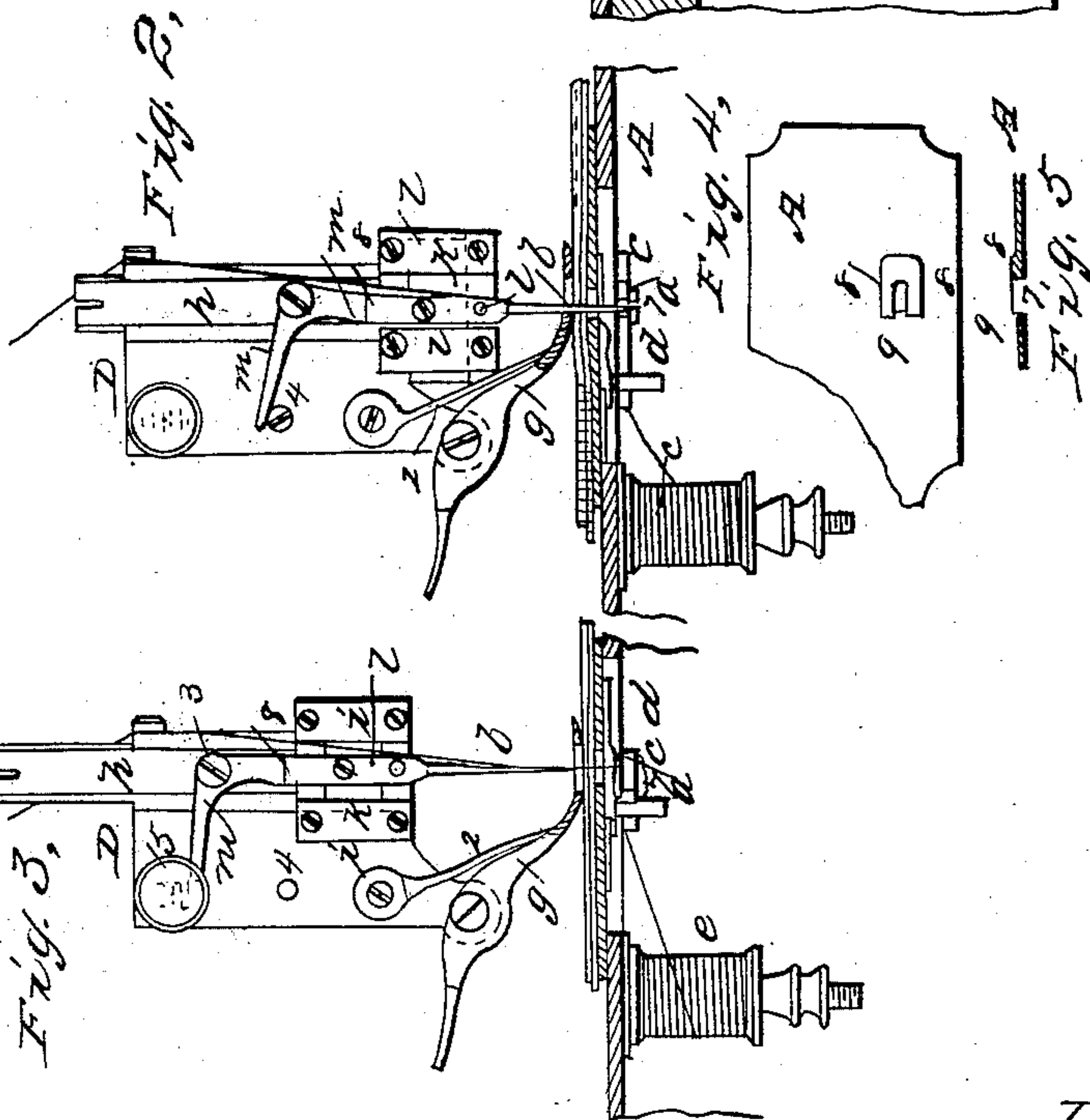
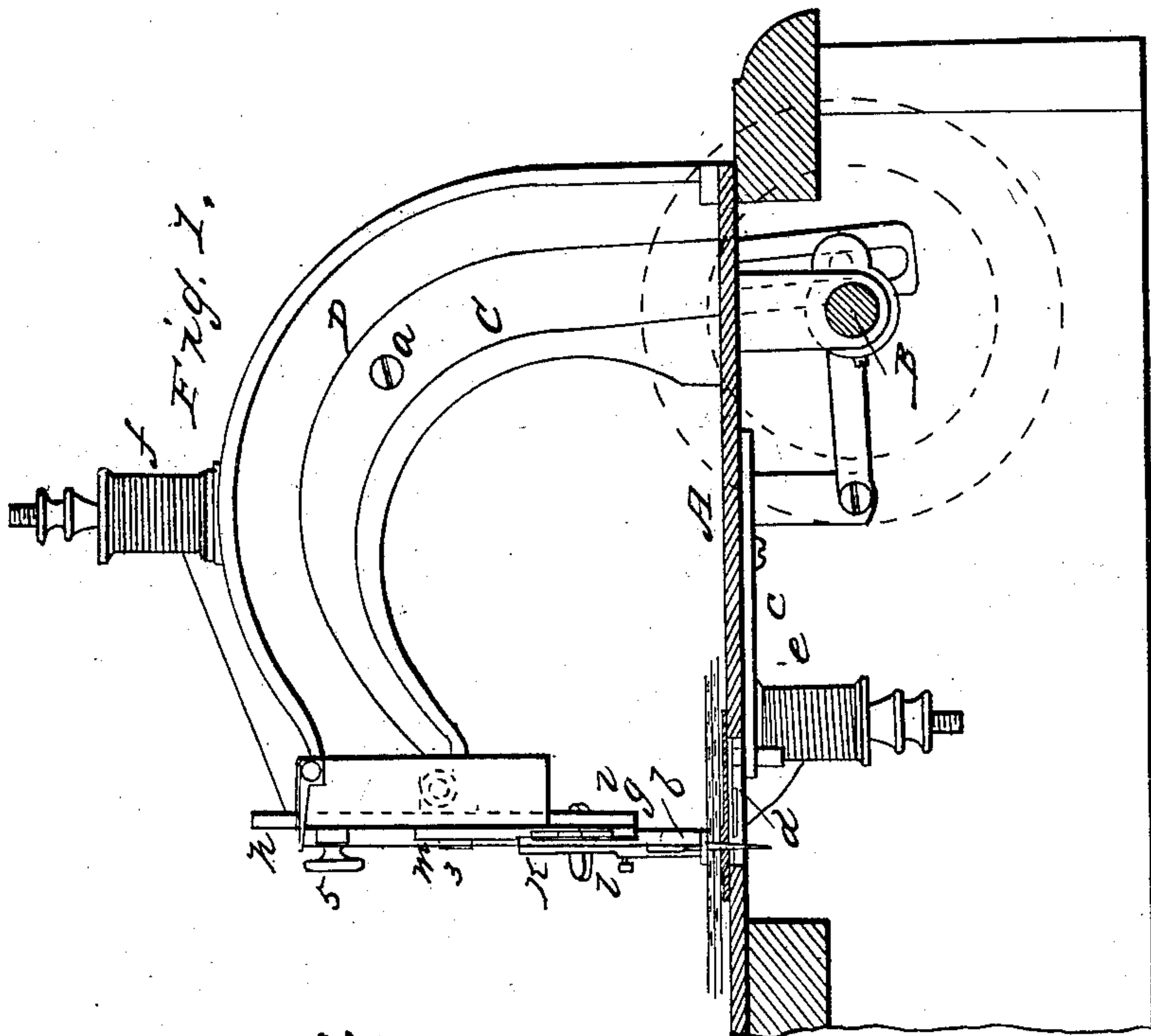


H. H. BISHOP.  
Sewing Machine.

No. 22,226.

Patented Dec. 7, 1858.



Witnesses:  
Augustine Norton  
Edward L. Shotton

Inventor:  
Robert H. Bishop.

# UNITED STATES PATENT OFFICE.

HOBERT H. BISHOP, OF BRISTOL, CONNECTICUT.

## IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **22,226**, dated December 7, 1858.

*To all whom it may concern:*

Be it known that I, HOBERT H. BISHOP, of Bristol, in the county of Hartford and State of Connecticut, have invented, made, and applied to use certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a side view of my sewing-machine, the bed being represented in section. Fig. 2 is a view of the needle-bar and needle when said needle reaches its extreme downward motion; and Fig. 3 is a similar view with the needle out of the cloth. Fig. 4 is a plan, and Fig. 5 is a section, of the bed and its projection that is provided contiguous to the hole through which the needle passes.

Similar marks of reference denote the same parts.

My invention relates, first, to a device for sustaining and actuating the needle so that it enters the cloth vertically, and when near its farthest point of insertion moves laterally to feed the cloth and then draws out straight, and while out returns to its previous position a regulated distance corresponding to the length of stitch, whereby the needle-feed does not operate except at the strong base of the needle. Thus much finer needles can be used than in those needle-feeds that are operative during their descending or retracting motions, or those having a tilting or vibrating movement.

In the drawings, A is the bed.

B is the main shaft, that receives rotation from a hand or band wheel, (shown by dotted lines,) the same being removed by the section, Fig. 1.

D is the fixed head or arm carrying the needle-bar *h* and needle-arm C on the fulcrum *a*.

*b* is the crank-pin giving motion to the needle-arm.

*c* is a slide giving motion to the looper *d* that may form the single chain-stitch or the double, as represented, being supplied with the second thread from the spool *e*. These parts thus far may be of any desired character, and operate in conjunction with the eye-pointed needle *b* (supplied with thread from the spool

*f*) to perform the sewing, and the operation of said parts need not be further specified, as my invention does not relate thereto.

On the needle-bar *h*, I attach a cross-slide, *i*, receiving a plate, *k*, to which is affixed the stock *l*, that carries the eye-pointed needle *b*. This slide-plate *k*, standing at right angles to the needle, will not be moved by either the penetration or withdrawal of the needle; hence requires no controlling power except that which is necessary in giving a lateral movement to the needle while terminating its descending motion to feed the cloth and another movement to return said needle and slide to its previous position while out of the cloth. These motions I accomplish by means of the bent lever *m*, on a fulcrum, 3, in the needle-bar that is jointed at 6 to the slide *k*, and the feeding motion is given by the fixed stop 4, being taken by said lever *m* in its descent, and the return motion is given to a greater or less extent, according to the length of the stitches by the adjustable stop 5, which is so placed that it takes the lever *m* sooner or later in the termination of the upward movement of the needle-bar *h* and lever *m*. This stop 5 may be a screw set in a slot, as shown, or any analogous device. *g* is the pressure-foot, and 2 its spring.

7 is the hole or slot in the bed through which the needle passes. 8 is a rise in or on said bed surrounding the said hole 7 on all sides except that to which the seam formed by the sewing passes, which, being open, as at 9, allows the cloth, loops, or stitches to pass unobstructedly away and rest on the surface of the bed A.

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

The plate *k*, in slides on the needle-bar *h* at right angles to it, and carrying the eye-pointed needle, in combination with the bent lever *m* and stops 4 and 5, or their equivalents, for the purposes and substantially as specified.

In witness whereof I have hereunto set my signature this 16th day of October, 1858.

H. H. BISHOP.

Witnesses:

AUGUSTINE NORTON,  
EDWARD Y. SHELTON.