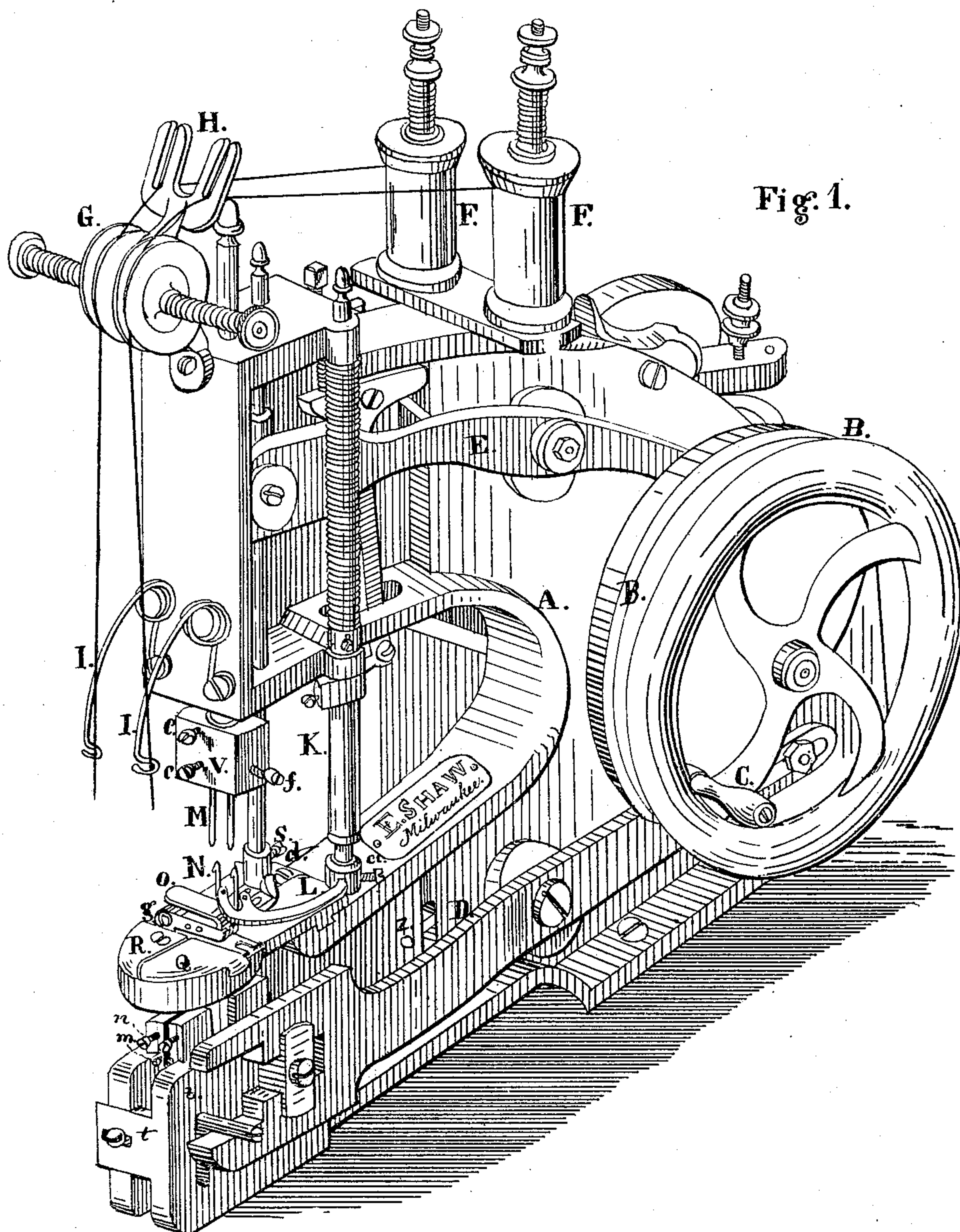


E. SHAW.

## Sewing-Machine.

No. 132,326.

Patented Oct. 15, 1872.



**WITNESSES:**

J. B. Smith  
E. J. Smith.

**INVENTOR:**

Elijah Shaw

E. SHAW.

Sewing-Machine.

No. 132,326.

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Fig. 2.

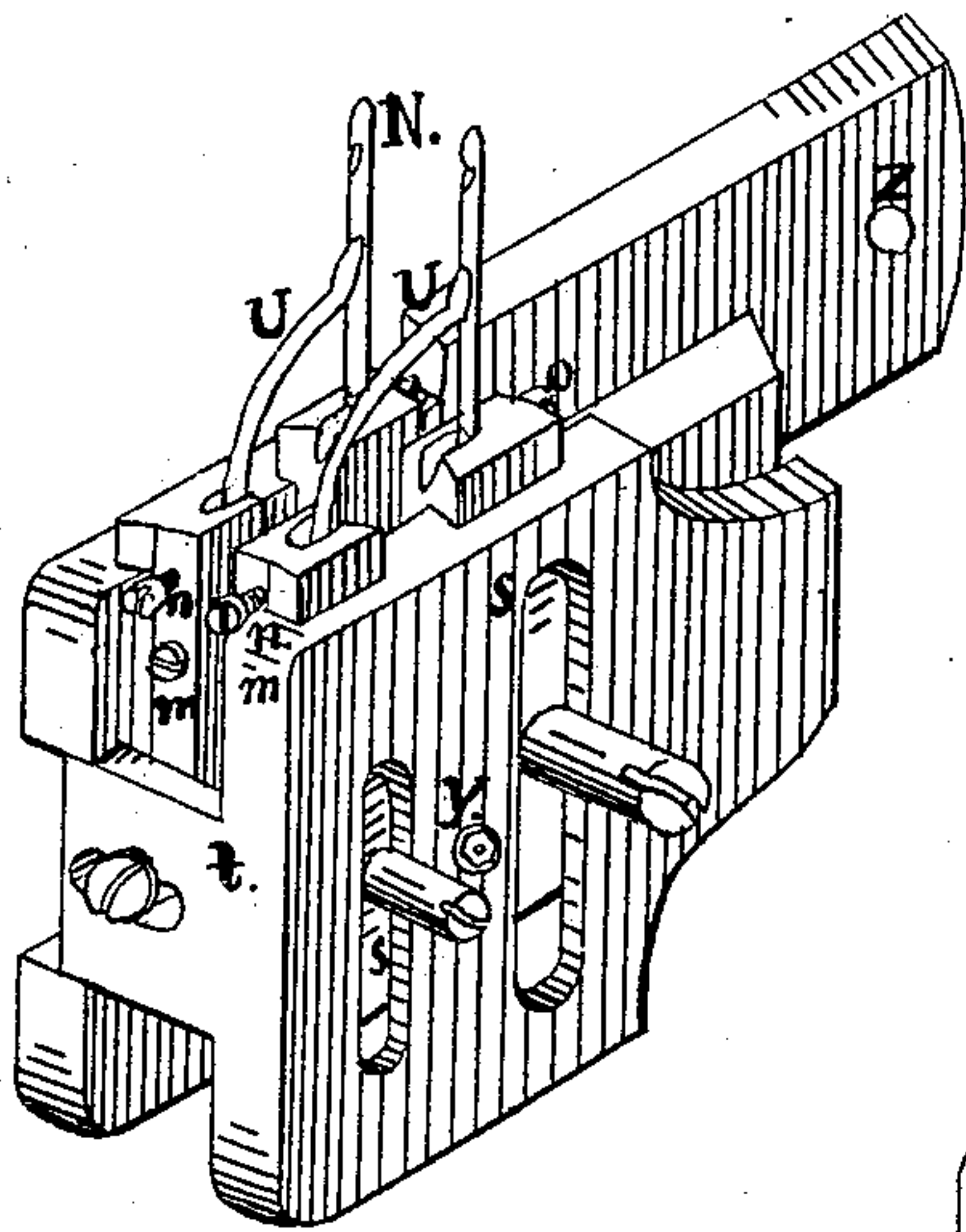


Fig. 3.

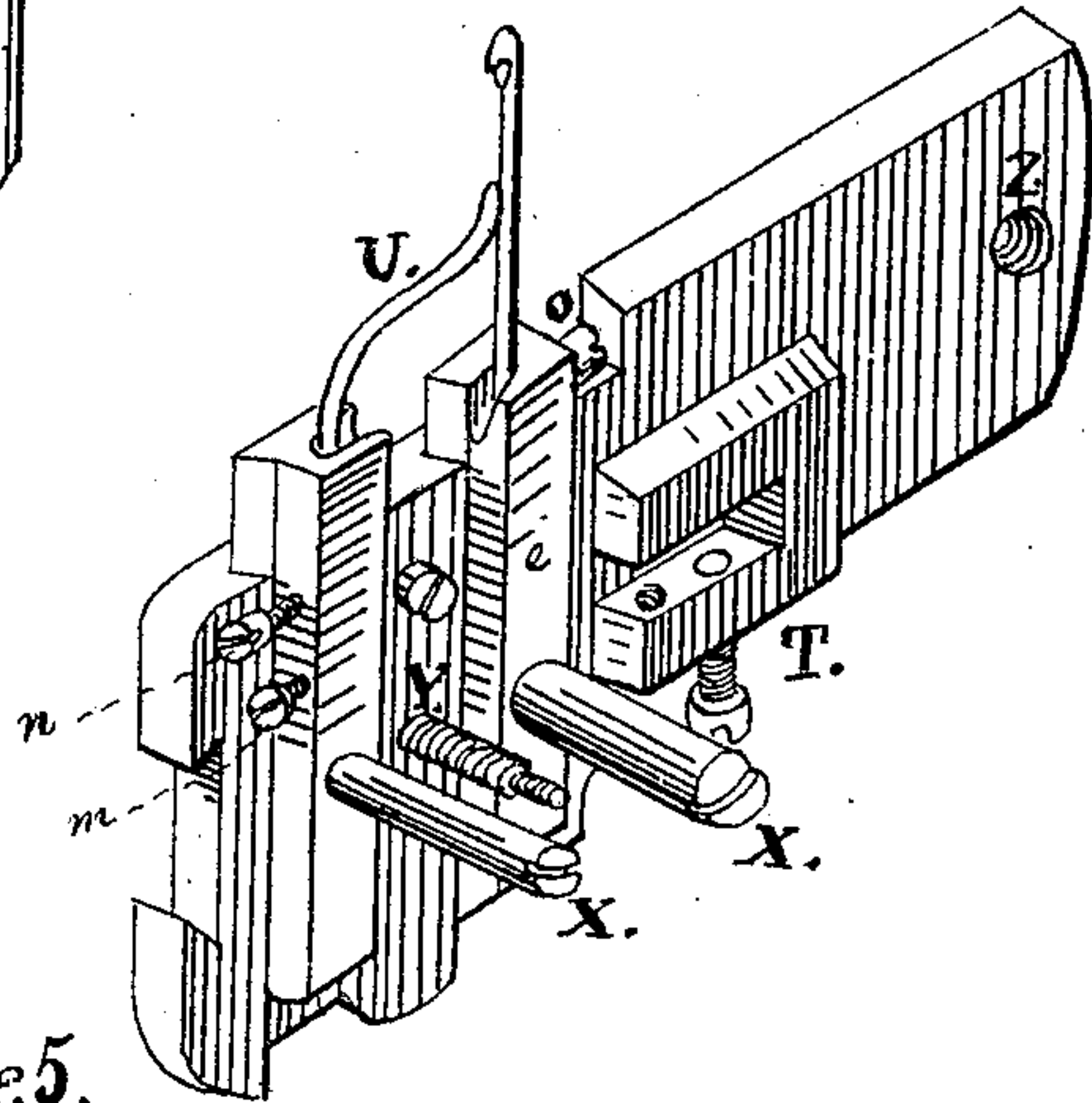


Fig. 4.

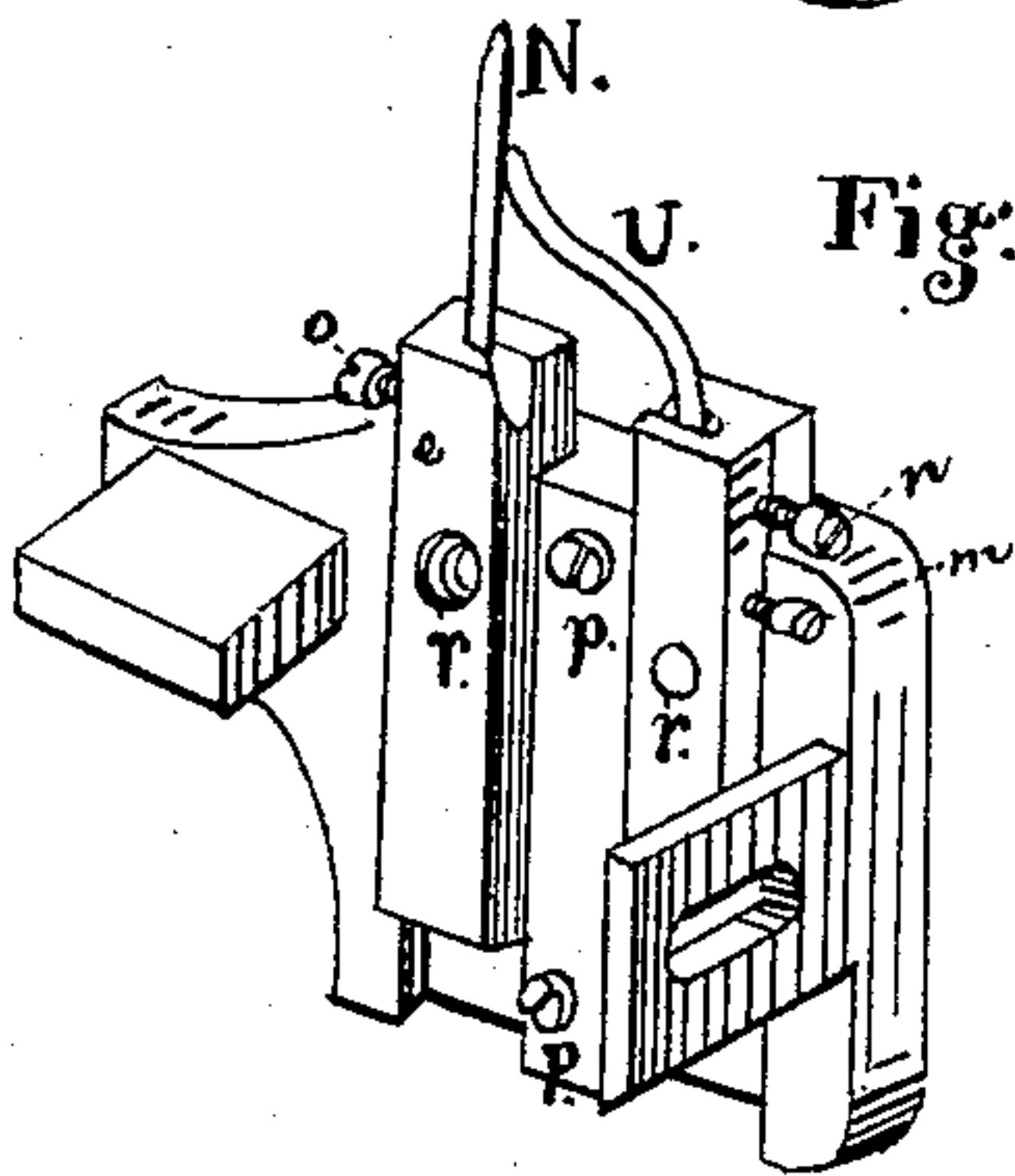


Fig. 5.

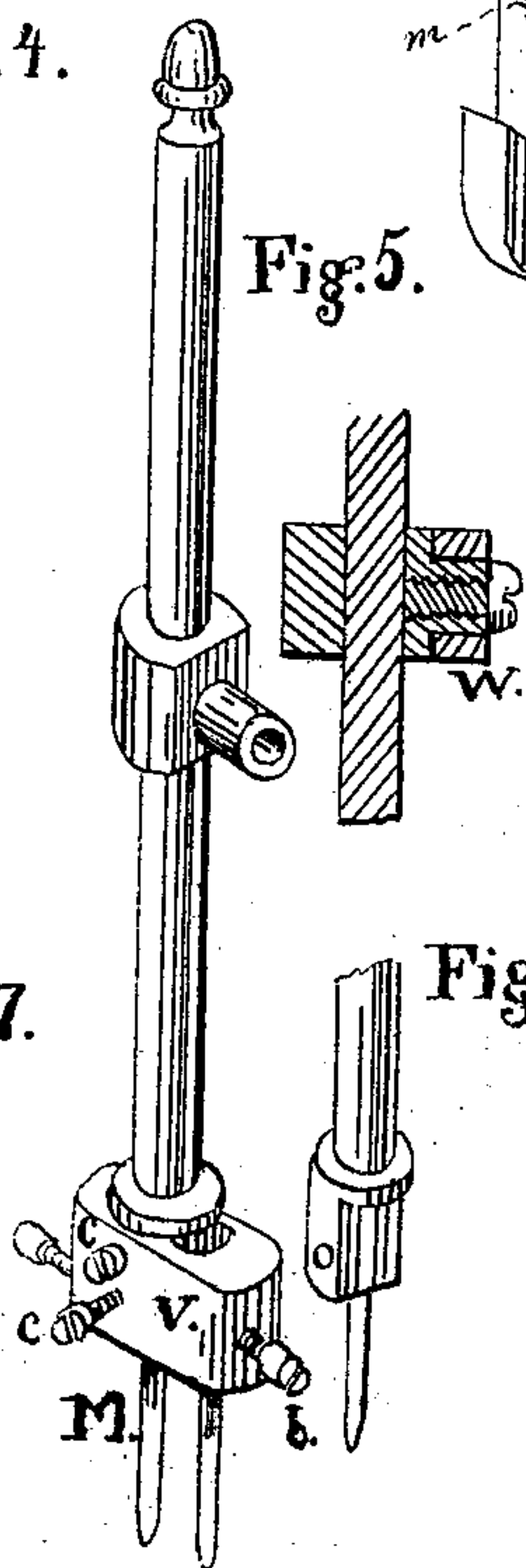


Fig. 8.

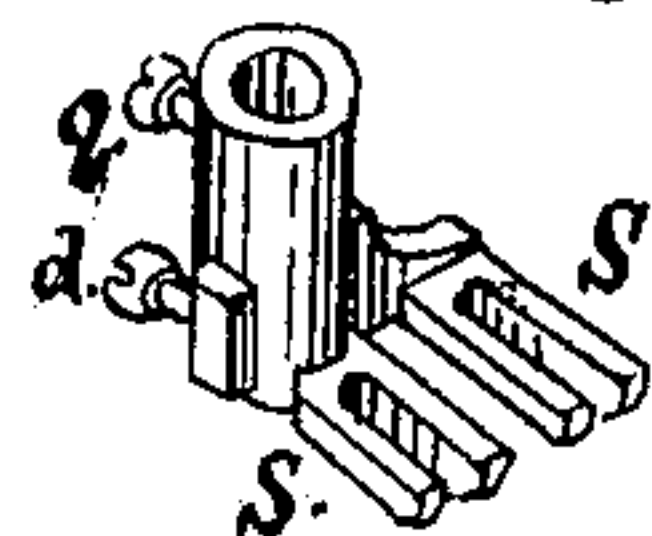


Fig. 10.

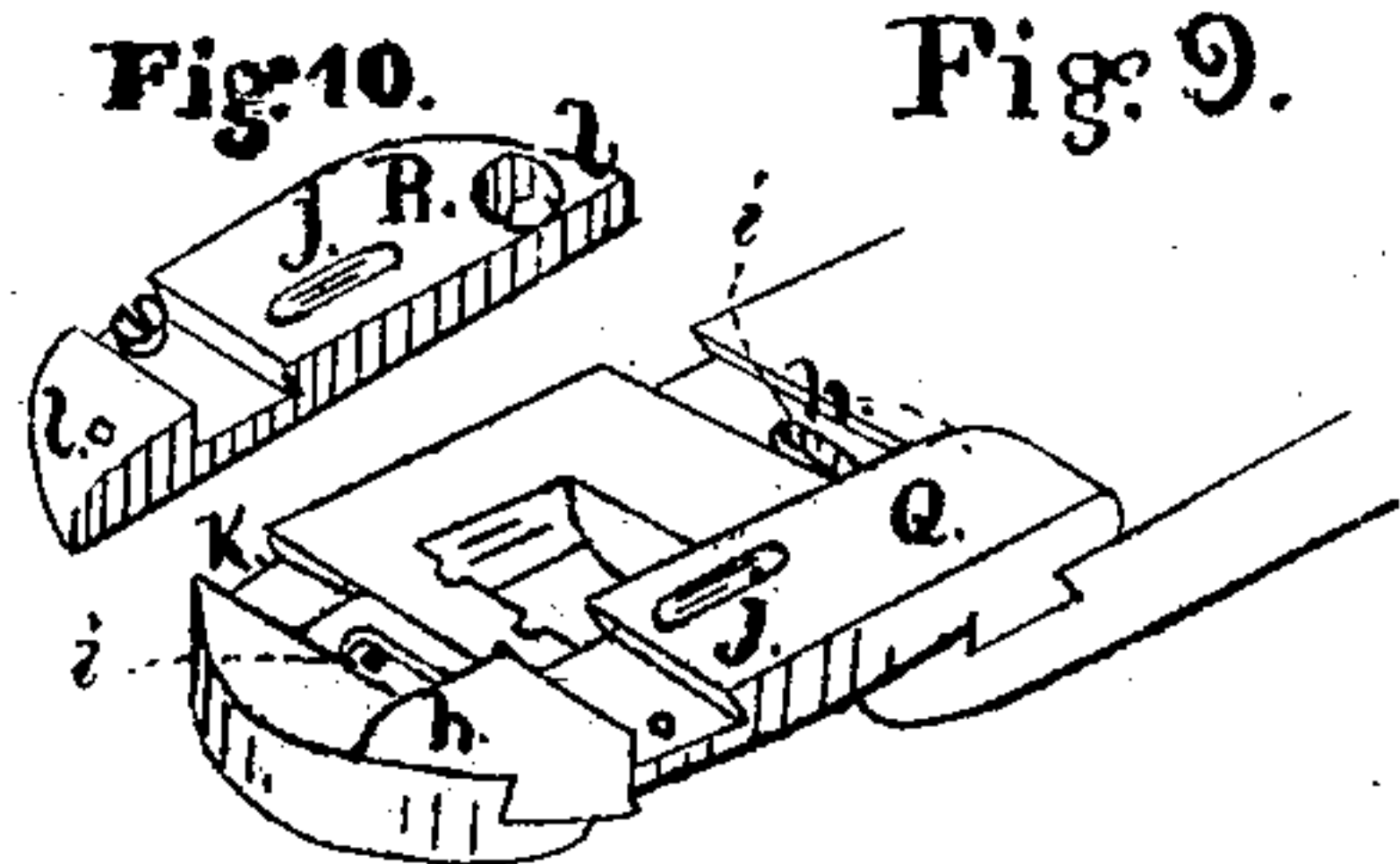


Fig. 9.

Fig. 11.

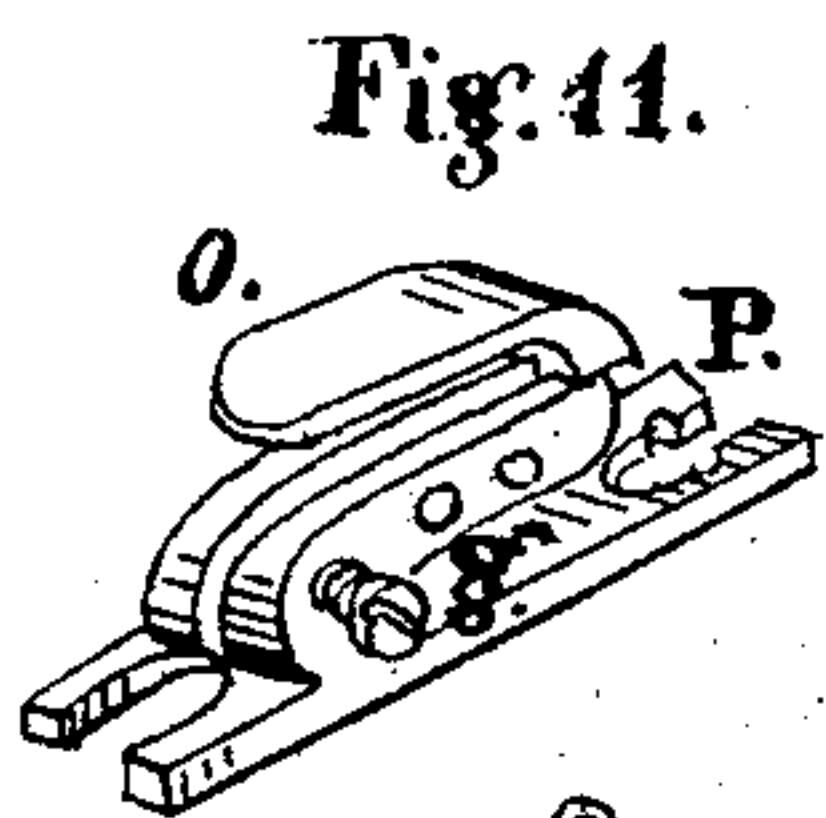
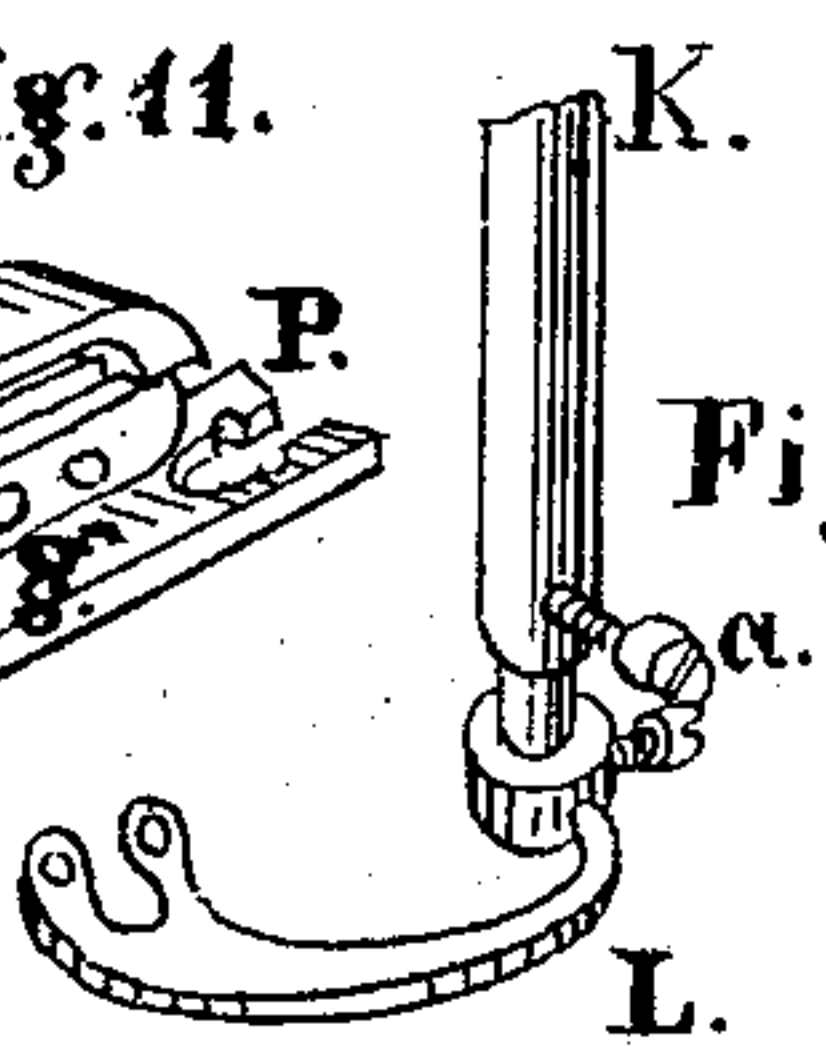


Fig. 7.



WITNESSES:

*E. H. Smith*  
*E. H. Smith*

INVENTOR:

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# UNITED STATES PATENT OFFICE.

ELIJAH SHAW, OF MILWAUKEE, WISCONSIN.

## IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 132,326, dated October 15, 1872.

*To all whom it may concern:*

Be it known that I, ELIJAH SHAW, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented certain Improvements in Sewing-Machines, of which the following is a specification:

### *Nature and Object of the Invention.*

My invention consists in an arrangement of adjustable awls and hooked needles supplied with thread by a double-thread guide, and operating, in connection with a cord and lap-seam guide, to overlap the material and sew parallel lines of stitches.

### *Description of the Drawing forming part of this Specification.*

Figure 1 is a perspective view of this machine; Fig. 2, a view of adjustable needles and loop-carriage; Fig. 3, a sectional view of adjustable needles and loop-carriage; Fig. 4, a sectional view of the other half of needles and loop-carriage; Fig. 5 is a view of the awl-bar with adjustable awl-fastenings; Fig. 6 is a view of the awl-bar; Fig. 7, the adjustable thread-caster; Fig. 8, the adjustable foot; Fig. 9, half of needle-plate; Fig. 10, other half of needle-plate; Fig. 11, lap-seam and cord-gage.

### *General Description.*

A is the frame of the machine. B is the balance-wheel. C is the crank. D is the needle and looper arm. E is the awl-arm; F, the thread-spool; G, tension-rollers; H, thread-guides; I, tension-springs; K, thread-caster bar; L, thread-caster; M, the awls; N, needles; O, lap-seam and cord-gage; P, end gage; Q and R, needle-plates; S, adjustable foot; T, set-screws, which hold adjustable needle-carriage in place; U U are cast-offs; V, adjustable awl-holder; W, adjustable collar or awl bar; X X, guide-pins to the cast-off and needle-bars; Y, screw for adjusting the needles and cast-offs the proper distance apart; Z, a screw for attaching the needle and looper carriage to the feed-bar; *a*, set-screw to adjust the thread-caster the proper height; *b*, set-screw for setting awls in the holder; *c*, set-screw for adjusting movable awl-holder;

*d*, set-screw to adjust the foot to the proper width; *e*, needle-bar; *f*, set-screw to hold awl in awl-bar; *g*, set-screw for setting lap-seam gage; *h h*, slides for adjusting needle-boards; *i i*, slots in needle-board for the needles and awls to pass through; *k*, slots in which the slides *h* move; *m m*, set-screws for fastening cast-offs in their sockets; *n*, screws for adjusting cast-offs to the needles; *o*, set-screws for setting needles in the needle-bars; *p p*, screws which hold a dovetail piece between needle and cast-off bars to hold them in their places; *q*, a set-screw which holds foot in bar; *r*, holes for guide-pins X X; *t*, loop and needle carriage.

### *Operation.*

By turning the crank the cams give motion to different parts of the machine. The awls pass down and pierce the holes in the leather, the thread being properly adjusted in the thread-carrier. When the needles have passed up to the proper height the thread-carrier will throw the thread over the barbs of the needles, the needles then passing down until their points come even with the points of the cast-offs. Then they and the needles pass down together until they get a proper distance below the needle-board to form the loop. These needles, awls, and cast-offs operate upon the thread in the usual manner. The gage is adjusted to lap the material the proper width, the edge of the material placed in the slots of the guide, and a cord or other filling in the hole in the guide. The machine may then be started, and the boot-leg or other article will be sewed by two seams, with edges overlapped and raised between the same.

### *Claim.*

I claim as my invention—

The double thread-carrier, the double presser-foot, the two awls, needles, and cast-off, and the cord and lap-seam gage O, all constructed, combined, and operating as set forth.

ELIJAH SHAW.

Witnesses:

J. B. SMITH,  
THOMAS SMITH.