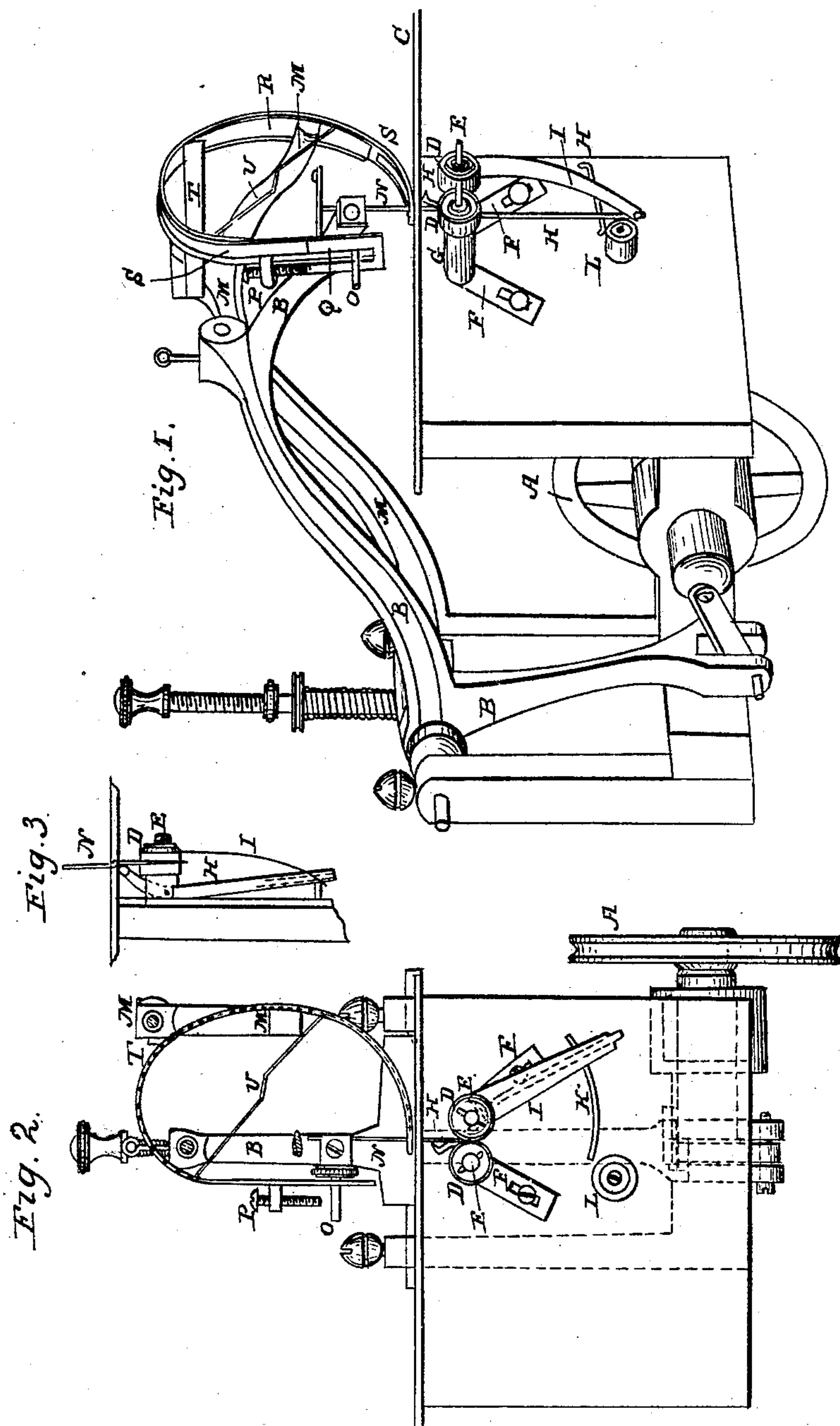


JENKS & UNDERWOOD.

Sewing Machine.

No. 18,285.

Patented Sept. 29, 1857.



UNITED STATES PATENT OFFICE.

EDWARD A. JENKS AND JOHN UNDERWOOD, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **18,285**, dated September 29, 1857.

To all whom it may concern:

Be it known that we, E. A. JENKS and J. UNDERWOOD, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Sewing-Machine; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention consists, first, in the mode of feeding the cloth to the needle, and, second, in the mode of operating the looper.

In the drawings, Figure 1 shows a perspective view of our machine, and Fig. 2 a front view.

The frame and table, as well as the wheel A and crooked lever B, by which motion is communicated to the needle, may be of any ordinary form. Upon the table C rests the foot of a curved sheath, R, and within this sheath R slides a feed-strip, S, the end of which also rests upon the table. The sheath R has a fork shape at the end, so as to bestride the needle N, while the feed-strip S has a slight notch which comes up to the needle, when the strip moves forward, to push the cloth along. This sheath is supported by the arm M, and has two braces, T and U. As the lever B raises the needle N, it also carries upward the pin O until the latter strikes the screw P, which is firmly connected with the feed-piece S. The plate Q is also attached to the feed-piece. The action of the pin O is to force the screw P upward, carrying the feed-piece S along sheath R, and thus giving motion to the cloth upon the table C. At the same time the action of pin O tends to raise the sheath R, so that the foot of the sheath does not press upon the cloth. As the lever B carries the needle downward, the pressure against the screw P is relieved, and the pin O soon reaches the lower end of the slot in plate Q, and then pulls the feed-piece S back in the sheath R. At this moment, when the feed-piece is being drawn back, there is an increased pressure on the cloth by the foot of sheath R, so as to hold the cloth more firmly. By this simple arrangement the cloth is fed along regularly to the needle, and also held securely while the stitch is made. The foot of sheath R is smooth, and the lower end of the feed-piece S is both smooth and blunt, so that no injury is done to even delicate fabrics while being sewed, and yet the feeding is perfect.

Below the table C are a pair of rollers, D D, turning on pivots E E. The pivots E E are supported by adjustable slides F F. The looper H, Fig. 3, is attached to the back part of one of the rollers, so as to turn with the roller, which also carries in front a spring, I. This spring presses the lower end of the looper against an inclined plane, K. In operating the machine, when the needle N descends through the table it passes between the two rollers D D, as seen in Fig. 2, and the pressure of the needle against the rollers turns the looper, as seen in Fig. 2. When the needle rises, the action of spring I drives the lower end of the looper down the inclined plane K until the spring and looper are arrested by the cushion L, which is made of india-rubber or other elastic material. By this simple arrangement the looper is operated with perfect success.

It is obvious that the sheath R may be somewhat varied in form without departing from our invention. For instance, a plate with pins or rollers may be used to guide the feed-piece. The rollers beneath the table may be replaced by segments.

The great merit of our machine is its extreme simplicity and its perfect operation.

We are aware that a looper has been moved by the action of the needle, but in a way entirely different from our invention.

Having thus fully described our machine, we would here state that we disclaim the rigid guide and feed-piece as employed in the patent of J. B. Woodruff, dated December 23, 1856, also the use of a spring-presser for holding the cloth, as this device has been long in use in sewing-machines; but

What we do claim, and desire to secure by Letters Patent of the United States, is—

1. The arrangement of the spring feed-piece S with its pressure guide or sheath R, substantially as described, for the purpose set forth.

2. The rollers D D' and looper H, as arranged and operating in combination with the needle, for the purpose specified.

EDWARD A. JENKS.
JOHN UNDERWOOD.

Witnesses:

SAMUEL H. MERRILL,
ELIPT. HILLS.