J. J. SIBLEY.

Sewing Machine.

No. 48,248. Patented June 13, 1865.

Fig. 5.

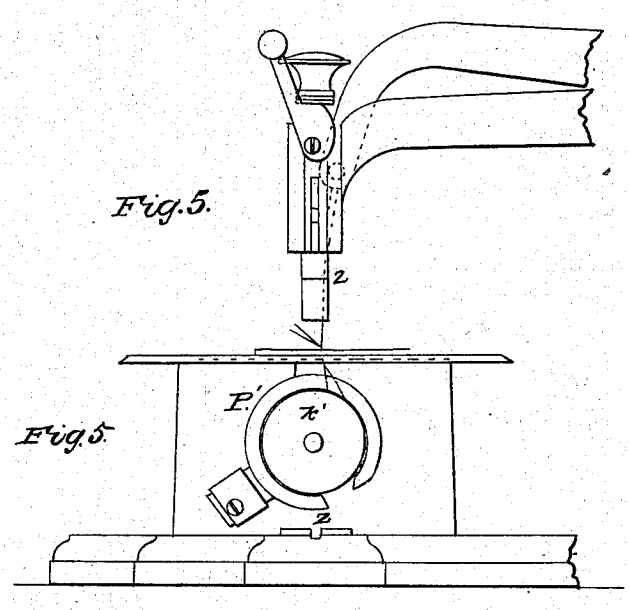


Fig. 3

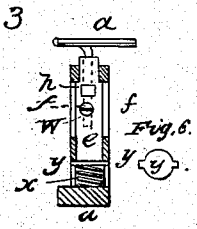


Fig. 6.

Fig. 1.

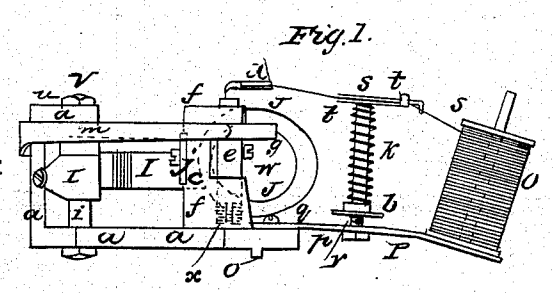
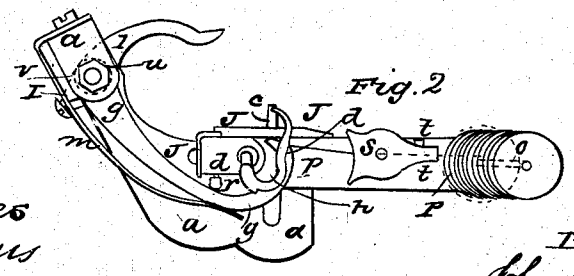


Fig. 2



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN J. SIBLEY, OF NEW YORK, N. Y., ASSIGNOR TO BRUEN MANUFACTURING COMPANY, OF NEW YORK STATE.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **48,248**, dated June 13, 1865.

To all whom it may concern:

Be it known that I, JOHN J. SIBLEY, of the city, county, and State of New York, have invented a new and useful Improvement in Sewing-Machines; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and the letters of reference marked thereon, in which the same letter represents the same thing in each figure.

Figure 1 is a side view of the addition to a Wheeler & Wilson sewing-machine in which my improvement consists. Fig. 2 is a top view thereof. Fig. 3 is a section of the stand supporting the under-thread carrier. Figs. 4 and 5 represent the parts of an ordinary Wheeler & Wilson sewing-machine, sufficient to show the operation of my improvement therewith; Fig. 6, the step of the shaft of the under-thread carrier.

a represents the frame of my new attachment; *b*, the thumb-nut regulating the tension of the under thread; *c*, the regulating-pin that controls the distance at which the attachment shall stand from the face of the rotating hook; *c'*, the point of arm *l*; *d*, the under-thread carrier; *e*, the shaft to which the under-thread carrier is secured; *f*, the stand supporting the under-thread carrier and its shaft; *g*, one of the arms operating the under-thread carrier; *h*, the connection between the under-thread carrier and arm *g*; *i*, the shaft that supports arms *g* and *l*; *j*, the ring-slide; *k*, the tension-spring; *k'*, the bobbin as ordinarily in use in the Wheeler & Wilson machine; *l*, the arm actuating the under-thread carrier and arm *g*, receiving its motion from the ordinary feed-cam in a Wheeler & Wilson sewing-machine; *m*, the spring that returns the under-thread carrier to its position; *n*, the post that supports the under tension; *o*, the under-spool spindle; *o'*, the tongue on the base of frame *a*, which slides into the ring-slide groove of a Wheeler & Wilson machine; *p*, the frame supporting the under tension and spool-spindle; *q*, the screw that secures frame *p* to frame *a*; *r*, the screw that regulates the play of arm *g*; *s*, the top surface of the under-thread tension; *t*, the bottom surface thereof; *u*, the check-nut of the step that supports shaft *i*; *v*, the step thereof; *w*, the screw that secures the under-thread carrier in shaft *e*; *x*, the spring under the step of shaft *e*; *y*, the step between the spring *x* and shaft *e*, on which shaft *e* rests; *z*, the ring-slide groove of the ordinary Wheeler & Wilson machine; *z'*, the needle; *p'*, the rotary hook.

The purpose of my improvement is to enable a Wheeler & Wilson sewing-machine to make the three or more threaded stitch described in my pending application before the United States Patent Office for a patent therefor, the first thread being carried by the needle, the second by the bobbin of that machine, and the third by the thread-carrier *d* of my improved attachment. This is accomplished as follows: Unscrew the thumb-screw that secures the ring-slide of a Wheeler & Wilson machine in place. Remove the ring-slide and put the attachment on in its place, the tongue *o'* of the attachment being made to slide in ring-slide groove *z* of the machine. The ring-slide thumb-screw of the machine will secure the attachment in place, ring-slide *j* of the attachment, secured to the stand *f*, taking the place of the removed ring-slide of the machine, and having the same operative relations to bobbin *k'* and rotating hook *p'* of the Wheeler & Wilson machine that the removed ring-slide of the machine has. Motion is communicated to the under-thread carrier in one direction through the arm *l* and arm *g*, connection *h*, and shaft *e* from the feed-cam of the Wheeler & Wilson machine, bearing directly upon arm *l* at point *c'*, and in the opposite direction by the spring *m*.

The operation will be as follows: Needle *z* descends with its thread through the material. When the loop of needle-thread has been caught and spread upon the rotating hook, as usual in the Wheeler & Wilson machine, and the needle retracted, the under-thread carrier passes through said loop of needle-thread, carrying its own thread back of the track of the needle, thus introducing a loop of under-thread through a loop of needle-thread, in which position it remains until the needle has again descended, carrying its own thread through the loop of under-thread. While the rotating hook is securing and spreading this second loop of needle-thread the under-thread carrier *d* is withdrawn from the first loop of needle-thread, and immediately enters the second loop of needle-thread

while it is yet spread upon the rotating hook, and carries its own thread across the track of the needle, as before. The needle and bobbin threads being interlaced, as usual in the Wheeler & Wilson machine the third, or under thread carrier-thread is drawn up by the needle-thread to the cloth and tension plates *s* and *t*, between which the thread passes to keep it taut. Shaft *e* rests upon step *y*, and step *y* is held up against the bottom of shaft *e* by spiral spring *x*, the step having two small ears projecting out through the slots *i'* in stand *f*, which keeps the step *y* from reciprocating with shaft *e*. By pressing down upon thread-carrier *d* spiral spring *x* closes up and permits thread-carrier *d* to fall until it disconnects from arm *g*, and it may then be swung round from under the cloth-plate of a Wheeler & Wilson machine, so that the eyes of the thread-carrier can be easily got at to thread. The ears of the step bear against the top of the slot *i'* in stand *f*, which prevents the spring from pushing it so high as to bind shaft *e*. Two or more threads may be placed in the bobbin and thread carriers, so as to secure a variety of colors when desired.

I do not claim, broadly, a sewing-machine so constructed as to form a three-threaded stitch, of which one thread is carried by the upper needle, another by a non-reciprocating spool or bobbin, and the third by an eye-pointed vibrating looper; but

What I claim, and desire to secure by Letters Patent, is—

1. The attachment described, adjustable to a Wheeler & Wilson sewing-machine to make a stitch of three or more threads, substantially in the manner set forth.

2. The combination of the attachment described with the needle-rotating hook, bobbin, and other operative parts of a Wheeler & Wilson sewing-machine, except the ring-slide.

3. The ring-slide *j*, constructed and operating substantially as described.

4. The combination of needle *z*, bobbin *k'*, thread-carrier *d*, and ring-slide *j*, constructed and operating together substantially as described.

5. The step *y*, constructed and operating substantially as set forth.

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Test:
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