

W. M. LEAVENS.
Sewing Machine.

No. 54,926.

Patented May 22, 1866.

Fig: 1.

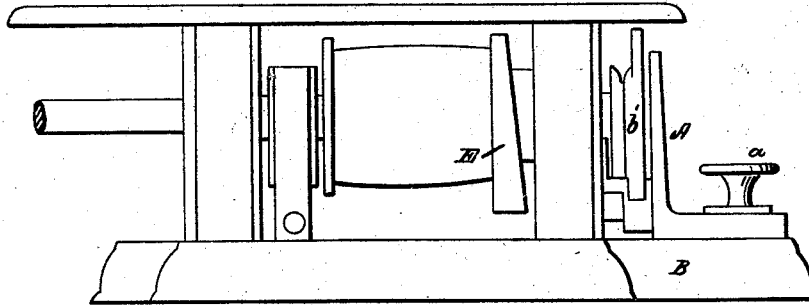


Fig: 2.

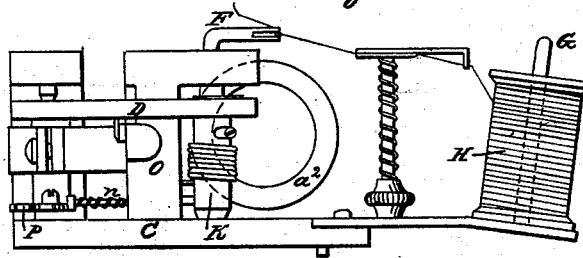


Fig: 3.

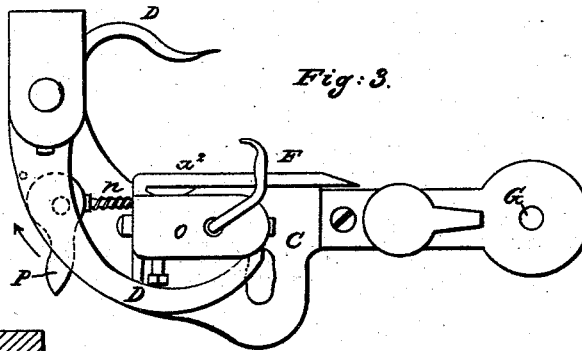
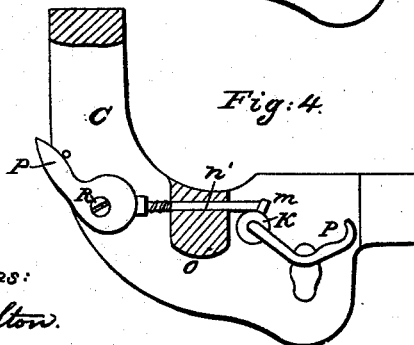


Fig: 4.



Witnesses:
Stanley C. Hyllton.
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Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM M. LEAVENS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 54,926, dated May 22, 1866.

To all whom it may concern:

Be it known that I, WILLIAM M. LEAVENS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new Improvement in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in an improvement on the invention of J. J. Sibley, June 13, 1865, and known to the public under the trade-mark of the "three-stitch and embroidering attachment for the Wheeler & Wilson sewing-machine."

Referring to the drawings making part of this specification, Figure 1 is an end view of part of the Wheeler & Wilson sewing-machine. Fig. 2 is an elevation of the attachment. Fig. 3 is a plan of the attachment. Fig. 4 is a plan, partly in section.

Similar letters in each refer to the same parts.

Fig. 1 shows part of the Wheeler & Wilson sewing-machine as generally used and making only the lock-stitch. A is the ring-slide, secured by a screw, *a'*, to the frame B. *b'* is the rotating needle or looper.

Fig. 2 shows the attachment to be fixed to the said machine by the screw *a'* in place of the ring-slide A, which is first removed. It is made of a casting, C, carrying some movable parts.

D is a vibrating arm worked by a cam, E, on the machine. F is the thread-carrier, operating as an under needle. Its motion is given to it by the arm D. *a*² is a ring-slide fastened to this attachment, and it takes the place of the ring-slide A. G is a spindle for carrying an ordinary spool, H.

It is not necessary to describe minutely the mode of making the three stitches with this attachment, as it is now an article of commerce. I will only briefly state that without it the ma-

chine makes the lock-stitch; with it and the thread-carrier, with the thread from the spool H in operation, it makes the three-thread or embroidery stitch. If the thread from the under bobbin is now cut, or the bobbin removed it makes the elastic double-loop stitch.

Now, in order to return to making the lock-stitch again, it is necessary as the machine and attachment are now used to remove the attachment and replace it by the ring-slide A, requiring time and labor. My improvement obviates this, as shown in Fig. 4.

To the oscillating lower thread-carrier shaft *k*, I attach an arm, *m*, and a pin, *n*, is fitted to slide through a hole drilled in a lug, *o*. An eccentric lever, P, working on a center stud, R, bears against the pin *n*, which has a coiled spring around it to press it back against the lever P. By moving this lever by the finger from the position in Fig. 3 to that of Fig. 4 the thread-carrier is forced back, as shown, and fastened and retained in that position, so as to prevent its being operated by the lever or arm D. The machine may now be operated to make the common lock-stitch without removing or changing the attachment, which is a great advantage, and saving the necessity of employing the ordinary slide-ring A.

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

1. Preventing the operation of the thread-carrier F by throwing it back and securing and retaining it in that position, so that the stitch may be changed without further modification or substitution of the parts, substantially as described.

2. Securing and retaining the thread-carrier F in a position to prevent it from operating by means of lever P, pin *n*, arm *m*, or their equivalents, substantially as described.

WM. M. LEAVENS.

Witnesses:

STANLEY C. HYLTON,
EDWARD BROWN.