Thornton & Cooley,

Motor.

No. 111,276. Patented Jan. 24, 1871.

Fig. 1.

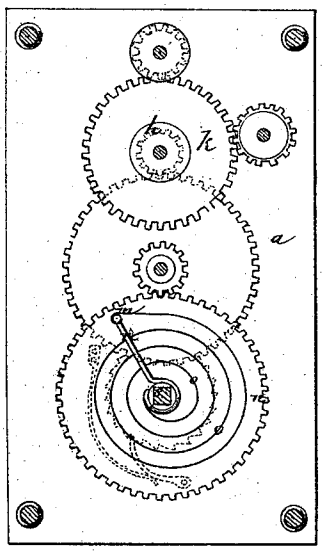


Fig. 2.

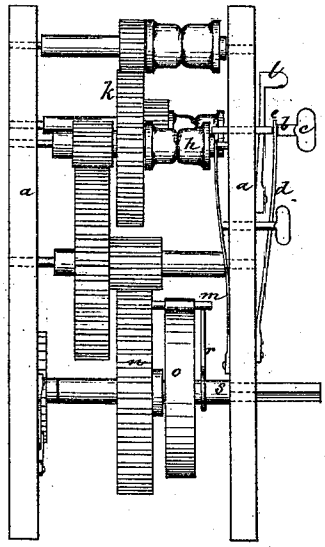
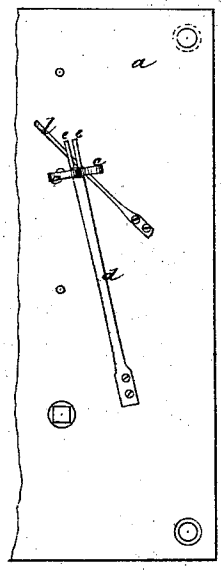


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM C. THORNTON AND JAMES D. COOLEY, OF HILLSVILLE, VIRGINIA.

IMPROVEMENT IN SEWING-MACHINE MOTORS.

Specification forming part of Letters Patent No. **111,276**, dated January 24, 1871.

To all whom it may concern:

Be it known that we, WILLIAM C. THORNTON and JAMES D. COOLEY, of Hillsville, in the county of Carroll and State of Virginia, have invented a new and Improved Sewing-Machine Motor; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a sectional elevation. Fig. 2 is a front elevation, and Fig. 3 is a partial side elevation, showing the stop mechanism.

This invention relates to a stop mechanism for sewing-machine motors, the object of such mechanism being to stop the motion of the motor instantly and at any desired moment. It also relates to a brace for the pin on the main wheel to which the motor-spring is fastened.

Referring to the drawing, *a a* are two standards supporting a motor mechanism, which, being all well known, we do not find it necessary to describe.

In Fig. 2, *b* is a pin passing through one of the standards *a*, and having a head, *c*, outside the standard, and notches in its sides near the head, into which notches the forks *e* of a bifurcated spring-plate, *d*, enter, said plate being secured at its opposite extremity to the standard *a*, and standing out from the standard at every other part. The inner end of the pin *b* is opposite a drum, *h*, which forms part of the shaft of the second counter-wheel, *k*, of the motor mechanism. When the pin *b* is shoved inward sufficiently far it closes in with the end of the drum *h* and stops it, and, by consequence, the whole mechanism. When hus thrust inward the pin *b* is held against the drum by a spring-plate, *l*, which ordinarily bears against the pin and has to be raised to let the head of the plate *d* pass beneath it. After being thus raised, the plate *l* is let down upon the end of the plate *d*, and prevents it from springing back and drawing the pin *b* with it. When it is desired to start the mechanism again, it is only necessary to raise the plate *l*, when the plate *d* will at once draw the pin away from the drum *h*.

In Figs. 1 and 2, *m* is a pin projecting from one side of the main wheel *n*, near the periphery of the latter, to which pin one end of the motor-spring *o* is attached.

To counteract the drawing of the spring upon the pin, which might otherwise be so forcible as to displace the latter, a brace, *r*, is placed between the outer end of the pin and the shaft *s* of the wheel, which brace, being secured at one end to the shaft and at the other to the pin, supports the latter completely.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the pin *b* and springs *d* and *l* in respect to a sewing-machine motor, as specified.

2. The arrangement of the pin *m* and brace *r* with respect to a wheel and axle, as described.

To the above specification of our invention we have signed our names this 1st day of December, A. D. 1870.

WM. C. THORNTON.
JAMES D. COOLEY.

Witnesses to the signature of Thornton:
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