L. L. BARBER.

Spoolers.

No. 149,180. Patented March 31, 1874.

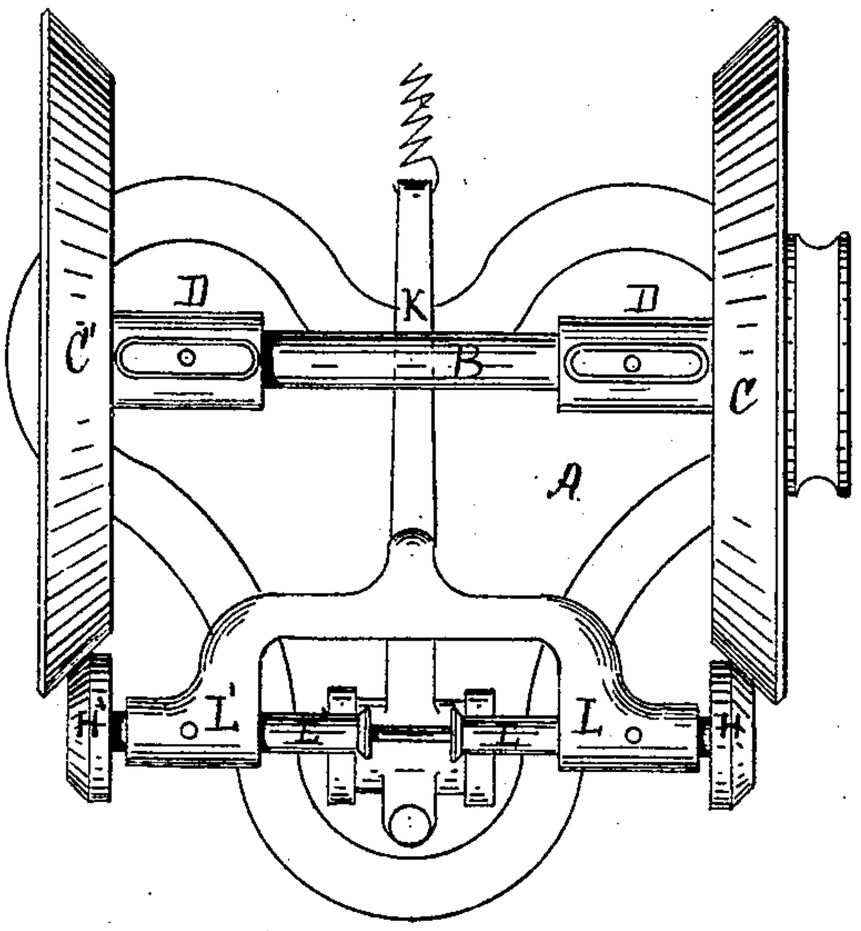

Fig. 1.

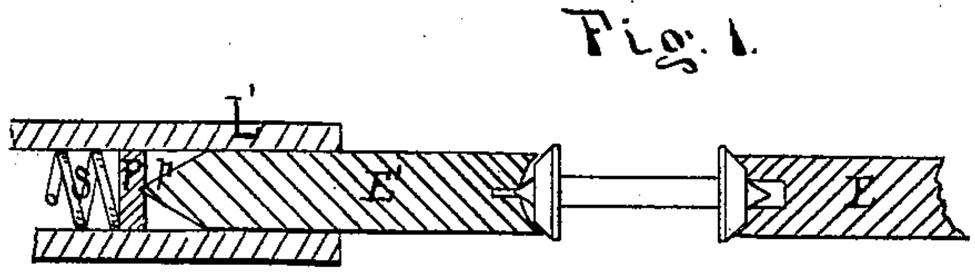

Fig. 3.

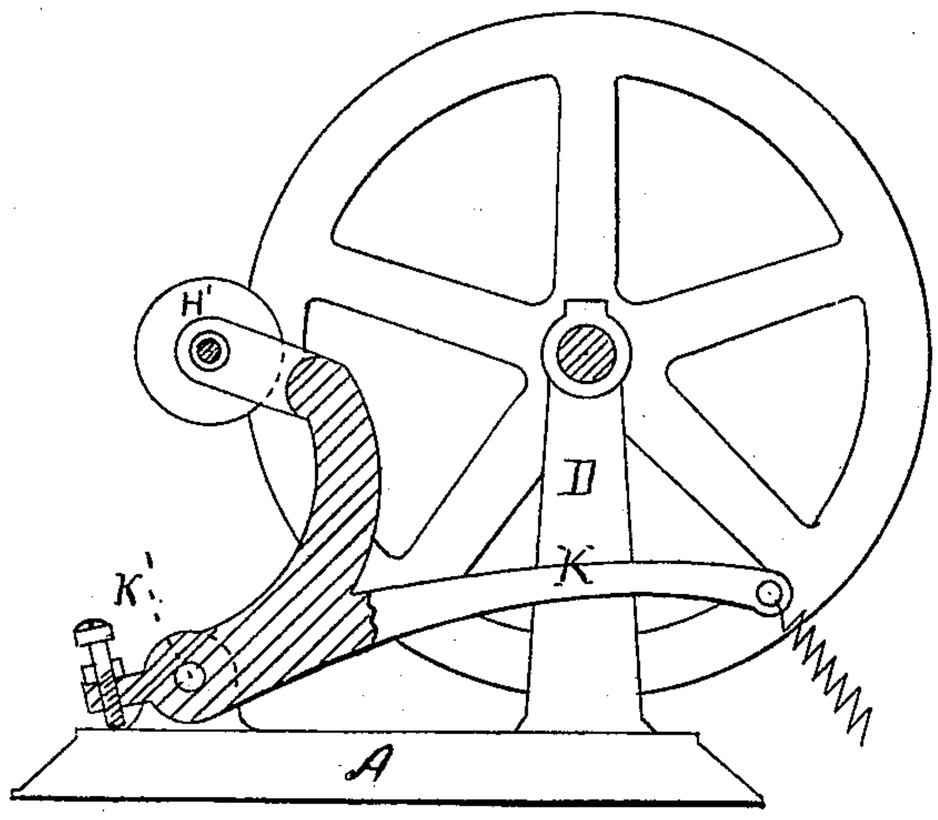

Fig. 2

Witnesses
Frank G. Parker
E. A. Nickerson

Inventor
Lyman L. Barber
per William Edson Atty

UNITED STATES PATENT OFFICE.

LYMAN L. BARBER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SPOOLERS.

Specification forming part of Letters Patent No. **149,180**, dated March 31, 1874; application filed January 6, 1874.

To all whom it may concern:

Be it known that I, LYMAN L. BARBER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Spoolers, of which the following is a complete specification:

The nature of my invention consists, first, in hanging the spool-holding arbors on a lever, in such relation to a revolving beveled wheel or wheels that, by throwing the lever forward, the bevel-wheel of the spool-holding arbor contracts with the beveled wheel, and is pressed inwardly, forcing one arbor toward the other, and thus holding the spool or bobbin, at the same time causing it to revolve; second, in arranging the spooler so that both centers revolve, and thus save the wear on the bobbin-points. In saving the points of the bobbins, so that they will always fit their sockets in the shuttle, the shuttles themselves are saved, and may be used much longer, and also insure a more perfect tension on the thread, as the parts most liable to give out in a shuttle are the bobbin-supporting sockets.

Figure 1 is a plan of my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a horizontal section, showing the spool-holding center.

A represents the base of the machine, and in standards D D I place a shaft, B, having at one or both extremities the beveled wheels C C′. K represents a bent forked lever, hung on a pivot or fulcrum at K′. Upon the upper branches L L′, I hang the two bobbin centers E E′, one or each of which has a bevel-wheel, H, which may act as a friction-wheel in connection with the beveled wheel C or C′, the motion of the beveled wheels being thus communicated to the bobbin.

To bring the bobbin-wheels H H′ in contact with the beveled wheels, I have simply to depress the end M of the lever K. This will throw the branches L L′ backward, carrying the wheels H H′ against the wheels C C′. To operate the lever a strap or spring, S, may connect it with a foot-lever.

The centers or arbors E and E′, in Fig. 3, are made concave, or tunnel-shaped, or with a hole drilled to receive the points of the bobbin, so that the bobbin may be held by its heads or flanges; or it may be held by its points or centers, the concave serving to guide the point of the bobbin to the center or socket in the arbors.

I can dispense with one of the wheels on the bobbin-centers, and adopt the arrangement shown at E′, Fig. 3, which consists in turning the center E′ down to a fine point, *p*, and having it rest against a suitable stop, P, which is made to press against the centers *p* by a spring, S, so as to admit the bobbin and press it against the opposite center, which causes it to revolve. This stop P may be made of rawhide or some similar material.

By this arrangement, the friction on the point *p* is much less than that of the bobbin-head on E′; hence the center E′ will revolve and save the wear of the bobbins.

The stop P is held in place by a spring, S, so that the bobbin may be put in and held steadily against the opposite center.

I claim as my invention—

1. The combination of the beveled wheels C and C′ with the wheels H H′, when the same are operated substantially as described, and for the purpose set forth.

2. In a spooler, the combination of the bobbin and the two revolving centers E and E′, substantially as described, and for the purpose set forth.

LYMAN L. BARBER.

Witnesses:

FRANK G. PARKER,

H. FLOYD FAULKNER.