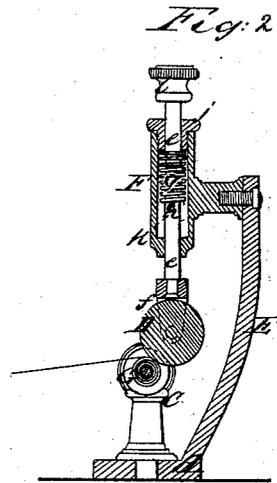
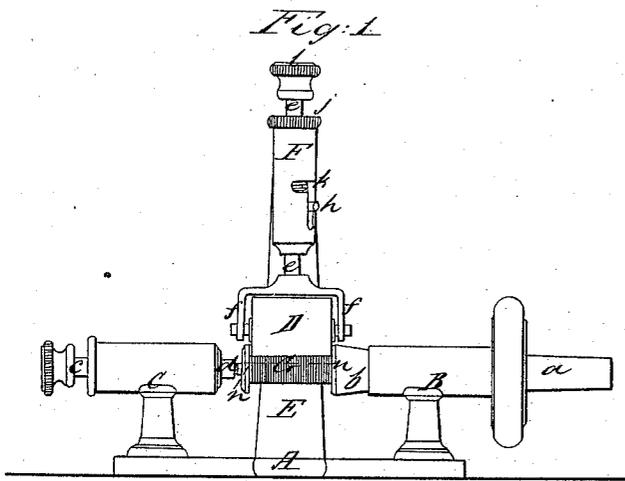


A. C. Kasson,

Bobbin Winder for Sewing Machines.

N^o 43,210.

Patented Jun. 21. 1864.



Witnesses.
Henry Morris
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Inventor.
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UNITED STATES PATENT OFFICE.

A. C. KASSON, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN BOBBIN-WINDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 43,210, dated June 21, 1864.

To all whom it may concern:

Be it known that I, A. C. KASSON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Bobbin-Winders for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of a spooler with my improvement. Fig. 2 is a transverse vertical section of the same.

Similar letters of reference indicate corresponding parts in both figures.

The object of this invention is to provide the bobbin-winders of sewing-machines with a means of laying the thread even upon the bobbins, which, while being effective, is so simple as to add little to the cost of the winder; and to this end it consists in the combination, with such a winder, of a pressure-roller, of metal or other hard material, so constructed and applied in relation to the centers between which the bobbin is rotated for winding on the thread that when the bobbin is placed between the said centers the said roller will fit between its heads and press upon the thread which is be-wound thereon in such manner as to cause the said thread to be laid perfectly even, so that when the bobbin is placed in the shuttle and the shuttle in the sewing-machine the thread will draw therefrom with an even tension.

A is a base-plate, intended to be secured to the bed-plate or table of the sewing-machine, and having provided upon it the two stationary head-stocks B C, which hold the centers between which the bobbin G is rotated, the head-stock B containing the bearing for the rotating spindle *a* of the rotating center *b*, and the head C receiving the sliding spindle *c* of the fixed female center *d*. These parts are like the corresponding parts of the bobbin-winder in common use.

E is a standard, cast upon or otherwise secured to the base A at the middle of its length. To the upper part of this standard there is secured an upright cylindrical box, F, which serves as a guide, through which works a vertical spindle, *e*, the lower end of which is made with a fork, *f*, to contain the bearings for the

lindrical steel pressure-roller D, which is so situated as to enable it to press upon the thread on the bobbin G, which is placed between the centers *b d*. The length of this roller is such that it will fit easily between the heads *nn* of the bobbin. Within the box F there is coiled around the spindle *e* a spiral spring, *g*, which presses downward upon a small pin, *h*, which is inserted in a hole drilled through the spindle *e*. This pin enters an inverted-L-shaped slot, *k*, in the box F, the upright portion of which serves as a guide to keep the spindle D parallel with that of the centers *b* and *d*. The position of the spindle is such that when the roller is parallel with the axis of the centers *b d* it will enter between the heads *nn* of a bobbin placed between the centers. The upper end of the box F is fitted with a screw-cap, *j*, which is movable for the introduction of the spring, and which serves as a bearing for the upper end thereof. The upper end of the spindle *e* is furnished with a knob, *l*, by which to take hold of it and lift it up to raise the roller G high enough to permit the insertion and removal of the bobbin. When the bobbin is thus raised up it is held up by turning the spindle to bring the pin *h* into the horizontal upper portion of the slot *k*. When a bobbin has been placed between the centers *b d* the end of the thread to be wound upon it is first wound once or twice around it, and the pressure-roller turned to a position parallel with the common axis of the bobbin and the centers *b d*, and allowed to be brought down upon the bobbin between the heads *nn* by the pressure of the spring *g*. The thread is then held loosely, so that it will run freely between the finger and thumb of one hand, at a few inches from the bobbin and opposite to the middle of its length, and the spindle *a* set in motion in the usual manner to give the necessary rotary motion to the bobbin to wind on the thread. The roller resting upon the thread already wound upon the bobbin leaves between it and the bobbin at the portion yet to be wound a space only equal to the thickness of the thread, so that as the thread is wound thereon its successive coils cannot override each other, but are caused to lie close side by side until a series of coils from end to end of the bobbin has been completed, when the next coil rises on its predecessor and lifts the roller a

distance equal to the thickness of the thread above the preceding series of coils, and the winding of the thread proceeds toward the other end of the roller without the successive coils overriding, and when the winding has proceeded to the first-mentioned end of the bobbin the next coil of thread again rises upon its predecessor and the winding again proceeds toward the other end, and so on until the bobbin is full, the coils being laid almost as evenly as in a spooling-machine, and sufficiently even to allow the thread to draw evenly from the shuttle when the bobbin has been placed therein and is used in the sewing-machine. When

the bobbin is full the roller is lifted up and the bobbin taken from between the centers of the winder.

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

The smooth-surfaced pressure-roller D, applied in combination with the bobbin-winder of a sewing-machine, substantially as and for the purpose herein specified.

A. C. KASSON.

Witnesses:

F. W. NOYES,
CHAS. H. RAYMER.