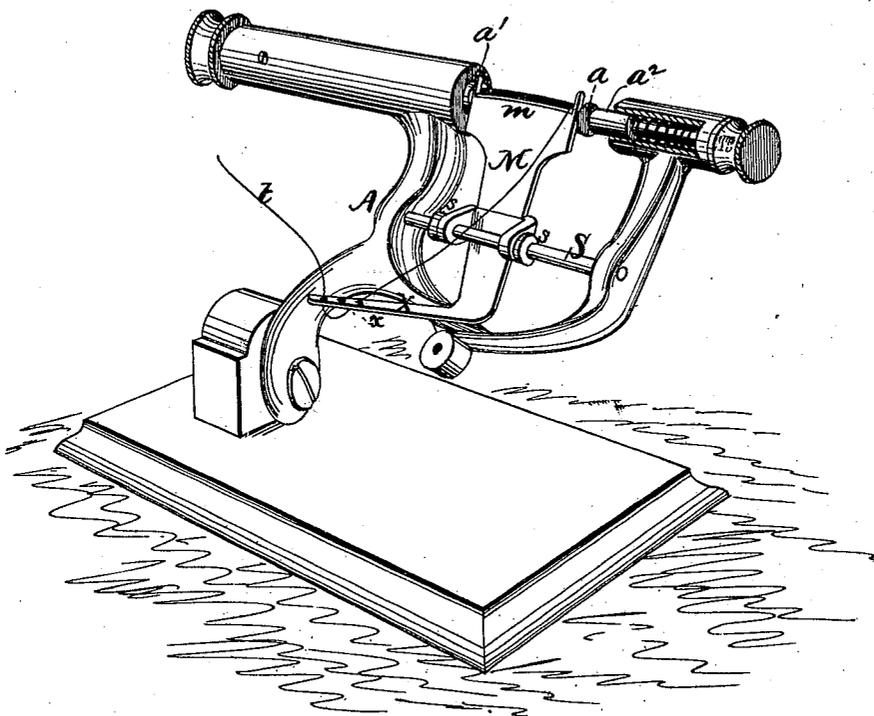


P. KENNEDY, Jr., & N. G. LINNY.  
BOBBIN-WINDERS FOR SEWING-MACHINES.

No. 174,630.

Patented March 14, 1876.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

PATRICK KENNEDY, JR., AND NATHAN G. LINNY, OF WATERTOWN, N. Y.

## IMPROVEMENT IN BOBBIN-WINDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **174,630**, dated March 14, 1876; application filed March 24, 1875.

*To all whom it may concern :*

Be it known that we, PATRICK KENNEDY, Jr., and NATHAN G. LINNY, of Watertown, in the county of Jefferson and State of New York, have invented new and useful Improvements in Bobbin-Winders for Sewing-Machines; 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, forming part of this specification, in which the figure is a perspective view of a bobbin-winder embodying our invention.

The object of this invention is to produce a bobbin-winder for sewing-machines which shall wind the thread evenly and compactly upon the spool, so as to form a smooth, handsome, cylindrical bobbin, substantially as shown in the drawing.

To this end the invention consists in an angular arm hung upon the shaft of the bobbin-winder, and having one end formed with a wide convex plate to bear against the bobbin and distribute the thread thereon, while the opposite end is formed with holes for the passage of the thread to the convex edge of the wide plate; such construction enabling the thread to be fed laterally over the edge of the guide plate so that the latter shall compact smooth and shape the bobbin during the winding process.

The bobbin-winders in general use are provided with angular distributing-arms, but instead of being constructed with a wide convex pressure and guide plate, they are made with a narrow bearing-surface, which carries the thread and distributes it by reciprocating the entire length of the bobbin. This construction does not shape and compact the bobbin uniformly but simply distributes the thread;

whereas by our invention each layer of thread is shaped, compacted, and smoothed as it is laid upon the spool.

In the drawings, A represents the ordinary bobbin-winder, in which the bobbin *a* is held and rotated by means of the usual spindles, *a*<sup>1</sup> *a*<sup>2</sup>. S is a shaft or rod upon which, between collars *s s*, is mounted an angular rocking plate, M, the enlarged convex end *m* of said plate resting against the bobbin, while the opposite end is pierced with holes through which passes the thread *t*. In winding the bobbin the thread holds the the edge *m* with considerable force against the side of the bobbin, thereby smoothing and compacting the latter as it is built up. The plate adjusts itself to the thickness of the bobbin, and, if its convex edge between the end shoulders thereof is too short for the particular spool employed, the plate is adapted to slide to a slight extent on the shaft so as to make up for the deficiency. The edge of the plate forms the bobbin in exactly the required shape, and, in connection with the holes at the opposite end through which the thread is passed, constitutes an excellent tension, which may be regulated by using more or less of the holes.

We claim as our invention, in bobbin-winders for sewing-machines—

In a bobbin-winder the thread-guide, distributing, tension, and pressure-plate M, having a long convex upper edge, *m*, and the perforated arm X, as shown in combination with the shaft S, as and for the purpose specified.

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Witnesses:

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