F. H. Drake,

Thread-Winding Device for Sewing Machine Bobbins.

No. 43,839. Patented Aug. 16. 1864.

Fig: 3

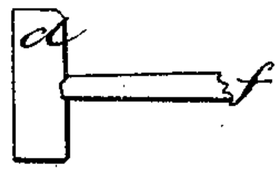


Fig: 2

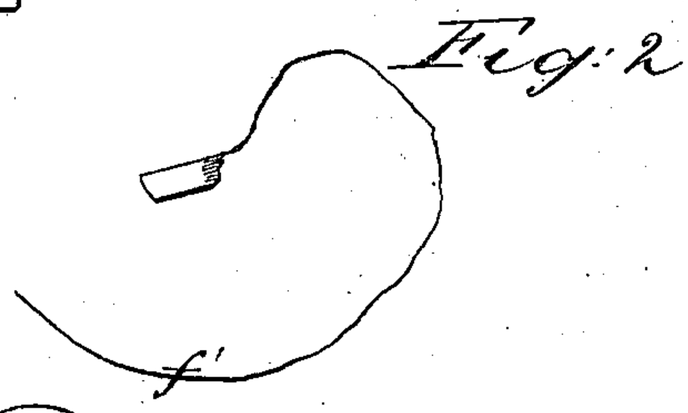


Fig: 6

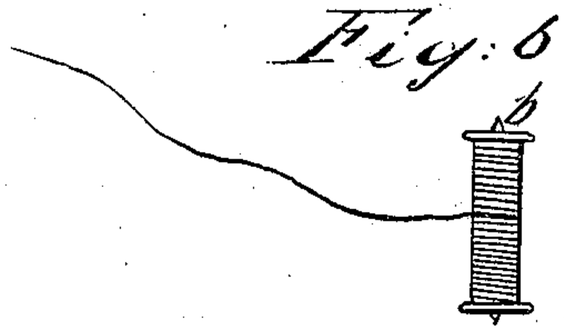


Fig: 4

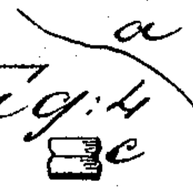
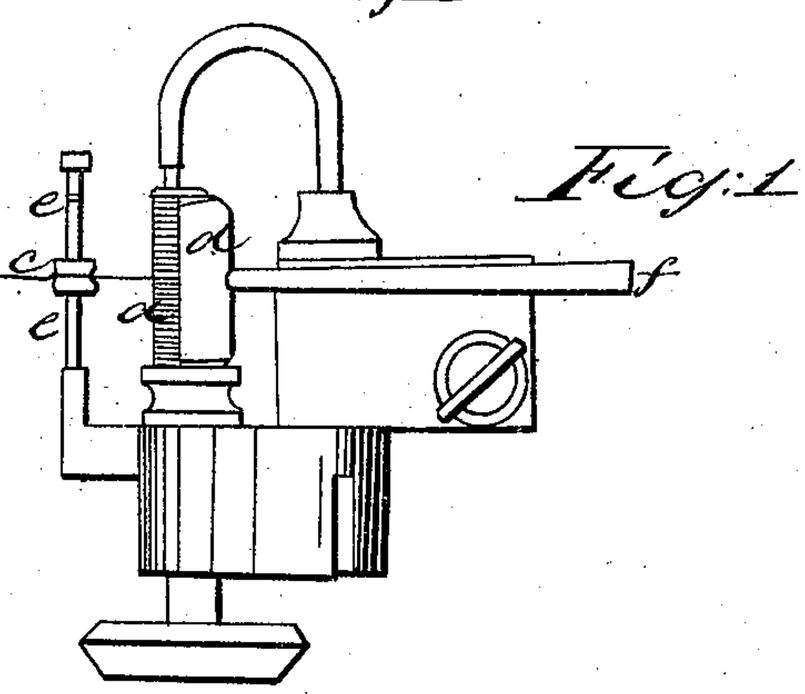


Fig: 5

Fig: 1



Witnesses

Samuel L Parmer

Albert G Lucas

Inventor

Frederick H. Drake

UNITED STATES PATENT OFFICE.

FREDERICK H. DRAKE, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN THREAD-WINDING DEVICES FOR SEWING-MACHINE BOBBINS.

Specification forming part of Letters Patent No. **43,839,** dated August 16, 1864; antedated August 4, 1864.

To all whom it may concern:

Be it known that I, FREDERICK H. DRAKE, of the town of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and Improved Mode of Winding the Thread Upon the Bobbins of Sewing-Machines; and I do hereby declare that the following is a full 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 attaching to any of the bobbin-winders now used upon sewing-machines a movable roller or guide and a pressure-pad, the roller to act as a guide to the thread while being wound upon the bobbin and the pressure-pad, in combination with said guide to secure the thread to be wound backward and forward under the pressure-pad upon the bobbin in exact and uniform layers, the pressure of the pad causing the thread to run perfectly and uniformly.

By means of my invention, when the thread is unwound from the bobbin for the purpose of feeding the sewing-machine, I secure an exact and uniform tension to the thread when sewing, and, as the thread is wound upon the bobbin evenly and without ridges, I am enabled to wind larger quantities upon the same-sized bobbin than could be wound if the same were wound enevenly, as it is, so far as I am aware, by any other method now in use.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 of the accompanying drawings represents the instrument complete and ready for adjustment to the sewing-machine. Fig. 2 is a side view of the pressure-pad and spring attached. Fig. 3 represents a front or top view of the pressure-pad detached from the bobbin. Fig. 4 represents a side view of the movable guide detached from the horizontal shaft upon which it plays. Fig. 5 represents an end view of said movable guide. Fig. 6 represents the bobbin detached with the thread wound thereon.

I attach the thread *a* to be wound to the bobbin *b* by passing it over the guide *c*, with the pressure-pad *d* down upon the top surface of the thread *a* and bobbin *b*, ready for winding. As the thread *a* is wound upon the bobbin *b* it passes over the guide *c* in a groove upon the surface of the same. The guide *c* plays easily backward and forward upon its shaft *e e* as the thread is being wound upon the bobbin *b*. The pressure-pad *d* is kept down upon the thread *a* while being wound by its spring *f*, which pressure-pad, in combination with the guide *c*, prevents the thread from winding unevenly and with ridges upon the bobbin *b*. I apply the power to the bobbin-winder in the same manner as it is now applied to all other bobbin-winders now in use.

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

The employment of a pressure-pad, in combination with a horizontal shaft or axle, having thereon an adjustable grooved roller as a guide to the thread for the winding of thread upon the bobbins of sewing-machines, as is described in the above specification and accompanying drawings.

Middletown, November 10, A. D. 1862.

FREDERICK H. DRAKE.

Witnesses:

SAMUEL L. WARNER,

ALBERT G. LUCAS.