

E. L. MANCHESTER & J. A. BOLEN.

Thread-Winding Guides.

No. 158,427.

Patented Jan. 5, 1875.

Fig. 1.

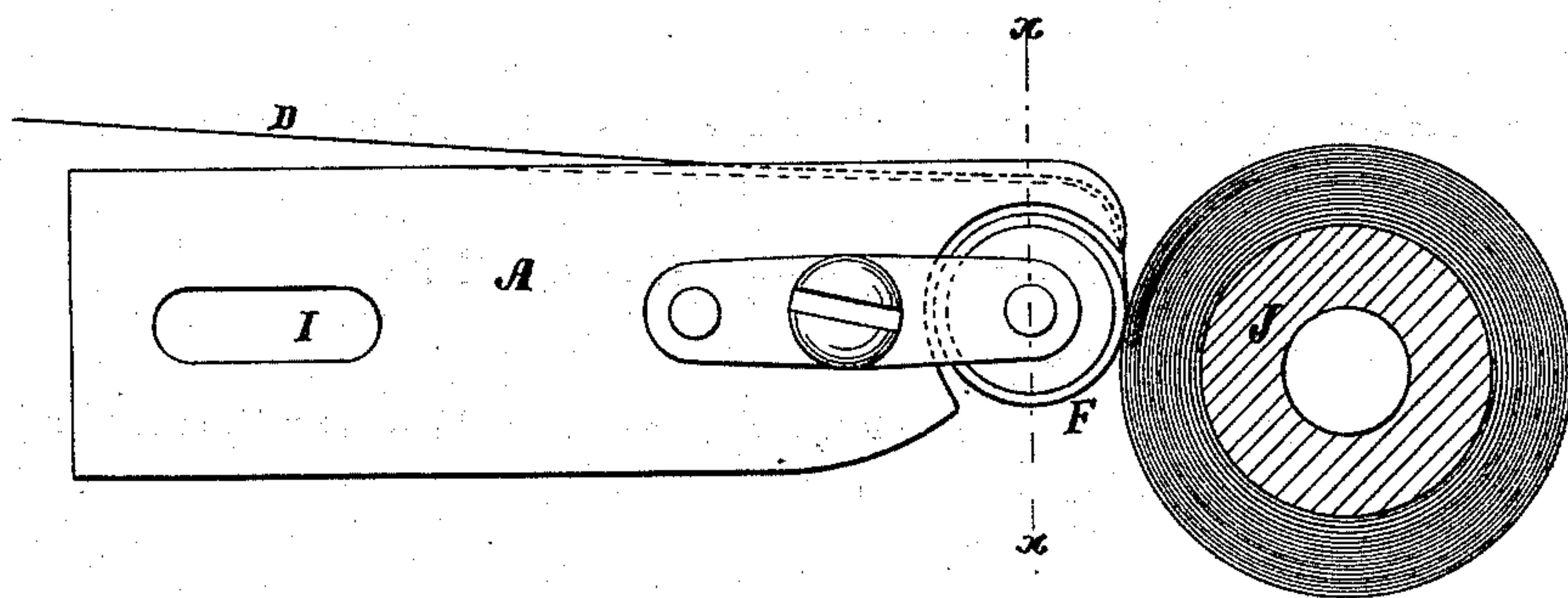


Fig. 2.

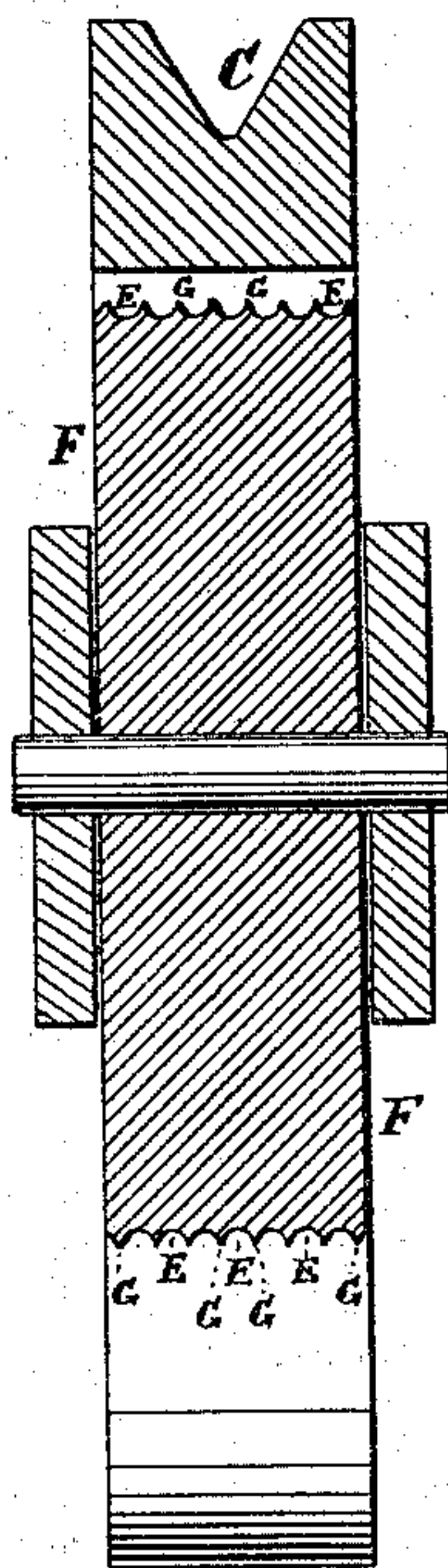
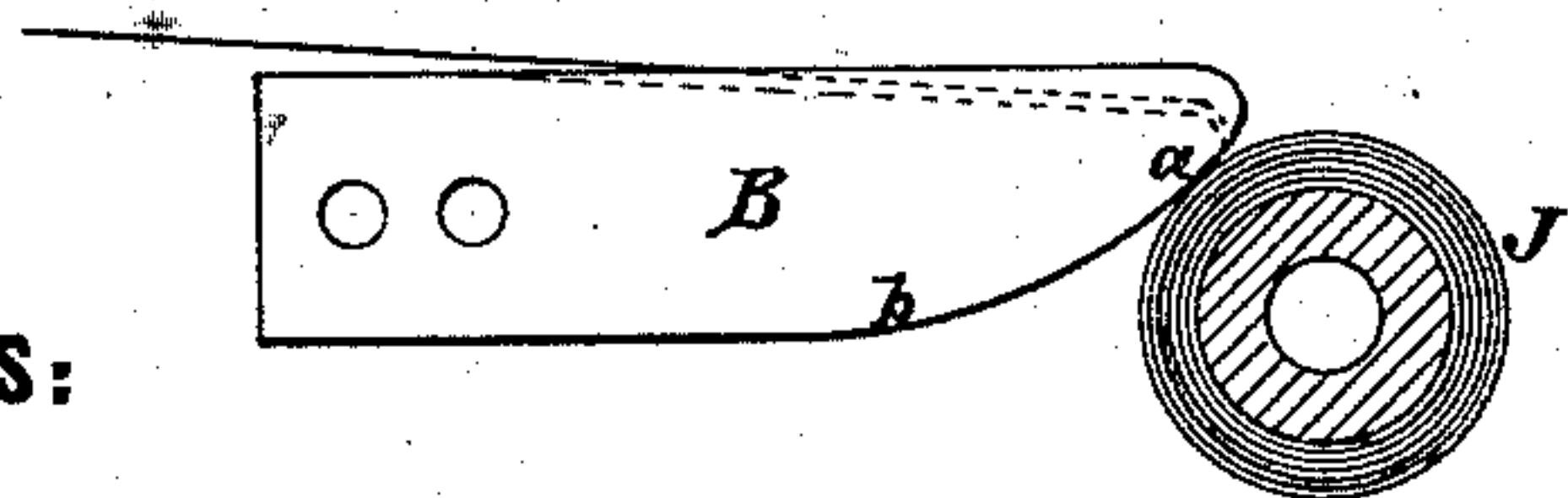


Fig. 3.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

EUGENE L. MANCHESTER AND JOHN A. BOLEN, OF SPRINGFIELD, MASS.

IMPROVEMENT IN THREAD-WINDING GUIDES.

Specification forming part of Letters Patent No. **158,427**, dated January 5, 1875; application filed December 7, 1874.

To all whom it may concern:

Be it known that I, EUGENE L. MANCHESTER and JOHN A. BOLEN, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and Improved Thread-Winding Guide, of which the following is a specification:

Our invention relates to the thread-winding guide used in thread-mills for guiding the thread and laying it on the spools; and it consists of a wheel or roller in that part of the guide which is employed for laying and compacting the thread on the spool, the object being to substitute rolling for sliding friction, and thereby economize in the cost of guides by largely lessening the wear, which is so great in the common arrangement that the guides have to be refitted often, whereas, the rolling device which we propose to employ will wear for weeks without repair.

Figure 1, in the drawing, is a side elevation of our improved guide, and a section of the spool whereon the thread is being guided and laid. Fig. 2 is a transverse section of Fig. 1 on line *xx*, on a larger scale; and Fig. 3 is a side elevation of the guide now in use.

Similar letters of reference indicate corresponding parts.

A is the metallic plate of the guide, which is substantially like the ordinary guide-plate B, and like it has a groove, C, in the upper edge, along which the thread D is guided to the

middle groove E of the device for laying the thread on the spool J, and pressing the layers firmly together, which in our guide consists of the wheel F, having three or four well-defined projecting ribs, G, on each side of the groove, to run in the grooves between the last, three or four coils of thread laid on the spool, and press them snugly together, while the thread is laid alongside of the last coil from the groove E.

In the common guide, this laying contrivance of projecting ribs is formed on the breast of the plate B, from the point *a* to *b*, and the spool presses and rubs against it, and wears off the ribs in a very short time, so that the plates have to be cut. The wear extends from *a* to *b*, or nearly so, as the plate rises by the increase of the spool in size, and besides, having to cut the breast very often, the plates wear away very fast.

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

The combination of a revolving laying device, F, with a thread-spooling guide, substantially as specified.

EUGENE L. MANCHESTER.
JOHN A. BOLEN.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.