J. E. ATWOOD.

Thread-Guide for Spooling-Machines, &c.

No. 221,268. Patented Nov. 4, 1879.

Fig. 1.

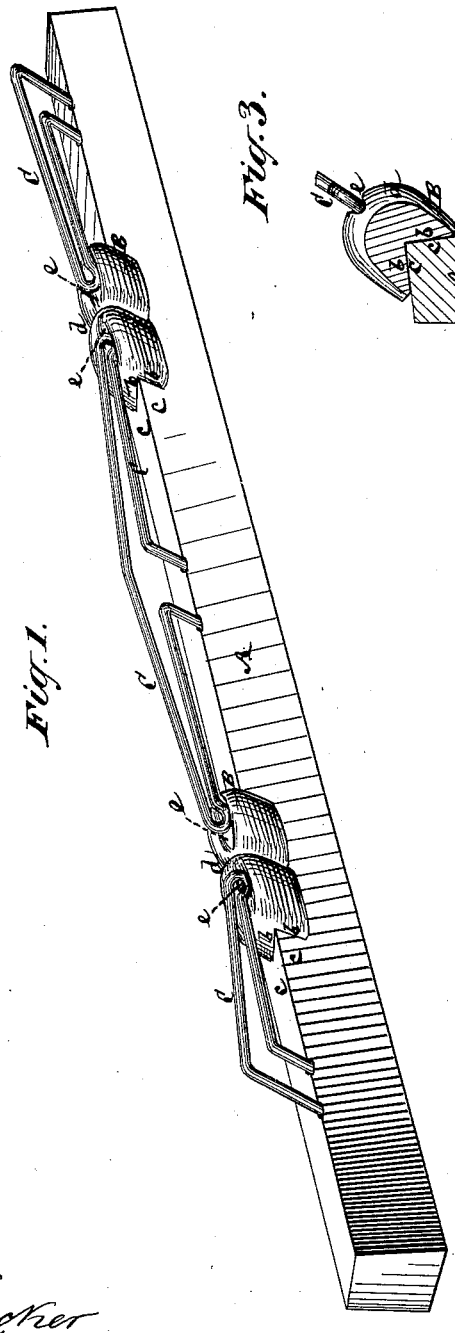


Fig. 3.

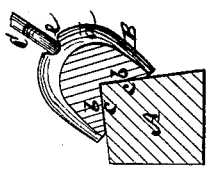
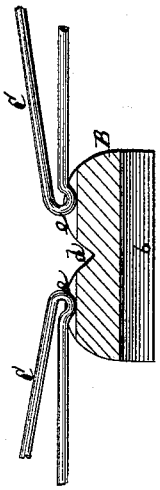


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN E. ATWOOD, OF STONINGTON, CONNECTICUT, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO EUGENE ATWOOD, OF SAME PLACE.

IMPROVEMENT IN THREAD-GUIDES FOR SPOOLING-MACHINES, &c.

Specification forming part of Letters Patent No. **221,268**, dated November 4, 1879; application filed January 18, 1879.

To all whom it may concern:

Be it known that I, JOHN E. ATWOOD, of Stonington, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Thread-Guides for Spooling and Winding Machines, of which the following is a description, reference being had to the accompanying drawings, which form part of this specification.

This invention is applicable to various machines for winding or spooling silk and other threads in which guides arranged upon a traverse-bar are used to secure a uniform or even laying of the thread upon the spool or take-up bobbin.

The invention consists in the combination, with the traverse-bar, of a thread-guide of glass or other suitable material, of novel construction, and in novel means of securing the same to the traverse-bar, whereby convenient provision is afforded for its adjustment lengthwise of the bar, to bring it in proper relation to the spool or bobbin onto which it is to direct the thread, and whereby, also, its easy removal and replacement are permitted, and it is rendered reversible, to present new wearing-surfaces after having been partly worn out, and also is restrained from being displaced or shifting in a transverse relation to the traverse-bar.

In the accompanying drawings, Figure 1 represents a view, in perspective, of a traverse-bar of a winding-machine having my invention applied. Fig. 2 is a longitudinal section of a thread-guide on said bar and certain means of holding said guide to its place, and of conducting the thread to the guide; and Fig. 3 is a transverse section through the traverse-bar and guide.

A is the traverse-bar of a thread winding or spooling machine, provided with any desired number—that is, one or more—of thread-guides B, which are preferably made of glass, to combine durability with a smooth running of the silk or thread over them. These guides are of a V or saddle shape construction on their bases or backs *b b*, to provide for their being seated on or against and receiving within them the angular sides *c c* of the bar to which the backs of said guides correspond. Such guides, which are constructed with a thread-guiding groove, *d*, in their faces, are held firmly to the bar by means of spring-holders C. These spring-holders C may be made of wire, and are attached at their fast end or ends to the bar and press at their free end or ends on the guides B within longitudinal grooves *e*, which are arranged above and on opposite sides of the thread-guiding grooves *d* in the faces of the guides. Said spring-holders C are set inclining downward or inward from their back or fast ends to the thread-guiding grooves *d* of the guides B, whereby they are not only made to hold the guides to their places on the bar, but also to lead or conduct the thread into the grooves *d*. Furthermore, the guides B, being simply held to their places on the traverse-bar by the spring-holders and thread-conductors C, may be slipped along or adjusted lengthwise of said bar to bring them into proper relative positions with the take-up bobbins without having to unfasten and refasten screws used in guides of a different construction to hold the latter to their places, thus doing away with a difficulty heretofore experienced of using thread-guides made of glass, and providing for a much quicker adjustment of the guides than when screws are used to secure them. Again, these thread-guides, which have a large wearing-surface, can, by reason of the angular construction of their backs *b*, fitting the angular sides *c* of the traverse-bar A, be readily reversed end for end upon the bar, and be easily removed from under the spring-holders and thread-conductors and replaced by other guides, when necessary.

This angular construction of the backs *b b* of the thread-guides also serves, when said guides are combined with and applied to the traverse-bar, to cause two adjacent sides of said bar to hold the thread-guides from shifting in a transverse relation to the bar, thereby contributing to their steadiness on the latter.

I claim—

The combination, with the traverse-bar, of one or more thread-guides having their backs of a V or saddle shape construction to fit the said bar, and having longitudinal grooves in their faces, and spring-holders secured to the said bar and arranged to enter the said longitudinal grooves, and constructed to form conductors to conduct the thread to the said guides, essentially as described.

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Witnesses:

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