

DeW. C. HILL.

Guides for Winding-Machines.

No. 134,888.

Patented Jan. 14, 1873.

Fig: 1

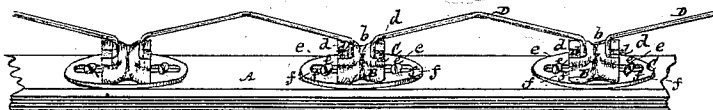


Fig: 3

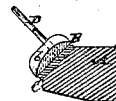


Fig: 2

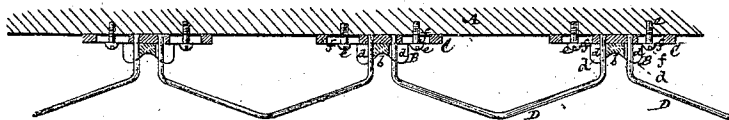
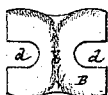


Fig: 4



Witnesses:
Geo. W. Hays
Geo. F. Hays

Dewitt C. Hill
per Brown & Allen
Attorneys

UNITED STATES PATENT OFFICE.

DE WITT CLINTON HILL, OF WINDHAM, CONNECTICUT.

IMPROVEMENT IN GUIDES FOR WINDING-MACHINES.

Specification forming part of Letters Patent No. 134,888, dated January 14, 1873.

To all whom it may concern:

Be it known that I, DE WITT C. HILL, of Windham, in the county of Windham and State of Connecticut, have invented a new and useful Improvement in Guides for Winding and Spooling Machinery; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a plan view of a traverse-bar having my improvement applied; Fig. 2, a longitudinal section of the same; and Fig. 3, a transverse section at the line *x x*. Fig. 4 is a face view of one of the thread-guides detached.

This invention relates to traverse-bars of winding and spooling machinery generally, but more particularly to the traverse-bars of machines for winding raw silk; and consists in a peculiar construction of glass thread-guides in combination with inclined flexible wire conductors for directing the silk onto the guides, said conductors serving to hold the glass guides to their places free from all liability to breakage, and being secured at their ends to plates which are adjustably attached to the traverse-bar, whereby provision is made, by the elasticity of the conductors, for adjusting, lengthwise of the bar, any one or more of the thread-guides in a connected line of guides and conductors, to vary the place of distribution of the silk by the motion of the traverse-bar. Heretofore it has been difficult to secure glass thread-guides, owing to the liability of their eyes to breakage, and no such adjustment of them has been feasible; but the advantage of glass guides for raw silk, owing to their freedom from cutting as compared even with hardened steel, is well understood.

Referring to the accompanying drawing, A represents a traverse-bar in part, and B B grooved glass thread-guides thereon, over which the raw silk is passed or run. These guides are of a curved form in direction of their grooves *b*—that is, on their tops or faces—but flat underneath where they rest upon plates C C, and each guide is made with loop-like spaces or openings, *d d*, in its sides to receive the ends of the double or reversely inclined wire conductors D D, which direct the silk onto the guides, and also serve to keep the latter to their places on the traverse-bar. Said conductors D D are riveted at their ends to the plates C C, each conductor connecting two adjacent plates, thus forming a connected line of thread-guides with intervening conductors. The plates C C are secured to the traverse-bar by screws *e e* or their equivalents, arranged to pass through slots *f f* in the plates, said slots running in direction of the length of the bar. By these means and the flexibility of the wire conductors D D, any one or more of the thread-guides may be shifted longitudinally on the traverse-bar, by crowding or spreading the conductor or conductors, without any liability of breaking the glass guide or guides thus being adjusted.

What is here claimed, and desired to be secured by Letters Patent, is—

The glass thread-guides B B, constructed as described, in combination with the flexible wire conductors D D, the longitudinally adjustable or slotted plates C C, and the traverse-bar A, substantially as specified.

DE WITT CLINTON HILL.

Witnesses:

ELLIOT B. SUMNER,
GEO. W. MELONY.