

(No Model.)

C. E. BEAN.

YARN GUIDE FOR SPOOLING MACHINES.

No. 263,463.

Patented Aug. 29, 1882.

Fig 2.

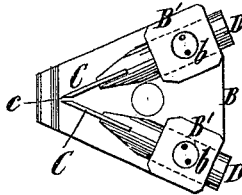
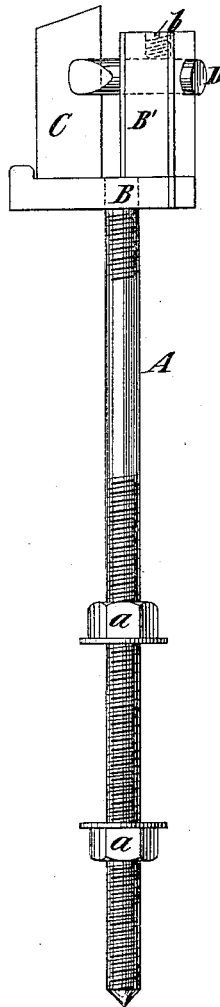


Fig 1.



Witnesses:

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CHARLES E. BEAN, OF FALL RIVER, MASS., ASSIGNOR OF TWO-THIRDS TO
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YARN-GUIDE FOR SPOOLING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 263,463, dated August 29, 1882.

Application filed March 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BEAN, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Yarn-Guides for Spooling-Machines, of which the following is a specification.

My invention relates to that class of yarn-guides which are used on yarn-spooling frames, and is applicable to winders or any other machine in which a guide is needed to clean waste from the yarn.

The guides heretofore in use, having their plates or blades commonly set at a right angle, or thereabout, to the yarn passing between them, act upon the yarn with a dragging or scraping action; and the object of my invention is to provide a guide which shall operate on the yarn with more of a cutting action, and will therefore act more effectively to clean the yarn from bunches and dirt and with less liability to breakage of the yarn.

The invention consists in the combination, in a yarn-guide, of two fixed converging plates or blades having knife-edges between which the yarn may be drawn in the opposite direction to that in which the said plates or blades converge.

The invention also consists in the combination, in a yarn-guide, of the fixed converging plates or blades, converging shanks therefor, and supports or bearings wherein the said shanks may be adjusted longitudinally and secured in different positions to give an opening of the desired width between the plates or blades.

The invention also consists in details of construction to be hereinafter described.

In the accompanying drawings, Figure 1 represents a side view of a guide of my improved construction, and Fig. 2 represents a plan thereof.

Similar letters of reference designate corresponding parts in both figures.

A designates the rod or stem, which is adapted to be inserted in the usual manner into the guide-rail of the machine, and which is provided with nuts *a*, whereby it may be secured in different vertical positions, as may be desired.

Upon the rod or stem A is supported a head or frame, which consists of a base-piece, B, and standards or uprights B', erected thereon, and arranged as shown in Fig. 2.

CC designate the two plates or blades, which form between them the opening through which the yarn passes. These plates or blades are represented as arranged vertically, and rest at their lower ends on the base-piece B. The plates or blades are provided with or attached to shanks D, which are inserted in holes in the standards or uprights B', and the said shanks are adapted to be adjusted longitudinally in said uprights, which form supports for them, and are secured in position after adjustment by set-screws *b*. Although the shanks D and plates are adjustable to vary the size of the slot or opening between the adjacent edges of the plates, the plates are always held rigidly while in operation, and hence may be regarded as fixed. The shanks D are so arranged that they converge toward the blades or plates C, as clearly shown in Fig. 2, and the said blades or plates also converge and form between them a narrow vertical slot or opening, *e*, and it will be readily seen that the said slot or opening may be varied in width by adjusting the shanks D longitudinally.

In order to prevent the operator or attendant from surreptitiously adjusting the plates or blades C to widen the slot or opening *e*, I may make the screws *b* of peculiar construction, so that they cannot be turned by an ordinary screw-driver, and, as here shown, the screws have holes in their heads, as shown in Fig. 2, instead of the usual nicks, so that they can only be turned by a screw-driver or wrench having pins fitted to said holes, and not with an ordinary screw-driver.

As clearly represented in Fig. 2, the edges of the plates or blades C are chamfered off or sharpened on their adjacent faces, so that they will more effectively clean the yarn.

In the operation of my improved guide the yarn is drawn through it in a direction opposite to that in which the plates or blades converge, and the said plates or blades act upon the yarn to remove the waste with more of a cutting action than a scraping or dragging action, as in the guides usually employed. The

guide is therefore more effective in its operation, and there is less liability of breaking the yarn.

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

1. The combination, in a yarn-guide, of two fixed converging plates or blades having knife-edges, and forming between them a slot or opening through which the yarn may be drawn in a direction opposite to the direction in which the said plates or blades converge, substantially as specified.

2. The combination, in a yarn-guide, of two fixed converging plates or blades having knife-

edges, converging shanks to which said plates or blades are attached, and supports wherein said shanks may be adjusted longitudinally to vary the opening between said plates or blades, substantially as specified.

3. The combination of the base-piece B, the standards or uprights B', the plates or blades C, and their converging shanks D, substantially as specified.

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Witnesses:

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