

F. S. CLARKSON.
Sash-Cord Guide.

No. 216,940.

Patented July 1, 1879.

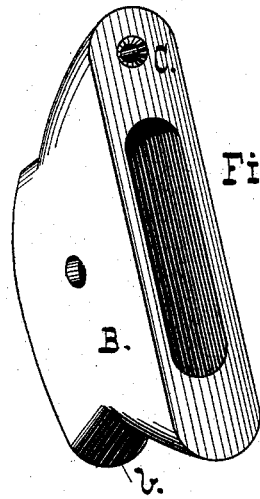


Fig. 2.

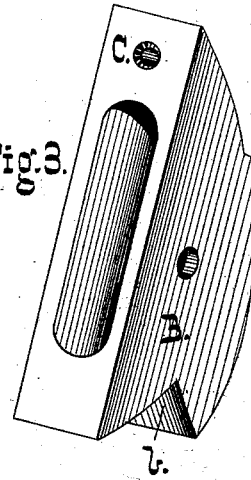


Fig. 3.

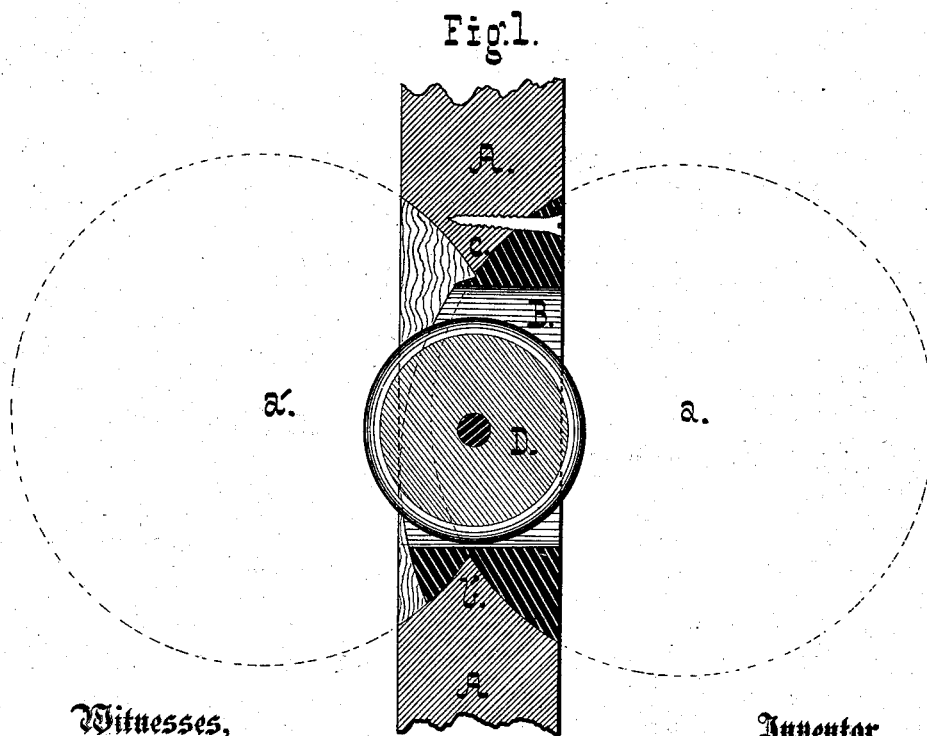


Fig. 1.

Witnesses,

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UNITED STATES PATENT OFFICE.

FRANK S. CLARKSON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN SASH-CORD GUIDES.

Specification forming part of Letters Patent No. **216,940**, dated July 1, 1879; application filed May 20, 1879.

To all whom it may concern:

Be it known that I, FRANK S. CLARKSON, of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Sash-Cord Guides; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical central sectional view of the device inserted in the window-frame; Fig. 2, a perspective view of one form of casing for holding the pulley, and Fig. 3 a similar view of a modified form of the same.

My invention relates to sash-cord guides of that class in which a special fastening device at one end is dispensed with by reason of a peculiarity of construction of the device designed to engage with the window-frame.

In reissued Letters Patent No. 8,586, dated February 18, 1879, is described a sash-cord guide having a rounded and beveled lower end, the device being adapted for insertion in a machine made mortise-formed by a revolving bit having lateral cutting-edges, the bit or frame being caused to revolve about an axis at right angles to the plane of the frame.

The sash-cord guide about to be described possesses some features in common with the one described above; but the methods of insertion are radically different, the salient idea in both cases, however, being the adaptation of the guide to a mortise of predetermined shape, and not, as usual, the converse.

In the present case the mortise is formed by cutting away the frame from either side by means of circular saws or routing-disks, the frame being made to approach the saws, or vice versa, both mortises being formed at one operation by saws separated the proper distance. A machine for doing this work will form the subject of a separate application.

In the accompanying drawings, A is the window-frame, in which is formed the mortise, as shown, *a a'* being the positions of the saw-centers as the mortise is completed.

The bottom of the sash-cord guide B is provided with an entering wedge-shaped groove, *b*, adapted to fit upon the projection *b'* at the bottom of the mortise, the rear face of the sash-cord guide being formed at least at the upper end in the arc of a circle, and so meeting the front face. A perforation, C, is formed for the securing-screw, which enters the upper projection, *c*, of the mortise.

It is obvious that the periphery of the routing disk or saw may be made convex instead of flat, so that the ends of the guide will be rounded and be more symmetrical; but the principle of construction and insertion is the same.

It will be seen that the essential characteristics of the sash-cord guide incident upon the described mode of insertion consist in the re-entering groove in one end.

For a close and accurate fit it is desirable that the sides of this groove and the rear face at the end be curved in the arcs of the saw-circles. The sheave D may be pivoted to the rear of the perpendicular from the groove, so as to cause the weight of the sash and sash-weight to keep the device in the mortise independent of the screw; but this is not essential.

What I claim is—

1. A sash-cord guide having a re-entering groove in one of its ends, whereby it is adapted for engagement with a correspondingly-shaped projection in the end of the window-frame mortise, substantially as described.

2. A sash-cord guide having one end provided with a re-entering groove and the other perforated, as set forth.

3. A sash-cord guide having a re-entering groove in one end and its end faces rounded from side to side, as described.

Witness my hand this 12th day of May, 1879.

FRANK S. CLARKSON.

Witnesses:

R. D. WILLIAMS,
FRANK B. SLOAN.