

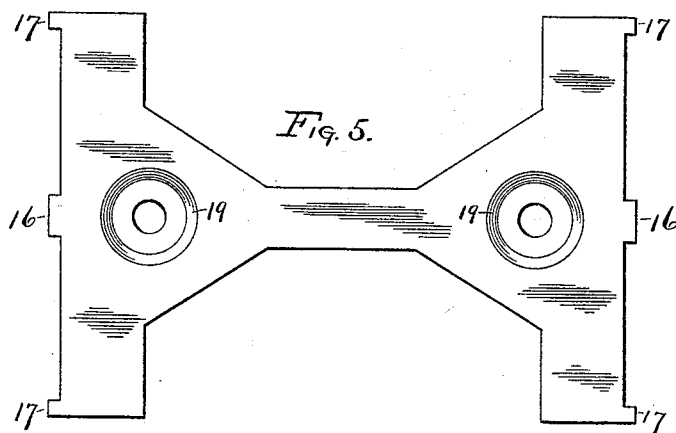
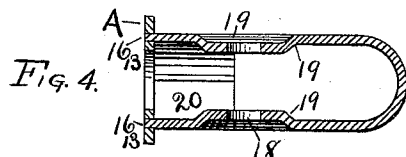
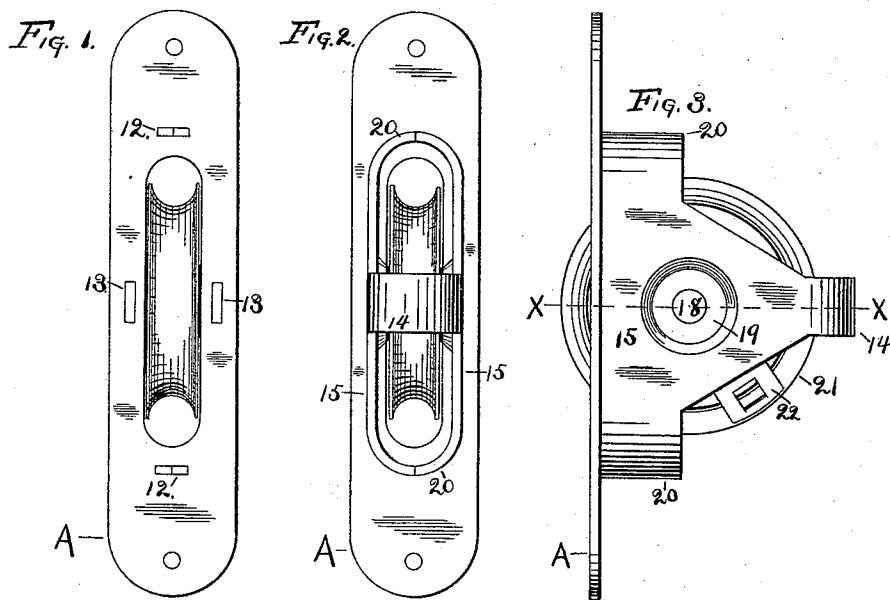
(No Model.)

2 Sheets—Sheet 1.

C. WOLCOTT.
SASH CORD GUIDE.

No. 487,812.

Patented Dec. 13, 1892.



Witnesses.

Edward, W. Bush,
F. H. Griswold.

Inventor:

Clayton Wolcott,
By James Shepard,
Atty.

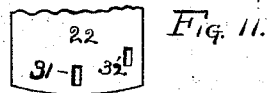
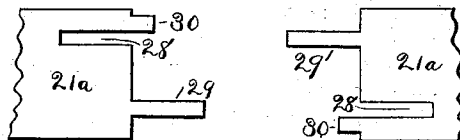
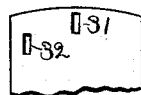
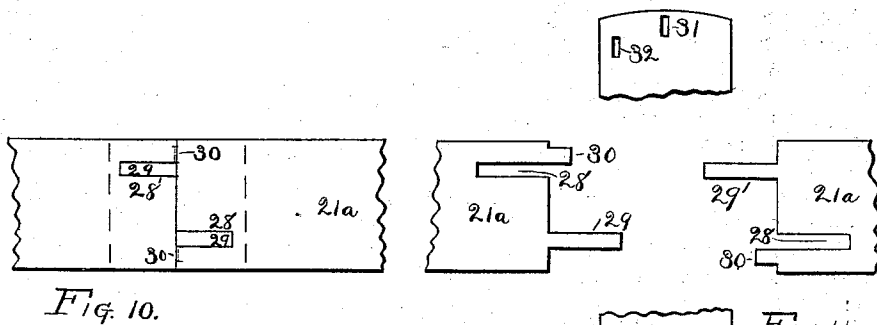
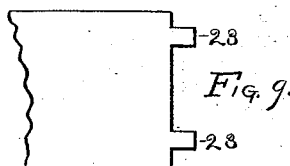
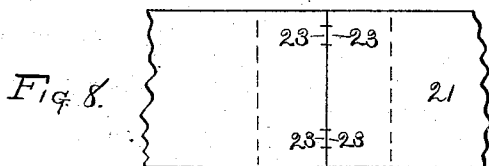
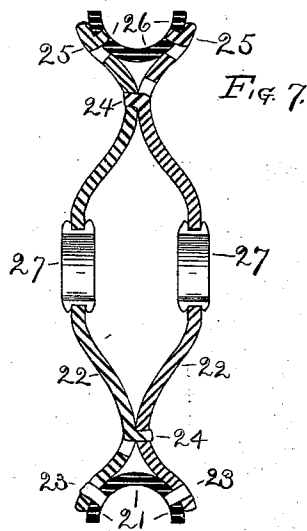
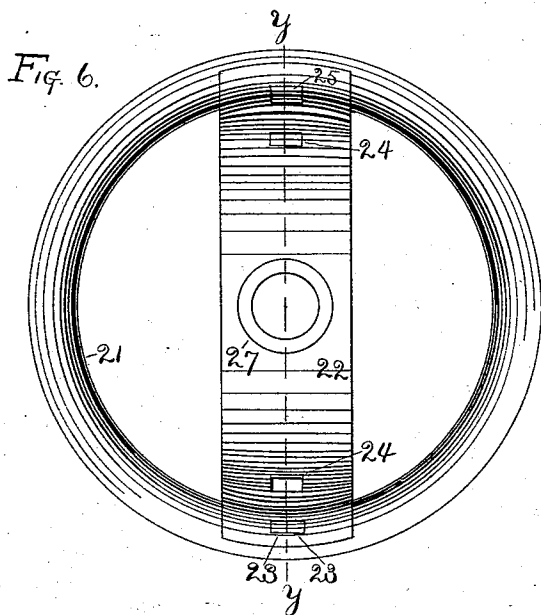
(No Model.)

2 Sheets—Sheet 2.

C. WOLCOTT.
SASH CORD GUIDE.

No. 487,812.

Patented Dec. 13, 1892.



Witnesses:
Edward W. Wash,
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UNITED STATES PATENT OFFICE.

CLAYTON WOLCOTT, OF HARTFORD, CONNECTICUT.

SASH-CORD GUIDE.

SPECIFICATION forming part of Letters Patent No. 487,812, dated December 13, 1892.

Application filed August 18, 1892. Serial No. 443,455. (No model.)

To all whom it may concern:

Be it known that I, CLAYTON WOLCOTT, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sash-Cord Guides, of which the following is a specification.

My invention relates to improvements in sash-cord guides; and the main object of my improvement is to construct a substantial and efficient article from sheet metal at a small cost.

In the accompanying drawings, Figure 1 is a front elevation of my sash-cord guide. Fig. 2 is a rear elevation of the same. Fig. 3 is a side elevation of the same. Fig. 4 is a horizontal section of the frame thereof on the line *x x* of Fig. 3. Fig. 5 is a plan view of the blank from which the main portion of said frame is cut. Fig. 6 is an enlarged side elevation of the pulley for my sash-cord guide. Fig. 7 is a section thereof on the line *y y* of Fig. 6. Fig. 8 is a diagram showing a portion of the pulley-rim. Fig. 9 is a diagram showing one end of said rim prior to bending the lugs. Fig. 10 is a diagram of a portion of the rim with a modified form of seam, and Fig. 11 is a diagrammatical view of the abutting ends of the rim and adjacent ends of the cross-braces.

A designates the face-plate of the frame of my sash-cord guide, the same being of an ordinary form and provided with perforations or mortises 12 and 13 for the reception of lugs by which to secure it to the sides of the frame. I form the sides of the frame with a narrow middle portion for forming the rear guard 14 of the frame and two wider portions for forming the cheeks or sides 15 of the frame, as shown in Fig. 5. I provide the cheek-blanks with full tenons or lugs 16 for entering the mortises 13 of the face-plate and half tenons or lugs 17 at each corner for entering the mortises 12 in the face-plate. I also perforate this blank to receive the pulley-axle 18, and I prefer to swage an inward depression or boss 19 around this hole for engaging the ends of the pulley-hub. The blank Fig. 5 is bent at its narrow middle portion to form the rear guard 14, and the parts having the half-tenons 17 are curved inwardly toward each other

to form the upper and lower guards 20. The blank Fig. 5 being thus formed into the sides of the frame, the tenons 16 and half-tenons 17 are placed in the respective mortises of the face-plate and the parts are secured together by riveting or heading said tenons, thereby producing the article shown in Figs. 1 to 4.

I form the pulley for my sash-cord guide in a peripheral rim 21 and cross-braces 22. This rim I form from a straight strip of sheet metal having lugs 23 at each end, said strip being bent into a ring or peripheral form and also curved in cross-section to conform to the desired curvature of groove. The cross-braces 22 are formed from flat strips of sheet metal, which are bent, as shown in Fig. 7, so that when placed together in pairs their middle portion is spread to form a pulley-hub, while their outer ends are also spread to form seats for the rim 21, while the parts between said outer ends and middle portion rest upon each other, where they are secured by suitable fastenings—as, for instance, a rivet or lug. I prefer to secure these braces together by means of integral lugs 24, the same being cut out on three sides from the body of one brace, then bent at right angles to pass through a proper mortise in the companion brace, as shown in Fig. 7, the ends of the lugs being headed to secure the two parts together. Near that end of the cross-brace that receives the abutting ends of the rim 21 I form a central mortise, and within this mortise the lugs 23 of said rim are received, as shown at the lower side of Figs. 6 and 7, the lugs being clinched or headed down on the outside of the braces. At the opposite ends of the double brace I form lugs 25, which are formed by cutting on three sides from the body of the brace and bending out at right angles, as shown at the upper part of Figs. 6 and 7, said lugs entering suitable mortises 26 in the rim. It is not necessary to head these lugs; but they may be headed, if desired, and their ends smoothed off in smoothing up the pulley-rim. I have shown only one set of these double braces, as one is all that is necessary to make an efficient pulley; but it is evident that this set of braces might be duplicated, if desired. The hub or middle portion of the braces may be merely perforated

for the reception of the pulley-axle; but in order to get a greater length of bearing I prefer to secure bushings 27 in said hub, as shown, the same being formed of a short section of tubing and slightly headed to hold them in place.

In Figs. 6, 7, and 8 I have represented the abutting ends of the rim as extending squarely across; but by a slight modification these ends may be formed so as to make the joint or abutting seam on an angular line instead of a straight one. Such a modification is represented in the rim 21^A in Figs. 10 and 11, Fig. 10 showing the abutting ends of the rim, with the edges of the cross-braces indicated by broken lines, while Fig. 11 shows the ends of said cross-braces at the top and bottom portion of the figure and the abutting ends of the rim 21^A before the fastening-lugs have been bent. It will be seen that each end of the rim has a notch 28 formed in it, while the corresponding portion of the opposite end has a tongue 29, whose length is in excess of the notch a distance sufficient to form a lug by bending the end at right angles to the surface of the rim. I also form on each end a lug 30, which is analogous to the lug 23 in the construction first described. The cross-pieces 22 at this end are each provided with a central mortise 31 to receive the lugs 30, the same as the central mortise at the lower ends of the brace in Figs. 6 and 7 receives the abutting lugs 23. I also form a second mortise 32 for receiving the lugs formed by bending the ends of the tongues 29, so that the parts when secured together, as described, will show a seam such as is represented in Fig. 10.

While I prefer to secure the parts together by means of integral lugs, it is evident that so far as some features of my invention are

concerned ordinary rivets might be substituted for these lugs.

By my improvements I form the frame of my sash-cord guide from a single piece of sheet metal and the face-plate, the two being secured together by integral lugs and mortises, thereby forming a cheap and substantial frame. I also form the pulley of sheet metal in a cheap and efficient manner and with but little stock.

I claim as my invention—

1. In a sash-cord guide, the herein-described frame, consisting of the face-plate having perforations or mortises 12 and 13 and the sides or cheeks 15 15, with a narrow middle portion doubled upon itself and forming the rear guard 14, said sides or cheeks having the full lugs 16 secured within the side mortises 13 of the face-plate and the half-lugs 17 at each corner secured within the upper and lower mortises of said face-plate, substantially as described, and for the purpose specified.

2. In a sash-cord guide, the pulley consisting of a peripheral rim with abutting ends and a pair of cross-braces extending diametrically across the pulley from said abutting ends, the same being mechanically secured together, substantially as described, and for the purpose specified.

3. The herein-described pulley, consisting of the peripheral rim, a pair of cross-braces bent as described and arranged within said rim, and integral lugs and mortises for securing the parts together, substantially as described, and for the purpose specified.

CLAYTON WOLCOTT.

Witnesses:

JAMES SHEPARD,
EDWARD W. BUSH.