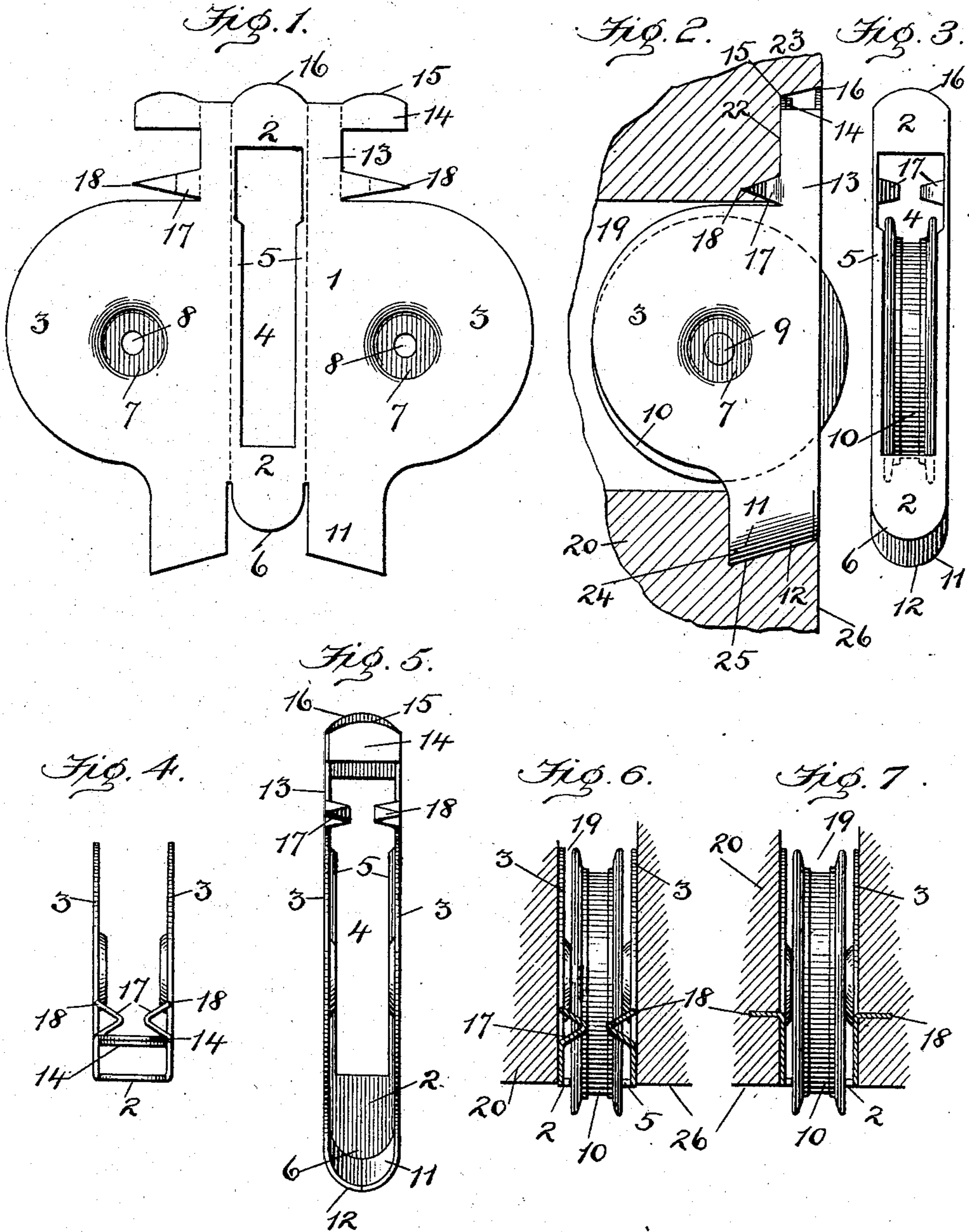


No. 840,265.

PATENTED JAN. 1, 1907.

F. E. SLOAN.  
SHEET METAL PULLEY CASING.  
APPLICATION FILED MAR. 21, 1906.



Inventor

Witnesses  
Edwin L. Bradford  
J. Ferd. Vogt.

Francis Eugene Sloan

Mann & Co.  
Attorneys

# UNITED STATES PATENT OFFICE.

FRANCIS EUGENE SLOAN, OF BALTIMORE, MARYLAND.

## SHEET-METAL PULLEY-CASING.

No. 840,265.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed March 21, 1906. Serial No. 307,154.

*To all whom it may concern:*

Be it known that I, FRANCIS EUGENE SLOAN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Sheet-Metal Pulley-Casings, of which the following is a specification.

My invention relates to a housing or casing for sash-pulleys.

The object of the invention is to provide an improved construction of casing composed of a single piece of sheet metal, being cut or stamped from a blank, and to provide securing devices formed integrally therewith that will enable the casing to be quickly attached to the window-frame and securely held against movement in either an inward or outward direction.

Another object of the invention is to provide a construction of securing devices that may be driven into the woodwork by a single operation and which will serve to draw the casing to a proper position while being driven into place.

Other objects and advantages arising from the invention will be hereinafter pointed out and made the subject of claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a view of the flat blank as cut from a piece of sheet metal. Fig. 2 is a side elevation of the casing formed from the blank and fitted into a mortise in a window-frame. Fig. 3 is a front elevation of the casing. Fig. 4 is a top plan view of the same with the pulley removed. Fig. 5 is a rear elevation of the same. Fig. 6 is a horizontal section through a portion of a window-frame and also through the housing and shows the latter inserted in the mortise provided in the frame and in position to be secured thereon, and Fig. 7 shows a similar view with the securing devices and housing in the permanent position.

Referring to the drawings by numerals, 1 designates the blank as cut from a sheet of metal and which comprises a central face portion 2, which forms the front wall and side cheek-pieces 3, which latter are to be folded or bent backward at right angles to the face to form the side bearings, in which a pulley is to be mounted.

The face portion or front wall of the casing is provided with a central vertical slot 4 and laterally-projecting vertical flanges 5, which serve to stiffen the casing. Below the slot

the front wall has a rounded end 6, which is shorter than the sides of the casing.

The cheek-pieces 3 of the casing are provided with a central circular depression 7, in which a perforation 8 is provided to receive the ends of a pin 9, which serves as a shaft on which the pulley 10 is mounted. At the lower ends 11 the side walls of the casing become gradually longer as they recede from the front wall, and these ends are curved toward each other and form an inclined curved bottom surface 12.

Above the cheek-pieces 3 the casing is provided with hollow vertical side extensions 13, and at the extreme upper ends these side extensions are provided with laterally-extending flaps 14, which extend parallel with the front wall and overlap each other. The upper edges 15 of these flaps are arched or curved, as is also the upper edge 16 of the front wall; but the edge of said front wall has position in a plane above the edges of the flaps, as seen in Fig. 2.

Between the cheek-pieces 3 and the flaps 14 the side extensions 13 are each provided with pointed tangs 17, which are normally of a V shape and which lie in a vertical plane wholly between the side walls, so that their point ends 18 will not project beyond the plane of said side walls while the casing is being inserted in the mortise in the window-frame. It will be noted that a line drawn from the upper edge 16 of the front wall to the upper edge 15 of the flaps will be parallel with the inclined bottom surface 12 at the lower end of the casing. This construction enables the casing to be readily fitted into a mortise in the frame and to be securely held therein by the tangs 17.

By reference to Figs. 2, 6, and 7 the operation of the tangs will be clearly understood. A mortise or slot 19 is cut into the window-frame 20, and above said mortise the frame is provided with a recess 22, with a beveled upper end 23, and the side extension 13 of the casing snugly fits into said recess. Below the mortise the frame has a recess 24, with an inclined bottom surface 25, so as to receive the lower curved ends 11 of the side walls. When the casing is inserted in the mortise, the upper side extension will enter the recess 24 and the lower curved ends will enter the lower recess 24, and when the casing has been inserted in the mortise to a point almost flush with the vertical outer surface 26 of the frame 20, as seen in Fig. 6,

the tangs 17 will be simultaneously wedged apart by the insertion of a suitable tool through the slot 4 in the front face portion 2 of the casing. The driving of the tangs laterally into the vertical sides of the mortise will draw the casing into the mortise until it is flush with the vertical surface 26 of the frame, and the use of screws or other securing devices is entirely avoided and the casing will be rigidly held in place.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A sheet-metal casing for sash-pulleys having a slotted face and parallel side cheek-pieces and also having a hollow vertical extension which extends above the cheek-pieces with securing-tangs formed integrally with and at opposite sides of the said extension and lying in a vertical plane between the side walls.

2. A sheet-metal casing for sash-pulleys

having a slotted front wall and parallel side cheek-pieces, and having hollow vertical extensions projecting above the cheek-pieces which are provided with laterally-extending overlapping flaps which project parallel with but spaced from the front wall and securing devices at said hollow extension.

3. A sheet-metal casing for sash-pulleys having a slotted front wall and parallel side cheek-pieces with a hollow extension projecting above the cheek-pieces and the front of the extension being higher than the rear thereof, said casing having its sides projecting below the front wall and increasing in length as they recede from the front wall whereby to form a hollow inclined bottom.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS EUGENE SLOAN.

Witnesses:

CHARLES B. MANN, Jr.,  
JOHN W. HEWES.