

J. H. FOOTE.
SASH CORD PULLEY.
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1,029,006.

Patented June 11, 1912.

Fig. 1.

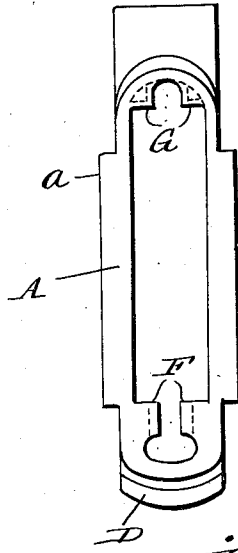


Fig. 2.

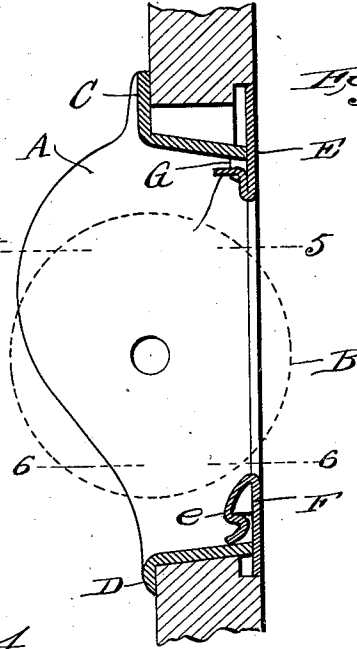


Fig. 4.

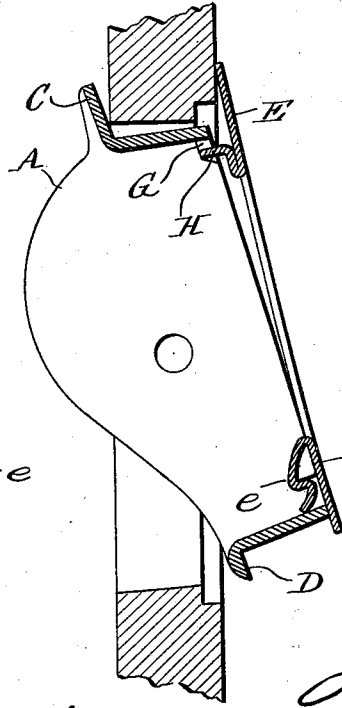


Fig. 3.

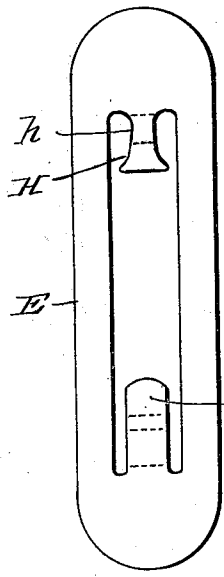


Fig. 5.

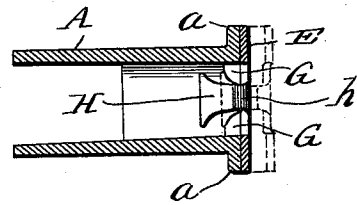
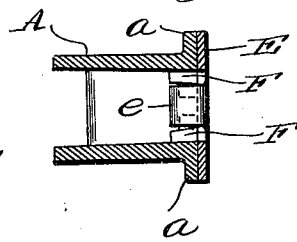


Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES H. FOOTE, OF CINCINNATI, OHIO.

SASH-CORD PULLEY.

1,029,006.

Specification of Letters Patent. Patented June 11, 1912.

Application filed December 23, 1911. Serial No. 667,555.

To all whom it may concern:

Be it known that I, JAMES H. FOOTE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Sash-Cord Pulleys; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and to the figures and letters of reference marked thereon.

This invention relates to sash cord pulleys of that type wherein the sheave bearing casing is adapted to be inserted in a properly formed aperture therefor in the window frame and to be held securely against dislodgment in any direction by fastening means forming a part of the sheave bearing casing and face plate, whereby the use of special fastening devices such as screws is entirely avoided and the device is adapted to be placed in position by a simple manipulation not requiring tools or special appliances, or access to the interior or weight box of the framing.

This invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be hereinafter described and pointed out particularly in the appended claims.

Referring to the accompanying drawings,—Figure 1 is a front elevation of a sheave bearing casing, with the face plate removed; Fig. 2 is a section in a vertical plane indicated by the dotted line 2—2 of Fig. 1, with a face plate mounted on the sheave bearing casing and the whole device shown in its proper position in a window frame, the sheave being indicated in dotted lines; Fig. 3 is a front elevation of the blank from which the face plate is formed; Fig. 4 is a sectional view in the plane of the section, Fig. 2, but illustrating the position assumed by the pulley in being inserted in the window framing; Fig. 5 is a section in substantially the plane indicated by the dotted line 5—5, Fig. 2, looking toward the upper end of the casing; Fig. 6 is a section on the plane indicated by the line 6—6 of Fig. 2, looking toward the lower end of the casing.

Like letters of reference in the several figures indicate the same parts.

The sash pulley forming the subject mat-

ter of the present application embodies in its construction features set forth in my contemporaneous applications, Serial Nos. 362,650 and 587,064, together with improved details of construction relating more particularly to the means whereby the face plate is mounted on the sheave bearing casing, and whereby the assembling of the parts and the application of the device to window framing are facilitated.

For convenience in illustration, the sheave bearing casing A in the accompanying drawings is shown as a casting within which there is journaled a sash cord sheave B, but it will be understood that in accordance with known practice the sheave bearing casing may be formed by other means than casting, and that the particular manner of supporting the sheave therein is not material insofar as the present invention is concerned.

The two side walls of the sheave bearing casing are substantially parallel, and at their front edges are provided with transversely extending flanges *a* adapted to seat in and bear against the window framing on opposite sides of the slot or seat for the pulley.

Extending upwardly from the upper end of the sheave bearing casing is a projection C, the forwardly directed face of which lies in substantially the plane of the inner face of the window frame, and when the parts are in their proper relative positions the forwardly directed face of the projection C is adapted to bear against the inner face of the framing to thereby prevent outward movement of the sheave bearing casing at its upper end. The space between the flanges *a* and the frame engaging face of the projection C is made sufficient to permit the sheave bearing casing to be inserted in its slot in the framing in an inclined position as shown in Fig. 4 and to swing inwardly about a center formed by the flanges bearing on the framing until the projection and the flanges fit respectively against the inner and outer faces of the framing when, by a bodily downward movement, the casing is seated in the bottom of the slot. In this position the flanges *a* will hold it against further inward movement while the projection C will hold its upper end against outward movement. To hold the lower end of the sheave bearing casing against outward movement, it is

preferably provided with a downwardly extending projection D, arranged diametrically opposite the projection C, and adapted to seat against the inner face of the window frame when the sheave bearing casing has been lowered to its seat in the framing, as indicated in Fig. 2 of the drawings. The oppositely extending projections C and D at top and bottom of the casing hold it securely against outward movement while the laterally projecting flanges *a* hold it against inward movement, so that the casing can only be dislodged or withdrawn from its slot in the framing after it has first been moved bodily upward or in a direction reverse to that in which it was moved into position.

In the preferred construction it will be understood that the flange *a* seat in the offset or rout in the framing and they preferably terminate at their upper ends below the level of the upper end of the projection C in order to permit of the pivotal action before referred to, and a bodily downward movement of the casing without permitting the projection C to be released from its engagement with the inner face of the framing above the slot.

To securely lock the sheave bearing casing down to its seat it is provided with a retainer, which, preferably also forms a facing plate to give a finished appearance to the device and which serves to close the front end of the opening in the slot above the sheave bearing casing after the latter has been dropped to its seat. This face plate is indicated in the accompanying drawings by the letter E and at its lower end it is preferably secured permanently to the lower portion of the sheave bearing casing while at its upper end stops are provided for limiting its outward movement. It is preferably made of resilient material and is adapted to spring back into its position indicated in Fig. 2, after it has been bent away to the position indicated in Fig. 4, during the insertion of the device in the window framing.

As a convenient method of securing the face plate in position, inwardly extending lugs F are formed in the lower portion of the casing, the ends of said lugs being cut away to form a channel in which a tongue *e* on the face plate may find its seat and said tongue is adapted to be bent around the projections F so as to securely lock the face plate thereto and to hold the face plate against movement in its own plane in any direction. At the upper end of the casing inwardly extending lugs G are formed, there being a space between said lugs for the passage of the neck *h* of a tongue or projection H. The head or end of the projection H is enlarged to prevent its passage between the lugs G; thus when the tongue is bent into the position indicated in Fig. 2 it will form,

in connection with said lugs, an effective stop for limiting the outward movement or bending of the face plate, as shown in Fig. 4.

The face plate preferably extends above and below the sheave bearing casing, as well as on each side, a sufficient distance to cover and conceal the flanges *a*. The slot in the window framing is routed out uniformly all the way around for the reception of the face plate, which is thus adapted to seat in the routed portion or recess and to lie flush with the face of the frame, in which position it prevents any upward movement of the sheave bearing casing and dispenses entirely with the necessity of using screws or other fastening devices. By springing the upper end of the face plate out of its seat in the window framing, the sheave bearing casing is released and may be moved bodily upward and its downwardly extending projection freed from engagement with the inner face of the window framing, so that the whole device may be readily withdrawn.

It will be noted that the upwardly extending end projection is longer than the lower projection and consequently when the casing is down to its seat both projections take a firm bearing against the inner face of the frame above and below the slot or opening.

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

1. A sash cord pulley embodying a sheave bearing casing having upwardly and downwardly extending projections on its inner side adapted to seat against the inner face of the window framing and laterally extending flanges on its outer side adapted to seat against the outer side of the window framing, said flanges extending upwardly a less distance than the said end projection, whereby the casing may be inserted in the framing in an inclined position and seated by a bodily downward movement with the projection in engagement with the framing, and a face plate extending above the front of the casing and having inwardly extending tongues above and below the sheave for coöperation with the casing to retain the face plate in position.

2. A sash cord pulley embodying a sheave bearing casing having upwardly and downwardly extending end projections on its inner side, the upwardly extending projection being longer than the downwardly extending projection and laterally extending flanges on the front of the casing extending upwardly a less distance than the upwardly extending projection, a face plate and interlocking projections at the top and bottom of the face plate and casing, the construction being such that the projections and flanges will seat against inner and outer faces of the window framing and the face plate will hold the casing down to its seat.

3. A sash cord pulley embodying a sheave bearing casing having rigid projections on its inner side for seating against the inside of the window framing to prevent outward movement of the casing, and flanges on the outer side for preventing inward movement of the casing, a face plate, interlocking projections rigidly connecting one end of the face plate and casing and stops for limiting the outward movement of the opposite end of the face plate, whereby one end of the face plate may be moved away from the casing to insert the pulley in the window framing.

4. A sash cord pulley embodying a sheave bearing casing having rigid top and bottom projections on its inner side, the top projection being longer than the bottom projection and a face plate of resilient material rigidly secured at the lower end and loosely secured at its upper end to the front of the casing, whereby the face plate may be sprung away from the casing at the upper end for inserting the pulley in the window framing.

5. A sash cord pulley embodying a sheave

bearing casing having rigid top and bottom projections on its inner side adapted to seat against the inner face of the window framing, the upper projection being longer than the lower projection, and projections within the casing at top and bottom, a resilient face plate rigidly connected with said internal projections at one end and loosely connected with the internal projections at the opposite end of the casing.

6. A sash cord pulley embodying a sheave bearing casing having rigid top and bottom projections on its inner side adapted to seat against the inner face of the window framing, the upper projection being longer than the lower projection and internal projections at top and bottom of the casing, a face plate and inwardly extending tongues at top and bottom of the face plate cooperating with the said internal projections for securing the face plate to the front of the casing.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."