

J. VETTERLEIN.
 SASH PULLEY-CASE.

No. 185,369.

Patented Dec. 12, 1876.

Fig. 1.

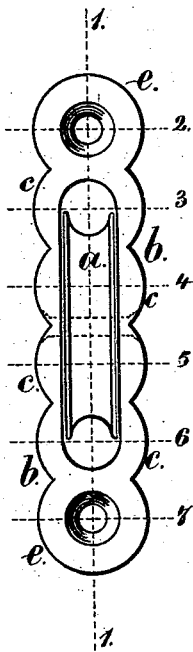
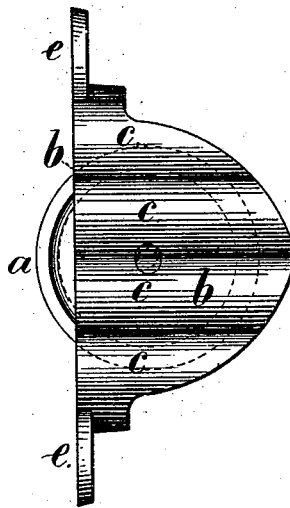


Fig. 2.



Witnesses

Charl. St. Smith
 Harold Ferris

Inventor.

John Vetterlein.

per Lemuel W. Ferris
 atty.

UNITED STATES PATENT OFFICE.

JOHN VETTERLEIN, OF PLAINFIELD, NEW JERSEY.

IMPROVEMENT IN SASH-PULLEY CASES.

Specification forming part of Letters Patent No. **185,369**, dated December 12, 1876; application filed March 22, 1876.

To all whom it may concern:

Be it known that I, JOHN VETTERLEIN, of Plainfield, in the county of Union and State of New Jersey, have invented an Improvement in Cases for Sheaves of Sashes, Doors, &c., of which the following is a specification:

It is usual in the manufacture of sash-pulleys, and sheaves for sliding doors, to employ a case with a flange all around the outer edge, and this flange is let into the surface of the wood of the window-frame or door so that the flange is flush. This operation involves considerable work, and it is difficult to do, as the body portion of the case is recessed into the wood-work.

In some instances the ends of the sheave-case have been the segment of a cylinder, but the sides were flat; and in other cases the flange that is let into the surface of the wood has been composed of segments of circles, but the case itself has had flat sides.

I make use of a case having its exterior surface corrugated in the form of segments of cylinders fitting into a mortise formed by boring a row of holes. This construction lessens the work of fitting in the case, strengthens the case itself, and causes the strain upon the axis of the pulley to come upon the corrugated surfaces of the mortise contiguous to the axis, instead of being taken upon the ends or flanges of the case.

In the drawing, Figure 1 is a front view of the case, and Fig. 2 is a side elevation of the same.

The sheave *a* is usually grooved around its periphery, and it is to be of greater or less size, according to the use to which the same is to be put, and the case is made of a proper size internally for receiving the same.

My improvement relates to the case *b*, made with an external surface composed of segments of cylinders *c* at opposite sides, so placed that they are adapted to enter mortises formed by holes bored in the wood, such

holes intersecting, so that the interior of the opening made in the wood will be corrugations corresponding with the corrugations upon the surface of the case. The attaching-ears *e e* are sections of a cylinder, with screws passing axially through the same.

To insert this case it is only necessary to lay off upon a straight central line, 1 1, the distance corresponding to the cross-lines 2 3 4 5 6 7, and bore the two end holes 2 and 7 to a gaged depth for the reception of the flanges or ears *e*; then to bore the other holes of the depth necessary to receive the pulley-case. Of course a bit of the proper diameter is used, and the holes cut into each other so the pulley-case can be inserted immediately that the holes have been bored. By this means there is not any occasion to use a chisel in making the opening for the pulley-case, and the corrugations on the side of the case, matching the corrugations in the bored mortise-hole, support the case reliably, and prevent undue strain coming upon the ears *e*.

The metal of the case is to be largest at the outer portions of the corrugations, as shown, so that the case will wedge into the mortise as the same is driven in.

The inner portion of the case is preferably plain, so as not to require as much weight of metal as it would if the segmental corrugations extended the entire width of the case.

I claim as my invention—

The sash-pulley case *b*, having sides formed entirely of segments of circles *c*, combined with the face-plate, whose edges and ends are also parts of corresponding circles, as set forth.

Signed by me this 21st day of March, A. D. 1876.

JOHN VETTERLEIN.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.