

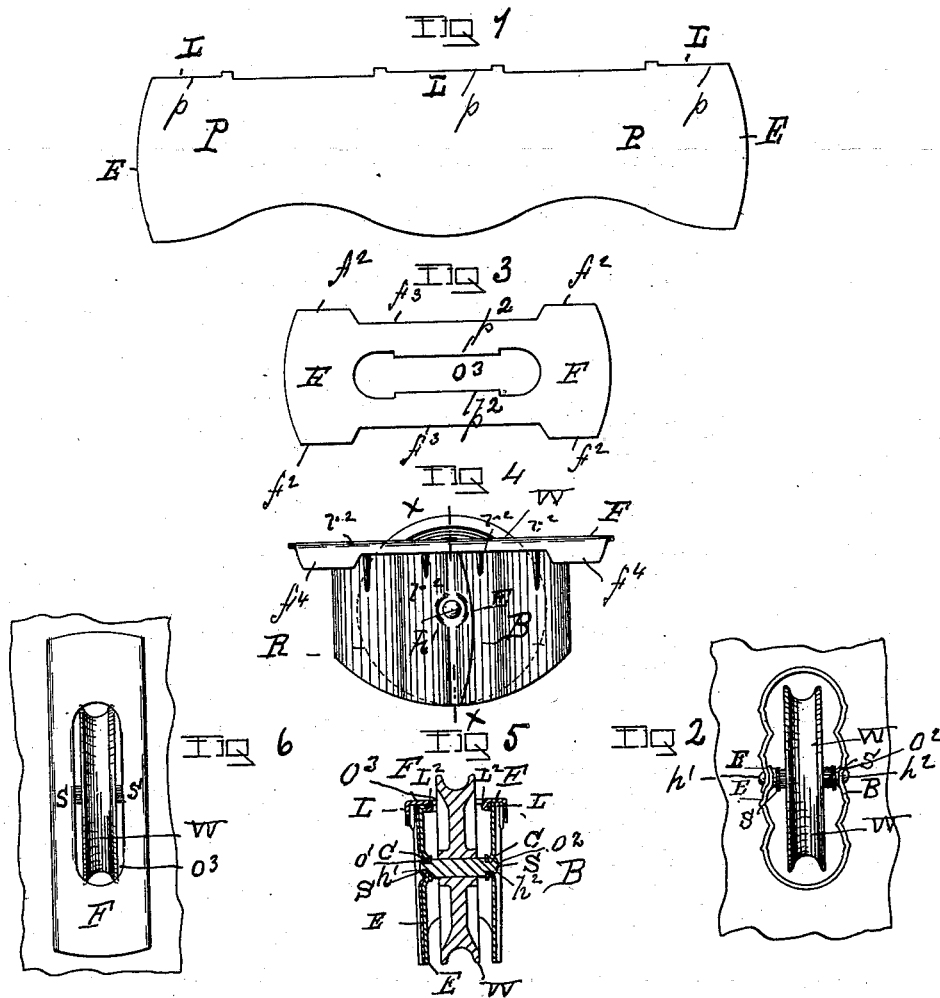
No. 647,842.

Patented Apr. 17, 1900.

W. T. KELLOGG.
SASH PULLEY.

(Application filed Aug. 4, 1899.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

WARREN T. KELLOGG, OF LANSINGBURG, NEW YORK.

SASH-PULLEY.

SPECIFICATION forming part of Letters Patent No. 647,842, dated April 17, 1900.

Application filed August 4, 1899. Serial No. 726,091. (No model.)

To all whom it may concern:

Be it known that I, WARREN T. KELLOGG, of the village of Lansingburg, county of Rensselaer, and State of New York, have invented new and useful Improvements in Sash-Pulleys, of which the following is a specification.

My invention relates to that class of sash-pulleys in which the cases or body parts are made from a stamped-out plate of sheet metal; and my improvements upon this class of sash-pulley cases relates to one of the latter, made from sheet metal, which is bent to have its ends lap past each other at one of the case or body sides and to be thereat secured by being riveted to one of the ends of the pulley-axle, with the other end of the latter riveted to the opposite side of the case, thus forming the latter with solid ends.

My invention also relates to the construction of a face-plate adapted to connect with a sheet-metal pulley case or body by means of a lip formed on the inner opposite edges of the latter at its top, and a lip formed on each of the opposite sides of the pulley-passage formed in the face-plate, and the latter having blades at each of its corners adapted to enter the wood when the sash-pulley is driven into its socket in the sash, and thus dispense with nails and screws thereat.

Accompanying this specification to form a part of it there is a plate of drawings containing six figures, illustrating my invention in application, with the same designation of parts by letter-reference used in all of them.

Of the illustrations, Figure 1 shows a plan view of the plate from which the pulley case or body is made. Fig. 2 is a top view of the sash-pulley, shown as inserted in a socket formed in a block of wood and as made without a face-plate. Fig. 3 is a plan view of the plate of sheet metal from which the face-plate is formed and bent into shape. Fig. 4 is a side elevation of the sash-pulley and combined face-plate. Fig. 5 is a section taken on the line $x x$ of Fig. 4. Fig. 6 is a top view of the combined sash-pulley and face-plate, shown as inserted in a socket formed in a block of wood.

The several parts of the sash-pulley and face-plate thus illustrated are designated by letter-reference, and the function of the parts is described as follows:

The letter P designates a plate that is stamped from a piece of sheet-steel or other sheet metal, and the letters $p p$ designate projections on what is the upper edge of the plate when bent into shape, and which projections, after the case has been formed, are bent inwardly from each of the opposite sides of the case to be at right angles to the sides of the latter, and thus form the lips L of the case.

The letters R designate convexities, which are rounded outwardly from the sides of the body part or case, and each of these convexities is provided with a blade or rib r^2 , projected from its outer side at its top.

The letters E E designate the ends of the plate P, and these ends, when the plate is bent into shape to form the body part or case, are so arranged as to lap past each other at one of the pulley-case sides, as shown at Fig. 2.

The letter S designates the pulley-axle on which the pulley proper, W, is mounted to turn. Where the axle extends beyond the case through the lapping ends E E it is at h riveted to hold the overlapping ends as connected, and the other end of the axle where extending beyond the opposite side of the case at h^2 is also riveted or headed, thus giving to a pulley-case made from sheet metal all that advantage which comes from having solid ends and the strength which the latter have when being driven into a socket.

The letter F designates the face-plate, which is shown in the blank or sheet form at Fig. 3, and as bent into shape and combined with the body part or case at Figs. 4, 5, and 6.

The letters $p^2 p^2$ designate lip-forming projections which are constructed on the inner and opposite sides of the opening O^3 , made in the face-plate for the pulley W. Each of these projections p^2 is made wide enough on its inward projection from the sides of the opening to be turned downwardly and laterally, as lips L^2 , each adapted to underlap and hold as grasped one of the lips L of the body part within its infold. As thus constructed and arranged the three thicknesses of metal formed by the overlapping and underlapping lip L^2 of the face-plate and the intermediately-grasped lip L of the body part at each side of the latter serve to strengthen the case, so that when driven into a socket the side walls

of the case will not be sprung inwardly so as to interfere with the working of the pulley.

The letters f^2 designate projections that are formed on the edge of the plate F at all of its corners, and the letters f^3 designate the edge of the plate at each side where between the projections f^2 . When the face-plate is being shaped for connection, these corners f^2 , where projecting, as well as the edge of the plate F, where between the corners, as indicated at f^3 , are turned down, so as to be at right angles to the top of the face-plate, and thus the projections f^2 form blades f^4 , of which there are two at each end of the plate. When the connected face-plate and case or body part are being inserted in a socket formed in a window-sash, the blades f^4 are driven into the wood for the purpose of connection, thus dispensing with the use of nails or screws.

Apart from the manner of constructing the face-plate with the blades f^4 and the manner of constructing them to connect with the cases I make no claim. I am also aware that the convexities R and the ribs r^2 are old and well-known features of sash-pulley construction.

Inasmuch as my improved pulley-case made from sheet metal with solid ends and with the lapping ends of the bent sheet metal secured where lapping past each other at one of the case sides by a riveting-head formed on the axle could be used without a face-plate, I do not limit my invention as relating to the construction of the pulley-case to its combination with a face-plate; neither do I limit my improved construction of a pulley face-plate having the blade form corners and the lips on the inner edge of the pulley-opening to connect with the lips on the case to their combination with the pulley-case which I illustrate it connected.

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

1. A sash-pulley case made from a piece of sheet metal bent to form the case or body part

with solid ends; with the ends of the plate lapping past each other at one of the case or body sides; and having a pulley-axle provided with a riveting-head at each end; with one of the riveting-heads passed through the lapping ends of the plate, and thereat riveted, and the other head passed through the opposite side of the body or case and thereat riveted, substantially as and for the purposes set forth.

2. In a sash-pulley the combination with a case or body part having an inturned lip or projection on each of the opposite edges of its top; of a face-plate having lips projected inwardly from each of the opposite sides of the pulley-passage, with each of such last-named lips adapted to be turned downwardly and laterally to underlap and grasp one of the lips or projections formed on the case or body part, and with the ends of the face-plate at each of its corners provided with a downturned blade, whereby when the case is driven into a socket each of the blades will enter the wood, and hold the parts as connected, substantially as shown and described.

3. The combination with a sash-pulley case made from a piece of sheet metal and bent to form the case with solid ends, and having a lip projecting inwardly from what are each of the opposite sides of the case when bent into shape; and a face-plate provided with a central opening having a lip projected inwardly from each of its opposite sides and thereat arranged to be bent downwardly and laterally to underlap and grasp one of the lips of the body part or case, substantially as shown and described.

Signed at the city of Troy, New York, this 31st day of July, 1899, and in the presence of the two witnesses whose names are hereto written.

WARREN T. KELLOGG.

Witnesses:

W. E. HAGAN,
CHARLES S. BRINTNALL.