

No. 620,489.

Patented Feb. 28, 1899.

C. H. OCUMPAUGH.

SASH PULLEY.

(Application filed Dec. 14, 1896.)

(No Model.)

Fig. 3.

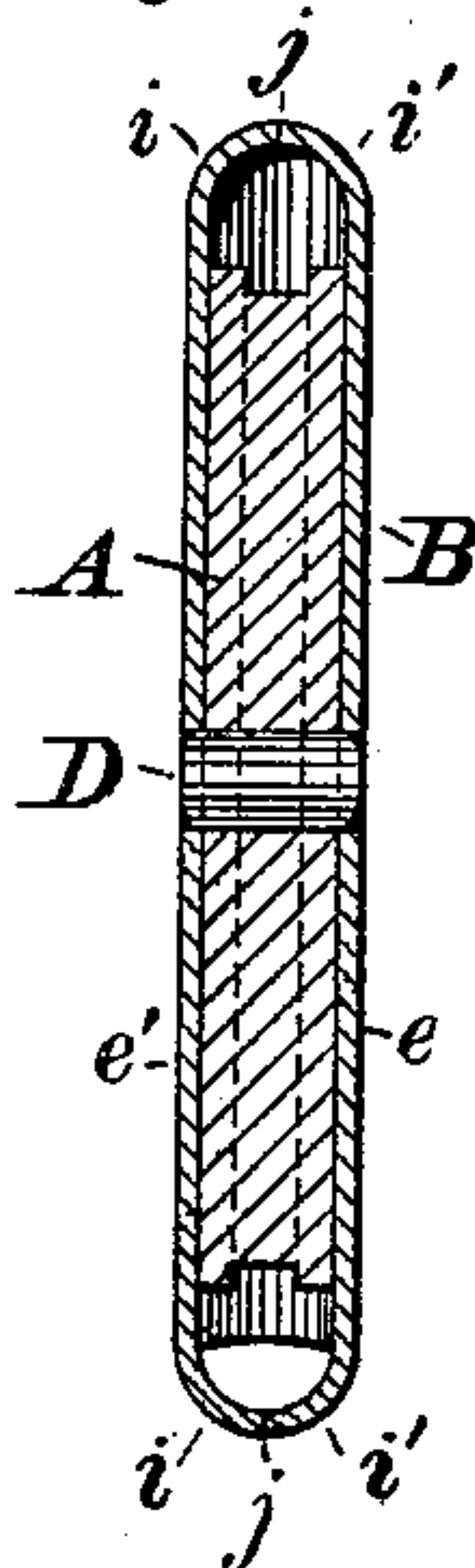


Fig. 1.

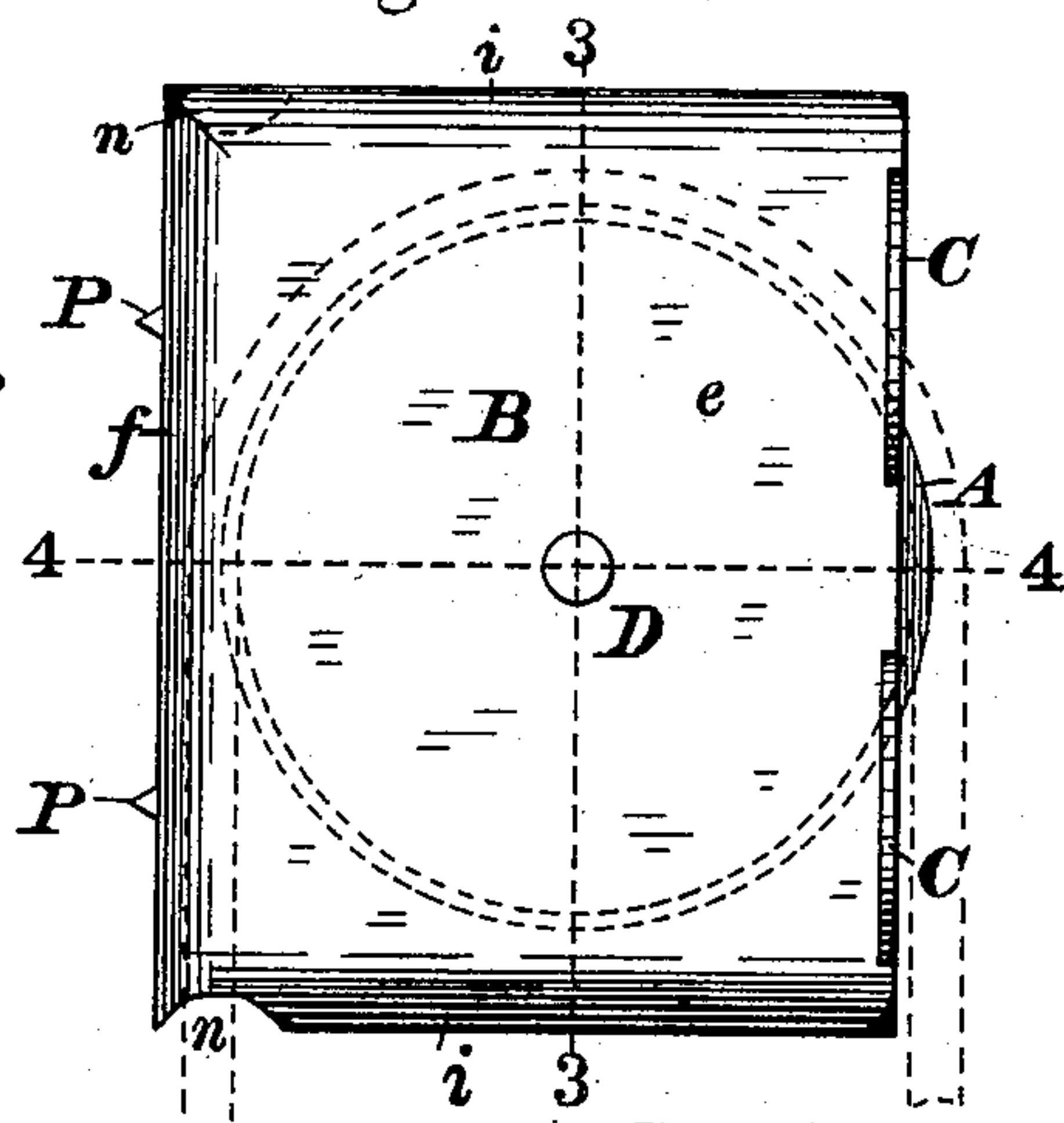


Fig. 2.

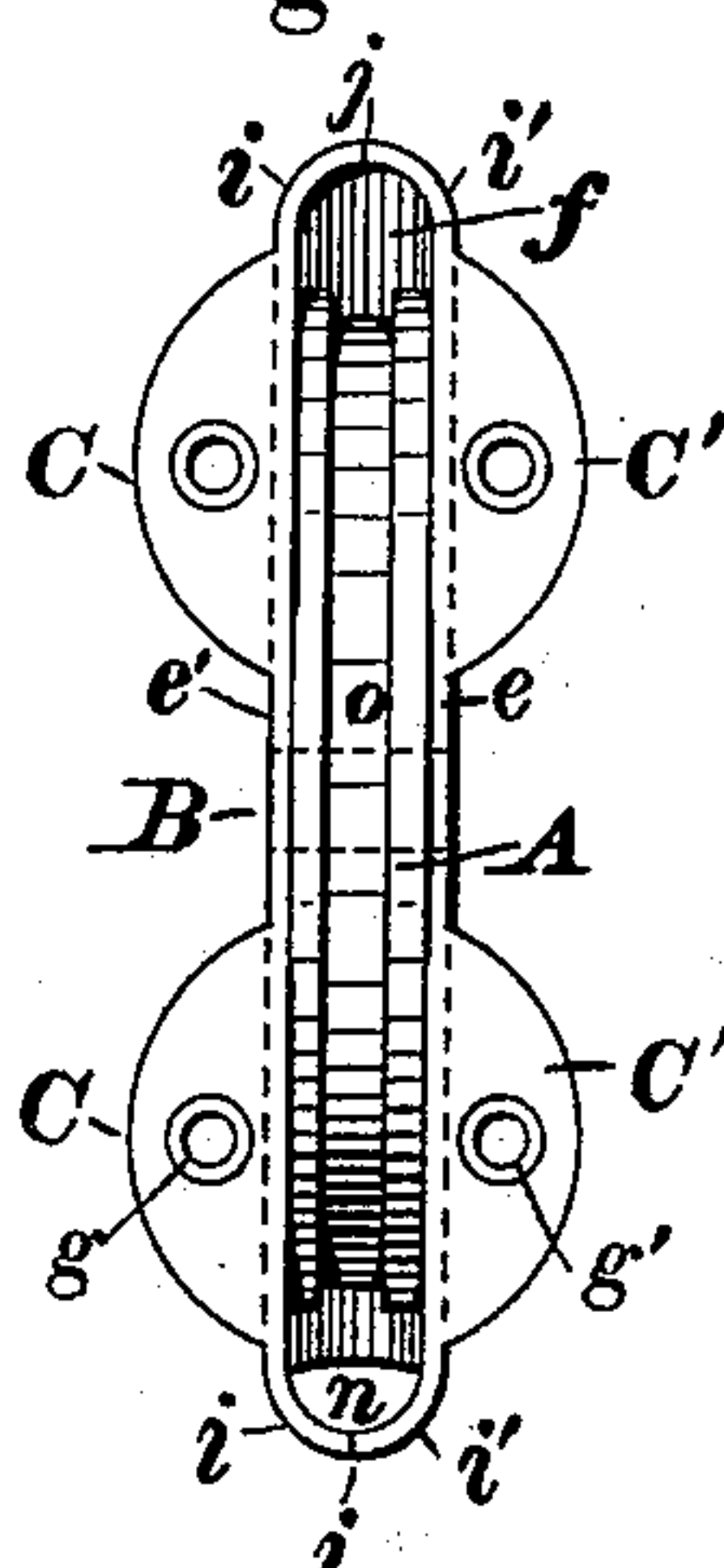


Fig. 6.



Fig. 5.

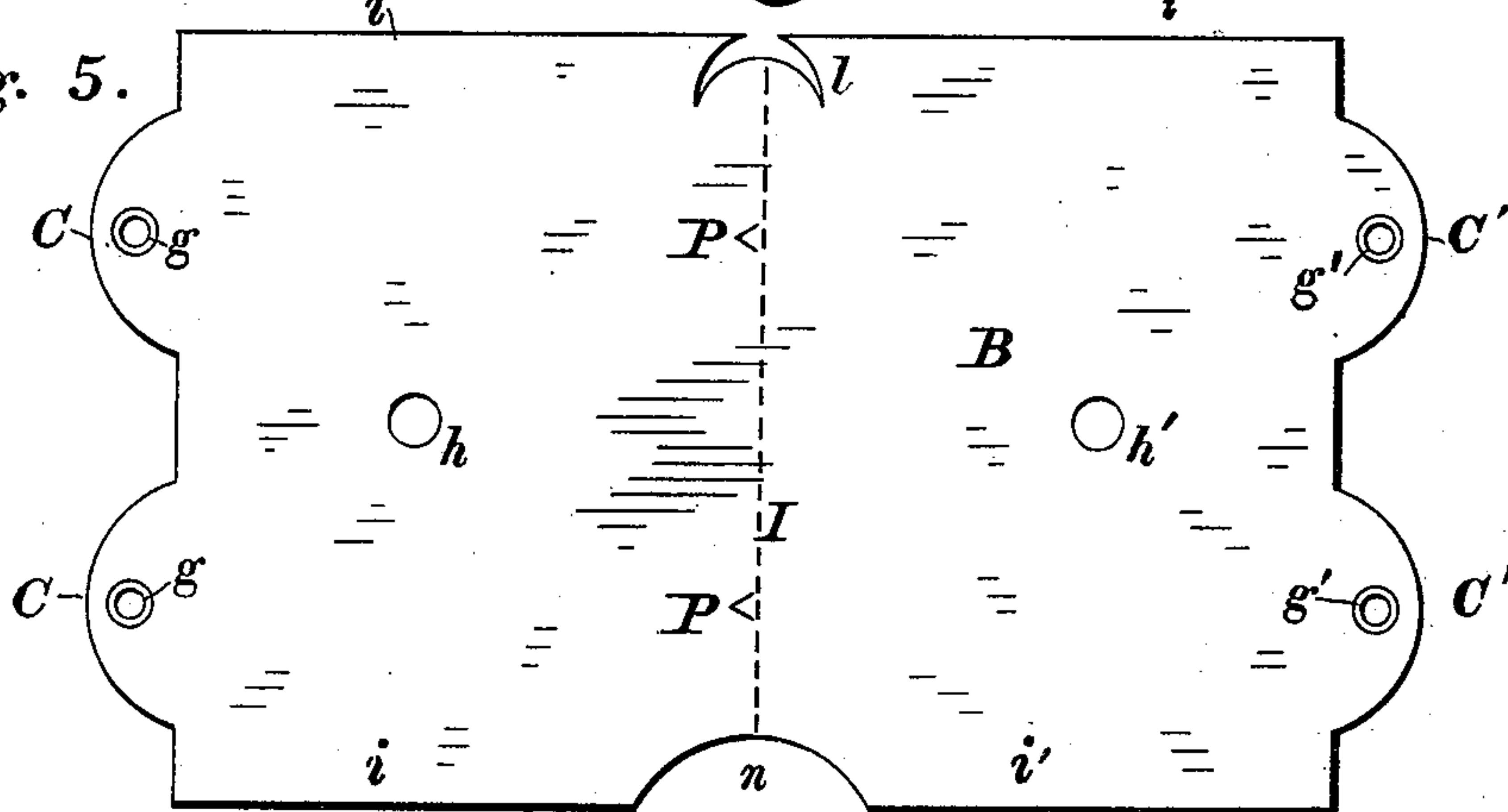


Fig. 7.

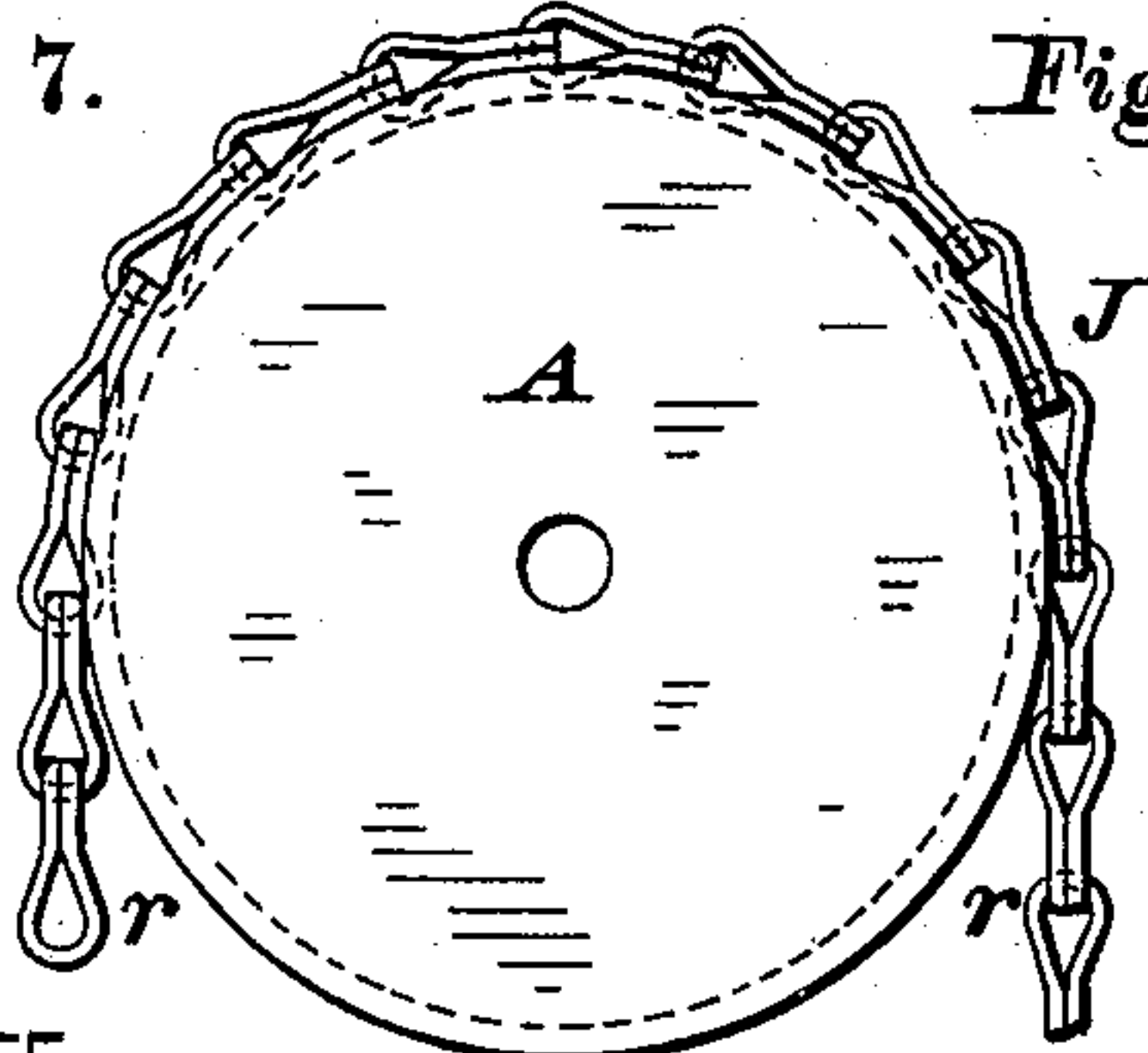
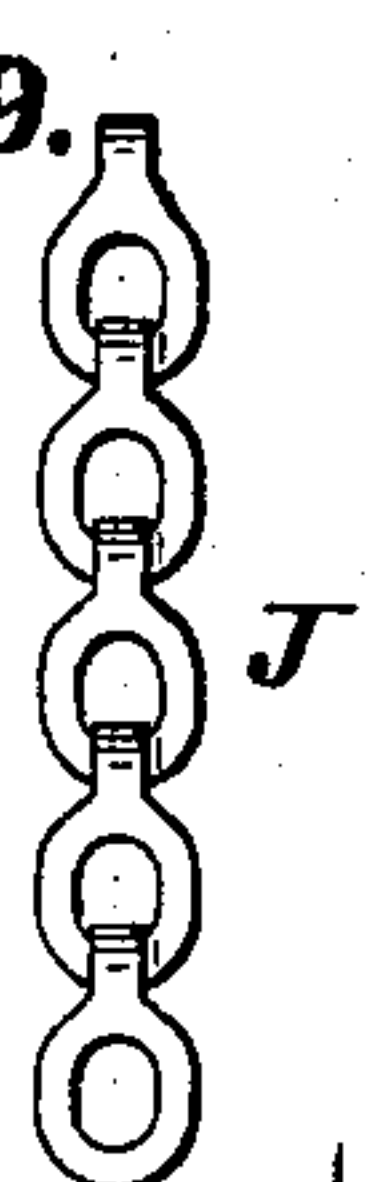


Fig. 8.

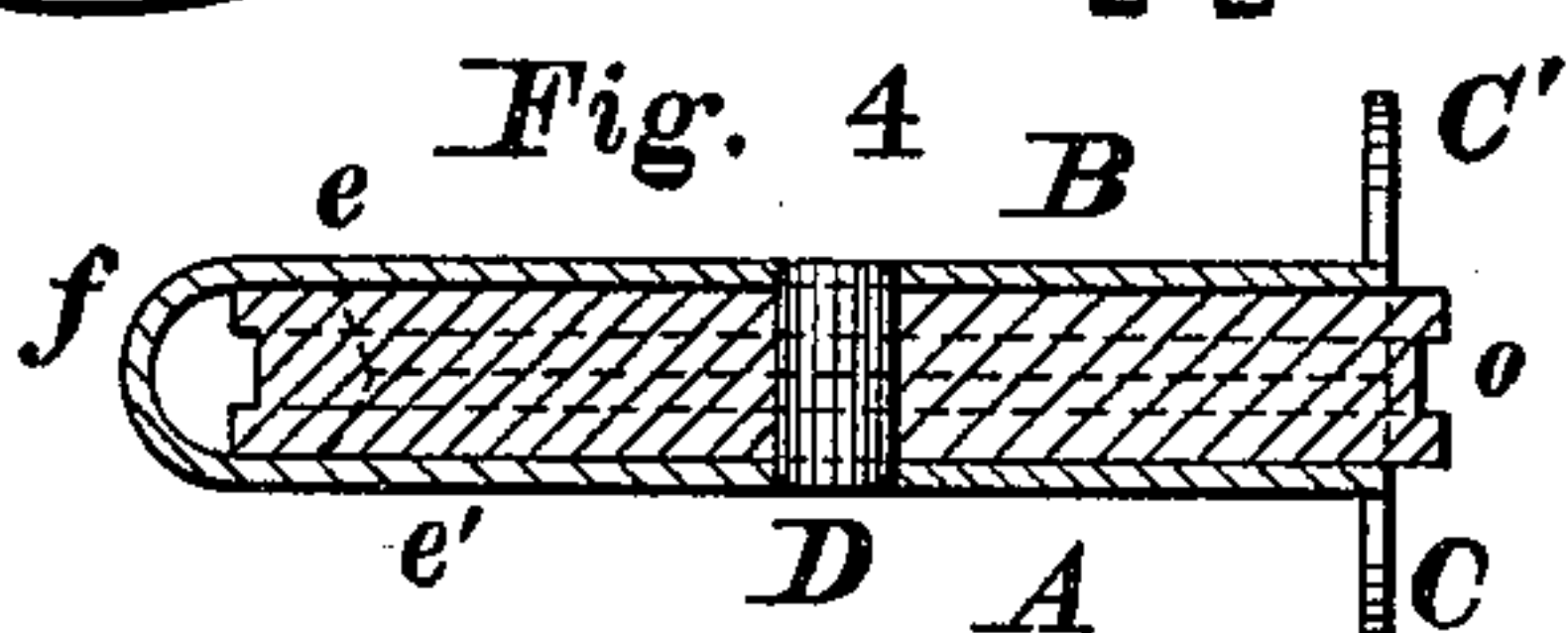


Fig. 9.



WITNESSES

G. S. Dey.
C. G. Crumwell



INVENTOR
C. H. Ocumpaugh,
By Geo. B. Selden,
Att'y

UNITED STATES PATENT OFFICE.

CHARLES H. OCUMPAUGH, OF ROCHESTER, NEW YORK.

SASH-PULLEY.

SPECIFICATION forming part of Letters Patent No. 620,489, dated February 28, 1899.

Application filed December 14, 1896. Serial No. 615,664. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. OCUMPAUGH, a citizen of the United States, residing at Rochester, in the county of Monroe, in the State of New York, have invented certain Improvements in Sash-Pulleys, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to certain improvements in sash-pulleys whereby their construction is simplified and cheapened and their strength and durability increased.

My improvements are fully described and illustrated in the following specification and the accompanying drawings, the novel features thereof being specified in the claims annexed to the said specification.

In the accompanying drawings, representing my improvements, Figure 1 is a side view. Fig. 2 is a front view. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a section on the line 4 4, Fig. 1. Fig. 5 represents the blank in its flat condition. Fig. 6 represents a modification of the same. Fig. 7 is a side view of the chain-pulley. Fig. 8 is a front view of the same. Fig. 9 represents a portion of the chain.

In the accompanying drawings, A represents the pulley, and B the sheath, which is provided with projecting lugs C C', by which the sash-pulley is secured in place in a recess in the window-frame.

D is the stud or pin on which the pulley revolves. In the manufacture of the sheath the blank, of a shape substantially such as is represented in Fig. 5, is first stamped out of suitable sheet metal, being provided with the projecting lugs C C' on its opposite ends. This operation is performed by any suitable dies in any suitable punching-machine, the perforations g g' for the screws in the lugs C C' being punched at the same time or subsequently punched, drilled, or countersunk in any preferred manner. The holes h h' for the pin D may be punched at the same time the blank is formed or punched or drilled later, as preferred. After the blank is formed it is bent on itself along the median line I, Fig. 5, so as to form the bent or curved back f, which is continuous with the parallel sides e e', which inclose the pulley A. At the same time the edges i i' of the sides of the blank

may be bent inward, so that their opposing surfaces meet together, forming the joint j at the top and bottom of the sheath. The lugs C C' may also be bent outward at right angles to the sides, or these operations may be performed in any preferred order. The blank is so shaped, as indicated in Figs. 5 and 6, that the corner between the back and top of the sheath will close up when bent or formed, or the corner, as indicated in Figs. 1 and 5, may be left open either above or below for the passage of the chain or flexible connection J. The form of blank indicated at l, Fig. 5, will close up the corner, or, if preferred, such a form as m, Fig. 6, may be adopted; or the blank may be shaped on one or both sides, as approximately indicated at n, Figs. 1 and 5, to permit the passage of the chain or flexible connection either at the top or bottom, so that the reversibility of the sash-pulley is secured. It will also be understood that the bent edges i i' along the top and bottom of the sheave may be partially cut away. The closed blank, however, with the continuous back f, not only protects the pulley from any chips or splinters produced in cutting the recess in the window-frame, but it also prevents to some extent the circulation of air through the sheave, the opening or notch n being only made large enough to permit the passage of the chain or flexible connection. The closed back also strengthens the sheath, making it stronger than by any other construction, and it facilitates the threading of the flexible connection around the pulley and through the opening n.

The pulley A when used with a chain J, as shown, is provided with a single central peripheral groove o, adapted to receive the projecting portions r of the links of the chain, the body or connecting portions tt of the links resting on the surfaces s s on each side of the groove. By this construction flanges on the pulley are avoided, the pulley is made narrower, and consequently the weight and thickness of the inclosing sheath are reduced.

P represents one or more points which are used as marking devices to locate the center of the recess bored to receive the lugs C C'. These markers may be made in any suitable manner, as by punching at the time the blank is formed. The markers facilitate the insertion of the sash-pulley. The markers are

placed at points on the back corresponding in the vertical direction with the locations of the perforations of the lugs, so that by pressing the back against the sash the centers of the apertures to be made for the lugs are located without measuring.

I claim—

1. The combination with a sash-pulley of an inclosing sheath consisting of a single piece of sheet metal, bent along the median line to form parallel sides connected by a continuous closed back, the upper and lower edges of said parallel sides being bent inward to meet each other, and provided with perforated lugs at right angles with the sides at the front thereof, and having a suitable aperture for the flexible connection, substantially as described.

2. The combination with a sash-pulley, of the inclosing sheath stamped from one piece of sheet metal and closed at all sides except the front and at points in the top and bottom near the back, substantially as described.

3. The combination with a sash-pulley, of the inclosing sheath consisting of a single piece of sheet metal bent to form a closed back with parallel sides provided with projecting perforated lugs at the front, the said back being provided with suitable marking devices located at points corresponding in the vertical line with the perforations in the lugs, substantially as described.

CHARLES H. OCUMPAUGH.

Witnesses:

C. G. CRANNELL,
GEO. B. SELDEN.