

No. 843,982.

PATENTED FEB. 12, 1907.

E. K. WOELFLY.
PULLEY BLOCK.
APPLICATION FILED SEPT. 27, 1906.

Fig. 1

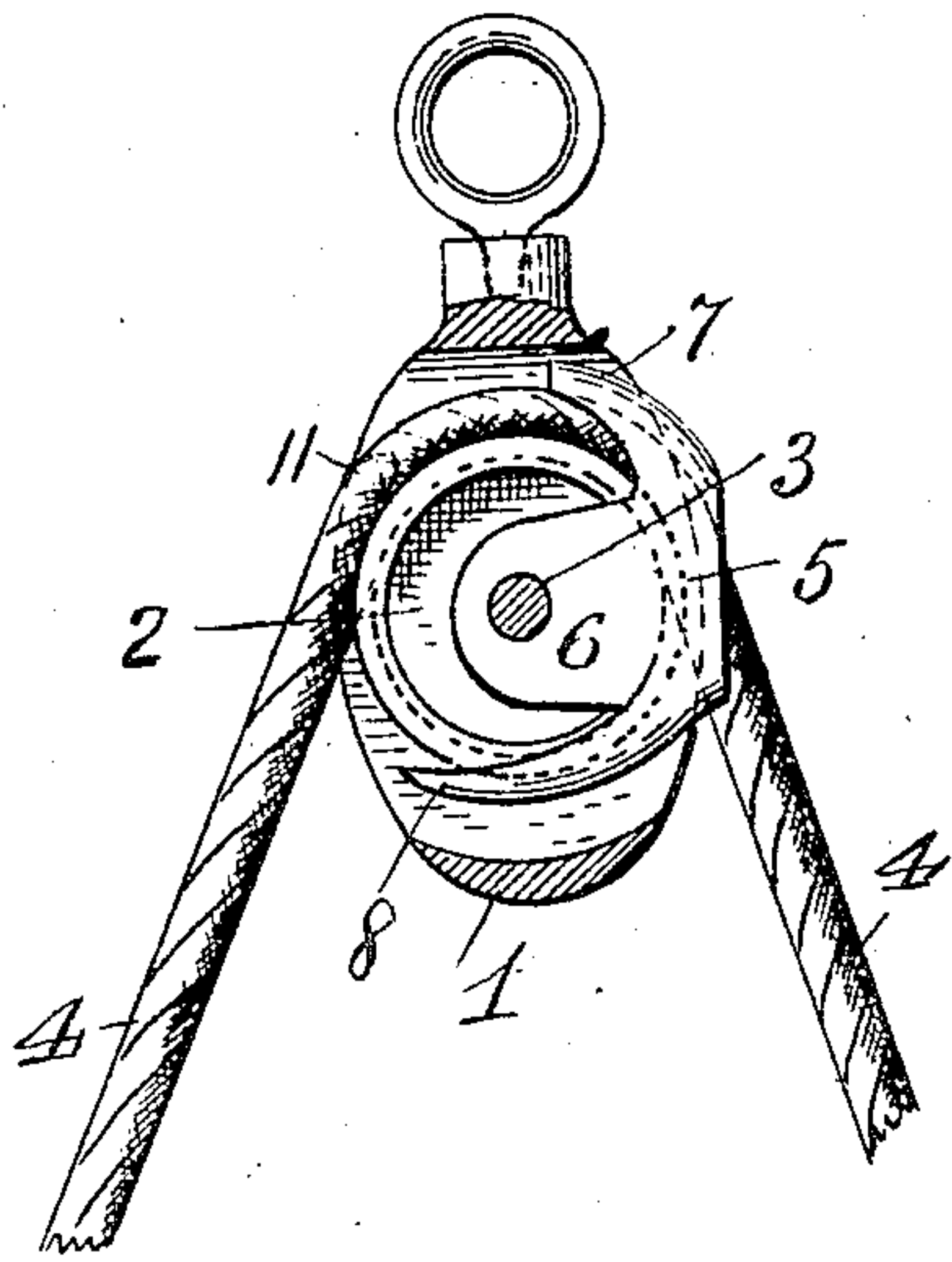


Fig. 2

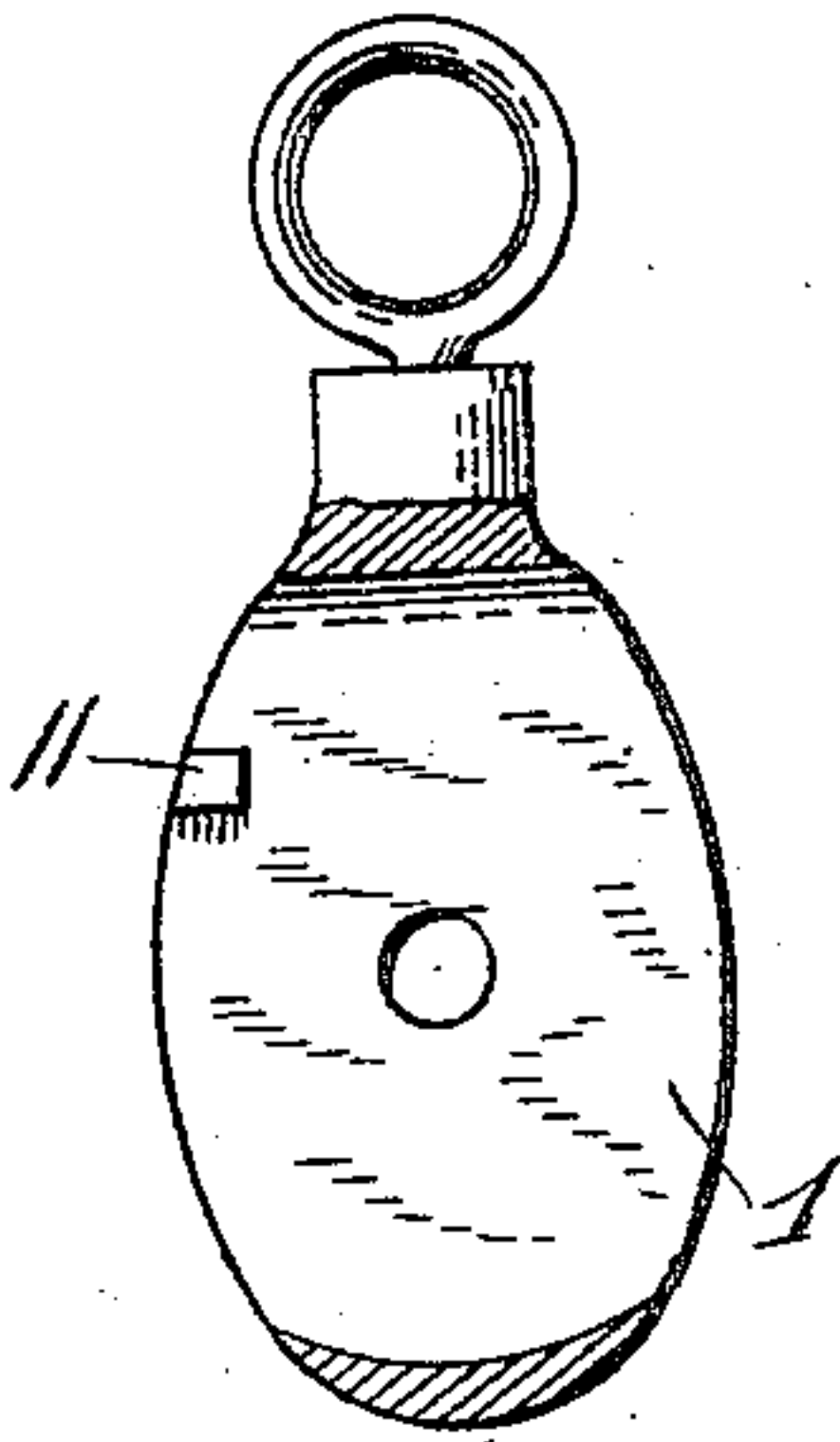


Fig. 3

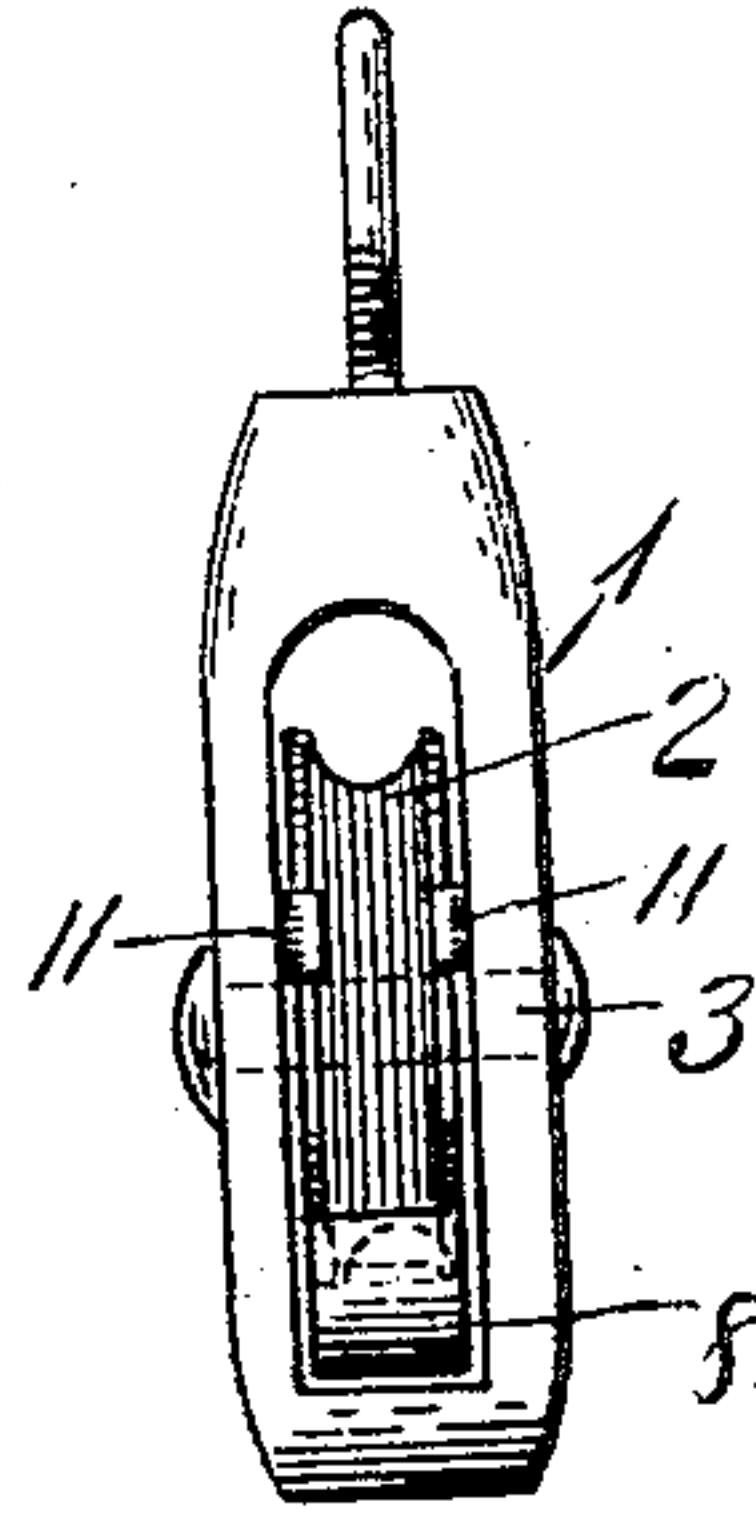


Fig. 4

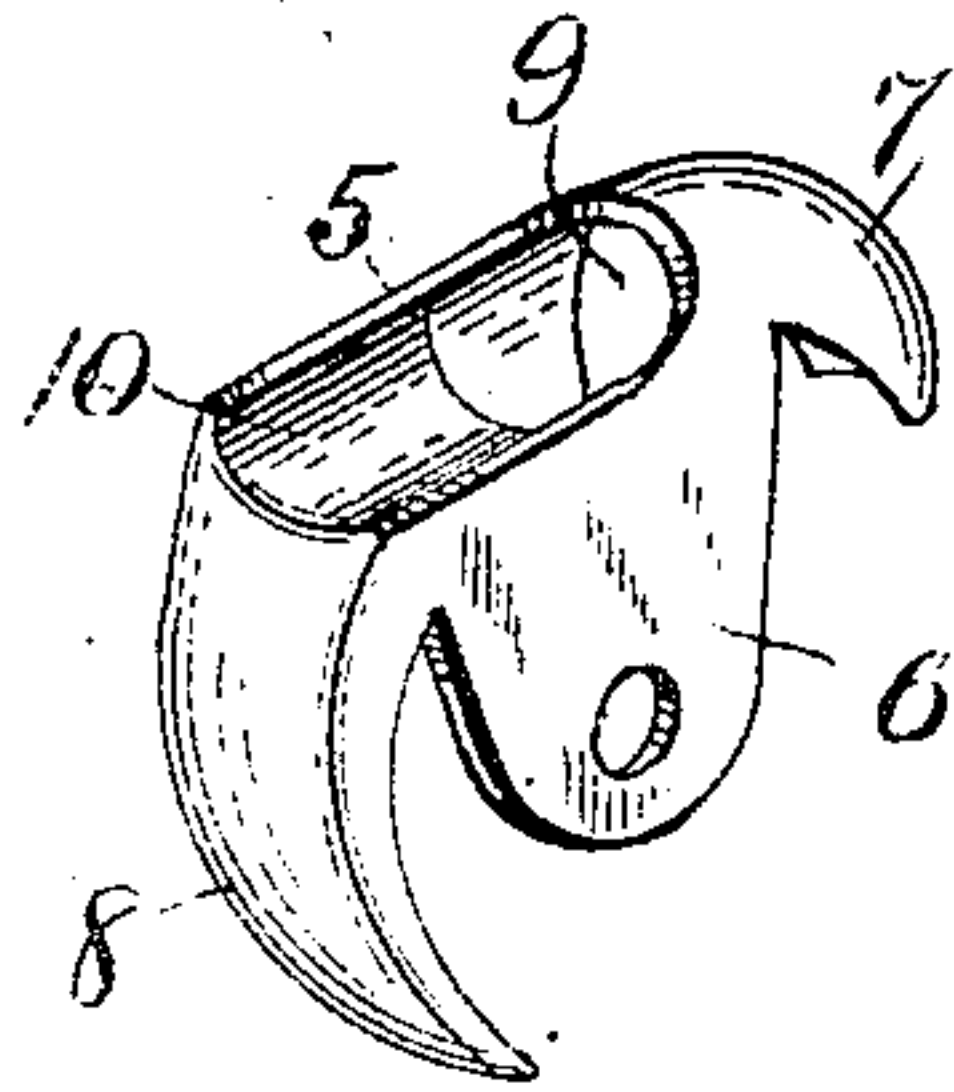


Fig. 5

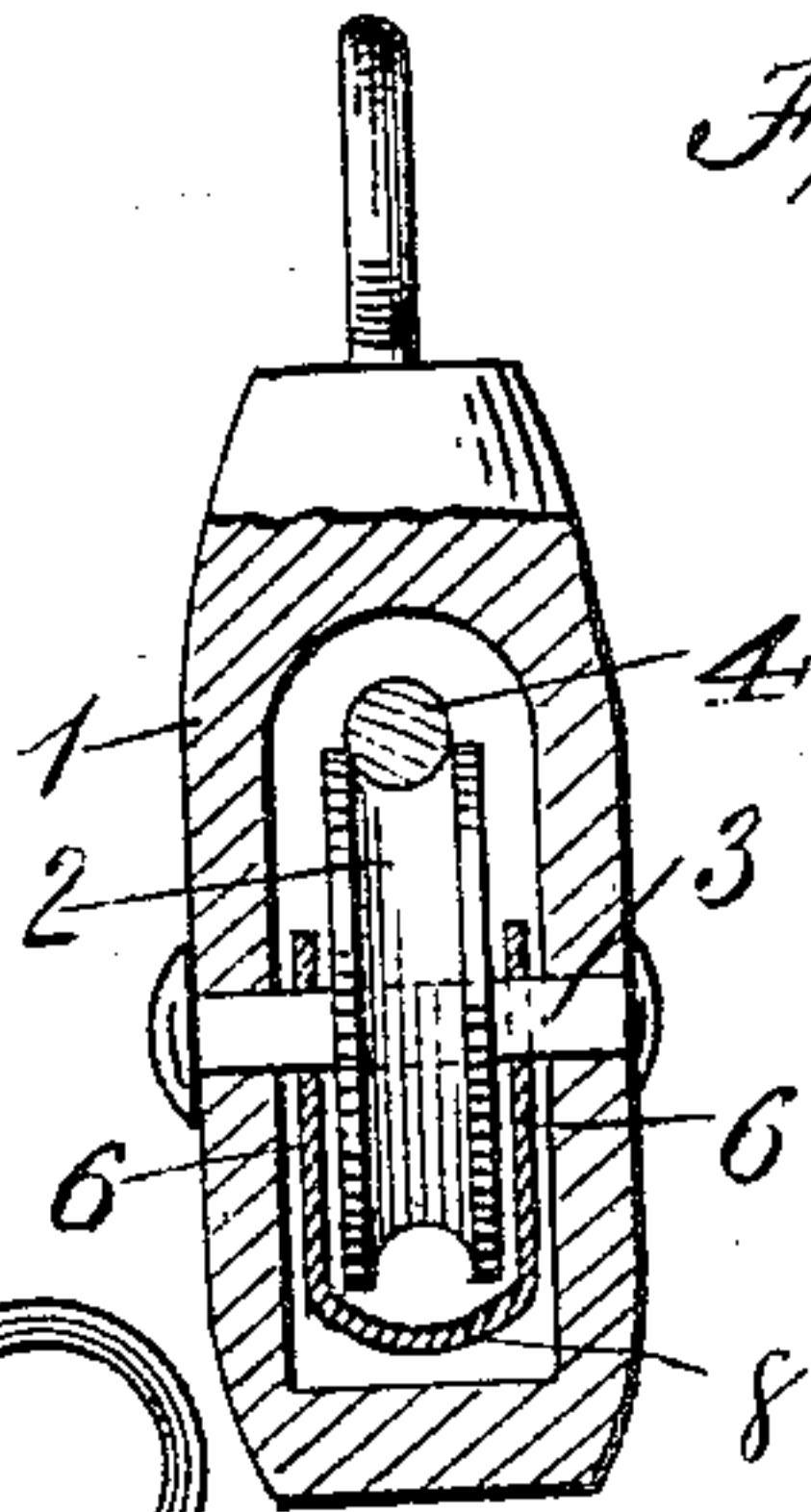
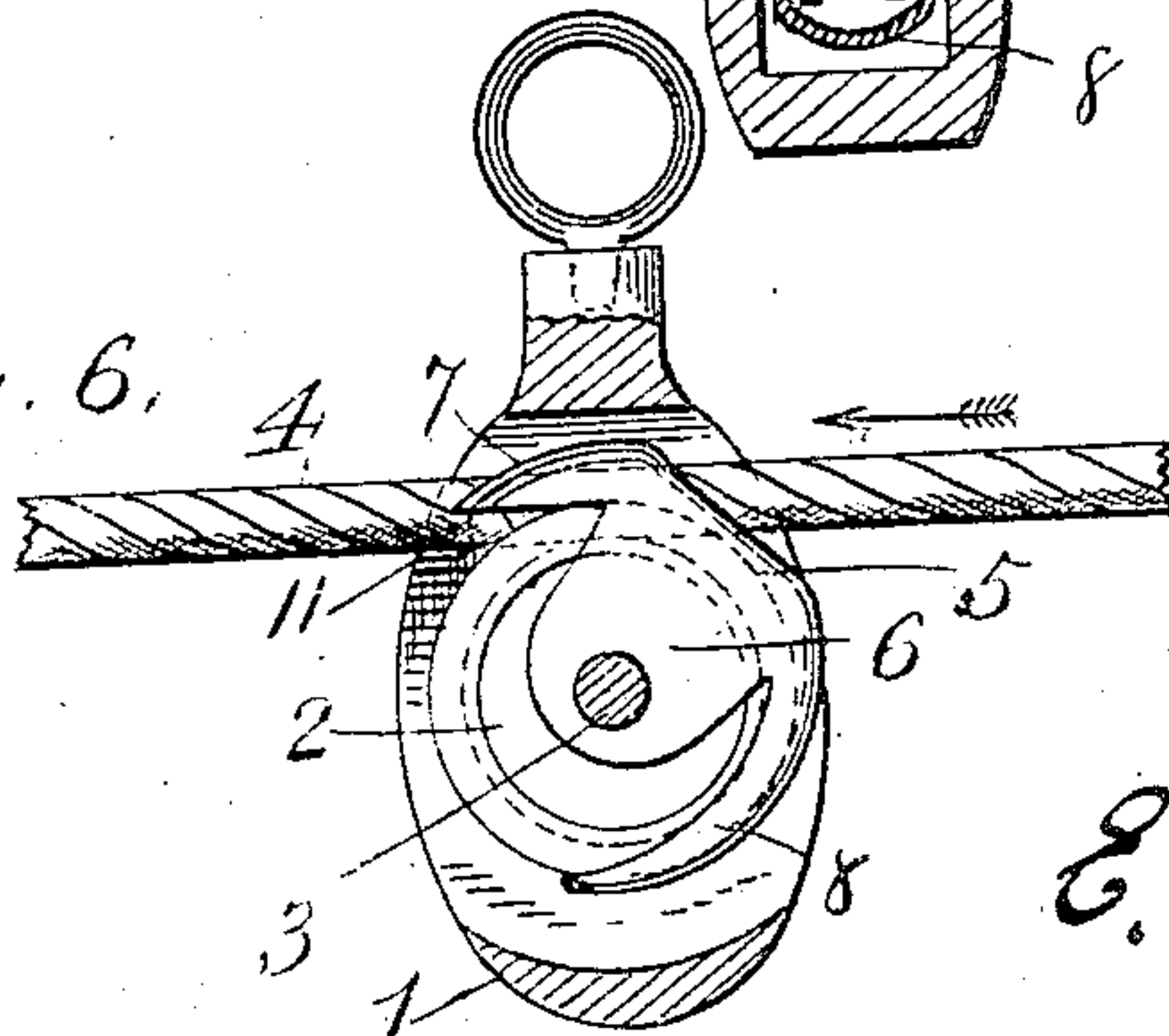


Fig. 6



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PULLEY-BLOCK.

No. 843,982.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed September 27, 1906. Serial No. 336,496.

To all whom it may concern:

Be it known that I, ERASTUS K. WOELFLY, a citizen of the United States, residing at Lebanon, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Pulley-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to pulley-blocks such as are used for raising and lowering awnings, and for other purposes, where the pulley is liable to cut the awning or the pulley cord or rope, has for its object the prevention of such cutting; and the invention consists in certain improvements in construction, which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a vertical section, partly in elevation, of a pulley-block embodying my invention; Fig. 2, a like view with the pulley, the guard-plate, the pin, and the cord removed; Fig. 3, a side elevation with the cord removed; Fig. 4, a perspective of the guard-plate detached; Fig. 5, a vertical transverse section of the pulley-block, partly in elevation; and Fig. 6, a vertical section, partly in elevation, showing the cord in a plane at a right angle to the vertical center of the pulley-block.

Reference being had to the drawings and the designating characters thereon, the numeral 1 indicates the pulley case or block, 2 the pulley or wheel, 3 the pin or axle on which the pulley is supported and secured in the case or block, and 4 the pulley cord or rope, all of which are of well-known form and construction. As thus constructed the cord or rope is liable to jump off the pulley and be cut or worn between the edges of the pulley and the case or pulley-block, or when the pulley is used for awnings the awning gets between the pulley and the cord, which chokes the pulley, and results in cutting and destroying the awning. To overcome this serious defect, a guard-plate 5 is inserted in the casing over the pulley 2, is provided with lugs 6 6, which engage the pin 3, and with extensions or wings 7 8, having the contour of the pulley on the inside, and the extensions are concavo-convex in cross-section to accommodate the cord on the pulley, and in the extension 7 above the pin or axle 3 is an

opening 9 for the passage of the cord 4 through the guard-plate, and in the extension 8 and adjacent to the opening 9 is a concave seat 10, over which the cord 4 passes out of contact with the pulley at this point, while it rests upon and travels over the pulley directly above the pin 3, thus reducing the friction on the pulley and preventing the guard-plate cutting the cord when in use in either of the positions shown in Figs. 1 and 6.

On the inside of the case or block above the vertical center of the pulley are stops 11 on opposite sides of the case or block for arresting the guard-plate and holding it in the position shown in Fig. 6 while the cord is traveling in the direction of the arrow shown in said figure.

The guard-plate may be made of sheet metal stamped into form, or it may be made of cast metal and is readily insertible in the case or block for use.

It is obvious that the guard-plate may be applied to sash and other pulleys for preventing the cord or rope jumping off the pulley and being cut and that the guard-plate may be applied to both sides of the pulley by reducing the length of the wings 7 8 and providing a stop at the center of the pulley-block at its upper and at its lower end instead of on one side of the vertical center only, as shown.

Having thus fully described my invention, what I claim is—

1. A pulley provided with a metallic guard-plate having lugs for attachment to the pin or axle of the pulley, and extensions on opposite sides of said lugs, one of the extensions having an opening for the passage of the cord, and the other extension having a concave seat for the cord adjacent to the said opening.

2. A pulley-case, a pulley within said case, a pin or axle supporting the pulley, and a guard-plate having lugs connected to said pin, and having extensions on both sides of said lugs, the upper extension having an opening in a plane above the pin to guide the cord on the upper surface of the pulley and at a right angle to the plane of the vertical center of the pulley, a concave seat for the cord adjacent to said opening, and stops to limit the movement of the guard-plate.

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

ERASTUS K. WOELFLY.

Witnesses:

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ANDREW LIGHT.