

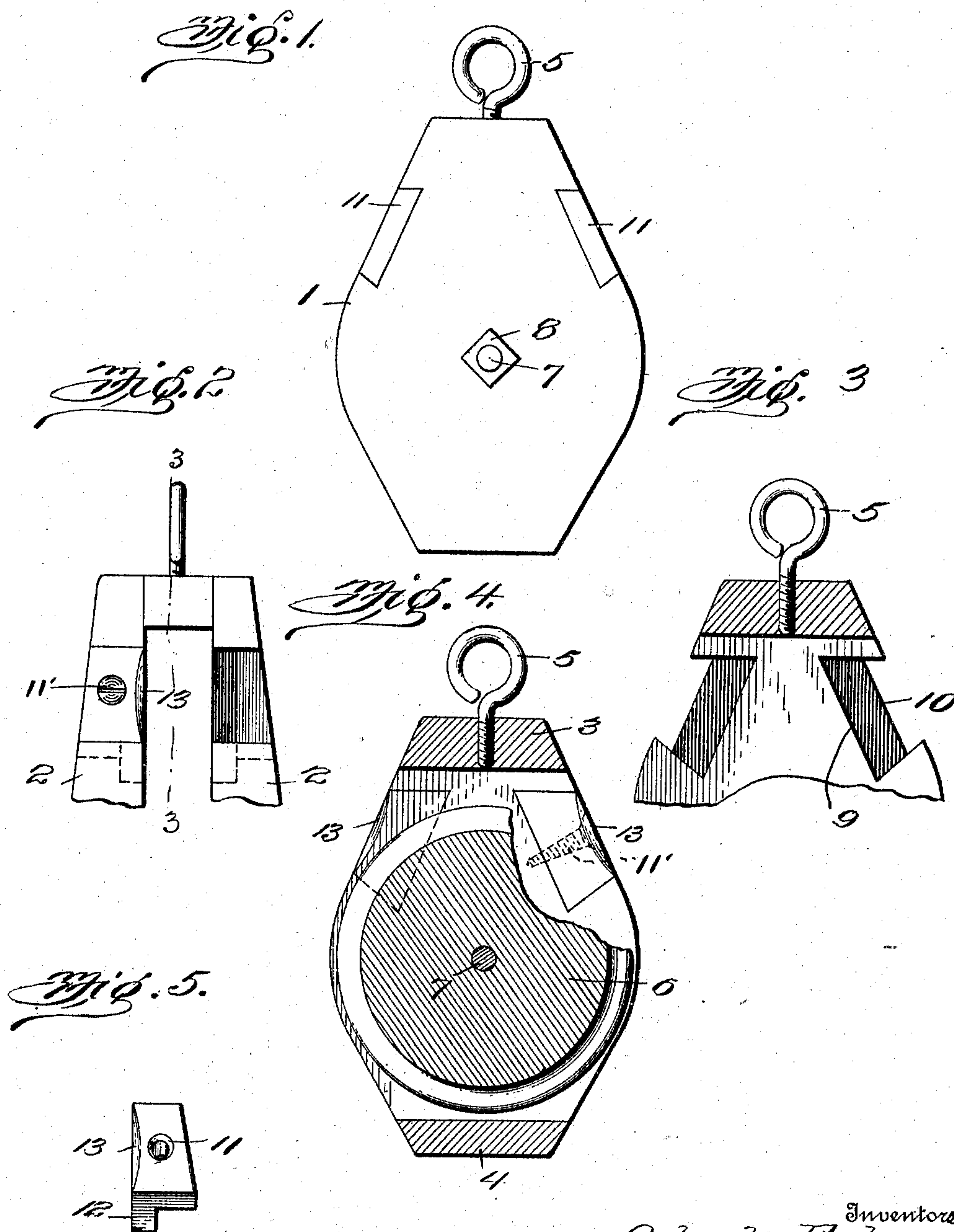
H. L. WILLIAMS & O. FORBES.

PULLEY BLOCK.

APPLICATION FILED NOV. 27, 1909.

967,697.

Patented Aug. 16, 1910.



Witnesses

H. F. Gobau.

C. C. Hines.

Inventors
Orlando Forbes.
Homer L. Williams.
By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

HOMER L. WILLIAMS AND ORLANDO FORBES, OF COLLETON, SOUTH CAROLINA.

PULLEY-BLOCK.

967,697.

Specification of Letters Patent. Patented Aug. 16, 1910.

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To all whom it may concern:

Be it known that we, HOMER L. WILLIAMS and ORLANDO FORBES, citizens of the United States, residing at Colleton, in the county of Colleton and State of South Carolina, have invented new and useful Improvements in Pulley-Blocks, of which the following is a specification.

This invention relates to improvements in pulley blocks especially designed for use in connection with wire cables employed in log skidding and other similar operations.

In the skidding of logs with steel cables, large steel pulley blocks are hung up in trees, towers and other supports for the suspension of the wire cables. Often there is a side pull on the blocks or cables, which causes the cables to soon cut into the sides of the block, thus rendering them useless and requiring their replacement. As such blocks are comparatively expensive, the cost of renewing them at frequent intervals often amounts to a considerable sum.

The object of our invention is to provide a pulley block having removable wear pieces arranged to sustain the wear from the cables in the event of a side draft, and which when worn may be readily removed and new plates substituted therefor, thus allowing the body of the block to be employed for an indefinite period and decreasing the cost of maintaining the blocks in proper operative condition.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a side elevation of a pulley block embodying our invention. Fig. 2 is an end view of the upper portion of the block, showing one of the adjacent wear plates removed. Fig. 3 is a section through the block on the line 3—3 of Fig. 2. Fig. 4 is a similar section through the entire block with the pulley or sheave in position. Fig. 5 is a perspective view of one of the wear plates.

Referring to the drawing, 1 designates a pulley block of usual form, comprising side pieces 2 connecting the top and bottom cross pieces 3 and 4, the top cross piece being provided with a suitable suspension device 5.

6 designates the sheave or pulley revolvably mounted between the side pieces 2 on a cross bolt 7 passing through said side piece and provided at its threaded end with a retain-

ing nut 8, upon the removal of which the bolt and pulley may be conveniently detached.

In the use of the block, it will be understood that the wire rope or cable passes through the block from the top of the pulley 6 and between the same and the upper cross piece 3. When the pulley or cable is subjected to lateral or side strain, the cable bears against and cuts into the upper portions of the edges of the block, thus rendering the block useless on account of the tendency of the cable to catch or become bound between the pulley and the cut out surfaces.

In carrying our invention into practice, we provide the upper portions of the side pieces 2 with preferably triangular recesses 9 in their inner faces, which recesses communicate with or intersect transverse dove-tailed recesses 10 formed in the edges of the block at a suitable distance below the cross piece, against which recessed portions the cable bears when subjected to a lateral or side strain. Each recess 9 and its intersecting recess 10 is adapted to receive a hardened steel wear plate 11, said plate being of triangular form to fit within the recess 9, by which it is held from upward or downward displacement. The plate 10 is provided at its outer edge with a flange or extension 12 adapted to fit within the recess 10 and having its ends dove-tailed or undercut to engage the dove-tailed or undercut edges thereof, whereby the plate will be held from outward displacement. The outer corner portion of each plate is preferably provided with a concaved or beveled surface 13 to reduce friction on the cable when the latter contacts therewith.

It will be understood from the foregoing description that the plates will be retained from inward movement by the pulley 6 and may be inserted or detached when said pulley is removed, which may be accomplished in a simple manner, as hereinbefore described. When a lateral pull falls upon the cable in any angular relation of the block, the cable will contact with one of the wear plates, which will sustain the friction from the movement thereof, thus preventing the cable from cutting into the body of the block. When one of the plates becomes appreciably worn, it may be removed and a new one substituted therefor, allowing the body of the block to be employed for an indefinite period with resultant economy.

While the invention is preferably em-

ployed in connection with pulleys used in log skidding, it will, of course, be understood that it is adapted for general application to pulleys of all kinds. Instead of relying upon the pulley 6 to hold the wear plates from inward movement, these plates may be fastened in position against inward movement by screws 11'.

We claim:—

- 10 1. A pulley block having its side pieces provided with recesses communicating with dovetailed recesses in the edges thereof, and wear plates inserted in said side pieces and having dove-tailed flanges engaging said
15 dove-tailed recesses.

2. A pulley block having its side pieces formed with receiving recesses in the inner faces thereof and communicating with dove-tailed transverse recesses in the edges of said side pieces, and wear plates fitted within said receiving recesses and having dove-tailed flanges engaging said dove-tailed transverse recesses. 20

In testimony whereof we affix our signatures in presence of two witnesses.

HOMER L. WILLIAMS.

· ORLANDO FORBES.

Witnesses:

ROBT. F. RAMSAY,
J. W. FRANK.