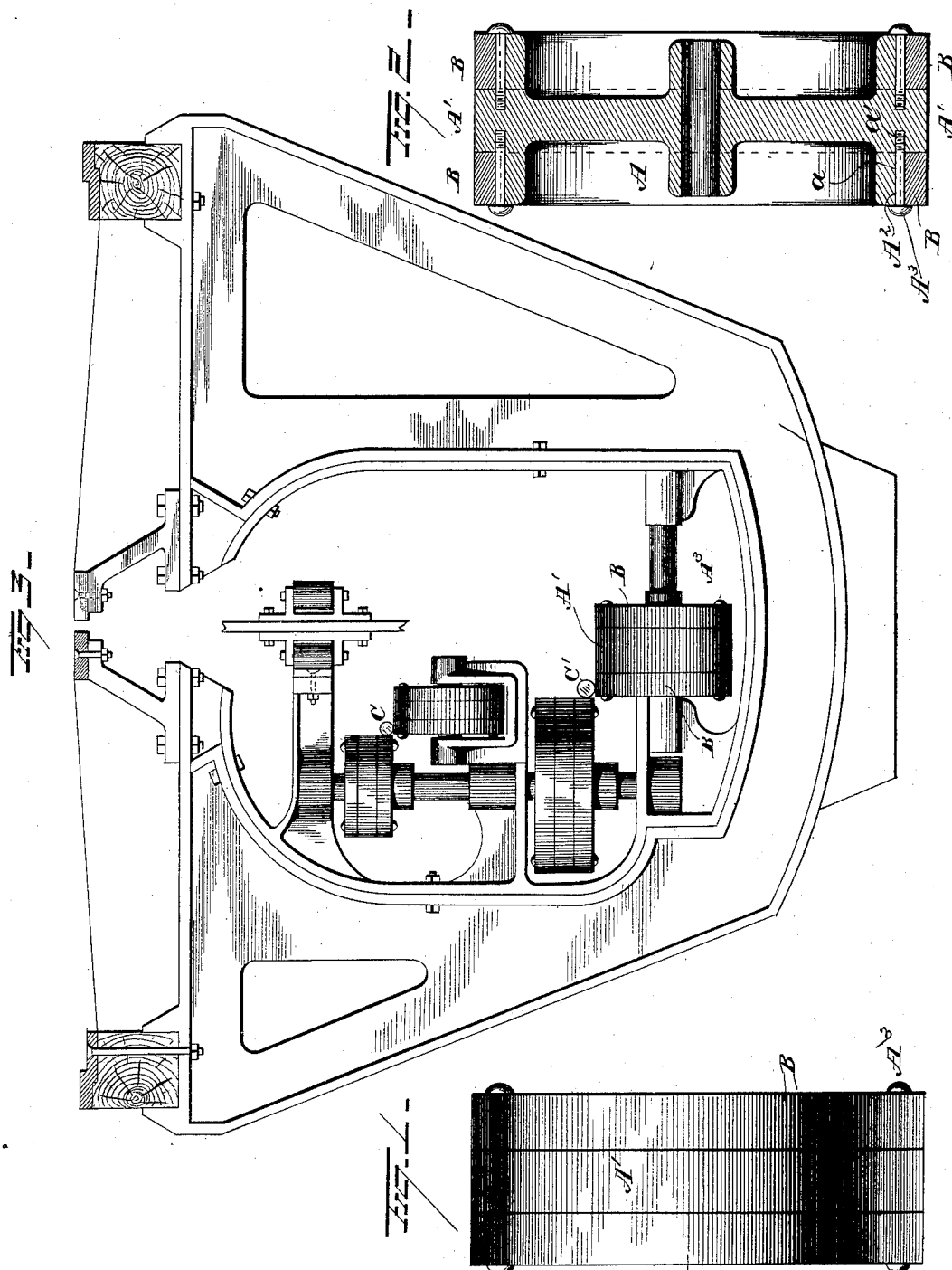


(No Model.)

E. D. DOUGHERTY.
PULLEY FOR CABLE RAILWAYS.

No. 364,498.

Patented June 7, 1887.



WITNESSES

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EDWARD D. DOUGHERTY, OF PHILADELPHIA, PENNSYLVANIA.

PULLEY FOR CABLE RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 364,498, dated June 7, 1887.

Application filed August 31, 1886. Serial No. 211,564. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. DOUGHERTY, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pulleys for Cable Railways; 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 an improvement in pulleys for cable railways, and more particularly such pulleys as are employed in turning curves, the object of my invention being to produce a pulley which shall be capable of lasting longer under wear than those heretofore provided for this class of wear, and one which shall be readily removed when unfit for wear, and replaced in proper condition for effective service.

To the above purpose my invention consists in the combination, with a pulley having a pair of recesses contiguous to and opening out upon each of its marginal edges, of a pair of wearing-rings fitting into said recesses, as hereinafter described and claimed.

My invention further consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a face elevation of a pulley constructed in accordance with my invention. Fig. 2 is a central transverse section of the same. Fig. 3 is a cross-section of a traction-railway bed with my improvements applied.

In traction-railways in which the traction-cable is guided around curves by pulleys located within the trough and placed in pairs at right angles to each other each pulley in the trough or tunnel is worn at one edge of its circumference only. Thus such pulleys become rapidly unfit for use and have to be constantly replaced. As will be seen from the ensuing description, I avoid this defect and produce a pulley which will not only last much longer than the pulleys heretofore employed in this class of railways, but one which may be caused to double its increased usefulness by being reversed in position, and which may be also readily refitted for further use.

In the said drawings, A designates one of a number of pulleys which are designed for use on the curved portions of traction-railways, as shown in Fig. 3. This pulley is formed with an annular boss, A', encircling the center of the pulley at its circumference, as shown. B B designate a pair of metallic wearing-rings which embrace the periphery A' at each side of the central boss, A', of said pulley, and A^s designates a number of screws which secure the wearing-rings to the boss in such manner as to maintain their position upon the periphery of the pulley. These screws each extend through semicircular recesses *a* in the periphery of the pulley and similar recesses in the inner surface of each ring B, and the inner ends only of said screws are threaded to enter internally-threaded sockets *a'*, which are formed in the sides of the boss A'. Thus it will be seen that the rings B may be readily attached to and removed from the peripheries of the pulleys. It will also be seen by referring to Fig. 3 that the wear of the cables C C' comes only on the meeting edges of the pulleys A, and that said pulleys may be readily reversed to present their opposite edges to each other, thereby doubling the length of wear of the pulleys.

When both wearing-rings of each pair of pulleys have become worn out, such pulleys are to be removed and new wearing-rings substituted for the old ones, after which the pulleys are to be replaced in operative position.

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

1. An improved pulley for the cables of traction-railways, having metallic wearing-rings secured upon its periphery at the opposite margins thereof, substantially as described.

2. An improved pulley for cable railways, having a central boss and a metallic wearing-ring removably secured upon one side of said boss contiguous to the edge of the periphery of the pulley, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWARD D. DOUGHERTY.

Witnesses:

ROBERT N. SIMPERS,
J. MCGREGOR GIBB.