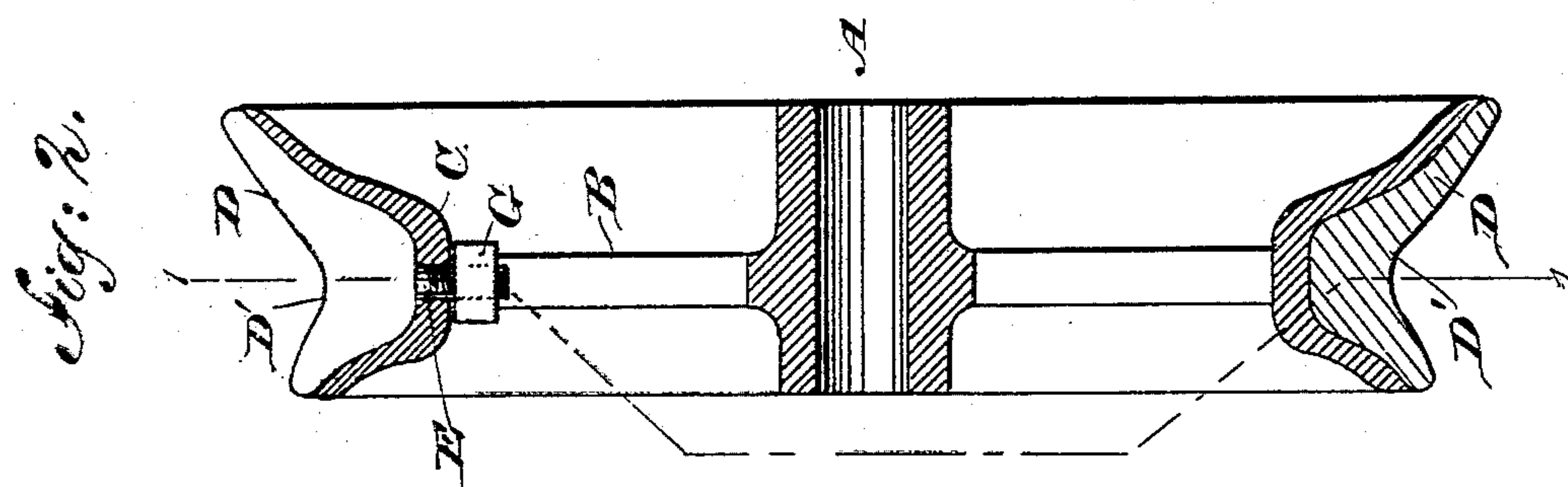
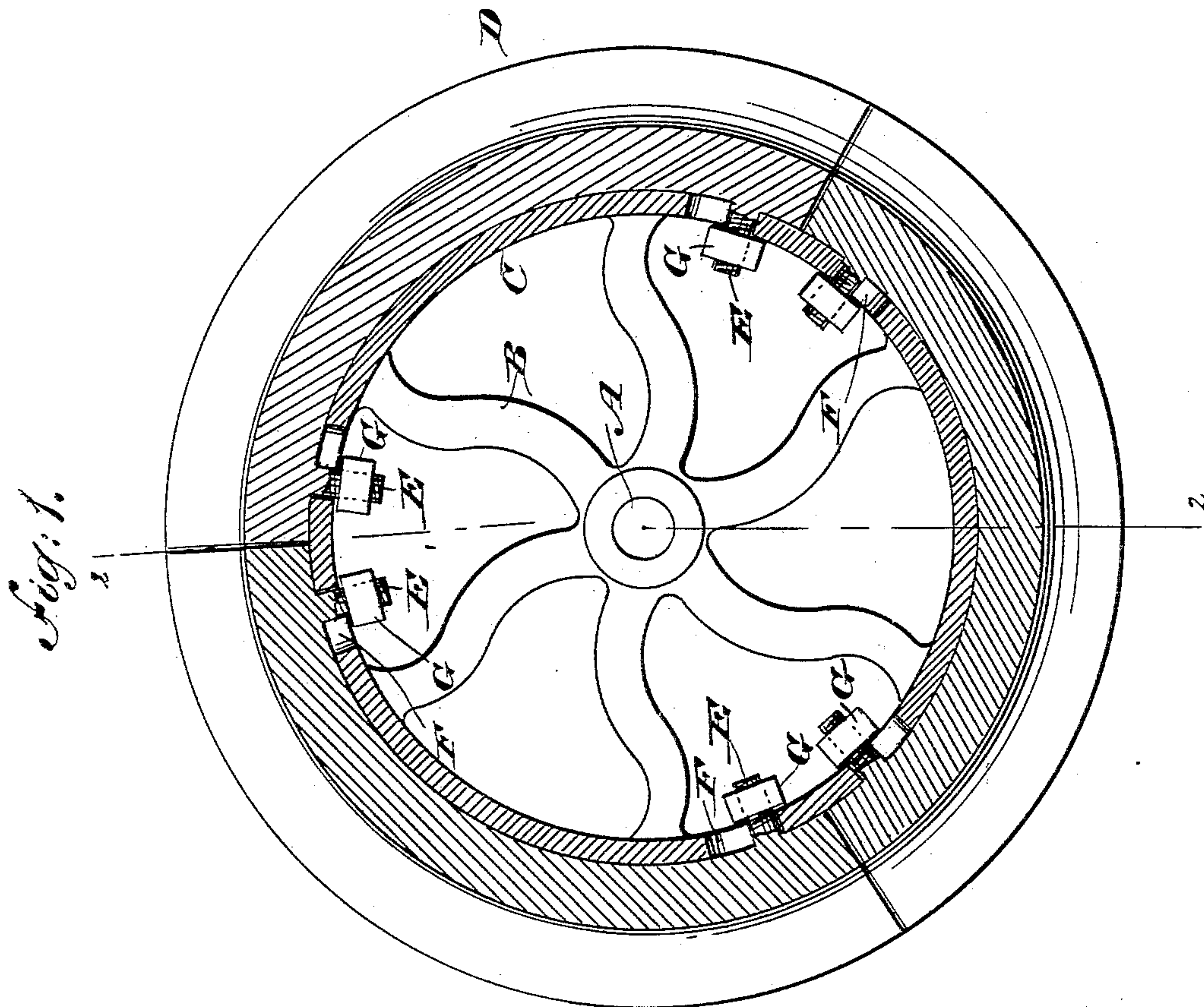


(No Model.)

C. A. JOHNSON.
PULLEY.

No. 504,588.

Patented Sept. 5, 1893.



WITNESSES:

Chas. Kiehl
W. Sedgwick

INVENTOR

C. A. Johnson
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CARLES A. JOHNSON, OF NEW YORK, N. Y.

PULLEY.

SPECIFICATION forming part of Letters Patent No. 504,588, dated September 5, 1893.

Application filed January 12, 1893. Serial No. 458,148. (No model.)

To all whom it may concern:

Be it known that I, CARLES A. JOHNSON, of New York city, in the county and State of New York, have invented a new and Improved Pulley, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved pulley, more especially designed for use on cable railways for carrying or supporting the traveling cable, the pulley being arranged to prevent a rapid wear of its rim by the contact of the latter with the material of the cable, the pulley being also arranged to permit of conveniently removing the worn out rim and putting a new one in place of the same, without discarding the remainder of the pulley or disturbing the position of the latter in the journals.

The invention consists of a pulley having an auxiliary grooved rim made in sections and adapted to be fastened to the main rim, the sections being made of a hard metal to prevent rapid wear.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional side elevation of the improvement on the line 1—1 in Fig. 2; and Fig. 2 is a transverse section of the same on the line 2—2 in Fig. 1.

The improved pulley is provided with the usual hub A, the spokes B, and the main rim C, which carries an auxiliary rim D, preferably made in sections and formed with an angular groove D' for the passage of the cable. As shown in the drawings, the main rim C is curved or provided with flanges to receive the correspondingly shaped sections of the auxiliary rim D to prevent the lateral displacement of the sections on the main rim C.

In order to secure the auxiliary rim in place on the main rim, I provide each section near its end, with threaded projections E, adapted to pass through an elongated slot F, formed in the main rim C. A nut G, screws on each projection E and abuts against the inner surface of the main rim C. In practice I cast the sections of the auxiliary rim D of a comparatively hard metal, while the balance of the pulley is made of the usual soft cast iron. Now, it will be seen that the auxiliary rim D can be readily removed when worn out and replaced by a new one, without disturbing the pulley in its journals. The elongated slots F permit of easily inserting and removing the sections of the auxiliary rim D; if the slots were only of the exact width necessary to receive the projections E, it would be impossible to bring any section of the rim into position. It will further be seen that the auxiliary rim is securely held in place by the flanges of the main rim, and the projections and nuts E and G, as described. By making the auxiliary rim of a hard metal, it will last a considerable length of time without becoming worn or injurious to the cable passing over it.

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

A pulley, comprising spokes, a main rim having flanges and elongated slots, an auxiliary grooved rim made in sections held in the flanges of the main rim and formed with threaded projections integral with its body and adapted to pass through the said slots of the main rim, and nuts for fastening the sections of the auxiliary rim to the main rim, as set forth.

CARLES A. JOHNSON.

Witnesses:

THEO. G. HOSTER,
EDGAR TATE.