(No Model.)

J. C. FIESTER.

SPLIT PULLEY.

No. 483,647. Patented Oct. 4, 1892.

Fig. 1.

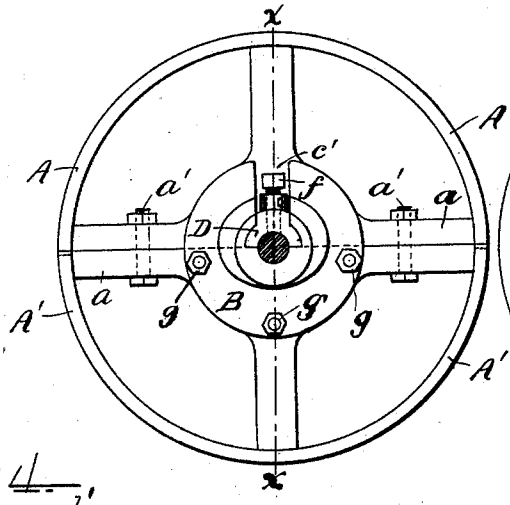


Fig. 2.

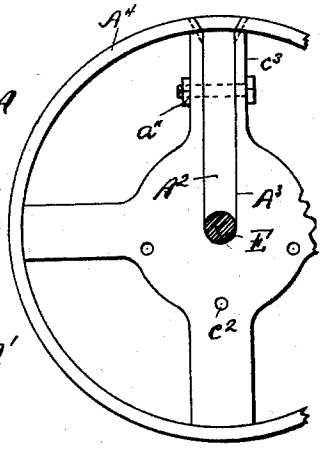


Fig. 4.

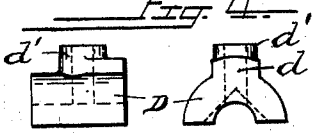


Fig. 3.

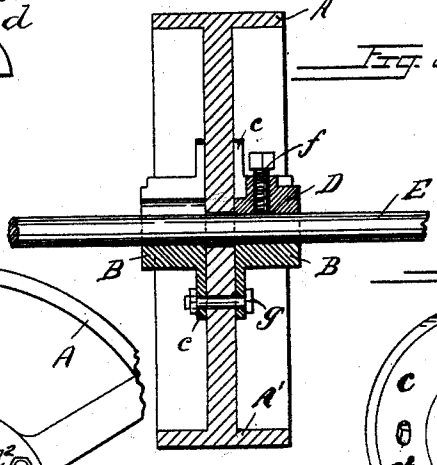


Fig. 6.

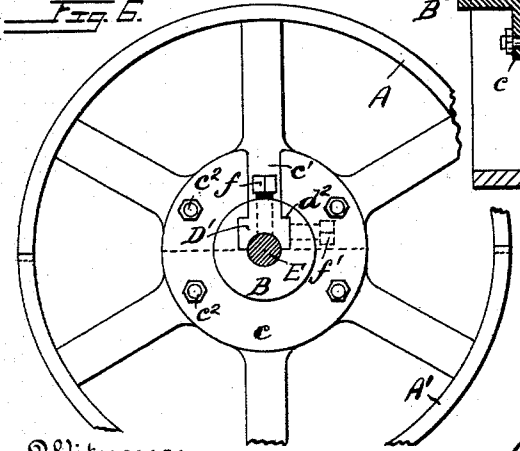
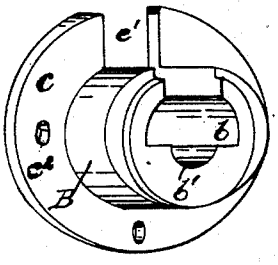


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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SPLIT PULLEY.

SPECIFICATION forming part of Letters Patent No. 483,647, dated October 4, 1892.

Application filed May 14, 1892. Serial No. 432,944. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. FIESTER, a citizen of the United States, residing at Reading, in the county of Berks, State of Pennsylvania, have invented certain Improvements in Split Pulleys, of which the following is a specification.

This invention relates to an improved form of split pulley, which is described in connection with the accompanying drawings and the novel features of which are specifically pointed out in the subjoined claim.

Figure 1 is a full elevation of a complete pulley involving my invention. Fig. 2 is a similar view with the hub-piece removed and showing the pulley divided in sections differing from Fig. 1. Fig. 3 is a sectional view on line X X, Fig. 1. Figs. 4 and 5 are separate views of the hub-piece and sliding block, respectively. Fig. 6 illustrates some slight modifications in structure.

A and A′ represent the separable sections of the pulley, and B B metal hub-pieces located on each side of the sections, to one of which they may be permanently secured by means of bolts *g*, which pass through holes c^2 in the circular flange *c*. These hub-pieces are provided with central openings, the semicircular portions *b′* of which bear directly against the shaft E, to which the pulley is to be secured, while the enlarged portions *b* are adapted to receive removable blocks D, and slots *c′*, of a width somewhat greater than the diameter of the shaft E, extend from these portions *b* outward through the bolting-flanges *c*. The hub-bosses are made elliptical in form, as indicated, to restore the strength lost by providing this slot *c′* and enlarged opening.

The hub-pieces B being secured to the pulley-section A′ by means of the bolts *g* the section may be placed upon the shaft E, the slots *c′* readily passing over the latter. The section A is afterward placed in position and secured. If the pulley is parted through the spokes *a*, as indicated in Figs. 1 or 2, bolts *a′* may be conveniently employed to hold the sections together, or they may be secured by means of additional bolts passing through the hub-flanges at c^2, as shown in Fig. 6. The removable block D is placed in position by sliding it longitudinally into the enlarged opening *b* until its face is flush with the face of the hub-boss, and when in this position it effectually prevents the removal of the pulley from the shaft. To cause it to rotate with the latter as a tight pulley, a set-screw *f* is provided, which fits in a tapped hole *d* in the sliding block or bearing D, which latter is formed with a boss *d′*, extending above the opening *b* into the slot *c′*. The point of the set-screw is pressed tightly against the shaft to fix the pulley to the latter.

In the construction shown in Fig. 2 the pulley, instead of being divided into the halves A and A′, as shown in Figs. 1 and 2, has an opening A^3 extending from its rim inward through one of its spokes c^3 to the center of the pulley. This opening is of substantially the same diameter as the shaft E and is occupied by the separable section A^2 of the pulley, said section being removably bolted to said spoke, as indicated at *a″*. In securing this form of pulley upon the shaft the section A^4, with its hub-pieces B, (which hub-pieces are not shown in Fig. 2,) is engaged with the shaft, (the slots A^3 and *c′* readily passing over said shaft,) and the section A^2 is then inserted in said opening A^3 and secured to the section A^4, after which the blocks D (not shown in Fig. 2) are secured in position in the manner above described.

In Fig. 6 the pulley is represented as parted between the spokes and the removable block or bearing D′ is formed with square shoulders d^2. The set-screw *f′* (indicated in dotted lines) may be employed to secure the sliding block D′ to the hub without fixing the pulley to the shaft, thus permitting it to be used as a loose pulley.

Having thus fully revealed my invention, I do not limit myself to the exact construction shown and described; but

What I claim is—

The herein-described pulley, consisting of the separable sections, means for removably securing the same together, the hub-pieces B, located on each side of the sections and each having substantially-elliptical bosses and formed with openings, said openings consisting of the semicircular portions *b′*, forming

half-bearings for the shaft, portions *b*, communicating with said portions *b'* and of greater diameter than the same, and portions *c'*, communicating with said portions *b*, slidable blocks fitted in said portions *b* and having bosses extending into said portions *c'*, said blocks being adapted to bear directly against the shaft and forming the other half-bearing therefor, and set-screws engaging said blocks, all substantially as shown and described.

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

JOHN C. FIESTER.

Witnesses:
ADAM L. OTTERBEIN,
W. G. STEWART.