

No. 853,006.

PATENTED MAY 7, 1907.

J. B. DUNLAP.
PULLEY.

APPLICATION FILED APR. 20, 1906.

Fig. 1

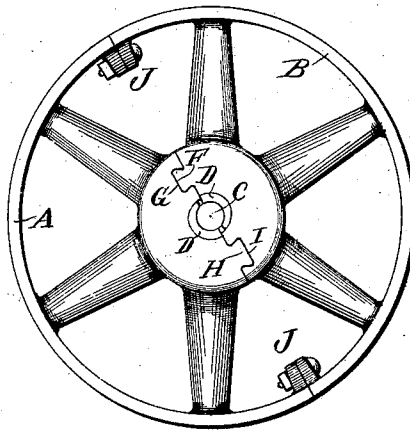


Fig. 2

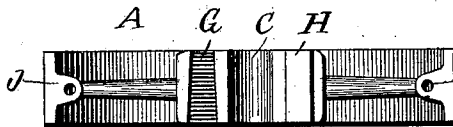


Fig. 3

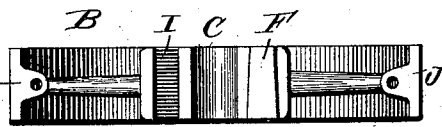


Fig. 4

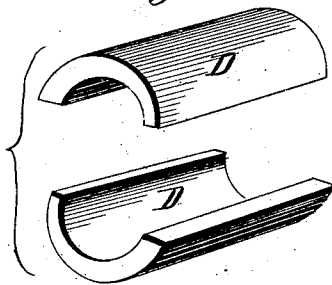
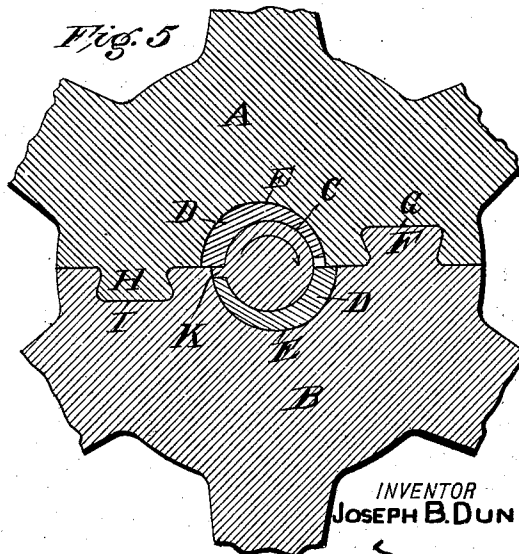


Fig. 5



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UNITED STATES PATENT OFFICE.

JOSEPH B. DUNLAP, OF TULSA, INDIAN TERRITORY.

PULLEY.

No. 853,006.

Specification of Letters Patent.

Patented May 7, 1907.

Application filed April 20, 1906. Serial No. 312,802.

To all whom it may concern:

Be it known that I, JOSEPH B. DUNLAP, a citizen of the United States, and a resident of Tulsa, in the Creek Nation, Indian Territory, have invented a new and Improved Pulley, of which the following is a specification.

My invention relates more particularly to drive pulleys for shafting, but comprehends the general subject of gear-wheels and similar driving or driven devices.

The invention is directed to the pulley or gear-wheel fastening means and also to a peculiar construction of a two-part hub.

The invention consists, more definitely stated, of the novel construction shown by the accompanying drawing and hereinafter fully described.

In the drawing Figure 1 is a view illustrating my invention in side elevation. Figs. 2 and 3 are edge or plan views, illustrating two detached half-portions of a divided pulley. Fig. 4 shows perspective views of the pulley fastenings, bushings, or keys, and Fig. 5 is an enlarged transverse sectional view through my improved two-part hub and its fastening means.

In the preferred form of my invention I employ a divided pulley, consisting of two similar interchangeable portions A and B, the bore or shaft opening C through the hubs being fashioned in peculiar form as will appear further on.

In the makeup of my invention I employ two keys D, having inner curved sides, and outer sides made cam shape from one longitudinal edge to the other, or gradually thickened transversely substantially as shown, into wedge form.

The opening C through the hub may be defined as being formed by curved walls, or segments of circles E, described from laterally separated points of center.

In further carrying out my invention I provide the inner or flat side of one hub portion B with a transversely arranged dovetail tongue F, made tapering from end to end, and similar shaped and arranged groove I. The other portion of the hub A is likewise provided with a tongue H and a groove G, both corresponding in form to the tongue and groove F, I, and are adapted in assembling the two parts of the hub, for the tongues to be entered into the grooves and the sec-

tions or parts of the hub to be secured by conjoint wedging action, as will be understood.

Other fastening means such as perforated lugs and securing bolts indicated at J, are also provided in the makeup of my invention, but as same will be readily understood, detail description thereof is deemed unnecessary.

The construction of my invention will be understood from the above description.

My invention involves novelty in that it obviates the necessity of boring, smoothing or otherwise finishing the shaft opening through the hub, thereby adapting the parts for ready use, directly after casting of the parts.

In the use of my invention the pulley is arranged on its supporting shaft and the keys D driven into place, in the arc shaped spaces formed inside the shaft opening through the hub. Now it is obvious that when the pulley is forwardly rotated indicated by the arrow in Fig. 5, the outer surfaces of the keys will be engaged by cam acting surfaces, formed by the cylindrical shaped surfaces E in the bore of the hub, and through wedging action clamp the keys against the shaft, thereby secure the pulley against rotation on the shaft.

In some instances it may be necessary to upset a slight bur K on the pulley shaft, for use as an obstruction to sliding action of the keys, upon starting the pulley, and same may be made with a suitable chisel, as will be understood.

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

In combination, a hub constructed in two interchangeable parts and with a shaft opening therethrough, there being a dove-tail tongue, and a similar shaped groove, in the adjacent sides of the hub parts, the tongue on one part being adapted for interlocking engagement with the groove on the other part, curved keys in the shaft opening, constructed with cam acting outer surfaces, and a shaft provided with a bur adapted to operatively engage the curved keys.

JOSEPH B. DUNLAP.

Witnesses:

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W. I. RENEAU.