No. 649,147. Patented May 8, 1900.

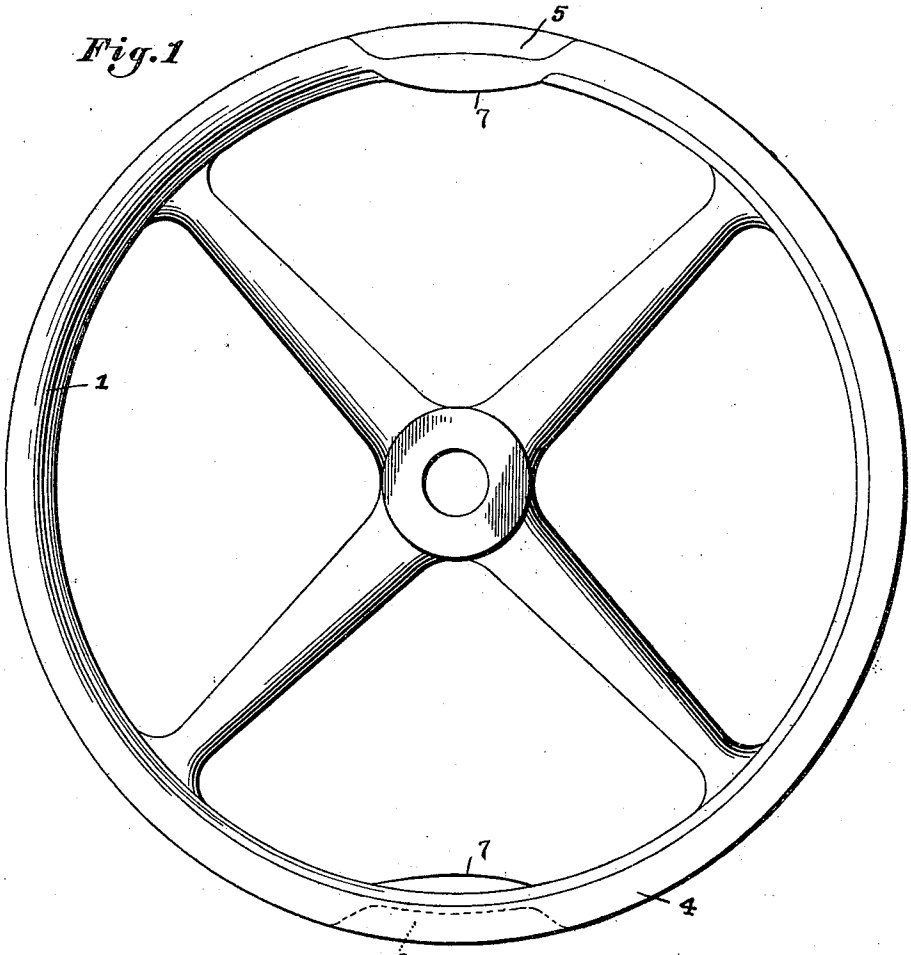
W. R. TOWSE.

GROOVED BELT WHEEL.

(Application filed Aug. 21, 1899.)

(No Model.)

Fig. 1



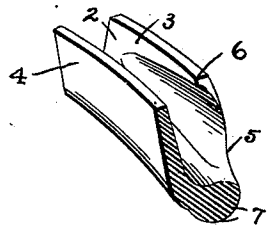


Fig. 2

WITNESSES:

J. H. Travel

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UNITED STATES PATENT OFFICE.

WILLIAM R. TOWSE, OF PORTSMOUTH, OHIO.

GROOVED BELT-WHEEL.

SPECIFICATION forming part of Letters Patent No. 649,147, dated May 8, 1900.

Application filed August 21, 1899. Serial No. 727,882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. TOWSE, a citizen of the United States, residing at Portsmouth, in the county of Scioto and State of Ohio, have invented a certain new and useful Improvement in Grooved Belt-Wheels, of which the following is a specification.

My invention relates to the improvement of grooved belts-wheels; and the objects of my invention are to provide an improved wheel of this class of such construction as to facilitate the placing of belting thereon, to so construct and arrange the same as to admit of the belt being slipped thereon without imparting an undesirable strain to the belt or weakening the same and permit of the belt being readily run onto the wheel while the latter is rapidly rotating, and to produce other improvements the details of construction of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a view in elevation of my improved wheel, and Fig. 2 is a view in perspective of a portion of said wheel.

Similar numerals refer to similar parts throughout both views.

1 represents a wheel, the rim of which is provided with a continuous groove 2, resulting in the formation of the usual parallel outer and inner rim-flanges 3 and 4. Formed in each of these rim-flanges at diametrically-opposite sides of the wheel is an elongated opening or recess 5, this recess extending, preferably, to the depth of the rim-groove. As shown in the drawings, the inner side of the rim-flange at the ends of the recess is slightly beveled or rounded, while the outer edge of the flange at the beginning of said recess is so formed as to produce a slight inwardly-projecting hook or lip 6.

In order to strengthen the wheel at the points of formation of the flange-recesses, the body of the rim is thickened or enlarged slightly, as indicated at 7, on its inner side.

In running a belt onto my improved wheel it will be seen that said belt may be fed through one of the elongated recesses 5, with the result that a rotation of the wheel will cause the belt to slip easily into its place in the rim-groove without stretching or straining said belt or the laces or hooks which unite the same. The inwardly-projecting lip portions 6, which, as described, are formed adjacent to the ends of the recess, will serve as guides for the belt while it is being run onto the wheel and obviate any tendency of said belt toward working out of the wheel-groove at the mouth of the recess. The construction described admits of the running of the belt onto the wheel in either direction, and owing to the fact that the two recesses 5 are arranged, respectively, in the outer and inner flanges of the wheel-rim means are provided for slipping the belt onto said wheel regardless of the direction in which the wheel is facing. It will also be observed that in forming the recesses no lateral projections are produced on the rim, which, as is well known, are objectionable owing to the tendency to catch clothing, &c.

Although the belt-wheel herein shown is of a solid form, it is obvious that the same might be of any well-known sectional form without interfering with the employment of the means herein described. It will readily be seen that my improved belt-wheel will apply to any class of grooved wheels where belts or continuous cords are used for the transmission of power and that the construction is such as to admit of a belt being placed thereon while the same is at a high or low speed without straining, stretching, or otherwise injuring the belting or belt connections.

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

A belt-wheel consisting of the wheel-body having a grooved rim, each of the rim-flanges formed by the production of said grooves being provided with an elongated recess and inwardly-projecting lip portions adjacent to the ends of said recesses, substantially as specified.

WILLIAM R. TOWSE.

In presence of—
H. F. THOMPSON,
JOHN HOGAN.