(No Model.)

F. B. RAY.

PULLEY BELTER.

No. 346,067. Patented July 20, 1886.

Fig. 1.

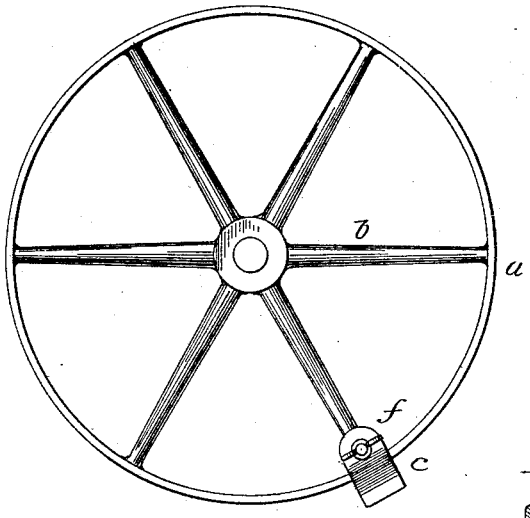


Fig. 4.

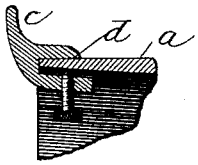


Fig. 2.

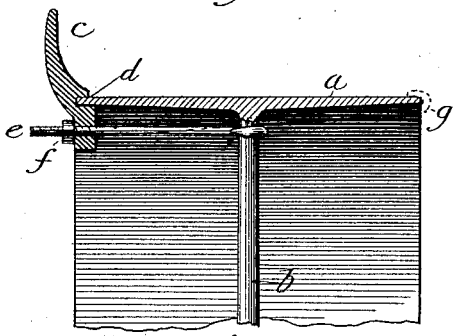
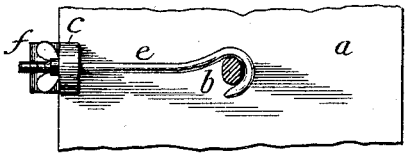


Fig. 3.



Witnesses:
Frank S. Blanchard
Frank S Ray
August Altman

Inventor:
Frank B Ray

UNITED STATES PATENT OFFICE.

FRANK B. RAY, OF KANSAS CITY, MISSOURI, ASSIGNOR TO HIMSELF AND H. C. STAVER, OF CHICAGO, ILLINOIS.

PULLEY-BELTER.

SPECIFICATION forming part of Letters Patent No. 346,067, dated July 20, 1886.

Application filed January 5, 1886. Serial No. 187,729. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. RAY, residing at Kansas City, in the county of Jackson and State of Missouri, and a citizen of the United States, have invented a new and useful Improvement in Pulley-Belters, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of a large belt-pulley. Fig. 2, a cross-section of a portion of the pulley; Fig. 3, a broken section showing an under or inside view of a portion of the pulley and the method of attaching my device, and Fig. 4 a modification.

The object of this invention is to construct a pulley-belter which may be applied to belt-pulleys of various sizes and constructions for the purpose of enabling a single attendant to apply a heavy belt to the pulley or wheel and to attach the belter in such a manner that it may or may not be detached or taken off, as desired, and also one which can be applied to a belt pulley or wheel which runs close to some portions of the supporting-frame or adjoining machinery; and its nature consists in the improvements hereinafter described and claimed as new.

In the drawings, *a* indicates the rim of a pulley-wheel; *b*, the spokes; *c*, the belter; *d*, an engaging slit or notch therein; *e*, the attaching-bolt, and *f* the fastening-screw.

In the form shown with the hooked bolt the device is designed to be attached to a belt-wheel having a center hub and radiating spokes, which may be made in any of the various forms known in the constructions of such wheels or large pulleys. The belter *c* is made of metal and formed to project above and below the rim of the wheel, as shown in Fig. 2. In order to lock and maintain it in position on the wheel, it is provided with a groove or notch, *d*, which fits upon the edge of the rim when made to fit any particular or special form of wheels. For general use the slot *d* is made a little wider than the thickness of average rims.

The bolt *e*, as shown in Figs. 2 and 3, is formed with a hook or opening at the inner end, so as to engage with one of the spokes of the wheel, and it passes through the lower projection of the belter and is provided with a locking or tightening screw, *f*. The screw-thread on the outer end of the rod may be made of a considerable length, so that the belter may be used with wheels having different widths of rim. A second bolt may be provided with a hook or notch to extend across under the rim of the wheel and engage on the opposite side, as shown by dotted lines at *g*, Fig. 2, which will be the more desirable bolt to use, when the belt wheel or pulley is provided with spokes or arms, which are thin and wide, and also in cases of smaller pulleys, where the connection between the rim and the hub is continuous, with the exception of two or more holes. This construction furnishes a very simple belter, which is easily applied to one side of the pulley, which may be permitted to remain to prevent its running off of the belt, as it has no effect upon the action of the belt in operation, or it may be taken off if desired. In this respect it will be found an improvement over the belters heretofore in use and also in the further respect that it can be applied to pulleys or wheels running close to the frame-work or other parts of the machinery.

This device will be found exceedingly useful in belting portable engines, thrashing-machines, horse-powers, and in other places where long or heavy belts are used. Its operation will be obvious, as all that is required is that the outer edge of the belt should be placed within the reach or grasp of the belter, which can be easily done when it is in the position shown in Fig. 1 or in any position in which the belt would be out of contact with the wheel when in operation. Then, starting the machinery, it completes the belting of the wheel, and it is obvious that by placing it on the side of the wheel to which the belt has a tendency to run off the device may be allowed to remain to prevent the belt from running off, as it is not heavy enough to affect the operation of the wheel. Where there is no such tendency the device may be removed.

It will be understood that the long or short attaching-bolt will not both be used at the same time, but that the bolt will be changed from a long one to a short one, according to the construction of the pulley-wheel to which

the device is to be applied, and that the modification shown at Fig. 4 differs only in the method of applying the bolt, and, while it may be used with all forms of pulleys, it is more particularly designed for use with such pulleys as have continuous webs in place of spokes.

What I claim as new, and desire to secure by Letters Patent, is—

The belter *c*, having the notch *d* adapted to engage with the edge of a pulley-rim, in combination with an attaching-bolt, substantially as specified.

FRANK B. RAY.

Witnesses:
AUGUST. ALTMAN,
FRANK S. RAY.