No. 748,674. PATENTED JAN. 5, 1904.

J. F. WEBB.

PULLEY COVERING.

APPLICATION FILED MAR. 23, 1903.

NO MODEL.

Fig. I.

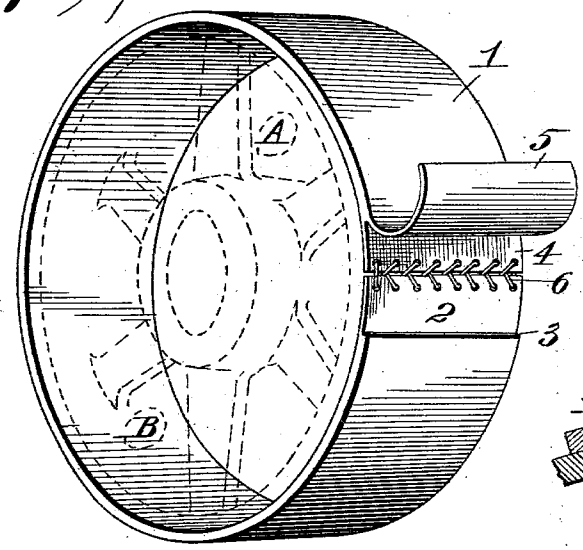


Fig. II.

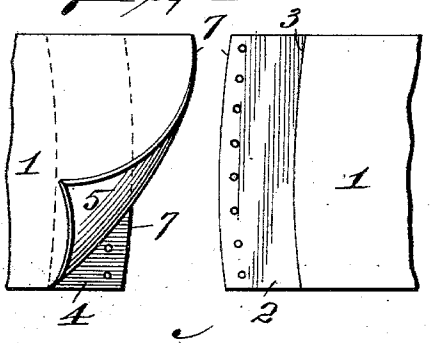


Fig. III.

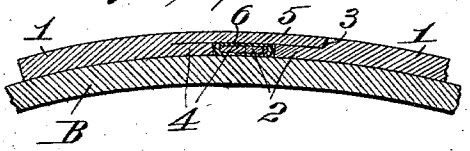


Fig. IV.

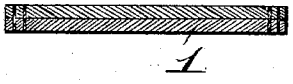


Fig. V.

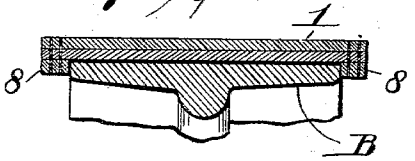


Fig. VI.

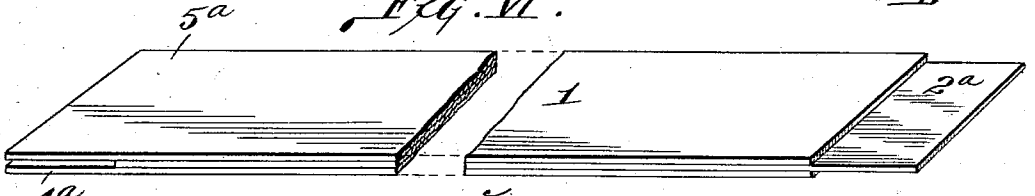


Fig. VII.

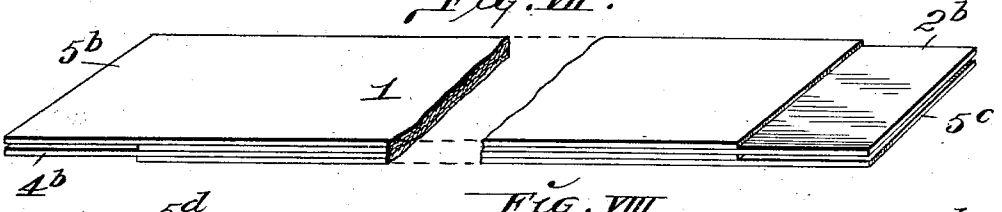
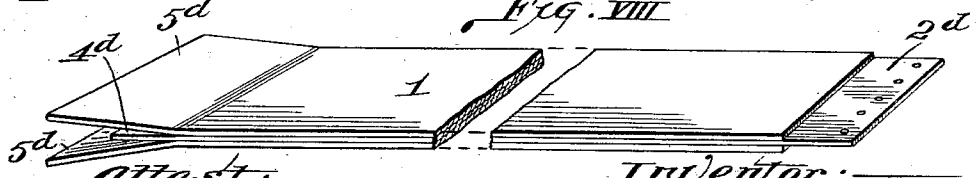


Fig. VIII.



Attest:—

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Atty's.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 748,674. Patented January 5, 1904.

UNITED STATES PATENT OFFICE.

JEAN F. WEBB, OF DENVER, COLORADO.

PULLEY-COVERING.

SPECIFICATION forming part of Letters Patent No. 748,674, dated January 5, 1904.

Application filed March 23, 1903. Serial No. 149,144. (No model.)

To all whom it may concern:

Be it known that I, JEAN F. WEBB, a citizen of the United States, residing in Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Pulley-Coverings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a covering-band applied to the rims or perimeters of pulleys to prevent slippage of belts thereon and to increase the traction thereof.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a perspective view of a pulley with my covering applied thereto, the outer tongue that incloses the inner joining tongues of the band being shown detached to afford a view of the inner tongues. Fig. II is a view illustrating the ends of the band shown in Fig. I, with the inner tongues having curving edges such as provided where the band is applied to a pulley having a convex rim. Fig. III is a longitudinal section of the band at the meeting ends and a fragment of the pulley-rim to which the band is fitted. Fig. IV is a cross-section of a band made of double ply instead of single ply, as shown in Figs. I, II, and III. Fig. V is a section showing the band with retaining-cleats applied to its under side to retain it upon a flat-rim pulley. Fig. VI is a perspective view of a modification of the band made of three-ply material. Fig. VII is a perspective view of a modification of the band made of four-ply material. Fig. VIII is a perspective view of a modification of the band made of three-ply material.

A designates a pulley of common form to which my covering is shown applied.

The rims of some pulleys are furnished with flat faces, while the rims of other pulleys are furnished with convex faces, and I have therefore provided constructions in my covering rendering it applicable to either form of rim.

Referring first to Figs. I to III, inclusive, 1 designates a band of single-ply material, such as leather or rawhide. In forming the band from a single-ply strip of material one end of the band is reduced in thickness to furnish an inner tongue 2, that extends from a shoulder 3 to the termination of the end of the band by which it is carried. The other end of the band 1 is split to divide it into an inner tongue 4, of a thickness approximately that of the inner tongue 2, and an outer tongue 5, that is of greater length than the inner tongue 4, so that it will overlap both of the inner tongues 2 and 4 when they are brought into abutting position against the rim-face of the pulley, as seen in Fig. I. When the covering-band 1 is applied to a pulley, the inner tongues 2 and 4 occupy positions in which their edges face or abut each other, and they are secured together by a strip of lacing 6, threaded through perforations therein or by any other suitable means of fastening that will serve to hold them united. The outer tongue 5 is then cemented or otherwise fastened onto the inner tongues to inclose them and present a smooth surface across the joint at the ends of the band, as seen in Fig. III, the outer tongue being preferably of sufficient length to extend to the shoulder 3 at the junction of the inner tongue 2 with the end of the band by which it is carried. When the band has been made and applied to the pulley in the manner described, it fits tightly to the pulley-rim and is perfectly smooth and even throughout its circumference without the presence of any jutting fastenings at the joined ends of the band, and therefore when the belt is applied to the pulley it will run as smoothly on the band as it would upon the surface of the pulley-rim and without the occurrence of slippage, which so frequently happens on the rims of pulleys, especially after they become worn smooth.

Where my covering-band is to be fitted to a pulley having a convex rim, I provide for the retention of the band upon the rim by curving the edges of the tongues 2, 4, and 5, as shown at 7, Fig. II, and also curving the shoulder 3, so that when said tongues are drawn together in the manner described the band will fit to the contour of the convex surface of the pulley-rim.

Where the covering-band is applied to a straight-face pulley, such as shown in Figs. I and V, I provide against side slippage and for its retention upon the rim of the pulley by affixing to its under side at the edges of the

band retaining-strips 8. These strips may be of any desirable size, length, or material and stitched or otherwise secured to the band, which is of sufficient width to permit of the strips being positioned at the edges of the pulley-rim.

I have thus far described the band as of a single ply; but it may be of two-ply, as seen in Fig. IV, the plies being stitched or otherwise suitably connected and the tongues at their ends being formed similarly to those in the one-ply construction.

In Figs. VI, VII, and VIII, I have shown modifications of the band. That in VI consists of a three-ply band the outer layers of which project at one end beyond the end of the inner layer to furnish an inner tongue 4^a and an outer tongue 5^a. The intermediate layer of the band projects at the end opposite that furnished with the tongues 4^a and 5^a to furnish a tongue 2^a. In connecting the ends of a band of this form the tongue 2^a is introduced into the interstice between the tongues 4^a and 5^a and secured by lacing, rivets, or other suitable means to the tongue 4^a, after which the tongue 5^a is cemented or otherwise fastened onto the tongue 2^a beneath it.

In the modification shown in Fig. VII the band is of four-ply. One of the intermediate layers has a tongue 2^b extending from one end of the band and the other intermediate layer has a tongue 4^b extending from the opposite end of the band. These intermediate tongues are laced, riveted, or otherwise secured together, and the tongue 5^c is lapped onto the intermediate tongue 4^b and cemented thereto, while the other outer-layer tongue 5^b is lapped onto and cemented to the intermediate tongue 2^b.

In the modification shown in Fig. VIII, which is of three-ply, the inner tongues 2^d and 4^d at each end of the middle layer are laced or otherwise secured together with their ends abutting and the tongues 5^d, projecting over the intermediate tongues 4^d, overlap the tongues 2^d and 4^d, when they are brought together and are cemented to said tongues, thereby providing a smooth surface at both sides of the band by reason of such overlapping.

The pulley-covering band may be made of any suitable material, such as leather, rawhide, rubber belting, or canvas. During the process of manufacture the interlapping ends and the side cleats may be pressed, molded, woven, or otherwise shaped into the proper form.

I do not desire to confine myself to the materials named or to the exact dimensions shown in the drawings, but wish to avail myself of any modifications thereof that come within the true spirit of my invention.

I claim as my invention—

1. A pulley-covering band having tongues of suitable lengths at its ends so disposed that when placed in position around a pulley the tongues will overlap to be secured to each other, substantially as set forth.

2. A pulley-covering band having tongues of suitable lengths at its ends so disposed that when placed in position around a pulley two of said tongues are opposed to each other for connection, and a third tongue to overlap the joint between the two aforesaid tongues and form a smooth outside surface, substantially as set forth.

3. A pulley-covering band having one of its ends divided to form a short tongue and a long tongue and having at its opposite end a short tongue to oppose and be connected to the first-mentioned short tongue; said long tongue being arranged to overlap and be secured to said short tongues, substantially as and for the purpose set forth.

4. A pulley-covering band having one of its ends split to present a short tongue and a long tongue and having at its other end a short tongue to mate with said first-named short tongue beneath said long tongue, substantially as set forth.

5. The combination with a pulley-covering band to extend across the face of a pulley-rim and projecting beyond the edges of said rim, of retaining-strips secured to the under side of the band at its edges which are extended beyond the pulley-rim face, substantially as set forth.

JEAN F. WEBB.

In presence of—
JEAN F. WEBB, Jr.,
H. F. BEHNEMAN.