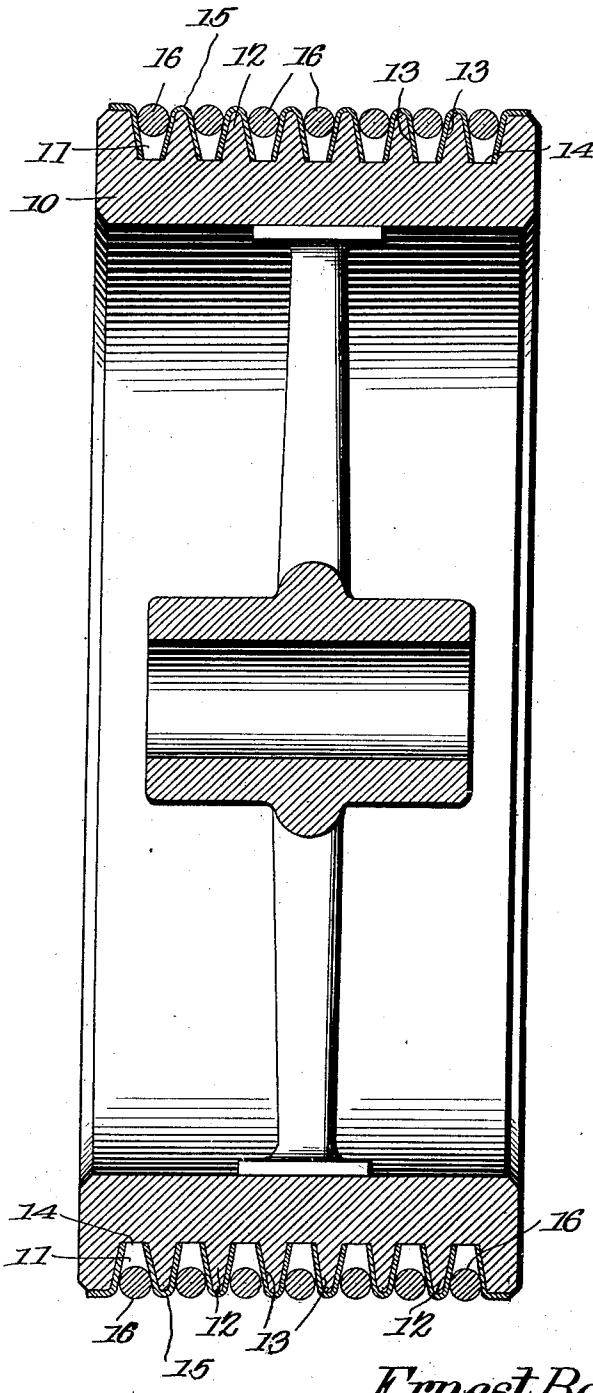
No. 754,960. PATENTED MAR. 22, 1904.

E. BAUER.

BELT PULLEY.

APPLICATION FILED DEC. 23, 1902.

NO MODEL.



Witnesses
E. F. Stewart
Wm. Bagger

Ernest Bauer, Inventor
by Cashow & Co
Attorneys

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

No. 754,960. Patented March 22, 1904.

UNITED STATES PATENT OFFICE.

ERNEST BAUER, OF CHICAGO, ILLINOIS.

BELT-PULLEY.

SPECIFICATION forming part of Letters Patent No. 754,960, dated March 22, 1904.

Application filed December 23, 1902. Serial No. 136,392. (No model.)

To all whom it may concern:

Be it known that I, ERNEST BAUER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Belt-Pulley, of which the following is a specification.

This invention relates to pulleys adapted to be operated by ropes or cable-belts; and it has for its object to provide a pulley of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view my invention consists, essentially, in the combination, with a wooden rim-pulley having an annularly-grooved face, of protecting means of wear-resisting material disposed to cover and protect the walls of said grooves where they are exposed to wear, thus materially increasing the life of the pulley, the body of which is not affected by wear upon the protecting elements.

My invention further consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claim, in connection with the accompanying drawing, which represents an axial sectional view of a pulley constructed in accordance with the principles of my invention.

10 designates a wooden rim-pulley, which may be of the ordinary or any well-known construction. The face of the pulley-rim is provided with a plurality of annular grooves 11, spaced by ribs 12, said ribs being **V**-shaped in cross-section, the grooves being formed with correspondingly-inclined walls 13 and with flat bottoms 14.

The protecting means are composed of bands 15 of sheet metal, which are approximately **V**-shaped in cross-section, with their open sides facing inwardly, so as to fit snugly upon the side walls of the ribs 12. These bands, which may be applied and secured in position in any suitable manner, are obviously prevented from lateral displacement by the ribs upon which they are mounted, and they form wear-surfaces for the operating band or cable 16, which is preferably circular in cross-section and which engages the several grooves of the pulley. It will be observed that said grooves are contracted at their lower ends to such an extent as to prevent the band from engaging the bottoms of said grooves, the wear being entirely against the sides of the ribs constituting the walls of the grooves, which are covered with the protective sheet-metal bands.

It will be readily understood that by the use of my invention the side walls of the grooves in a grooved-faced pulley of this kind will be so protected as to be practially free from wear, the consequence being that a pulley thus protected may be used for an indefinite length of time, and the wear-faces formed by the annular **V**-shaped bands may be renewed as often as may be found necessary or desirable.

Having thus described my invention, I claim—

The combination with a wood rim-pulley having a plurality of annular grooves with inclined walls and a plurality of inverted-**V**-shaped ribs spaced apart by said grooves, of bands of wear-resisting material, said bands being substantially **V**-shaped, with their open sides facing inwardly and disposed upon the inverted-**V**-shaped ribs contacting closely with the side walls of said ribs and constituting wear-surfaces supported by the side walls of the ribs for cables running in the grooves of said pulley.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ERNEST BAUER.

Witnesses:

GEO. R. HANCOCK,

ALBERT J. IVES.