

J. ANDERSON.
ELEVATOR BELT PULLEY.
APPLICATION FILED OCT. 14, 1908.

931,982.

Patented Aug. 24, 1909.

Fig. 1.

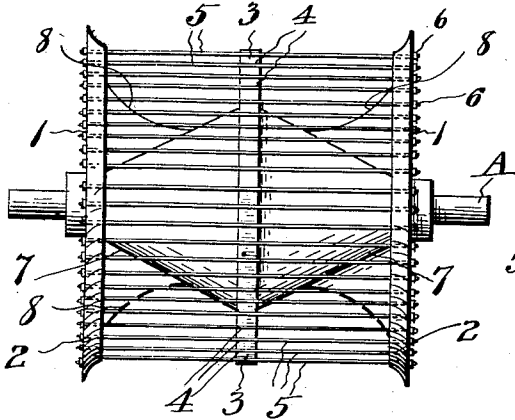


Fig. 2.

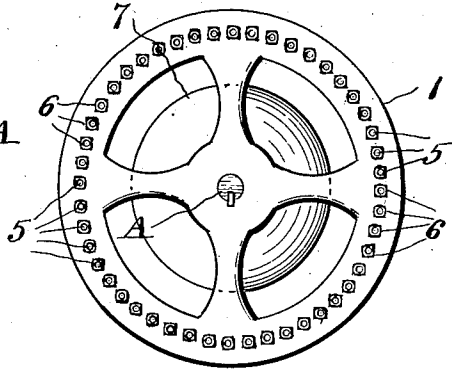


Fig. 3.

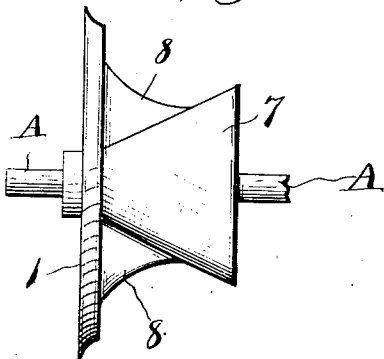


Fig. 4.

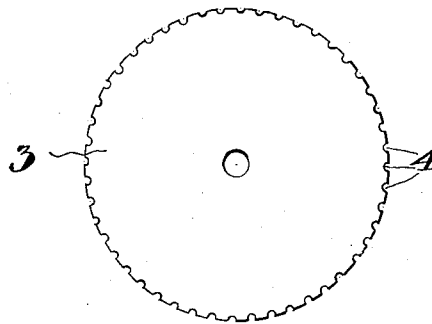


Fig. 5.



WITNESSES

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ELEVATOR-BELT PULLEY.

931,982.

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To all whom it may concern:

Be it known that I, JOHN ANDERSON, a citizen of the United States, residing at Galena, in the county of Cherokee and State of Kansas, have invented certain new and useful Improvements in Elevator-Belt Pulleys, of which the following is a specification.

My invention relates to pulleys and particularly to pulleys used for endless belt conveyers or elevators used to convey sand, gravel, broken stone, quartz, etc. In the use of the ordinary pulley with belt conveyers any sand or gravel that may get between the pulley and belt will be pressed into the belt and carried by it so that each time that part of the belt engages the pulley the belt is cut more and more and is eventually cut through.

My invention consists in the provision of a pulley constructed of end wheels and a middle disk spaced apart and connected by rods so as to permit the sand or gravel to drop into the pulley and a conical-shaped deflector on each wheel to throw any sand or gravel that may drop into the pulley to the side and out of it.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a side view in elevation of my improved pulley, Fig. 2, an end view, Fig. 3, a detail view of one of the end wheels, Fig. 4, a view of the middle disk, and Fig. 5, a detail view of one of the rods connecting the end wheels.

In the drawings similar reference characters indicate corresponding parts in all of the views.

A indicates a shaft.

My improved pulley consists of end wheels 1 provided with holes 2 adjacent to its rim, a middle disk 3 having transverse grooves 4 in its periphery, and rods 5 passed through holes 2 and engaging transverse grooves 4, said rods 5 being provided with threaded ends to receive nuts 6 to hold them in position. Wheels 1 and disk 3 are keyed to shaft A.

Secured to the central portion of each

wheel 1 is an inverted cone-shaped deflector 7 that is long enough to engage the adjacent side of disk 3, and 8 indicates braces connecting said deflector 7 and the spokes of wheel 1.

It will be understood from the above description and an inspection of the drawings that when the pulley is in use any sand, gravel, etc., that may get between the belt and the pulley will pass between rods 5 and striking one of the deflectors 7 will pass to the outside of the pulley.

Having thus described my invention what I claim is—

1. In a pulley, spaced apart wheels, a disk midway between said wheels, and rods connecting said wheels and engaging said disk.

2. In a pulley, spaced apart wheels, a disk midway between said wheels, and rods connecting the rims of said wheels and engaging the periphery of said disk.

3. In a pulley, spaced apart wheels having transverse holes in their rims, a disk having transverse grooves in its periphery, and rods secured in the holes in the wheels and engaging the grooves in the disk.

4. In a pulley, end wheels having inverted cone-shaped deflectors secured thereto, and rods connecting said wheels.

5. In a pulley, end wheels having inverted cone-shaped deflectors secured thereto, a middle disk engaging the free ends of said deflectors, and rods secured to said wheels and engaging said disk.

6. A pulley comprising end wheels having transverse holes adjacent to their peripheries, a disk midway between the end wheels having transverse grooves in its periphery, an inverted cone-shaped deflector secured to the inner side of each wheel and engaging the middle disk, braces connecting each deflector and the spokes of the wheels, and rods secured in the holes in the wheels and engaging the grooves in the disk.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

JOHN ANDERSON.

Witnesses:

H. C. DALE,

S. J. HERSHBERGER.