(No Model.)

C. E. BALL, Dec'd.,

M. H. BALL, Administrator.

BAND PULLEY.

No. 301,659. Patented July 8, 1884.

Fig. 2.

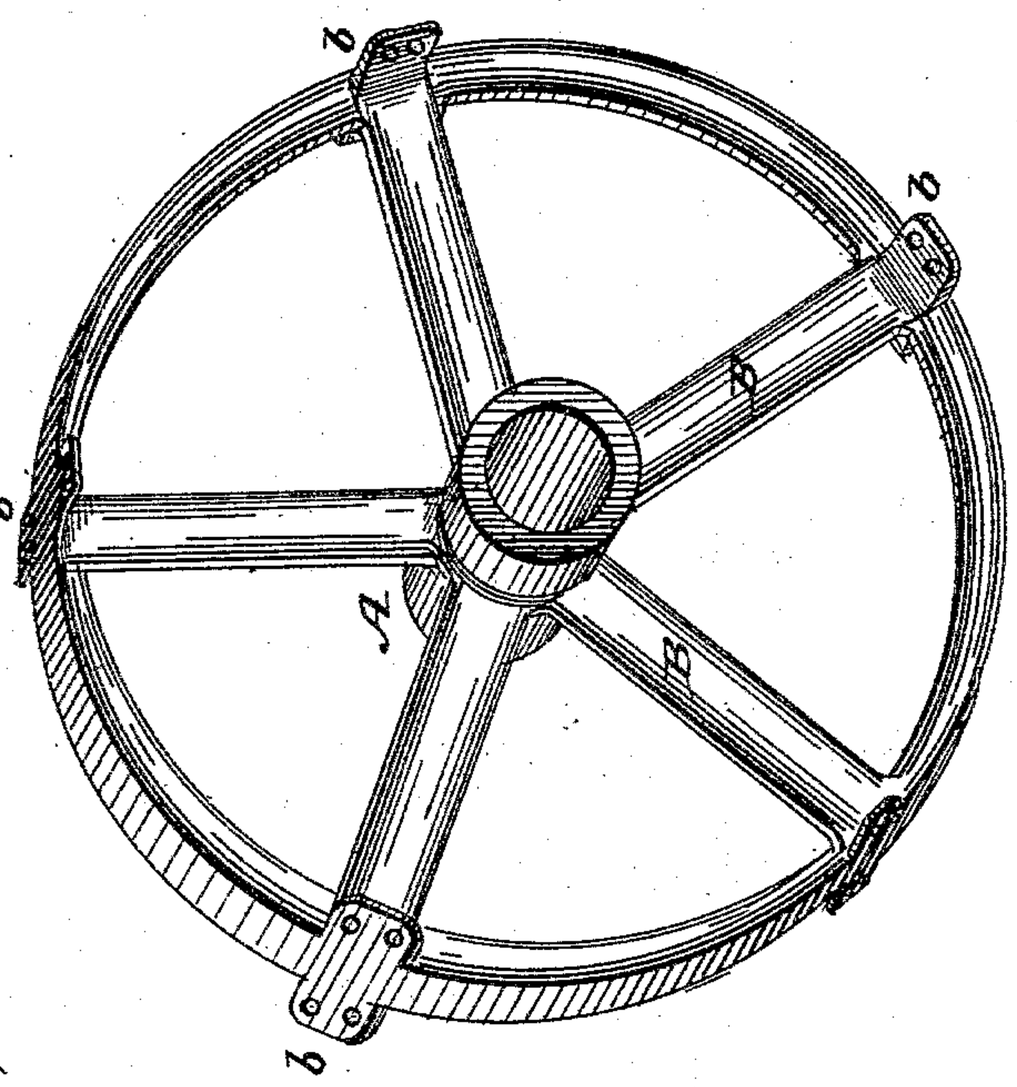


Fig. 3.

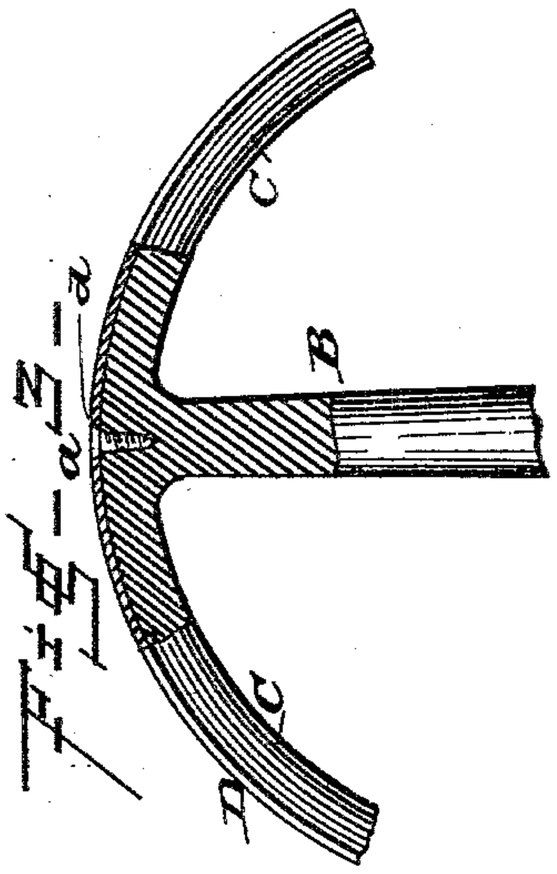
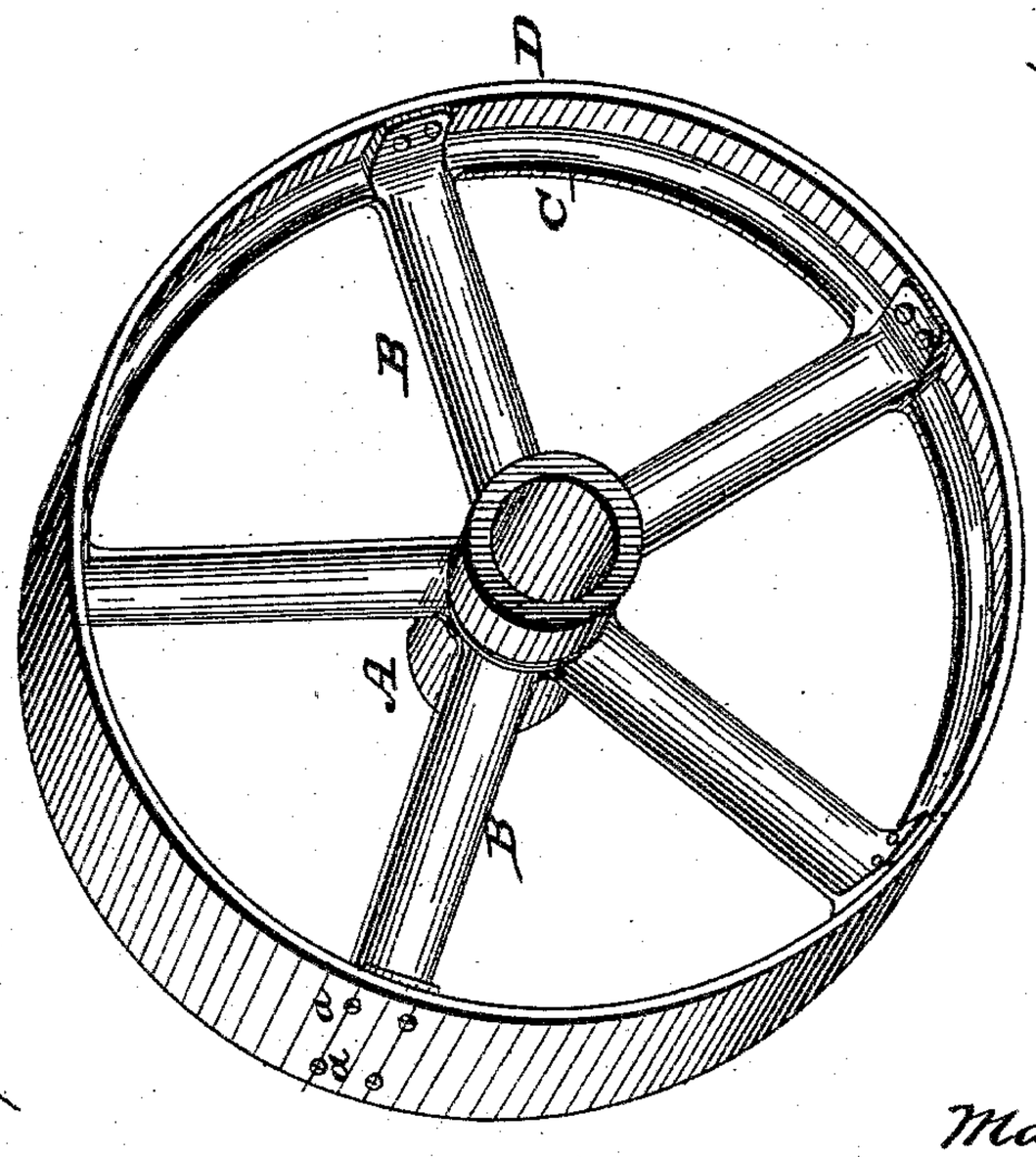


Fig. 1.



WITNESSES:

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INVENTOR.

UNITED STATES PATENT OFFICE.

MADISON H. BALL, OF MADISON, WISCONSIN, ADMINISTRATOR OF CHARLES E. BALL, DECEASED.

BAND-PULLEY.

SPECIFICATION forming part of Letters Patent No. 301,659, dated July 8, 1884.

Application filed May 20, 1884. (No model.)

To all whom it may concern:

Be it known that CHARLES E. BALL, late a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, did invent certain new and useful Improvements in Band-Pulleys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in belt or band pulleys, having for its object the production of a pulley-frame by which the number of spokes or arms may be reduced, and giving a stronger pulley for the same weight, and around which pulley-frame is put a light broad band or rim secured by rivets, screws, or bolts, also obviating the liability of thin parts of the pulley being broken, as is generally the case where the entire pulley is formed of cast-iron; and to this end the invention consists in the novel construction and combination of parts, all as will be hereinafter fully described, and set forth in the claims hereto annexed.

Referring to the accompanying drawings, Figure 1 represents a view in perspective of the improved pulley; Fig. 2, a view in perspective of the pulley-frame; Fig. 3, a detail sectional view of a portion of the pulley, showing one means of securing the exterior rim or band, D, in position.

In the drawings, A represents the hub; B, the spokes or arms, and C the fellies or rim of the pulley-frame, which are made of cast-iron, the ends of the spokes or arms B at their junction with the fellies or rim C being enlarged or provided with projecting flanges *b*, as shown, so as to brace and strengthen the parts at that point, and also form means by which the exterior wrought-iron or steel band or rim, D, may be secured to the pulley-frame by rivets, screws, or bolts *a*. When screws are used, the exterior band, D, has countersunk holes *d* for the reception of the screw-heads, as shown in Fig. 3. The exterior band or rim, D, is heated to the proper temperature and placed on the pulley-frame in a similar manner to securing tires on vehicle-wheels. The band or rim D, being quite broad or extending some distance beyond each side of the fellies or rim C of the pulley-frame, prevents said frame from receiving accidental blows. While the fellies or rim C strengthen and brace the spokes or arms B at their ends, they also prevent their being broken by the springing of the wrought-iron or steel band or rim D.

The spokes or arms B, if desired, may be made of wrought-iron and cast to the hub and fellies or rim C.

Having thus fully described the said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a belt or band pulley, the pulley-frame consisting of the hub A, spokes or arms B, having enlarged ends, and the fellies or rim C, said parts being cast in one piece, in combination with the exterior wrought-iron or steel band or rim, D, secured to the spokes or arms and fellies or rim C, substantially as specified.

2. In a belt or band pulley, the pulley-frame consisting of the hub A, spokes or arms B, having enlarged ends, and the fellies or rim C, in combination with the exterior wrought-iron or steel band or rim, D, secured to the said spokes or arms and fellies or rim by rivets, screws, or bolts, substantially as specified.

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

MADISON H. BALL,
Administrator of the estate of Charles E. Ball, deceased.

Witnesses:
A. R. JONES,
WM. M. WHELAN.