

J. F. WRIGHT & B. B. JONES.

Wheels for Vehicles.

No. 138,220

Patented April 22, 1873.

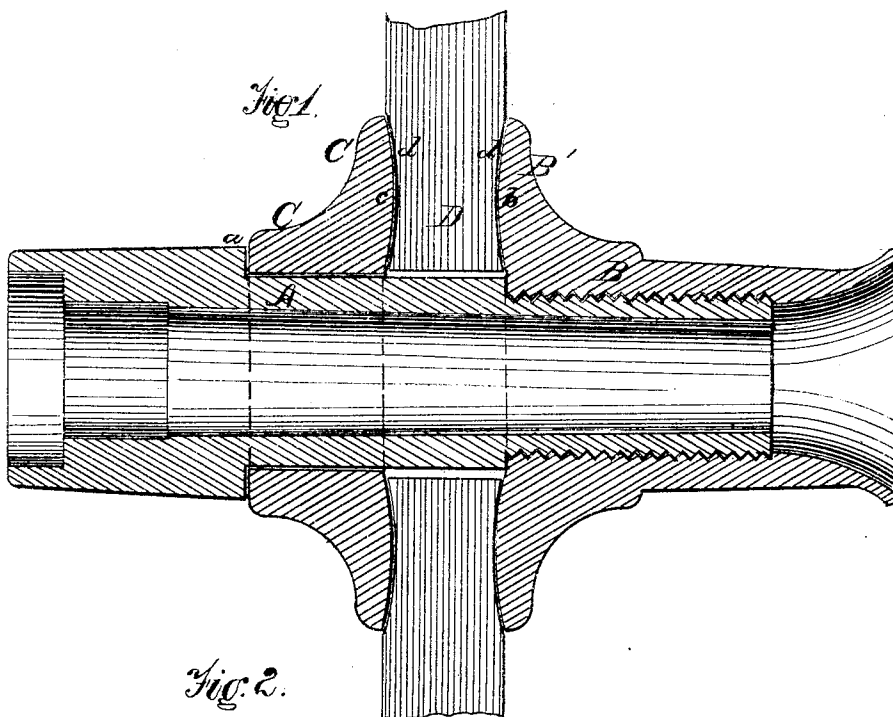
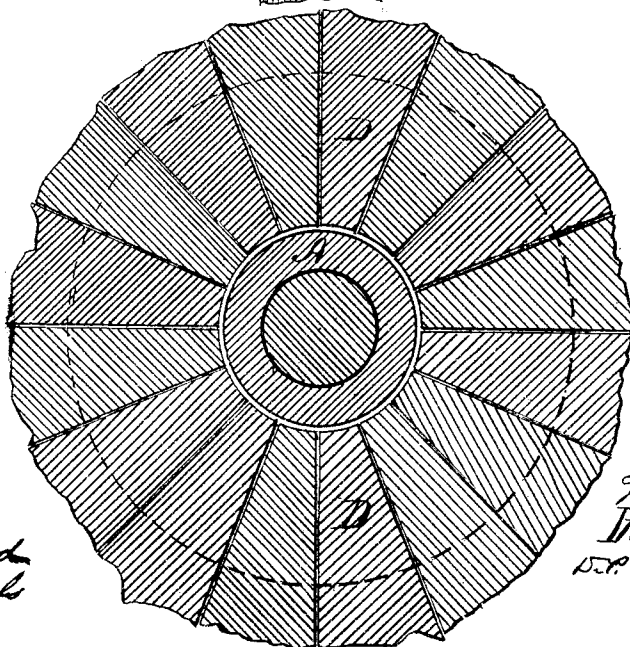


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN F. WRIGHT AND BENONI B. JONES, OF COLUMBUS, INDIANA.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **138,220**, dated April 22, 1873; application filed January 21, 1873.

To all whom it may concern:

Be it known that we, JOHN F. WRIGHT and BENONI B. JONES, of Columbus, in the county of Bartholomew and State of Indiana, have invented a certain Improvement in Carriage-Wheels, of which the following is a specification:

This invention relates to that class of carriage-wheels the hubs of which are of metal, and are so constructed that a broken spoke may readily be replaced by a perfect one on removing, temporarily, one of the flanges of the hub, between which the tenons of the spokes are clamped. Our improvement consists in making the respective faces of the flanges bearing against the edges of the tenons of the spokes convex from edge to edge, and in giving to the edges of the spoke-tenons a corresponding concavity. By these means all endwise movement of the spokes is most effectually prevented.

Figure 1 is an axial section of our improved hub. Fig. 2 is a transverse section thereof.

The same letters of reference are employed in both figures in the designation of identical parts.

The part A of the hub, forming the pipe-box for the journal of the axle, is screw-threaded upon the exterior surface at the smaller end, to screw into the part B, which has the flange B' formed upon it. A flanged ring, C C', is fitted upon the part A, bearing against the shoulder a thereof. The tenons D of the spokes form a solid arch around the part A without coming in contact therewith, and are clamped between the flanges B' and C',

the bearing-faces *b* and *c* of which are of convex form from edge to edge, adapted to the concavities of the edges of the tenons, as seen at *d*, Fig. 1.

The flange C', instead of forming part of a loose ring, may be cast with the part A of the hub; but the construction shown is preferred, because in that way the flange may adapt itself to slight inequalities in the arch of spoke-tenons.

The chief merit and distinguishing characteristic of our invention consists in the fact that it provides a continuous unbroken bearing to both sides of the arch of spoke-tenons the entire width of the clamping-flanges—a result very much desired, but never before attained in this class of wheels.

The above-described construction adds greatly to the strength of the wheels, and it almost absolutely prevents the tenons from working loose in the hub.

What we claim as our invention, and desire to secure by Letters Patent, is—

In a carriage-wheel, the combination of the clamping-flanges B' and C', having convex bearing-surfaces *b* and *c*, with spokes the tenons D of which are concaved at *d d*, substantially as and for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOHN F. WRIGHT.
BENONI B. JONES.

Witnesses:

H. DAILY,
C. A. TERRELL.