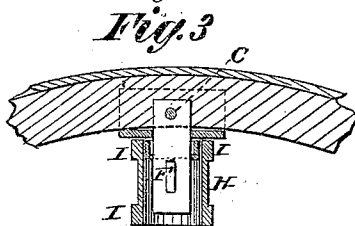
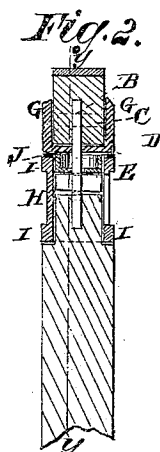
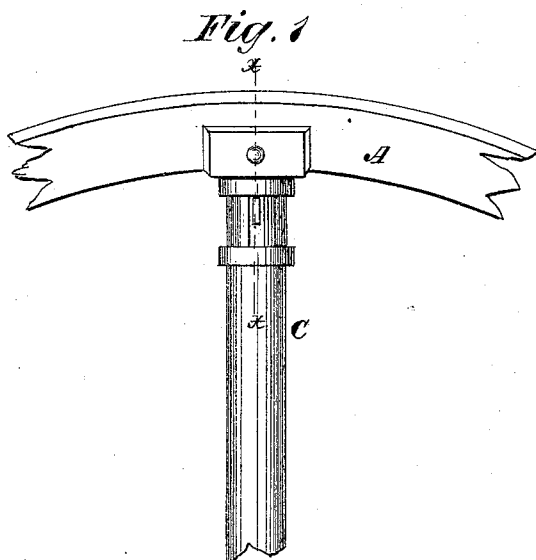


R. R. JONES.
Wheels for Vehicles.

No. 143,078.

Patented September 23, 1873.



Witnesses:

F. Mc Andy.
Sturgeon

Inventor:

R. R. Jones
Per *Munn & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

ROLLA R. JONES, OF PILLAR POINT, NEW YORK.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **143,078**, dated September 23, 1873; application filed May 24, 1873.

CASE B.

To all whom it may concern:

Be it known that I, ROLLA R. JONES, of Pillar Point, in the county of Jefferson and State of New York, have invented a new and useful Improvement in Wagon-Wheels, of which the following is a specification:

The invention consists in the improvement of wagon-wheels, as hereinafter described and pointed out in the claim.

Figure 1 is a side elevation of a section of a felly and spoke, showing my improved mode of fastening the spoke. Fig. 2 is a section of Fig. 1 on the line *x x*, and Fig. 3 is a section of Fig. 2 on the line *y y*.

Similar letters of reference indicate corresponding parts.

A is the felly; B, the metal plate, let into it in the axis of the spoke, and secured by a pin, C, or any other suitable means. D is the cap, and E the bearing-piece for the end of the spoke, clamped on the felly by a key, F. The cap has flanges G overlapping the sides of the felly, to secure it against splitting. The bearing-piece E may be cast together with the

cap, if preferred. The spoke is slotted at the end suitably to be fitted on the plate and key, and it is firmly secured thereon by a thin metal ferrule, which may be a plate, H, bent around the spoke and secured by the bands I, which are driven on tight, and secured by solder, or it may be an ordinary ferrule of sheet or cast metal. An elastic washer, J, is placed between the band H and the cap D, to lessen the shocks. The spoke is to be driven in the ferrule H, and the ferrule keyed on when arranged as in the drawing; but it may be screwed on the rest E, if desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The plate B, pin C, flange-cap D G, and ferrule H, constructed and combined to form an intermediate connection between spokes and fellyes, substantially as set forth.

ROLLA REES JONES.

Witnesses:

WAKEMAN J. DIBBLE,
LYMAN ACKERMAN.