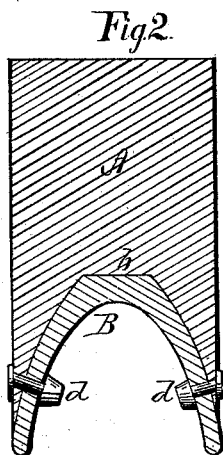
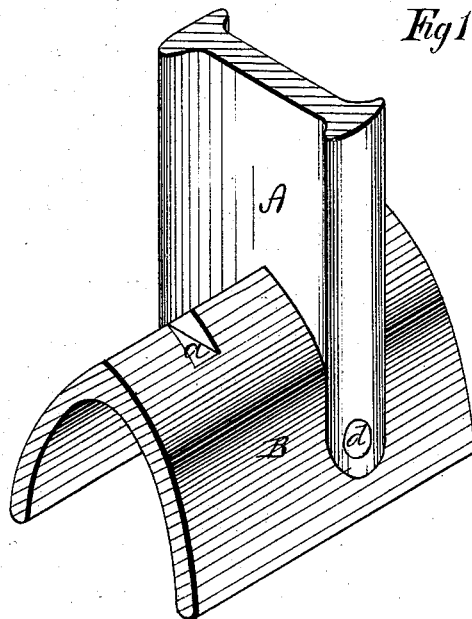


E. BALL.
Vehicle-Wheel.

No. 168,209.

Patented Sept. 28, 1875.



WITNESSES
Chas H. Orland
C. L. Ewert.

INVENTOR
Ephraim Ball.
per
Alexander Mason
ATTORNEYS

UNITED STATES PATENT OFFICE.

EPHRAIM BALL, OF CLARKSVILLE, TENNESSEE, ASSIGNOR TO THE CLARKSVILLE IRON WAGON MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN VEHICLE-WHEELS.

Specification forming part of Letters Patent No. **168,209**, dated September 28, 1875; application filed March 6, 1875.

CASE C.

To all whom it may concern:

Be it known that I, EPHRAIM BALL, of Clarksville, in the county of Montgomery and in the State of Tennessee, have invented certain new and useful Improvements in Wheels for Vehicles; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention relates to an improvement upon Letters Patent No. 119,811, granted to me October 10, 1871; and it consists in the construction and mode of uniting an iron spoke to an iron felly, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my invention, and Fig. 2 is a section of the same.

A represents an iron spoke, and B an iron felly, to which the spokes are to be attached.

The spoke is made I-shaped, as shown, so as to give it strength, and not materially add to its weight. The felly B is provided with notches *a* at the points where the spokes are to be attached, and the outer end of each spoke is forked to straddle the felly. The angle of the fork of the spoke is cut straight, as shown at *b* in Fig. 2, and fits in the notch *a* of the felly. The prongs of the spoke are then riveted to the felly by rivets *d d*.

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

The combination of the I-shaped metallic spoke A, with forked end and square part *b*, and the metallic felly B, having notches *a*, the parts being united by the rivets *d*, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of January, 1875.

EPHRAIM BALL.

Witnesses:

A. HOWELL,
G. L. ALLEY.