S. J. MILLER & L. WRIGHT.

Wheels for Vehicles.

No. 137,017. Fig 1 Patented March 18, 1873.

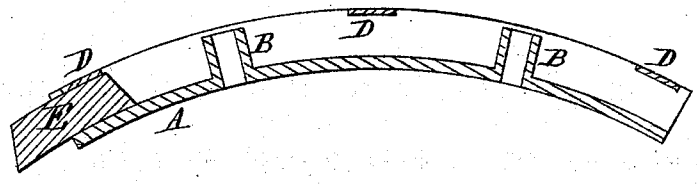


Fig 2

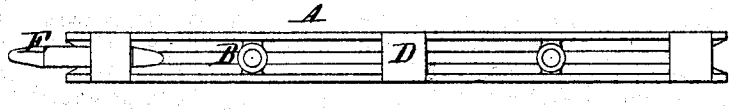


Fig 3

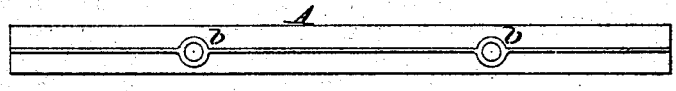
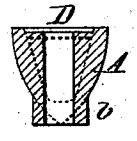


Fig 4.



Witnesses
Geo. E. Upham
J. B. Loomis.

Inventor
S. J. Miller,
Luna Wright,
Chipman & Osmer & Co
Attys

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

SAMUEL J. MILLER AND LUNA WRIGHT, OF ECONOMY, INDIANA.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **137,017**, dated Mar h 18, 1873.

To all whom it may concern:

Be it known that we, SAMUEL J. MILLER and LUNA WRIGHT, of Economy, in the county of Wayne and State of Indiana, have invented a new and valuable Improvement in Fellies; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of our felly. Fig. 2 is a top view of the same. Fig. 3 is a bottom, and Fig. 4 a cross-section, of the same.

This invention has relation to metallic hollow fellies for carriage-wheels; and it consists in constructing the same with tubular spoke-sockets, forming braces to the sides of the felly, and also in providing the felly with transverse braces connecting the edges of its sides or flanges, all substantially as hereinafter more fully described.

Referring to the drawing, A designates a hollow V-shaped felly, made of malleable cast-iron, and constructed with the tubular spoke-sockets B passing up or outward between the sides of the felly, nearly to its convex part. These sockets are cast with the felly, and are attached to the sides thereof, thus constituting braces to increase the strength of the wheel. These sockets extend to the concave part of the felly, and appear outside the latter in the form of nipples *b*, of sufficient thickness of wall to withstand all ordinary strain from or against the spokes. D designates transverse braces, cast with or mortised into the edges of the sides of the felly, one being located at the middle and the others near the end of the felly. E represents a beveled segmental key, fitting the recess in the felly, and designed to connect and strengthen the fellies at the joints. The key E fits under the two adjacent end braces D of two connected fellies. The tire or cap band, preferably flanged, fits over the fellies in the ordinary manner.

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

The hollow metallic felly A, having the elongated spoke-sockets B and transverse braces D, constructed and arranged substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

SAMUEL J. MILLER.
LUNA WRIGHT.

Witnesses:
G. W. ROBBINS,
J. W. WILLIAMS.