

I. E. BOWER.

Improvement in Carriage Wheels.

No. 120,847.

Patented Nov. 14, 1871.

Fig. 1.

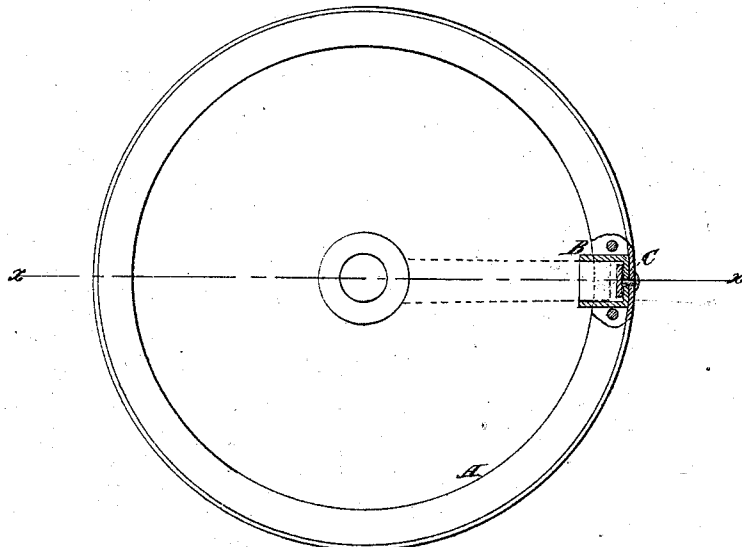


Fig. 2.

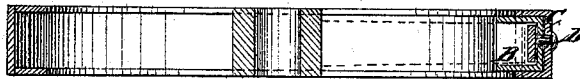


Fig. 3.

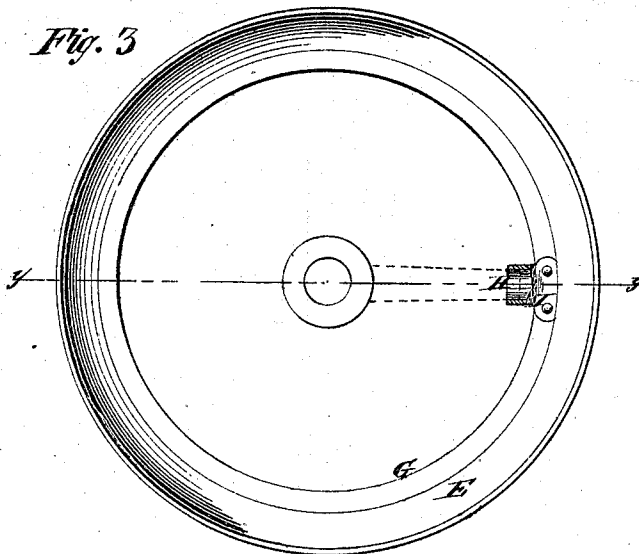


Fig. 6.

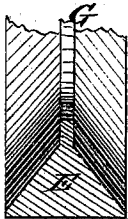


Fig. 5.

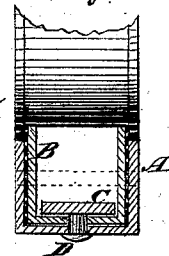
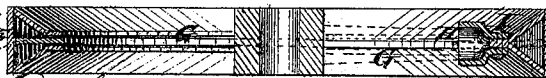


Fig. 4.

Witnesses:

P. C. Dietrich,
Charles "Mac" Cady,



Inventor:

I. E. Bower

PER

Wm. L. G.
Attorneys.

UNITED STATES PATENT OFFICE.

ISAAC E. BOWER, OF BAINBRIDGE, GEORGIA.

IMPROVEMENT IN CARRIAGE-WHEELS.

Specification forming part of Letters Patent No. 120,847, dated November 14, 1871.

To all whom it may concern:

Be it known that I, ISAAC E. BOWER, of Bainbridge, in the county of Decatur and State of Georgia, have invented a new and useful Improvement in Carriage-Wheels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to improvements in the construction of the rims of carriage-wheels; and it consists in forming the said rims of thin sheet iron or steel bent into the form of three sides of a rectangular figure or triangular shape, in cross-section, with metal sockets for the ends of the spokes, said sockets being riveted to the tread of the rim when in rectangular form; but when in triangular form they will be secured to the apex of the angle, or an extension of the sides meeting at the apex.

Figure 1 is a side elevation of the rectangular wheel with a part broken out and one of the sockets sectional. Fig. 2 is a transverse section of the same taken on the line *xx* of Fig. 1. Fig. 3 is a side elevation of the triangular wheel, and section of one of the sockets. Fig. 4 is a section of Fig. 3 on the line *yy*. Fig. 5 is an enlarged section of Fig. 1; and Fig. 6 is an enlarged section of Fig. 3.

Similar letters of reference indicate corresponding parts.

A is the rim formed of a thin sheet-metal strip bent into the form, in cross-section, of three sides of a rectangle. B is a metal socket for the outer end of a spoke. It is fitted to the tread C

inside of the sides and secured thereto by a rivet, D. E is a similar strip of thin sheet metal bent into triangular form in cross-section with the sides, extending beyond the apex a short distance, as indicated at G. H is a socket with a flattened base, provided with a slot to receive the extension G and be riveted thereto, as shown at I. The flattening of the base spreads the metal, so that it can be secured by two rivets, as shown in Fig. 3. This arrangement of the sheet metal provides light and strong rims, that may be cheaply made.

In making these rims the metal strip will first be bent into form, in cross-section, represented in Fig. 1. Then it will be bent into circular form, which will complete the form for Fig. 1; but for the wheel represented in Fig. 3 the sides will be bent inward to meet at the apex of the angle, and again bent thereat to form the extension G afterward. These rims may be filled with wood rims or not, as preferred, and will hold the said wood rims very securely. The triangular rim may have a vertical rim, *x*, Fig. 4, for bracing the center of the tire, said ring being bolted or secured between the flanges G.

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

The sheet-metal rim E of a carriage-wheel, triangular in form and having extension shank G, combined with the sockets H to receive spokes, and having necks to receive said shanks, as described.

ISAAC E. BOWER.

Witnesses:

DANIEL MCGILL,
NOAH L. CLOUD.

(31)