(No Model.)

H. ROHRER.

WHEEL.

No. 343,399. Patented June 8, 1886.

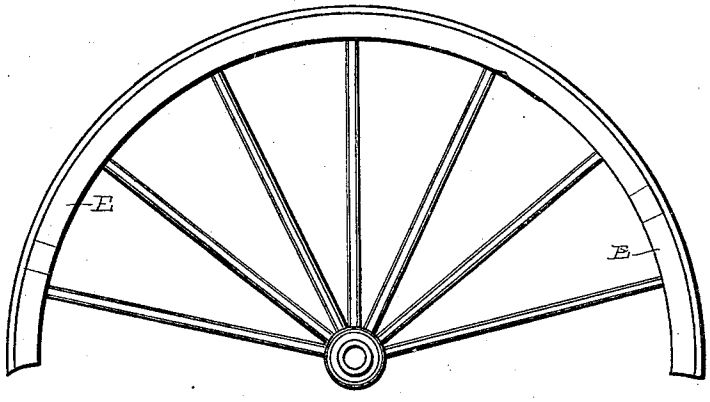

FIG. 1.

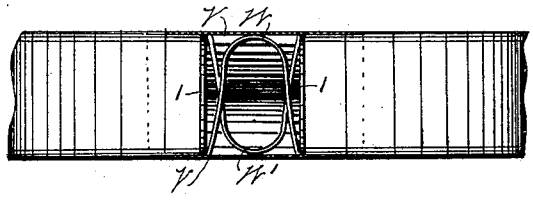

FIG. 2.

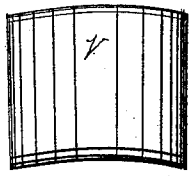

FIG. 3.

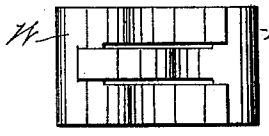

FIG. 4.

WITNESSES
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HENRY ROHRER, OF NEW YORK, N. Y.

WHEEL.

SPECIFICATION forming part of Letters Patent No. 343,399, dated June 8, 1886.

Application filed April 5, 1886. Serial No. 197,919. (No model.)

To all whom it may concern:

Be it known that I, HENRY ROHRER, a citizen of the United States of America, residing at the city of New York, in the county of New York and State of New York, have invented certain Improvements in Wheels, of which the following is a specification.

My invention relates to wheels constructed with elastic joints between the ends of the fellies, so that they may be pressed in toward the hub, temporarily reducing the diameter of the wheel; and the object of my improvement is to reduce the labor and expense of putting on the tire, and making the wheels much more durable, the tire itself always serving to hold the wheel firmly together. This construction also admits of the use of tires fully tempered before they are put in place, no heating being required in order to fix them on the wheels.

I attain my object by the mechanism illustrated in the accompanying drawings, in which Figure 1 is a side view of a section of a wheel with elastic joints; Fig. 2, a top view of one of the connections between two fellies, with the upper part of the shell of the joint removed; Fig. 3, an outside view of the joint, and Fig. 4 a top view of the spring used in the shell between the fellies.

Similar letters refer to similar parts throughout the several views.

The joint I use consists of a shell, V, the shape of the cross-section of which is similar to that of the felly E, having a movable head, I, somewhat inside of either end, and between these heads a powerful spring. The spring is composed of two broad U-shaped pieces of steel, the prongs of one, W, having a deep recess cut in their ends, and those of the other, W′, a corresponding tongue. The prongs of W′ are entered or engaged between those of W, and the tongues of W pass out of the corresponding recesses in the side of W′ and lap the prongs of the same. These thimbles are used at each joint between sections of the fellies, the end of each section being received by one end of the shell. The strength of the spring is such that when the tire is in place its pressure is great enough to force the felly immovably against it. In order to prevent the spring and interior of the shell from rusting, I fill the spring-chamber between the bearing-heads with asphaltum or any similar non-corrosive substance, generally after the parts are connected. The asphaltum is sufficiently softened by the heat in summer to permit the spring to give under the pressure caused by the expansion of the connected parts. The movable head, which separates the spring from the ends of the felly, gives a full and uniform bearing for the spring against the heads of fellies between which it is placed.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a wheel, the combination of the fellies having their ends somewhat separated, a shell adapted to receive the end of a felly at both ends, and a spring composed of two U-shaped pieces, the ends of which are constructed to interlock, placed in said shell and adapted to act outwardly against the ends of the fellies, substantially as specified.

HENRY ROHRER.

Witnesses:
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