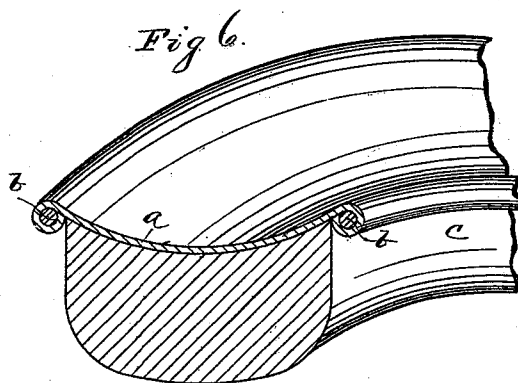
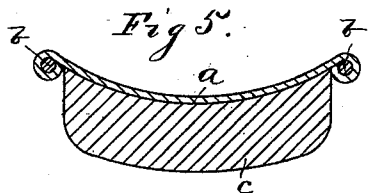
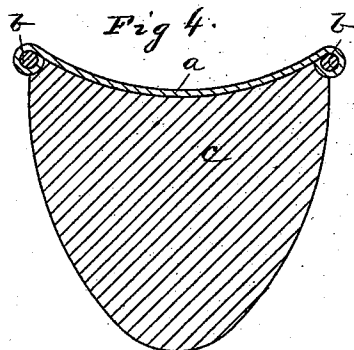
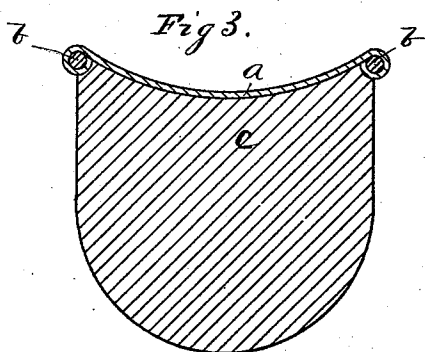
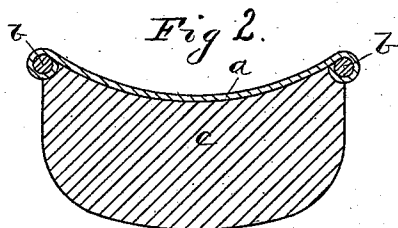
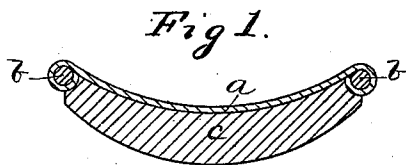


(No Model.)

C. H. BROWN.
WHEEL RIM.

No. 532,866.

Patented Jan. 22, 1895.



WITNESSES:

Lester L. Allen.
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UNITED STATES PATENT OFFICE.

CHARLES H. BROWN, OF DAYTON, OHIO, ASSIGNOR TO THE S. N. BROWN & COMPANY, OF SAME PLACE.

WHEEL-RIM.

SPECIFICATION forming part of Letters Patent No. 532,866, dated January 22, 1895.

Application filed August 24, 1894. Serial No. 521,140. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BROWN, of Dayton, county of Montgomery, State of Ohio, have invented a new and useful Improvement in Wheel Rims or Fellies; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to new and useful means for reinforcing or strengthening the wooden rims or fellies of wheels adapted to sulkies, bicycles and other light vehicles of the pneumatic tire type.

The object of the invention is to provide a metallic reinforcing band for wooden rims, which, when united with said wooden rim, produces a structure in which a high degree of elasticity and strength is obtained, and a specific lightness and durability is combined.

To these ends I provide a metal reinforcing band, which is placed around the outer circumference of the wooden rim, and made secure thereto by shrinkage, after the method of applying the ordinary metal tire to a wheel; by compressing the reinforcing band and the wooden rim together, or any other suitable way.

Referring to the annexed drawings, which form a supplement to the specification, Figs. 1, 2, 3, 4, 5 and 6, are sectional views of my improved reinforcing or strengthening band applied to a wooden rim.

The wooden rims shown in the views are of varying thicknesses to illustrate that the band may be applied to a variety of wooden rims.

The letter (a) designates a thin metallic band constructed of metal that has a requisite amount of elasticity and hardness. (b) designates wires which are completely inclosed in the outer circumferential edges of said band, by being rolled therein. These wires, when so placed, form solid and substantial beads that extend around the edges of said band, and are essential to give said band the

desired strength and elasticity, and to insure its durable quality.

The joint formed by the meeting ends of the band, may be secured in any suitable way, as by allowing the wires to project at one end beyond the end of the band, and their insertion in the rolls of the other end of said band, until the ends of said wires meet, when they may be brazed and thereby made secure.

(c) designates a wooden rim or felly, which may be of any desirable form in cross section, as is amply illustrated in the drawings. The outer circumferential surface of said rim is concaved to receive the metallic reinforcing band, in which the pneumatic tire is placed, and which tire it has not been deemed necessary to show in the drawings.

The band (a) may be shrunk onto the wooden rim, or it may be placed thereon by compression, as hereinbefore stated, and when so placed, a stiffer or firmer nature is imparted to the wooden rim that greatly enhances its durability, and enables the wooden rim to possess a minimum degree of weight.

When placed upon the rim, the circumferential strengthening beads formed by the wires (b) will inclose the outer edges of said wooden rim, thereby preventing any chafing or splitting of said rim, and adding greater power to resist lateral strain and any pressure on the metallic band, will have the effect of compressing or holding toward the center, the wooden rim, the parts thereby becoming rigid and compact.

There are a variety of ways of applying the metallic reinforcing band to the rim, but in each case it is essential that the metallic band (a) be provided with the circumferential strengthening beads, as this construction of said band is a substantial means of preventing any lateral or twisting movement of the rim.

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

1. The combination with a wooden rim or felly; of a metallic reinforcing band around the outer periphery of said felly; wires rolled in the circumferential edges of said metallic

band, forming circumferential beads that inclose the outer edges of said felly, substantially as and for the purposes specified.

2. In a wheel, the combination with the
5 wooden rim; of a metallic reinforcing band inclosing said rim; wires rolled in the circumferential edges of said metallic band, and projecting laterally beyond the edges of the rim, whereby means are provided for protecting

said rim against torsional strain, and for obtaining a specific degree of lightness, substantially as and for the purposes specified.

In testimony whereof, I have hereunto set my hand this 18th day of August, 1894.

CHARLES H. BROWN.

Witnesses:

R. J. MCCARTY,

CHARLES W. DALE.