No. 667,734. Patented Feb. 12, 1901.

M. A. PATTON.

TIRE SETTER.

(Application filed June 26, 1900.)

(No Model.)

Fig. 1.

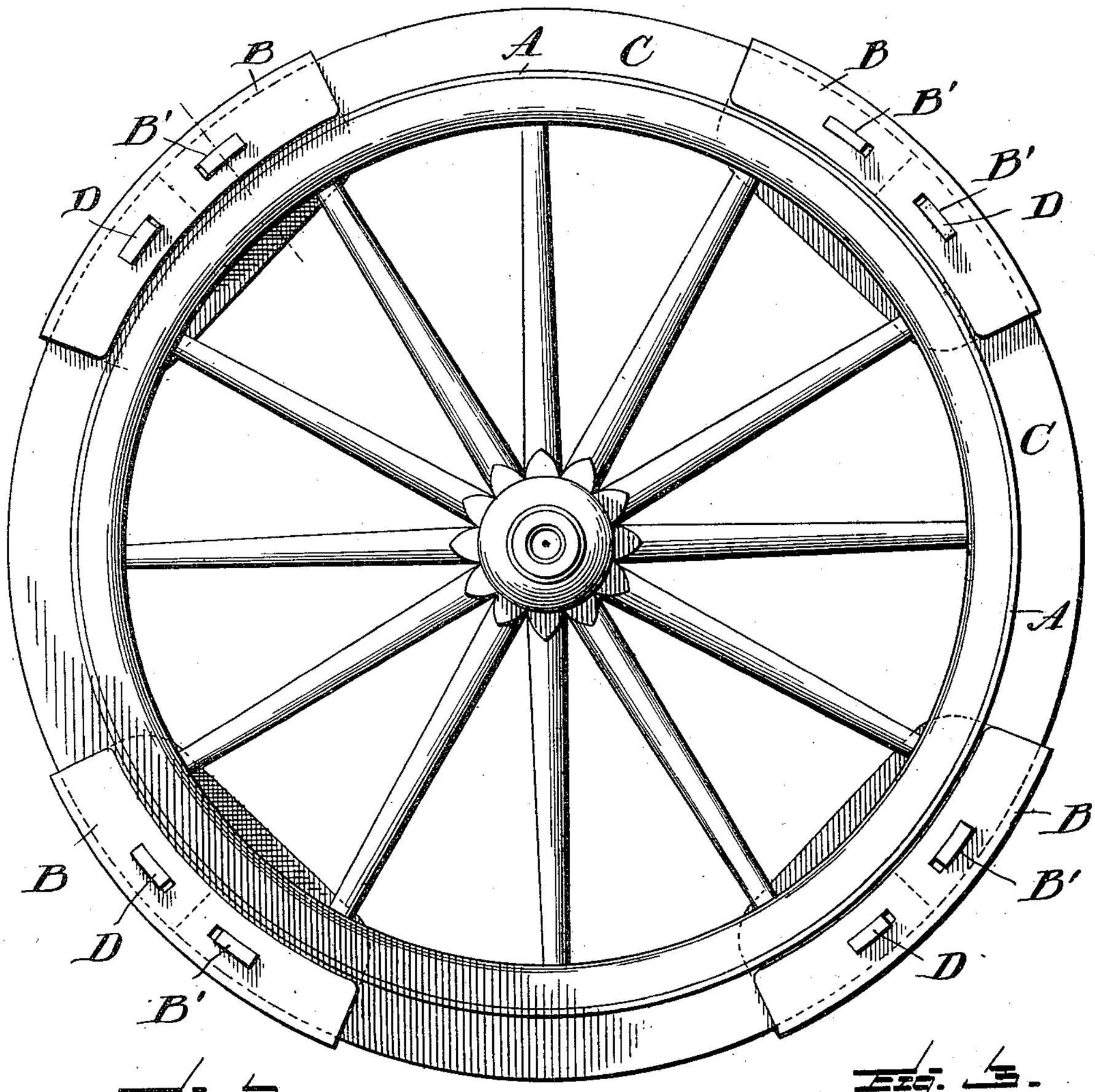


Fig. 2.

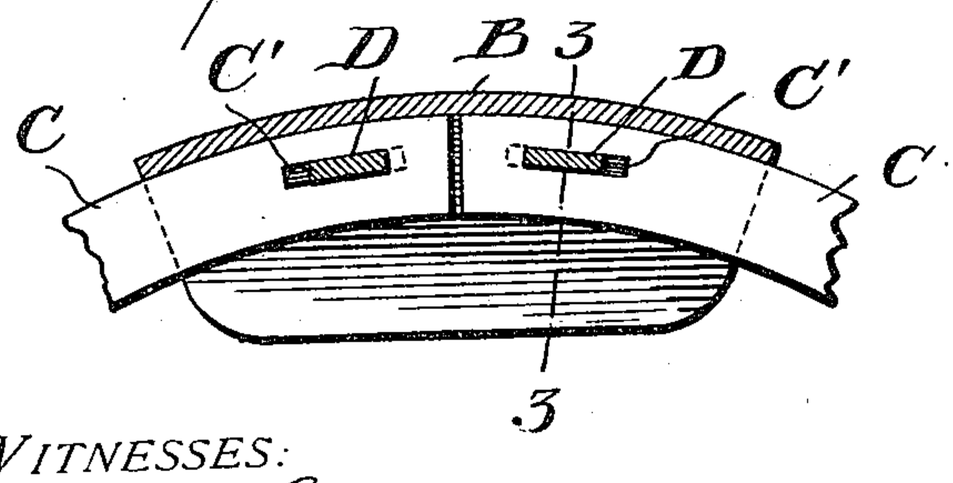
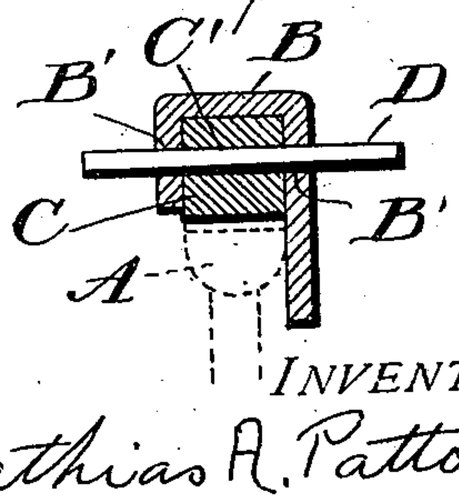


Fig. 5.



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MATHIAS A. PATTON, OF LIVINGSTON, MONTANA.

TIRE-SETTER.

SPECIFICATION forming part of Letters Patent No. 667,734, dated February 12, 1901.

Application filed June 26, 1900. Serial No. 21,652. (No model.)

To all whom it may concern:

Be it known that I, MATHIAS A. PATTON, a citizen of the United States, residing at Livingston, in the county of Park and State of Montana, have invented certain new and useful Improvements in Tire-Setters; 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.

This invention relates to new and useful improvements in tire-setting devices; and the object of the present invention is to produce a device of this character whereby the tire of a vehicle may be set without detaching the wheel from the axle.

More specifically, the invention consists in the provision of a tire-setting device comprising four segments of a circular band, which are engaged and held together by means of keys which pass through registering apertures in a clevis and segment-sections, the keys being wedge-shaped and when driven through the apertures are adapted to draw the ends of the segment close together, and after the segments, which have been previously heated to a high degree of temperature, are adjusted in place the tire will be uniformly contracted as the segments gradually cool.

My invention will be hereinafter more fully described, and then specifically defined in the appended claims, and is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 designates my improved tire-setting device shown as applied to a wheel. Fig. 2 is an enlarged detail section of one of the clevises and the keys; and Fig. 3 is a cross-sectional view through the clevis, tire-engaging segment, and key.

Reference now being had to the details of the drawings by letter, A designates a tire of a wheel, and B B designate the clevises or grooved blocks, which are apertured at B′ to receive the wedge-shaped keys D. The setting-ring comprises four sections C, each of which segments, forming a quadrant of a circle, has an elongated aperture C′, which when each section is adjusted in its proper position within said clevis or grooved box should be in registration with the apertures therein. Over each meeting edge of said segments a similar clevis or grooved box is provided, and when the segments are all adjusted, with their apertures registering with the apertures in said clevises, the wedge-shaped keys are passed through the registering apertures, and the ends of the segments are drawn close together or in contact with each other. In order to hold the segments which have been connected together to the wheel, one face of the clevis or grooved block projects over the face of the ring-segments and against which the wheel is adapted to rest and be held in position, while the segments, which have been previously heated to a high degree of temperature before adjusting the same together, begin to cool. As the segments cool they will contract, and the pressure being uniform about the entire circumference of the tire the latter will be contracted tightly against the felly of the wheel.

Having thus described my invention, what I desire to secure by Letters Patent is—

1. A tire-setting device, comprising four quadrant-segments having apertures at their ends, clevises or grooved blocks adapted to receive the ends of said segments, and having apertures registering with the apertures in said segments, and wedge-shaped keys adapted to be passed through said registering apertures and hold the segments to said blocks, as shown and described.

2. A device for setting tires, comprising four quadrant-segments having apertures near their ends, the grooved blocks adapted to receive said segments, keys passed through registering apertures in said blocks and segments, a portion of one face of each block adapted to project over the inner margin of the circle formed by fastening the segments together, said segments adapted to be heated and clamped about the circumference of a tire, and in cooling to contract the tire tightly against the felly of a wheel, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MATHIAS A. PATTON.

Witnesses:

W. H. POORMAN,

JOHN BYARD.