

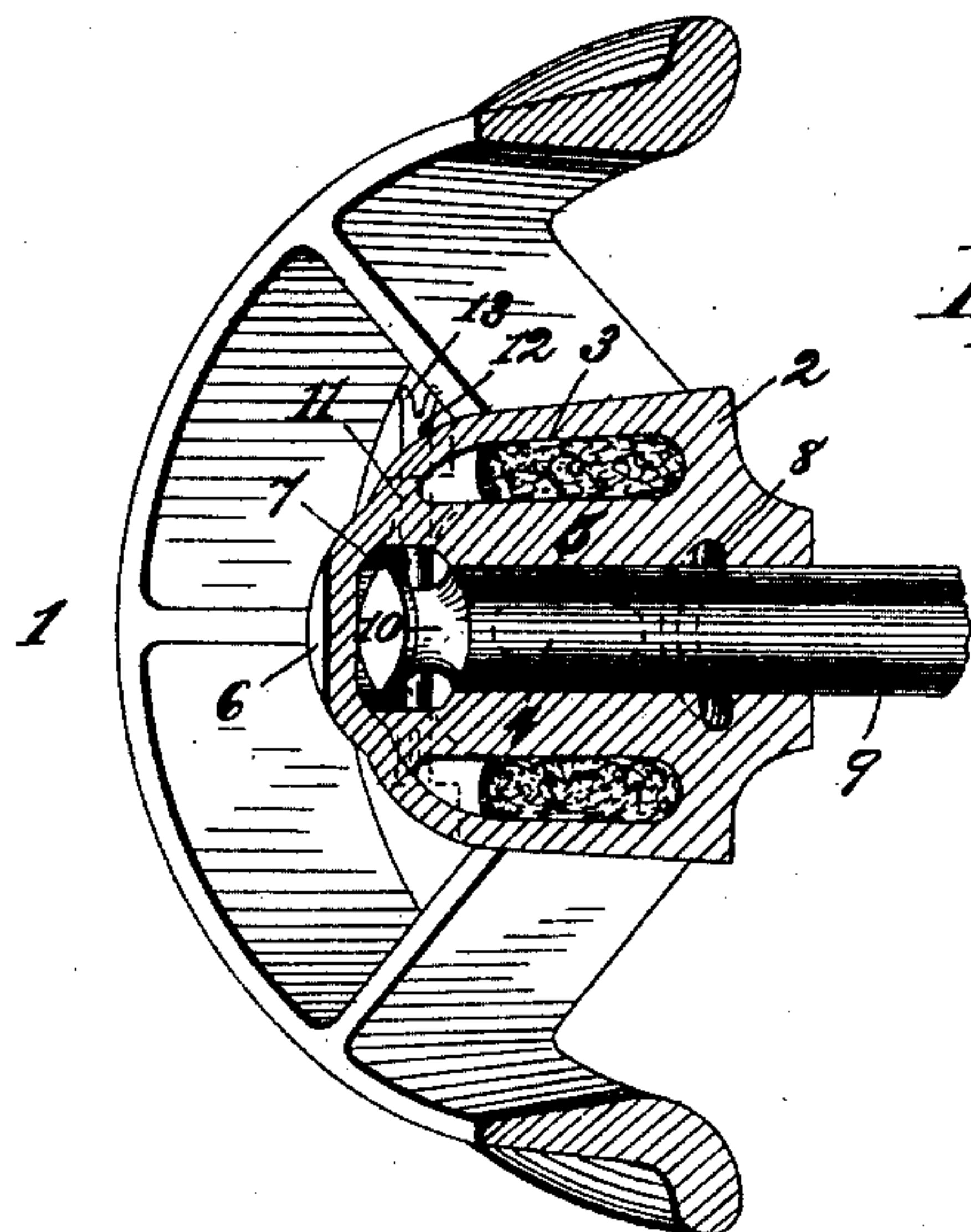
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Patented Dec. 2, 1902.

E. T. WIRES.
CAR WHEEL.

(Application filed Jan. 22, 1902.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD T. WIRES, OF TERRE HAUTE, INDIANA.

CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 714,848, dated December 2, 1902.

Application filed January 22, 1902. Serial No. 90,737. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. WIRES, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Car-Wheels; and I do hereby 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.

My invention relates to car-wheels, but more particularly to wheels for mine-cars, and has for its object to provide a wheel which is practically dust, mud, and water proof and self-lubricating.

A further object of my invention is to provide a car-wheel which is simple in its construction and above all durable and efficient.

With these objects in view my invention consists principally in the novel construction of the hub of a car-wheel, as will be hereinafter fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a sectional view through the center of my car-wheel. Fig. 2 is an elevation of my wheel.

Like numerals of reference indicate the same parts throughout both views, in which—

1 indicates my wheel, and 2 the hub. I provide the hub 2 with an annular chamber 3, cast in the interior thereof, and also with openings 4, extending through the journal-box 5 to said chamber 3. (Shown in dotted lines in Fig. 1.) Integrally cast to said hub or journal-box is a butting plate 6, behind which is formed a chamber 7, communicating with chamber 3. Near the inner end of the journal-box and in the interior thereof I provide a small annular groove 8.

9 indicates the axle provided with an annular groove 10 near the outer end thereof.

Extending entirely through the hub 2 and eccentrically located is a preferably circular opening 11, which connects with the annular chamber 3 in the interior of the hub 2 and which enters the chamber 7. Said opening does not extend through the center of the hub, but to one side thereof, as shown in Fig. 2.

12 indicates my securing-pin, which is provided with split ends 13 and which is adapted to pass through said opening 11.

Having thus described the several parts of my invention, its operation is as follows: Before the wheel is attached to the axle, as will be hereinafter described, it is my intention to fill the annular chamber 3 with waste or other absorbent material by inserting the same through the openings 4. (Shown in dotted lines in Fig. 1.) The wheel having been run on the axle in the ordinary manner the securing-pin 12 is inserted in the opening 11 and arranged so as to form a driving fit. Said pin is then driven in and passes alongside the axle in line with the annular groove 10 and within the same, after which the split ends are spread. Said groove is so constructed as to allow some play of the wheel laterally, and the axle is so constructed as to allow a small space between the end thereof and the butting plate 6. The pin having been placed as described the wheel is securely held in position in a simple and efficient manner. When it is desired to fill the chamber with oil, the securing-pin is partially driven out, as shown in Fig. 1, and the oil is run in the pin-opening around the pin which forms the oil-inlet, the other spread end of the pin filling the opening around it and preventing the oil from running through. A sufficient quantity of oil is run in to thoroughly saturate the waste or other absorbent material in the annular chamber, after which the securing-pin is again driven in, the split ends of which effectually close the pin-opening and hold the pin in position. The oil thus held in the annular chamber continually finds its way to the axle through the communicating chamber 3, which in reality is a part of the annular chamber. The openings 4, opening into the annular chamber, also furnish an exit from the chamber to the axle. In order to prevent the oil after it has reached the axle from wasting out from the inner side of the journal-box, I provide the groove 8 in the interior of the journal-box, which while preventing the oil from escaping in quantity will allow a sufficient amount to pass to lubricate the axle on the inner side of said groove.

Having thus described my invention, I do not wish to be understood as limiting myself to the exact construction as herein set forth, as various slight changes may be made therein which would fall within the limit and scope

of my invention, and I consider myself clearly entitled to all such changes and modifications.

What I claim as new, and desire to secure
5 by Letters Patent of the United States, is—

In a car-wheel the combination of a hub provided with an oil-chamber in the interior thereof, and openings leading from said chamber to the axle, and provided with a securing
10 pin-hole passing through said chamber and

furnishing an oil-inlet, and a securing-pin eccentrically located and passing entirely through the hub and adapted to engage the axle, and to effectually close the oil-inlet.

In testimony whereof I affix my signature 15
in presence of two witnesses.

EDWARD T. WIRES.

Witnesses:

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