

(No Model.)

P. F. WHITE.
CAR WHEEL LUBRICATOR.

No. 336,461.

Patented Feb. 16, 1886.

FIG. 1.

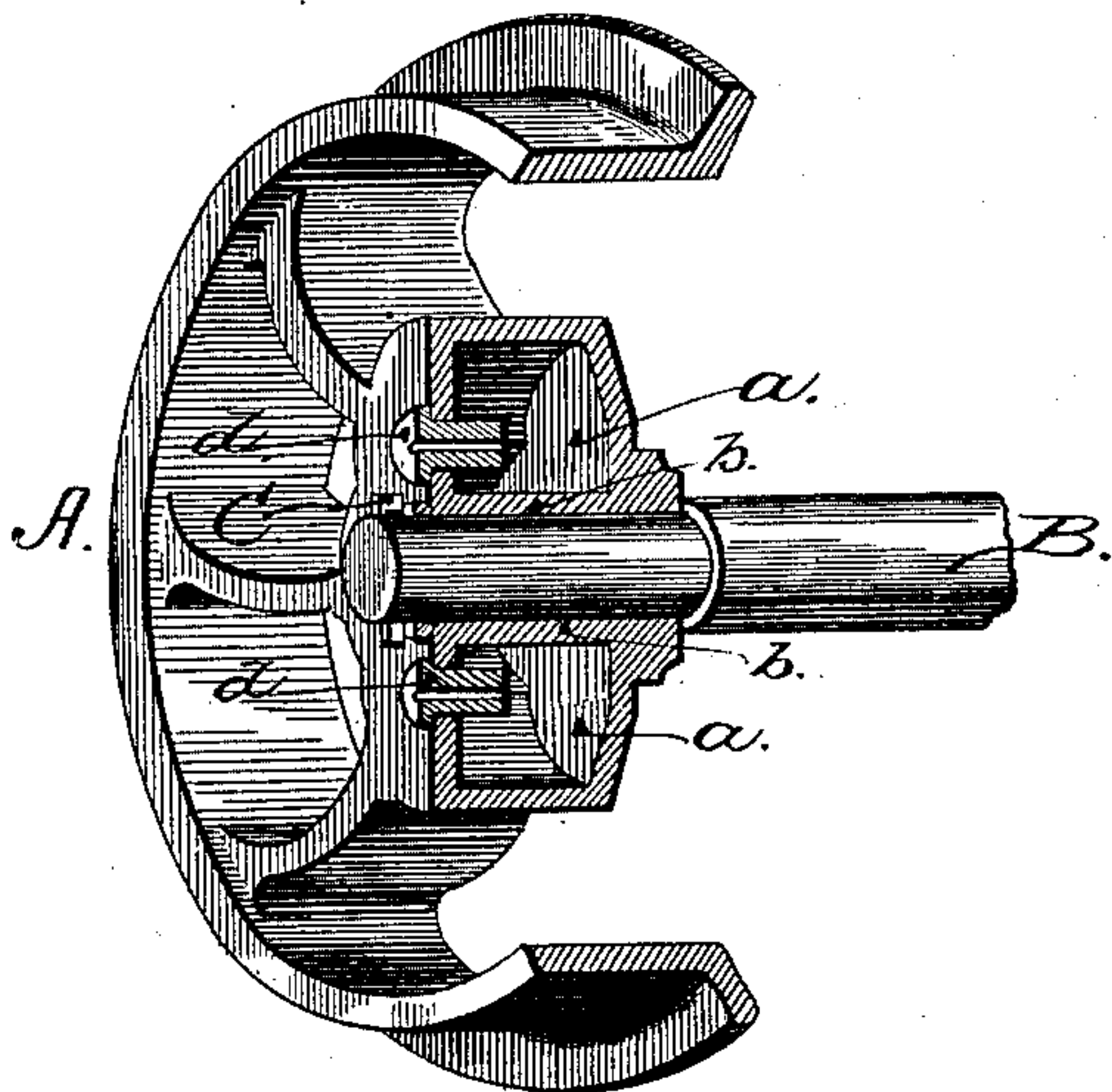
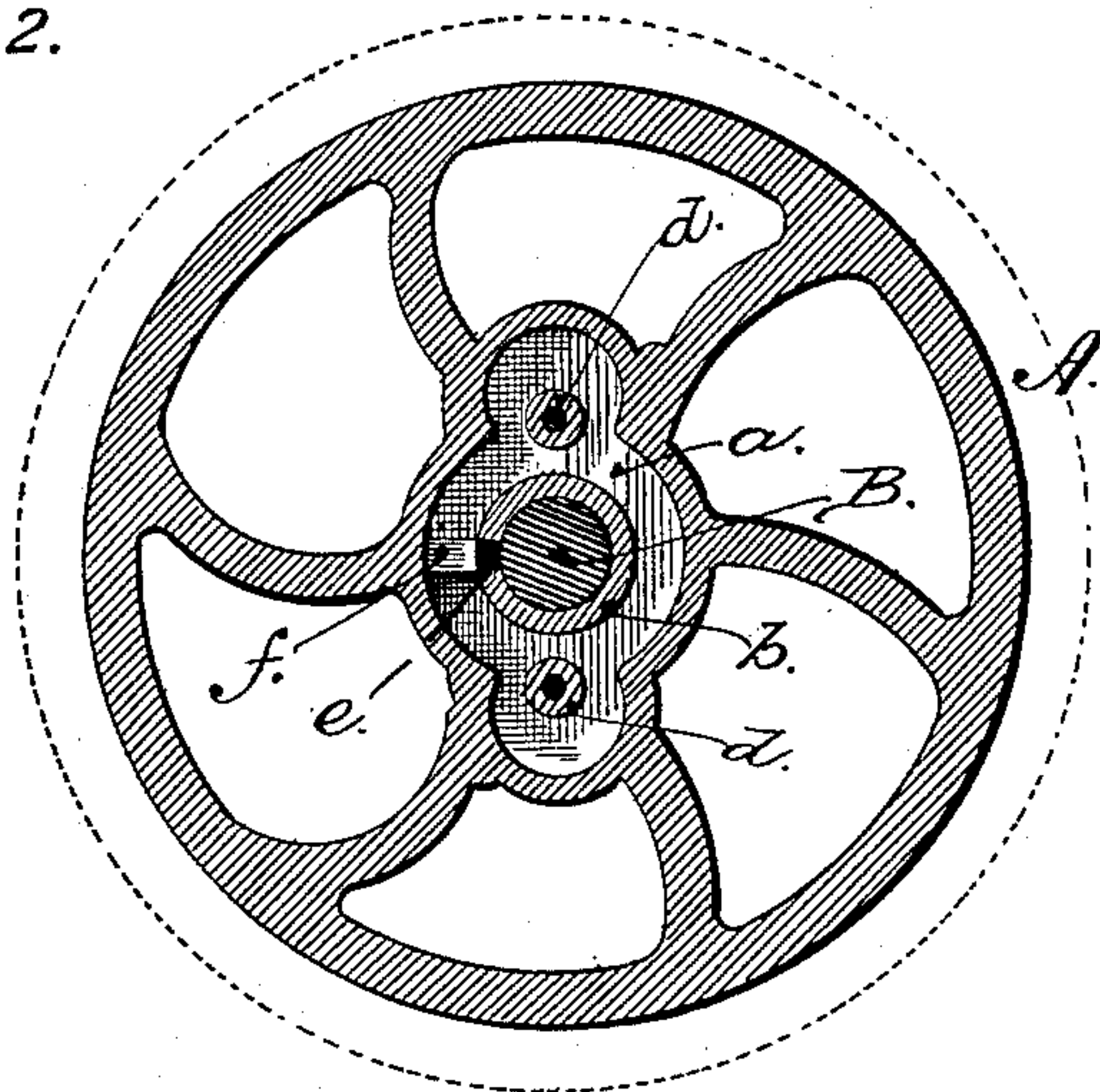


FIG. 2.



WITNESSES:

WITNESSES:
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CAR-WHEEL LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 336,461, dated February 16, 1886.

Application filed December 19, 1885. Serial No. 186,154. (No model.)

To all whom it may concern:

Be it known that I, PATRICK F. WHITE, a citizen of the United States, residing at Western Port, in the county of Alleghany and State of Maryland, have invented certain new and useful Improvements in Lubricating Car-Wheels; 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 and figures of reference marked thereon, which form a part of this specification.

My invention has for its object to provide an improved and novel lubricating car-wheel, whereby a constant and sufficient supply of oil to the bearing-surfaces of said wheel and its axle is secured in the simplest and best possible manner, and whereby the escape of oil from its reservoir is effectually prevented when a cradle-dump is employed; and my improvements consist, essentially, of a car-wheel having the hub thereof provided with an oval-shaped oil-recess having inwardly-projecting metallic plugs for the introduction of the oil-supply, and with an inner radial flange for arresting the centrifugal flow of the oil in said recess and conducting it to an oil-orifice in the axle-shell for lubricating the bearing-surfaces, all as will be hereinafter fully described, and specifically designated in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of my improved wheel, and Fig. 2 a section of the same upon a line with the plane of rotation.

Similar letters of reference occurring on both figures indicate like parts.

In carrying out my invention I employ a car-wheel, A, of any desired pattern, and form within its hub an oval-shaped oil-recess, *a*, which entirely surrounds the central bearing portion or axle-shell, *b*, the front and rear walls of said oil-recess uniting with the central bearing portion or axle-shell, *b*, and with the spokes of the wheel, as fully shown in Fig. 2. The front wall of the oil-recess *a* is provided with suitable openings for the reception therein of the metallic plugs *d*, preferably of Bab-

bitt metal, having a central orifice for supplying the oil to the said recess, the inner ends of said plugs projecting a suitable distance into the oil-recess, as shown, to prevent the oil from escaping through the central orifices when the wheel is turned over upon a cradle-dump. The axle B is of the usual construction, and adapted to fit into the central bearing portion or axle-shell, *b*, with its outer end projecting sufficiently beyond the front wall of the oil-recess *a* to receive the pin or key C, which operates to hold said axle and wheel in relative positions. Through the central bearing portion or axle-shell, *b*, are provided one or more oil-orifices, *e*, which communicate with the oil-recess *a* for conducting the oil to the bearing-surfaces of said wheel and axle. The oval shape of the oil-recess *a*, as well as the inwardly-projecting ends of the plugs *d*, serve in a great measure to break or arrest the flow of the oil around the outer side of its chamber, due to centrifugal force; but to more effectually guide the oil into the oil-orifice *e*, I provide a projecting flange, *f*, around the inner periphery of said oil-chamber at a point adjacent to said oil-orifice *e*, as fully shown in the drawings. My improved wheel is designed to be cast in one piece by coring out its oil recess or chamber *a*, and requires only that its axial opening, the oil-orifice *e*, and the openings for the reception of the plugs *d* be dressed out with suitable tools to render the wheel ready for use.

By means of my improvements the oil is readily supplied to the oil-recess *a* through the orifices of the plugs *d* without loss of time consequent upon removing caps or screw-plugs, as is commonly the case, the oil is regularly conducted in sufficient quantity to the bearing-surfaces of the wheel and axle, and all liability of the leakage of the oil obviated by the inwardly-projecting ends of the plugs *d*.

Having thus described my invention, what I claim as new and useful is—

1. A car-wheel having its hub provided with an oval-shaped oil-recess, *a*, surrounding the central bearing portion or axle-shell, *b*, said recess *a* being provided with an inner flange, *f*, and with openings in the front wall

thereof for the reception of the plugs *d*, having central orifices, as shown, and the central bearing portion or axle-shell, *b*, having one or more oil-orifices, *e*, substantially as and for
5 the purpose specified.

2. A car-wheel having its hub provided with an oval-shaped oil-recess, *a*, the front wall whereof is provided with openings for the reception of centrally-perforated plugs *d*,
10 the inner ends of which project into said oil-recess, substantially as and for the purpose specified.

3. A car-wheel provided with an oval-shaped

oil-recess in its hub having an inner flange, *f*, arranged in juxtaposition to the oil-orifice 15
e in the axle-shell for arresting the centrifugal flow of oil in said recess and conducting it to said oil-orifice, substantially as shown, and for the purpose specified.

In testimony whereof I affix my signature in 20
presence of two witnesses.

PATRICK F. WHITE.

Witnesses:

MICHAEL E. MALONE,
L. H. PHLEGER.