

No. 789,841.

PATENTED MAY 16, 1905.

A. M. DAVIS.
SELF OILING CAR WHEEL.
APPLICATION FILED FEB. 13, 1905.

FIG. 1

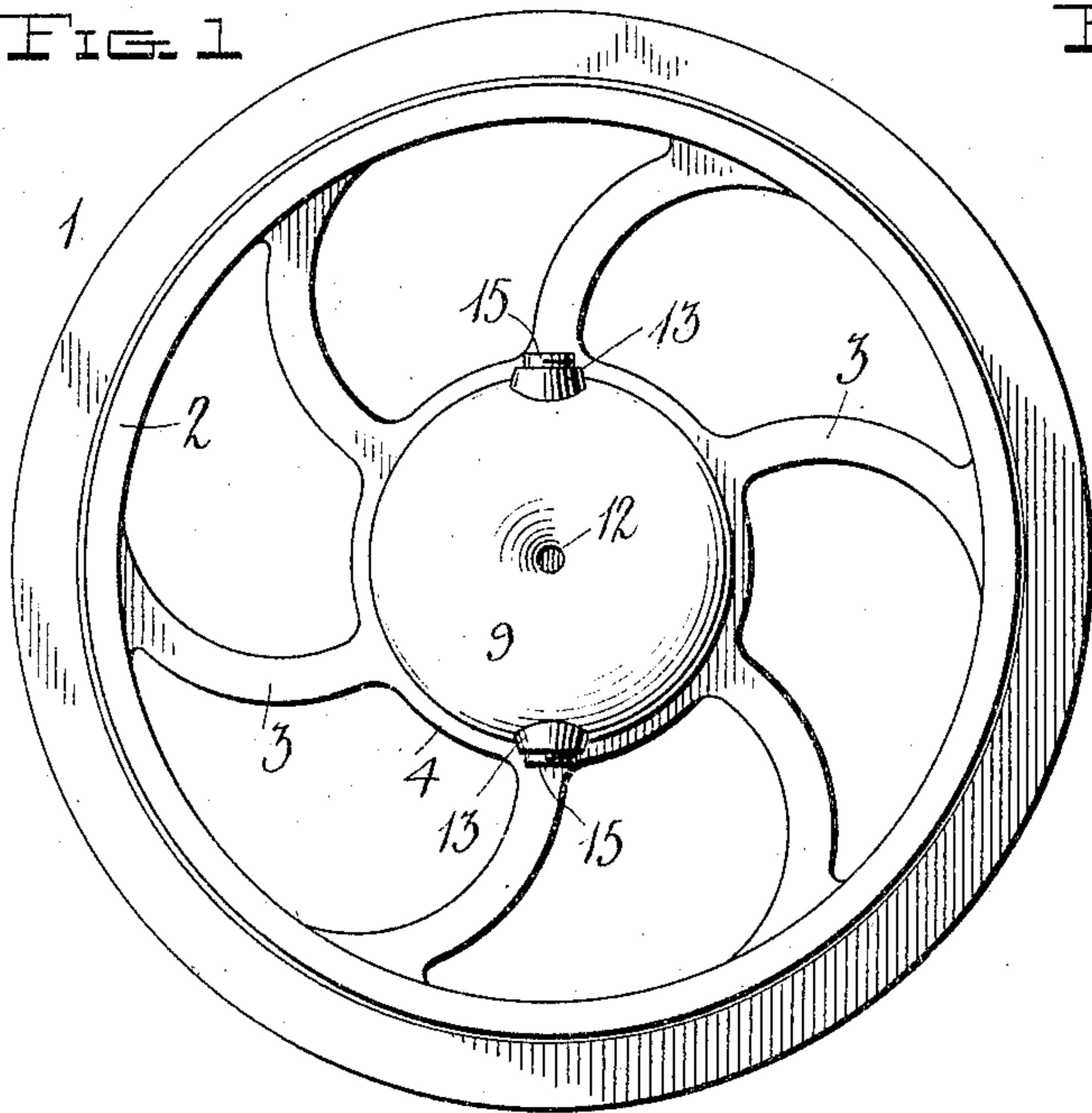


FIG. 2

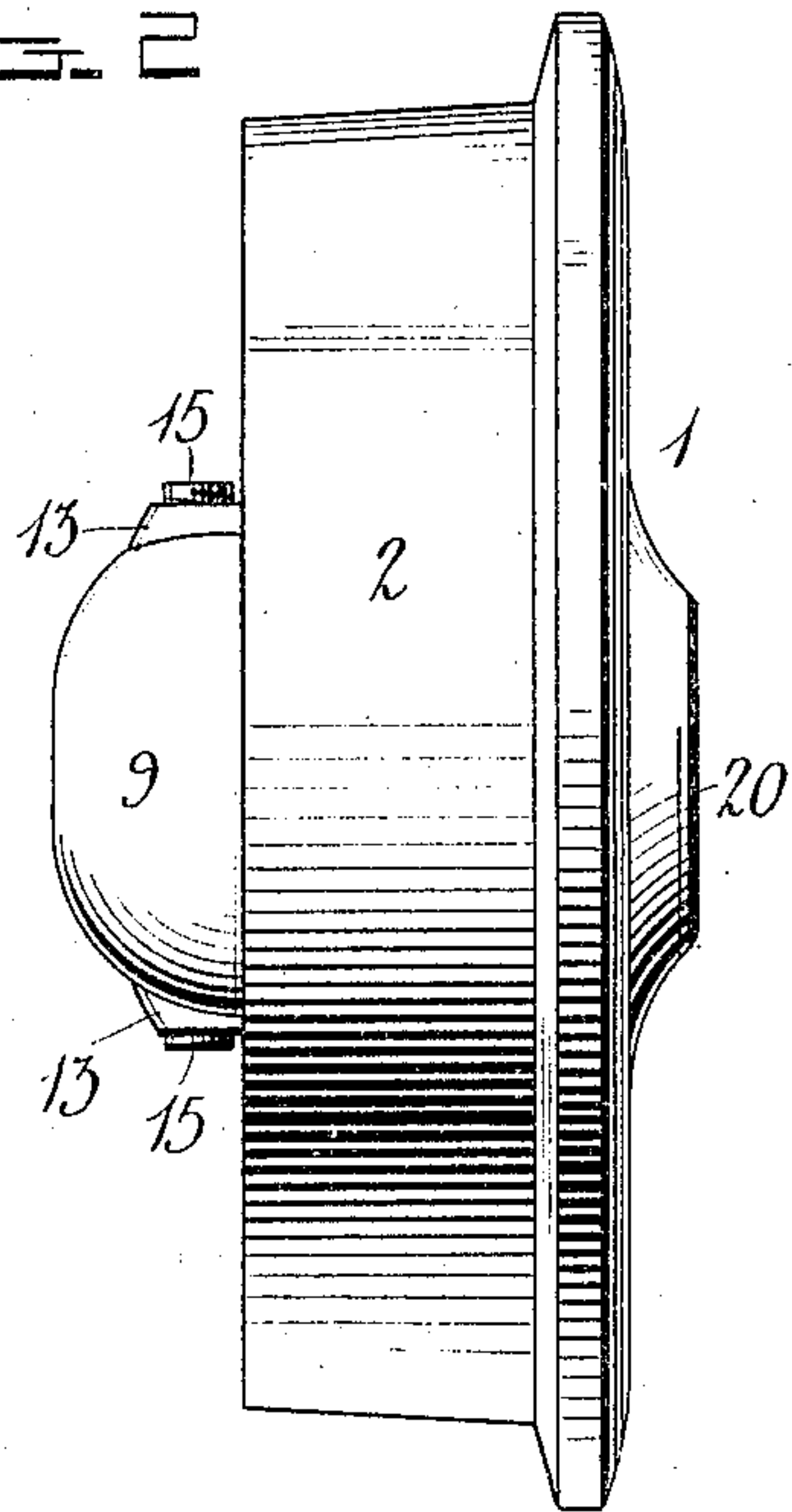


FIG. 3

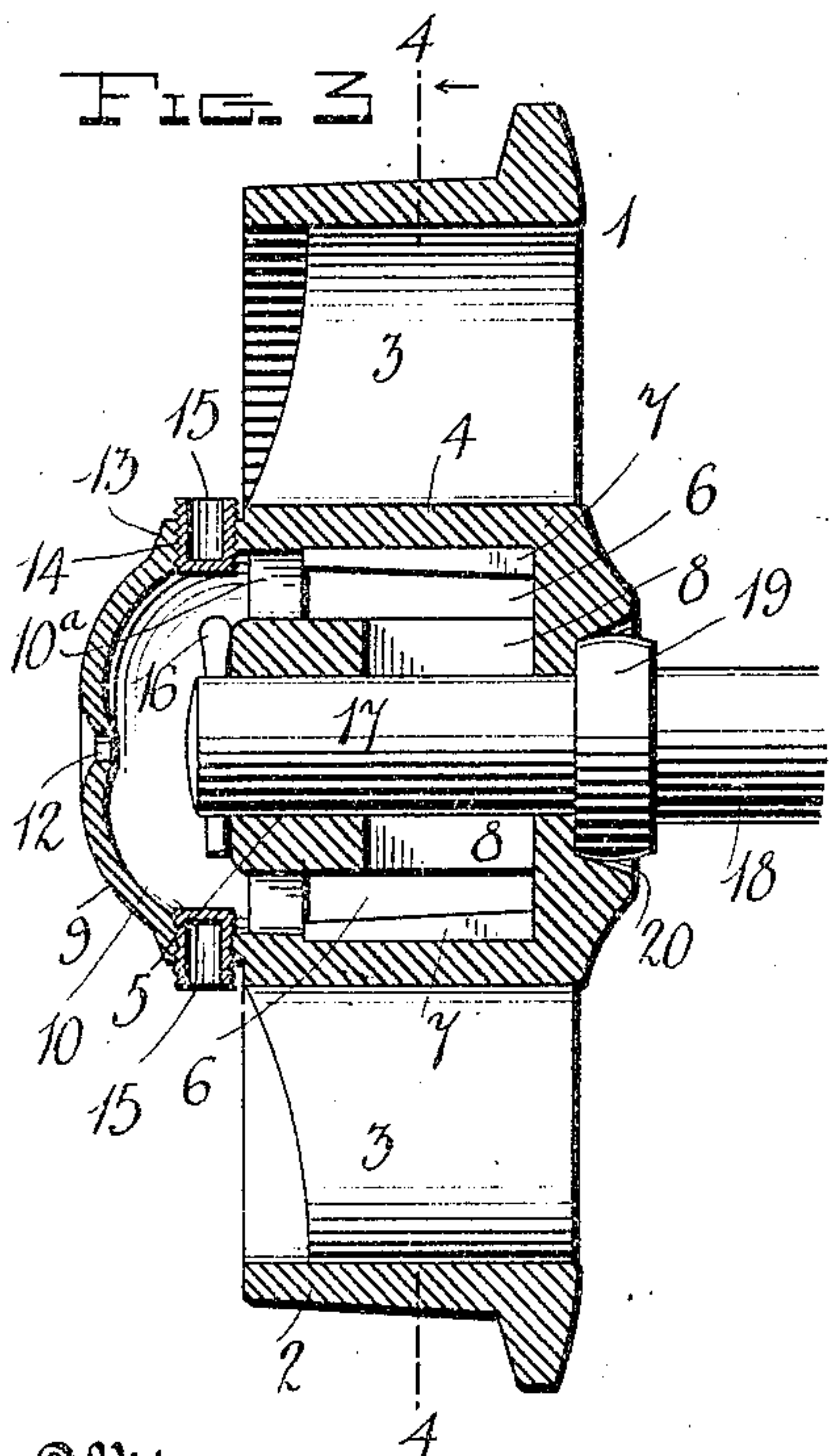
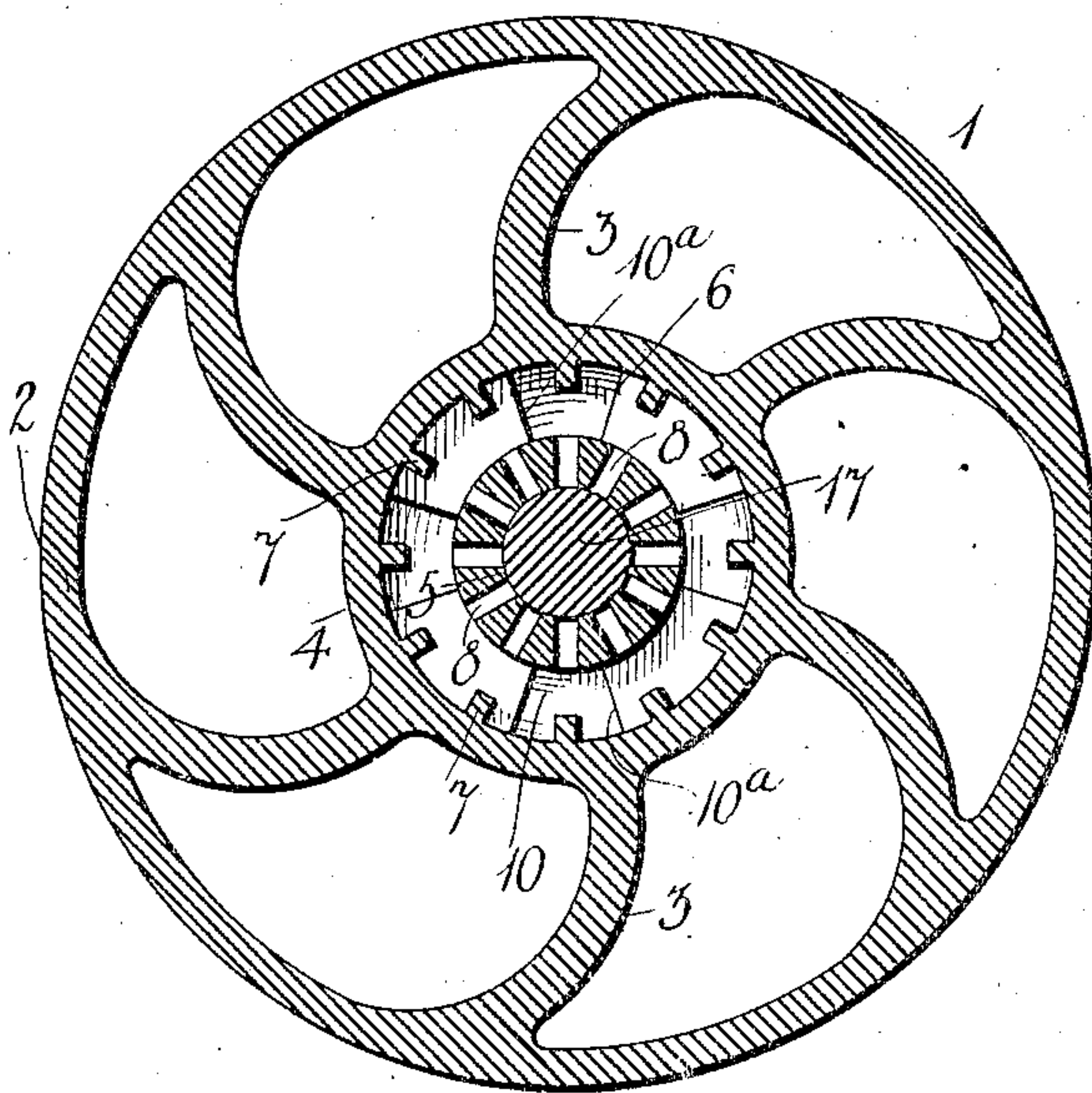


FIG. 4



Witnesses
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UNITED STATES PATENT OFFICE.

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SELF-OILING CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 789,841, dated May 16, 1905.

Application filed February 13, 1905. Serial No. 245,477.

To all whom it may concern:

Be it known that I, ARTHUR M. DAVIS, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Ohio, have invented certain new and useful Improvements in Self-Oiling 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.

This invention relates to improvements in self-oiling car-wheels.

The object of the invention is to provide a car of this character having a suitable oil-reservoir and provided with means whereby the oil in said reservoir will be fed to the journal or bearings of the wheel in suitable quantities.

A further object is to provide a self-oiling car-wheel the bearing of which is so constructed and covered as to be dirt and dust proof.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a car-wheel constructed in accordance with the invention. Fig. 2 is an edge view of the same. Fig. 3 is a central vertical sectional view thereof, and Fig. 4 is a vertical sectional view through the wheel on the line 4-4 of Fig. 3.

Referring more particularly to the drawings, 1 denotes a wheel consisting of a flanged rim 2, spokes 3, and a hub 4. The hub 4 is provided with a centrally-disposed bearing-aperture 5, around which is arranged an annular passage 6. On the outer wall of the annular passage 6 is formed a series of radial inwardly-projecting wings or blades 7. In the inner wall of the passage 6, opposite each wing 7 and communicating with the bearing-aperture 5 of the hub, is a series of slots forming oil-ports 8.

On the outer end of the hub 4 is formed an outwardly-projecting substantially hemispherical projection 9, in which is arranged an oil chamber or reservoir 10, which is adapt-

ed to be supplied with oil and from which the oil passes through radially-disposed slots 10^a, formed in the dividing-wall between the chamber 10 and passage 6, to said passage. In the outer end of the projection 9 is formed a centrally-disposed feed-opening 12, through which oil is introduced or supplied to the reservoir 10 and passage 6. On each side of the projection 9 is formed a boss 13, in which is formed a threaded aperture 14, said apertures 14 being normally closed by screw-plugs 15. The apertures 14 are provided for the purpose of inserting and removing a clench-pin 16 through the aperture in the end of the journal 17 of the car-axle 18.

On the journal 17 adjacent to the inner side of the hub is arranged a collar 19, adapted to fit closely against the inner side of the hub, and surrounding said collar is formed an annular projection 20. This construction prevents the entrance of dirt or dust to the journal-bearings from the rear side of the wheel. The front end of the journal is protected by the hollow projection 9, forming the oil-reservoir, thus providing a dust-proof bearing for the wheel.

In operation the oil from the reservoir 10 will feed through the slots 10^a into the passage 6, from whence it will be carried around by the wings or blades 7 to a point above the journal, where it will drop off from said wings and drip through the oil ports or slots 8 at the upper side of the journal and again run into the bearing-aperture 5 and onto said journal, thus keeping the same thoroughly lubricated at all times.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

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

A car-wheel of the character described, comprising the hub having formed therein an annular oil-passage, oil-ports communicating between said passage and the axle-bearing, radially-projecting wings formed in said annular passage to carry the oil around from

the bottom of said passage to the top of the
same, an oil-reservoir formed on the outer
end of said hub, to cover and protect the end
of the axle, said reservoir having formed
5 therein a filling-opening and alined screw-
threaded apertures to permit the insertion
and removal of a clench-pin into and out of
engagement with an aperture in the end of
the axle, threaded plugs to close said aper-
10 tures, and feed-apertures formed between the

same and the annular passage in said hub,
substantially as described.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

ARTHUR M. DAVIS.

Witnesses:

GEO. THOMPSON,
H. D. CHANDLE.