

No. 796,388.

PATENTED AUG. 1, 1905.

G. T. WRIGHT.
CIRCULATING OIL WHEEL AND BEARING.

APPLICATION FILED MAR. 7, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

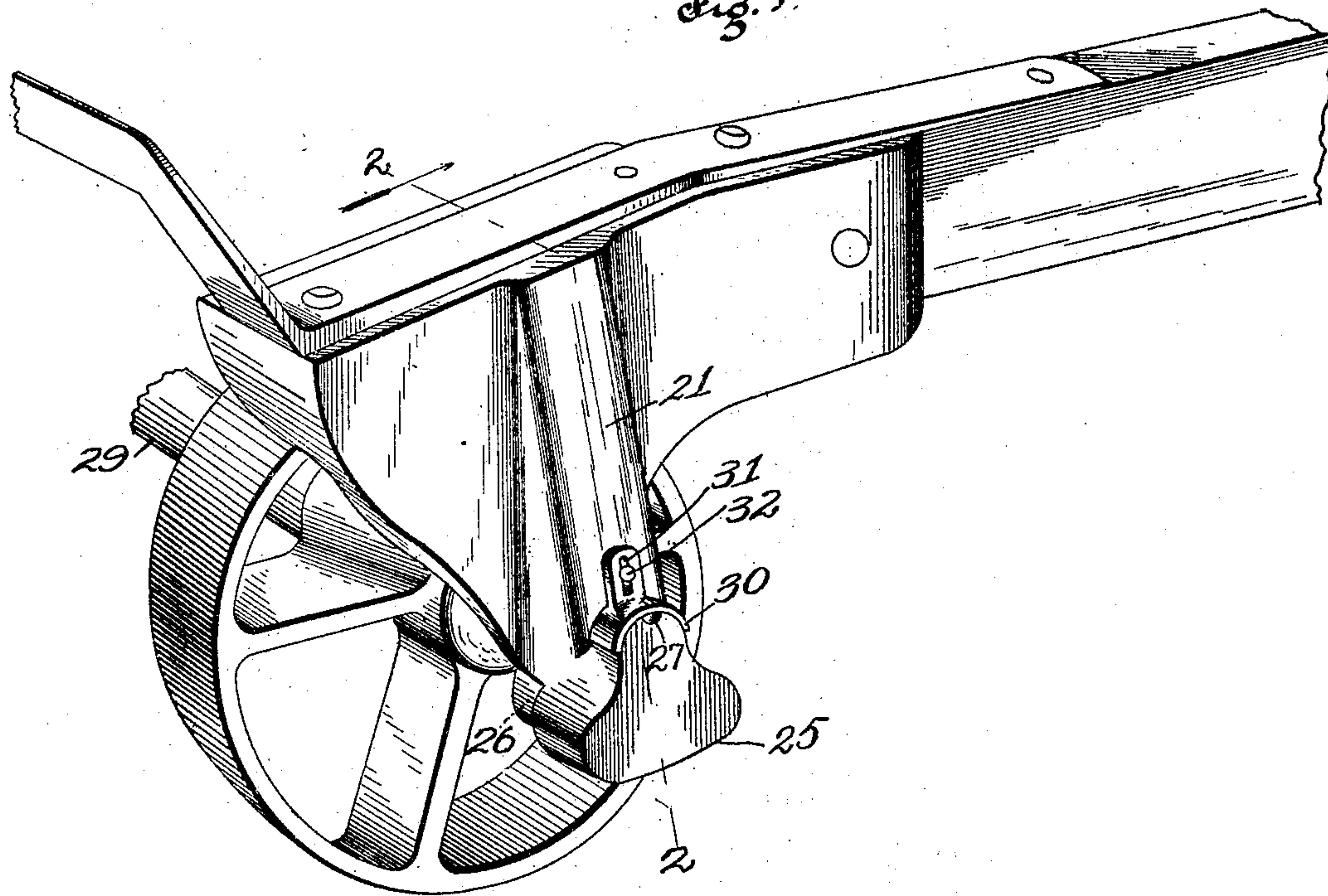
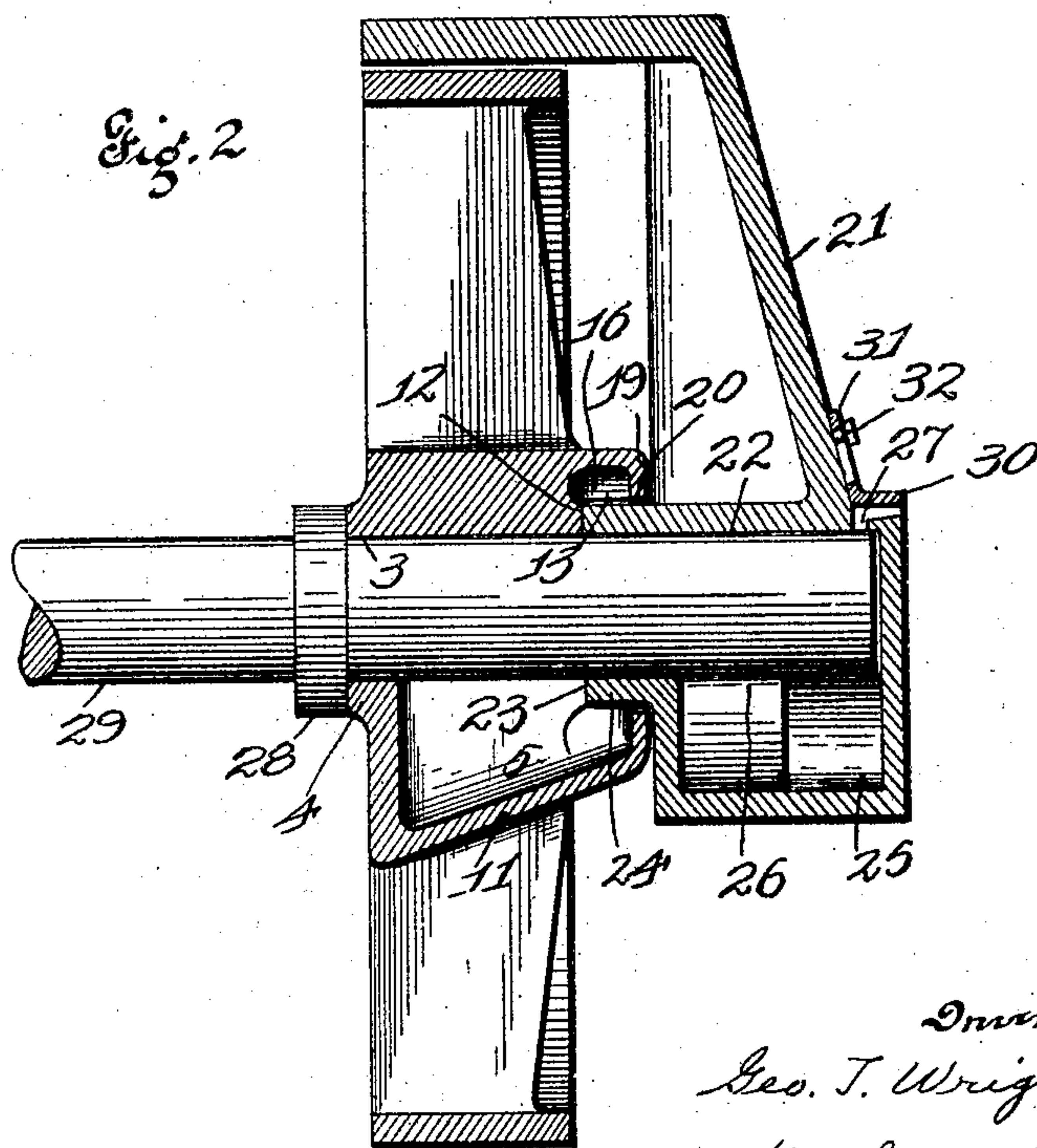


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 4.

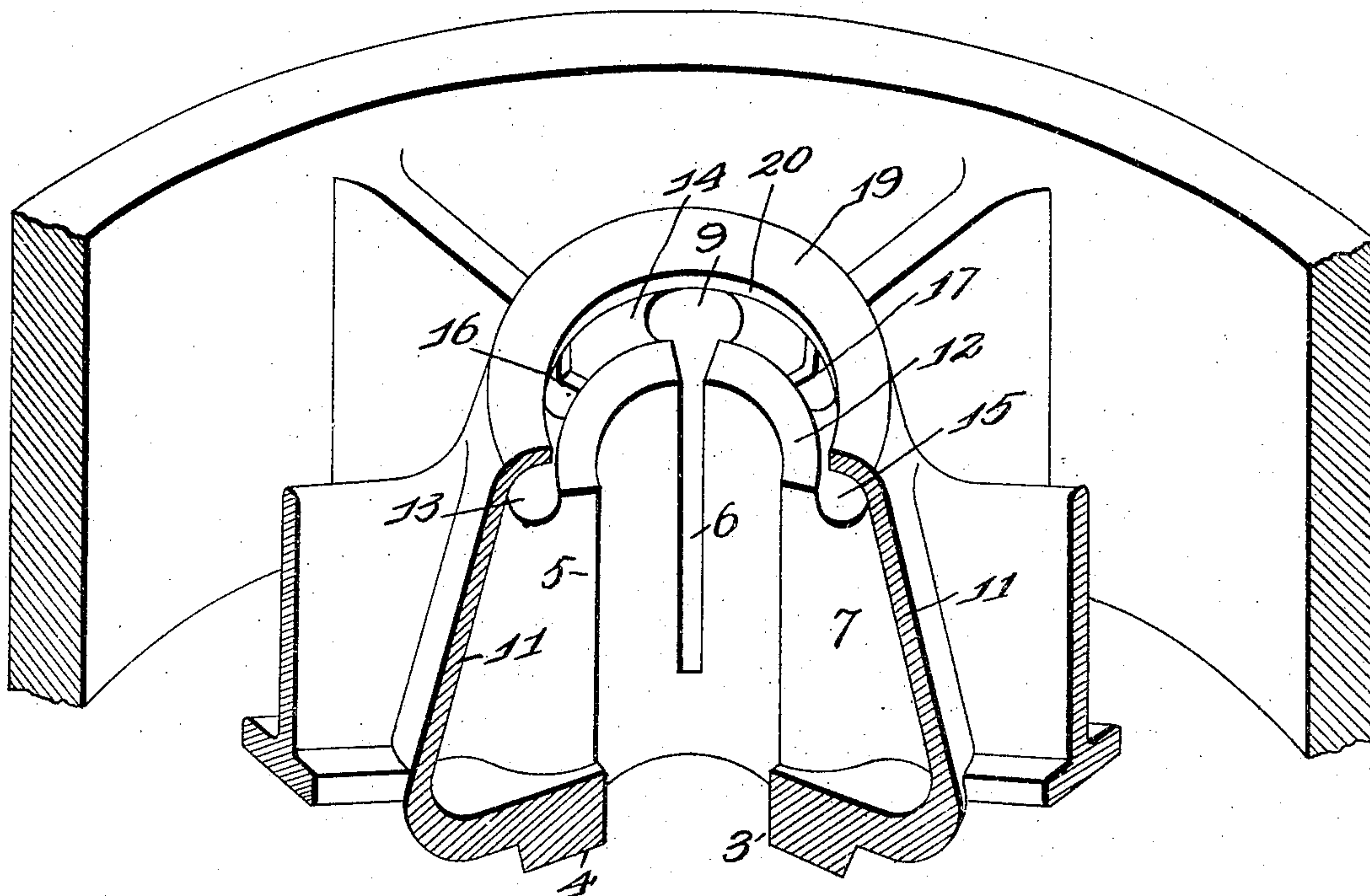
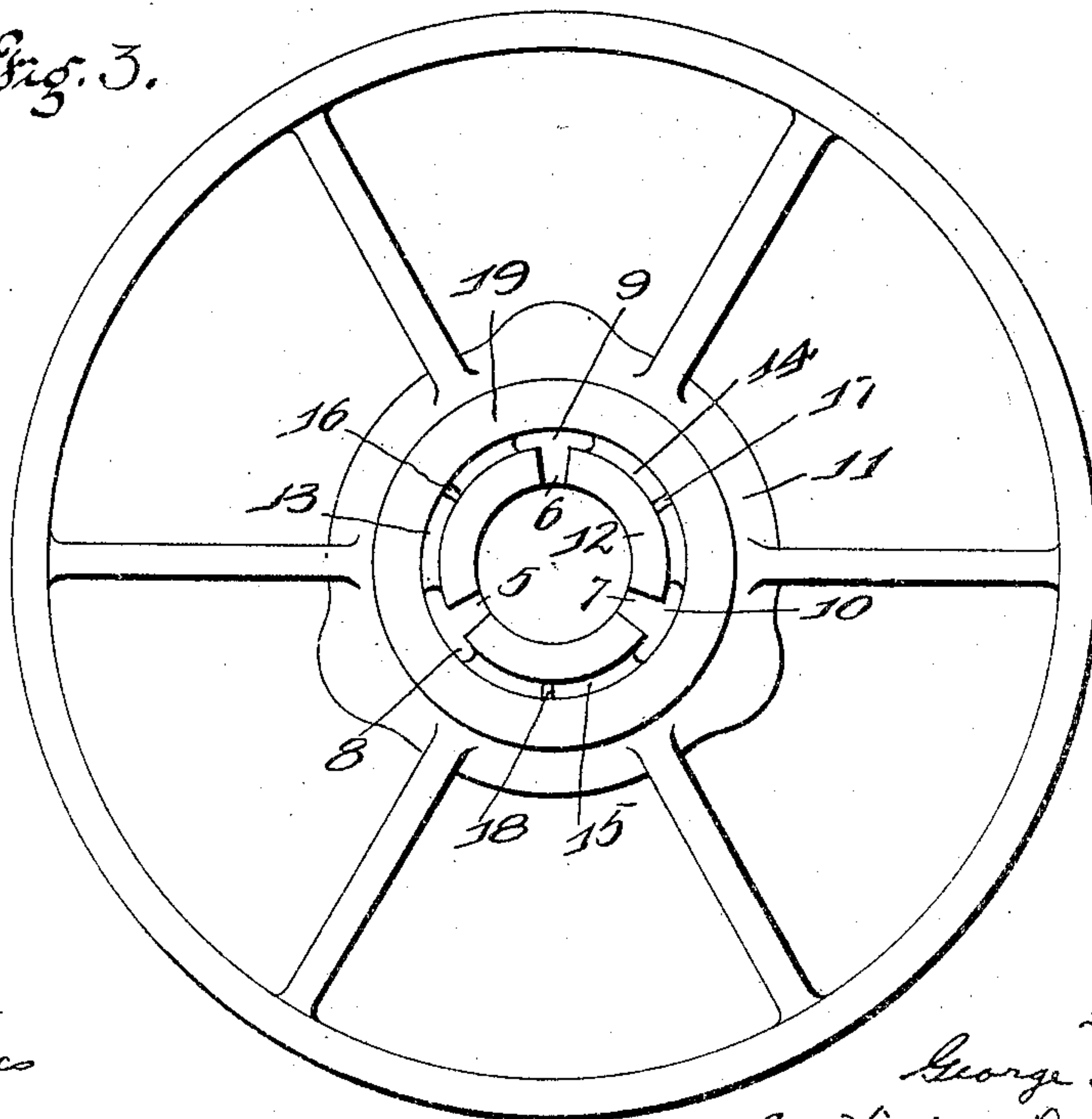


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE T. WRIGHT, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF
TO JOHN W. WRIGHT, OF ST. LOUIS, MISSOURI.

CIRCULATING OIL-WHEEL AND BEARING.

No. 796,388.

Specification of Letters Patent.

Patented Aug. 1, 1905.

Application filed March 7, 1905. Serial No. 248,945.

To all whom it may concern:

Be it known that I, GEORGE T. WRIGHT, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Circulating Oil-Wheels and Bearings, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in circulating oil-wheels and bearings; and it consists of the novel features herein shown, described, and claimed.

In the drawings, Figure 1 is a perspective of a circulating oil-wheel and bearing embodying the principles of my invention shown applied to a hand-truck, the frame of the truck being broken away to economize space. Fig. 2 is a sectional detail on the line 2 2 of Fig. 1 and looking in the direction indicated by the arrow. Fig. 3 is an enlarged outside elevation of the wheel. Fig. 4 is a perspective sectional detail upon an enlarged scale.

Referring to the drawings in detail, my improved circulating oil-wheel and bearing is intended principally for use in hand-trucks, mine-cars, and the like; but it may be used in any construction where the wheel may turn upon the axle.

Referring first to Figs. 3 and 4, the hub comprises the axle-box having the spindle-opening 3, there being a solid ring 4 around the inner end of the spindle-opening, there being radial slots 5, 6, and 7 through the wall of the axle-box outside of the ring 4, there being oil-chambers 8, 9, and 10 communicating with the slots 5, 6, and 7, the walls 11 of said chambers farthest away from the center being inclined from the periphery of the ring 4 outwardly and toward the center, the outer end face 12 of the axle-box being finished on a transverse line, there being annular pockets 13, 14, and 15 around the outer end, said pockets being separated by the walls 16, 17, and 18, there being a flange 19, forming the outer wall of the pockets 13, 14, and 15, and the axial face 20 of said flange being finished, said axial face 20 being outside of the transverse face 12.

Referring to Figs. 1 and 2, the essential part of the bearing comprises the post 21, having the spindle-opening 22, the inner end

face 23 of the boxing around the spindle-opening fitting against the transverse face 12, and the peripheral face 24, adjacent the end face 23, fitting within the axial face 20, there being an oil-chamber 25 extending downwardly from the outer end of the axle-opening 22, and there being a feed-slot 26 leading from the pocket 25 to the central portion of the boxing, and there being an oil-supply opening 27 leading to the pocket 25. A collar 28 is fixed upon the axle 29 to hold the wheel-hub in place. A cap 30 covers the oil-supply opening 27, and a slotted arm 31 extends upwardly from the cap and is secured to the post 21 by a pin 32, so that the cap 30 may slide up to uncover the oil-hole when it is desired to insert the oil. The frame of the truck, car, or the like may be attached to the post 21 in various ways. A supply of oil is placed in the pocket 25, and the oil is fed to the axle 29 and works its way over to the pockets 13, 14, and 15 and then to the pockets 8, 9, and 10, and a constant circulation of oil is maintained in the hub. The oil is fed into the pockets 13, 14, and 15 and from said pockets runs inwardly along the inclined walls 11 when said walls are below the center of the axle, and said oil runs outwardly again along said walls 11 when the walls are above the center of the axle.

I claim—

1. In a circulating oil-wheel and bearing: a hub having a spindle-opening extending continuously from end to end of the hub; there being pockets arranged around the spindle-opening; the outer walls of said pockets being inclined longitudinally of the axle; there being passages from the spindle-opening to the pockets; and a bearing having an oil-chamber in position so that the oil will feed from the oil-chamber to the said oil-pockets of the hub.

2. In a circulating oil-wheel and bearing: a hub comprising an axle-box having a spindle-opening; there being oil-chambers communicating with the spindle-opening; the walls of said chambers farthest away from the center being inclined longitudinal of the axle; the outer end face of the axle-box being finished on a transverse line; there being annular pockets around the outer end of the axle-box; there being a flange forming the outer wall of the pockets; the axial face of said

flange being finished outside of the transverse face of the axle-box; a bearing having an axle-opening; the end face of the box fitting against the transverse face of the axle-box of the hub and the periphery of the box fitting within the axial face of the hub; and there being an oil-pocket communicating with the axle-opening.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

GEORGE T. WRIGHT.

Witnesses:

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