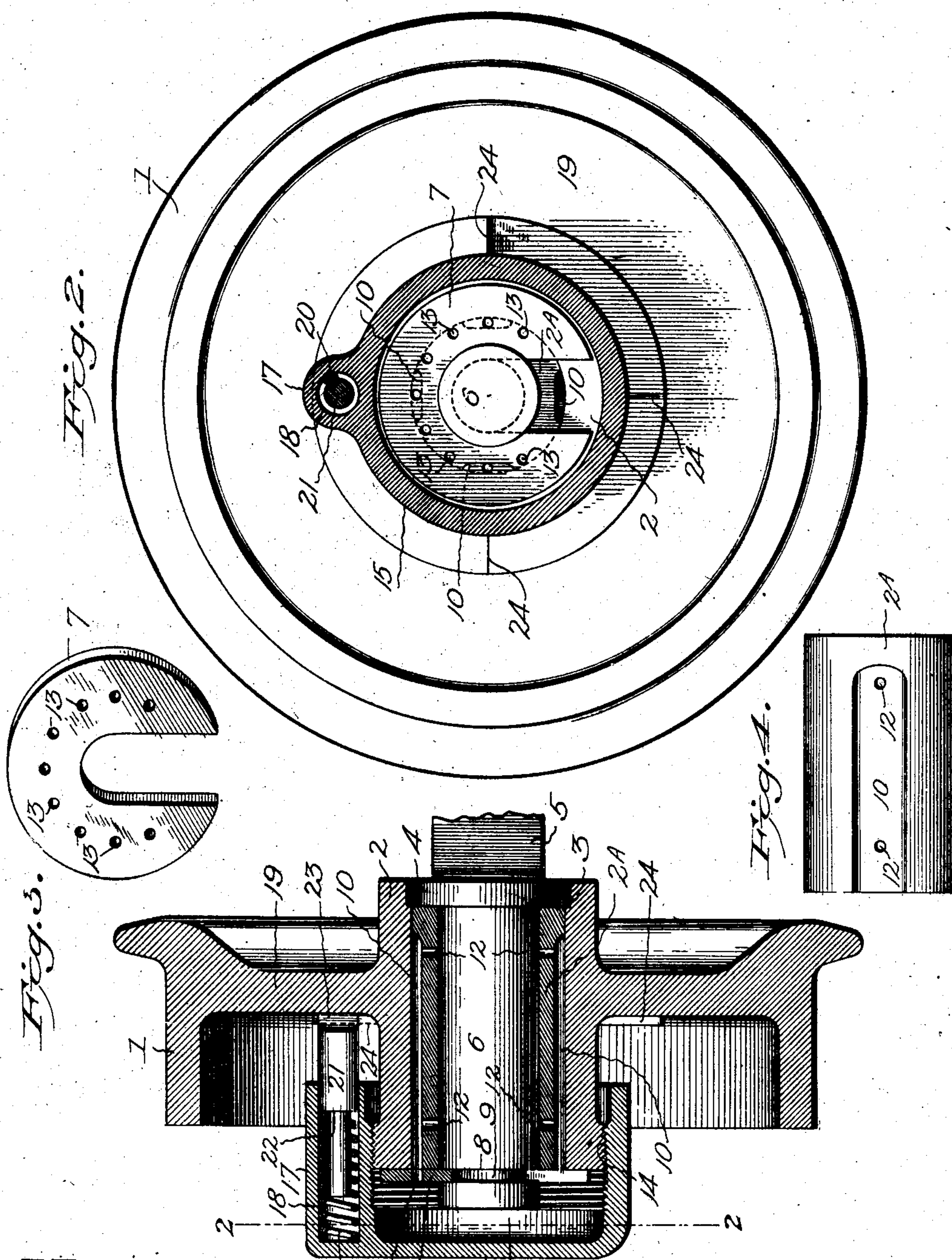


No. 835,016.

PATENTED NOV. 6, 1906.

H. EGGERS.
SELF OILING CAR WHEEL.
APPLICATION FILED DEC. 19, 1905.



Witnesses:
G. Sargent Elliott.
Bessie Thompson

Fig. 1.

Inventor:
By Henry Eggers.
H. S. Bailey, Attorney

UNITED STATES PATENT OFFICE.

HENRY EGGERS, OF DENVER, COLORADO.

SELF-OILING CAR-WHEEL.

No. 835,016.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed December 19, 1905. Serial No. 292,415.

To all whom it may concern:

Be it known that I, HENRY EGGERS, a citizen of the United States of America, residing in the city and county of Denver and State of Colorado, have invented a new and useful Self-Oiling Car-Wheel, of which the following is a specification.

My invention relates to improvements in self-oiling car-wheels; and the objects of my invention are, first, to provide a car-wheel having a removable axle-oiling bushing; second, to provide a self-oiling car-wheel provided with a renewable axle-oiling bushing and an inclosed hood that is provided with a locking device to prevent its accidental displacement from the car-wheel. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of my improved self-oiling car-wheel, illustrating the manner in which the lubricant is fed to the axle-journal. Fig. 2 is a front elevation of the car-wheel, the oil-cap being in section, so as not to obscure the locking-yoke and other parts. Fig. 3 is a perspective view of the locking-yoke, and Fig. 4 is a side elevation of the hub-bushing.

Similar figures of reference refer to similar parts throughout the several views.

Referring to the drawings, the numeral 1 designates a car-wheel.

The hub 2 is bored out to receive a brass or other antifrictional metal bushing 2^a, which preferably extends entirely through it from the front side to within a very short distance from its rear end, in which I form a counter-bore 3, in which extends loosely a collar 4, that is formed on the axle 5. The journal 6 of the axle extends from this collar through the bushing and is secured to the hub of the car-wheel by a yoke-shaped washer 7, which fits in a circumferential recess 8, formed in the journal close to the end of the hub and bushing and straddles a reduced neck portion 9, formed in the shaft by said recess. The bushing is provided with several longitudinal slots 10, that extend along its length from its front end to close to its rear end, and from the bottoms of the apertures oil-holes 12 are drilled through its shell. A circular row of oil-holes 13 are drilled through the yoke-washer, which allow oil to work freely into the oil-channels in the bushing.

The periphery of the hub is provided with a thread 14, and a cap 15 is threaded to it.

This cap is made large enough to leave an oil well or chamber 16 between the end of the hub and the outer wall of the cap. A lug 17 is formed on one side of the periphery of the cap in which a hole 18 is formed that extends into the lug from its end that faces the flange 19 of the car-wheel. In this hole I place an expansive coiled spring 20 and also a pawl 21, which comprises a pin of two diameters, the smaller diameter of which projects loosely into the spring and the larger diameter of which extends and fits slidably into the hole 18 and bears against the end of the spring at the shoulder 22, formed at the junction with the smaller diameter of the pin. The outer end of this pin-pawl is provided with a ratchet-engaging pawl-tooth 23, and on the adjacent side of the flange of the car-wheel I form a projecting circular lug-surface which is provided with a number of ratchet-teeth 24, which are arranged in a circular row. The pin-pawl engages these teeth which are arranged on the car-wheel relative to the direction in which the cap screws onto the hub, so that the pawl will run over the teeth while the cap is being screwed onto it, the pawl being held in resilient engagement with them by its actuating-spring 20 and will engage a ratchet-tooth when the cap is fully screwed tightly onto the hub and will thus lock the cap against accidental displacement. The pawl can be moved back into its supporting-aperture by a pin or other suitable means, or a slot may be drilled into the lug that will permit a pin to be inserted against the front end of the spring to move it back enough to permit the pawl to be moved back out of engagement with the ratchet-teeth. The cap is filled with grease or any suitable oil which works into and along the recesses of the bushing and through the oil-holes to the journal of the axle.

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

1. The combination of a car-wheel having a hub, a grooved bushing therein, a cap threaded on the hub and a spring-pressed pawl carried by the cap, there being ratchet-teeth on the wheel adapted to be engaged by the pawl.

2. The combination of a car-wheel, provided with an axially-bored hub, and a bushing therein with an axle rotatively mounted in said bushing, there being oil-passages in said

bushing adapted to distribute oil to the surface of said axle, an oil-reservoir cap threaded to said hub to inclose the end of said axle and hub, there being ratchet-teeth arranged in a
5 circle on said car-wheel and a spring-controlled pawl mounted in said cap and arranged and adapted to operatively engage said ratchet-teeth and lock said cap to said

car-wheel against accidental displacement, as set forth.

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

HENRY EGGERS.

Witnesses:

G. SARGENT ELLIOTT,
BESSIE THOMPSON.