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Patented Sept. 28, 1915.

1,154,990.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILBUR D. HOCKENSMITH, OF PENNS STATION, PENNSYLVANIA, ASSIGNOR TO HOCKENSMITH WHEEL & MINE CAR COMPANY, OF PENNS STATION, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

MINE-CAR WHEEL.

1,154,990.

Specification of Letters Patent.

Patented Sept. 28, 1915.

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To all whom it may concern:

Be it known that I, WILBUR D. HOCKENSMITH, a citizen of the United States, and resident of Penns Station, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Mine-Car Wheels, of which the following is a specification.

This invention relates to certain improvements in the mine car wheel patented to F. C. Hockensmith, November 19, 1901, No. 687,027, and the primary object is to provide simple and efficient means for holding the closure in open position and out of engagement with the wall through which the filling opening is formed, thereby relieving the closure of damaging strain when in open position, also from danger of injury when moving from closed to open position.

The improvement also provides efficient means for locking the closure in closed position.

In the accompanying drawings, Figure 1 is a side elevation of the hub of a mine car wheel showing the improvement applied thereto with the closure for the filling port turned to open position. Fig. 2 is a cross-section on line 2—2 of Fig. 1, the closure being shown in closed position in full lines and open in dotted lines. Fig. 3 is an elevation taken in the direction of the arrow of Fig. 2 illustrating the closure in open position.

Referring to the drawings, 2 designates the cast hub of a mine car wheel which is cored to form the oil chamber or reservoir 3, with openings 4 to pass the lubricant to the wheel bore 5. An exterior wall 6 of the chambered hub is formed with filling port 7, a baffle 8 being located within the oil chamber and spaced from the port to hold the main body of oil away from the port when the wheel is in position to place the ported portion of the chamber lowermost.

The plug-like closure 9 for the filling port is carried by the curved arm 10 projecting from bolt-like stem 11. This stem is rotatable and movable longitudinally in housing 12 formed at one side of the hub, longitudinal movement being opposed by spring 13. The face of the housing adjacent to or forming an extension of face 6 is formed with notch 14 and adapted to fit therein when plug 9 is in closed position as in Fig. 2 is lug 15 which projects from stem 11. With

the lug seated in the notch, plug 9 is not wholly dependent on its seating hold in port 7 for retaining its closed position, and hence is more securely held than in the patent above referred to.

When clearing the filling port for the insertion of oil, stem 11 and the plug-carrying arm 10 must be withdrawn sufficiently against the pressure of spring 13 to withdraw lug 15 from notch 14, when the device is turned as in Figs. 1 and 3, lug 15 overhanging and bearing against the face of housing 12 as the device is turned. The arrangement is such that the extremity of plug 9 is held clear of wall 6, as shown in Fig. 3 and in dotted lines in Fig. 2, and hence is relieved of injurious scraping on said wall incident to the structure of the patent referred to.

In addition to preventing injury, less force is required to turn the closure support toward and from closed position due to the fact that holding lug 15 is closely adjacent the axis of stem 11. When turned to position to place lug 9 in line with port 7, lug 15 is also turned into line with notch 14 and the spring snaps the closure into closed and locked position as in Fig. 2.

I claim:

1. In a self-oiling wheel, the combination of a wheel hub provided with an oil chamber in communication with the hub bore and with a filling opening for the chamber extending through an external wall of the latter, said wall formed with a second opening parallel with the filling opening and with an offset in the outer end of said second opening, a stem movable longitudinally in said second opening, a stopper projecting laterally from the stem and adapted to close the filling opening, and a spring for opposing longitudinal movement of the stem, the stem having a lug adapted to enter the offset of said second opening when the stopper is closed and adapted when the latter is withdrawn to bear on the outer wall of the oil chamber through which said opening are formed, thereby permitting the stem to be rotated and at the same time holding the stopper clear of the filling opening and of the chamber wall through which the openings are formed.

2. In a self-oiling wheel, the combination of a wheel hub provided with an oil cham-

ber in communication with the hub bore and
with a filling opening for the chamber ex-
tending through an external wall of the
latter, the hub formed with an extension at
5 one side of the oil chamber and with a pas-
sage in said extension which is parallel with
the filling opening, said passage being open
through the same external face of the oil
chamber as the filling opening and with an
10 offset in the outer end of the passage, a stem
movable longitudinally and adapted to ro-
tate in said passage, a stopper carried by
the stem and adapted to cooperate with the
filling opening, and a spring for opposing

movement of the stem in a direction to re- 15
move the stopper from said opening, the
stem having a lug adapted to enter the off-
set in said passage and also adapted when
withdrawn and upon rotating the stem to
bear on the outer wall of the hub, thereby 20
holding the stopper clear of said wall and
of the filling opening.

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

WILBUR D. HOCKENSMITH.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."