J. FANNING.
AUTOMATIC ROLLER FEED LUBRICATOR.
(Application filed Nov. 20, 1901.)


Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

JOHN FANNING, OF BROOKLYN, NEW YORK.

AUTOMATIC ROLLER-FEED LUBRICATOR.


Application filed November 22, 1901. Serial No. 83,383. (No model.)

To all whom it may concern:

Be it known that I, JOHN FANNING, a citizen of the United States, residing at Brooklyn, New York city, in the county of Kings and State of New York, have invented new and useful Improvements in Automatic Roller-Feed Lubricators, of which the following is a specification.

This invention relates to lubricators; and one of the objects thereof is to provide means for retaining a lubricating agent, whereby it may be fed to the journal in a convenient manner.

The peculiar construction of the invention will be clearly described hereinafter, reference being had to the accompanying drawing, in which the figure is a vertical longitudinal sectional view through a portion of an axle-brass and the lubricator.

The reference-numeral 1 designates an axle journal, in a suitable journal-box 2, in which is arranged a brass 3, provided with a plurality of antifriction-rollers 4. These rollers are retained in recesses provided with slots 5, whereby a portion only of the roller will project through, being practically flush with the curvature of the brass, whereby the weight will be equally distributed upon the rollers and the brass. A lubricating-cup 6 is secured to the top of the journal-box 2 by means of a tubular thread neck 6a, which depends from the bottom of the cup and is designed to be screwed in the top of the box 2. A central channel or passage 7 is provided in the neck 6a and communicates with the interior of the cup 6 and with the channel 8 in the brass 3, whereby the lubricant can find its way into the central recess 5, in which a roller is located. Surrounding the inlet 9 of the channel 7 in the neck 6a is an upwardly-projecting tube 10, which extends nearly to the top of the cup and is provided near its lower extremity with inlet-openings 11, through which the lubricating material may be admitted into the channel 7, so as to lubricate the central roller 4. Arranged adjacent the inlet-openings 9 in the top of the neck 6a is a valve-seat 12, adapted to be closed or opened through the medium of a valve 13, having a valve-stem 14, which projects through the top of the cup 6, being threaded therein and designed to be operated by a hand-wheel 15 or other suitable means, whereby flow of the lubricant may be controlled at all times. Side channels 16 and 17 are arranged in the brass 3 and communicate with the interior of the cup 6 through the medium of pipes or tubes 18 and 19. These pipes 18 and 19 are preferably threaded, so that when the cup is screwed in place the pipes can be attached to the cup in the brass by means of a wrench or other tool. In the bottom of the cup 6 are valve-seats 20 and 21, which are arranged adjacent the tubes 18 and 19, whereby they can be closed by the valves 22 and 65, 23, which are carried on the end of stems 24 and 25, similar to the stem 14. Tubes 26 and 27, similar to the one designated by the reference-numeral 10, also surround the stems 24 and 25 and are provided with openings 70 through which the oil or lubricant can pass through other channels, so as to lubricate the rollers.

While I have shown but three rollers and three lubricating devices thereto, it will of course be obvious that I may employ any number suitable for the purpose. It will also be apparent that I have provided means whereby the oil or other lubricating material may be supplied either simultaneously or independently from all of the feed-tubes to the rollers and that the supply from one roller may be readily cut off without cutting off the supply of the other rollers.

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

The combination with an axle-box, of a brass therein having vertical passages, antifriction-rollers carried by the brass and adapted to bear on the axle, said rollers arranged immediately below the vertical passages, a lubricating-cup above the brass and secured to the box said cup having a number of vertical supply-pipes equal to the number of vertical passages in the brass, said pipes leading into the vertical passages, a valve for each pipe arranged vertically in the cup and adapted to be seated so as to close the inlet-opening through the pipes and pipes surrounding the respective valves and their stems and provided with inlet-openings near the valve-seat for the purpose described.

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

JOHN FANNING.

Witnesses:

F. A. SCHNEIDER,
CARL SJÖBERG.