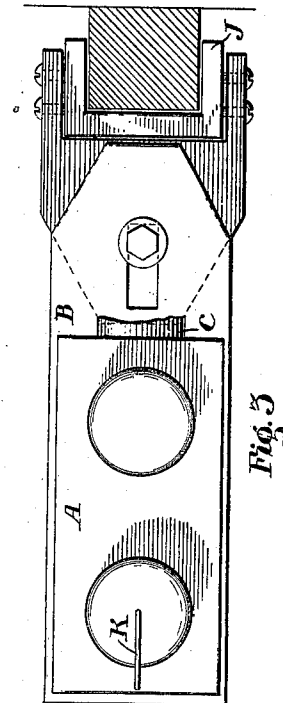
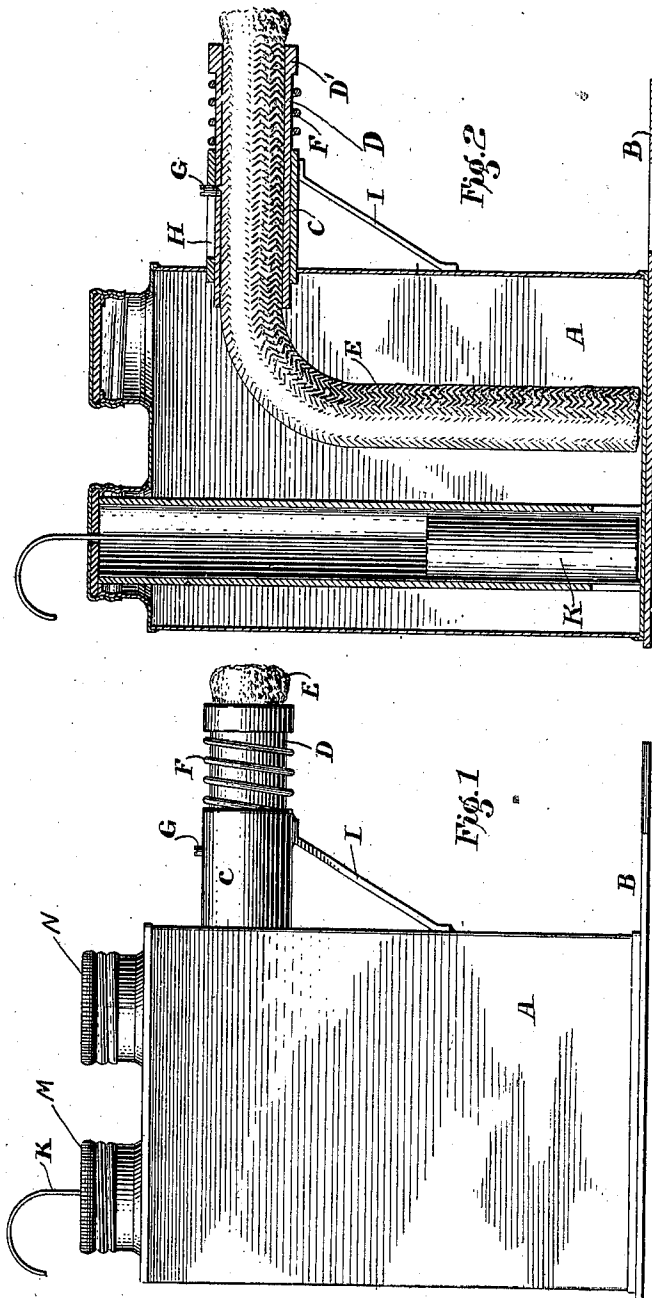


B. W. GIVENS.
GUIDE RAIL LUBRICATOR.
APPLICATION FILED OCT. 11, 1910.

996,077.

Patented June 27, 1911.



Witnesses:
John D. Ruffie
Hannah E. McDuffie

Inventor:
Benjamin W. Givens

UNITED STATES PATENT OFFICE.

BENJAMIN W. GIVENS, OF CAMBRIDGE, MASSACHUSETTS.

GUIDE-RAIL LUBRICATOR.

996,077.

Specification of Letters Patent. Patented June 27, 1911.

Application filed October 11, 1910. Serial No. 586,810.

To all whom it may concern:

Be it known that I, BENJAMIN W. GIVENS, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Guide-Rail Lubricators, of which the following is a full description thereof, reference being had to the drawings accompanying and forming a part of the same.

My invention relates to improvements in devices for lubricating elevator or similar guides and has in view such a device as will feed the oil economically, yet keep the guide sufficiently and substantially uniformly lubricated.

Specifically my device consists of an oil can with a horizontal nose having an elongated slot therein, a cylinder adapted to reciprocate within said nose, said cylinder having a wick inclosed therein and extending outwardly beyond said cylinder and inwardly substantially to the bottom of said can. The said cylinder is maintained in its normal position by means of a spiral spring abutting at one end against the nose and at its other end against a boss on the said cylinder and is prevented from excessive outward movement by means of a set screw connected thereto and limited in its reciprocatory motion by means of the ends of the slot in the nose.

In the drawings in which like characters in the different figures refer to the same part, Figure 1 is a side view of my lubricator; Fig. 2 is a central vertical longitudinal section thereof; and Fig. 3 is a plan view of the device showing its relative position to the elevator car.

Referring to the figures in detail, A designates one form of lubricating can or cup that can be used in carrying out my invention.

B is any suitable support on the elevator (not shown) upon which support the can A can be suitably mounted.

C designates the nose of the can in which the cylinder is slidably mounted. Within the cylinder D is mounted a wick E and upon the end of this cylinder exteriorly thereof is a boss D' against which abuts the spiral spring F the other end of the spring abutting against the end of the nose C. As before stated the cylinder D has a sliding action relative to the nose C and this sliding

action is limited by means of the set screw G operating in the slot H of the nose. The set screw passes through the cylinder D and engages with the wick E to secure the same in said cylinder D. The part I is a suitable brace connecting the nose with the body of the oil can.

In conjunction with the oil can I use a float K mounted in the cylinder L for the purpose of indicating the height of the lubricant in the can. Suitable openings M and N are provided in the top of the can one of which may be used for inserting or withdrawing the float K and the other for filling and emptying the can.

The operation of the device will be readily understood from the foregoing description. Suffice therefore to say that when the can is filled with the desired lubricant and suitably located on the elevator adjacent to the rail the end of the wick projecting outwardly from the cylinder D contacts with said rail. Owing to the capillary attraction of the said wick the end thereof will always be moist from the lubricant. Contacting then with the rail the lubricant is transferred from the wick to the rail and the latter thereby lubricated. The wick may be adjusted in the cylinder C by removing the set screw G after which the said wick will have a free and easy movement in said cylinder and when properly adjusted the set screw is caused to again penetrate the wick to secure the same in its adjusted position. Normally the end of the wick is in contact with the guide rail and if, for any reason, the elevator is closer at some points to the rail than at others the pressure on the wick will cause the cylinder D to slide in the nose C against the tension of the spring F. When the elevator recedes from the rail the spring will maintain the said wick in proper position against said guide rail. It will therefore be seen that I can compensate for certain irregularities that may exist in the construction of the elevators upon which I propose to use my device.

A very important feature of my device, as will be appreciated, is the fact that the lubricating cup can be rigidly attached to the elevator.

It will be understood that I do not limit myself to the exact construction herein shown and described as the same may be varied considerably in points of detail and

still come within the scope and spirit of my invention.

What I claim is:

1. The combination of an oil can having
5 a nose, a cylinder adapted to reciprocate within said nose, said cylinder having an enlarged end, a spiral spring arranged between the end of the nose and the enlarged end of the cylinder.
- 10 2. In a lubricator for elevators, in combination, a nose, on one side thereof, a member slidable within said nose and having a boss on the end thereof, and resilient means contacting the nose and the boss and tend-
15 ing to hold the member outwardly.
3. In a lubricator for elevator guides, a nose having a slot therein, a member extending beyond said nose and having a projec-
20 tion thereon slidable within said slot, a boss upon said member, and a spring mounted upon said member between the end of the nose and the boss tending to keep the projec-
25 tion in one end of the slot.
4. In a lubricator for elevator guides, a nose projecting through one side of the lu-
25 bricator and having a slot therein, a cylindrical member within said nose extending beyond the same and having a projection engaging said slot and also having a boss
30 upon the outer end thereof, a spiral spring mounted upon said cylindrical member and located between the nose of the lubricator and the boss of the said member, and a wick
35 adjustably secured in said member.
5. In a lubricator for elevator guides, a

nose having a slot therein, a member within said nose having a projection screw-threaded thereto and engaging the slot in the nose, and a wick adjustably secured in said mem-
40 ber.

6. In a lubricator for elevator guides, a nose having a slot therein, a member within said nose adapted to receive a wick and hav-
45 ing a projection screw-threaded thereto and entering the slot of the nose, said projection serving to limit the reciprocation by con-
50 tacting with the ends of the slot and also serving to adjustably secure the wick within said member.

7. In a lubricator for elevator guides, a
50 lubricant cup adapted to be secured to the elevator, an extensible member secured to the cup and having a wick therein one end of which extends into the cup, and means
55 for causing the other end of the wick to en-
gage the elevator guide rail regardless of the distance between the lubricant cup and the said rail.

8. In a lubricator for elevator guides, a lubricant cup adapted to be secured to the
60 elevator, a nose on said cup, and a reciprocating member within said nose to compensate for the varying distance between the cup and the guide.

In testimony whereof I have affixed my
65 signature, in presence of two witnesses.

BENJAMIN W. GIVENS.

Witnesses:

ANNA E. DUFFY,
GEORGE L. DORN.

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