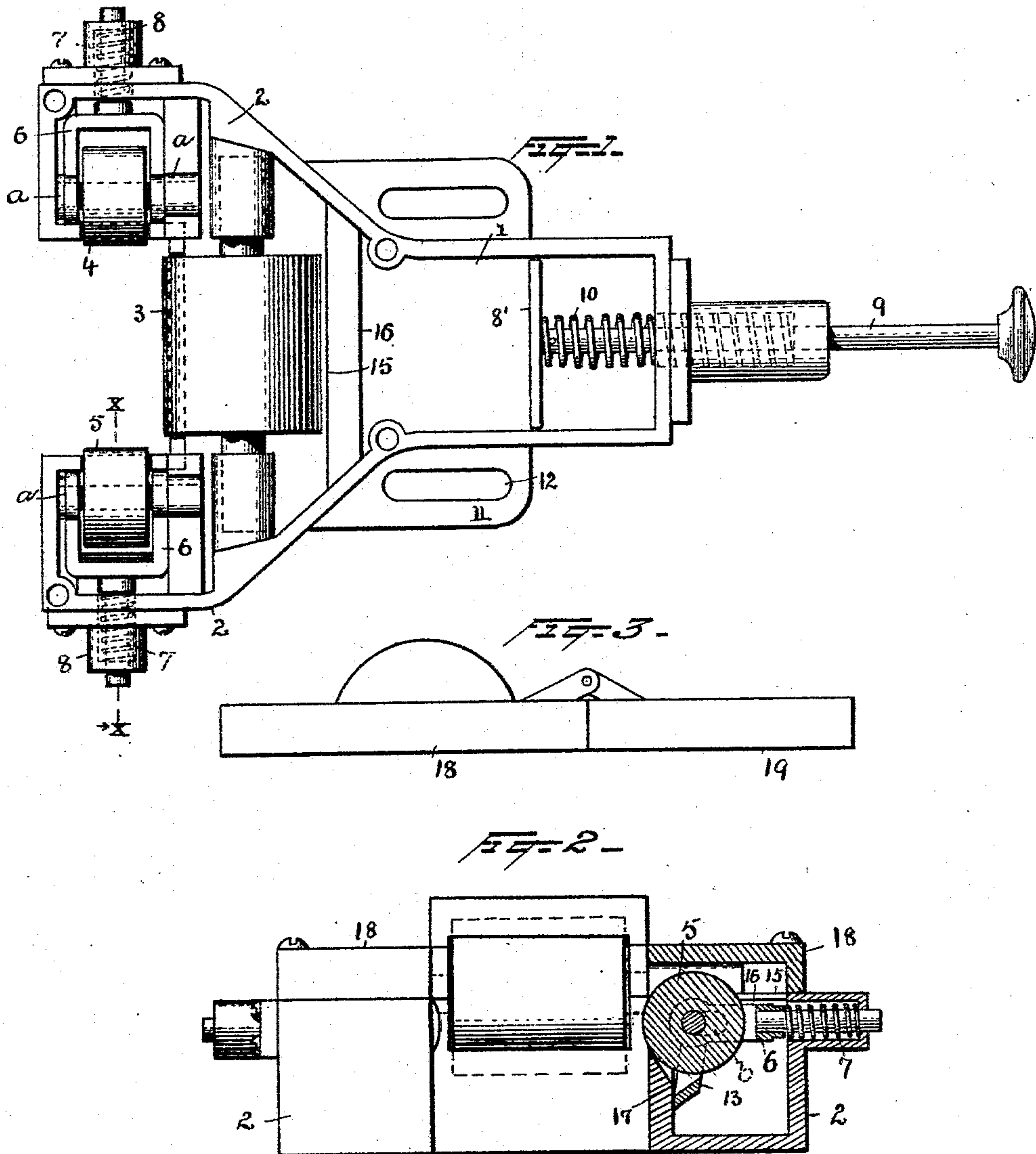


(No Model.)

G. A. HOFMEYER.  
LUBRICATOR.

No. 515,586.

Patented Feb. 27, 1894.



Witnesses  
Ironis A. Clark,  
George B. Cronk.

Inventor  
Geo. A. Hofmeyer  
By his Attorneys  
Syer & Seely.



# UNITED STATES PATENT OFFICE.

GEORGE A. HOFMEYER, OF NEW YORK, N. Y., ASSIGNOR TO ROSALIE HOFMEYER, OF SAME PLACE.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 515,586, dated February 27, 1894.

Application filed December 3, 1892. Serial No. 453,953. (No model.)

### *To all whom it may concern:*

Be it known that I, GEORGE A. HOFMEYER, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a certain new and useful Improvement in Lubricators, of which the following is a specification.

The present invention relates to devices for applying lubricating material to the guide rails of elevators, although the lubricator to be described may be used in any other suitable location.

The main objects of the invention are, to provide an automatic lubricator of this character adapted to move along the rail or guide with the elevator or similar device, and to apply the desired quantity of lubricant evenly and without waste and without requiring constant attention; and the invention consists in the devices and combinations forming the improved lubricator as hereinafter described and set forth in the claims.

In the accompanying drawing, Figure 1 is a plan view of the lubricator with the cover removed. Fig. 2 is an end view on the line  $x-x$  of Fig. 1; and Fig. 3 is an edge view of a cover adapted to be used on the device.

The body of the lubricator consists of a grease chamber 1 and branch chambers 2 extending therefrom and communicating directly therewith, the whole forming approximately a Y-shaped body.

3, 4, 5 are rollers made of felt, wood, iron or other suitable material mounted on suitable trunnions and projecting slightly through the walls of the body facing the space inclosed by the arms of said Y-shaped body. The spindles of the rollers 4, 5 are supported by the U-shaped pieces 6, which are pressed forward by spiral springs 7 held in suitable receptacles 8, which springs are adapted to yield to allow the rollers to move backward when they strike obstructions. The springs also cause the rollers to bear against the rail sufficiently to perform their function successfully. Said spindles have end bearings  $a$  for supporting the same, but having elongated openings  $b$ , as indicated in dotted lines in Fig. 2, to allow said spindles to move back and

forth as the springs 7 are compressed or expanded.

8' is a plate within the main portion of the body 1, having a stem or handle 9 and a spiral spring 10 which tends to push the plate 8' toward the left.

11 are flanges with elongated bolt-holes 12, by means of which the lubricator may be secured to the top of an elevator car or in any other suitable location, in such position that the guide-rail shall stand between the rollers 4, 5.

Adjacent to the peripheries of the rollers 4, 5 are placed suitable cleaning edges or scrapers 13 which remove the surplus of grease from said rollers and act to regulate the amount of grease that is applied to the guide-rail. The cleaning device or scraper is preferably formed in one piece with the part 6, as shown in Fig. 2. In connection with roller 3, the edge 15 of bar 16 forms the cleaning device or scraper. Owing to the inclined position of the bar having the edge 13, a receptacle 17 is formed, into which the grease removed may fall and from which it will work back into the main chamber or will be again taken up by the rollers.

Over the grease chamber 1 and its branches 2 may be placed a cover 18, secured by screws or otherwise, and preferably having a hinged portion 19 giving access to the portion where grease is inserted without bodily removing the cover.

The lubricator is charged by pulling the handle 9, compressing the spring 10 and placing the lubricating material, preferably of about the consistency of tallow, to the left of plate 8'. The lubricating material will pass through the spaces at opposite ends of roller 3 to the spaces around rollers 4, 5, so that all three of the rollers will be in contact with the lubricating material, which is pressed forward by plate 8' and spring 10 as the material is used. As the structure which carries the lubricator moves along, the rollers 3, 4, 5 will travel over the guide-rail, applying the proper amount of lubricating material without waste of material and entirely automatically. When the elevator is out of use, or when further lu-



brication is not desired, the lubricator can be moved back from the guide-rail.

It is evident that the particular shape of the lubricator body and other devices can be modified to some extent without departing from my invention, but in all cases there must be lubricating devices adapted to press against more than one side of a guide-rail or similar device, means being provided for supplying lubricant thereto as indicated. Instead of moving the lubricator along a rail, evidently a rail may be moved past the lubricator with the same result. Evidently roller 3, or the entire body 1, may also be pressed forward by a spring.

When the lubricator is out of use and the rollers are thrown forward by their springs, the openings through which the rollers project will be tightly closed by said rollers and waste of lubricant thus prevented.

What I claim is—

1. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein and working in suitable bearings, branches extending from said chamber and communicating therewith, each having a lubricating roller supported therein and working in suitable bearings, and means for forcing the grease against all the rollers, substantially as set forth.

2. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein and working in suitable bearings, branches extending from said chamber and communicating therewith, each having a lubricating roller supported therein and working in suitable bearings, and a spring pressed plate or body forcing the grease against all the rollers, substantially as set forth.

3. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein, having adjustable bearings, branches extending from said chamber and communicating therewith, each having a lubricating roller supported therein and having adjustable bearings, and means for forcing the grease against all the rollers, substantially as set forth.

4. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein, having adjustable bearings, branches extending from said chamber and communicating therewith, each having a lubricating roller supported therein and having adjustable bearings, and a spring plate or body forcing the grease against all the rollers, substantially as set forth.

5. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, adjustable toward and away from the rail, a lubricating roller supported in said chamber and working in suitable bear-

ings, branches extending from said chamber, each having a lubricating roller supported therein and working in suitable bearings, and means for forcing the grease against all the rollers, substantially as set forth.

6. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, adjustable toward and away from the rail, a lubricating roller supported in said chamber and working in suitable bearings, branches extending from said chamber, each having a lubricating roller supported therein and working in suitable bearings, a spring pressed plate or body forcing the grease against all the rollers, substantially as set forth.

7. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, adjustable toward and away from the rail, a lubricating roller supported therein, having adjustable bearings, branches extending from said chamber, each having a lubricating roller supported therein and having adjustable bearings, and means for forcing the grease against all the rollers, substantially as set forth.

8. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, adjustable toward and away from the rail, a lubricating roller supported therein, having adjustable bearings, branches extending from said chamber, each having a lubricating roller supported therein and having adjustable bearings, and a spring plate or body forcing the grease against all the rollers, substantially as set forth.

9. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein and working in suitable bearings, branches extending from said chamber, each having a lubricating roller supported therein and working in suitable bearings, means for forcing the grease against all the rollers, and scrapers for regulating the amount of grease applied to the rail by said rollers, substantially as set forth.

10. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein and working in suitable bearings, branches extending from said chamber, each having a lubricating roller supported therein and working in suitable bearings, a spring pressed plate or body forcing the grease against all the rollers, and scrapers for regulating the amount of grease applied to the rail by said rollers, substantially as set forth.

11. A lubricator adapted to lubricate a rail or similar device, having in combination a grease chamber, a lubricating roller supported therein, having adjustable bearings, branches extending from said chamber, each having a lubricating roller supported therein and having adjustable bearings, means for forcing the grease against all the rollers, and scrapers



for regulating the amount of grease applied to the rail by said rollers, substantially as set forth.

12. A lubricator adapted to lubricate a rail  
5 or similar device, having in combination a grease chamber, adjustable toward and away from the rail, a lubricating roller supported in said chamber and working in suitable bearings, branches extending from said chamber,  
10 each having a lubricating roller supported therein and working in suitable bearings,

means for forcing the grease against all the rollers, and scrapers for regulating the amount of grease applied to the rails by said rollers, substantially as set forth.

This specification signed and witnessed  
this 25th day of November, 1892.

GEORGE A. HOFMEYER.

Witnesses:

E. A. MACCLEAN,  
CHARLES M. CATLIN.