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FRICITION GUIDE LUBRICATOR

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Inventor

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By his Attorney

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This invention relates to improvements in lubricators, particularly to a friction guide lubricator for elevator cars, and the like, and it is the principal object of my invention to provide a lubricator frictionally engaging and gliding along the guides of elevator cars and lubricating the same automatically during the up and down movements of the elevator car.

Another object of my invention is the provision of a lubricating device of this character, which is automatically supplied with a lubricating means.

A further object of my invention is the provision of a lubricator of simple and inexpensive construction, yet durable and efficient in its operation.

A still further object of my invention is the provision of a device of this character equipped with means for allowing a regulation of the supply of lubricant.

These and further objects of my invention will become more fully known as the description thereof proceeds, and will then specifically be pointed out or defined in the appended claim.

In the accompanying drawing forming a material part of this disclosure—

Figure 1 is a fragmentary end view of an elevator provided with a lubricating device constructed according to my invention.

Figure 2 is an enlarged side elevation of the lubricating device.

Figure 3 is a section on line 3-3 of Figure 2.

Figure 4 is a front elevation of the lubricating device.

As illustrated:—the guide rails 10 of an elevator car 11 end in oil or lubricant containers 12 at the bottom of the elevator shaft. Into these containers dip the lubricating devices proper at the end of each trip of a car to be supplied with a fresh supply of lubricant.

The friction guide lubricators constructed according to my invention are preferably secured, as shown, by suitable brackets 13 at the bottom of the car, they may, however, just as well be attached at any suitable place of a car by any appropriate means.

The lubricator proper preferably comprises a neck part 14 having an end plate 15, and a substantially central bore 16 extending through neck, end plate and bracket arm, to admit a supply of lubricant from vessels 12, to the lubricator proper.

The neck part 14 is made integrally with a body 17, substantially U-shaped in cross-section having a chamber 18 formed therein near its rear end, and inner shoulders 19.

Against these shoulders are seated the inner side edges of clamp blocks or lugs 20, 21 each of which is tiltably arranged upon a pair of hollow pins 22, loosely engaging in suitable bores in the blocks, about which springs 23 are wound, which have the tendency to tilt the blocks with their front edges, into firm, frictional engagement with the guide bars 24 of an elevator on opposite sides thereof.

The inner faces of the blocks 20, 21 are equipped with a number of depressions 25 adapted to receive and distribute the lubricant supplied to the hollow pins or posts 22 through the channels or bores 26, the outer ends of which are in communication with the central bore 16.

A substantially centrally located block or lug 27 is provided in chamber 18, and pins 28 projecting from body 17, into chamber 18 are loosely held in suitable sockets in the lug 27, and springs 29 wound about the pins have the tendency to press the lug 27 into frictional engagement with the rear edge of the guide bar 24.

The neck 14 has a vertical bore formed in its material in communication with its central bore 16 and adapted to receive a regulating screw 30 adapted to allow a regulation of the supply of the lubricant through bore 16. Similar, vertical bores, 31, 32, are provided in the side walls of the body 17, and are adapted to receive regulating screws controlling the supply of lubricant through bores 26.

The neck part 14 is made integrally with a body 17, substantially U-shaped in cross-section having a chamber 18 formed therein near its rear end, and inner shoulders 19.

Against these shoulders are seated the inner side edges of clamp blocks or lugs 20, 21 each of which is tiltably arranged upon a pair of hollow pins 22, loosely engaging in suitable bores in the blocks, about which springs 23 are wound, which have the tendency to tilt the blocks with their front edges, into firm, frictional engagement with the guide bars 24 of an elevator on opposite sides thereof.

The inner faces of the blocks 20, 21 are equipped with a number of depressions 25 adapted to receive and distribute the lubricant supplied to the hollow pins or posts 22 through the channels or bores 26, the outer ends of which are in communication with the central bore 16.

A substantially centrally located block or lug 27 is provided in chamber 18, and pins 28 projecting from body 17, into chamber 18 are loosely held in suitable sockets in the lug 27, and springs 29 wound about the pins have the tendency to press the lug 27 into frictional engagement with the rear edge of the guide bar 24.

The neck 14 has a vertical bore formed in its material in communication with its central bore 16 and adapted to receive a regulating screw 30 adapted to allow a regulation of the supply of the lubricant through bore 16. Similar, vertical bores, 31, 32, are provided in the side walls of the body 17, and are adapted to receive regulating screws controlling the supply of lubricant through bores 26.
such changes as come within the scope of the appended claim without departure from the spirit of my invention.

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

The combination of stationary lubricant containers with guide lubricators for elevators dipping into said containers at the end of the downward motion, said lubricators each comprising a chambered body adapted to be secured to the elevator car, means for supplying the chamber of said body with the lubricant, slidable blocks in said chamber having depressions on the inner faces of said blocks, communications between said depressions and said lubricant supply means, hollow pins in said body on which said blocks are mounted, springs wound about said pins for pressing said blocks into frictional engagement with the elevator guide, on opposite sides thereof, a substantially centrally located chambered block in said chamber, means for pressing said center block into frictional engagement with the rear edge of the elevator guide bar for lubricating the same by lubricant from its channel communicating with the lubricant supplying means, and a plurality of vertically disposed screws in said lubricant supply means and said communications for allowing a thorough lubrication of three sides of the guide by a thin coat of lubricant and preventing smearing.


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