

No. 860,375.

PATENTED JULY 16, 1907.

C. HARTLEY & K. KAUTSKY.
LUBRICATOR FOR ELEVATOR GUIDES.
APPLICATION FILED JUNE 27, 1906. RENEWED JUNE 17, 1907.

Fig. 1.

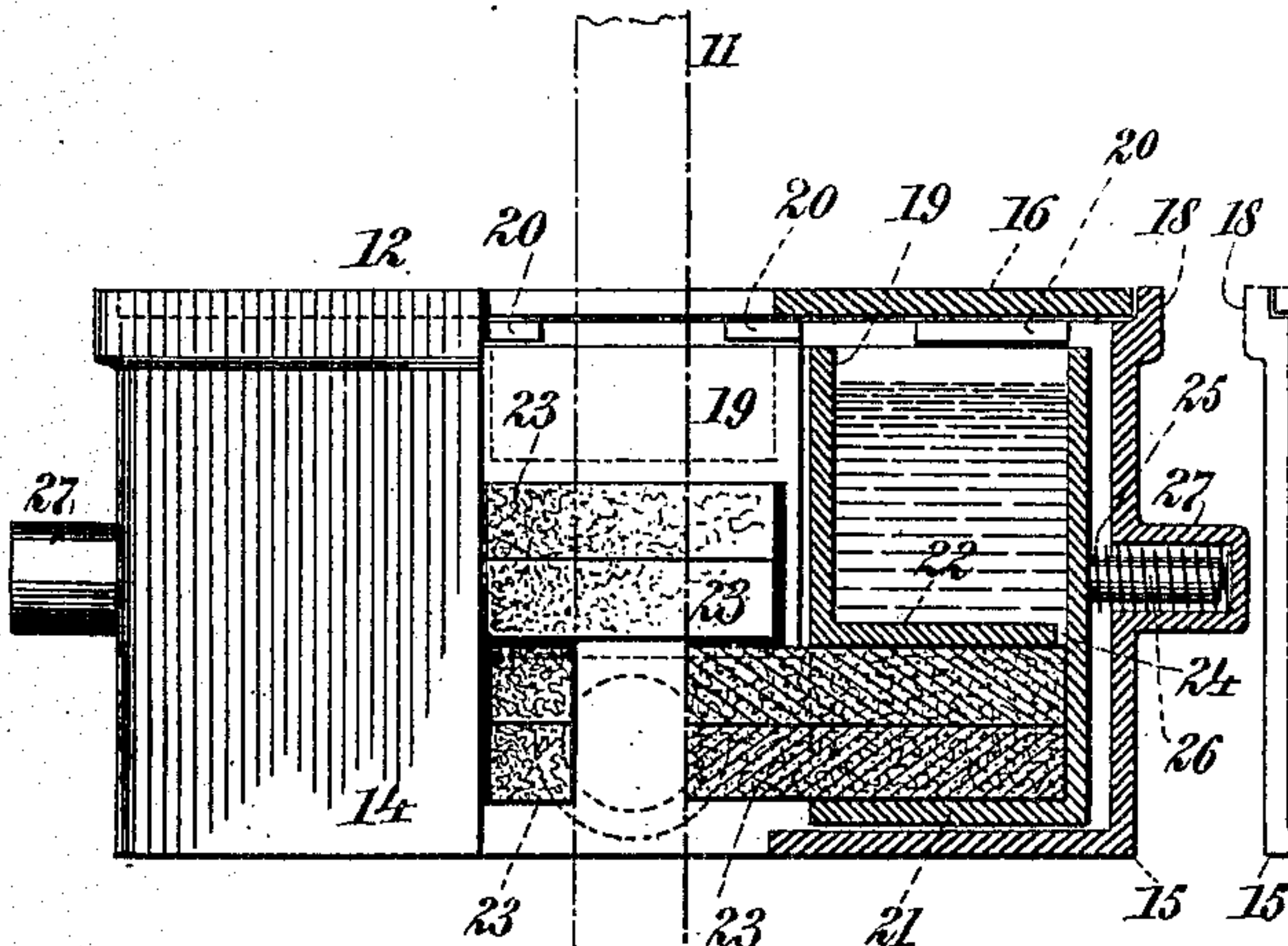


Fig. 3.

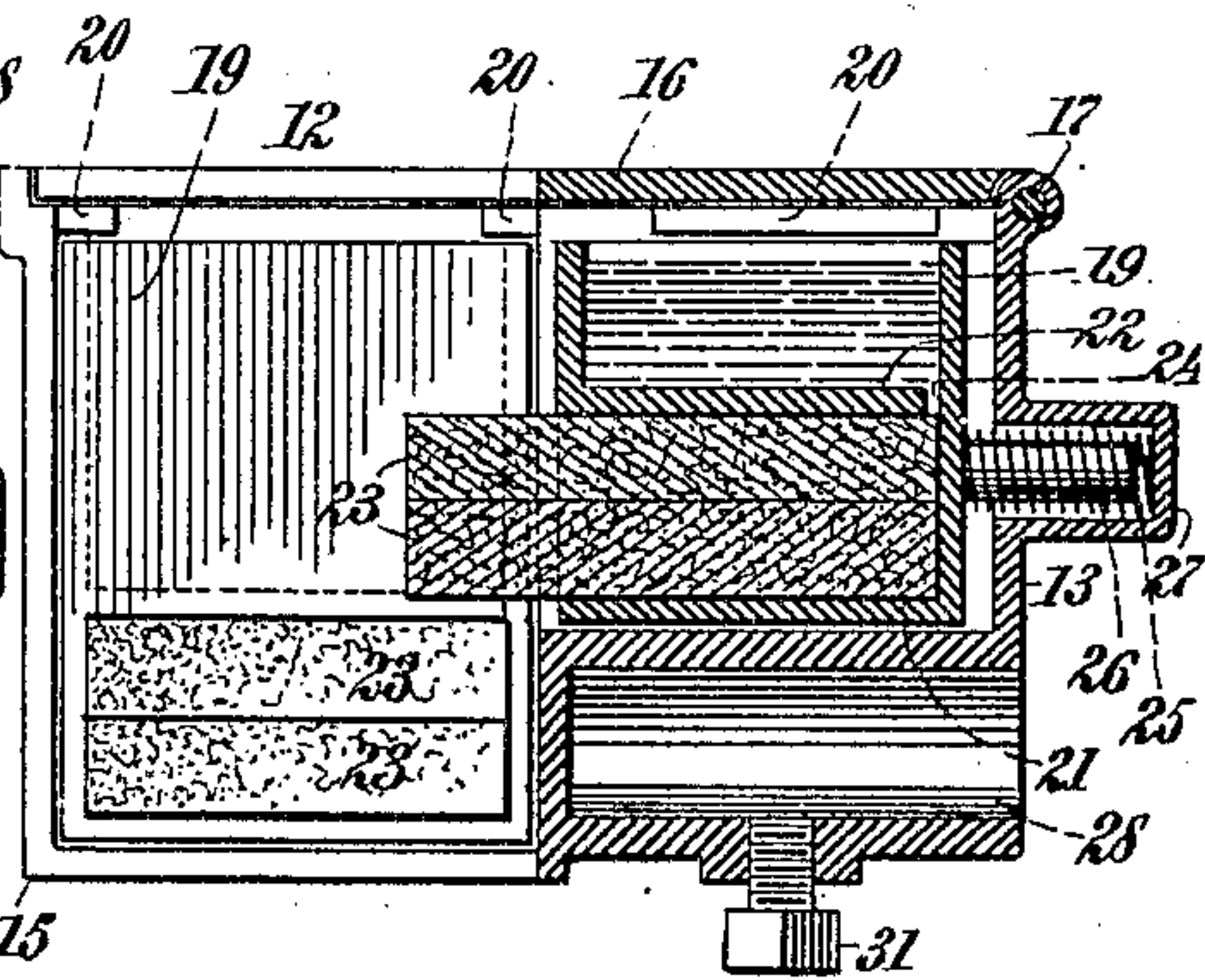


Fig. 2.

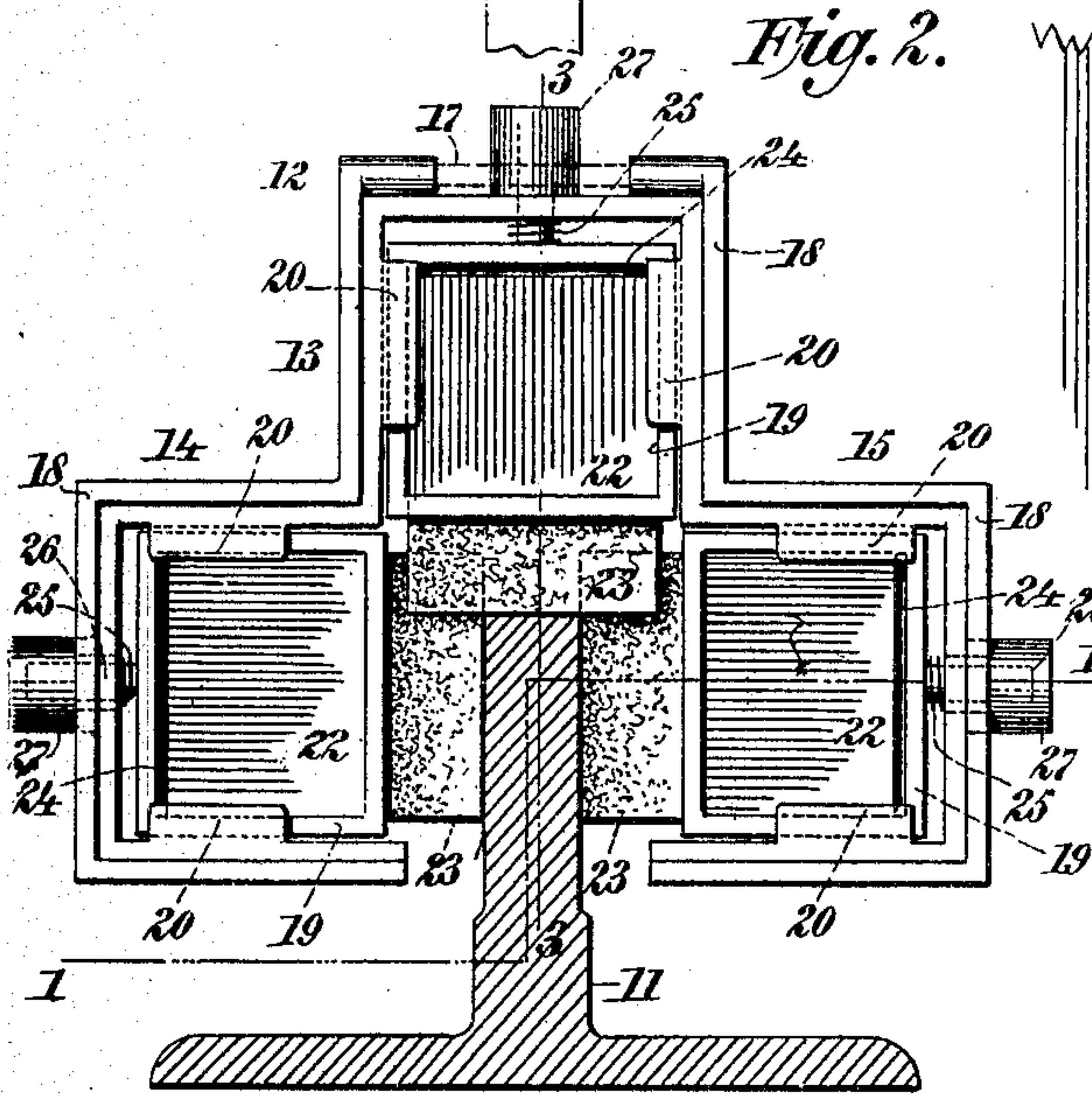
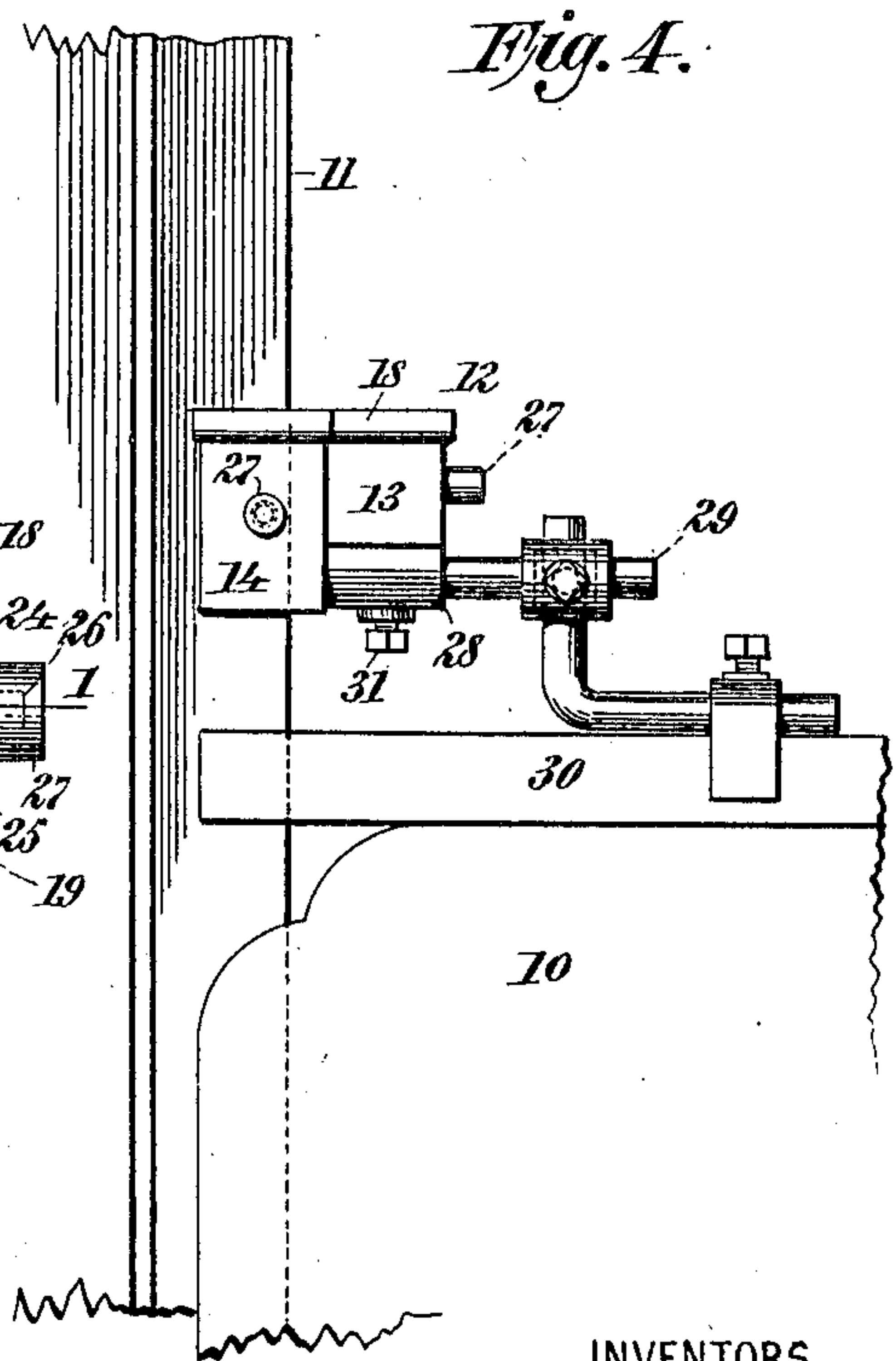


Fig. 4.



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LUBRICATOR FOR ELEVATOR-GUIDES.

No. 860,375.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed June 27, 1906, Serial No. 323,547. Renewed June 17, 1907. Serial No. 379,496.

To all whom it may concern:

Be it known that we, CHARLES HARTLEY, a subject of Great Britain, and a resident of Fort Lee, Bergen county, New Jersey, and KAYTON KAUTSKY, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have jointly invented certain new and useful Improvements in Lubricators for Elevator-Guides, of which the following is a specification.

10 The invention relates to improvements in lubricators for elevator guides; and it consists in the novel features and combinations of parts hereinafter described, and particularly pointed out in the claims.

15 The object of the invention is to provide a simple and highly efficient lubricator to be connected with the elevator car or platform and adapted to automatically lubricate the vertical guides between which the car or platform travels.

20 One purpose of our invention is to provide simple and economical means for lubricating the guides and which will not entail a waste of the oil, but properly and evenly lubricate the guides when the car is in motion without danger of the lubricant being spattered about and wasted or doing damage.

25 The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

30 Figure 1 is a side elevation partly in section on the dotted line 1—1 of Fig. 2, of a lubricator constructed in accordance with and embodying the invention, the elevator guide being indicated by dotted lines; Fig. 2 is a top view of same, the hinged cover plate being omitted and the elevator guide being shown in horizontal section; Fig. 3 is a vertical section through the lubricator on the dotted line 3—3 of Fig. 2, the elevator guide being omitted, and Fig. 4 is a view showing a portion of an elevator car and one of the guides with the lubricator device of our invention in position for use.

35 In the drawings 10 designates a usual form of elevator-car, 11 one of the elevator guides and 12 the lubricator of our invention, said lubricator being carried by the car and adapted to embrace the edge and a portion of the sides of the guide 11.

40 The exterior casing of the lubricator is preferably in one integral casting and in three divisions or sections 13, 14, 15 respectively, all of which are adapted to be closed by a hinged cover-plate or lid 16 whose edge outline corresponds with the edge outline of said casing, which outline is clearly shown in Fig. 2. The cover 16 will preferably be hinged to the upper rear edge of the section 13 of the lubricator casing, and in Fig. 3, 17 denotes the pintle of the hinge. When the cover 16 is closed it rests within a vertical flange 18 extending along the upper edges of the lubricator casing, said edges forming a shoulder to receive and support the said cover.

Within each of the sections 13, 14, 15 of the lubricator casing we mount a receptacle 19 which freely fits against the side walls and bottom of the section and is held below lips or flanges 20, which extend inwardly from said walls, as clearly shown in Fig. 2, and aid in guiding the receptacle during its sliding movements. The receptacles 19 are all alike except as to depth, the receptacles 19 located within the sections 14, 15 being of the same depth, while the receptacle 19 confined within the section 13 is made shallow, as shown in Fig. 3. The receptacles 19 are of metal and below the liquid-receiving portions thereof, the opposite side and outer end walls of the receptacles extend downwardly to the bottom of the main casing of the lubricator, as shown in Figs. 1 and 3, and are provided with horizontal supporting plates 21, which rest upon the bottom of the main casing. Each receptacle 19 has its plate 21 separated from the bottom 22 of the liquid-holding portion thereof by a space sufficient to receive a horizontal body of felt 23 which may be in one or more layers and closely fits between the said plate 21 and bottom 22 and projects outwardly beyond the inner vertical wall of the receptacle to engage the elevator guide 11. Each receptacle 19 is formed at the outer end of its bottom 22 with an opening 24 through which the oil carried within the receptacle may find an outlet to the felt 23, said opening 24 being of limited dimensions so that the oil may not too readily escape and simply keep the felt 23 in condition to lubricate the elevator guide. The felt bodies carried by the receptacles 19 within the sections 14, 15 are on the same horizontal plane and engage and lubricate the opposite faces of the guide 11, and the felt carried by the receptacle 19 confined within the section 13 is at a higher elevation than the felt in the other two receptacles so that it may overlap the same and engage and extend beyond the edges of the face of the guide 11, as shown in Fig. 2.

45 The receptacles 19 are normally pressed toward the elevator guide by means of springs 25 mounted upon pins 26 cast integrally with the receptacles and adapted to enter sockets 27 cast integrally upon the main casing of the lubricator. The springs 25 exert only sufficient tension on the receptacles 19 to keep the felt of the several receptacles pressed against the elevator guide and to take up any wear which may take place at the exposed edges of said felt. The main casing of the lubricator is thus in three distinct divisions each carrying a sliding receptacle 19 adapted in its upper part to hold a quantity of oil or other lubricant and in its lower part to receive and carry a layer or layers of felt 23, said felt fitting between the side walls of the lower part of the receptacle and closely confined between the plate 21 and bottom 22 of said receptacle, said plate and bottom serving to clamp the

felt, which will initially have a close fit between them and when moistened with the oil or other lubricant swell to a sufficient extent to closely bind against the same. The receptacles 19 guide upon the bottom 5 of the main casing of the lubricator and against the side walls of the several sections 13, 14 and 15 and are held down and further guided by means of the inwardly projecting flanges or lips 20 provided at the upper edge of said casing. When the lid 16 is closed 10 it covers all of the receptacles 19, preventing dirt from reaching the lubricant and also preventing the latter from under any ordinary circumstances spattering upwardly or escaping. Any oil that might be thrown upwardly against the lower face of the closed 15 lid 16 would not escape around the edges of the main casing, since said lid is set within the flange 18, which extends upwardly above the lower surface of said lid.

The main casing of the lubricator is formed below the section 13 thereof, with a horizontal sleeve or 20 socket 28 to receive a rod 29 which by any suitable means may be secured to one of the usual transverse bars 30 customarily found on the top of elevator cars. The rod 29 may be fastened within the socket 28 by means of a set screw 31. The present invention is not 25 confined to any special means for securing the lubricator upon or to the elevator car or hoist.

Each car will be furnished with two of the lubricators hereinbefore described, one being at each side of the car, so that both elevator guides may be lubricated 30 during the ascent and descent of the car. The strips of felt become saturated with the oil and transmit the same to the guides during the travel of the car, said strips being always, at their outer edges, kept against said guides because of the pressure of the springs 25 35 against the receptacles 19.

The receptacles 19 are of rectangular box-like-outline conforming to the sections 13, 14 and 15 of the main box-like casing, and since their sides and bottom plates 21 engage broad smooth surfaces of the main 40 casing, said receptacles are guided readily and smoothly in said casing.

The lubricator as a whole is composed of few parts of durable character easily made and assembled and capable of efficient action.

45 What we claim as our invention and desire to secure by Letters-Patent is

1. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main casing adapted to pass upon the guide, receptacles therein each comprising an upper lubricant-holding portion having an outlet-opening in its bottom and a lower portion carrying a 50 body of felt to absorb the lubricant from said outlet-opening and transmit the same to said guides, and means acting against said receptacles to keep the felt against said guide; substantially as set forth.

2. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main casing adapted to pass upon the guide, three receptacles therein arranged opposite to the side faces and edge of the guide and each 60 comprising an upper lubricant-holding portion having an outlet-opening in the bottom and a lower portion carrying a body of felt to absorb the lubricant from said outlet-opening and transmit the same to said guide, and means acting to keep the pieces of felt against said guide, 65 the receptacles at opposite sides of the guides carrying their pieces of felt on the same horizontal plane, and the receptacle opposite to the edge of the guide carrying its piece of felt above the felt of the side receptacles; substantially as set forth.

3. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main casing adapted to pass upon the guide, receptacles therein each comprising an upper lubricant-holding portion having an outlet-opening in its bottom and a lower portion carrying a 70 body of felt to absorb the lubricant from said outlet-opening and transmit the same to said guide, means acting to keep the felt against said guide, and a lid for said main casing covering said receptacles, said main casing having at its upper edges an upwardly extending flange to encompass the outer edges of said lid; substantially as set 80 forth.

4. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main casing adapted to pass upon the guide, receptacles therein each comprising an upper lubricant-holding portion having an outlet-opening in its bottom and a lower portion carrying a 85 body of felt to absorb the lubricant from said outlet-opening and transmit the same to said guide, and means acting against said receptacles to keep the felt against said guide and comprising pins 26 integral with said receptacles, sockets 27 integral with said casing and springs 25 90 on said pins; substantially as set forth.

5. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main box-like casing adapted to pass upon the guide and in three divisions 13, 14, 15, box-like receptacles in said divisions and adapted to guide upon the walls thereof and each comprising an upper lubricant-holding portion having an outlet-opening in its bottom and a lower portion carrying a body of felt to absorb the lubricant from said outlet-opening and 100 transmit the same to said guide, and means acting against said receptacles to keep the felt against said guide, substantially as set forth.

6. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main box-like casing adapted to pass upon the guide and in three divisions 13, 14, 15, box-like receptacles in said divisions and adapted to guide upon the walls thereof and each comprising an upper lubricant-holding portion having an outlet-opening in its bottom and a lower portion carrying a body of felt to absorb the lubricant from said outlet-opening and 110 transmit the same to said guide, and means acting to keep the pieces of felt against said guide, the receptacles at opposite sides of the guide carrying their pieces of felt on the same horizontal plane, and the receptacle opposite to the edge of the guide carrying its piece of felt above the felt of the side receptacles; substantially as set forth. 115

7. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main box-like casing, a box-like receptacle 19 mounted therein and adapted to guide on the walls thereof and comprising an upper lubricant-holding portion having a bottom 22 containing an outlet-opening 24 and a lower portion comprising a supporting-plate 21 and a body of felt 23 held between 120 said plate and bottom and projecting therefrom for absorbing the oil from said opening and transmitting it to the elevator-guide, and means acting to keep said felt against said guide; substantially as set forth. 125

8. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a main box-like casing adapted to pass upon the guide and in three divisions 13, 14, 15, box-like receptacles in said divisions and adapted to guide upon the walls thereof and each comprising an upper lubricant-holding portion having a bottom 22 containing an outlet-opening 24 and a lower portion comprising a supporting-plate 21 and a body of felt 23 held between said plate and bottom and projecting therefrom for absorbing the oil from said opening and transmitting it to the elevator-guide, and means acting to keep said 130 felt against said guide; substantially as set forth. 135

Signed at Manhattan borough, in the city, county and State of New York, this 26th day of June, A. D. 1906.

CHARLES HARTLEY.
KAYTON KAUTSKY.

Witnesses:

CHARLES C. GILL,
IRENE CRAWFORD.