

Oct. 23, 1923.

1,471,583

A. S. ANDERSEN  
CABLE LUBRICATING DEVICE

Filed Oct. 10, 1921

Fig. 1.

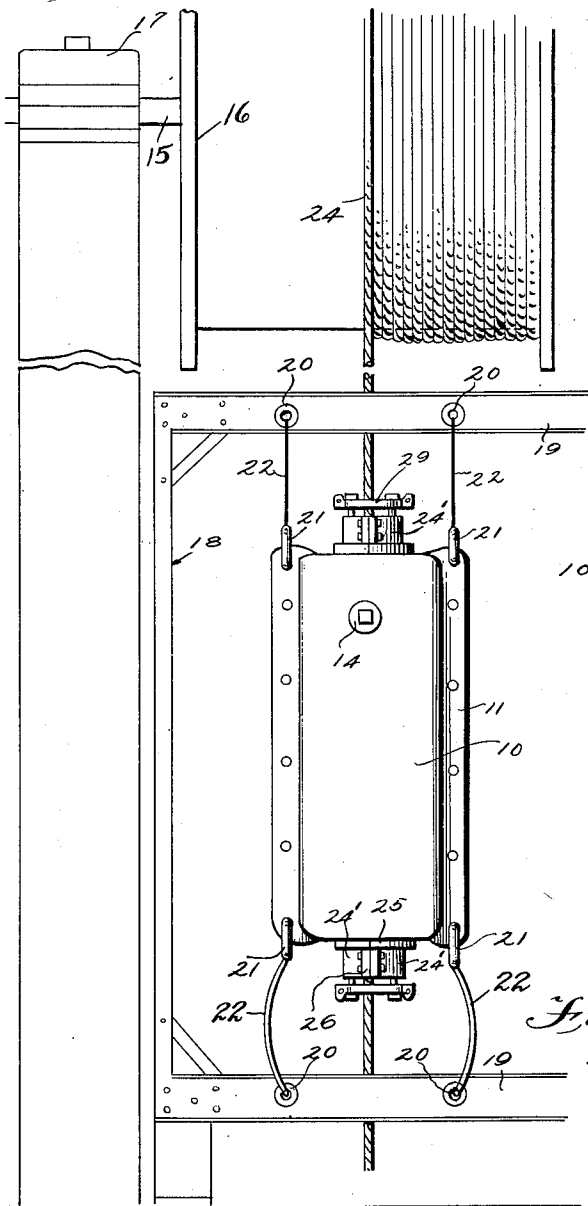


Fig. 2.

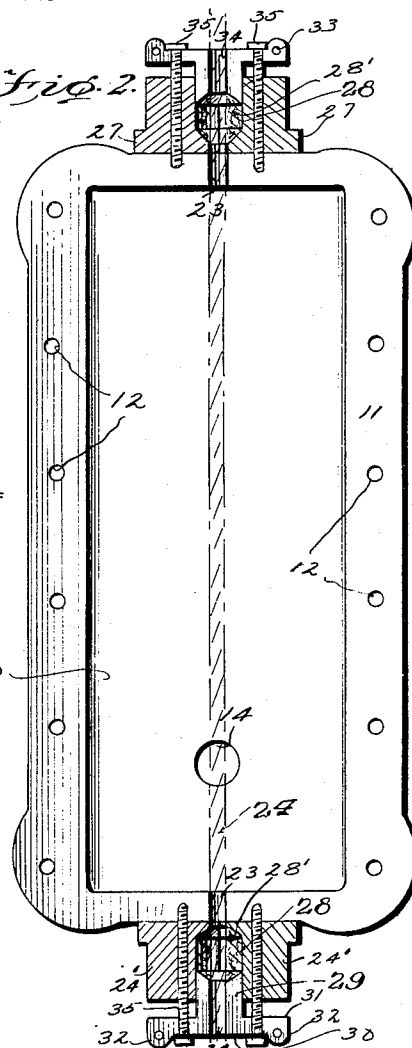
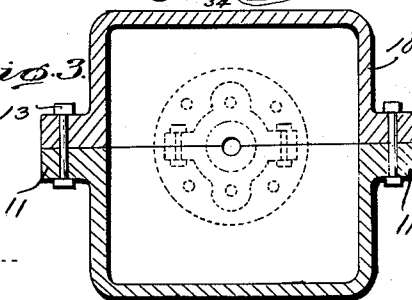


Fig. 3.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## CABLE-LUBRICATING DEVICE.

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*To all whom it may concern:*

Be it known that I, ANDERS S. ANDERSEN, a citizen of the United States, and a resident of West Palm Beach, in the county of Palm Beach and State of Florida, have invented certain new and useful Improvements in Cable-Lubricating Devices, of which the following is a specification.

This invention relates to a cable lubricating device.

The object of the invention is to provide a lubricator adapted to be associated with a cable for continuously lubricating the same during the movement thereof.

It is also an object of the invention that the lubricating device be simple in construction and positive in operation.

It is a further object of the invention that the lubricating device be economical with respect to distributing the lubricating agent upon a cable with which the same may be associated.

Other objects and objects relating to details of construction, combination and arrangement of parts will hereinafter appear in the detailed description to follow.

The invention is illustrated by way of example in the accompanying drawings, in which:—

Figure 1 is a partial side elevation illustrating the present invention when associated with a hoist of an elevator,

Figure 2 is an inside elevation of one of the box sections for retaining the lubricating agent, and showing the packing glands associated therewith in cross section, and

Figure 3 is a transverse sectional view of the box or container for retaining the lubricating agent.

Referring to the drawings more particularly, 10 indicates a pair of castings, each of which are substantially semi-circular in cross section and each having formed therewith a pair of bolting flanges 11 extending along the longitudinal edges thereof, and each bolting flange having provided therein a series of openings 12 adapted for receiving suitable bolts as at 13, Figure 3, for securing the two casting sections together. Each casting has also provided therein a suitable threaded opening for receiving a screw plug as at 14, Figure 1, the opening in one casting being preferably adjacent its lower end, while the opening in the other casting is adjacent its upper end. The purpose of these openings is to fill and also drain the

interior between the casting with a lubricating agent.

Referring to Figure 1, 15 indicates a shaft which supports a cable winding drum 16, and said shaft being journaled and supported by suitable bearings, one of which is indicated at 17. Below the drum 16 and in alignment therewith there is secured or positioned a frame generally indicated by the reference numeral 18. The upper and lower frame members 19 are each provided with a pair of eyelets 20. The frame 18 is primarily for suspending the two grease retaining castings 10 which is accomplished by extending a ring 21 through the registering openings 12 of the casting flanges 11 at each of the ends of said flanges and then connecting the rings through cables 22 with the frame member 19, each cable being extended through the associated eye 20 and secured to the frame 18 in any suitable manner.

Each casting 10 has provided in each of its ends a semi-circular recess 23, said recesses extending transversely of the end wall of each casting, and the recesses between corresponding ends of the castings being adapted to register with each other and also adapted to permit the hoisting cable 24 to pass therethrough. At each end of the casting sections 10 there is provided a packing gland adapted to restrict or regulate the amount of grease adhering to the cable which passes therethrough. Each packing gland comprises a pair of collar sections 24', each of which are semi-circular in cross section and adapted to be secured together by bolts 25 extending through the bolting flanges 26 formed with the collar sections. Also each section is formed with an enlargement about its face as at 27, said enlargements being adapted to register with each other when the collar sections are assembled. When the collar sections are assembled and placed in position there occurs between each pair of collar sections an opening 28 which is in alignment with the opening 23. The opening or bore 28 is considerably larger than the opening 23 and adapted to receive a plug 29, said plug in each instance being formed of two sections, substantially semi-circular in cross section, and each section 30 being formed with a flange 31 likewise semi-circular in shape and each flange having ears 32 by which the two sections of the plug may be secured together by the means of bolts or the like as indi-

cated at 33. The sections 30 of each plug are suitably recessed so that when said sections are assembled there occurs in each instance a bore 34 extending centrally through the plug and in register or alignment with the openings 23 of the castings 10. The cable 24 should extend through the bores 34 of the plugs 29, and forward to each plug 29 the cable 24 is surrounded by waste or the like as at 28'. A pair of bolt screws 35 are extended through the flange 31 of each plug 29 and thence through the hollow sections 24 and threaded into the associated end of the castings 10. The purpose of the bolts 35 is of course to retain the packing gland assembly, in each instance, and also to press upon the waste 28' for packing it about the cable.

In the use of the present device the interior of the castings 10 when secured together is filled with a suitable cable lubricating grease, and upon the cable 24 passing therethrough a certain amount of grease will adhere to the same. The recesses 23 in the ends of the castings through which the cable passes may be considerably larger than the cable and adapted to permit the same castings to be used in connection with different sizes of cables. The grease is wiped from the cable during its passage through the waste 28' and thus always thoroughly lubricating the cable in an efficient and economical manner.

It may be here mentioned that by arranging or suspending the castings 10 which comprise the grease container, as shown, the same will be permitted to swing laterally in either direction and thus remain in substantial alignment with the cable 24 during the unwinding or winding thereof.

While I have shown and described the preferred form of my invention, I wish it to be understood that I am aware of the fact that the construction, combination and arrangement of parts may be changed by

those skilled in the art without departing from the spirit of the invention as indicated by the appended claims.

I claim:

1. In combination with a hoisting cable operative through a winding drum, a lubricant container through which said cable may pass, means for suspending said lubricant container so that the same will be stationary with respect to the cable but free to move so that the same will be automatically retained in alignment with said cable during the winding and unwinding thereof, and a packing gland associated with each of the points where the cables enter and passes from said container adapted to cause a predetermined amount of lubricant to adhere to said cable.

2. A lubricant for cables, comprising a lubricant container consisting of a pair of casing sections with the ends formed with aligned recesses through which a cable may pass, means for holding the casing stationary, a packing gland associated with each end of the container adapted to restrict the amount of lubricant adhering to said cables, said packing gland in each instance comprising a collar having an enlarged central opening, a plug extending into the central opening of said collar and having a bore extending therethrough, agreeing substantially in diameter to the diameter of the associated cable, and means for securing said plug and collar to the container.

3. In combination, a cable and lubricant for said cable, comprising a container in which lubricant may be placed, and through which the cable may pass, to receive lubrication, and means for supporting said container adapted to permit a limited lateral movement thereof, but to hold the same against movement in either direction the cable may move.

ANDERS S. ANDERSEN.