

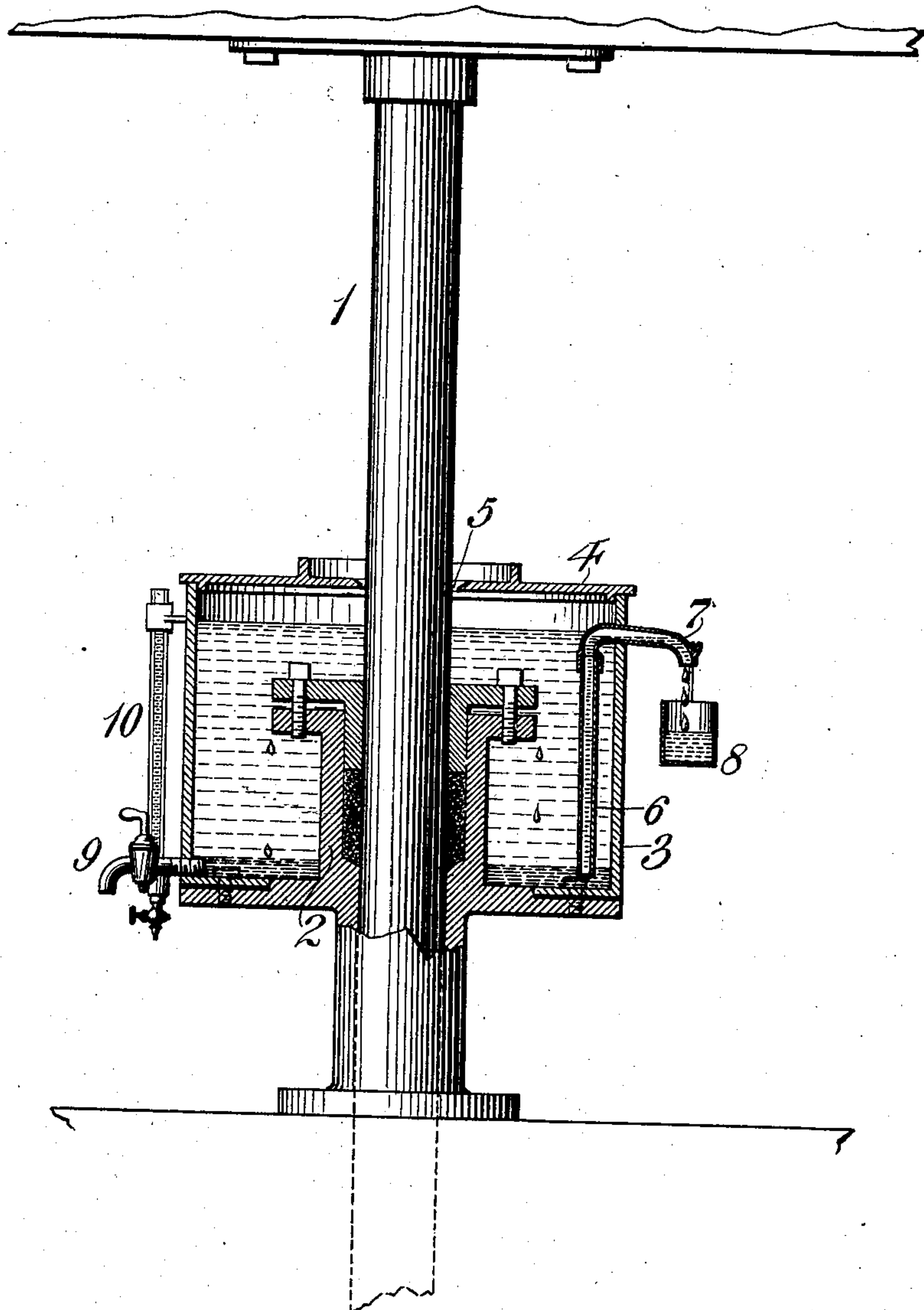
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PATENTED OCT. 27, 1903.

R. B. BROWN.
SHAFT OILER.

APPLICATION FILED JULY 1, 1903.

NO MODEL.



Witnesses.

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RICHARD B. BROWN, OF PHILADELPHIA, PENNSYLVANIA.

SHAFT-OILER.

SPECIFICATION forming part of Letters Patent No. 742,579, dated October 27, 1903.

Application filed July 1, 1903. Serial No. 163,867. (No model.)

To all whom it may concern:

Be it known that I, RICHARD B. BROWN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Rod-Oilers, of which the following is a specification.

My invention relates to a device for lubricating a shaft, and particularly the vertically-moving piston-rod of a hydraulic elevator. It provides for maintaining a constant level of the oil, so that loss by overflow is avoided.

It also consists of other novel features of construction, all as will be hereinafter fully set forth.

In the drawings, 1 designates the vertically-movable rod of a hydraulic elevator, which passes through the usual stuffing-box 2. Around the stuffing-box is a liquid-tight casing or receiver 3, which may be provided with a cover 4, having a central aperture 5, through which the shaft 1 freely passes. Extending nearly to the bottom of the receiver 3 or in any case substantially below the top of the stuffing-box 2 is a tube 6, integral with or connected at its upper end to a spout 7. The spout passes out of the side of the receiver 3 and may, if desired, be adapted to carry a vessel 8, as shown. The receiver 3 may also be provided with a drawing-off cock 9 and a gage 10, which, however, form no part of the invention.

The operation is as follows: Water is first introduced into the receiver 3, so as to stand above the foot of the tube 6. The receiver is then filled with a lubricant, as oil, above the top of the follower of the stuffing-box 2 and so as to surround the shaft 1. It is obvious that the rod will be efficiently lubricated and that any drops of water which may leak past the stuffing-box will fall through the lighter oil to the water-level at the bottom of the receiver. It will also be seen that any excess of water will be ejected through the tube 6 and spout 7 and that because of the water-seal no oil can thus escape.

By extending the receiver 3 a substantial distance below the top of the stuffing-box 2 a settling-tank is provided for any dirt or other foreign matter which may adhere to the rod and be carried down to the oil.

It will be evident that various changes may be made by those skilled in the art which will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact construction herein shown and described.

By lubricating the rod by a surrounding body of oil in the manner shown a small amount of oil is carried down into the packing in the box 2, whereby it is kept moist, pliable, and water-repellant.

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

1. A lubricating device comprising a vertically-movable rod, a stuffing-box through which said rod passes, a liquid-receiver inclosing said stuffing-box and extending a substantial distance above and below the opening thereof and means for automatically drawing off the liquid from the lower portion of said receiver whereby a constant liquid-level is maintained therein.

2. A lubricating device comprising a vertically-movable rod, a stuffing-box through which said rod passes, a liquid-receiver inclosing said stuffing-box and extending a substantial distance above and below the opening thereof, a tube extending nearly to the bottom of said receiver and having an opening below the plane of the top thereof whereby a liquid may be automatically drawn from the bottom of said receiver and a constant level of liquid maintained therein.

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Witnesses:

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