

No. 613,337.

Patented Nov. 1, 1898.

P. J. TORMAY.
OILER.

(Application filed June 9, 1898.)

(No Model.)

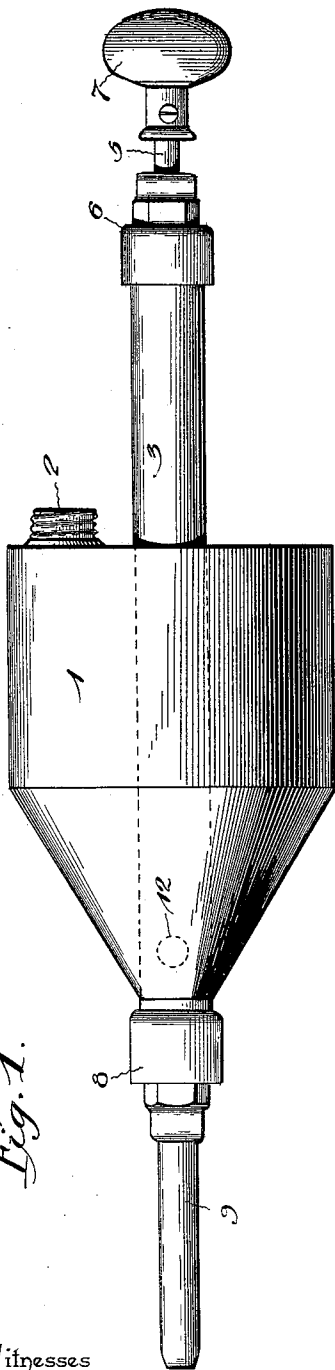


Fig. 1.

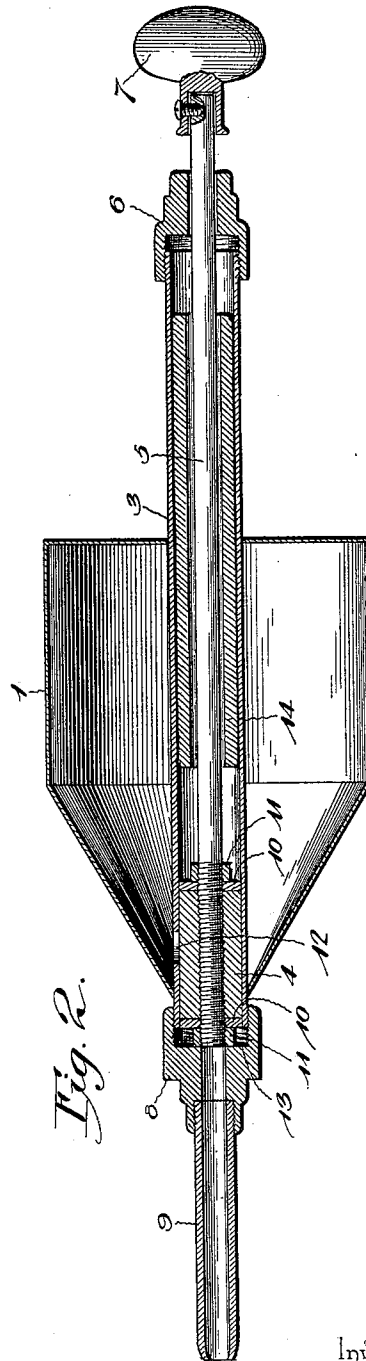


Fig. 2.

Witnesses

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PATRICK J. TORMAY, OF TROTTER, PENNSYLVANIA.

OILER.

SPECIFICATION forming part of Letters Patent No. 613,337, dated November 1, 1898.

Application filed June 9, 1898. Serial No. 683,024. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. TORMAY, a citizen of the United States, residing at Trotter, (New Haven P. O.), in the county of Fayette and State of Pennsylvania, have invented a new and useful Oiler, of which the following is a specification.

My invention relates to oilers or manually-operated oil-cans, and has for its object to provide an oiler particularly adapted for use in connection with mine or pit car-wheels, which are usually mounted upon fixed axles and are provided in their hubs with oil-holes communicating with the bearings.

The object of my invention is to provide an oiler wherein the amount of oil deposited in a bearing may be controlled to avoid the waste incident to the use of those devices now in common use for this purpose.

A further object of the invention is to provide an oiler by means of which oil may be injected upwardly into a bearing, or, in other words, which does not require the nozzle to be in a downwardly-inclined position at the moment of injecting the oil.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side view of an oiler constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

1 designates an oil-cup which is preferably tapered toward its front or outlet end and is provided at its rear end with a capped inlet-opening 2. Extending axially through the oil-cup is a feed-tube 3, forming a guide, and at the same time a cylinder, in which operates the plunger 4. The plunger-stem 5 extends rearwardly through the tube 3 and through a closing nut or head 6 at the rear end of said tube and is fitted with a knob or grip 7. Connected with the front end of the tube 3 by an intermediate coupling 8 is a nozzle 9. The plunger may, as illustrated, be constructed of a body portion of leather, through an axial opening in which extends the stem 5, and bearing rings or disks 10, ar-

ranged in contact with opposite ends of said body portion and held in place by nuts 11, arranged upon the stem, whereby the expansive body portion of the plunger may spread transversely by tightening the nuts to insure the snug fitting of the plunger in the bore of the feed-tube 3.

Communicating with the cup 1, near its reduced front end, the feed-tube is provided with an inlet-opening 12, normally closed by the plunger, which is preferably extended axially in order to cover said feed-opening when the front end of the plunger is in contact with a fixed stop 13, formed by a shoulder of the coupling 8. If the plunger is drawn rearwardly a sufficient distance to expose the feed-opening 12, oil will flow from the cup into the feed-tube, whereupon the advance of the plunger will close the feed-opening and discharge the admitted oil from the nozzle 9.

Arranged in the path of the rearward movement of the plunger is a stop formed by the front end of a filling-tube 14, fitted in the feed-tube 3, said stop being preferably arranged with its front end in such a position as to check the rearward movement of the plunger when the feed-opening 12 has been exposed. This filling-tube preferably fits snugly in the bore of the feed-tube and is frictionally held against accidental displacement, and it is obvious that the adjustment of this filling-tube within the feed-tube enables the operator to regulate the amount of throw of the plunger.

Inasmuch as the nozzle is provided with a reduced bore the oil admitted through the feed-opening 12 during the exposure thereof will not escape immediately through the nozzle, and hence only that portion of the feed-tube in front of the plunger will be filled with the oil. Thus by varying the backward throw of the plunger it is possible to vary the capacity of the portion of the feed-tube in front of the plunger to allow the entrance of more or less oil during the exposure of the opening 12.

In operation the plunger is drawn backwardly into contact with the stop to expose the feed-opening thereof, the oil-cup meanwhile being held in such a position as to cause the oil to flow therefrom into the portion of the feed-tube in advance of the plunger. The

cup may then be reversed in position to arrange the nozzle in an upwardly-inclined or vertical position, whereupon the advance of the plunger will discharge the contained oil, or by advancing the plunger sufficiently to close the feed-opening 12 and not far enough to discharge the oil from the feed-tube the oiler may be handled without waste of oil preparatory to adjusting its nozzle to the oil-hole which is to receive the lubricant. Furthermore, inasmuch as the feed-opening 12 is normally closed during the forward or advance movement of the plunger the accidental leakage of oil when the oiler is not in use is prevented. Hence after the oiler has been used and the oil discharged from the feed-chamber formed by that portion of the feed-tube which is between the front end of the plunger and the adjacent rear end of the nozzle the device may be put aside in any desired position, horizontal or otherwise, without risk of loss by the flowing of oil from the cup.

The adjustment of the stop formed by the tube 14 may be accomplished by removing either the coupling 8 or cap 6 and inserting a tool suitable to press the tube 14 in opposition to the frictional resistance offered thereby in the desired direction.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. An oiler having a cup, a feed-tube arranged within the cup and provided at its front end with a discharge-nozzle, said feed-tube having at its front end a feed-opening in communication with the interior of the cup, a plunger operating in the feed-tube (contiguous to said feed-opening and adapted, when advanced, to close the latter to exclude the contents of the cup from the feed-tube), and having its stem exposed beyond the rear end of the feed-tube, and a stop adjustably fitted in the feed-tube in the path of the rearward movement of the plunger to limit the capacity of the portion of the feed-tube in front of the plunger, substantially as specified.

2. An oiler having an oil-cup, a feed-tube arranged in the oil-cup and provided at its front end with a discharge-nozzle, said feed-

tube having a feed-opening in communication with the cup, a plunger operating in the feed-tube, and a stop adjustably fitted in the feed-tube to limit the capacity of the feed-tube in advance of the plunger, and movable by means of the plunger, substantially as specified.

3. An oiler having an oil-cup, a feed-tube arranged axially in the oil-cup and provided at its front end with a discharge-nozzle, said feed-tube having a lateral feed-opening in communication with the cup, a plunger operating in the feed-tube, and an adjustable stop, consisting of a tube, movably fitted in the bore of the feed-tube with its front end in the path of the rearward movement of the plunger, and frictionally held at the desired adjustment, substantially as specified.

4. An oiler having an oil-cup, a feed-tube extending axially through the oil-cup and provided at its front end with a reduced discharge-nozzle, said feed-tube having a lateral feed-opening in communication with the cup, a plunger operating in the feed-tube and adapted, when advanced, to close said feed-opening, and an adjustable stop consisting of a tube movably fitted in the bore of the feed-tube, with its front end in the path of the rearward movement of the plunger, substantially as specified.

5. An oiler having an oil-cup, a feed-tube extending axially through the oil-cup and provided contiguous to its front end with a lateral feed-opening communicating with the oil-cup, a nozzle, a coupling connecting the nozzle with the front end of the feed-tube beyond the oil-cup, and having a shoulder forming a stop, a plunger fitted in the feed-tube and adapted, when advanced in contact with said shoulder or stop, to close the feed-opening in the feed-tube, said plunger having a stem extending through the feed-tube and projecting beyond the rear end thereof, and a stop adjustably fitted in the feed-tube in the path of the rearward movement of the plunger, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PATRICK J. TORMAY.

Witnesses:

EUGENE O'DONOVAN,
J. LITTLETON DAWSON.