Oct. 20, 1931. H. P. GROSSMAN 1,827,844

LUBRICANT DISPENSER

Filed April 23, 1928

Fig. 1.

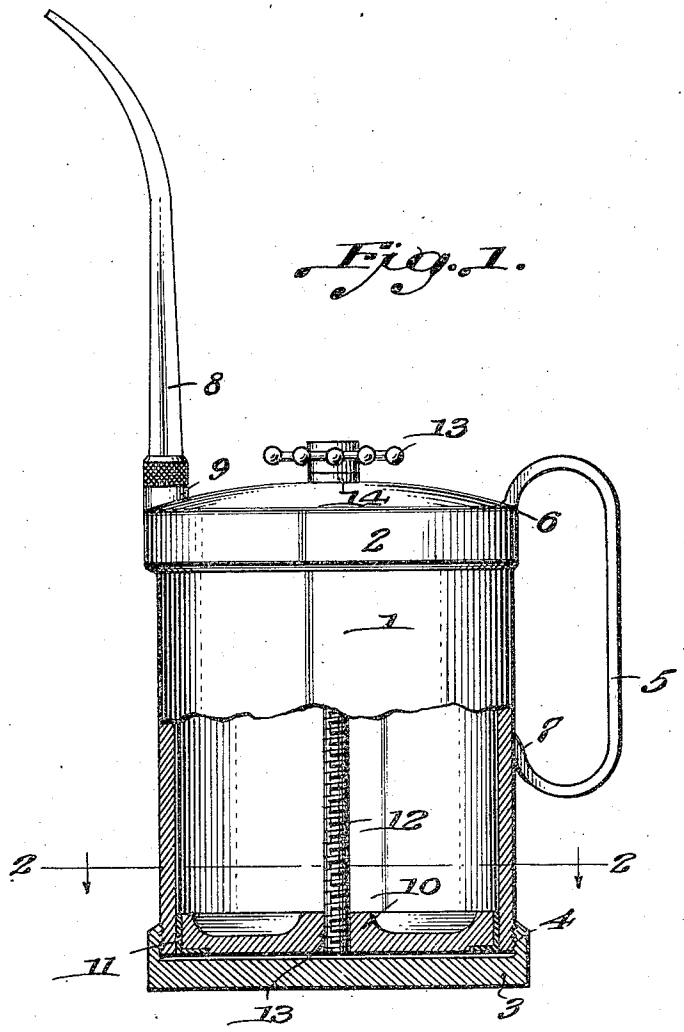
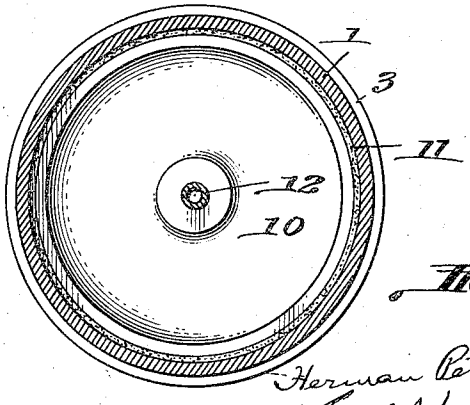


Fig. 2.



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UNITED STATES PATENT OFFICE

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LUBRICANT DISPENSER

Application filed April 23, 1928. Serial No. 272,307.

My object is to provide an improved pressure-feed can adapted for holding and for feeding in any desired quantity light or heavy oils and greases at temperatures ranging downward to relatively low points, regardless of the angle or position assumed by the can.

The invention embodies a can or receptacle having caps for its ends, a piston or plunger contained within the receptacle, a feed-screw having a screw-threaded engagement with the plunger, and an operating handle or hand-wheel carried by the feed-screw and engaged with one of said caps, combined in an improved manner, the can being provided, if desired, with a spout and a handle. In lieu of the spout, the feed-screw may be hollow and serve as a spout. The manipulating handle for the can may be arranged as shown in the drawings, or, otherwise, dispensed with, as may be preferred.

In the accompanying drawings:

Figure 1 is a side elevation, partly in section; and

Fig. 2 is a cross-section on the line 2—2, Fig. 1.

The shell or can 1 is provided with caps 2 and 3, either or both of which may be removable. As shown, the cap 3 is removably connected to the shell 1 by screw threads 4. The cap 2 may be similarly detachably connected to the shell 1. As shown, said cap 2 is provided with a handle 5 attached thereto at 6 and either attached to, or loosely bearing against, the shell 1 at 7.

Any suitable spout or nozzle 8 is detachably connected, as by a nipple 9, to the cap 2.

Inside of the shell 1 is a piston or plunger 10 whose periphery is provided with a "leather", or other suitable "cup" or packing 11 which "packs" the plunger and prevents escape of the lubricant past it.

The plunger is fed by a screw 12 which has a screw-threaded engagement with a hole 13 in said plunger. The screw 12 has a suitable hand-wheel 13 fastened to its upper end, the hub of said hand-wheel bearing on a suitable seat 14 on cap 2. On turning the handle or wheel 13, the plunger 10 will be fed upwardly or downwardly, according to the direction in which the wheel 13 is turned. Any suitable means, such as a collar carried by screw 12 and bearing against the under side of cap 2, may be used to prevent longitudinal movement of the screw 12.

In the embodiment of the invention shown, the lubricant is located above the plunger, whether such lubricant be light or heavy oil or light or heavy grease, and is forced out through spout 8 in either drop-like, or, extruded consistency, according to the nature of the lubricant, its temperature, and the manner in which the hand-wheel 13 is operated.

If the screw 12 be hollow the spout 8 and nipple 9 will be omitted and the lubricant, which will be located below the plunger, will be delivered through a spout, or otherwise, from the upper end of the hollow screw 12.

The handle 5 can be wholly carried by the shell 1 if desired.

Regardless of temperature, down to near the freezing point, any lubricant can be dispensed because the pressure available by the use of the feed-screw is capable of effecting dispensing the lubricant whether it is soft or relatively hard.

What I claim is:

1. In a lubricant dispenser, the combination with a lubricant container, of a plunger therein, a cap detachably connected to the container, said cap completely closing the end of the container, a hollow feed screw for moving said plunger within the container, said hollow feed screw being carried by the cap and serving the double purpose of feeding said plunger to exert pressure upon the lubricant and as a conduit for delivering the lubricant from the container when said feed screw is turned, means on the cap for preventing the feed screw from shifting length-

wise when turning, and a hand wheel carried by said feed screw outside of the container and bearing on said cap, whereby said feed screw may be rotated, and a removable cap at the end of the container opposite the cap first-named, said cap completely closing that end of the container.

2. In a lubricant dispenser, the combination with a lubricant container, of a removable cap therefor, a single loop-shaped handle having its upper end permanently attached to said cap so as to be bodily removable therewith and its lower end adapted to bear on the side of the container in a free manner.

In testimony whereof I affix my signature.

HERMAN PETER GROSSMAN.