

H. P. CARRINGTON.
LUBRICANT CONTAINER.
APPLICATION FILED APR. 29, 1910.

982,349.

Patented Jan. 24, 1911.

Fig. 1

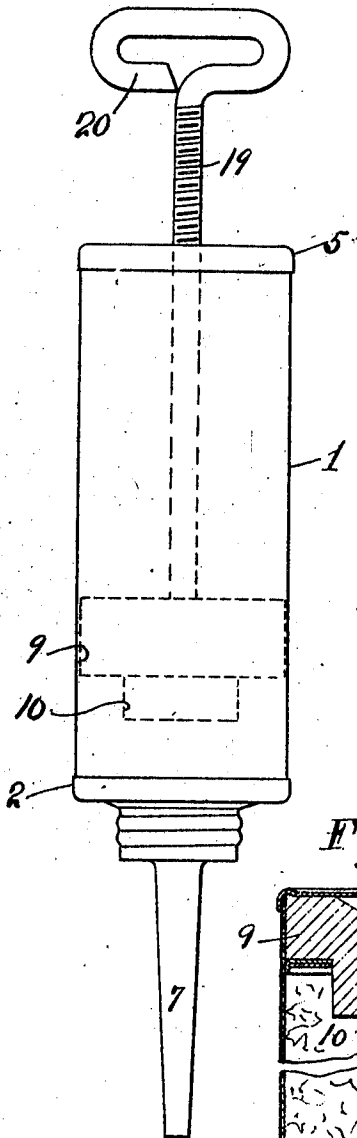


Fig. 2

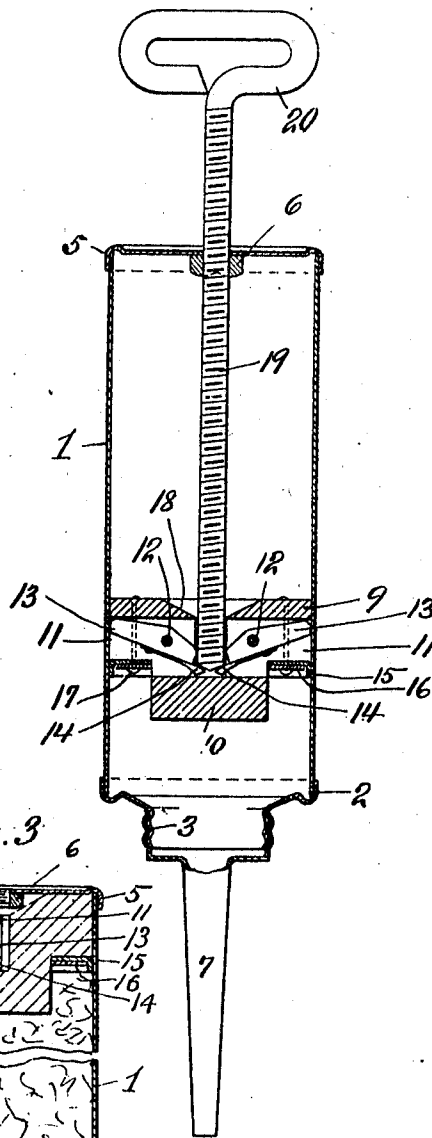
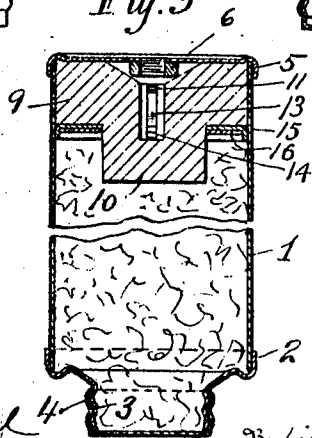


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

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LUBRICANT-CONTAINER.

982,349.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed April 29, 1910. Serial No. 558,504.

To all whom it may concern:

Be it known that I, HENRY P. CARRINGTON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lubricant-Containers, of which the following is a full, clear, and exact specification.

This invention relates to lubricant containers, and has for its object to provide a commercial package for containing lubricant or other compressible materials which can be expelled under pressure.

The object of the invention is more particularly to provide a commercial package for greases or oils used in automobiles, which can be put up in packages, and can be supplied to the required parts when necessary, the package when once emptied not ordinarily to be used again.

The use of compressible tubes for containing greases or lubricants is objectionable because of the possibility of fracturing the tubes before they are emptied, and this invention has especial reference to a tubular package which can be filled with grease or oil and sealed until required for use, the package or container preferably embodying a movable piston for expelling all of the contents and at the same time sealing the contents against damage by exposure. For operating the piston a separable rod is provided, the forward end of the package normally being provided with a closure cap which can be replaced by spouts of any desired length and shape. In practice, a number of filled packages will ordinarily be sold together, with common spout and operating means, so that when one package is emptied it can be thrown away and the spout and operating rod used for the others. Thereby, a considerable economy in the use of greases is secured while the presence of foreign matter is avoided, and also parts of an automobile, for instance, which are ordinarily difficult of access, can be readily charged without inconvenience or waste.

As herein specifically shown, the invention comprises a tubular body having at the forward end a nozzle provided with a removable cap which can be replaced by a spout, together with a stationary rear head and a movable piston arranged to be operated by a rod thrust through the rear head. In the form shown, the rod has threaded engagement with the head in order to uni-

formly expel the lubricant material, and the piston is specially constructed to receive the rod, and to expel practically all of the contents of the container.

The invention will be more fully understood in connection with the description of the accompanying drawings, in which—

Figure 1 shows an outside view of the invention ready for use; Fig. 2 a sectional view, and Fig. 3 a sectional view of a filled package.

1 represents a casing having secured thereto a forward head 2 provided with a nozzle 3, preferably screw-threaded to receive a cap 4. At the rear end is a stationary head 5, which may be soldered to the body portion 1 and provided with a central perforation, which, as herein shown is reinforced by a threaded nut 6.

7 is a detachable spout which can replace the cap 4 when it is desired to fill a grease cup or other part of a machine. Various forms of spouts may be used, either straight or curved, depending upon the character of the machine.

Mounted to slide within the body 1 is a piston 9 consisting of a generally cylindrical block, as shown in Fig. 1, having a forward projection 10 adapted to loosely fit the nozzle portion 3 to expel substantially all of the grease or oil, and transverse slots 11 in which are mounted on pivots 12 short levers 13 normally pressed upward by springs 14.

15 is a packing washer held by a ring 16 and fastenings 17. The rear side of the piston has a central hole beveled as at 18 to receive a rod 19 which may be preferably threaded to engage the nut 6. The rod 19 may be provided with a turning handle, as 20. The spring pressed levers 13 tend to frictionally engage and center the lower end of the rod 19 after it has been guided through the beveled hole 18, so that turning of the rod does not turn the piston 9, while by turning the rod backward it can withdraw from the piston 9. It will thus be seen that the rod 19 is simply effective to operate the piston in one direction toward the nozzle 3 or spout 7, and when moved in the other direction disengages from the piston 9. It will be observed that the piston 9 is made sufficiently long to move evenly, without being upset as would be the case with a narrow piston.

Fig. 3 shows my improved package in its commercial form, from which it will be seen

that the forward end is sealed by the cap 4, and the piston 9 is at the top, with the nut 6 fitting in the beveled hole 18 and the grease or other material contained in the tube protected from the air by the piston. 5 When the grease is to be used, the cap may be removed and a spout substituted or not, as may be desired, while the rod 19 is inserted through the aperture in the rear head. 10 By turning the rod to advance it, the piston will be advanced, and thereby the contents forced out from the forward end. When sufficient has been used the cap can be replaced and thereby the whole interior kept free of dirt or deterioration by exposure to the air. 15 The specific frictional, centering and holding means for the operating rod herein shown may be varied without departing from the scope of the invention as may also other details, it being seen that the piston 20 is formed to center the rod and hold it during operation. With some forms of more fluid lubricants it may not be necessary to thread the rod, though for handling heavy greases for which this invention is more 25 especially intended, a threaded rod is more advantageous.

Having thus described my invention, I

declare that what I claim as new and desire to secure by Letters Patent, is—

A package for plastic material comprising a cylindrical body having a forward and a rear head composed of sheet metal, a nozzle on the forward head having means for locking a closure cap or an interchangeable spout 35 thereto, a closure cap, said rear head having a central aperture and a threaded reinforcing nut rigidly secured thereto, a piston elongated in the direction of the axis of the body and adapted to move in said body 40 and comprising a solid cylindrical block packed to engage said body, said block having a plug of smaller diameter adapted to move and fit within said nozzle when in the extreme forward position and a central 45 socket in its rear side, and a threaded operating rod directly engaging the threads of said nut and extending into and loosely engaging said socket in the piston, said rod being removable through the rear head. 50

In testimony whereof I affix my signature, in presence of two witnesses.

HENRY P. CARRINGTON.

Witnesses:

JOHN E. BROAD,
C. F. HILKE.