July 12, 1938. H. L. NEWTON 2,123,741

DISPENSING CONTAINER

Filed March 12, 1937

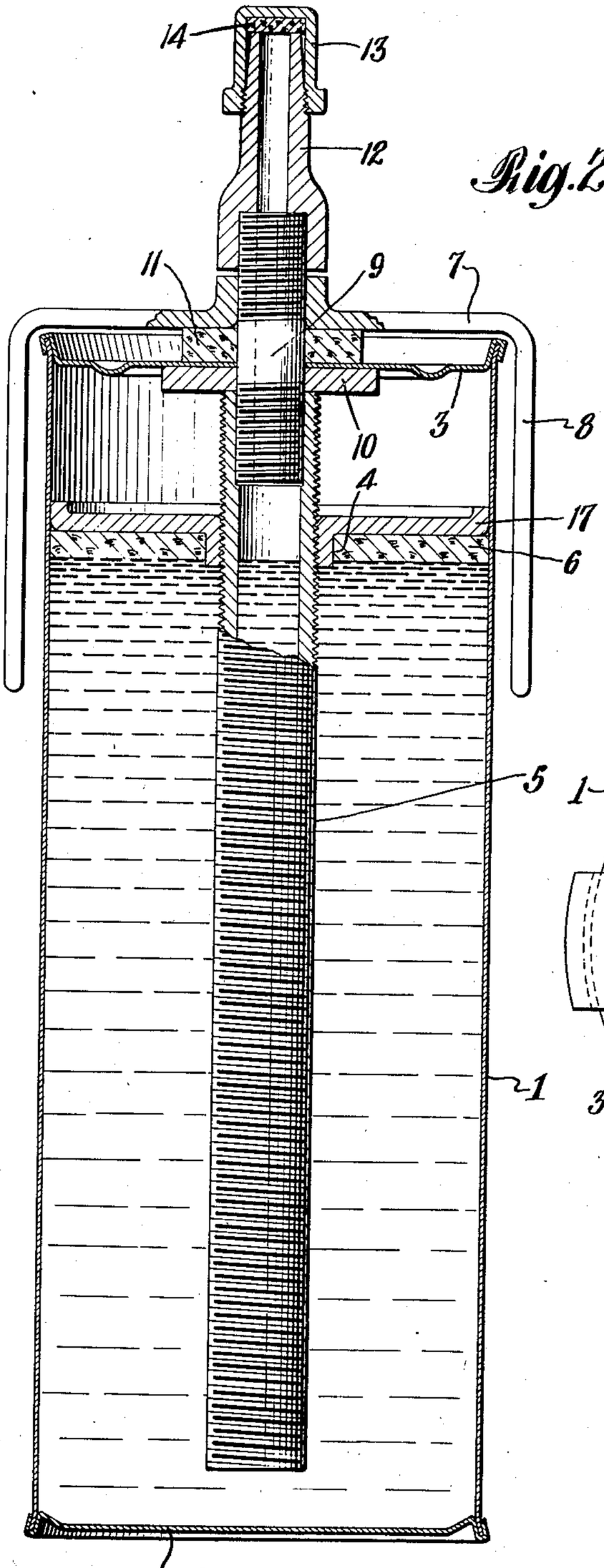

Fig. 2.

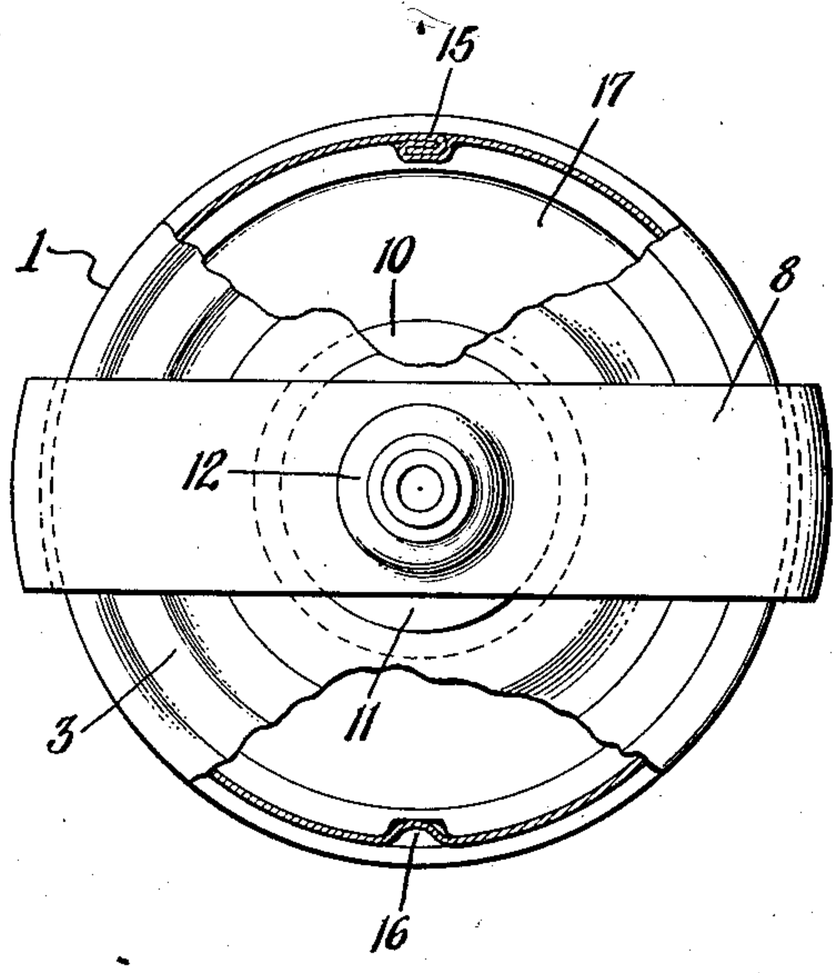

Fig. 1.

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DISPENSING CONTAINER

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1 Claim. (Cl. 221—79)

This invention relates to a container for dispensing fluid or semi-fluid material, such as viscous lubricating oil or grease, and for discharging the material in measured small quantities as required. The principal object of the invention is to produce a dispensing container which may be used conveniently in the manner of a grease gun, and which is strong enough to bear rough handling but sufficiently simple and inexpensive to be discarded when the contents are exhausted.

In the accompanying drawing, Fig. 1 is an end view of a container embodying the present invention, with parts broken away, and Fig. 2 is a longitudinal section of the same.

The illustrated embodiment of the invention is a container in the form of a grease gun, and it has a cylindrical body 1 and end plates 2 and 3, which are preferably made of tin-plate and seamed together in the usual manner. The lower end plate is imperforate, while the upper end plate has a central opening.

The piston comprises a metal disc 17 which has an integral central sleeve 4 with internal screw-threads. The piston is actuated by a hollow stem 5, which is screw-threaded from end to end to fit the threads in the sleeve 4. This stem may conveniently be made of a piece of ordinary iron pipe. To prevent leakage of fluid between the piston disc and the walls of the body, the piston is provided also with a washer 6 of yielding material, such as soft leather or cork composition, which fits closely against the body.

The stem 5 is provided with a handle 7 formed from strip metal in U-form, which spans the top of the body, with its parallel arms 8 lying close to the sides, so as to afford a firm handhold while not substantially increasing the overall diameter of the container. The handle is connected with the stem by means of a pipe nipple 9 which is screwed tightly into these parts and has a bearing in the central opening of the top plate 3. A thrust collar 10 is interposed between the stem and the end plate 3, and a soft washer 11 of cork or the like is interposed between the end plate and the handle to take up lost motion and prevent leakage of grease.

To facilitate the introduction of the grease into the filling openings or the grease cups of the machine which is to be lubricated, a nozzle 12 is screwed to the upper end of the nipple 9, and this nozzle is preferably made of lead or other soft material to avoid injury to the screw threads of the filling openings with which it is engaged. A cap 13, with a sealing disc 14, is screwed upon the end of the nozzle when the gun is not in use, to exclude dirt and prevent the accidental escape of grease.

In the ordinary mode of use, the handle is held fixed by one hand and the body is turned by the other hand, causing rotation of the piston upon the stem, in a direction such that the screw threads move the piston toward the end plate 2. The grease is thus put under pressure which causes it to flow through the stem and the nipple and discharge from the nozzle. To insure rotation of the piston with the body, the piston is provided with two diametrically placed notches in its edge, as shown in Fig. 1, one of which engages the usual longitudinal seam 15 of the body, while the other engages a longitudinal bead 16 formed in the body.

The margin of the piston disc 17 is rounded upwardly, as shown in Fig. 2, so that if any dents have been formed accidentally in the body wall the piston will ride over them and smooth them out, without serious resistance.

The invention has been described, for convenience, as embodied in a container for grease, but it is obvious that it may be used for dispensing various fluid or plastic materials other than grease, such as putty, polishing wax and the like.

In the specification and the claim the container is described as having "upper" and "lower" ends, but it will be understood that these are terms of relation only, and that when the contents are being discharged the container will ordinarily be held in a position inverted with relation to that in which it is illustrated and described. When it is not in use, however, it may stand conveniently on its imperforate end, as shown, and in this position no leakage of the contents can occur.

I claim as my invention:

A container, for grease or the like, comprising a cylindrical body with permanently fixed ends, the upper end being centrally perforated, a piston movable in the body and having a central threaded opening, an axially arranged theaded stem engaging the threaded opening in the piston, means, including a discharge nozzle, rotatably mounted in the central opening of said upper end and connected with the threaded stem to rotate the same, and a U-shaped member, for manually controlling said rotatably mounted means, having a transverse member centrally attached to said means and arms depending from the transverse member close to the sides of the body.

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