

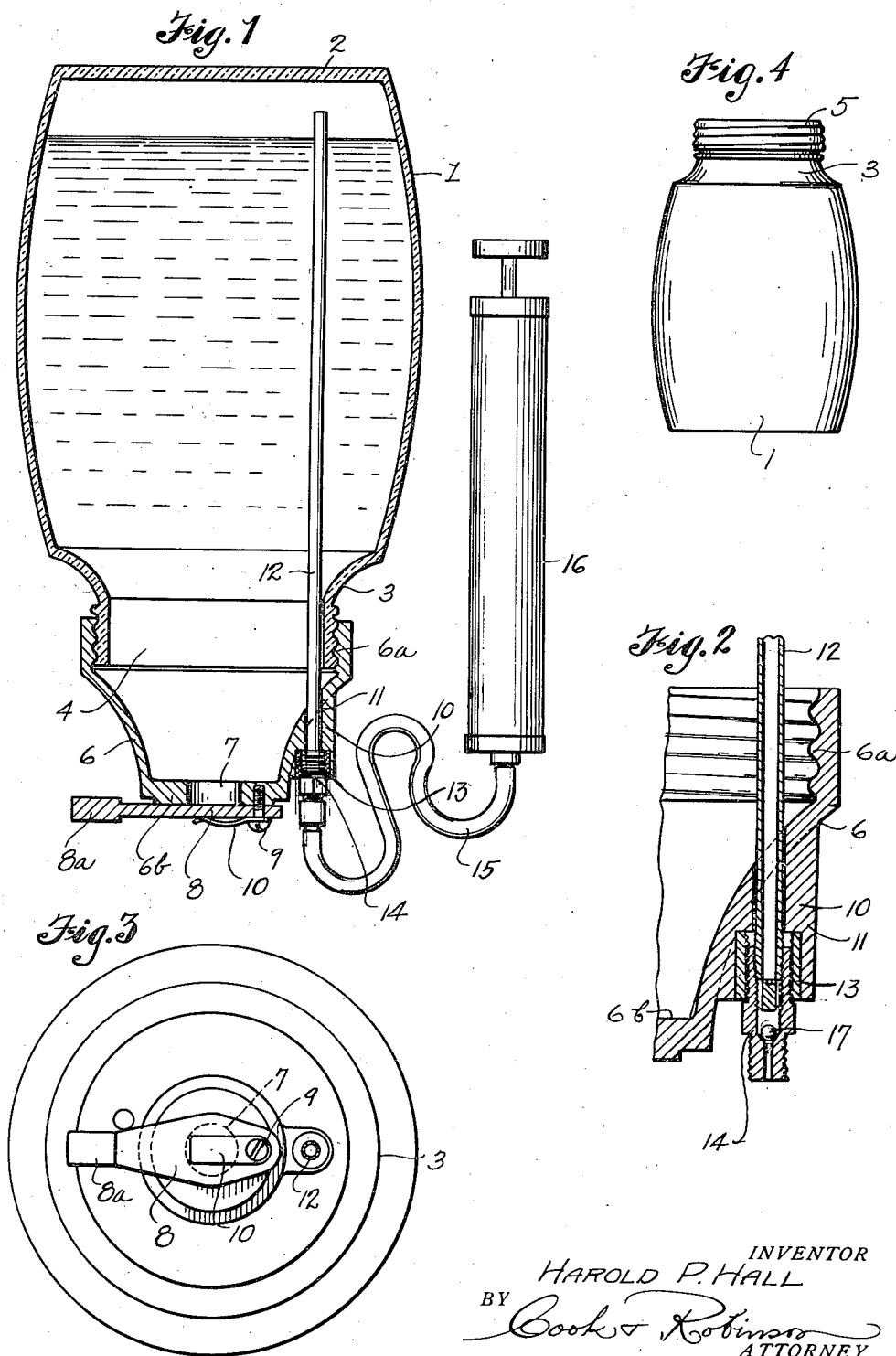
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DISPENSING CONTAINER FOR MAYONNAISE AND THE LIKE

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DISPENSING CONTAINER FOR MAYONNAISE
AND THE LIKE

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1 Claim. (Cl. 221—77)

This invention relates to improvements in dispensing devices as employed for semi-fluid materials, such as peanut butter, mayonnaise, and similar substances. More particularly the present invention is in the nature of an improvement over the device of my co-pending application, filed on Feb. 27, 1934, under Serial No. 713,098.

The device of the copending application, above mentioned, comprises a closed container terminating at its lower end in a neck portion providing an outlet to which a cap, formed with a valved outlet, is applied and having a shaft extending lengthwise within the container and through an opening in its upper end wall, with a crank arm at its upper end and a propeller disk at its lower end located within the cap, whereby the contents of the container may be forcibly ejected when the discharge opening is uncovered and the shaft is rotated.

While the prior device is satisfactory insofar as its general purpose and use are concerned, it is not satisfactorily economical to manufacture due to the requirement of providing the containers or glass jars with top end openings for the shaft and with suitable bushings for mounting the shaft. Furthermore, it is quite an item of expense to equip the jars with the propeller disks, shafts, and crank arm, and difficulty is sometimes experienced in packing for shipment or transportation.

In view of the various items of expense in manufacturing and difficulties of handling the device as heretofore manufactured, it has been the principal object of the present invention to provide a dispensing device of a similar kind but eliminating therefrom the undesirable features that are incident to use of the shaft and propeller, and substituting in their stead devices for applying air under pressure into the container as the means for effecting a forcible ejection of material, thus making possible the use of glass jar containers of standard construction, and materially reducing the cost of construction and the difficulties of shipping heretofore experienced.

More specifically stated, the present invention resides in the provision of a dispensing device comprising a closed container terminating in a downwardly opening neck portion to which a cap with a valved discharge opening is applied and wherein an air pump is connected to deliver air through a flexible connection to a tube extending upwardly through the cap and into the container to a point near the upper end, so that a pressure may be built up to serve as the eject-

ing medium for dispensing the container's contents when the discharge opening is uncovered.

Other objects of the invention reside in the details of construction and combination of parts, and in their mode of operation, as will hereinafter be described.

In accomplishing these and other objects of the invention, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawing, wherein—

Fig. 1 is a central, vertical section of a dispensing device constructed in accordance with the present invention.

Fig. 2 is an enlarged, sectional detail of the air tube mounting.

Fig. 3 is a lower end view of the device.

Fig. 4 is a view of the container as filled and closed for shipment or storage.

Referring more in detail to the drawing—

1 designates the container for the material to be dispensed. It is most desirable that the container be of glass but it might be of any other suitable material, and preferably would be of transparent material so that it will satisfactorily disclose its contents to view. In the present instance, the container is a standard form of glass jar, supported, when in use in an inverted position, as shown in Fig. 1. It has a flat upper end wall 2 and at its lower end has a restricted neck portion 3 providing a discharge opening 4. The neck portion is exteriorly threaded and during transportation and storage may be closed by any of the ordinary types of screw caps, as at 5 in Fig. 4, but when in use has a novel form of dispensing cap 6 applied thereto, as shown in Figs. 2 and 3.

This cap 6 is cup shaped and is interiorly threaded about its upper end as at 6a and tapers slightly in a downward direction to a lower end wall 6b formed centrally with a discharge opening 7 over which a closure plate 8 is located. The plate 8 is held in place against the under side of wall 6b by a pivot screw 9 through one end thereof and threaded into the wall. It may be swung about the pivot by means of an extended handle portion 8a, thus to close or to uncover the opening 7. A leaf spring 10 is also mounted by the screw 9 to press upwardly against the plate to hold it tightly against the wall 6a and thus prevent leakage from the container.

Integral with a side wall of the cap is a boss 10 and a vertical bore 11 is formed upwardly through the boss and cap wall for passage of an air tube 12 which is extended upwardly within

the container to near its upper end wall as seen in Fig. 1.

A metallic sleeve 13 is embedded in the cap coaxial of the bore 11 and a valve housing 14 is threaded into the sleeve, while the lower end of tube 12 is threaded into the housing as seen in Fig. 2. A flexible tube 15 is connected with the lower end of the air tube 12 and this leads to a hand pump 16 whereby air may be injected into the container. A backcheck valve 17 is contained in the housing 14 to retain any air pressure built up in the container.

Assuming the device to be so constructed, and assuming the container to be filled with a material to be dispensed, such as mayonnaise, the device is placed in use by applying the dispensing cap 6 and then inverting the container so that it will assume the position of Fig. 1. Then when it is desired to dispense contents from the container, the plate 8 is adjusted to uncover the opening 7 and air is delivered under pressure into the container by actuation of the pump. This air pressure against the contents of the container will effect a positive flow thereof through the discharge opening, but the flow may be cut off at any time by moving the plate 8 to closed position.

A very desirable feature resides in the fact that the cap 6 mounts the tube 12 since removal of the cap also removes the tube from the container.

When a container is emptied, the dispensing cap 6 may be removed and the container cleaned and refilled. The cap 6 may be interchangeably applied to containers and it is not required that individual dispensing caps be provided for each.

The present device is economical, sanitary, and easily handled, easily cleaned and is practical and entirely satisfactory in use. Furthermore, the container may be made in various sizes and designs without departing from the spirit of the invention.

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

A dispensing means comprising a closed container having a lower end opening for filling, a closure cup applied over said opening; said cup having side walls tapered toward a discharge port centrally in its bottom wall, a closure means for said port, a boss on the cup wall, having a vertical bore therethrough from the exterior to the interior of the cap for passage of an air tube, a back check valve housing threaded into said bore, a back check valve in said housing, an air tube mounted by the inner end of said valve housing and extended upwardly into the container, and means at the outer end of said valve housing for attachment of a conduit from a source of air pressure.

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