## PATENT SPECIFICATION

Application Date: May 5, 1931. No. 13,296 / 31.

Complete Left: Feb. 3, 1932.

Complete Accepted: June 2, 1932.

PROVISIONAL SPECIFICATION.

## Improvements in or relating to Pouring Devices for Attachment to Bottles and other Containers.

We, Mable Todd & Co. Limited, of Swan House, 133—135, Oxford Street, London, W.1, a Company incorporated under the laws of Great Britain and Northern Ireland, and Robert Jasper Knowles, of 16, Princesway, Wallasey, Cheshire, a British Subject, do hereby declare the nature of this invention to be as follows:—

This invention relates to pouring devices for attachment to bottles and

other containers.

A pouring device made according to the present invention comprises a member 15 adapted to be fitted on to a bottle or other container and provided with an outlet for the material stored in the container and with an inlet for air.

The pouring device may be provided
20 with a screw thread adapted to engage
with a screw thread on the neck surrounding the outlet opening of the container.
The device may further be provided with
a screw thread adapted to be engaged by
25 a correspondingly threaded cap or closure
member to close the container when not
in use.

In one form of pouring device made according to the present invention, given 30 by way of example as applied to a bottle, the device comprises a cylindrical member closed at one end. Two holes are bored at opposite ends of a diameter on the closed end of the cylinder, one hole 35 being of larger diameter than the other. The hole of larger diameter constitutes an outlet for the material and the hole of smaller diameter constitutes the air inlet. At its lower open end the member 40 is formed on its inner surface with an internal screw thread for about half the length of the cylindrical member. The act of cutting this screw thread forms an internal shoulder about half way along 45 the pouring device which acts as a stop when the pouring device is placed in position on a bottle or the like, the said stop

abutting against the top of the bottle or like receptacle.

The outer surface of the cylindrical 50 member is formed with an external screw thread at the top which also extends downwards for about half the depth of the device. An external shoulder is likewise formed where the screw thread terminates and this external shoulder acts as a stop for a metal or other cap.

The neck of the bottle to which the pouring device is to be attached is provided with an external thread on to which the internal thread in the said cylindrical member engages. When screwed into position on the bottle the material contained in the bottle may be poured out through the said outlet. When not in use the pouring device and bottle are closed by a metal cap of known construction provided with an internal screw thread adapted to engage the external thread on the pouring device.

In the form described the external thread on the pouring device is a replica of that on the neck of the bottle so that the metal cap may engage the neck of the bottle if the pouring device is discarded.

The cylindrical member constituting the pouring device may be moulded from any suitable substance, as for example 80 ebonite, vulcanite and the like.

A packing ring is preferably disposed between the neck of the bottle and the pouring device to ensure a good seal.

A pouring device made according to the present invention may be applied to containers of all kinds for materials which are capable of being poured. The example above described is applied to a bottle for containing ink.

Dated this 5th day of May, 1931.

MEWBURN, ELLIS & Co.,
70, 72, Chancery Lane, London, W.C.2,
Chartered Patent Agents.

## COMPLETE SPECIFICATION.

## Improvements in or relating to Pouring Devices for Attachment to Bottles and other Containers.

We, Mabie Todd & Co. Limited, of London, W.1, a Company incorporated Swan House, 133—135, Oxford Street, under the laws of Great Britain and [Price 1/-]

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Northern Ireland, and ROBERT JASPER Knowles, of 16, Princesway, Wallasey, Cheshire, a British Subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

This invention relates to pouring 10 devices for attachment to bottles and other containers comprising a member formed integral with two passages, one forming an outlet for the material stored in the bottle and the other forming an 15 inlet for air, and has for object to provide

improvements therein.

A pouring device according to the present invention is formed as a cupshaped member constituting a cover for 20 the bottle or other container and having a projecting flange adapted to engage the

outside of the neck of the bottle.

The pouring device may be provided with a screw thread adapted to engage 25 with a screw thread on the neck surrounding the outlet opening of the container. The device may further be provided with a screw thread adapted to be engaged by a correspondingly threaded cap or closure member to close the container when not in 30 use.

One form of device made according to the present invention is illustrated by way of example in the accompanying

35 drawings, wherein: Fig. I illustrates the parts ready to be

assembled;

Fig. 2 is a plan view of the pouring device;
Fig. 3 is a vertical section of the pour-

ing device; and

Fig. 4 shows the device in position on a

hottle.

The pouring device comprises a cup-45 shaped member a. Two holes b,  $b^1$  are formed at opposite ends of a diameter on the closed top of the member a, the hole bbeing of larger diameter than the hole  $b^1$ . The hole b constitutes an outlet for the material and the hole  $b^1$  constitutes the air inlet. At its lower open end the member is formed on its inner surface with an internal screw thread c extending about half its length. The screw thread forms 55 an internal shoulder d about half way along the pouring device which acts as a stop when the pouring device is placed in position on a bottle or the like, the said stop abutting against the rim e of the 60 bottle f.

The outer surface of the member a is formed with an external screw thread of at the top which also extends downwards for about half the depth of the device. 65 An external shoulder h is likewise formed

where the screw thread terminates and this external shoulder acts as a stop for a

metal or other cap l.

The neck i of the bottle to which the pouring device is to be attached is provided with an external thread k on to which the internal thread c in the member a engages. When screwed into position on the bottle the material contained in the bottle may be poured out through the said outlet. When not in use the pouring device and bottle are closed by the metal cap l of known construction provided with an internal screw thread m adapted to engage the external thread g on the 80 pouring device.

In the form described the external thread on the pouring device is a replica of that on the neck of the bottle so that the metal cap may engage the neck of the bottle if the pouring device is discarded.

The member a constituting the pouring device is moulded from any suitable substance, as for example, ebonite, vulcanite, an artificial resin composition, and the

A packing ring may be disposed between the neck of the bottle and the pouring device to ensure a good seal.

A pouring device made according to the present invention may be applied to containers of all kinds for materials which are capable of being poured. The example above described is applied to a bottle for containing ink.

We are aware that it has been proposed to make a pouring device comprising a moulded elongated member formed with two through passages and adapted to be cemented to a metal cap to fit over the 105

neck of the bottle.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we 110 claim is:

1. A pouring device for attachment to bottles or the like, comprising a member formed integral with two passages, one forming an outlet for material stored in 115 the bottle and the other forming an inlet for air, wherein the device is formed as a cup-shaped member constituting a cover for the bottle or other container and having a projecting flange adapted to 120 engage the outside of the neck of the bottle.

2. A device as claimed in claim 1 wherein the outlet and the inlet apertures are provided in the closed top of the said 125 member.

3. A device as claimed in claim 1 or 2 wherein the said member is provided with a screw thread to engage with a screw thread on the neck of the bottle or like 130

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container, substantially as described.

4. A device as claimed in the preceding claims in combination with a detachable

cap.

5. A device as claimed in claim 4 wherein the cap is detachably connected with the said pouring device by means of a screw threaded engagement, substantially as described.

6. A pouring device for bottles and like receptacles comprising a moulded cupshaped member provided with inlet and outlet apertures in the closed top, an internal thread at or near the base adapted to approve with a corresponding at the closed.

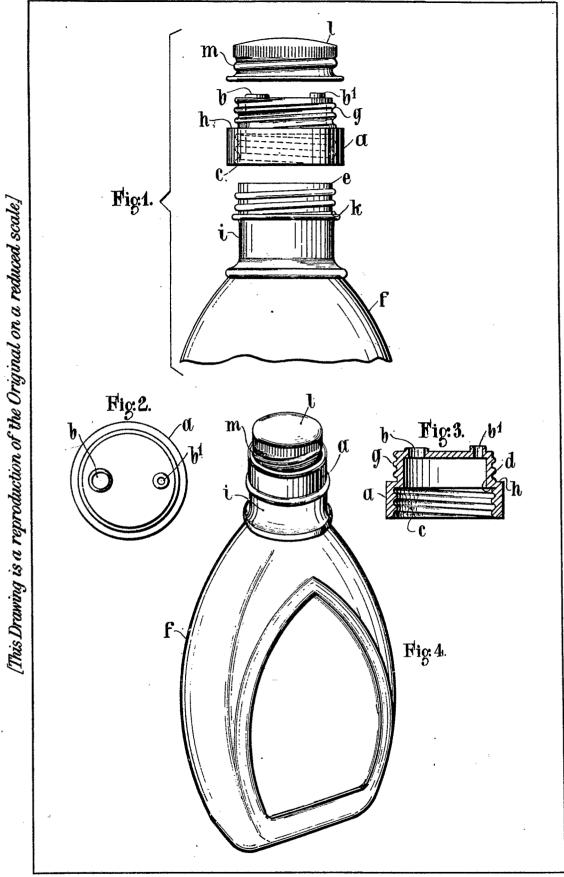
15 to engage with a corresponding thread on the neck of the bottle or other receptacle, and an external thread at or near the top adapted to be engaged by a cap which is provided with a corresponding thread.

7. A pouring device as claimed in the preceding claims moulded from ebonite, vulcanite, artificial resin composition, or other suitable moulding composition.

8. A pouring device constructed, arranged and adapted for use substantially as described with reference to and as illustrated in the accompanying drawings.

Dated this 3rd day of February, 1932.
MEWBURN, ELLIS & Co.
70—72, Chancery Lane, London, W.C.2,
Chartered Patent Agents.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1932.



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