March 26, 1957 B. T. MOORE ET AL 2,786,607

DISPENSING APPARATUS

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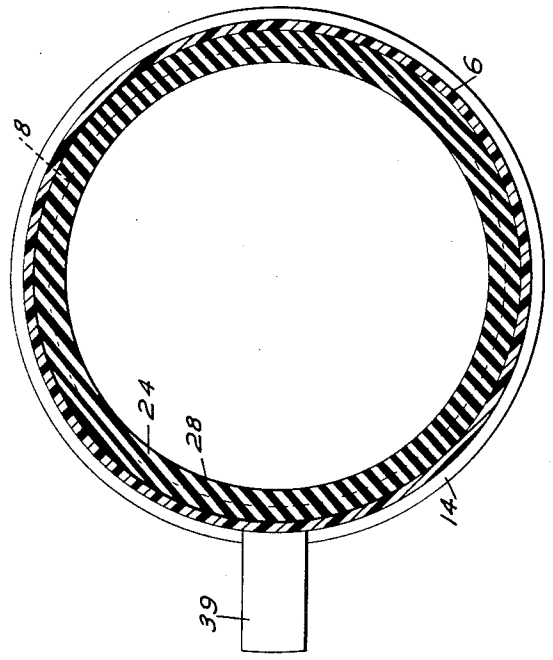

Fig. 2

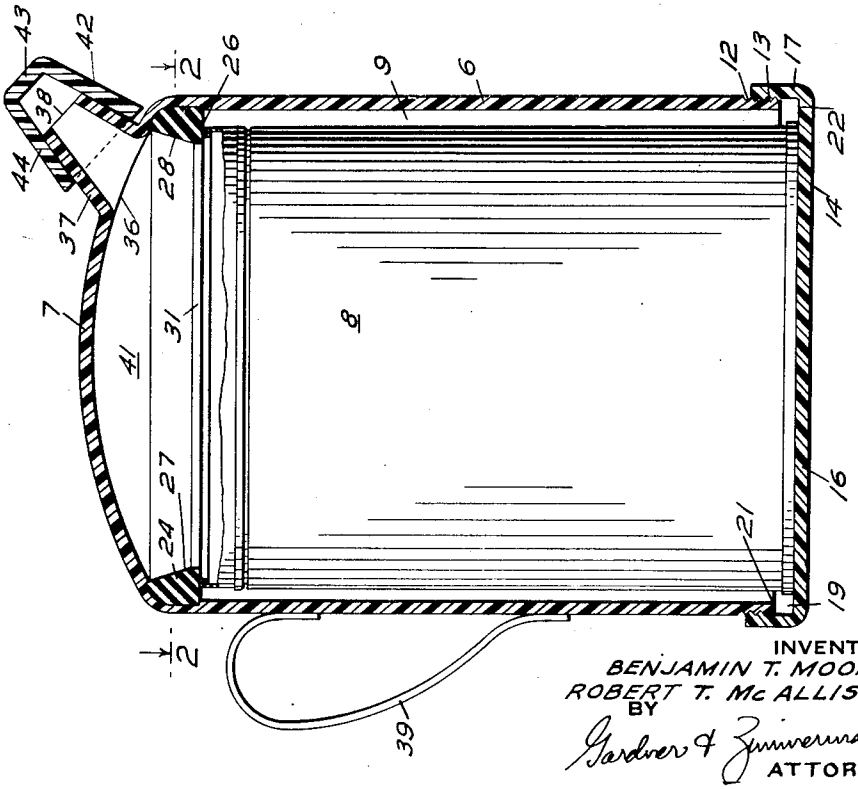

Fig. 1

INVENTORS
BENJAMIN T. MOORE &
ROBERT T. Mc ALLISTER
BY
Gardner & Zimmerman
ATTORNEYS

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DISPENSING APPARATUS

Benjamin T. Moore and Robert T. McAllister, Oakland, Calif.

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3 Claims. (Cl. 222—183)

This invention relates to devices for storing and dispensing flowable material, and is more particularly directed towards apparatus of this character adapted for receiving and dispensing the contents of a can of coffee or the like.

Heretofore, numerous dispensers have been provided which were adapted to receive a can or container in which a liquid or flowable granular material was placed whereby the material could be poured from the dispenser into any other suitable container or cooking vessel. While such dispensers have been widely used for a number of different purposes, there are certain inherent disadvantages and shortcomings in the prior art dispensers which renders them incapable of properly performing their functions under all conditions of operation.

Accordingly, it is an object of the present invention to provide a dispenser which is adapted to receive a can of coffee or the like, from which the coffee may be readily poured, and which will seal the coffee grounds from excessive oxidation when the dispenser is in its inoperative or stored condition.

Another object of our invention is to provide a dispenser of the character described in which novel measuring means are incorporated with the pouring spout, and in which such measuring means constitutes the seal for the dispenser.

A further object of the invention is to provide a dispenser of the aforesaid character in which the can containing the coffee or other flowable material may be readily placed into and removed from the dispenser with a minimum of effort, and yet in which the can, after being placed in operative position, is firmly sealed wtih the dispenser.

Yet another object of the invention is to provide a dispenser of the aforementioned character in which means are provided for insuring that the material initially stored in the can which is placed in the dispenser will return to the can after inverting of the dispenser as in pouring out the can contents.

A further object of our invention is to provide a dispenser of the character described in which the sealing of the can to the dispenser is insured notwithstanding any irregularities on the upper lip or bead of the can.

A still further object of our invention is to provide a dispenser which may be selectively used for receiving a can as hereinabove mentioned or which may be alternately used for receiving and holding the contents of the can.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawing:

Figure 1 is a side elevational view, mostly in section,

of a dispenser constructed in accordance with the teachings of the present invention.

Figure 2 is a cross-sectional view taken substantially in the plane indicated by the line 2—2 of Figure 1.

With reference to the drawing, it will be noted that the dispenser of our invention preferably includes a cylindrical body portion **6** and a concave head portion **7** which may be formed integrally with the body **6**. The diameter of the body is such that when a can **8** is placed therein, an annular space **9** will be provided between the outer walls of the can and the inner peripheral surface of the body. This of course, will permit ready insertion and removal of the can from the dispenser. For reasons of economy, the body **6** and head **7** may be molded from one of the thermosetting plastics or otherwise integrally formed, but it will be apparent to those skilled in the art that the head **7** could be removably attached to the body without departing from the spirit or scope of the invention.

The lower end of the body **6** is provided with external threads **12** which are adapted to receive the threads **13** of a lower cap member **14**. The cap **14** is provided with a base **16** and an annular collar **17** in which the threads are formed. As will be seen, the threads **12** and **13** may be engaged so as to secure the cap to the body while still providing a space **19** between the lower end **21** of the body and the opposed confronting surface **22** of the cap base. The reason for this spacing will be presently described.

Adjacent the upper end of the body **6** at substantially the juncture thereof with the head **7**, we provide a sealing means in the form of a gasket **24**. Preferably, the gasket is provided with a flat lower surface **26**, an upstanding vertical wall portion **27** and an upwardly and outwardly directed tapered portion **28**. As will be understood, the length of the flat portion **26**, that is, the annular width of the gasket is such as to insure engagement with the upper bead **31** of a can when the can is placed in the dispenser. Likewise, by constructing the gasket out of a resilient material such as rubber or the like, the can may still be forced upwardly into engagement with the surface **26** for substantially the entire length of the bead **31** notwithstanding any small irregularities or deformation appearing therein. Thus, the can may be inserted in the container or dispenser until the upper end **31** engages the gasket **24**. By screwing the lower cap **14**, the can will be forced upwardly into tight sealing engagement with the gasket while the space **19** permits the lower end portion of the can **8** to extend downwardly below the lower end **21** of the cylindrical body **6**. Thus, notwithstanding the seal between the cap, can and gasket, when the lower cap is threadedly removed, the lower end of the can may be grasped by the fingers of the user and readily withdrawn from the dispenser.

Means are provided for effecting removal of the can contents upon inversion of the dispenser. As here shown, adjacent one side of the head **7** we provide an opening in the head which is designated by the numeral **36**. Extending outwardly and upwardly from such opening there is a tapered spout **37** having an outlet **38**. Therefore, it will be apparent that when the dispenser is inverted or tilted such as by grasping the manually engageable handle **39**, the contents of the can may flow into the space **41** between the upper end of the can and the concave inner peripheral surface of the head, and through the openings **36** and **38** into any desired place.

When the dispenser and its contents is merely being stored, it is necessary that the contents of can **8** be sealed against undue exposure to the air, moisture and the like. We therefore provide a plug or seal for the opening **38** and as a novel feature of our invention, it will be

noted that this seal means is in the form of a cup 42 having a bottom 43 and side walls 44. The side walls 44 are tapered so that the cup may be readily placed on the tapered spout 37 so as to seal the opening 38. Preferably, the taper on the spout 37 is greater than the taper on the cup 42 so that by wedging the latter on the spout a firm seal is obtained therebetween. When the cup is removed, the contents of the dispenser may be poured directly into the cup and a predetermined quantity of the coffee or other material in the can 8 may be readily obtained. In this manner, we achieve a two-fold function in providing a ready source of measuring as well as providing a proper air seal for the interior of the dispenser.

When the dispenser is inverted, it will be understood that the contents thereof will flow into the space 41 and upon placing the dispenser in the normal position indicated in the drawing, the gasket 24, if constructed of a more conventional annular form would trap some of the contents on the upper surface of such gasket. To avoid such a possibility, the tapered portion 28 of the gasket will properly direct any contents which would normally remain thereon back into the can upon placing of the dispenser in its inoperative or vertical position. This will thoroughly prevent an accumulation of stale products on the gasket when subsequent cans are introduced into the dispenser.

From the foregoing description, it will be appreciated that while the dispenser of the present invention is simple in construction and operation, it will fulfil a long needed want in permitting the proper sealing, storing and dispensing of a flowable granular material with a minimum of difficulty and spoilage of such material. Furthermore, it will be readily appreciated that instead of placing a can of material in the dispenser, the contents of the can may be poured directly into the dispenser when the latter is in an inverted position by merely removing the lower cap 14. By replacing this cap, once again the coffee or other material will be held in the dispenser and ready for removal upon inverting of the dispenser and pouring out through the spout 37.

What is claimed is:

1. A dispenser comprising a cylindrical body having an upper closure provided with an opening therethrough, a lower cap having an annular wall extending upwardly from a base portion, means on the inner surface of said annular wall engageable with an outer lower edge portion of said body for releasably securing said cap to said body, a resilient annular gasket disposed on the inner surface of said body adjacent said upper closure against which the upper bead of a can may be positioned, said lower cap being arranged to engage the lower rim of said can and urge the same upwardly into engagement with said gasket, means defining a pouring spout extending outwardly from said upper closure opening, said spout having an outer surface tapering from a maximum cross-sectional area adjacent said opening to a minimum cross-sectional area at the open end thereof, and a readily removable closure member for said spout comprising a cup-shaped member having outwardly divergent walls arranged to engage the outer portions of said spout for sealing said opening.

2. Apparatus as set forth in claim 1 in which the taper on said cup-like member is less than the taper on said spout.

3. Apparatus as set forth in claim 1 in which said gasket is provided with an upwardly and outwardly directed taper adjacent the upper surface thereof and extending to said upper closure whereby the contents of a can placed in said dispenser will flow inwardly and downwardly upon placing of the dispenser in an upright position.

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