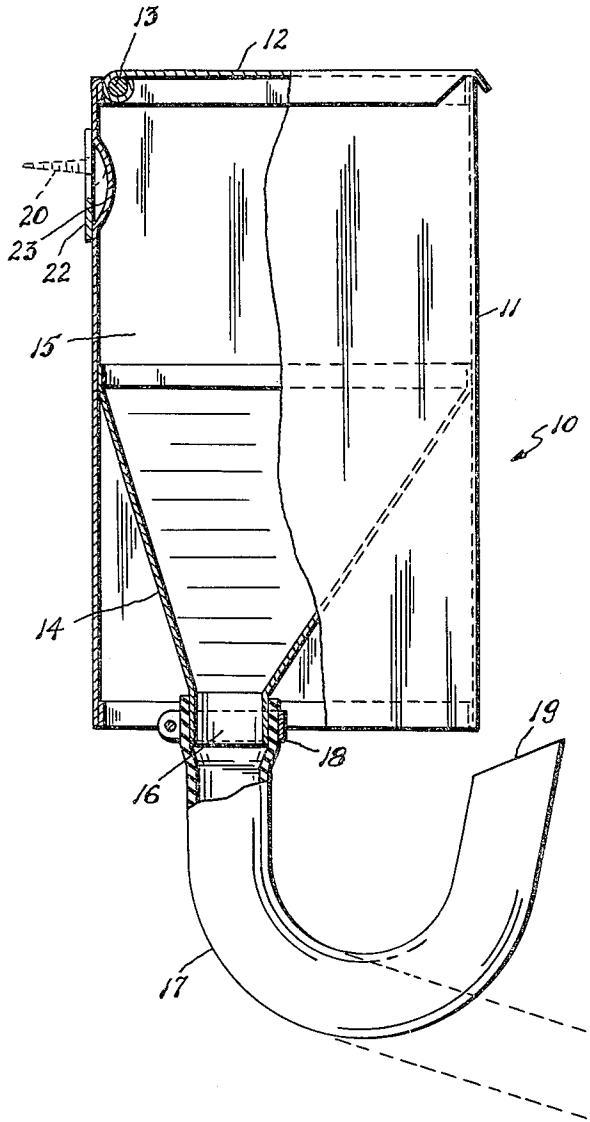
Feb. 28, 1961 L. REESE 2,973,124

DISPENSER FOR GRANULAR MATERIAL

Filed April 1, 1958



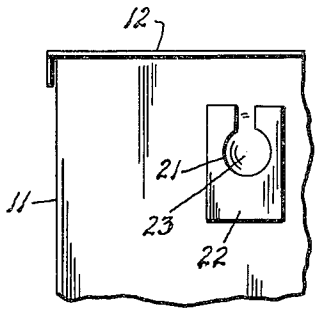


FIG. 2.

FIG. 1.

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United States Patent Office 2,973,124 Patented Feb. 28, 1961

2,973,124

DISPENSER FOR GRANULAR MATERIAL

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Filed Apr. 1, 1958, Ser. No. 725,689

4 Claims. (Cl. 222—513)

This invention relates to new and useful improvements in dispensers for powderous, granular or flaky materials such as soap, detergents and the like, and the principal object of the invention is to provide a very simple dispenser of the character herein described which is particularly well adapted for use in kitchens or laundries for easy and convenient dispensing of soap or other detergents, in place of pouring such materials out of cartons or boxes in which they are supplied to the user.

Such cartons or boxes often become misplaced, and even while they are on hand, they usually are in the way and often become knocked over or wet, thereby either spilling their contents or subjecting the same to damage.

The present invention eliminates these disadvantages by the provision of a dispenser which may be mounted on a wall so that it is out of the way yet readily available, and from which the contents may be quickly and easily dispensed, as required.

An important feature of the invention resides in providing the dispenser with what may be called a combined spout and valve means, the same being in the form of a simple, relatively rigid but flexible tube which is normally of a U-shaped configuration and by virtue thereof prevents the flow of material therethrough, but which may be bent or flexed downwardly to facilitate dispensing. As such, the aforementioned tube constitutes the sole valve means used in conjunction with the dispenser and eliminates complicated mechanical valves which are usually employed in the art. Some of the advantages of the invention reside in its extremely simple construction, efficient and dependable operation, and in its adaptability to economical manufacture.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention will be understood from the following description taken in conjunction with the accompanying drawing, wherein like characters of reference are used to designate like parts, and wherein:

Figure 1 is a side elevational view of a dispenser in accordance with the invention, the same being partly shown in section to reveal its construction; and

Figure 2 is a fragmentary rear elevational thereof.

Referring now to the accompanying drawings in detail, the dispenser in accordance with the invention is designated generally by the reference numeral **10** and embodies in its construction a generally rectangular box-shaped housing **11** formed from metal, plastic or other suitable material and provided at the top thereof with an upwardly swingable cover **12** mounted on a suitable hinge rod **13**.

The housing **11** has an open bottom, but a truncated bottom member **14** is suitably secured within the lower portion of the housing to coact with the upper portion of the housing in providing a hopper **15** for soap, detergents or other similar material in powderous, granular or flaky form, which is to be dispensed.

The hopper **15** is provided at the bottom of the member **14** with an outlet neck **16** to which is connected one end of a substantially U-shaped tube **17** by a suitable clamp **18**, or the like. The other end **19** of the tube **17** is open and is normally disposed substantially at the level of the lower end of the housing **11**, as shown.

The tube **17** is formed from material such as hard rubber, or the like, which is sufficiently rigid to cause the tube to normally retain its U-shaped configuration by virtue of rigidity along, so that it is not necessary to hold or otherwise support the end portion **19** of the tube. The powderous, granular or flaky consistency of the material in the hopper **15** is not sufficiently fluid to pass upwardly and outwardly through the free end portion of the U-shaped tube **17** and thus the tube functions in the manner of a simple valve to prevent discharge of material from the hopper.

However, the tube **17** is sufficiently flexible so that it may be bent by hand downwardly as indicated by the dotted lines **17***a*, in which event material will flow from the hopper through the open end **19** of the tube. Thus, in addition to its function as a simple valve, the tube **17** will also provide a convenient dispensing spout. When the downward bending or flexing force on the free end portion of the tube is relaxed, the tube will automatically return to its normal, U-shaped form by virtue of inherent resiliency of the material from which the tube is formed.

The entire device is preferably mounted on a wall, or the like, by a nail or screw **20** which has its head removably received in an inverted keyhole opening **21** formed in a plate **22** which is secured to the rear wall of the housing **11**. The portion of the housing wall underlying the plate **22** is inwardly concaved as indicated at **23** to afford clearance for the head of the nail or screw **20** and after the nail or screw head is passed through the large lower region of the opening **21** into the concavity **23** and the dispenser is shifted downwardly somewhat so that the shank of the screw enters the relatively narrow upper region of the opening **21**, the screw head becomes firmly wedged within the concavity **23** and against the plate **22** to securely mount the dispenser on the wall, as will be readily understood.

While in the foregoing there has been described and shown the preferred embodiment of the invention, various modifications may become apparent to those skilled in the art to which the invention relates. Accordingly, it is not desired to limit the invention to this disclosure and various modifications may be resorted to, such as may lie within the spirit and scope of the appended claims.

What is claimed as new is:

1. In a dispenser for powderous, granular or flaky materials, the combination of a hopper having an outlet at the bottom thereof and a combined spout and valve means comprising a substantially U-shaped tube of resiliently flexible non-metallic material connected at one end thereof to said outlet and having an open other end normally disposed substantially in the plane of the bottom of said hopper whereby flow of material through the open end of the tube is prevented, said tube being bendable downwardly to permit flow of material through its open end and being resiliently returnable to its normal position whereby to constitute sole means for controlling the dispensing of material from said hopper.

2. In a dispenser for powderous, granular or flaky materials, the combination of a hopper having an outlet at the bottom thereof and a combined spout and valve means comprising a substantially U-shaped tube of resiliently flexible non-metallic material connected at one end thereof to said outlet and having an open upturned other end normally disposed substantially in the plane of the bottom of said hopper, said tube being rigid enough to normally retain its U-shaped configuration and prevent

flow of material through its open end but being flexible enough to permit downward bending of its open end portion for dispensing of material therethrough and resiliently returnable to its normal position whereby to constitute sole valve means for controlling the flow of material from said hopper.

3. Combined spout and valve means for dispensing powderous, granular or flaky materials from hoppers, comprising a substantially U-shaped tube of resiliently flexible non-metallic material adapted to be connected at one end thereof to the outlet of a hopper, the other end of said tube being normally upturned and the tube being rigid enough to normally retain its U-shaped configuration and prevent flow of material through its open end but being flexible enough to permit downward bending of its open end portion for dispensing of material therethrough and resiliently returnable to its normal position.

4. A dispenser for powderous, granular or flaky materials, comprising in combination a vertically elongated hopper adapted to be mounted on a wall, said hopper having an open top and being provided at the bottom thereof with a tubular outlet neck, an openable cover provided on the open top of said hopper, and a combined spout and valve means comprising a substantially U-shaped tube of resiliently flexible rubber-like material disposed entirely below the bottom of said hopper and connected at one end thereof to said outlet neck, said tube being rigid enough to normally retain its U-shaped

configuration wherein the other end thereof is substantially horizontally coplanar with the first mentioned end to prevent flow of material from said hopper through said other end, but being flexible enough to permit downward movement of its other end portion to a point below its intermediate portion for dispensing material from said hopper therethrough, said other end portion of the tube being automatically returnable to its raised normal position solely by the inherent resiliency of the tube when downward bending force on said other end portion is relaxed whereby the tube constitutes sole, manually openable and automatically closable valve for controlling the flow of material from said hopper.

References Cited in the file of this patent

UNITED STATES PATENTS

251,832	Clark	Jan. 3, 1882
524,754	Chable	Aug. 21, 1894
824,297	Hopkins et al.	June 26, 1906
865,355	Callmann et al.	Sept. 20, 1907
1,848,211	Townsend	Mar. 8, 1932
2,020,711	Warr	Nov. 12, 1935
2,221,113	Schmitt	Nov. 12, 1940

FOREIGN PATENTS

107,166	Great Britain	June 21, 1917
523,894	France	Apr. 3, 1921