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DISPENSING CONTAINER

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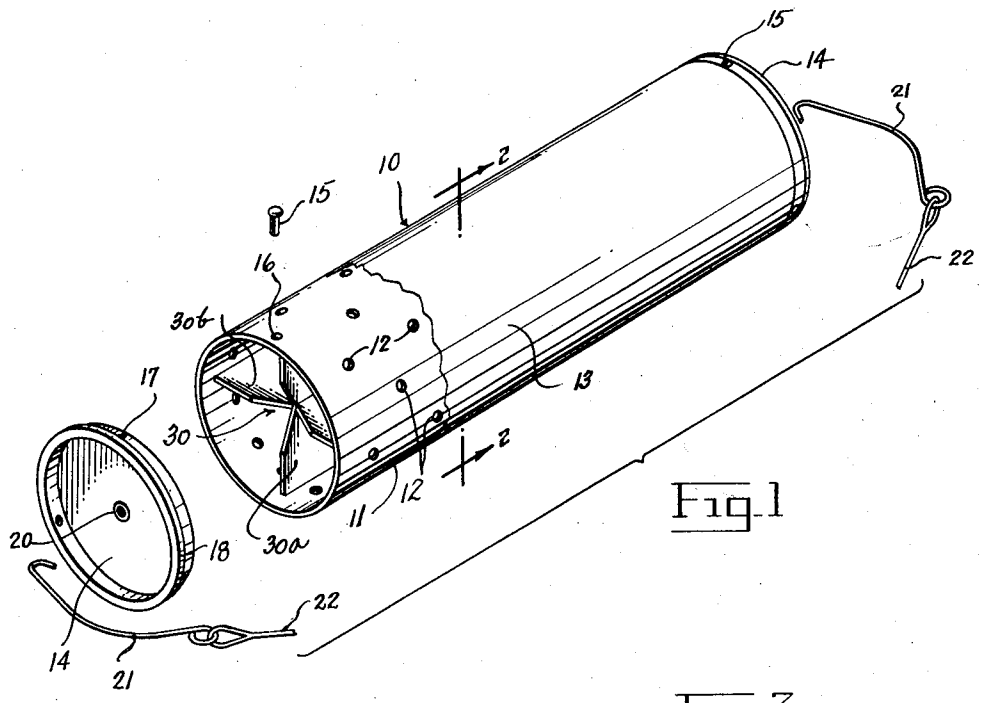
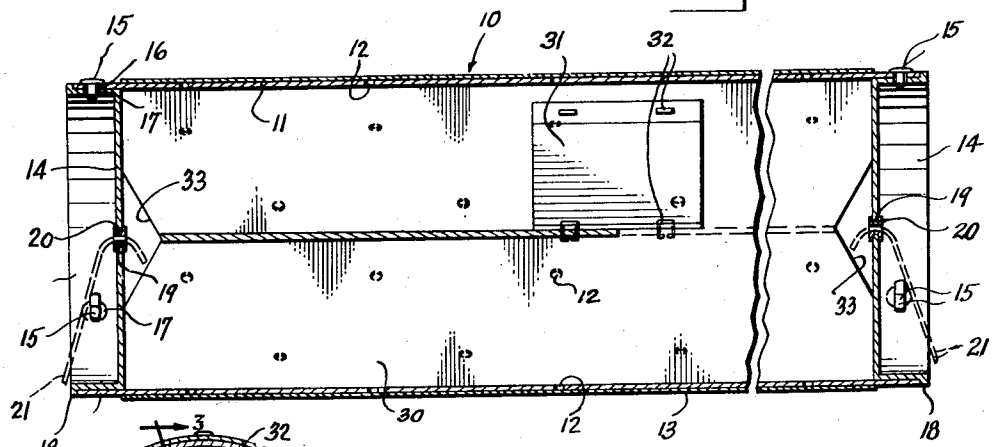


Fig. 1

Fig. 3



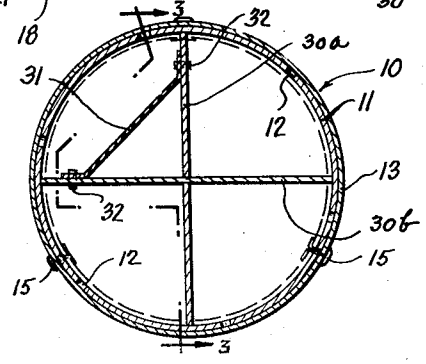


Fig. 2

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DISPENSING CONTAINER

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2 Claims. (Cl. 222—144)

This invention relates to a combination container and dispenser and more particularly the invention relates to a shipping container which may be readily used for dispensing material which is in granulated, powder or pulverized form incident to the rolling of the container.

It is the principal object of this invention to provide a combination container and dispenser for granular, powder or pulverized material which is relatively simple in its construction and relatively inexpensive to manufacture.

Another object of this invention resides in providing a new and improved combination container and dispenser wherein means is provided to cause the container to rotate as it is pulled and whereby the material contained therein is constantly tumbled and distributed in the container.

A further object of this invention is to provide a combination container and dispenser which may be readily reused as a dispenser.

Another object of this invention is to provide a combination container and dispensing device which is relatively simple to use and which may be readily stored when not in use.

Still further objects and advantages of the present invention reside in the details of construction and in the combination of its parts and in the mode of use of the device, as will hereinafter be more fully described.

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

Fig. 1 is an exploded perspective view of my combination container and dispenser with a portion thereof broken away for better illustration.

Fig. 2 is a cross-section taken on line 2—2 in Fig. 1.

Fig. 3 is an irregular cross-section taken on line 3—3 in Fig. 2, for purposes of more fully illustrating the interior construction.

It is acknowledged that dispensers of the broad or general type illustrated and described in this application are old as taught by the United States Patent No. 1,849,159, issued March 15, 1932. However, my invention resides in the new and improved details of construction whereby it is possible to obtain substantially superior results in the dispersion of the material from the container. This improved result is obtained because of the means provided which causes the container to rotate as it is pulled thereby agitating or tumbling the material. This tumbling action causes the material to be evenly dispersed within the container and the tumbling action causes the material to be positioned at the openings and in proper location for dispensing from the container.

Referring more in detail to the drawings:

In Fig. 1, I have illustrated the container which is designated in its entirety by reference numeral **10**. The container comprises a cylindrical, paper board tube **11** wherein are formed a substantial number of holes **12**.

For shipping or when the container is not in use, I provide a paper cover **13** which fits closely about the exterior of the cylinder and thereby provides means for closing or covering the holes **12**. The ends of the cylinder are closed by caps or cover members **14—14** which are removably secured to the cylinder by means of the staples or pin-like members **15**.

The cylindrical tube may vary in length and diameter and it is somewhat longer than the cover **13**. As is clearly illustrated in Fig. 3, the end closures or covers **14** are of substantially the same diameter as the inside diameter of the cylinder so that they may be inserted within the cylinder and secured thereto by means of the headed staples **15**. The staples are passed through the holes **16** in the ends of the cylinder and through the aligned holes **17** formed in the caps or ends **14**. In Fig. 3 it is indicated that the legs of the staples may be bent in such manner as to clinch or secure them in place. It will be noted that the closures or ends **14** are formed with cylindrical rim portions and these are outwardly flanged, as at **18** to limit the extent to which the closures may be inserted into the cylinder and to readily position the rim holes **17** in alignment with the holes **16** in the cylinder. It will also be noted that the end closures are inwardly countersunk so as to provide a readily accessible means for inserting and securing brads, or staples.

In the center of the ends or closures, I provide holes **19** in which are mounted metal grommets or the like **20**. The grommets are provided to receive the metal hooks **21—21** to which is secured a cord or rope **22** for the purpose of pulling the container and causing it to roll upon a supporting surface, thus causing the contained material to be dispersed. As is illustrated in Fig. 2, the hook-like members **21** are inserted within the container ends through the grommets **20**, and the inner ends of the hooks are pre-formed in such manner to prevent the hooks from readily releasing or from becoming disengaged from the ends **14**. It will be understood that the length of the cord or rope may be altered as desired or required, and in lieu of a cord or rope, a metal or wooden member could be used as a handle and pulling means.

Disposed within the cylinder is a baffle, designated in its entirety by reference numeral **30**, which divides the interior of the cylinder into four compartments as seen in Fig. 2. If it is desired, additional or fewer compartments can be formed, however, satisfactory results are obtained with the construction illustrated in the drawing. The baffle is removable from the cylinder and preferably is formed from two pieces of paperboard stock **30*a*** and **30*b*** and each piece contains a longitudinal slit along its center line from one end to approximately the middle thereof so that the companion pieces can be interlocked to form quarter sections. To retain baffles in relationship one to the other, I provide a gusset **31** which is secured by the staples **32—32** or any other convenient means, to adjacent sections of the baffle. This gusset member will retain the baffles at right angle to one another and will retain them against relative endwise movement. If desired, additional gussets or strengthening and positioning members could be used. So as to not interfere with the insertion of the hooks **21** through grommets **20**, the center end portions of the baffles are cut-away as at **33** to provide space for the insertion of the end portion of the hooks. Sufficient clearance must be provided so that the baffles will not engage the hooks as the dispenser is rotated for the dispersion of the contained material.

The essence of my invention resides in the provision of the internal baffles and it is not my desire nor intention that my invention be limited to the particular baffle construction which I have illustrated. It is because of

the provision of the baffle that it is possible to obtain substantially improved results when dispersing material from the container. Any type or construction of baffle which will permit the container to rotate and will cause the material to be tumbled and not rest in a relatively fixed position in the container will be comprehended to be within the scope of my invention.

It is necessary that the material be retained in the several compartments formed by the baffles. If the material is all located in the bottom or lowermost point, the container will not rotate but it will merely skid along the ground. This is especially true when the container is partially empty. As the dispenser is rolled, the material therein will be dispersed through the holes **12—12**. Also, as the dispenser is rolled, the contained material will be caused to be tumbled within the cylinder by by reason of the baffle construction which I provide. It will be understood that as the cylinder rolls forward the material will be carried upwardly and will fall to the respective lower corner of each section formed by the baffles and as the container continues to rotate and the particular section approaches the ground surface the material will fall to the lower corner passing over the holes **12** through which the material will be dispersed onto the ground surface. This continual tumbling action achieved by the rotation of the container causes the material to be evenly disposed within each baffle section so that a uniform spread or coverage may be achieved.

To refill the container, one end or cover member **14** is released by removal of its securing staples **15** and removed. The cylinder is then refilled with the fertilizer or other material and the end is replaced and secured to the cylinder. The container may then be readily used for the application of the material in the manner hereinbefore described.

It will be appreciated and understood that the container may be readily manufactured from relatively heavy paperboard or light metal and that the container may be readily stored and reused for dispensing material as required or desired. When the container is not in use, the removable, paper cover **13** should be replaced about

the container so as to prevent any material contained therein from being spilled or removed. The container may be reused many times and it provides a handy and convenient means for storing unused portions of the fertilizer or other material.

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

1. A dispensing container comprising an elongated cylindrical body, formed over its surface area with spaced dispensing perforations, and adapted to be rolled upon a surface for the dispensing of material through said perforations, baffles disposed lengthwise of and within said body, in crossed relationship, diametrically of and extending from end to end of the body and dividing said container into a plurality of separate longitudinal compartments around its axial center for material to be dispensed, closure disks removably fixed in the opposite ends of the body, each formed with a central perforation fitted with a grommet, and a towing means comprising a cord equipped at its opposite ends with hook shaped attachment members applied through said perforations of the closure members and rotatable in said grommets.

2. A dispensing container as recited in claim 1 wherein said crossed baffles are recessed axially of their opposite ends to provide clearance for the inner portions of said hook shaped attachment members as projected through the grommets.

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