W. G. TEMPLETON.

DISPENSING BIN.

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1,230,238. Patented June 19, 1917.

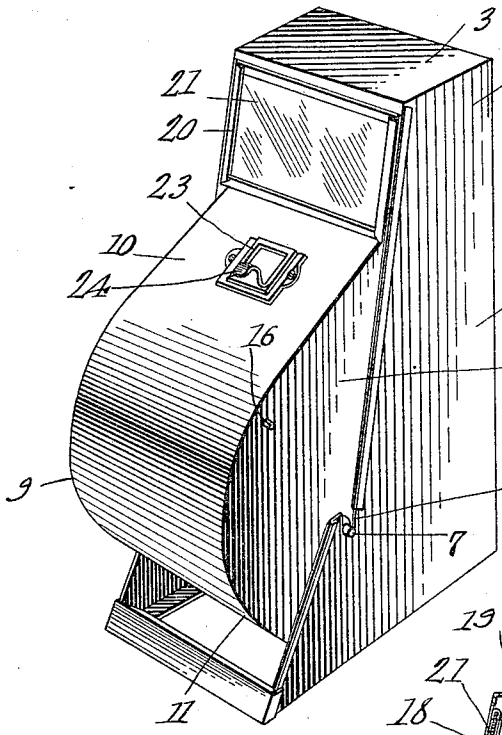


Fig. 1.

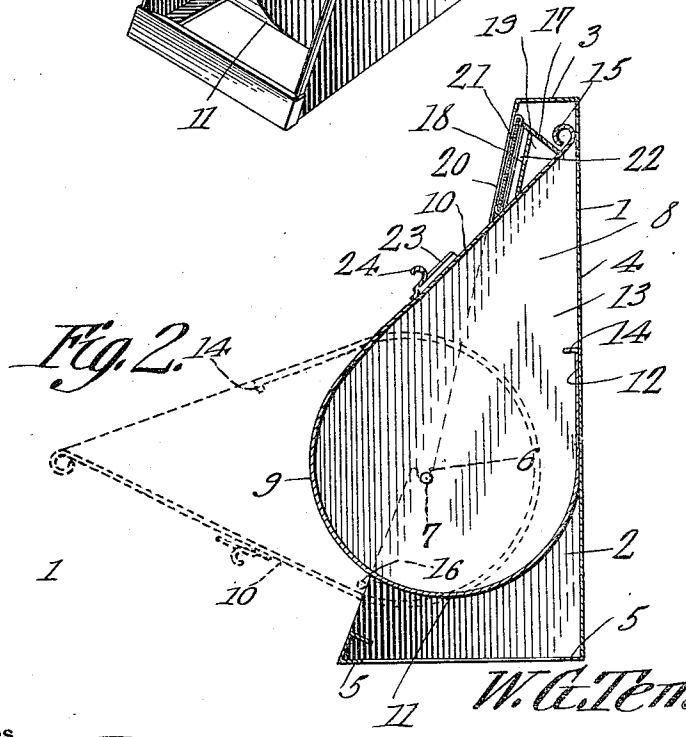


Fig. 2.

Witnesses

J. R. Somers

M. E. McCarthy

W. G. Templeton,
Inventor

by C. A. Snow & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM G. TEMPLETON, OF COLORADO SPRINGS, COLORADO.

DISPENSING-BIN.

1,230,238. Specification of Letters Patent. Patented June 19, 1917.

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To all whom it may concern:

Be it known that I, WILLIAM G. TEMPLETON, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Dispensing-Bin, of which the following is a specification.

This invention relates to bins for use in the storage of cereal, seeds, feed, small quantities of coal, and in fact any material of a nature allowing it to be handled with scoops, small shovels and the like.

One of the objects of the invention is to provide a bulk holder which, if desired, can be so mounted as to constitute one of a series of units, this bulk holder being movable bodily to open and to closed position, the weight of the holder and its contents serving to maintain the holder in either of said positions.

A further object is to provide a bulk holder which closes against a supporting wall provided therefor so that the contents of the holder are protected from dust, moisture, insects and rodents.

Another object is to provide a bulk holder which, when moved to open position, will bring to the top that portion of its contents which has been upon the bottom of the bulk holder, thus preventing any of the contents from becoming stale, as where only the top material is removed and the material at the bottom left untouched.

A further object is to provide a pin which is simple and durable in construction, attractive, and which can be easily opened or closed no matter how heavily loaded.

A further object is to provide a bulk holder which is so mounted that it becomes impossible to leave it in an intermediate or partly closed position. Instead it is necessary for the bulk holder to assume a position either where entirely open or entirely closed.

When the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—

Figure 1 is a perspective view of a bin embodying the present improvements.

Fig. 2 is a central vertical section taken therethrough from front to rear, the bulk holder being shown, by full lines in closed position and by dotted lines in open position.

Referring to the figures by characters of reference 1 designates a housing which, in the present instance, is made up of side supports 2, a top member 3, a wall 4 and bottom connecting strips 5. It is to be understood, however, that various other forms of bin supports may be used. For example, superposed shelves having vertical partitions therebetween can be used in lieu of the form of housing shown in the drawings, or, if preferred, side supports extending forwardly from a wall or the like can be employed, it merely being necessary that the parts be so arranged that the back wall will completely close the back of the bin when it is in one position.

In the construction illustrated, the supports 2 are formed with notched shoulders 6 in which trunnions 7 are detachably mounted and adapted to rotate, these trunnions extending laterally from the flat sides 8 of a bulk holder 9. As shown particularly in Fig. 2, the bulk holder is provided with a flat inclined front wall 10 merging, at its lower end, into a rounded bottom extending through approximately 240 degrees and which bottom 11, merges into a flat back wall 12 which, when the bulk holder is in closed position, fits snugly against the wall 4. This back wall 12 is spaced from the upper end of the front wall 10, thus to form an outlet opening 13 in the bulk holder, the free edge portion of the wall 12 being bent into the bulk holder to form a flange 14 while the free upper edge portion of the wall 12 is preferably rolled outwardly as at 15 to provide a stop for engaging the wall 4. The trunnions 7 are eccentrically disposed relative to the bottom 11 so that, when the bulk holder is swung upwardly, past a predetermined point, it will gravitate rearwardly against the back wall 4 and, when the bulk holder is moved forwardly past a predetermined point it will gravitate downwardly to open position. This downward

movement of the bulk holder to open position is limited by stop lugs 16 extending laterally from the bulk holder and adapted to come into contact with the side supports 2.

Extending forwardly from the upper portion of the front wall 10 and throughout the width of said wall is a plate 17 and this plate is connected to the wall 10 by a reinforcing and backing plate 18 which, when the bulk holder is in closed position, assumes a substantially vertical position, as shown in Fig. 2. The space between the wall 10 and plate 17 is closed at the sides by side plates 19 and secured to or formed on these side plates at the front edges thereof are guides 20 detachably engaged by a transparent panel 21. Thus it will be seen that a display compartment 22 is formed between the panel and the plate 18, it being designed to place a sample of the contents of the bulk holder in this compartment where it can be readily viewed through the transparent panel 21. A label holder 23 is preferably arranged upon the wall 10 of the bulk holder and the label carried by this holder will contain data relative to the contents of the bulk holder as, for example, the name and the price per pound. A finger piece or grip 24 can be extended from the label holder, the same affording means whereby the bulk holder can be moved readily to open or to closed position.

When it is desired to use the bulk holder, the same is moved to open position by pulling forwardly on the grip 24 until the center of gravity has passed the vertical plane occupied by the trunnions 7 whereupon said bulk holder will swing downwardly to the position indicated by dotted lines in Fig. 2, pins 16 coming against the front edges of the side supports 2. The material to be stored is placed through the opening 13 and into the bulk holder after which said bulk holder is swung upwardly and backwardly so that the opening 13 will be fully closed or sealed by the wall 4. Thus it will be seen that the contents of the bulk holder will be completely protected from dust, insects, rodents and moisture. When it is desired to remove a portion of the contents of the bulk holder, said bulk holder is again swung downwardly to the position shown by dotted lines in Fig. 2 and, during this movement, the rounded bottom 11 of the bulk holder will carry upwardly that portion of the material contacting therewith so that the material which had previously been at the bottom of the bulk holder will thus be brought to the top and be among that which is removed from the bulk holder. Obviously, therefore, the operation of opening and closing the bulk holder will result in the agitation of the contents so that no portion of said contents will remain constantly at the bottom where it would be likely to become stale.

It will be noted that in view of the granular or rolling characteristics of the goods or commodities designed to be handled in the holder it is desirable to have the opening in the rear wall extend approximately from the upper extremity of said wall or in other words, the apex of the holder, to a point about midway of the length of the holder or above the plane of the pivotal axis when the holder is in its upright or closed position. This requirement is due to the fact as above brought out, that in moving the holder from its closed or upright position to its open or lowered position the goods are carried upward by the arcuate or storage part of the holder and are in a sense dropped over the axis to a position in front so that the goods which occupied the bottom of the holder in its upright position are brought to the front. In other words, while water or other liquid which may be regarded as freely mobile so that in an article of this kind it would remain at the bottom and merely seek its level, the purpose of this receptacle may be said to be for the handling of semimobile goods or commodities which while capable of movement,—that is to say relative movement of the particles or elements, are not as freely movable as a liquid. It is hence desirable to have the closed portion of the rear wall of the holder extended upward to a plane considerably above the horizontal plane of the pivotal axis when the holder is in its upright or closed position.

By mounting the trunnions 7 in notches as shown, the entire bulk holder can be removed bodily from its housing should it be desired to clean it.

Although the bulk holder has been shown constructed of an imperforate material, it is to be understood that, where the bulk holder is designed for holding such goods as nuts, lemons, oranges, etc., it can be made of foraminous material such as wire netting, perforated metal, or the like. This is so obvious that it is not deemed necessary to illustrate the same.

As has already been pointed out, the bin is capable of numerous uses in stores and homes, and it has been found that the device can also be used as a mail box inasmuch as the contents of the device will be fully protected from rain, snow, etc.

Inasmuch as a bin such as described is much cheaper to manufacture than ordinary drawers, it has been found that it can be used to advantage in kitchen cabinets and other articles of furniture.

What is claimed is:—

1. The combination with a supporting structure having a vertical back wall, of a pivotal bulk-holder having an arcuate bot-

tom from the extremities of which tangential front and rear walls converge along straight lines toward a meeting point or apex, the holder being mounted eccentrically, the rear wall of the holder having an access opening extending from its upper extremity and of sufficient size to receive a bulk removing element, the side walls of the holder having straight free edges in the same plane with the outer face of the rear wall of the holder, said edges and face being movable to position flat against the vertical wall of the supporting structure to seal the access opening.

2. A pivoted bulk holder having its axis near the bottom and carrying a sample display compartment at a point above and remote from said axis, said holder having a limited range of movement such that at the limits thereof said display compartment is either in front or in rear of the vertical plane of the axis of the holder, and acts as a counter weight in retaining the holder in position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM G. TEMPLETON.

Witnesses:
HARRY A. SCURR,
F. J. BAKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."