Sept. 19, 1939. F. A. LEWIS 2,173,537

DISPENSING DEVICE

Filed June 6, 1938

FIG. 1

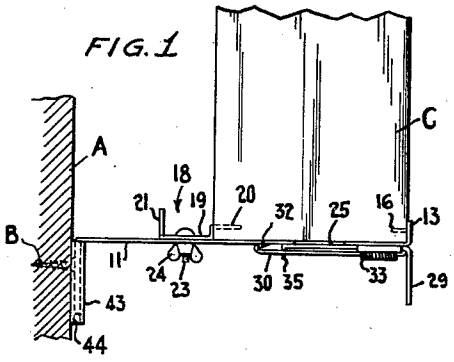


FIG. 2

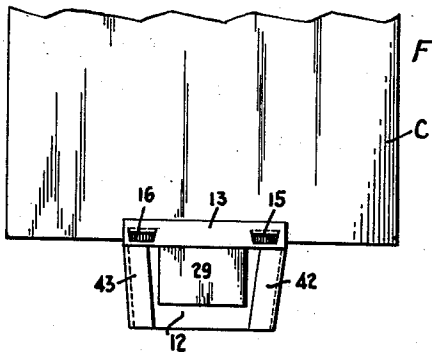


FIG. 3

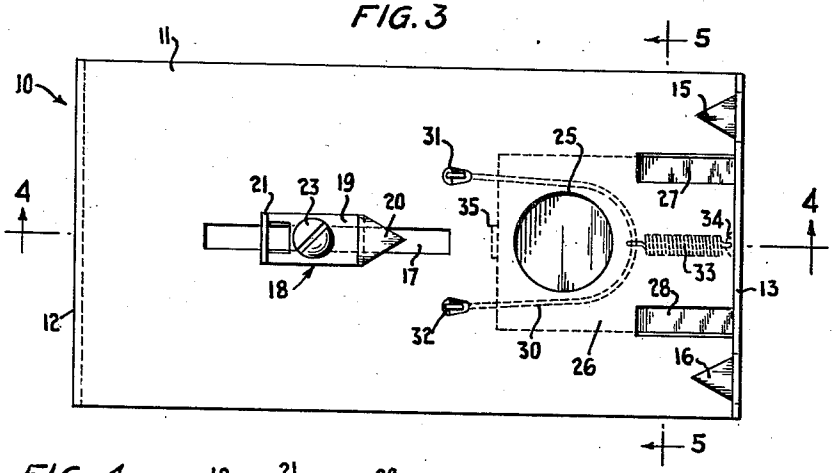


FIG. 4

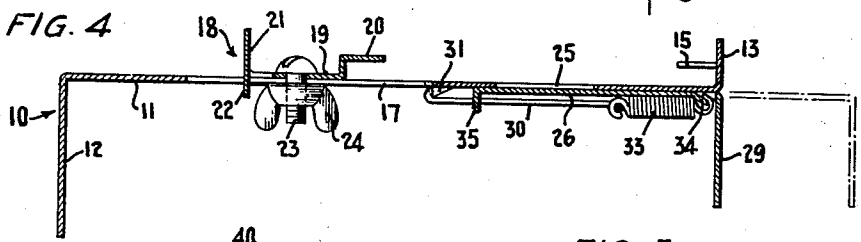


FIG. 6

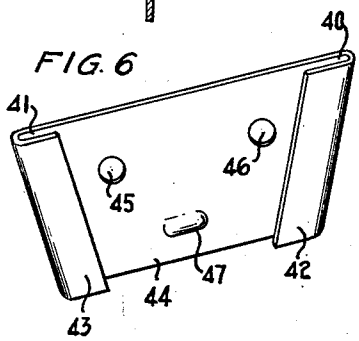
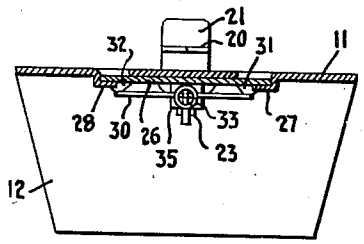


FIG. 5



FRED A. LEWIS
INVENTOR

BY Victor J. Evans & Co.
ATTORNEYS

Patented Sept. 19, 1939 2,173,537

UNITED STATES PATENT OFFICE

2,173,537

DISPENSING DEVICE

Fred A. Lewis, Brooklyn, N. Y.

Application June 6, 1938, Serial No. 212,167

3 Claims. (Cl. 221—146)

This invention relates generally to improvements in dispensing devices and more especially to an improved dispenser for packaged divided products, such as soap chips and the like.

It is presently customary to include perforated or at least easily torn sections in tops of containers or packages for divided goods, whereby the perforated or easily torn section can be pierced, bent in or removed, as the case may be to facilitate removal of contents from the package.

This type of package is disadvantageous, however, in that the perforation, bending in or tearing away of a portion of the top of the package exposes the unused contents to possible deterioration by entrance of foreign matter through the opening.

Another disadvantage of this type of package is that the user must tip or turn the package in order to remove the contents therefrom and inasmuch as in use of packaged soaps and the like, the user's hands are often wet, the package at least and sometimes the contents, soon becomes damaged by the moisture.

A still further disadvantage is that often too much of the product is poured from the opening whereby waste of the material results.

It is among the more important objects of the present invention to provide a novel dispenser for divided material adapted to function in cooperation with containers or packages for facilitating removal of divided materials from said packages or containers.

Another object of the present invention is to provide a novel dispenser adapted to engage with openings formed in packages or containers for facilitating removal of selected quantities of material from said container whereby, when not in use, the opening of said container is obstructed.

A further object of the present invention is to provide a dispenser of the type hereinbefore indicated which is suited to home use and which can be easily but removably mounted upon a wall or upright support.

Another object of the present invention is to provide a dispenser mechanism having a slide valve obstructing the orifice thereof which is self-sealing, that is to say is associated with resilient actuating mechanism whereby the sliding valve member is moved into position obstructing the opening when the device is not in use.

Another object of the invention is to provide a dispenser mechanism adapted to use with packages of divided material, said packages being of different sizes and of different shapes.

An important advantage of the novel dispensing mechanism according to the present invention is its simplicity and ruggedness of construction whereby it is suited to the requirements of mass production during manufacture and whereby the cost of repair or replacement is at least largely minimized.

Another advantage of the dispenser according to the present invention is that the moving parts thereof are arranged whereby there is little likelihood of sticking or jamming during use through accumulation of divided material in the bearings of the moving parts, whereby the utility of the device, as compared with dispensers according to certain prior art inventions, is materially enhanced.

Among the important features of the dispenser according to the present invention is that it is provided with a bracket mounting of a type which facilitates firm and secure holding of the device during use but which permits quick and easy removal thereof when desired.

Other objects, advantages and features of the device according to the present invention will be apparent to those skilled in the art during the course of the following description.

Regarded in certain of its broader aspects, the present invention comprises a horizontally supported plate having adjustable horizontally extending piercing fingers mounted thereon adapted to engage with packages of material and having an orifice formed therein and adapted to cooperate with an opening formed in said package for discharge of said contents of said package therefrom, said orifice being provided with a sliding valve mounted on said plate for, upon occasion, obstructing said orifice when it is desired not to discharge contents from said package, said valve being spring pressed into closed position when not in use.

In order to facilitate a fuller and more complete understanding of the present invention, a specific embodiment thereof will be hereinafter described, it being clearly understood, however, that the illustrated embodiment is given solely by way of example and is non-limitative upon the scope of the present invention, except as expressed in the subjoined claims.

Referring then to the drawing:

Figure 1 is substantially a side elevational view of the now preferred embodiment of the present invention, showing same mounted on an upright support and engaged with a package.

Figure 2 is substantially a front elevational view of the dispenser and package illustrated in Figure 1.

Figure 3 is substantially a top plan view of the now preferred embodiment of the dispenser mechanism according to the present invention.

Figure 4 is substantially a vertical sectional view of Figure 3 taken along the line 4—4.

Figure 5 is substantially a vertical sectional view of Figure 3 taken along the line 5—5, and

Figure 6 is substantially a perspective view of the supporting bracket.

Referring now especially in Figures 3 and 4, it will be noted that the dispenser according to the present invention, generally designated by the numeral 10, comprises an essentially flat substantially rectangular plate 11 having one end 12 bent downwardly relative to said plate and substantially at right angles thereto and having the opposite end 13 bent upwardly and also substantially at right angles to said plate.

The up-turned edge portion 13 is provided with inwardly extending pointed fingers 15 and 16 disposed adjacent but above the plate 11. A transversely extending slot 17 formed near the center of the essentially rectangular plate 11 serves as guide-way for the sliding adjustable gripping means generally designated by the numeral 18, said gripping means comprising a slidable plate 19 having a raised pointed end portion 20, positioned adjacent but above the plate 11, and a formation 21 on the opposite end thereof having a projecting portion 22 engageable with the slot 17 whereby the plate 19, when held in engagement with the plate 11 by means of the screw 23 and wing-nut 24, is adapted to slide in said slot whereby a package can be engaged with the horizontally extending pointed fingers 15, 16 and 20 and said adjustable finger 20 can be held in position relative to said plate 11. In this manner a package can be positioned upon the plate 11 and the fingers 15, 16 and 20 engaged with the edge portions of the package whereby said package is held substantially firmly and in fixed relationship to said plate. The plate 11 is provided with an orifice 25 in a locality between the fingers 15, 16 and 20, said orifice being preferably centrally located and being substantially circular in outline.

The closure or valve member 26 slidingly mounted in channel formations 27 and 28 formed from a portion of the plate 11 is provided to at least largely obstruct the orifice 25. The closure member 26 is provided with a downwardly extending handle portion 29 for facilitating sliding movement of said closure, said handle portion 29 being adapted to abut against end portions of the channels 27 and 28 whereby movement of said closure toward the edge 12 of the plate 11 is limited.

In order to facilitate holding the closure member in position obstructing the orifice 25 when the device is not in use, a U-shaped clip 30, mounted in portions 31 and 32 of the plate 11, is provided and engages with a spring 33 attached to a struck-out portion 34 of the sliding valve 26 whereby said spring 33 normally urges said closure 26 into position obstructing the orifice 25. It will be noted that a stop 35 is provided on the end portion of the closure member 26 and abuts against a portion of the U-shaped clip 30 when the closure is moved into extended or opened position, substantially as shown in phantom in Figure 4.

It will be noted that the downwardly bent marginal end portion 12 of the plate 11 is formed whereby its width at the top is greater than its width at the bottom edge thereof. This end portion 12 is receivable in channels 40 and 41 formed by bent edge portions 42 and 43 respectively of the plate 44, said channels being arranged obliquely relative to each other, adapted to conform with the outline of the edge portion 12 of the plate 11. Openings 45 and 46 are formed in the plate 44 and are suited to receive fastening means for holding the plate 44 upon an upright support. A protrusion 47 formed in the plate 44 is adapted to engage with a part of the end portion of the plate 11 when said end portion is positioned in engagement with the edge parts 42 and 43 of said plate 44 whereby the parts are firmly but removably held in engagement.

In use, referring now especially to Figures 1 and 2, the device is supported on an upright, such as the surface A, by engagement of fastening means B with the plate 44 hereinbefore described. A package of divided material C, having an opening formed in the top thereof alignable with the orifice 25 formed in the plate 11, is then positioned with the end having the opening facing upwardly and the prongs or fingers 15, 16 and 20 are engaged with edge portions of the package whereby the package and the plate 11 are engaged with the orifice 25 in alignment with the opening in the bent end. The wing-nut 24 and screw 23 are then adjusted whereby sliding movement of the plate 19 relative to the plate 11 is precluded and the package together with the plate 11 is inverted and the end portion of said plate engaged with edge portions 42 and 43 and the plate 44 mounted, as hereinbefore described, on the support A. It will be noted then that the plate 11 is disposed substantially horizontally and that the contents of the package C can be discharged through the opening or orifice 25 of the plate 11 by moving the closure 26, preferably by means of the handle 29, whereby the orifice is left unobstructed. It is to be noted that when the handle 29 is not held in extended position, the spring 33, associated with the U-shaped spring clip 30, will at least tend to move the closure 26 into position obstructing the opening 25 whereby discharge of package contents through said opening is precluded.

It is to be noted that the dispenser according to the present invention provides means for discharging contents from packages without necessitating handling of the packages proper, and also provides means for minimizing waste of material by automatically closing the discharge orifice of the dispenser when same is not held in opened position by the user.

It is to be understood that this improvement is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed is:

1. A dispenser of the type described for packaged divided materials comprising an essentially flat, rectangular plate; means for supporting said plate; means for holding a package on said plate comprising a bent marginal portion; pointed relatively stationary fingers extending in spaced parallelism relative to said plate toward the opposite end thereof, formed integral with and of a part of said bent marginal portion of said plate; an adjustable pointed finger extending in spaced parallelism relative to said plate and pointing in a direction opposite to said stationary fingers,

slidably mounted in a transverse slot formed in said plate, whereby a package can be held on said plate by engagement of said fingers therewith; said plate having a discharge orifice formed therein in the locality normally positioned beneath the package; means for controlling passage of materials through said orifice comprising a closure, slidingly mounted in essentially parallel channel formations made integral with and of the substance of said plate, adapted, when in closed position, to rest beneath and obstruct said orifice; a handle on said closure for facilitating sliding motion thereof; and means for holding said closure in closed position when the dispenser is not in use.

2. A dispenser of the type described for packaged divided materials comprising an essentially flat, rectangular plate; means for supporting said plate; means for holding a package on said plate comprising a bent marginal portion, distal relative to said lug and extending in the opposite direction; pointed relatively stationary fingers, extending in spaced parallelism relative to said plate toward said lug, formed integral with and of a part of said bent marginal portion of said plate; an adjustable pointed finger extending in spaced parallelism relative to said plate and pointing in a direction opposite to said stationary fingers, slidably mounted by means including a threaded screw and wing nut, in a slot formed in said plate extending transversely from a place near the lug-carrying end toward the opposite end, whereby a package can be held on said plate by engagement of said fingers therewith and tightening of said screw and wing nut; said plate having a discharge orifice formed therein in the locality between the fingers; means for controlling passage of materials through said orifice comprising a closure, slidingly mounted in essentially parallel channel formations made integral with and of the substance of said plate, adapted when in closed position, to rest beneath and obstruct said orifice; a handle on said closure for facilitating sliding motion thereof; and means for holding said closure in closed position when the dispenser is not in use.

3. A dispenser of the type described for packaged divided materials comprising an essentially flat, rectangular plate; means for supporting said plate; means for holding a package on said plate comprising a bent marginal portion, distal relative to said lug and extending in the opposite direction; pointed relatively stationary fingers, extending in spaced parallelism relative to said plate toward said lug, formed integral with and of a part of said bent marginal portion of said plate; an adjustable pointed finger extending in spaced parallelism relative to said plate and pointing in a direction opposite to said stationary fingers, slidably mounted by means including a threaded screw and wing nut, in a slot formed in said plate extending transversely from a place near the lug-carrying end toward the opposite end, whereby a package can be held on said plate by engagement of said fingers therewith and tightening of said screw and wing nut; said plate having a discharge orifice formed therein in the locality between the fingers; means for controlling passage of materials through said orifice comprising a closure, slidingly mounted in essentially parallel channel formations made integral with and of the substance of said plate, adapted when in closed position, to rest beneath and obstruct said orifice; a handle comprising a bent edge portion of said closure for facilitating sliding motion thereof, and means for holding said closure in closed position when the dispenser is not in use, comprising a spring, mounted at one end on said closure and at the opposite end on a U-shaped clip, attached to said plate and positioned circumjacent said orifice.

FRED A. LEWIS.