

1,267,635.

C. COX.
CONTAINER.

APPLICATION FILED MAY 21, 1917.

Patented May 28, 1918.

2 SHEETS—SHEET 1.

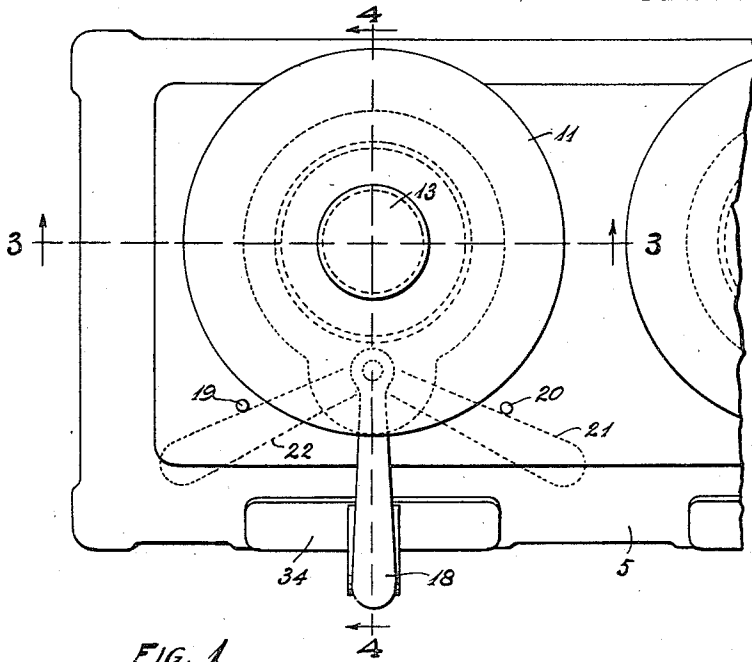


FIG. 1

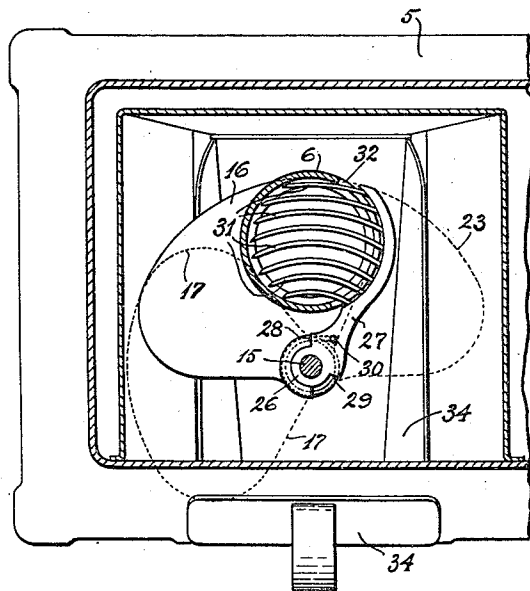


FIG. 2

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Carlos Cox

By Attorney
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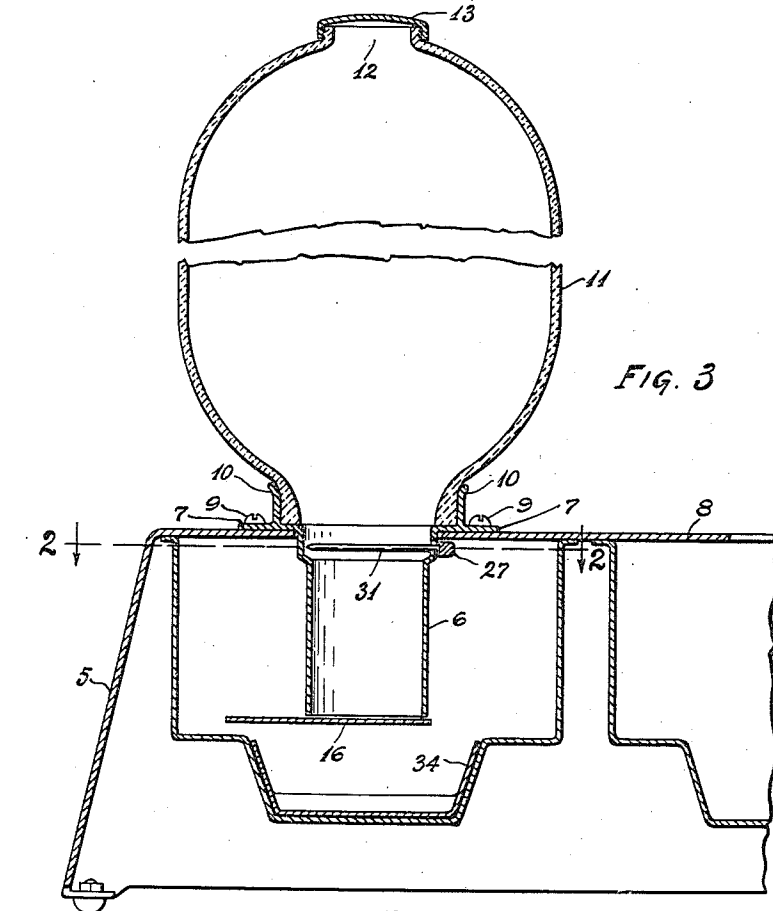


FIG. 3

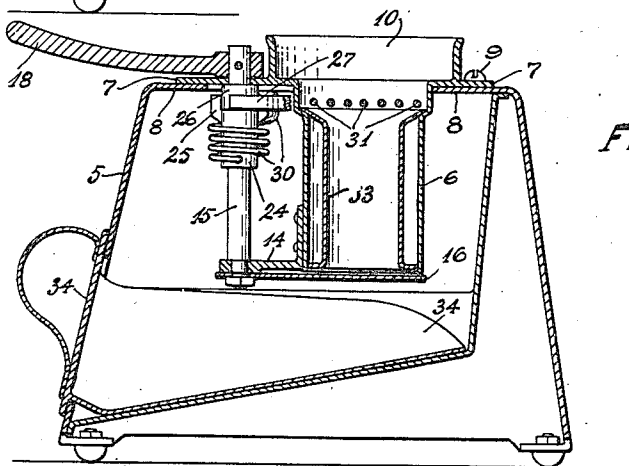


FIG. 4

Inventor
Carlos Cox

By Attorney
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UNITED STATES PATENT OFFICE.

CARLOS COX, OF SEDRO WOOLLEY, WASHINGTON, ASSIGNOR OF ONE-HALF TO CHARLES A. BEAULIEU, OF SEATTLE, WASHINGTON.

CONTAINER.

1,267,635.

Specification of Letters Patent. Patented May 28, 1918.

Application filed May 21, 1917. Serial No. 170,078.

To all whom it may concern:

Be it known that I, CARLOS COX, a citizen of the United States, residing at Sedro Woolley, in the county of Skagit and State of Washington, have invented a certain new and useful Improvement in Containers, of which the following is a specification.

My invention relates to improvements in containers having controllable outlet passageways, and the object of my invention is to provide a container which shall be adapted for use by venders of candy, shelled nuts and the like, which container may be filled with small pieces of candy, as for instance, lemon drops, or shelled peanuts, and which container shall embody a controllable outlet passageway through its bottom portion, together with operatively associated measuring devices, whereby separate like portions of the contents of said container may be caused successively to be extracted from said container through its said outlet passageway.

I accomplish this object by devices illustrated in the accompanying drawings, wherein:—

Figure 1 is a plan view of one form of structure embodying my invention;

Fig. 2 is a view of the same in horizontal section on broken line 2, 2 of Fig. 3;

Fig. 3 is a view of the same in vertical section on broken line 3, 3 of Fig. 1; and

Fig. 4 is a view of the same in vertical section on broken line 4, 4 of Fig. 1.

Referring to the drawings, throughout which like reference numerals indicate like parts, 5 designates a hollow supporting base only one end portion of which is shown, a complete one of which supporting bases is adapted to support a plurality of separate and independently operative structures embodying my invention, only one of which structures is shown as associated with said one end portion of said supporting base 5.

A measuring receptacle 6, of the form of a hollow cylinder having a radial flange 7, is disposed to project vertically downward through an opening formed in the top wall 8 of the supporting base 5 with its said flange 7 secured to the top surface of the

Extending vertically upward from the upper surface of the flange 7 is an annular flange 10 whose internal surface is concen-

tric with and spaced from the inner surface of the receptacle 6, thereby to form a socket within which is disposed the open bottom end of a container 11 of well known form that is preferably made of glass.

The container 11 is provided with a small opening 12 in its top end which is normally closed by a cover 13 which may be removed during the operation of filling the container with merchandise to be sold by dry measure.

The internal dimensions of the receptacle 6 are such as will adapted it to contain the required certain quantity of merchandise that is to be extracted and delivered from the container 11 in response to each of successive operations of the mechanism of the structure.

Fastened to the exterior surface of the lower portion of the receptacle 6 is an angular bracket 14, as shown in Fig. 4, within the outer end of whose horizontally disposed portion is formed a shaft bearing within which is journaled the lower end of a rotatively movable shaft 15 which extends vertically upward to project its upper end portion through and above the horizontal wall 8 of the supporting base 5 and a bearing formed in an outwardly projecting integral portion of the flange 7 within which bearing said upper end portion of said shaft 15 is journaled.

Rigidly fastened to the lower end portion of the shaft 15 adjacent to the under side of the bracket 14 is a shutter plate 16 that projects in a horizontal plane that adapts it to open and close the bottom end of the receptacle 6 in response to rotative movements of the shaft 15 in an obvious manner.

The shutter plate 16 is formed in outline to resemble a sector between whose radii is an angular distance of about 120 degrees, as indicated by the dotted lines 17 in Fig. 2, and the relative diameter of the lower end of the receptacle 6 is such that the shaft 15 may be rotatively moved through an angular distance of 60 degrees without displacing said shutter plate 16 sufficiently to permit any of the contents of the receptacle 6 to be emitted therefrom.

Rigidly fastened to the upwardly projecting end portion of the shaft 15, adjacent to the top surface of the flange 7 is a horizontally projecting hand lever 18 which may be manually actuated rotatively to move the

shaft 15 for an angular distance of a little more than 120 degrees which movement is limited by limit pins 19 and 20 which are fixed in the top wall 8 of the supporting base, as shown in Fig. 1, to engage with and limit the movements of said hand lever 18.

The relative circumferential positions of the hand lever 18 and the shutter plate 16 on the shaft 15 are such that when the hand lever 18 is disposed to engage with the limit pin 20 (as indicated by dotted lines 21 in Fig. 1) then the shutter-plate 16 will be disposed as indicated by dotted lines 17 in Fig. 2, thus wholly to open the bottom end of the receptacle 6 to permit its contents to be discharged downwardly therefrom.

But when the hand lever 18 is disposed to engage with the pin 19 (as indicated by dotted lines 22 in Fig. 1) then the shutter plate 16 will be disposed (as indicated by dotted lines 23 in Fig. 2) so that its left hand half portion will close the bottom end of the receptacle 6.

As shown more clearly in Fig. 4, fastened on the shaft 15, in a position spaced from the under side of the wall 8, is a sleeve 24 which is provided with an integral lug 25 on its upper end portion, which lug 25 is of the form of a semi-annular flange and is disposed with its internal surface concentric with the peripheral surface of said sleeve 24.

Freely mounted on the shaft 15, in a position to engage with the annular surface of the upper end of the sleeve 24 and with the internal surface of the semi-annular flange 25, is a hub 26 from which extends in a horizontal plane an integral curved arm 27 that is thus adapted to move in a horizontal plane through an angular distance of 60 degrees with relation to the semi-annular flange 25, such movement being limited by the vertical edges of said flange 25 which edges are adapted to engage with the respectively adjacent opposite shoulders 28 and 29 formed on the arm 27 as shown more clearly in Fig. 2.

Disposed to surround the sleeve 24 is a strong helical spring 30 the lower end of which is fastened to said sleeve 24 and the upper end of which is fastened to the curved arm 27, which spring 30 is adapted to exert its force with a tendency to cause the arm 27 to be disposed with its shoulder 28 in contact with the adjacent vertical edge of the semi-annular flange 25.

Fixed in the arm 27, to extend from the inner curved side in circular lines that are concentric with the axis of the shaft 15, are a plurality of spaced pointed tines 31 which are adapted to be projected through a slot 32 formed to extend through one side of the upper portion of the wall of the receptacle 6 in a position registering with the path of the arm 27, whereby at times required said tines 31 may serve as a grate-like shutter to

prevent merchandise from passing from the container 11 into the receptacle 6.

If it be desired to reduce the capacity of the receptacle 6 in order to measure a smaller quantity of merchandise, a hollow cylinder 33 of smaller diameter and provided with outwardly projecting flanges on its top and bottom ends, may be inserted into said receptacle 6 through its upper end to dispose it in the concentric position indicated in Fig. 4, thus to reduce the diameter of the effective space within said receptacle 6.

Thus, by providing a plurality of hollow cylinders similar to the hollow cylinder 33 but each of a different internal diameter, the capacity of the receptacle 6 may be changed in an obvious manner as may be desired.

Removably disposed to project into and through an opening in the front side wall of the supporting base 5 is a well known form of scoop 34 which is disposed with its bottom inclined upwardly from said front side wall to extend to a point beyond the bottom of the receptacle 6 thereby to adapt it to receive merchandise that may issue from the bottom end of said receptacle 6, said scoop 34 being supported by a sheet metal hanging bracket 35 that is fastened to the underside of the top wall 8.

Obviously the supporting base 5 may be made of a length suitable for supporting any desired number of containers 11 and their associated measuring devices.

While I have shown a grate-like shutter embodying the tines 31 for preventing merchandise from falling from the container 11 into the receptacle 6, a shutter for such purpose may be made to embody a solid plate of sheet metal instead of tines, like the tines 31, but a shutter formed of tines like tines 31 has the advantage in operation of not being so easily obstructed in its movements by some forms of merchandise, as, for instance, merchandise composed of a mixture of shelled nuts, loose raisins and small pieces of candy, while a shutter made of a solid metal plate has the advantage of being adapted to control the flow from the container 11 into the receptacle 6 of merchandise that is of a granular form, like granulated sugar.

The operation of a structure embodying my invention, in the manner illustrated by the drawings, may be described as follows: The lever 18 is disposed in the position indicated by dotted lines 22 which will thus cause the left hand portion of the shutter plate 16 to be disposed directly beneath the bottom of the receptacle 6 and the lever 27 in a position to dispose the tines 31 exterior to the top portion of the receptacle 6, and thereupon the cover 13 is removed from the container 11 and a desired merchandise, as, for instance, shelled peanuts, is introduced into the container 11 to fill it and the recep-

tacle 6 whereupon the cover 13 is replaced to protect the contents of said container 11 from dust and dirt.

Then, if it be desired to extract a quantity
 5 of peanuts from the container 11 that is equal to the quantity contained within the receptacle 6, then the lever 18 is swingingly moved toward the right hand to engage with the limit pin 20 to assume the position shown
 10 by dotted lines 21 in Fig. 1, and in the course of such movement of the lever 18, when it arrives to the position shown by full lines in Fig. 1, where it is midway between the limit pins 19 and 20, the tines 31 will have assumed the position shown in Fig. 2, thus to
 15 intercept the passage of peanuts from the container 11, and a continued movement of the lever 18 to the limit pin 20 will cause the shutter plate 16 to be disposed in the position indicated by dotted lines 17 in Fig. 2,
 20 thus to permit the contents of the receptacle 6 to fall into the scoop 34 which may then be withdrawn from the supporting base 5 to empty it into a paper bag for delivery to a purchaser, and then the lever 18 is swung
 25 back into engagement with the limit pin 19 again to cause the left hand half portion of the shutter plate 16 to close the bottom of the receptacle 6 and to cause the tines 31 to be withdrawn from the upper portion of
 30 said receptacle 6 thus to permit it again to be filled with peanuts.

If it be desired to extract a smaller predetermined quantity of peanuts or other merchandise from the container 11, then the container 11 is removed temporarily and a hollow cylinder, like the cylinder 33 of a required diameter, is disposed within the receptacle 6, as indicated in Fig. 4, whereupon
 35 the container 11 is replaced in its socket and again filled with merchandise which can then be extracted in successive quantities measured by the receptacle 6 in the manner described.

45 Manifestly, changes may be made in the forms, dimensions and arrangement of parts of my invention without departing from the spirit thereof.

What I claim is:

50 In a structure of the class described, the combination with a hollow supporting base having a hole through its top wall, of a

receptacle of the form of a hollow cylinder disposed to project downwardly through said hole with its upper end portion fastened
 55 to said top wall, said upper end portion being provided with a slot extending through one side of its cylindrical wall; a container having an opening through its bottom and adapted to be disposed to rest on said top
 60 wall with its said opening over the hole through said top wall of said supporting base; shaft bearings associated with said receptacle with their axes in the same vertical line spaced from and parallel with the exterior cylindrical surface of said receptacle;
 65 a shaft vertically disposed to be rotatively movable in said bearings with its upper end portion projecting above the surface of said top wall; a shutter plate of the form of a
 70 sector rigidly fastened to the lower end portion of said shaft in a position to adapt it to swing in a horizontal plane to a position where it will serve as a removable bottom for said receptacle; a hand lever fastened to
 75 the upper end portion of said shaft to swing in a horizontal plane above said top wall; a grate-like shutter freely mounted on the upper end portion of said shaft adjacent to the underside of said top wall and adapted to
 80 be rotatively movable in a horizontal plane to project it through the slot in the upper portion of said one side of the wall of said receptacle thereby to obstruct the passageway between said receptacle and said container;
 85 and a helical spring associated with said shaft and with said grate-like shutter, and adapted to exert its force with a tendency to dispose said grate-like shutter to register with a certain portion of said shutter
 90 plate with respect to its circumferential position on said shaft whereby when said shutter plate is not in a position to serve as a bottom wall of said receptacle, then said grate-like shutter will be in a position to
 95 obstruct the passageway between said container and said receptacle.

In witness whereof, I hereunto subscribe my name this 11th day of May A. D. 1917.

CARLOS COX.

Witnesses:

W. T. ODLIN,
 EMMA H. CREESE.