June 23, 1925. 1,543,249

W. H. CRAVEN

CARTON FILLER

Filed Sept. 3. 1924

Fig: 1.

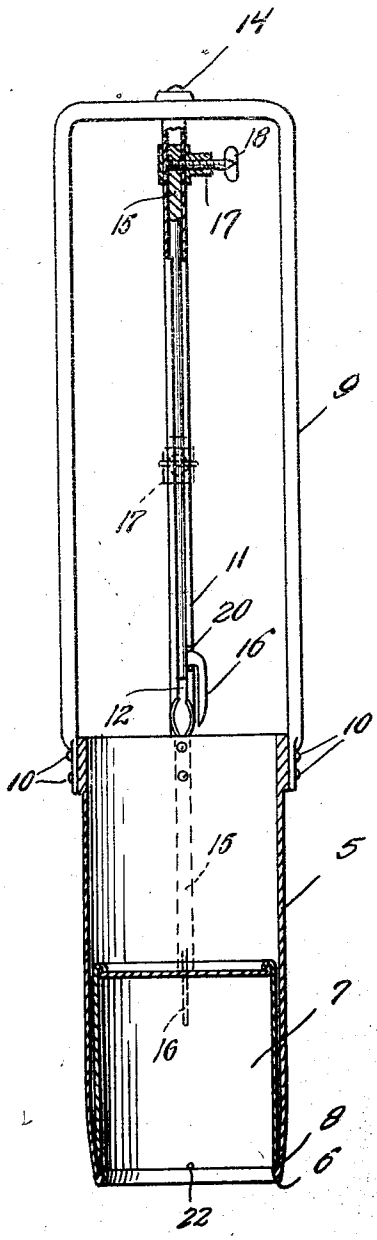


Fig: 2.

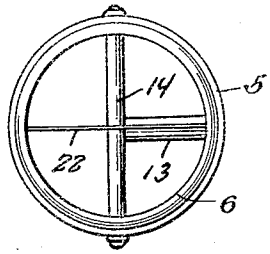
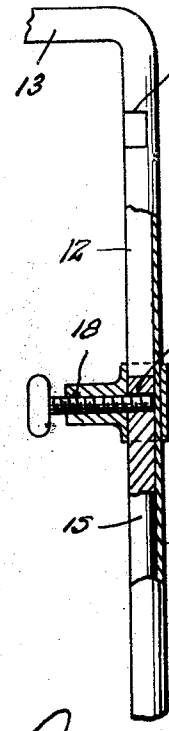


Fig: 3.



Inventor
W. H. Craven.

By Clarence A. O'Brien

Attorney

Patented June 23, 1925. 1,543,249

UNITED STATES PATENT OFFICE.

WILLIAM H. CRAVEN, OF PHILIPSBURG, PENNSYLVANIA.

CARTON FILLER.

Application filed September 3, 1924. Serial No. 735,620.

To all whom it may concern:

Be it known that I, WILLIAM H. CRAVEN, citizen of the United States, residing at Philipsburg, in the county of Center and State of Pennsylvania, have invented certain new and useful Improvements in Carton Fillers, of which the following is a specification.

This invention relates generally to devices for use by confectioners, and has more particular reference to a means whereby the well known form of cylindrical shaped ice cream cartons may be filled, without requiring the ice cream to be dipped by scoop or spoon from the ice cream container and then packed into the carton, which is now generally the method employed in the filling of the same.

The primary object of my invention resides in the provision of a device whereby the cylindrical shaped carton may be disposed therein after which the entire device may be forced downwardly into the body of the ice cream, resulting in the filling of the carton.

An additional object of the invention is to provide novel means for puncturing the bottom wall of the carton whereby the air will be displaced therefrom in the forcible filling of the same.

A further and important object is to provide a device of this character, whereby ice cream cartons may be filled in a more expeditious manner than is now possible, when filling the same by hand, and in the manner now carried out.

A still further object is to provide a device of the foregoing character, wherein the carton may be easily positioned therein or removed therefrom, and wherein cartons of varying length may be filled, through the medium of the present device.

With the foregoing and other objects in view, as the nature of the invention will be better understood, the same comprises the novel form, combination, and arrangement of parts hereinafter more fully described, shown in the accompanying drawings, and claimed.

In the drawing, wherein like reference characters indicate like parts throughout the several views:

Figure 1 is a vertical sectional view, of a device constructed in accordance with the present invention, the parts being shown as actually associated therewith.

Figure 2 is a bottom plan view of the device, and

Figure 3 is an enlarged fragmentary sectional view of a pin carrying rod guide that forms the essential part of the present invention, said view disclosing more fully the means for locking the rod at the desired point within said guide.

Now having particular reference to the drawing, my novel invention constitutes the provision of an open ended metallic cylinder 5, of desired length, the lower edge of which is so formed as to provide a cutter 6. The well known form of ice cream box 7 is adapted to be disposed within said cylinder in an inverted position, the lower open edge thereof engaging a shoulder 8 formed upon the interior of the cylinder at the cutter edge, for preventing the displacement of the carton with respect to said cylinder, when the same is held in position for the filling of the carton.

Secured to the upper open end of the cylinder 5 is the relatively elongated inverted U-shaped handle 9, the legs of which are secured, as at 10, to the upper end of the cylinder and at diametrically opposite points thereon.

Secured at its lower end to the upper open edge of said cylinder 5 and intermediate the legs of the handle 9 is a tubular rod guide 11, formed throughout its length with the slot 12, upon the inner side thereof, the upper end of this guide being bent inwardly, as at 13, whereby the same may be secured as at 14, with connecting portions of the legs of said handle 9.

It will be obvious that in the filling of the carton 7 through the use of the present device, it will be necessary that an opening be provided in the bottom wall of the carton for allowing the air to pass outwardly therefrom, during the time that the ice cream is forced thereinto, and for providing said opening, and for also maintaining the carton in firm engagement within the cylinder, there is provided a rod 15 slidably disposed within the tubular guide 11, the lower end of which is formed with an outwardly offset pendant pin 16 which is forced downwardly through the bottom wall of the carton, through the medium of a hand knob. The pin is formed with an intake groove to allow the air from the container to pass therethrough. The han-

dle includes a threaded stem 18 that extends from the knob for threaded relation with a screw threaded opening 19 at the upper end of said rod 15, whereby a turning of the stem will wedge the sleeve 17 against the tubular guide 11 for preventing movement of the rod within said guide, and this especially when the pin 16 punctures the bottom wall thereof and is serving as a means for rigidly maintaining the carton within the cylinder.

In removing the carton 7, it is necessary that the pin 16 be moved to one side of the cylinder, and for this purpose the guide 11 is formed adjacent its lower end with a notch 20, within which the upper bent portion of the pin may seat. It is also noted from a consideration of Figure 3 that an additional notch 21 is formed adjacent the upper end of said guide member for allowing the threaded stem 18 to be seated therein, as shown. This notch 21 cooperates with the notch 20 to permit the rod 15 to be turned within the guide 11. In other words, when the rod 15 is entirely up, or in raised position as shown in Figure 1 and the bent end of the finger 16 is seated in the notch 20, that portion of the threaded stem 18 opposite the notch 21 will drop into the latter.

Adjacent the lower open end of the cylinder 5 is a cross wire 22, that also serves as a means for preventing displacement of the carton with respect to the cylinder, while also serving as a means for scraping the excess ice cream from the lower edge of the carton, after the same has been entirely filled, it being of course understood that during the filling of the carton, the device must be turned in opposite directions while being forced into the ice cream. Thus it will be seen that I have provided a highly novel, simple and efficient device for use in the filling of ice cream boxes and one that will meet with all of the requirements for a successful commercial use.

Minor changes may be made in the invention, without departing from the spirit and scope of the appended claim.

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

A carton filler of the class described comprising an open ended comparatively long cylinder provided at its bottom with a cutting edge and an internal shoulder, said cylinder being adapted to receive the carton to be filled, a U-shaped bail, the arms of which are attached to the upper end of said cylinder, a tubular and slotted guide secured at its lower end to the cylinder and having its upper end directed laterally inward and connected to the intermediate part of the bight of said bail, a rod slidably mounted in said guide, said rod being provided at its lower end with a pointed spur intended to penetrate the bottom of a carton, said spur being connected to the rod through a laterally directed part movable in the slot of said guide, and retaining means carried by the upper end of the rod and slidably mounted upon the guide for holding the rod in said positions.

In testimony whereof I affix my signature.

WILLIAM H. CRAVEN.