J. Q. STEPHENS.

COMBINATION SHIPPING, PACKING, AND DISPENSING DEVICE.

APPLICATION FILED NOV. 28, 1919.

1,388,977. Patented Aug. 30, 1921.

FIG. 1.

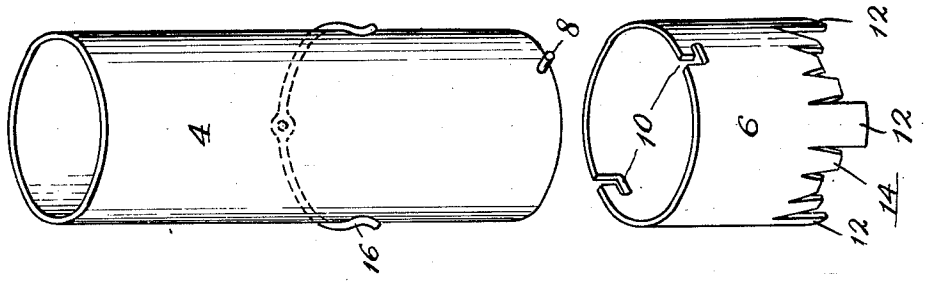


FIG. 2.

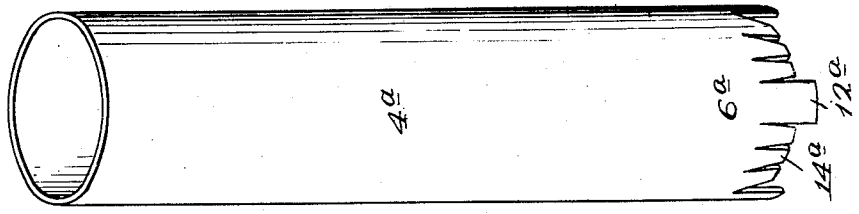


FIG. 3.

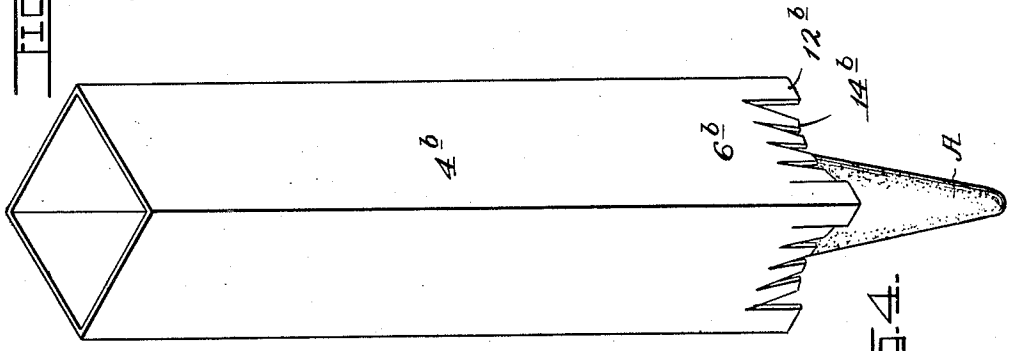
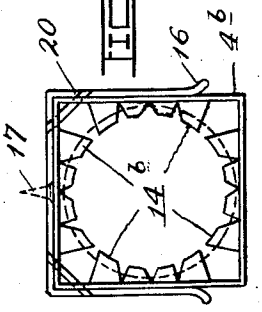


FIG. 4.



WITNESS:

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UNITED STATES PATENT OFFICE.

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COMBINATION SHIPPING, PACKING, AND DISPENSING DEVICE.

1,388,977. Specification of Letters Patent. Patented Aug. 30, 1921.

Application filed November 28, 1919. Serial No. 340,988.

To all whom it may concern:

Be it known that I, JAY QUINCY STEPHENS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Combination Shipping, Packing, and Dispensing Devices, of which the following is a specification.

My invention relates to a combination packing, shipping and dispensing device, and my object is to provide a simple, inexpensive and efficient device of this character in which ice cream cones, cup pastry, candies, paper cups and other articles may be safely packed, shipped, and dispensed one at a time, without the use of extraneous retaining or dispensing attachments. However, it is further contemplated that the dispensing feature of the invention can be used as a separate dispensing member to be attached to any container or carton of similar size and shape for the purposes herein set forth.

A further object is to provide a device which obviates the necessity of handling the individual articles or removing them from the original packing, shipping and dispensing device from the time they are packed therein by the manufacturer until finally dispensed for consumption, thus insuring that the articles be delivered from the device in a clean and sanitary condition.

In order that the invention may be fully understood reference will now be made to the accompanying drawing, in which:

Figure 1 is a perspective view of a container having a dispensing member, detachably secured thereto.

Fig. 2 is a perspective view of a container which is circular in cross section and has the dispensing member formed integral therewith at its lower portion.

Fig. 3 is a perspective view of a container which is rectangular in cross section and has a dispensing member formed integral therewith at its lower portion.

Fig. 4 is a plan view of the container disclosed by Fig. 3, with a holder, for supporting said container in active position.

Referring first to the form disclosed by Fig. 1, 4 designates a circular container which may consist of opaque material, such as paper, straw-board, or light metal, or transparent or translucent material such as mica, glass or celluloid.

6 designates a dispensing member which is detachably secured to the lower end of the container 4 by any suitable means, pins 8 and slots 10 being shown in the present instance. The dispensing member 6 is provided at its lower end with protecting guards 12 and retaining elements, fingers or tongues 14, which are formed by notching, cutting, or otherwise treating the lower end of said dispensing member 6.

The retaining elements 14 are bent inwardly to grasp the lowermost article in the device snugly enough to prevent said article from falling out by its own weight or from being forced out by the weight of the superimposed articles, but not tightly enough to prevent said lowermost article from being easily extracted by hand. The retaining elements 14 may be made in any number, length size or shape required.

The guards 12 constitute protecting means to prevent the retaining elements 14 from being broken or crushed in the course of packing or shipping, and also afford additional protection in preventing breakage to the lower end of the lowermost article in the device. Said guards 12, may if desired, be given added rigidity by treating them with a suitable solution or compound.

In practice the dispensing member 6 is secured to the lower end of the container 4, which is then filled with ice cream cones or other articles to be dispensed. The container may then be wrapped in paper and either forwarded individually or packed in a box or case with others for shipment. On receipt of the filled container by the consumer or retail dealer, as the case may be, said container is removed from its wrapper or shipping case and held in a vertical position either by hand or by a clamp 16, or other suitable support. When the container is thus placed in a vertical position the articles therein feed downwardly by the force of gravity until the lowermost article rests upon the retaining elements 14, which hold it until it is grasped and drawn downwardly out of engagement with said retaining elements 14. As force is applied to the article to withdraw it from the dispensing member 6, the retaining elements 14 spread apart and permit said article to pass, after which they immediately spring inwardly to engage and intercept the succeeding article. In order to overcome all chance of more than one article passing outwardly at the same time

when the retaining elements 14 spread apart as above-mentioned, said retaining elements may be made in different lengths, so that the shorter ones will spring into engagement with the following article before the article being withdrawn is fully released by the longer retaining elements 14.

I find in practice that when the dispensing member 6 is made of straw-board or other heavy paper, added resiliency of the retaining elements 14 is had by treating them with a coating of shellac, silicate of soda, or other suitable solution or compound. In case the combined weight of the articles is such as to overcome the restraining force of the retaining elements, especially in the form shown in Fig. 3, it is advisable to increase such restraining force by placing the container in the supporting clamp 16 in such position that said clamp will press over or adjacent to the retaining elements, or if the device is held in the hand added pressure may be had with the fingers.

In the form disclosed by Fig. 2, the container 4^a and the dispensing member 6^a are formed integral with each other instead of being detachable as in the form disclosed by Fig. 1, otherwise the parts are approximately the same as evidenced by corresponding reference numerals with exponents *a*. The retaining fingers in the form shown in Fig. 2 are indicated by the reference character 14^a and the guards are indicated by the reference character 12^a.

In the form disclosed by Figs. 3 and 4, the container 4^b and the dispensing member 6^b are formed integral with each other as in the form disclosed by Fig. 2, the chief difference being that said container 4^b and dispensing member 6^b are rectangular in cross section instead of being circular. Otherwise the construction is the same as evidenced by corresponding reference numerals with exponents *b*. I find that the forms disclosed by Figs. 3 and 4, are the least expensive to manufacture. The retaining fingers in the form shown in Fig. 4 are indicated by the reference character 14^b and the guards by 12^b.

In the form disclosed on Fig. 5, the container 4^c and the dispensing member 6^c are formed integral with each other and may be either circular, rectangular or of any other suitable cross sectional configuration. The chief difference between this form and the forms disclosed by Figs. 2 to 4, inclusive, resides in placing the retaining elements 14^c at the upper end of the dispensing member 6^c, which is elongated to extend downwardly to the lower end of the lowermost article A, arranged in the device for dispensation. By thus elongating the dispensing member 6^c, the articles are retained wholly within the device and when in dispensing position said articles are not exposed to dust, flies, etc. The retaining elements 14^c are formed by cutting openings in the wall of the device and then pressing the resultant retaining elements inwardly and downwardly to render them resilient, so that they will grasp and support the lowermost article A.

The supporting clamp 16 is provided at its rear portion with a fastening device, such as a screw 17, whereby it may be secured to any suitable support. Should the clamp 16 fail to prevent the container from slipping downwardly when an article is withdrawn from the dispensing member, pins 20 may be passed through the container as disclosed on Fig. 4, and overlap the said clamp 16.

From the foregoing description it is apparent that I have produced a combination packing, shipping and dispensing device embodying the advantages above pointed out, and while I have shown several forms of the device I reserve the right to make such other changes in the size, shape and length of the parts as properly fall within the spirit and scope of the appended claims.

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

1. A device of the character described consisting of a tubular container for holding articles to be dispensed, retaining elements associated with said container to yieldably engage and support the articles in position for dispensation, a clamp to embrace and support said container in active position, and pins secured to the container and adapted to overlap said clamp, for the purpose described.

2. A combination shipping, packing and dispensing device consisting of a tubular container cut to provide retaining elements which are inclined inwardly, and are treated to render them resilient.

3. A device of the character described consisting of a tubular container having one end notched to form fingers which are inclined inwardly and treated with a suitable solution or compound to cause them to normally retain such inclined position.

4. A device of the character described consisting of a tubular container having one end indented to form fingers and posts, said fingers being inclined inwardly and treated with a suitable solution or compound to cause them to normally retain such inclined position.

5. A device of the character described, embodying a tubular body having one end notched to form article retaining fingers and leave guard posts adjacent to said fingers.

6. A device of the character described, embodying a tubular body having one end notched to form article retaining fingers and

leave guard posts adjacent to said fingers, said guard posts being treated with a composition to render the material of the same of greater rigidity than that of the remainder of the body.

7. A device of the character described, embodying a tubular body having one end notched to form article retaining fingers and leave guard posts adjacent to said fingers, said fingers and guard posts being treated with a composition to render the material of the same of greater rigidity than that of the remainder of the body.

In testimony whereof I affix my signature, in the presence of two witnesses.

JAY QUINCY STEPHENS.

Witnesses:
F. G. FISCHER,
L. J. FISCHER.