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CONFECTIONERY EXTRUDING MOLDER

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2 Sheets-Sheet 1

FIG. 1.

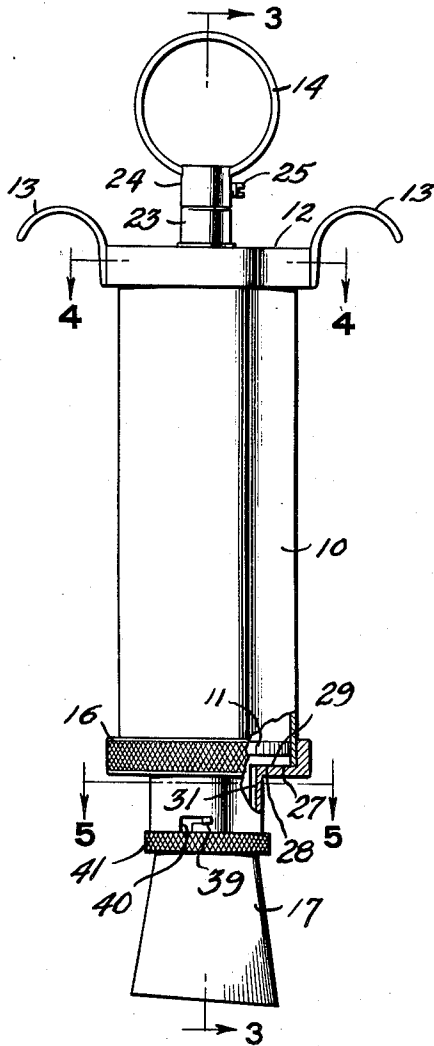


FIG. 3.

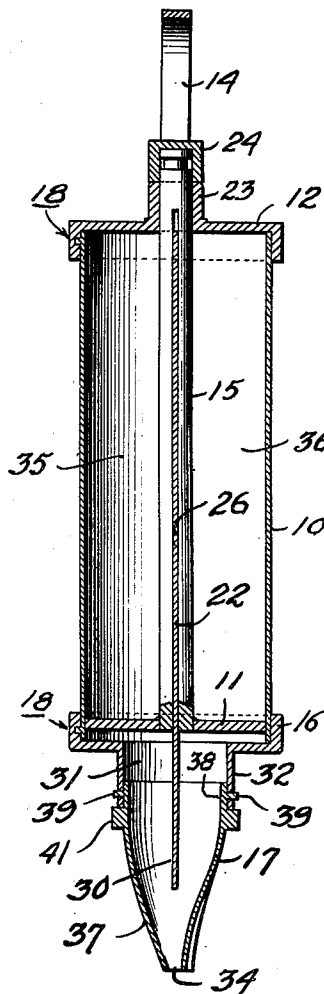


FIG. 4.

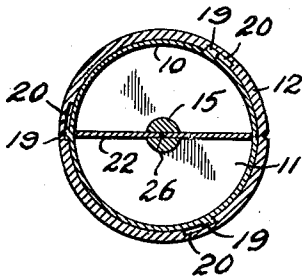
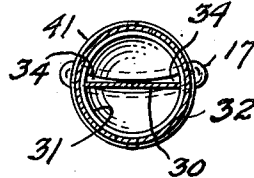


FIG. 5.



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CONFECTIONERY EXTRUDING MOLDER

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4 Claims. (Cl. 107-52)

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This invention relates to confectionery molders or decorating devices of the character using pistons and cylinders as containers which may be charged with plastic substances and provided with interchangeable nozzles thru which the plastic substances are extruded in ribbon or other forms upon pressure exerted upon the plastics in the containers.

In the past such general combination of piston, cylinder and nozzle has been used extensively to decorate cakes, candies and other edibles with ornaments in the nature of rosettes, flowers, scalloped borders, etc., each of a selected color. Attempts have been made to provide such equipment whereby two or more different colors or shades of color may be extruded from the nozzle, but with them difficulty has been experienced either in preventing the different colors or shades from flowing unevenly from the nozzle so that more of one color or shade is extruded than desired when the plastics of different colors or shades are not definitely separated in the container, or if definitely separated in the container then there are limitations as to the type of ornament that may be produced, such as to merely provide a center of one color and a surrounding area of a different color. Further equipment heretofore required for this art has been complicated and too expensive to produce to make it practical for extensive use.

The principal object of the present invention is to provide a molder which may be used in producing ornaments made from plastics of different colors or shades of colors, and where the resulting product will be highly satisfactory and attractive in that unintentional extruding of more of one color or shade of color than of the other may be easily avoided. In a practical use of the molder, flowers (such as roses by way of example, having petals of one color or shade on one side and a different color or shade on the other side), may be imitated in a manner so that it is difficult, without close inspection, to distinguish the imitation from the real article.

Other objects of the invention are to produce molders which may be easily cleansed, may comprise a number of different types of nozzles, any of which may be easily and quickly attached to the containers, and which may be manufactured at a low cost so that the invention may be brought within the means of a vast number of users who may practice the decorating art and use the molder as described herein.

Another object of the invention is to provide several improvements in molders of the type dis-

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closed in my copending application for confectionery molders filed October 18, 1946, Serial No. 704,153, to simplify the construction and overcome difficulties which may be experienced due to improper handling of a molder in accordance with the construction illustrated therein.

Further objects and advantages of the invention will appear in the following detailed description of a highly satisfactory embodiment of my invention, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing:

Fig. 1 is a side elevational view of a molder, constructed according to the present invention, a portion being broken away and shown in section to disclose certain details of construction.

Fig. 2 is an exploded side elevation of the molder casing and parts removed therefrom and likewise shown in side elevation.

Fig. 3 is a longitudinal vertical sectional view of the molder taken on line 3-3 of Fig. 1.

Figs. 4 and 5 are transverse sectional views of parts of the molder taken on line 4-4 and 5-5 respectively of Fig. 1.

Figs. 6 and 7 are detail perspective views of elements of the molder, Fig. 7 being a cross sectional view in perspective.

Referring to the drawings a confectionery molder in accordance with my invention is illustrated in general as applied to a type of dispenser comprising a casing 10 and cylindrical piston 11 particularly well adapted for dispensing plastic pastry material for use in decorating cakes, and the like. The casing has an upper head end member 12 with lateral finger grips 13 for cooperation with an operator 14 in the form of a ring mounted on the outer end of piston rod 15 on the inner end of which piston 11 is mounted. On the other end of cylindrical casing 10 a connector head 16 is mounted for the mounting of a molding nozzle 17 thru which the plastic pastry material is ejected in a decorating process.

While dispensers of the general characteristics above described have been in general use, as well as those generally comprising a flexible bag or container equipped with a nozzle of which the invention disclosed in my aforesaid application is an improvement, the present invention embodies improvements applicable to each of said types.

In the usual form of such cylindrical casing dispensers, the matter of cleaning and assembling of the parts has been a problem which is simplified in accordance with improved constructions in accordance with my invention. The cyl-

inner casing 10 in accordance with my invention is a plain but sturdy cylindrical tube without threads at its ends which become clogged with plastic material. In place of such threads I employ bayonet joint type of connections 18 for both heads 12 and 16. As best shown in Fig. 2, each end of the cylinder has three equally spaced bayonet joint projecting lugs 19 for cooperation with three bayonet joint slots 20 in each of the head members, 12 and 16. Thus the head members fit interchangeably on the ends of cylinder 10 and it is immaterial which end of the casing is positioned at the top, the casing being otherwise perfectly plain except for a single index mark 21 at each end midway between a pair of the lugs 19 as a guide for coupling head 16 which has a corresponding index mark 21' thereon and the positioning of a partition member 22 in the casing. Such index marks are employed solely for the positioning of the partition 22 in the casing as will be subsequently explained.

The upper head member 12 has a concentric bushing 23 providing a bearing thru which piston rod 15 extends and is free to turn and reciprocate, and operating ring 14 is secured to a collar 24 which is removably secured on the piston rod 15 by means of a set screw 25 altho it may be otherwise or permanently secured in place after the head 12 is once in position on the piston rod 15 as the subsequent disassembly of this operating member from the piston rod 15 is not essential. Piston rod 15 has a longitudinal slot 26 therein extending from a point adjacent to its upper end corresponding with the top of casing 10 when piston 11 is in the bottom thereof and entirely thru piston 11 thereby bifurcating the piston and its rod so that it will straddle partition 22 when it is inserted in casing 10.

Partition 22 has a width substantially the same as the internal diameter of cylinder casing 10 and is generally rectangular in shape so as to divide the cylinder into two compartments of substantially equal volumes. When positioned in the cylinder with the nozzle head 16 in position its lower corners 27 and portions 28 seat against the inner face 29 of head 16. Partition 22 has an integral extension 30 shaped to conform with the inner surface 31 of the reduced cylinder portion 32 of head 16 and for a distance downward in nozzle 17 short of the lower end thereof as best shown in Fig. 3. In my earlier application the corresponding partition extends integrally with and to the open end of the nozzle. However as an improvement the partition 22 herein is removable as a unit and by having its lower end 33 above the nozzle opening 34 plastic confectionery materials of different colors in the two compartments 35 and 36 of casing 10 are brought into intimate contact so as to unite without mixing to any substantial degree before they are ejected from the nozzle opening 34.

Nozzle 17 for illustrative purposes has a lower dispensing jet formation 37 similar to that disclosed in my earlier application of concavo-convex construction for the formation of rose petals and the like as fully described and claimed in my said earlier application, tho other forms of dispensing jets may be employed with the present confectionery molder within the broadest scope of my invention. The nozzle 17 has an upper cylindrical portion 38 for slidably fitting the inner cylindrical surface 31 of cylinder portion 32 of head 16. A pair of studs 39 for engaging in a corresponding pair of bayonet slots 40 in cylinder 32 which fix the position of nozzle 17 in

cooperation with head 16 and the index marks 21 on cylinder 10 when these parts are assembled. Just below studs 39 nozzle 17 is formed with a manual manipulating collar 41 which also acts as an abutment for engaging the lower end of the nozzle head cylindrical portion 32. Below collar 41 the nozzle 17 is shaped, flared laterally and curved to provide the elongated nozzle opening 34 for the dispensing jet formation 37 as referred to above.

It will be noted that in positioning partition 22 in cylindrical casing 10 the index marks 21 define the position of the nozzle jet formation 37 with respect thereto and also the position in which partition 22 is to be inserted for molding rose petals having one color of the plastic confectionery material on one side and another shade or color on the opposite side, the partition extending into the nozzle so as to form the separate layers of uniform thickness in accordance with the arrangement set forth in the earlier application.

The present arrangement has numerous advantages over my prior arrangement. According to the present arrangement, as above set forth, the two layers of different plastics are positively united before leaving the jet. The partition with its lower extension extending into the nozzle is a single integral piece. If the type of molding nozzle applied to the head 16 is not of a character to produce ejections of ribbon-like formation, differently colored, but rather of any of the ordinary molding nozzles such as for simulating rope, or where a ribbon-like formation having no difference in color at opposite faces is desired, care need not be exercised in accurately positioning the partition 22 and its extension 30 with respect to the cylinder 16 and the molding nozzle 17.

I claim:

1. A confectionery molder or the like comprising, a cylindrical casing, a lower nozzle head and nozzle for one end of the casing, an upper head for the other end of the casing, a piston reciprocable in said cylindrical casing, a piston rod extending from said piston and thru said upper head, an operating handle on the outer extending end of said piston rod, said piston rod having a longitudinal slot therein extending substantially the length of the cylindrical casing and thru the piston bifurcating these members, and a rectangular partition extending thru the said slot in the piston rod and piston crosswise of the cylindrical casing and from end to end thereof dividing the casing into two separate compartments.

2. A confectionery molder or the like comprising, a cylindrical casing, a lower nozzle head and nozzle for one end of the casing, an upper head for the other end of the casing, a piston reciprocable in said cylindrical casing, a piston rod extending from said piston and thru said upper head, an operating handle on the outer extending end of said piston rod, said piston rod having a longitudinal slot therein extending substantially the length of the cylindrical casing and thru the piston bifurcating these members, a rectangular partition extending thru the said slot in the piston rod and piston crosswise of the cylindrical casing and from end to end thereof dividing the casing into two separate compartments, and an integral extension on the lower end of said partition extending thru the nozzle head member and into the nozzle.

3. A confectionery molder or the like comprising, a cylindrical casing, a lower nozzle head and

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nozzle for one end of the casing, an upper head for the other end of the casing, a piston reciprocable in said cylindrical casing, a piston rod extending from said piston and thru said upper head, an operating handle on the outer extending end of said piston rod, said piston rod having a longitudinal slot therein extending substantially the length of the cylindrical casing and thru the piston bifurcating these members, a rectangular partition extending thru the said slot in the piston rod and piston crosswise of the cylindrical casing and from end to end thereof dividing the casing into two separate compartments, and an integral extension on the lower end of said partition extending thru the nozzle head member and into the nozzle terminating in the nozzle above the lower end thereof whereby plastic materials in the compartments will be brought into contact with each other and united before they are ejected from the nozzle.

4. A confectionery molder or the like comprising, a cylindrical casing, a lower nozzle head and nozzle for one end of the casing, an upper head for the other end of the casing, a piston reciprocable in said cylindrical casing, a piston rod extending from said piston and thru said upper head, an operating handle on the outer extending end of said piston rod, said piston rod having

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a longitudinal slot therein extending substantially the length of the cylindrical casing and thru the piston bifurcating these members, a rectangular partition extending thru the said slot in the piston rod and piston crosswise of the cylindrical casing and from end to end thereof dividing the casing into two separate compartments, and an index mark on an end of the cylindrical casing for defining the position of the partition member in the casing with respect to the nozzle.

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