July 7, 1936. J. P. BURKE 2,046,869

TABLET DISPENSING CONTAINER

Filed Jan. 24, 1935

Fig. 1

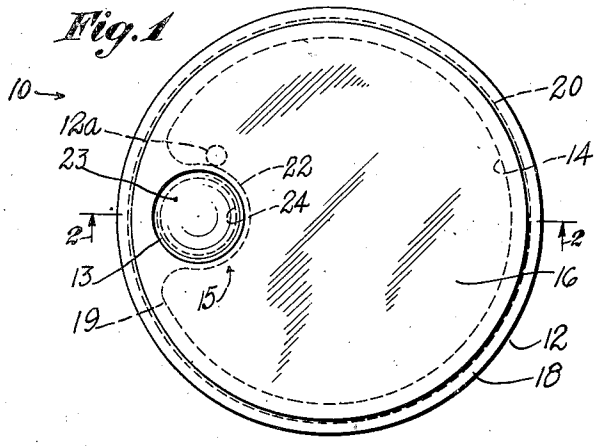


Fig. 3

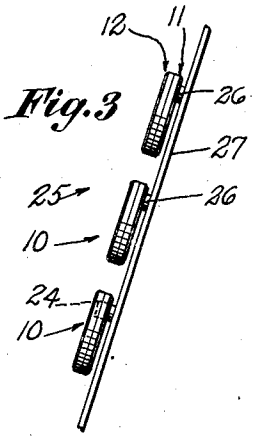


Fig. 2

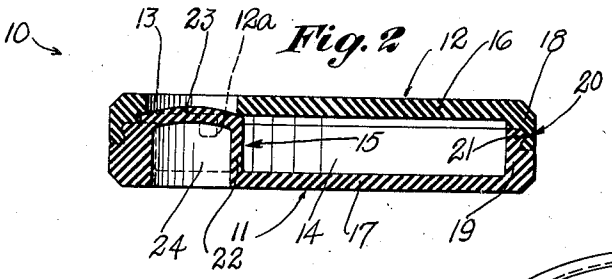


Fig. 4

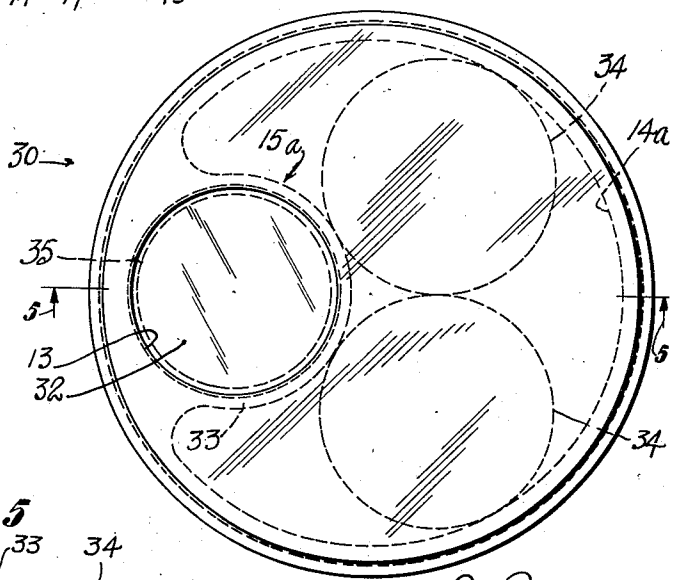
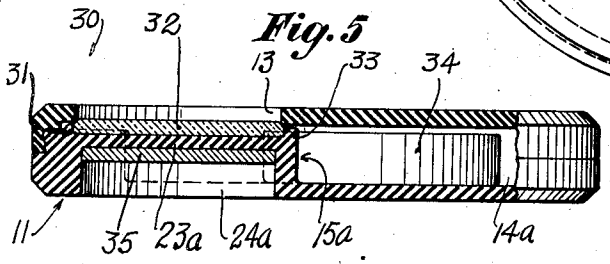


Fig. 5



INVENTOR.
James P. Burke
BY
Louis Schumacher
ATTORNEY.

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2,046,869

TABLET DISPENSING CONTAINER

James P. Burke, Knoxville, Tenn., assignor to Electro Chemical Corporation, Knoxville, Tenn., a corporation of Tennessee

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10 Claims. (Cl. 206—42)

This invention relates to devices such as containers and has particular reference to dispensing containers and the like; and to methods of making containers.

One object of the invention is to provide a device of the character described having improved closure means; and closure means having improved stop coaction therein; and the closure constituting an integral portion of the container in improved association therewith.

Another object of the invention is the provision of a device including a plurality of sections movable relatively to each other and interengaged in an improved manner; also closure means on one section in improved coaction with a port on the other section; and closure means in improved reenforcing association with a container section.

Another object is to provide an improved method of making a device having an offset closure portion continuous with a wall of the device and particularly adapted for manufacture as a one piece stamping or molded article so as to require as little material as possible.

Another object is to provide a device of the type mentioned having improved means including a tubular closure for a port with the opening of the closure arranged to afford a finger hold relative to the port for conveniently causing a movement between the container sections; and further to provide such a closure adapted to serve as a mounting for the device or as an auxiliary container, or both.

Another object of the invention is to provide a device having few and simple parts, adapted for quantity production, neat and compact, durable, reliable, and efficient in use, and adapted to be embodied in a dispensing container or container for exhibiting objects or placing them in operative position, and the term dispensing may be considered as including such features.

Other objects and advantages of the invention will become apparent as the specification proceeds.

With the aforesaid objects in view, the invention consists in the novel combinations and arrangements of parts hereinafter described in their preferred embodiments, pointed out in the subjoined claims, and illustrated in the annexed drawing, wherein like parts are designated by the same reference characters throughout the several views.

In the drawing:

Figure 1 is a plan view of a device embodying the invention.

Fig. 2 is a vertical sectional view thereof taken along the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary view in end elevation showing a display device embodying the invention.

Fig. 4 is a plan view of a modification of the invention.

Fig. 5 is a fragmentary sectional view taken on line 5—5 of Fig. 4.

The advantages of the invention as here outlined are best realized when all of its features and instrumentalities are combined in one and the same structure, but, useful devices may be produced embodying less than the whole.

It will be obvious to those skilled in the art to which the invention appertains, that the same may be incorporated in several different constructions. The accompanying drawing, therefore, is submitted merely as showing the preferred exemplification of the invention.

Referring in detail to the drawing, 10 denotes a device embodying the invention. The same may include a plurality of sections 11, 12 of which the latter may constitute a cover for section 11. The cover 12 may have a port 13 communicable with the chamber 14 in the container, and the section 11 may have a closure means 15 for said port. The sections 11 and 12 may be arranged for movement relative to each other in any suitable manner to cause the closure 15 to move into and out of engagement with the port 13. A simple arrangement is to provide for coaxial relative rotation between the container sections with the port and its alined closure eccentric to the container axis.

Accordingly the sections 11, 12 include circular spaced walls 16, 17 respectively, these having corresponding circular or cylindrical walls or flanges 18, 19. A movably operative snap interengagement may be employed, including, for instance, an annular internal groove 20 in the flange 18, and a corresponding annular rib 21 on the flange 19, adapted to snap into the groove 20 for interconnecting the sections for relatively easy rotation, as desired.

The closure 15 is formed hollow, and may be of suitable shape, for instance, circular, with a cylindrical side wall 22 and a top wall 23 closing the hollow or tubular space 24 in the closure. The wall 22 merges at one side into an adjacent portion of the wall 19 and is continuously connected to the bottom wall 17. According to this arrangement it is seen that the closure 15 is offset but continuous with the walls 17 and 19 and provides an S shaped formation whereby

the section 11 is simple in construction and is reenforced. The closure may extend into suitable proximity or contact with the wall 16, as at the rim of the port 13, and the wall 23 is desirably upwardly concaved to releasably engage in said port in the manner of a stop. The tubular opening 24 of the closure is in alinement with the port and on a side of the container opposite to the port so that an operator may conveniently engage openings 13 and 24 with the fingers of one hand to cause a relatively angular movement between sections 11, 12 to open the container. Likewise the container can be conveniently closed. As the closure wall 23 does not materially extend into the opening 13, the latter is available as a finger hold. In the open position of the container, the wall 23 may have a slight frictional braking action with the wall 16, if preferred.

The device 10 may be conveniently mounted for a display 25 by using the tubular chamber 24 to frictionally removably receive a suitable finger or tongue 26 cut and bent out of the plane of a sheet of cardboard 27 or the like.

In use the container 10 may be filled with tablets placed in section 11, and then section 12 may be axially applied and snapped on at 20, 21 with the flanges 18, 19 yielding slightly. The cover 12 may then be turned to cause the closure 15 to snap into engagement with the port 13. This can be done by placing the tips of two fingers of one hand in port 13 and in opening 24, and in the same manner the container port can be conveniently opened. If desired, a pin, rod or tongue 26 may be removably inserted into chamber 24 for mounting the device 10 as on a display card 27. The chamber 24 may also have axially fitted therein a removable scroll containing an advertisement or instructions concerning the contents of the container. A stop lug 12a integral with cover 12 may project downward to engage the closure 15 and prevent movement thereof in one direction past the port 13.

The method of making the container 10 will now be described. Each section 11 and 12 is desirably of one piece, and can be made as a stamping or molding, as of "bakelite" or the like. The molding of the section 12 offers no problem, since the section can be sprung out of the mold while hot and before being fully cured in which case the material is amply resilient so that the section can be removed without damage to the grooved portion 20 of the flange 18. The molding of the section 11 did however present a problem, according to the novel feature of the invention of making the closure 15 integral with section 11 and extending from the wall 17 all the way across the space between the walls 16 and 17. The problem consisted in that the closure 15 would require first, too much material for producing a very cheap container, and, second, the time for curing the mass at the closure 15 would be too great for sufficiently rapid manufacture to keep down the cost of production. Hence I provided for a hollow, closed ended tubular construction for the closure 15, with the opening thereof opposite to the chamber 14, so that the section 11 can be made by the use of dies and without requiring any special cores. Thus the closure means 15 was formed with a relatively thin wall which can easily be compressed and cured in molding and is continuous with the walls 17 and 19 so as to avoid any break therein.

In Figs. 4 and 5 is shown a device 30 according to a modification of the invention and showing the application thereof to a vanity case. The device may be the same as container 11 in all important respects, except that the closure means 15a for the port 13 may be provided with a circular recess 31 in the top wall 23a thereof to permit a mirror 32 to be pressed, fitted or snapped thereinto so as to be securely held by the marginal lip 33 of the recess. Thus the mirror 32 affords the seating element for sliding engagement with the wall of the cover, and the top surface of the mirror may be beveled or convexed to snap into the port 13 in a stop closure engagement therewith. While a surface such as that of 23 in device 10 can be mirrored, the present arrangement is cheaper to produce. The chamber 14a is adapted to receive compacts of powder and rouge 34 equally angularly spaced with the mirror, and being of equal size therewith, the closure 32 being substantially larger in size relative to the container than that shown at 15. The tubular chamber 24a may receive a device such as a disc or liner 35 which may have one or more colors thereon to constitute a color indicator for use in conjunction with the particular shades of rouge and powder in the container. The device 35 may be removable or not as desired. The device 30 may be made and used in the same manner as the device 10.

It will be appreciated that various changes and modifications may be made in the device as shown in the drawing, and that the same is submitted in an illustrative and not in a limiting sense, the scope of the invention being defined in the following claims.

I claim:

1. A tablet dispensing container including a circular container section, a cover section therefor rotatably engaged with the container section, said sections provided with spaced opposed walls, the wall of the container section having an eccentric irregular portion affording an external recess and an internal raised valve adapted to slidingly contact the wall of the cover section, the latter having a port adapted to move into and out of register with the valve portion to close and open the port upon relative angular movement between said sections, whereby the contents of the container can be controllably discharged.

2. A dispensing device including a container, a cover therefor, said container and cover having spaced opposed side walls and having circular rotatably interconnected walls, the circular wall of the container being within the circular wall of the cover, the side wall of the container having a hollow raised portion integrally reenforcingly connected and continuous with an adjacent portion of the circular wall of the container, the cover having an eccentric port, and said raised portion being movable into and out of register with said port to close and open the same upon relative angular movement between the container and cover.

3. A device including a container having a plurality of container sections having spaced opposed walls rotatably interengaged, the wall of one of the sections having an eccentric opening, the wall of the other section having a raised closure portion extending across the space between said walls and having a convex upper face adapted to snap into and out of engagement with the opening upon relative angular movement between the sections.

4. A device including a container having a plurality of container sections having spaced

opposed walls rotatably interengaged, the wall of one of the sections having an eccentric opening, the wall of the other section having a raised closure portion extending across the space between said walls and having a convex upper face adapted to snap into and out of engagement with the opening upon relative angular movement between the sections, and the wall having the opening having its internal face parallel to the plane of rotary interconnection between the sections, and the curved surface of said raised valve portion having frictional braking contact with the said internal surface upon relative angular movement of the sections away from closing position of said valve portion.

5. A device including a container having a pair of rotatably interengaged container sections, the same having spaced opposed walls, the wall of one section having an eccentric opening portion, the wall of the other section having a raised closure portion extending across the distance between said walls and adapted to snap into and out of engagement with said opening portion upon relative angular movement between the container sections, the section having the opening having a projection adapted for stop engagement with the raised closure portion to prevent the latter from being sprung out of engagement with the opening portion upon being moved into engagement therewith.

6. A container having a plurality of container sections, said sections having continuous marginal flanges, said flanges having means adapted for rotary interengagement so that one of the container sections can be angularly moved relative to the other, said flanges being resilient so that the means of the different flanges can be snapped into engagement with each other, one of said sections having a port and the other section having closure means for opening and closing the port upon relative angular movement between the sections.

7. A device including a container having a plurality of container sections, each being of one piece molded material, said sections having grooved marginal flanges adapted for rotary interengagement, said flanges being yieldable so that flanges can be snapped into engagement with each other at the grooves thereof, one of said sections having a wall having an eccentric opening, the other section having a wall having a raised portion movable into and out of register with the opening to open and close the same upon relative angular movement between the sections, said walls being adapted to house articles therebetween and affording a chamber for such articles lateral to the raised portion.

8. A device including a container having a plurality of sections interengaged for movement relative to each other, one of the sections having an opening, the other section having a portion for closing and opening said opening upon relative movement between the sections, and a mirror mounted on said portion so as to be operatively visible through said opening when said portion is in a position to close said opening.

9. A device including a container having a plurality of one piece molded sections, each having a wall and a marginal flange, said flanges being rotatably interengaged, the wall of one section having a projection extending toward the wall of the other section, the wall of the latter section having a port adapted to be opened and closed by the projection upon relative angular movement between the sections, said projection being hollow and closed ended toward said opening, and said projection having a wall portion consisting of a part of the flange of the container section carrying the projection.

10. A device including a container having a plurality of sections, each having a wall, said walls being spaced from each other and being movably interengaged along edges of the container to permit relative movement between the sections, one wall having a port spaced from an edge of the container, and the other wall having a closure projection movable into and out of register with the port upon relative movement between the sections, said projection being hollow and open ended on a side of the container opposite to said port, and said projection being adapted to receive an article in the hollow space thereof, as set forth.

JAMES P. BURKE.