Sept. 27, 1938. H. H. LURSSEN 2,131,518

DISPENSING CONTAINER

Filed Feb. 19, 1938

Fig. 1.

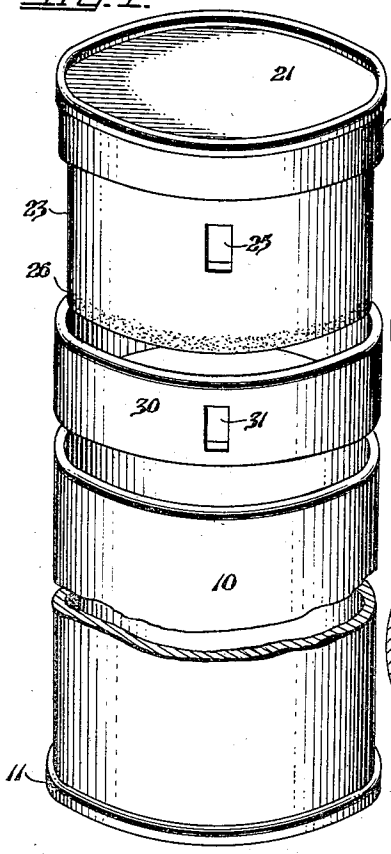


Fig. 2.

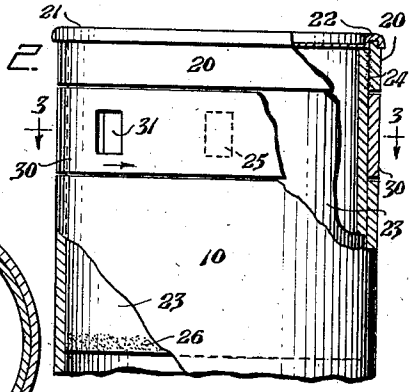


Fig. 3.

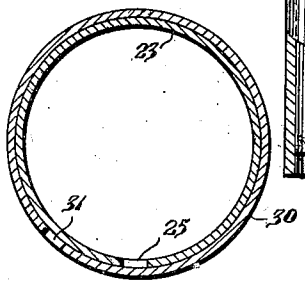


Fig. 4.

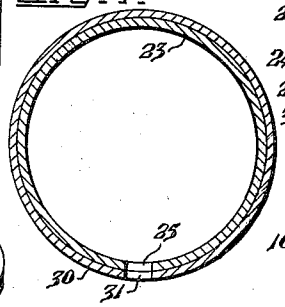


Fig. 5.

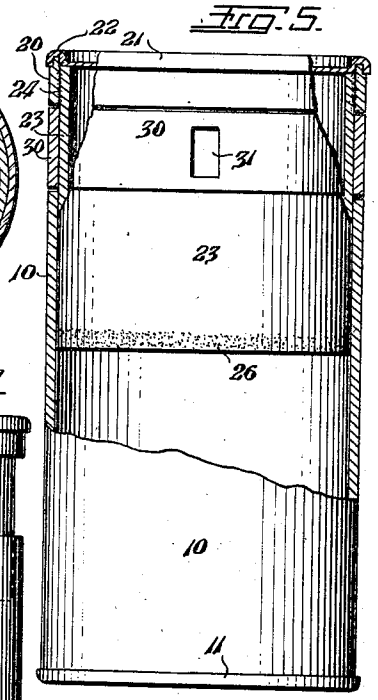


Fig. 6.

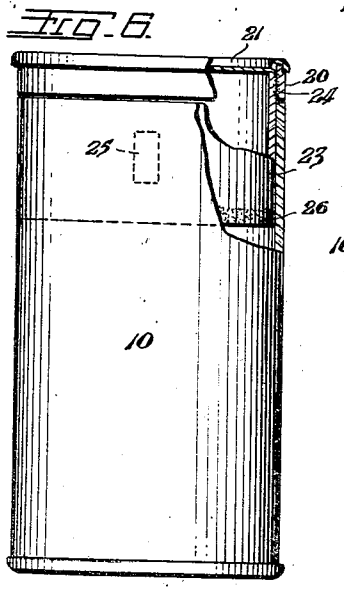
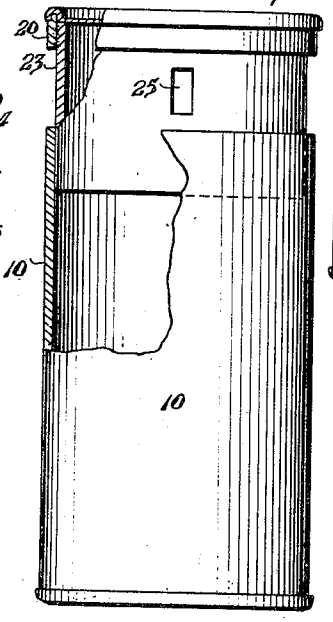


Fig. 7.



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DISPENSING CONTAINER

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Application February 19, 1938, Serial No. 191,527

6 Claims. (Cl. 221—64)

This invention relates to improvements in dispensing containers, and is directed, more particularly, to an improved end construction for a paper receptacle whereby an ordinary paper container may be provided with a simple, durable dispensing means which is capable of most economical production in a completed article of manufacture.

A primary object of the invention is to provide in a paper container, an arrangement for an end construction comprising dispensing means, and which may be incorporated in a completed article of manufacture with little added expense in the fabrication thereof and other costs of manufacture.

Another primary object of the invention contemplates the provision of such dispensing means in an end construction for a paper container, comprising a body section forming part of the outer wall of the container and provided with a fixed cap member and an auxiliary inner wall member, the said inner wall member having a dispensing opening and mounting a closure element for covering said dispensing opening and otherwise preventing leakage of the contents of the container while, at the same time, being movable relative to said inner wall to a position in which the contents may be ejected without the removal of a cap or other end closure of the completed container.

A still further object is for the provision in such a container structure having an auxiliary inner wall member provided with a dispensing opening, an arrangement in which the closure element may be dispensed with whereby in a completed container construction, the dispensing opening in the auxiliary wall is normally closed by the outer wall of the container in providing a sealed package, but is capable of being exposed for dispensing purposes by axial sliding adjustment of the inner wall member relative to the outer wall or container body upon breaking of the seal.

A more specific object is directed to the provision of a paper dispensing container construction comprising an outer tubular wall or container body, having fixed end closures, and an auxiliary, inner tubular wall member provided with a dispensing opening and carrying an annular closure element rotatably adjustable on said inner tubular member to a position in which the dispensing opening is completely or only partially open for pouring, shaking or otherwise ejecting the contents, or, in which the opening is entirely closed thereby preventing leakage of the contents of the container, it being understood that containers of this character are employed for packaging commodities of relatively fine body and consisting of small particles such as powder, bath salts and the like, and which packages are often subjected to rough usage and placed in unusual positions conducive to leakage, as, for example, when carried in a handbag.

Other objects of the invention reside in the relatively simple structure and details of the several parts of the container, and the cooperative relation of such parts in the various container constructions which may be fabricated as desired using identical of such parts.

Further objects and advantages of the invention will be apparent to those skilled in the art as a description thereof proceeds with reference to the accompanying drawing in which like reference characters designate like parts throughout the same, and in which:

Fig. 1 is a perspective of the several parts of the improved dispensing container shown prior to assembling in providing a preferred construction in one embodiment of the invention;

Fig. 2 is a front elevational view, partly in section, showing the cooperative relation of the closure and other parts of the container in providing the dispensing means therefor;

Fig. 3 is a cross sectional view along line 3—3 of Fig. 2, looking in the direction of the arrows, showing the position of the closure element in completely covering the dispensing opening in the inner tubular wall member of the container;

Fig. 4 is a similar view showing the position of the closure element as adjusted relative to the inner wall member for dispensing purposes;

Fig. 5 is a front view of a completed dispensing container showing the cooperative relation of the closure and outer wall or container body, represented partly in section, with the inner wall member broken away in part to illustrate in detail the end construction of the container providing the dispensing means;

Fig. 6 is a front elevational view of an alternate form of container construction in which the movable closure element is omitted, the dispensing opening in the inner wall member being shown as completely covered in the sealed form of the container;

Fig. 7 shows the container construction of Fig. 6 with the seal broken and the dispensing opening exposed for dispensing purposes.

In general, the present invention is directed to the provision of a dispensing arrangement for paper containers, and, more particularly, to an

end construction comprising a dispensing means which may be incorporated in any usual form of paper container with little added cost involved in the change in structure and the formative operations required.

Referring now, in detail to the accompanying drawing, Fig. 1 shows the several elements of the improved dispensing container construction prior to assembling in providing the completed article. The body 10 of the container is of paper, or the like, and is preferably a cylindrical tubular wall member which, of course, may be of any desired length and cross-section. The said container body is provided with a metallic head or other end closure 11 at one end, the opposite end being initially open to permit the same to be readily filled with the selected contents before the package is completed by applying an end closure thereto. In this respect, the container body may be of the simplest, cheapest, standard type usually employed as a sealed container comprising a metallic head or other end closure applied to the open end thereof after filling.

In providing the container body with a dispensing means in accordance with the invention, the preferred embodiment comprises an end construction including a movable collar or sleeve closure dispensing arrangement which may be manufactured as a separate part of the container and which is otherwise applied to the open end of the container body as an end closure to complete the package and seal the contents therein. As shown in Figs. 1, 2 and 5, the dispensing end construction comprises a cylindrical body section 20 of a cross-section corresponding substantially to that of the container body 10 and which is provided with an end closure such as a metallic head 21 or closure plate attached thereto as by spinning the peripheral flange 22 thereof into clamped or embedded relation with said body section. An auxiliary inner wall member 23 comprising a tubular element of a cross-section corresponding substantially to the inner periphery of the body section 20, is telescoped within said body section and rigidly secured thereto as by gluing, indicated by stippling 24, or by any other suitable means. As shown in Fig. 1, the inner wall member is provided with one or more dispensing openings 25 and is of such length as to accommodate a collar or sleeve closure element 30 and at the same time extend into the container body 10 a suitable distance in the completed package construction, as presently to be described.

The said collar or sleeve closure 30 is of substantially the same cross-section as the container body 10 and body section 20, and accordingly, is snugly fitted to the auxiliary inner wall 23 in the completed form of the container as illustrated in Figs. 2 and 5. The said collar is provided with one or more openings 31 corresponding substantially to the dispensing openings or opening 25 in the inner auxiliary wall member 23, and when assembled thereon serves as an adjustable closure element whereby the said dispensing opening in the inner wall may be fully or partly opened, as desired, for dispensing purposes, or fully covered to seal the contents of the container in the initial package, or thereafter against leakage after the seal is broken.

It will therefore be seen that the end construction thus provided is, in itself, a distinct unit and may be manufactured apart from the container body with which it is to be used. Accordingly, when a selected size container body is to be provided with a dispensing arrangement, the end construction described, comprising the inner auxiliary wall member 23 having the collar or sleeve closure 30 fitted thereto, is assembled with the container body as shown in Figs. 2 and 5 with the inner wall member telescoped within the container body and permanently secured thereto. To this end, a suitable portion of the auxiliary inner wall member 23 is first coated with glue as indicated by stippling 26, such that in a completed container structure the body section 20 and container body 10 are rigidly united in axially spaced relation and the collar or sleeve closure 30 fixedly retained thereby but capable of rotary adjustment on the inner auxiliary wall member.

From the foregoing, it will be understood that in use, in quantity production, the container bodies 10 are filled with the selected contents through the open ends thereof in the usual manner. The dispensing end constructions, each including an adjustable collar sleeve or collar 30, are then assembled therewith as shown in Fig. 5, after a suitable application of adhesive 26 to the inner auxiliary wall members 23, as aforesaid. Thus, on drying of the adhesive, the body section 20 and container body 10 are permanently secured and thereby permanently retain the closure collar 30 in the assembly; and since the said closure is preferably of the same cross-section, the package thus provided has a uniform, even appearance with no beads, tabs and the like projecting therefrom. Of course, in the initial product, the closure element 20 is so positioned on the inner auxiliary wall member as to fully cover the dispensing opening 25 therein substantially as shown in Fig. 3, thereby sealing the contents in the container and otherwise preventing leakage thereof in shipping and handling. However, when it is desired to pour or shake the contents from the package, the movable closure member 30 only need be rotatably adjusted relative to the container body to suitably align the opening 31 therein with the dispensing opening 25 in the inner auxiliary wall member 23, substantially as illustrated in Fig. 4, without removal of either end closure 11, 21, or otherwise destroying or mutilating the container out of its initial form.

With respect to the packaging of various perishable products in the dispensing containers of the instant invention, it is noteworthy that inasmuch as the completed container is uniform throughout without beads, tabs, and the like, the same may be readily provided with a sealing strip or label retaining the closure member 30 in its closed position and otherwise rendering the container air-tight and impervious to moisture and other foreign matter whereby ruinous effects of shelf-age, etc. on the contents is greatly minimized. Such a sealing strip may embody a ripcord or tearing tab which, on being removed to permit access to the closure element, mutilates the label or other seal on the container; and in this way, when a package of the goods is offered for sale, the purchaser is assured of the genuineness of the article and integrity of the contents, since any destruction or mutilation of the label or seal will immediately indicate an act of tampering which will cause him to reject the goods.

In Figs. 6 and 7 there is shown an alternate construction of the paper container wherein the movable sleeve or collar closure is omitted, and the dispensing arrangement provided in sliding the end construction axially relative to the container body to uncover the dispensing opening 25 in the inner wall member 23. It is to be noted

that in this construction, the several parts of the container are identical to those of the embodiment of Figs. 1–5 inclusive; thus the container body 10 is of the usual form and the end construction comprises a body section 20 having a metallic head 21 and carrying an inner wall member 23 provided with a dispensing opening 25. In the use of the container construction in this form, the body 10 is filled with the selected contents in the usual manner, whereupon the end construction, without the sleeve closure, is fitted to the open end of the container body 10 with the inner wall member 23 received in snug frictional engagement with the inner side walls thereof. In this relation, of course, the inner wall member may be glued as indicated by stippling 26, Fig. 6, whereupon the respective parts of the container are permanently secured and a sealed package is provided from which the contents cannot be removed without mutilating the carton. However, in the use of the dispensing arrangement in this form of container construction, a sealing strip or label may best be employed to unite the body section 20 and container body 10 in a completed package. Thus upon tearing of the strip or label by the consumer, the said end construction is no longer united to the container wherefor the dispensing opening 25 may be wholly or partly uncovered as desired, by sliding the end construction axially with respect to the container body substantially to the position illustrated in Fig. 7. Since, as stated, the inner wall member 23 is fitted into firm frictional engagement with the inner side walls of the container body 10, the contents of the container may be poured, shaken or otherwise ejected therefrom with little likelihood of the end closure becoming completely removed. Of course, after a desired amount of the contents has been removed, the dispensing opening 25 may be covered by the container body side wall and the container otherwise made substantially air-tight simply by relative axial sliding movement of the parts of the container to the initial position thereof represented in Fig. 6.

While this invention has been described in detail with a specific example such example is illustrative only, since it will be apparent to those skilled in the art that other modifications within the spirit and scope of the invention may be constructed without departing from the teachings or essential characteristics thereof. The present embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.

What is claimed and desired to be secured by United States Letters Patent is:

1. In a dispensing container, a container body having an end closure sealing one end, a dispensing end construction closing the opposite end thereof, said end construction comprising a body section including an end closure and an inner wall member having a dispensing opening provided therein, a sleeve closure fitted onto said inner wall member, said inner wall member being received within said container body and rigidly secured thereto in the completed form of the container, said sleeve closure having an opening and being retained on said inner wall member by the adjacent end of the container body, whereby said sleeve closure is adjustable on said inner wall member to completely cover the dispensing opening or to suitably align the same with the opening therein for dispensing purposes.

2. In a dispensing container comprising a container body open at one end, a dispensing end construction for said open end, said end construction comprising an end body section including an end closure and a wall member provided with a dispensing opening, said wall member having fitted thereon a sleeve closure and being of such length as to extend within the container body to be rigidly secured thereto, the adjacent end of the container body thereby retaining said sleeve closure in longitudinal position in the completed form of the container but permitting adjusting movement thereof to cover or uncover said dispensing opening in said wall member.

3. In a dispensing container comprising a container body having an end closure sealing one end, a dispensing end construction closing the opposite end thereof, said dispensing end construction comprising a body section including an end closure and an inner wall member having a dispensing opening provided therein, an apertured sleeve closure fitted to said inner wall member, said inner wall member being of such length as to extend within the container body to be rigidly secured thereto, whereby said sleeve closure is retained by the adjacent edges of the container body and the said body section in a completed form of package, said sleeve closure being capable of rotary adjustment to cover or uncover the dispensing opening in the inner wall member.

4. In a paper dispensing container comprising a paper container body having an end closure sealing one end, a dispensing end construction closing the opposite end thereof, said end construction comprising a paper body section including an end closure and an inner wall member, a sleeve closure element fitted to said inner wall member, said inner wall member having a dispensing opening provided therein and being received within the container body and rigidly secured thereto as by gluing, whereby said sleeve closure is retained in longitudinal position by the adjacent edges of the paper container body and body section in a completed form of package, said sleeve closure being adjustable to cover or uncover the dispensing opening in the said inner wall member.

5. In a paper dispensing container comprising a cylindrical paper container body having an end closure sealing one end, a dispensing end construction closing the opposite end thereof, said end construction comprising a cylindrical paper body section including an end closure and a cylindrical inner wall member, said inner wall member being provided with a dispensing opening and having a cylindrical collar fitted thereon, said collar having an opening capable of alignment with the dispensing opening in the inner wall member, said inner wall member being received within the cylindrical container body and rigidly secured thereto, whereby said collar is retained in longitudinal position by the adjacent edges of the paper container body and body section in a completed package, said collar being rotatable on said cylindrical inner wall member to completely cover the dispensing opening or to suitably align the same with the opening therein for dispensing purposes.

6. In a paper dispensing container comprising a cylindrical paper container body having a metallic head sealing one end, a dispensing end con-

struction closing the opposite end thereof, said end construction comprising a cylindrical paper body section including a metallic head and a cylindrical inner wall member rigidly secured to the inner periphery thereof as by gluing, said inner wall member being provided with a dispensing opening and having a cylindrical collar fitted thereon, said collar having an opening capable of alignment with the dispensing opening in the inner wall member, and said inner wall member being received within the cylindrical container body and rigidly secured thereto as by gluing, whereby said collar is retained in longitudinal position by the adjacent edges of the paper container body and said body section in a completed package, said collar being rotatable on said cylindrical inner wall member to completely cover the dispensing opening or to suitably align the same with the opening therein for dispensing purposes.

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