P. J. D. REYNOLDS.

POWDER DISPENSING RECEPTACLE.

APPLICATION FILED AUG. 7, 1919.

1,366,279. **Patented Jan. 18, 1921.**

Fig. 1.

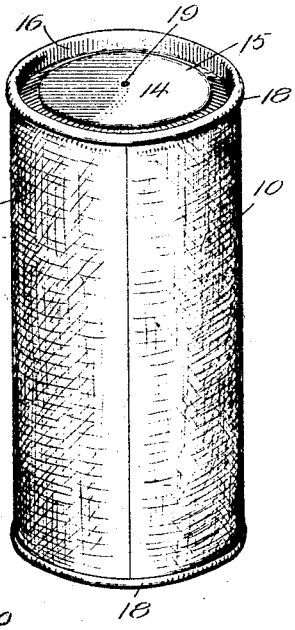


Fig. 3.

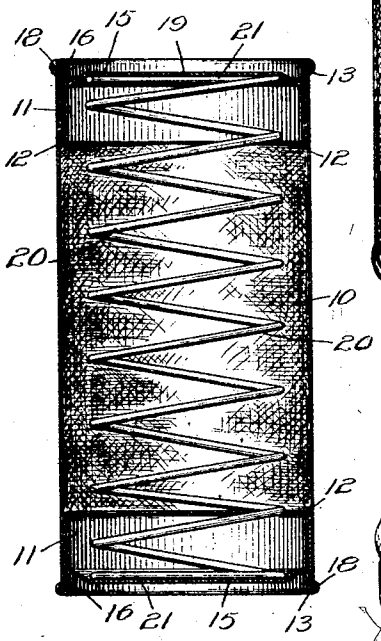


Fig. 5.

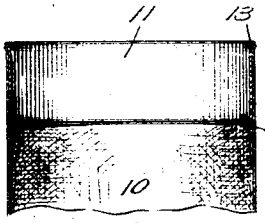


Fig. 6.

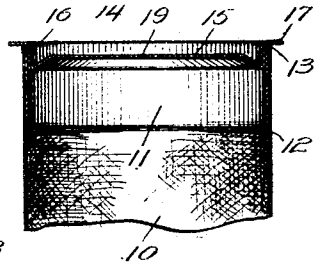


Fig. 2.

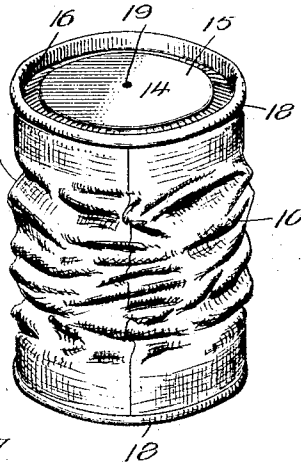


Fig. 7.

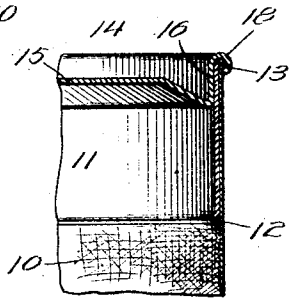
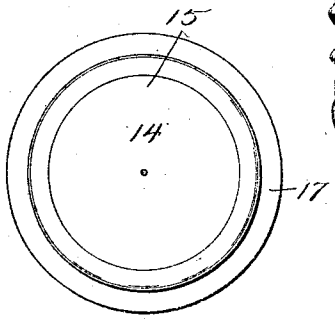


Fig. 4.



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UNITED STATES PATENT OFFICE.

PERRY J. D. REYNOLDS, OF PONTIAC, MICHIGAN.

POWDER-DISPENSING RECEPTACLE.

1,366,279. Specification of Letters Patent. Patented Jan. 18, 1921.

Application filed August 7, 1919. Serial No. 315,896.

To all whom it may concern:

Be it known that I, PERRY J. D. REYNOLDS, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Powder-Dispensing Receptacles, of which the following is a specification.

The invention relates to a bellows-container, and more particularly to the class of compressible powder dispensing receptacles.

The primary object of the invention is the provision of a bellows-container or receptacle of this character, wherein the body thereof between the ends is formed from flexible material, such as leather or the like, to effect a bellows action for the dispensing of the contents thereof, the ends of the body being made from metal and have their peripheral edges bent over and beaded down upon the flexible body to provide a tight joint therebetween, and interiorly of the body is a compressible spring so that the said body can be collapsed against the resistance of the spring and, through a suitable outlet opening, the contents of said container or receptacle can be discharged during the compression of the body.

Another object of the invention is the provision of a bellows-container or receptacle of this character, wherein the spring interiorly of the body thereof will serve to hold the same normally distended; the body being made from flexible material will allow for a bellows action for the dispensing of the contents of said container or receptacle in an easy and convenient manner.

A further object of the invention is the provision of a container or receptacle of this character, which is extremely simple in construction, readily and easily assembled to insure an air-tight body, strong, durable, thoroughly reliable and efficient in its purpose, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts, as will be hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereunto appended.

In the accompanying drawings:

Figure 1 is a perspective view of the container or receptacle constructed in accordance with the invention.

Fig. 2 is a view similar to Fig. 1 showing the body of the container or receptacle partly collapsed for the bellows-action thereof to dispense its contents.

Fig. 3 is a vertical longitudinal sectional view through the container or receptacle showing in detail the spring interiorly thereof.

Fig. 4 is a top plan view of one head or cover section.

Fig. 5 is a fragmentary vertical sectional view, showing in detail the inner end ring or band with the head or cover section removed.

Fig. 6 is a view similar to Fig. 5 showing the head or cover section engaged in the band prior to the seaming of the peripheral edge of said section for the air-tight sealing of the body.

Fig. 7 is a fragmentary vertical sectional view showing in detail the air-tight seam between the inner band, flexible body, and head or cover section.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings in detail, the receptacle or container comprises a flexible body 10, made from a sheet of flexible material, preferably leather, although the same may be made from any other suitable fibrous or fabric material, and the adjacent longitudinal edges of the sheet of material are stitched together or otherwise fastened as at 6 to provide an air-tight seam and for the cylindrical formation of the body.

Snugly fitted within opposite ends of the body 10 are inner annular bands or rings 11, each made from sheet metal and has its inner edge slightly inwardly curled as at 12 to permit the easy insertion of the band or ring 11 into the end of the body 10 and prevent its cutting or abrading said body, while the outer edge is reversely outwardly curled as at 13 for the lapped-seaming of end heads upon the body, as hereinafter fully described.

Each of the end heads for the body, is made from a disk 14 of sheet metal struck or stamped to provide an outwardly dished central circular portion 15 and a rim 16 having a bendable peripheral flange 17 constituting a seaming flange, which on the telescoping of the rim 16 in the inner band or ring 11 as is clearly shown in Figs. 6 and

7 of the drawings, the flange 17 is folded outwardly and curled over the edge 13 of said band 11 and the body 10 to provide a lapped seam 18 as shown in Fig. 7 of the drawings, thereby forming an air-tight joint between the ends and the said body.

One of the end head sections constituted by the disk 14 is formed with a central opening or aperture 19, providing a discharge port for the contents of the container or receptacle which is filled prior to the fastening of the end heads or sections upon the body 10 thereof, the contents being in the form of powder to be dispensed through the opening or aperture 19 on compressing or collapsing the said container or receptacle.

Located interiorly of the body 10 is a coiled expansion spring 20 which has its end convolutions or coils 11 seated in the dished portion 15 of each disk 14, and this spring functions to hold the body 10 distended, yet permitting the collapsing thereof in the manner as shown in Fig. 2 of the drawing for the bellows action of the container or receptacle.

After the container or receptacle has been collapsed the required distance and pressure is relieved therefrom, the spring 20 which has its ends 21 centered in the dished portion 15 of the end head section becomes active to extend the body 10 of said container or receptacle, to bring the same to normal position as shown in Fig. 1 of the drawings.

The contents of the container or receptacle can be readily dispensed therefrom by a bellows action on compressing the body 10 by pressure being applied to the end head sections when held in the hand of the user so that the said end heads or sections will be moved toward each other and during the bellows action the air interiorly of the body 10 will expel the contents through the opening or aperture 19, and when pressure is relieved from said container or receptacle the spring 10 becomes active to extend the body as will be clearly apparent.

It is of course to be understood that changes, variations and modifications may be made in the invention, as come properly within the scope of the appended claim, without departing from the spirit of the invention or sacrificing any of its advantages.

From the foregoing, it is believed that the construction and manner of operation of the container or receptacle will be clearly understood, and therefore a more extended explanation has been omitted.

What is claimed is:

A compressible powder dispensing receptacle comprising a transversely flexible tubular body member, annular sheet metal bands snugly fitted within the ends of said body and having their inner ends curled inwardly to facilitate their insertion and prevent injury to the body, the outer end edges of said band being curled outwardly, heads mounted in said bands and composed of sheet metal disks each stamped to provide an outwardly dished central portion having an outwardly extending flange-like rim fitting snugly against the inner face of said band with the free edge thereof rolled outwardly over the ends of the band and body forming an airtight joint, one of said heads having a dispensing aperture, and a coiled expansion spring located in said body with its end coils seated in the dished portions of said heads.

In testimony whereof I affix my signature hereto.

PERRY J. D. REYNOLDS.