Dec. 2 1952 J. BUCHAN 2,620,096

POWDER DISTRIBUTING DRUMS

Filed March 1, 1949

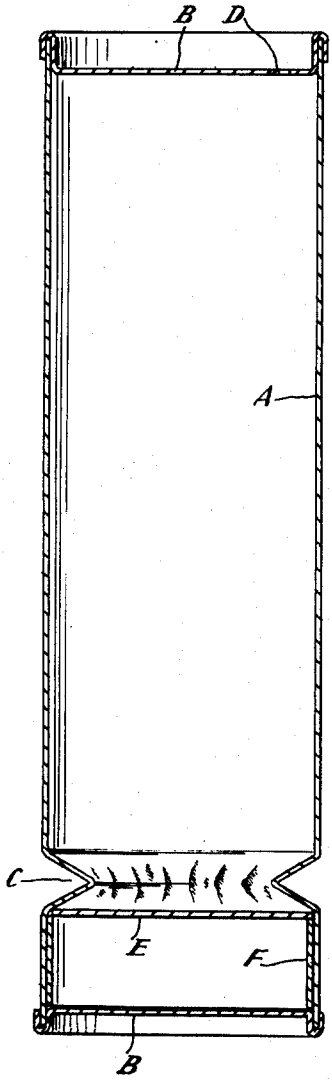


Fig. 2.

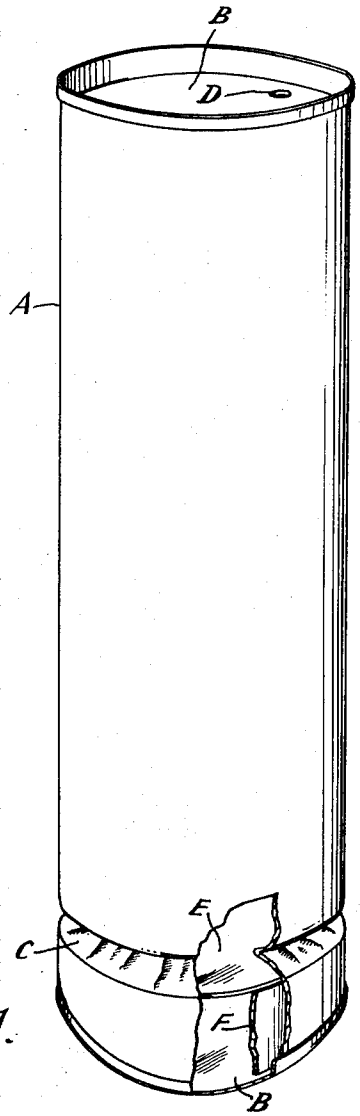


Fig. 1.

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UNITED STATES PATENT OFFICE

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POWDER DISTRIBUTING DRUMS

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In Great Britain October 29, 1948

5 Claims. (Cl. 222—209)

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This invention relates to powder distributing drums and is an improvement in or modification of the invention described and claimed in my co-pending application Serial No. 766,283, filed August 5, 1947.

In the aforesaid specification there is described a powder distributor comprising a tubular body portion closed at one end and open at the other and a closing cap therefor closed at one end and open at the other, the cap portion sliding over the body portion to provide a closed cylindrical container, with the walls of the cap extending practically the full length of the body, said body having the wall thereof adjacent the closed end constituted as a bellows and the closed end of the cap having one or more perforations.

The object of the present invention is to simplify the aforesaid construction and to this end a powder distributor comprises a tubular body portion adapted to be pre-filled with powder and provided with closing ends of metal, the bellows arrangement consisting of a single peripheral groove formed by collapsing the substance of the body of the container to produce the bellows arrangement and permit relative to and fro movement between that part of the body on one side of the groove and the part on the other side and thus operate the bellows arrangement and expel powder from an orifice or orifices in the opposite end of the container.

In order that the invention may be clearly understood and readily carried into effect, reference is directed to the accompanying drawing, wherein:

Figure 1 is a perspective view of a powder distributing drum according to the invention, and

Figure 2 is a vertical section thereof.

The preferred construction according to the present invention illustrated in the drawing comprises a tubular body A of cardboard which is closed at each end by metal discs B in the known manner to form a closed tubular body. Adjacent one end of the container the wall thereof is collapsed inwardly to form a peripheral groove C of substantially V form the sides of which corrugate or crumple and constitute a bellows arrangement when the two parts of the container so divided are moved towards and away from each other, and thus expel powder from the container in the form of a cloud through an orifice D. A cardboard disc E is positioned and held between the groove C and the end of the container B by a packing or a distance piece F to give the base a substantially solid end for gripping purposes.

It will be appreciated that the powder distributor is charged with powder before both metal closing ends are applied, preferably the container is filled from the base end and then the isolating disc introduced to rest on the bellows groove and followed by the packing F and finally the metal end B, the container is expendable as it is not feasible to refill the container as is the case with the powder distributor in accordance with my aforementioned co-pending application.

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What I claim and desire to secure by Letters Patent is:

1. A powder distributor receptacle comprising an integral tubular self-sustaining body formed of relatively stiff, non-flexible material, a closure member at each end of the tubular body, one closure member having therein at least one perforation and the tubular body in adjacent spaced relation to the other end closure member being deformed to provide an inwardly directed peripheral groove which divides the body into two connected tubular parts adapted to be axially moved toward and away from each other as a bellows.

2. A powder distributor receptacle according to claim 1 wherein the portions of the tubular body defining the peripheral groove are crumpled.

3. A powder distributor receptacle according to claim 1 wherein the peripheral groove is of substantially V-form.

4. A powder distributor according to claim 1, wherein the tubular body is formed of cardboard.

5. A powder distributor receptacle comprising an integral self-sustaining tubular body, having a closure member at each end of the tubular body, one closure member having therein at least one perforation, the tubular body in adjacent spaced relation to the other end closure member being deformed to provide an inwardly directed peripheral groove which divides the body into two connected tubular parts adapted to be axially moved toward and away from each other as a bellows, and a reinforcing sleeve disposed in the tubular body part between the peripheral grooved portion and the end closure member which is in adjacent spaced relation to said grooved portion.

JAMES BUCHAN.

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