

J. GREENE.
CONTAINER.

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1,438,487.

Patented Dec. 12, 1922.

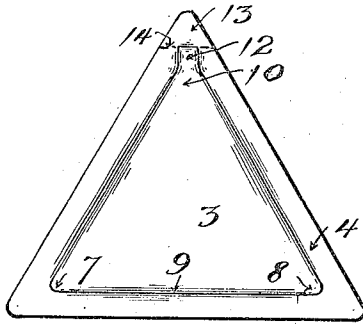


Fig. 1.

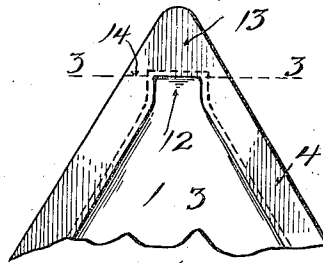


Fig. 2.

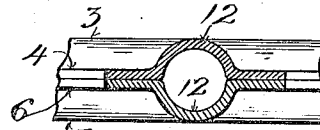


Fig. 3.

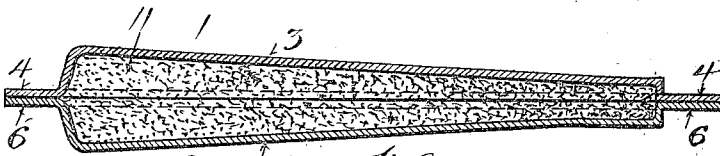


Fig. 4.

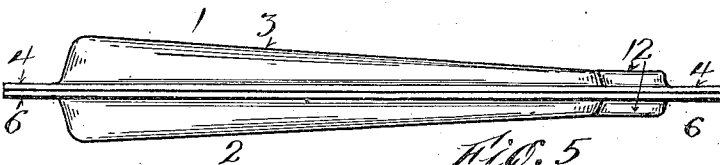


Fig. 5.

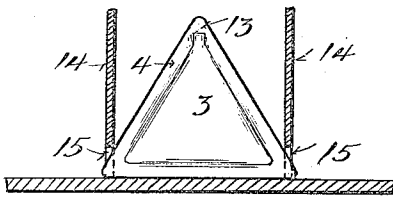


Fig. 6.

John Greene Inventor
By his Attorney
Charles E. Hensley.

UNITED STATES PATENT OFFICE.

JOHN GREENE, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO GILPIN, LANGDON & COMPANY, INCORPORATED, OF BALTIMORE, MARYLAND, A CORPORATION OF MARYLAND.

CONTAINER.

Application filed February 16, 1921. Serial No. 445,409.

To all whom it may concern:

Be it known that I, JOHN GREENE, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Containers, of which the following is a specification.

My present invention relates to a new article of manufacture comprising a receptacle in which a product may be shipped and handled and from which the product may be used. While my container is not limited to a particular use I have sought to provide a container in which insect powders may be sold and delivered and which may serve as a convenient instrument or device for distributing the powder upon furniture, into crevices or wherever the powder is to be distributed. It is common practice at present to sell such powders in cardboard boxes, or containers composed of at least three sections: to wit, two flanged members forming the end members of a box and an enclosed tubular member; and the overlying edges of these parts are sealed by pasting a label over them. These labels often become partly or wholly loosened and the powder is shaken out during shipment or when the receptacle is being handled. Aside from this the receptacle is expensive and it is difficult to assemble, fill and seal. Where such receptacles are used for distributing the powder by flexing the walls to produce a bellows action, it is difficult to exude the entire contents.

The object of my present invention is to overcome these objections. The present article is simple to make, inexpensive, easily filled and sealed, and the device is very handy for distributing the powder. The container consists essentially of two sheets or disks of fibrous material, preferably cardboard, which are pressed or embossed to provide a chamber and laterally extending flange portions surrounding the raised or embossed portions. These flanges meet face to face and are secured together by an adhesive so that the container has no cracks to be closed by a label, although a label may be pasted on any part of the container if desired. The article is shaped to provide a very convenient means for discharging the powder by a bellows action, so that the article may serve both as a shipping container and as a distributor of the powder. The

flanges may be inserted in slotted separating sheets in the shipping carton so that the containers may be kept from resting against each other at their flexible sides.

In the drawing forming part of this application—

Figure 1 is a plan view of my container,

Figure 2 is an enlarged view of one end thereof,

Figure 3 is a sectional view taken on the line 3—3 of Figure 2,

Figure 4 is a longitudinal sectional view of the device,

Figure 5 is an edge view thereof, and

Figure 6 is a sectional view of a carton showing a method of packing the containers.

The receptacle or container is comprised principally of the two disks or blanks 1, 2 of fibrous material, preferably paper or cardboard which is capable of being pressed or embossed to provide raised portions capable of retaining their form for the purpose intended. In the drawing the disk or blank 1 is shown as provided with a raised portion 3 formed by pressing or embossing the blank to press the walls 3 into a different plane than the surrounding portion 4. This raised portion is surrounded by the flat portion or flange 4. The raised portion when viewed from the top is preferably of triangular shape with rounded corners, as shown in the drawing. The blank 2 is pressed or embossed to provide a raised portion 5 corresponding to the portion 3 of the blank 1 preferably in size and shape. There is also a flange 6 surrounding the raised portion 5 of the blank 2.

These blanks may be made up in large quantities by any well known pressing or embossing method and their cost is but slightly more than the bare cost of the cardboard stock from which they are made. In the preferred form of my invention, the raised portions 3, 5 are of graduated height. At one end of the blank the raised portion 3 has its maximum height across from one corner 7 of the triangle to the other corner 8, and from one side 9 of this triangle the height of the raised portion 3 gradually decreases toward the third corner 10 of the triangle. The same is true of the raised portion 5 of the member 2.

One of the sections or blanks is laid flat with the hollow side up and the powder is

placed in the depression either to the level of the flange or it may be piled higher as there will be sufficient space in the opposite blank to receive it. Glue, paste or other form of adhesive is then applied to the opposing surfaces of the flanges 4, 6, and the second blank 2, is placed upon the under flanges 4, 6, contact all around the container. The flanges are then pressed together and when the adhesive is dry the container is ready for shipment with the powder sealed in the chamber 11. I provide depressions 12 in the flanges 4, 6, near one corner of the container and these depressions extend only partially across the flanges. This leaves a flat portion 13 on each flange outside the depressions 12. When the adhesive is applied around the flanges 4, 6, it is also applied to the flat portions 13 which lie beyond the depressions 12. Therefore when the flanges are secured together by the adhesive the depressions are inside the flat portions 13 of the flanges and the container is completely sealed. When the powder is to be distributed from the container the flange is cut across the dotted line 14, and this will remove the closed portion of the flange beyond the depressions 12 and the latter will then form an open spout through which the powder may be ejected. The raised sides of the container are flexible so that by pressing upon these the powder is ejected by a bellows like action.

As the container decreases in thickness and grows narrower toward the spout or outlet end 19 the powder is directed through the outlet and every portion of the contents may be ejected because there are no shoulders or pockets in which the powder may lodge and escape the ejecting action of the bellows. It will be seen that the container proper comprises only the two blanks 1, 2 and when these are united at their flanges none of the powder can escape while the containers are in transit. The sections may be assembled and attached much quicker than the three piece containers now in general use.

The flanges 4, 6 may be utilized for holding the containers in spaced relation in the shipping cartons to keep the flexible sides of the several containers from pressing against each other. I have shown dividing walls or septums 14 of a carton, provided with openings or slots 15 to receive the flanges 4, 6 of the containers at the several corners. When the containers are thus inserted in the walls or septums 14 each container is held by the flange in spaced relation to the other containers and this prevents the walls from being pressed out of shape and it prevents any pressure being exerted which might tend to loosen the adhesion of the flanges of the several sections 1, 2.

It is obvious that each half or wall of the container and dispenser embodies an arch-like portion connected at its base to a flange which does not yield laterally when this arch-like portion is squeezed so as to eject the powder by a bellows action. Hence in the normal ejection of the powder, the said arch-like portion does not collapse, but springs back to substantially its original shape, even when only a little powder remains therein. In previously used devices, the container either had a flat wall which could not be depressed to any substantial extent or it was composed of a cardboard blank made up of parts bent up along scored lines so that the container could be easily pressed to the flat condition. In the last mentioned type, the action depended upon the resilience of the cardboard blank along the lines of scoring, and the device lost its resilience before the contents were ejected. I have provided an arch-like portion in the wall of the container so as to secure an efficient bellows action and this is believed to be broadly new. I have shown a preferred embodiment of my invention but it is obvious that numerous changes and omissions could be made without departing from its spirit, as defined in the appended claims.

Having described my invention, what I claim is:—

1. A new article of manufacture comprising a receptacle composed of two blanks, each blank comprising a sheet of cardboard stamped or embossed to provide a raised wall and having a laterally extending flange surrounding said raised wall, said blanks being arranged with the raised walls spaced apart to form a compartment for a product, and said flanges of said blanks being secured together face to face to seal the container and said raised walls being adapted to be flexed to exude the contents of the container by a bellows action.

2. A new article of manufacture comprising a container composed of two blanks of the general contour of a triangle, each blank comprising a sheet of cardboard stamped or embossed to provide a raised, flexible wall and having a laterally extending flange surrounding said raised wall, said blank being arranged with the raised walls spaced apart to form a compartment for a product, and said flanges of said blanks being secured together face to face by an adhesive to close the container and said raised walls being adapted to be flexed to exude the contents of the container by a bellows action.

3. A new article of manufacture comprising a container composed of two blanks of the general contour of a triangle, each blank comprising a sheet of cardboard stamped or embossed to provide a raised, flexible wall higher at one end of said blank and decreasing toward one corner of the blank,

each blank having a laterally extending flange surrounding said raised wall, said blanks being arranged with the raised walls spaced apart to form a compartment for a product, and said flanges of said blanks being secured together face to face by an adhesive to close the container.

4. A new article of manufacture comprising a container composed of two blanks, each blank comprising a sheet of cardboard stamped or embossed to provide a raised wall and having a laterally extending flange surrounding said raised wall, said blanks being arranged with the raised walls spaced apart to form a compartment for a product and said flanges of said blanks being secured together face to face by an adhesive to close the container, said flanges having depressions extending partially across the same to form a pouring opening and said flanges being adapted to be severed to remove the portions beyond said depressions.

5. A combination container and dispenser for powdered material made of two parts, one of said parts embodying a resilient arch-like wall portion having a substantially flat transverse flange at a sufficient portion of the base thereof to enable said arch-like portion to be firmly secured to the other part of said container by adhesive or the like, the portion of said other part of said container adjacent said flange being substantially flat.

Signed at the city, county, and State of New York, this 14 day of February, 1921.
JOHN GREENE.