March 17, 1942. C. B. SPRAGUE 2,276,800

VENTILATED CONTAINER

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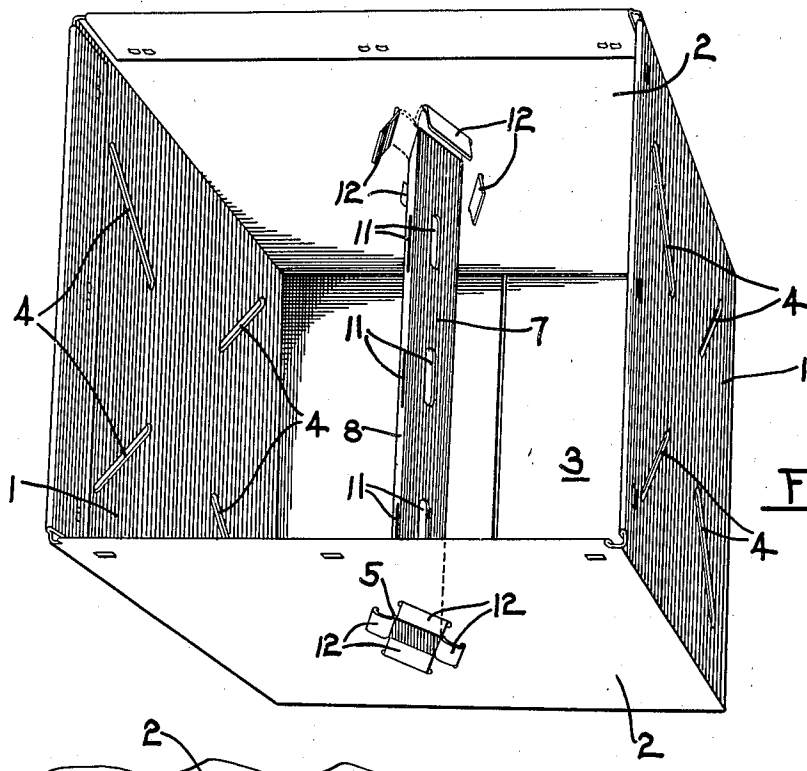


Fig. 1.

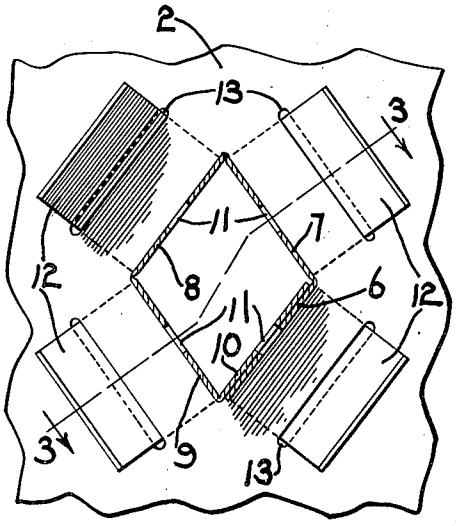


Fig. 2.

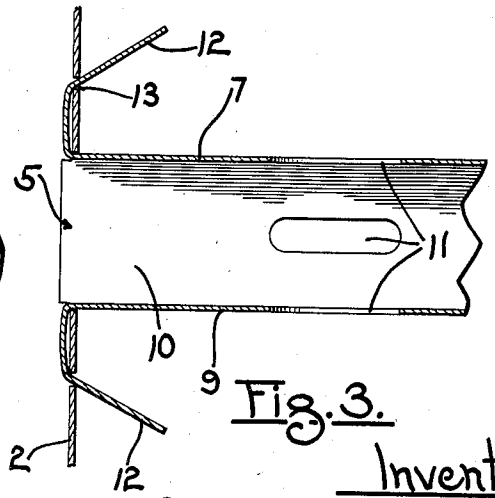


Fig. 3.

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VENTILATED CONTAINER

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5 Claims. (Cl. 229—6)

This invention relates generally to containers particularly adapted for carrying fresh fruits and vegetables, and is primarily concerned with novel means for communicating fresh air to the central portion of the box and to those packed vegetables which ordinarily cannot receive fresh air through the customary means of ventilation.

It is well known that those vegetables at the center of a packed carton, and particularly green beans, will readily spoil if fresh air from the outside of the container is not communicated thereto. In the past this has been impossible even though the vegetables be packed in a container provided with ventilating openings in all sides thereof, and it is therefore the principal object of this invention to provide novel means in the form of a tube which is located centrally in the container and which has communication with the outside atmosphere to thereby carry fresh air to those vegetables at the center of the carton.

Another object of the invention is the provision of novel means by which this tube, when extended between two sides of the carton, may be secured and held in place.

Other objects and purposes of the invention will appear more fully as the description proceeds.

To the accomplishment of the foregoing and related ends said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims. The annexed drawing and following description set forth in detail certain means for carrying out my invention, said means constituting, however, but one of various ways in which the principle of the invention may be employed.

In said annexed drawing, wherein like reference numerals refer to like parts throughout the various views:

Fig. 1 is a perspective view of the ventilated container looking downwardly through the open top thereof.

Fig. 2 is an enlarged fragmentary vertical section through the tube, and

Fig. 3 is a fragmentary longitudinal section taken substantially on the plane of line 3—3 of Fig. 2.

Referring now more particularly to the drawing and more especially to Fig. 1, although my invention is adapted to be used with any type of container, in this preferred embodiment thereof I provide a paper box carton having the opposing sides 1 and the other opposing sides 2. The container is also provided with a bottom 3 of any desired construction and is adapted to have a cover placed thereon which is not shown. In some or all of the sides the usual ventilating openings 4 are provided and in each of the opposing sides 2 I provide the opening 5 which is of the same shape and size as the cross section of the tube.

The tube which forms a material feature of the invention, while it may assume any desired shape, is shown in the drawing as including the four elongated sides, 6, 7, 8 and 9 and is open at both ends. The side 9 also has an additional side or flange 10 attached thereto and adapted to be folded over the side 6 to form a unitary structure without any openings along the edges thereof. Throughout the length of each of the sides of the tube therein is located a plurality of spaced apart ventilating openings 11.

Each of the sides of the tube is provided at each end thereof with the outwardly extending tabs 12, while surrounding each of the openings 5 is a plurality of slots 13 of substantially the size to receive one of the tabs 12. The slots 13 are spaced a distance from each side or edge of the openings 5.

In assembling my invention the tube is passed through the opening 5 in one of the sides 2 and continues through the opening 5 in the opposing side so that the tube then extends between the two sides and through the openings therein. The tabs 12 will extend outwardly beyond the sides of the container and will be folded rearwardly and be received in the respective slot 13 provided therefor as shown in Fig. 3. This novel construction will hold the tube securely in place and prevent any inadvertent removal thereof.

It will readily be seen that when the container of my invention is packed with vegetables, such as green beans or the like, fresh air will be received through the openings 5 and through the open ends of the tube where it will be carried inwardly and passed outwardly through the vents 11 therein in order to reach those vegetables at the center of the carton. In practice it has been found that this construction lengthens considerably the life of those vegetables at the center of the carton which cannot otherwise receive fresh air from the outside.

Other modes of applying the principle of my invention may be used instead of the one here explained, change being made as regards the structure herein disclosed, provided, however, that the means stated by any of the following claims or the equivalent of such stated means be employed.

I claim:

1. The combination with a container having a plurality of sides, of ventilating means comprising, openings in two opposed sides of the container, a tube formed of a single length of material folded so that its longitudinal edges overlap, means to secure said overlapped edges together, a plurality of tabs extending outwardly from each end of the tube, slots surrounding the opening in each of said opposed sides and spaced therefrom, said tube extending through said openings between said sides with the tabs thereon extending through said slots from the outside of the container toward the inside thereof, and openings in the sides of said tube.

2. A ventilated container comprising, a plurality of sides and a bottom, an opening in each of two of said sides, a tube having at least one end open extending between said two sides and through said openings, a plurality of other openings in the sides of said tube, whereby air is passed through the tube and openings therein from the open end thereof, slots around the openings in said two sides, and tabs on the ends of said tube reversely bent and extending through said slots toward the inside of the container to secure the tube in place.

3. The combination with a container having a plurality of sides and a bottom, of means for ventilating the contents thereof from within comprising, a tube extending within said container from a side thereof, an opening in said side, one end of said tube being open and communicating with said opening, a plurality of other openings in the sides of said tube, slots in said side around said opening, and tabs extending outwardly from said open end of the tube reversely bent and extending inwardly through said slots.

4. A ventilated container comprising, four sides and a bottom, openings in two opposing sides, a tube having vents therein and open at both ends extending between said two sides and communicating with said openings, slots around each of said openings, and tabs extending outwardly from each end of said tube reversely bent to extend inwardly through said slots, whereby said tube is held from movement.

5. A ventilated container comprising, a plurality of sides, openings in two of said sides, a tube having vents therein and open at both ends extending between said two sides and communicating with said openings, slots in said sides adjacent said openings and tabs on the ends of said tube, said slots and tabs being cooperatively associated with each other so as to hold said tube from movement.

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