Aug. 6, 1957 J. P. FARRELL 2,801,742

VENTILATED CONTAINER

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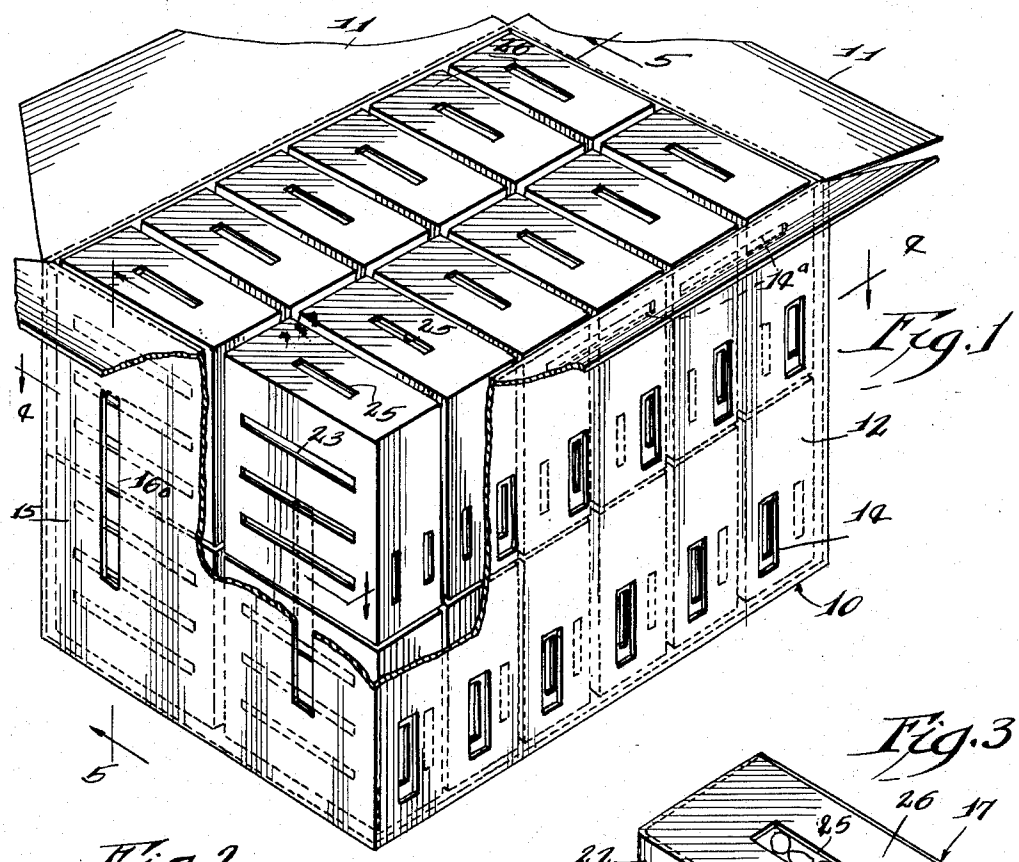


Fig. 1

Fig. 3

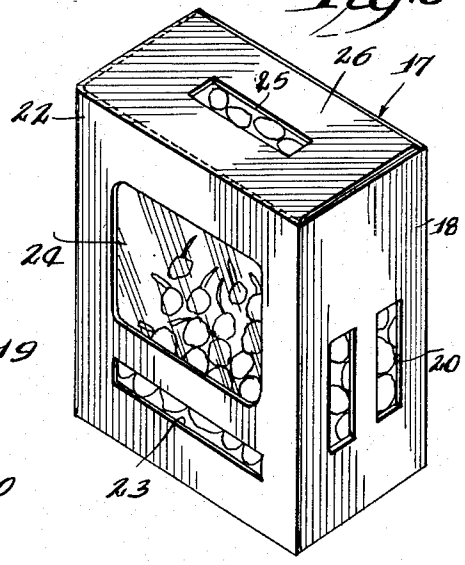
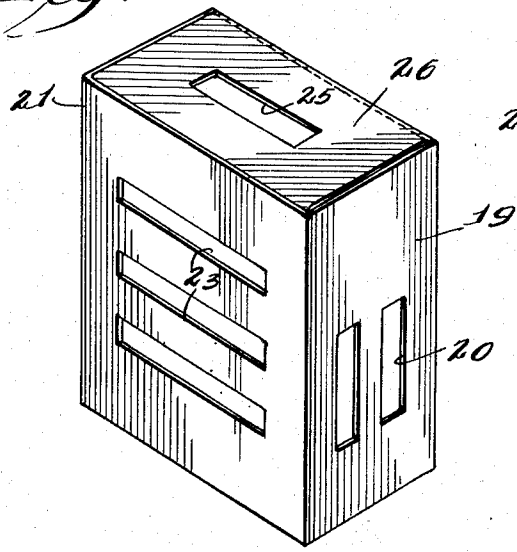


Fig. 2



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Fig. 4

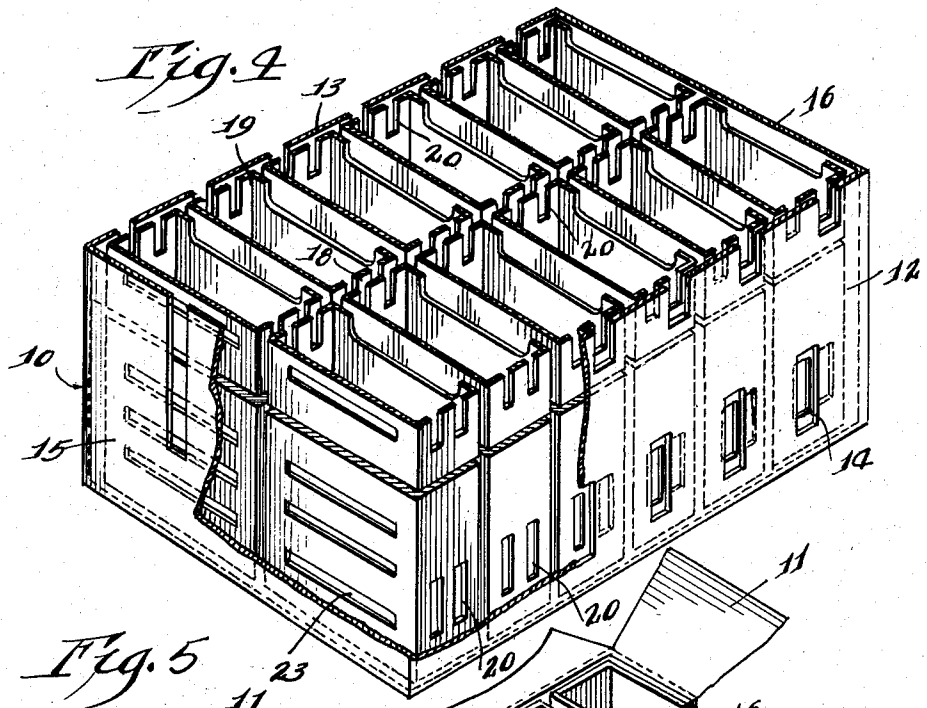
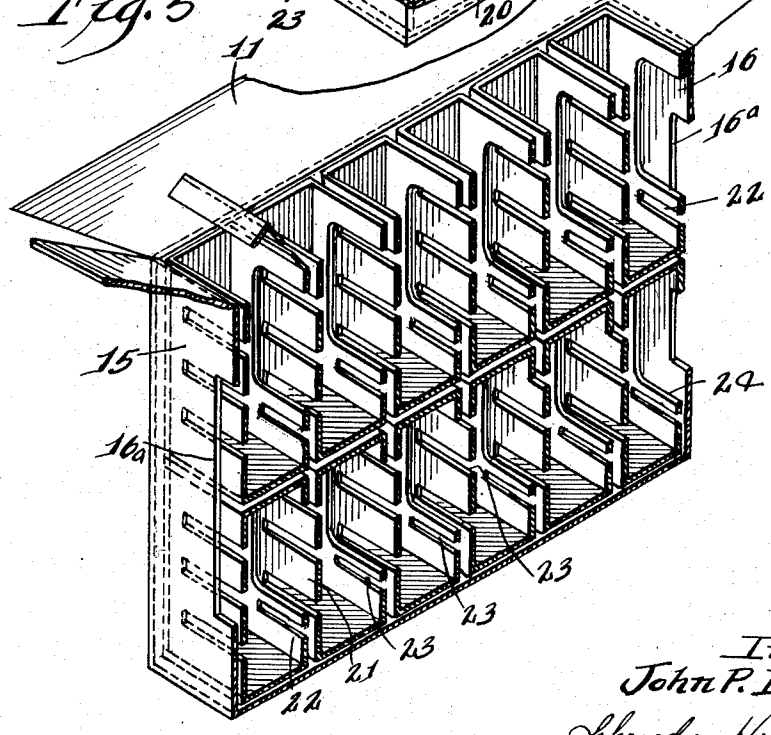


Fig. 5



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VENTILATED CONTAINER

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Application May 20, 1954, Serial No. 431,091

1 Claim. (Cl. 206—65)

This invention relates to ventilating containers, and more particularly to an improvement in such containers whereby circulatory passages permit adequate amounts of ventilating air to pass through individual cartons in packed position within the outer enclosure of the container.

A distinct problem has existed in the transportation of perishable merchandise over long distances. Containers for the merchandise must be strong enough to withstand normal shipping jostling, but adequate ventilation must be provided throughout every container so that the merchandise can be delivered in good condition to permit a merchant to dispose of it before spoilage occurs. The problem is especially acute in shipping onion sets and other bulbs which are packed in individual cartons within a container. It is well known that heating occurs in onion sets when confined, and decaying results, unless the noxious gases are removed.

The present invention provides a structure having circulatory passages for ventilating air through each individual carton packed within the container. The container is simple in construction and it may be economically manufactured, permitting its use with low cost items such as the bulbs described above.

The invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a broken perspective view of the ventilated container showing the individual cartons in packed position;

Fig. 2, a perspective view of an individual carton showing ventilating openings in its sides and top;

Fig. 3, a perspective view of the front side of the carton shown in Fig. 2;

Fig. 4, a broken perspective view of the container of Fig. 1 having the top section removed as indicated on line 4—4 of Fig. 1; and

Fig. 5, a perspective view taken in section as indicated on line 5—5 of Fig. 1.

In the embodiment illustrated, an outer rectangular enclosure, generally designated **10**, has two pairs of similar side-walls enclosed by top flaps **11**. The first pair of side-walls **12** and **13** is preferably provided with two rows of elongated ventilating slots **14**, but openings of other shapes may also be used. Each of the slots is in transverse alignment with a similar slot in the opposite side-wall, and the slots in each of the rows are offset one from the other to add strength to the container. Horizontal cut-out portions **14***a* may be added if desired near the top of side-walls **12** and **13** to provide ventilation over the top of the merchandise in the enclosure **10**. The second pair of side-walls **15** and **16** is usually provided with ventilating slots **16***a* which are also in longitudinal alignment with each other.

The completed ventilated container comprises the rectangular enclosure **10** and a number of individual cartons, generally designated **17**, which are preferably rectangularly shaped and of a size to fit snugly within the enclosure **10** in two tiers from side-wall to side-wall. It is preferred that each of the cartons be an outside carton, that is, a carton having at least one side adjacent a side-wall of the enclosure **10**. Each carton has a first pair of supporting sides **18** and **19** having similarly spaced ventilating openings **20** which are cut small enough to prevent the escape of merchandise placed in the carton. Preferably, two openings **20** are cut in each of the sides **18** and **19**, so that one or the other of the openings will be in alignment with the ventilating slots **14** in the side-walls **12** and **13** whether the carton is packed in the first or in the second tier of the container. It is apparent that the aligned slots **14** in the enclosure **10** and the openings **20** in the carton **17** provide a plurality of passages for air extending transversely of the enclosure **10**, and that the interior of each carton is readily accessible to circulating air.

It is also contemplated that the rows of ventilating slots **14** in the enclosure need not be offset one from the other. In such a case, a single cut-out portion in the supporting sides **18** and **19** would be sufficient.

The other supporting sides **21** and **22** of the carton **17** preferably have horizontally-extending ventilating openings **23** in them. The ventilating openings **23** may be aligned in part with each other and with the slot **16***a* in the enclosure **10** to provide circulatory passages for air extending longitudinally of the enclosure **10**. With such an arrangement each carton **17** in the container is completely ventilated from side to side in two directions. An additional ventilating opening **25** may be cut in the top of each carton **17** to further expose the carton interior for circulating air.

Each individual carton **17** may be provided with a cellophane window **24** to display the contents of each carton more attractively. An additional ventilating opening **25** is sometimes cut in the top **26** of each carton to permit further ventilation of the carton when in display position. When the cartons are in packed position, these openings **25** may be combined with the cut-out portions **14***a* to provide a further source of ventilation for the container and its contents.

The foregoing detailed description is given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, for some modifications will be obvious to those skilled in the art.

I claim:

A ventilated container, comprising: an outer rectangular enclosure having a top, a bottom, and two pairs of opposed side-walls, each of the side-walls in one of said pairs having two rows of spaced elongated, vertical ventilating slots, each of the slots in the first row being offset from the slots in the second row; and a plurality of similar rectangular cartons fitting snugly within the outer enclosure from side-wall to side-wall in two tiers in packed position, each of said cartons having two pairs of opposed supporting sides, each side in one of said pairs being provided with a pair of similarly spaced and shaped ventilating openings, one of said ventilating openings in each carton being so positioned as to occupy a position in alignment with one of the ventilating slots in one of said rows of ventilating slots when the cartons are in packed position, the end walls of said cartons being provided with a plurality of elongated horizontal openings and the end walls of said enclosure being provided with elongated vertical slots, each of which overlie some of the horizontal openings in the end walls of the cartons in each tier, the arrangement of said slots and openings providing a plurality of circulatory passages for air through the cartons.

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