

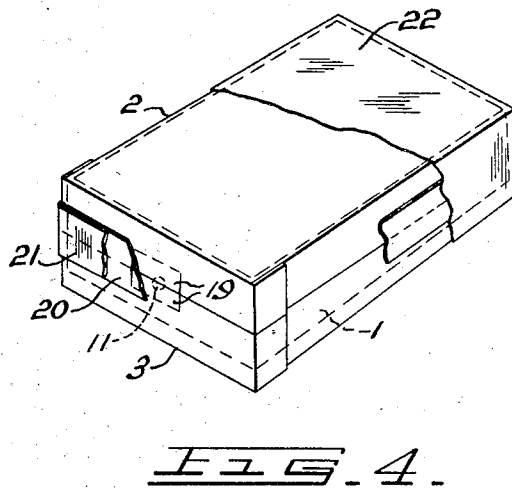
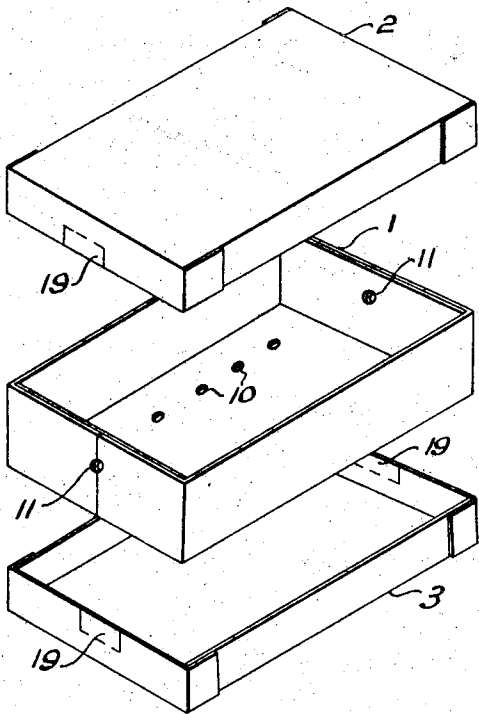
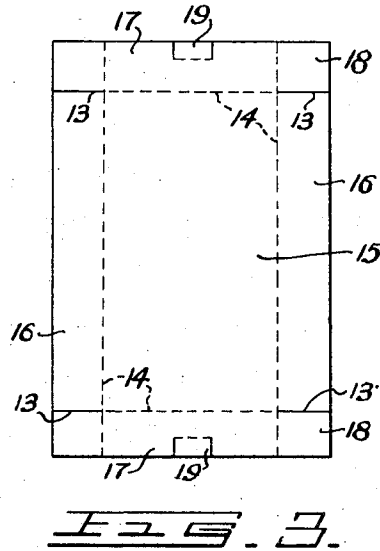
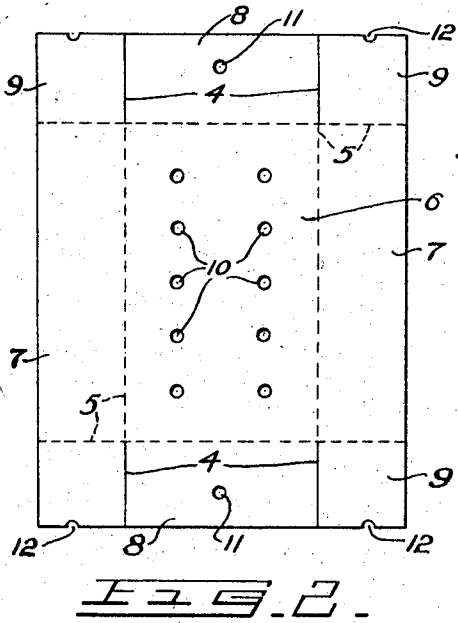
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CONTAINER

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2,192,006

CONTAINER

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8 Claims. (Cl. 229-6)

This invention relates to containers and more particularly to an improved container for the transport and storage of perishable commodities such as poultry.

5 The present practice of packaging poultry consists in the use of wooden or cardboard boxes, a number of birds being packed in one box which is lined with paper. This lining paper may be permeable or impermeable to water vapor and it is merely folded over the pack, it being commercially impracticable to seal the folds. In wooden boxes this liner is the only part of the package that offers any significant resistance to the transfer of air or water vapor. Cardboard boxes may resist the transfer of moisture but the method of sealing is usually inadequate to maintain the humidities desired in the package.

It has been found that poultry stored in these containers in the frozen state suffer losses in weight and quality because of evaporation through the liners, if not waterproofed, or the unsealed folds. When the product is stored in the chilled state a drier atmosphere is desirable than in the frozen state, in order to retard microbiological activity at the surface of the product. A certain degree of ventilation is therefore desirable for storage above the freezing point and in existing packages this is haphazard, depending entirely on the type of liner and condition of the folds.

It is an object of this invention to provide a container which is readily usable, which is capable of being sealed or ventilated repeatedly to provide the conditions necessary for either frozen or chilled storage, and which can be adapted for use in the chilling of commodities by introducing a desirable refrigerating material.

It is another object of this invention to provide a container, for perishable commodities, which has improved heat insulating properties combined with lightness of weight and which is waterproofed on both sides to prevent the uptake of moisture from the product or the surrounding atmosphere.

The invention will be described with reference to the accompanying drawing, in which,

Figure 1 is a perspective view of the improved container showing the three members thereof in separated relation,

Figure 2 is a plan of the blank from which the inner member may be formed,

Figure 3 is a plan of the blank from which the top or bottom members may be formed, and

Figure 4 is a perspective view of the assembled container or package.

As shown in the drawing the container proper consists of three members, 1 being an inner tray member and 2 and 3 top and bottom box members, formed, for instance, of corrugated cardboard which has been waxed or otherwise made water resistant.

The inner tray member 1 is formed from a blank, such as is shown in Figure 2, which is cut along lines 4 and scored along lines 5 to provide a bottom 6, sides 7, ends 8 and securing flaps 9. A number of regularly disposed holes 10 are punched in the bottom portion. A hole 11 is punched on the central vertical axis preferably above the central horizontal axis in each of the end portions, notches 12 being cut in the flaps 9 to register with such holes in the formed member.

The top and bottom members 2 and 3 are formed from identical blanks, one of which is shown in Figure 3, which is cut along lines 13 and scored along lines 14 to provide a bottom or top portion 15, sides 16, ends 17 and securing flaps 18. A central flap 19 is scored centrally in each of the end portions 17 and of such dimensions as to cover the end openings 11 in the tray when the package is assembled.

In assembling the package, the commodity, such as poultry, to be packed is placed in the inner member 1, which is placed in the bottom member 3 and the top member placed in position over the tray member with its edges in abutting relation to those of the bottom member as shown in Figure 4.

The container is then sealed by placing a sealing paper strip 20 which is provided with an adhesive not affected by moisture, around the container covering the abutting edges of the top and bottom members.

Owing to the position and proportions of the flap 19, if ventilation of the packaged goods is desirable, the flaps may be raised, moved or removed to open the holes 11 to the exterior of the closed package, only the adjacent portion of the sealing strip requiring to be broken if the flaps are opened after sealing. If desired, the container may be ventilated or sealed repeatedly.

Where cooling facilities are not available, it is proposed to precool the products in the package and the container has been so constructed that a refrigerant may be incorporated therein. A suitable quantity of a refrigerant, such as dry ice, may be first placed in the bottom member 3 and the inner member 1 containing the products to be packed then placed therein over the refrigerant, the top member being then placed in posi-

tion as previously described. The weight of the product in tray 1 keeps the latter in good thermal contact with the refrigerant which chills the contents as it evaporates, member 1 keeping the contents from direct contact with the refrigerant. At the same time, the holes 10 permit the gas given off, which has a preservative action, to surround the contents. When a refrigerant such as dry ice is used, the small amount required, distributed uniformly in the bottom box member, does not occupy sufficient space to prevent attachment immediately of the sealing strip previously mentioned, to both top and bottom box members if desired. Ordinarily sealing will be delayed until the refrigerant has practically all evaporated. For shipment or handling the box may be wired or banded, if required, to give additional protection.

The sealing strip 20 may be coated with aluminum foil 21 and the entire package may be similarly coated with a covering 22 of aluminum foil. The aluminum foil coating renders the package weather resistant and, in transshipping, the rate of heating up of the contents in aluminum coated packages is slower particularly in a high ambient temperature.

I claim:

1. A container for food products comprising an inner tray member adapted to contain the food products and top and bottom box members fitting over said inner member with their edges in abutting relation, said inner member having ventilating vents, and adjustable flaps on said top and bottom members positioned to cover the outer openings of said vents.

2. A package for food products comprising a container having an inner tray member adapted to contain the food products and top and bottom box members fitting over said inner member with their edges in abutting relation, said inner member having ventilating vents, flaps on said top and bottom members positioned to cover the outer openings of said vents, and a sealing strip extending around the container over said abutting edges and an aluminum foil coating over the container and sealing strip.

3. A container for food products comprising an inner tray member adapted to contain food products and having holes in its bottom and ends, and top and bottom closure members adapted to receive and enclose said tray member with their

edges in abutting relation, said closure members having adjustable means for closing or opening the holes in the end of said tray member.

4. A container for food products comprising an inner tray member and top and bottom closure members adapted to receive said tray member, the tray being provided with ventilating openings and the closure members with adjustable means for regulating the ventilation provided by said openings.

5. A container for food products comprising an inner tray member adapted to contain the food products and having at least one hole located in the central portion of each end thereof, and top and bottom closure members adapted to receive and enclose said tray member with their edges in abutting relation, said closure members having adjustable means for closing or opening said holes.

6. A container for food products comprising an inner tray member adapted to contain the food products and top and bottom box members fitting over said inner member with their edges in abutting relation, said inner member having at least one hole located in the central portion of each end thereof, and adjustable flaps on said top and bottom members positioned to cover said holes.

7. A container for food products comprising an inner tray member and top and bottom closure members adapted to receive said tray member, the ends of said tray being of double thickness and being provided with at least one centrally located ventilating opening, said closure members having adjustable means for regulating the ventilation provided by said openings.

8. A container for food products comprising an inner tray member and top and bottom closure members adapted to receive said tray member, said tray member being formed of a rectangular blank having a bottom portion and foldable side and end walls, said side walls having foldable end flaps adapted to overlie said end walls, each of said end walls having a centrally located hole and each of said end flaps having a notch adapted to register with a respective hole, and each of said closure members being formed of a blank having a central portion and foldable side and end walls, each of said last mentioned end walls having a centrally located foldable flap.

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