

(No Model.)

3 Sheets—Sheet 1.

E. J. VANCE & J. M. LEAVER.

CARRIER FOR EGGS, FRUIT, &c.

No. 598,755.

Patented Feb. 8, 1898.

FIG. 1.

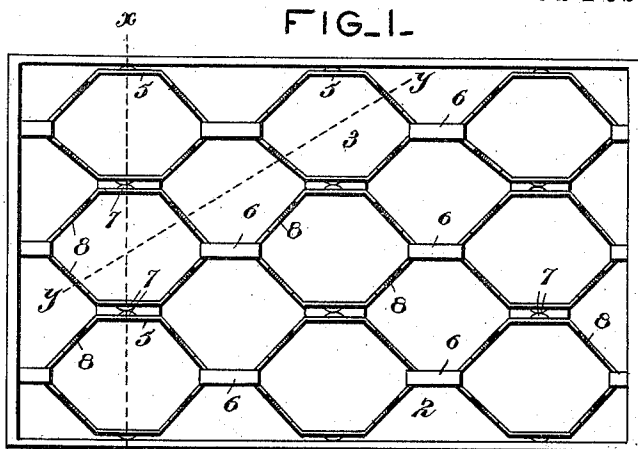


FIG. 2.

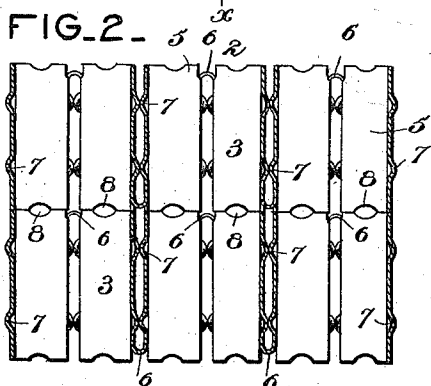


FIG. 6.

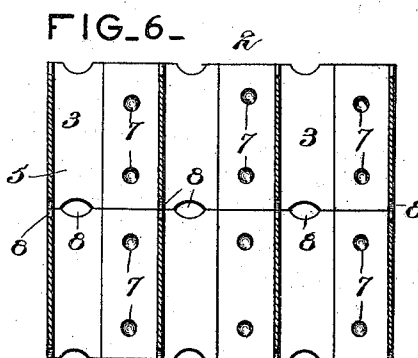
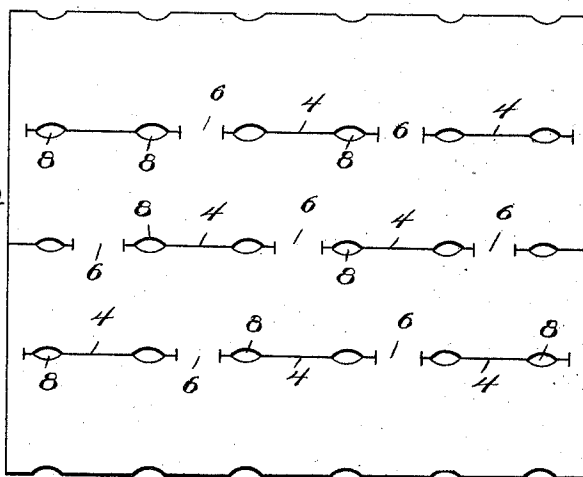


FIG. 3.



Inventors

Witnesses

F. Kieser

J. F. Riley

By their Attorneys,

Emery J. Vance,
James M. Leaver.

C. A. Snow & Co.

(No Model.)

3 Sheets—Sheet 2.

E. J. VANCE & J. M. LEAVER.
CARRIER FOR EGGS, FRUIT, &c.

No. 598,755.

Patented Feb. 8, 1898.

FIG. 4—

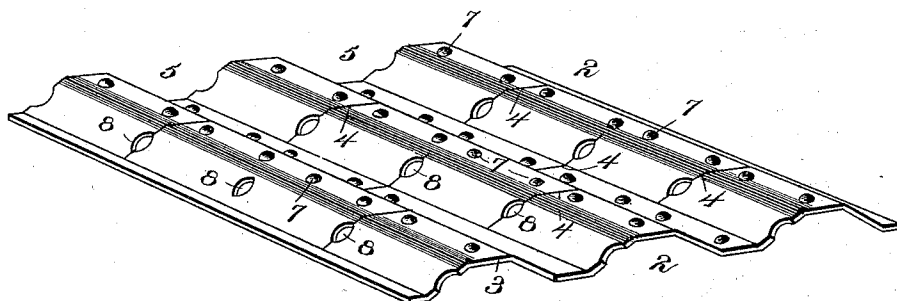


FIG. 5—

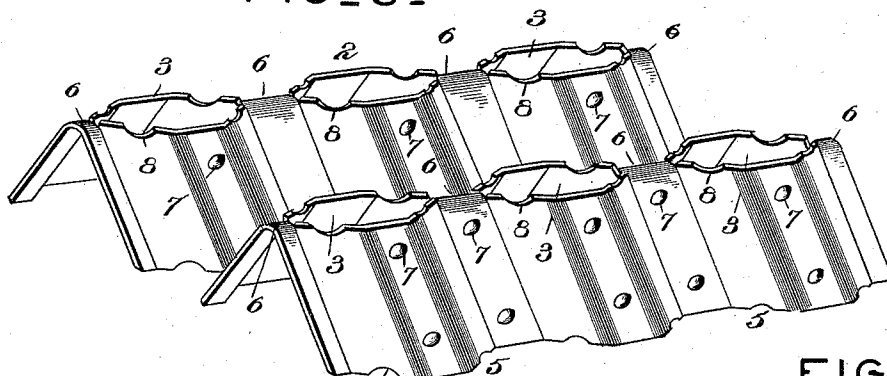


FIG. 7—

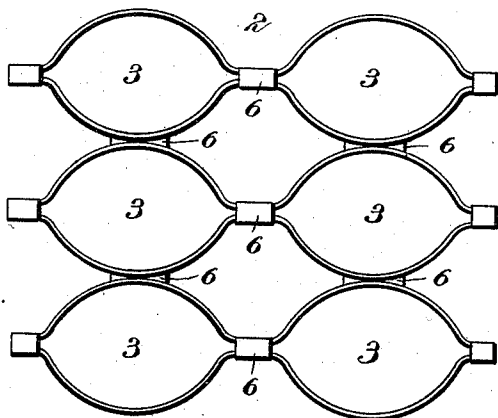
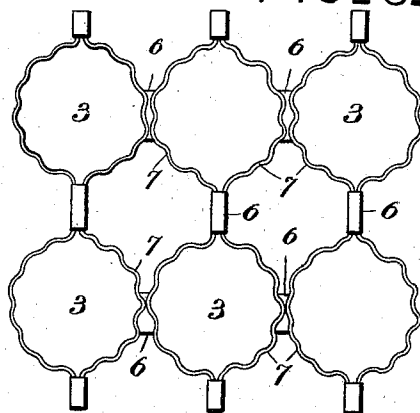


FIG. 8—



Witnesses
G. Kiesel.

J. F. Riley

By their Attorneys,

C. A. Snow & Co.

Inventors
Emery J. Vance,
James M. Leaver.

(No Model.)

3 Sheets—Sheet 3.

E. J. VANCE & J. M. LEAVER.

CARRIER FOR EGGS, FRUIT, &c.

No. 598,755.

Patented Feb. 8, 1898.

FIG - 9 -

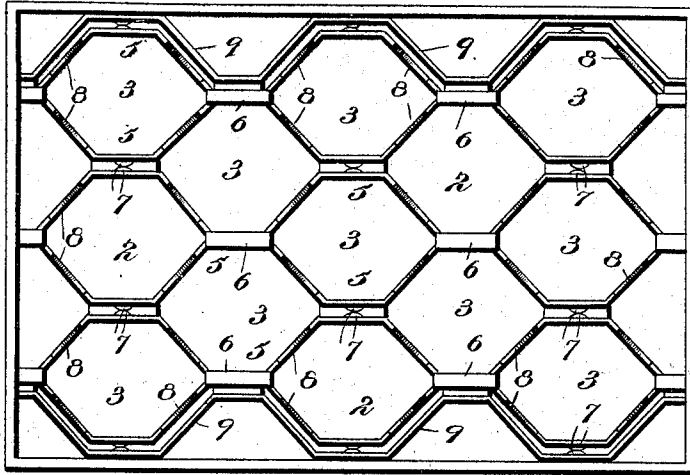


FIG - 10 -

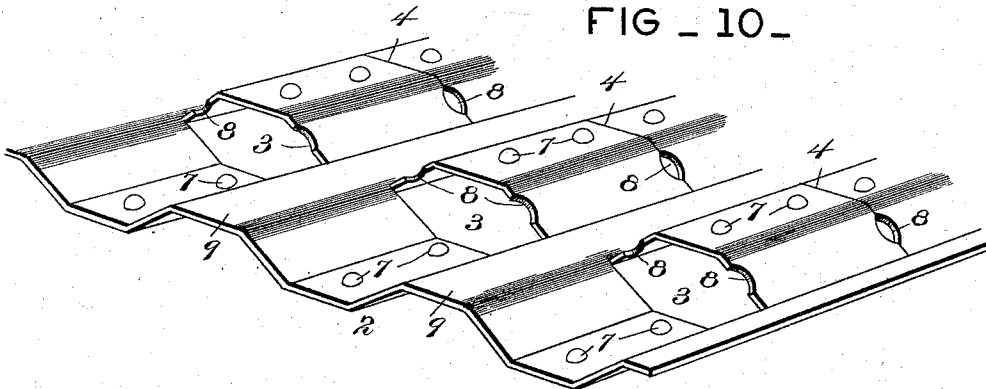
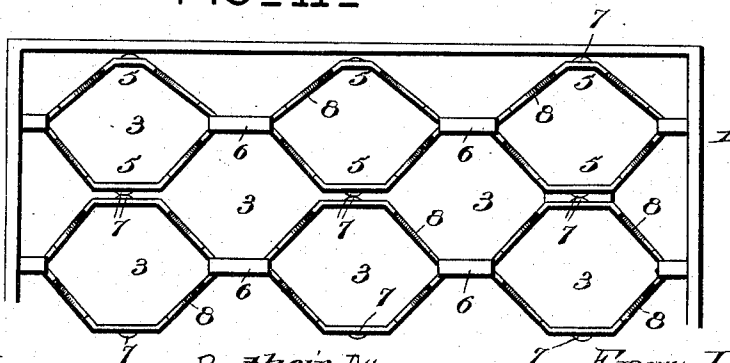


FIG - 11 -



Witnesses
F. Kaiser.

By their Attorneys,

Emery J. Vance
James M. Leaver.

Inventors,

J. H. F. Riley

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

EMERY J. VANCE, OF BAY CITY, AND JAMES MARSHALL LEAVER, OF BAY MILLS, MICHIGAN.

CARRIER FOR EGGS, FRUIT, &c.

SPECIFICATION forming part of Letters Patent No. 598,755, dated February 8, 1898.

Application filed April 30, 1897. Serial No. 634,581. (No model.) Patented in Canada April 3, 1894, No. 45,685.

To all whom it may concern:

Be it known that we, EMERY J. VANCE, residing at Bay City, in the county of Bay, and JAMES MARSHALL LEAVER, residing at Bay Mills, in the county of Chippewa, State of Michigan, citizens of the United States, have invented a new and useful Carrier for Eggs, Fruit, &c., (patented in Canada by Letters Patent No. 45,685, dated April 3, 1894,) of which the following is a specification.

This invention relates to improvements in carriers for eggs, fruit, &c.

The object of the present invention is to improve the construction of carriers for eggs, fruit, &c., to cushion eggs to prevent any liability of their breaking, and to enable the cells to be rapidly and economically constructed without waste of material.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a plan view of an egg-crate provided with egg carriers or holders constructed in accordance with the invention. Fig. 2 is a vertical sectional view on line *xx* of Fig. 1. Fig. 3 is a plan view of a sheet of paper or blank provided with slits or cuts arranged at intervals, the sheet or blank being shown preparatory to corrugating. Fig. 4 is a perspective view of a sheet or blank corrugated and cut preparatory to folding. Fig. 5 is a similar view, the sheet or blank being partly folded. Fig. 6 is a detail sectional view on line *yy* of Fig. 1, showing the ventilator-openings. Figs. 7 and 8 are plan views showing modifications of the invention. Fig. 9 is a plan view of an egg-crate provided with an egg carrier or holder constructed as shown in Fig. 1 and provided with the side cushioning-strips. Fig. 10 is a detail perspective view illustrating the side cushioning-strip and showing the same before folding. Fig. 11 is a plan view illustrating a modification of the invention and showing another means for cushioning the egg carrier or holder.

Like numerals of reference indicate corresponding parts in the several figures of the drawings.

1 designates an egg-crate provided with egg carriers or holders 2, having egg-cells 3, and each constructed of a single sheet of paper or other suitable material, which is provided with a series of slits 4, and which is corrugated or regularly bent at right angles to the line of the slits or the cuts to form oppositely-bowed portions 5 when folded, whereby a series of egg-cells are formed, as shown. The slits 4 occur at regular intervals and leave uncut portions 6, and the slits of one series occur opposite the intervals between the adjacent series of slits in order to enable the blank to be folded, as shown. The uncut portions 6 form hinges which connect the strips of material and which occur alternately at the top and bottom of the strips.

The oppositely-bowed portions 5, which form the sides of the egg-cells, may be polygonal, as illustrated in Figs. 1 to 6 of the accompanying drawings, or may be continuously curved to form an approximately circular cell, or may be sigmoidally or sinusoidally curved, as shown in Fig. 8 of the accompanying drawings; but any other desired shape may be employed. The form of the egg-cells is produced by corrugating or alternately depressing and raising the material or blank at right angles to the line of cuts by stamping, compressing, or other suitable means.

In order to cushion the eggs to prevent breakage, the adjacent continuous portions of the bowed sides 5 are provided with outwardly-extending protuberances 7, which are preferably of semispherical shape and which contact with each other and serve to separate the adjacent portions of the bowed sides of the cell. This construction separates the eggs considerably at the adjacent portions of the sides of the cell and prevents two thicknesses of pasteboard forming a solid body against which eggs might be easily cracked.

The egg-crate is ventilated by recesses 8 at the upper and lower edges of the sides of the cells, which recesses, when several holders or carriers are in a crate, are oppositely disposed and form adjacent openings, as shown in Fig. 6 of the accompanying drawings. These recesses are formed by making circular or elliptical openings at the ends of the

slits, as clearly shown in Fig. 4 of the accompanying drawings.

The sinusoidally-curved bowed sides of the cells (shown in Fig. 8 of the accompanying drawings) obviate the necessity of employing the outwardly-extending semispherical cushioning protuberances.

In Fig. 9 of the accompanying drawings is illustrated an egg carrier or holder constructed the same as that shown in Fig. 1 and provided with side cushioning-strips 9, which are corrugated reversely of the adjacent strips, as clearly illustrated in Fig. 10 of the drawings, whereby when the parts are folded the side cushioning-strip will be arranged parallel with the adjacent strip to increase the thickness of the sides of the holder and to strengthen the same. The semispherical protuberances separate the side cushioning-strip from the adjacent side strip and from the receptacle, and the parts form a yielding cushion of great strength and durability at the sides of a carrier or holder.

In Fig. 11 of the accompanying drawings is illustrated another modification of the invention, and in this form the outer side strip is substantially V-shaped corrugated, and the apexes of the corrugations are in contact with the adjacent sides of the receptacle to form a cushion.

The egg carriers or holders may be of any size to adapt them to different crates and receptacles, and they are separated in the usual manner by horizontal partitions or boards.

It will readily be seen that the egg holders or carriers are exceedingly simple and inexpensive in construction, that they may be readily manufactured without waste of material, and that they are adapted to cushion eggs and prevent them coming in contact with one another or with solid portions of a crate or carrier and becoming cracked by such contact. Furthermore, it will be apparent that the carrier is adapted for fruit and similar merchandise, that it may be modified to suit the merchandise to be carried, and that as the form of the hinge is the salient feature of the invention the protuberances, which form the cushions, and the recesses, which provide for ventilation, may be omitted in some forms of the invention.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What we claim is—

1. A carrier or holder constructed of a single sheet of material and provided with parallel series of cuts arranged at intervals and leaving unsevered portions forming hinges, said sheet being corrugated at right angles to the lines of the cuts and folded at the uncut portions or hinges, whereby oppositely-bowed portions are formed to provide cells for the reception of eggs, substantially as described.

2. A carrier or holder constructed of a single sheet of corrugated material and provided at right angles to the line of corrugations with parallel series of cuts or slits, arranged at intervals and dividing the sheet into strips and leaving uncut portions connecting the strips, said strips being folded at the uncut connecting portions, whereby oppositely-bowed portions are brought opposite one another to form cells, substantially as described.

3. A carrier or holder constructed of a single sheet of corrugated material and provided with parallel series of slits, arranged transversely of the line of corrugations and dividing the sheets into strips and leaving uncut portions connecting the strips, the cuts or slits of one series being arranged opposite the intervals between the cuts or slits of the adjacent series, and the strips being folded at the uncut portions into vertical positions to form cells, substantially as described.

4. A carrier or holder constructed of a single sheet of material and consisting of a series of strips corrugated to form oppositely-bowed portions and connected at intervals at their longitudinal edges alternately at the top and bottom and having the concave faces of the bowed portions disposed opposite each other to form cells, substantially as described.

5. A carrier or holder comprising a series of corrugated strips, having oppositely-disposed corrugations forming cells and provided at the contiguous portions of the strips with outwardly-extending contacting substantially semispherical protuberances forming cushions and separating the strips, substantially as described.

6. A carrier or holder comprising a series of corrugated strips, constructed from a single sheet of material and arranged vertically and connected alternately at the top and bottom by uncut portions and provided at their upper and lower edges with recesses and provided at their adjacent portions with contacting outwardly-extending protuberances, separating the strips and forming cushions, substantially as described.

7. A carrier or holder comprising a series of strips, cut from a single sheet of material and connected alternately at the top and bottom by uncut portions, said strips being arranged vertically and being polygonally corrugated and having oppositely-disposed bowed or corrugated portions forming cells, substantially as described.

8. A carrier or holder constructed of a single sheet of material and slitted at intervals to form a series of strips, and bowed at the slitted portions, said sheet being folded to form complete egg-cells, substantially as described.

9. A carrier or holder having a series of egg-cells and composed of a series of corrugated strips and provided at its sides with cushioning-strips corrugated the reverse of the adjacent strips, whereby when they are

folded they will be arranged parallel with the adjacent strips, substantially as and for the purpose described.

10. A carrier or holder constructed of a single sheet of material and provided with parallel series of cuts arranged at intervals and leaving unsevered portions forming hinges, said sheet being folded at the uncut portion or hinges and oppositely bowed to provide
10 complete egg-cells, substantially as described.

In testimony that we claim the foregoing as

our own we have hereto affixed our signatures in the presence of witnesses.

EMERY J. VANCE.

JAMES MARSHALL LEAVER.

Witnesses for E. J. Vance:

A. E. PEARCE,

MINNIE RAYMOND.

Witnesses for J. M. Leaver:

C. W. CALEY,

GEO. C. RAMSEY.