

(Model.)

2 Sheets—Sheet 1.

A. L. ELLIS.
EGG CARRIER.

No. 385,450.

Patented July 3, 1888.

Fig 1

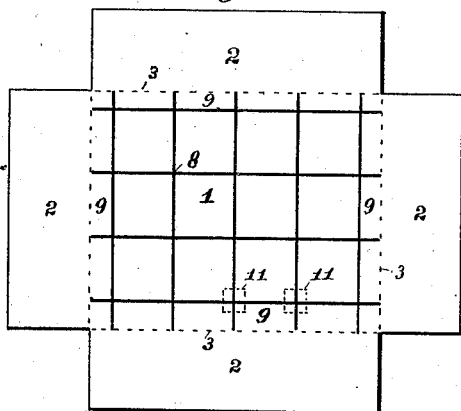


Fig 2

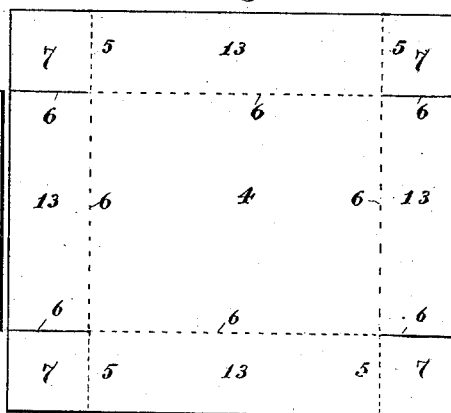


Fig 3

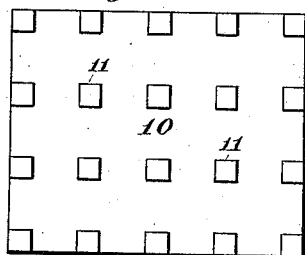


Fig 4

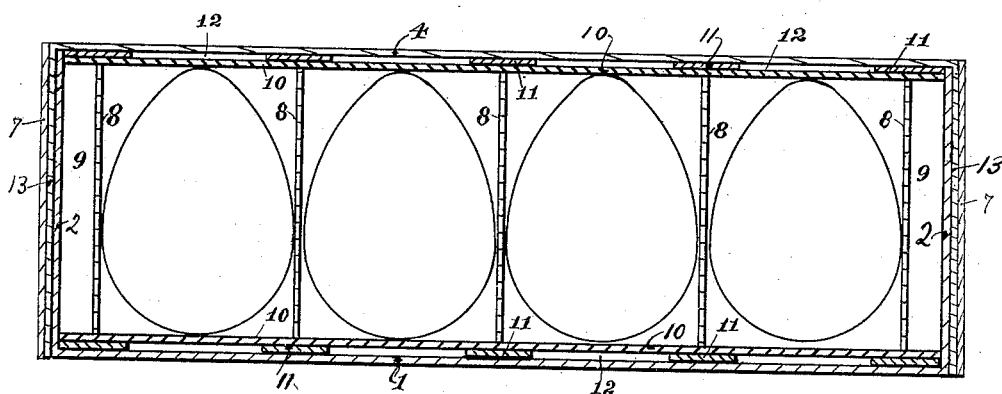


Fig 5

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ATTORNEY.

(Model.)

2 Sheets—Sheet 2.

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EGG CARRIER.

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Fig. 6.

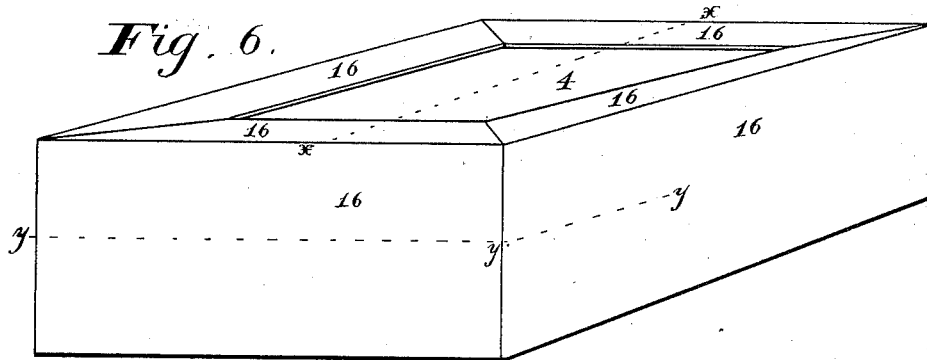


Fig. 7.

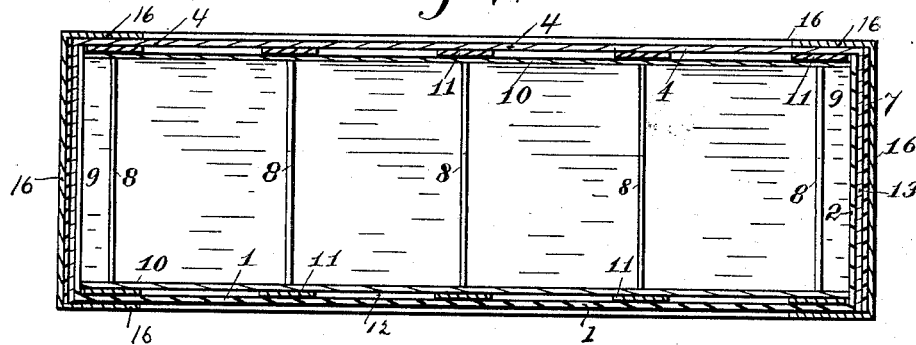
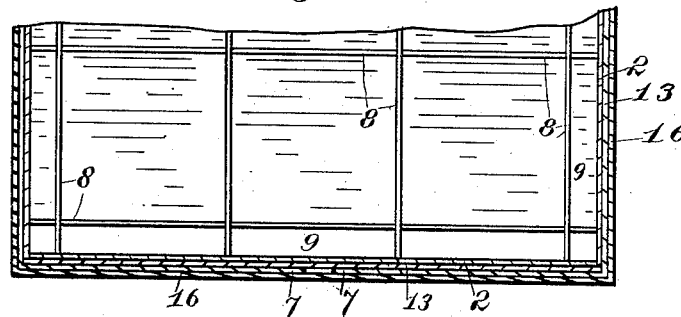


Fig. 8



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UNITED STATES PATENT OFFICE.

ADELBERT L. ELLIS, OF PONCHO SPRINGS, ASSIGNOR OF ONE-HALF TO
HARVEY W. FORMAN, OF DENVER, COLORADO.

EGG-CARRIER.

SPECIFICATION forming part of Letters Patent No. 385,450, dated July 3, 1888.

Application filed December 12, 1887. Serial No. 257,575. (Model.)

To all whom it may concern:

Be it known that I, ADELBERT L. ELLIS, a citizen of the United States, residing at Poncho Springs, in the county of Chaffee and State of Colorado, have invented a new and useful Egg-Carrier, of which the following, taken in connection with the drawings accompanying and forming part hereof, is a specification.

My invention relates to cases or boxes for the safe packing and transportation of eggs, commonly known as "egg-carriers," in which a separate nest or cell is provided for each egg, so that each egg is independently and safely inclosed and prevented from itself hitting against or being hit by any of the other eggs in the case.

Egg-carriers as hitherto very often constructed have had an exterior wooden casing, within which, layer upon layer, were placed the cellular structures for receiving and holding the eggs. From their size, weight, construction, and cost they have been adapted mainly, if not totally, to the use of the shipper or middleman, and not to the use of the average producer. The shipper or middleman receives eggs loose, so to speak, and from a large number of producers, packing such eggs for shipment in the carriers without regard to age or identity of producer. Another form of egg-carrier proposed is intended for the packing of small quantities of eggs, so that it may be used by the producer. Such consists of a knock-down box with a contained cellular structure; but such structure is not maintained away from the walls of the casing, the casing forming the exterior walls of the outer rows of cells. This leaves the contained eggs in contact with the walls of the box or case and in position to receive the effect of any blow or jar upon the box or case, involving great danger of injury to the contents. It seems desirable, therefore, that there should be produced an egg carrier or box especially adapted to the use of the producer in which the eggs could be safely packed for shipment and retail sale, and in which they would be thoroughly protected from danger from any jar or blow on the outside of the carrier or box, which could be sealed by him, to be opened only by the consumer, and which could bear, if he chose, his name, brand,

or trade-mark and marks indicative of the age of the contents.

The object of my invention, therefore, is to produce such an egg-carrier, one small enough to be used by the producer for the marketing of his production, simple in construction, economical in cost, easily used, yet securely protecting the contents; to which ends my invention consists in the features and combinations more particularly hereinafter described and claimed.

In practicing my invention I more particularly intend it for the construction of carriers or cases to contain only a limited number of eggs—say a dozen, as that is the unit used in the retail sale—so that it may be used by the producer, who is to fill the carrier, hermetically seal it, place thereon his certificate of date of production or of date of sealing, or both, the package to reach the consumer in the condition it leaves the producer, the whole forming a convenient package for the shipment, storage, safe handling, and retail sale of the eggs, affording also to the purchaser or consumer knowledge of the producer and of the freshness of the contents. A carrier or case for such purposes must be light and cheap, yet strong and of such construction that the freight or carriage thereon when empty shall be a comparatively small charge. To secure these ends I make the case of my improved egg-carrier as a "knock-down" pasteboard box. Two bases of pasteboard are used, each having side wing-pieces with lines of creasing or "folding-lines" along the lines of junction of the bases and side wing-pieces. One of these forms the body of the box or case and the other the cover, after the usual manner of telescopic knock-down boxes. Within the body of the box is arranged the ordinary and well-known cellular structure for carrying eggs in a carrier. As before stated, I prefer to make the carrier of a size to contain only a dozen eggs; but of course the size may be varied, and they may be made to carry several dozen each. As the containing case or box is of pasteboard, there would be danger of a blow or jar upon the case being conveyed to the eggs, breaking or injuring them, unless means were provided for

obviating such danger. The means used therefor are extra pieces forming an extra or false top and an extra or false bottom for the cellular structure, these extra pieces being held in contact with the cellular structure and away from the walls of the case by projections or supports affixed to the extra pieces and taking against the walls of the case at several points where the walls of the egg-cells intersect each other, so that a jar or blow upon the exterior, either top or bottom, is transmitted to the cell-walls, and through them to the other side of the case, without injury ordinarily to the contents of the cells, there being also directly beneath and directly over each egg the air-spaces between the extra pieces and the exterior walls of the case, such air-space forming an elastic cushion between the eggs and the walls, which serves as an additional protection to the eggs. Such a construction embodying my invention is shown in the drawings, in which—

Figure 1 is a plan view of the blank for the body of the carrier with the cellular structure placed thereon; Fig. 2, a plan view of another form of blank; Fig. 3, a plan view of one of the extra pieces referred to; Fig. 4, a side view of Fig. 3; Fig. 5, a section, on an enlarged scale, of my improved carrier put together and packed. Fig. 6 is a perspective view of a sealed box or package embodying my invention. Fig. 7 is a longitudinal section on line *xx*, and Fig. 8 a horizontal section on line *yy*, Fig. 2, the cellular structure being omitted in these sectional views.

In these figures the reference-numeral 1 indicates the base of the body of the box or case, having side pieces or wings, 2 2 2 2, whose lines of junction with the base 1 are creased, forming the folding-lines 3 3 3 3. It is to be understood that these lines are upon the other side of the base, so that the wings 2 may be turned up to form the sides of the body of the case. The cover part may be made of a blank of the same form and description, the two forming a telescopic knockdown box of the well-known form, or either or both parts may be formed from blanks like that shown in Fig. 2, wherein 4 is the base, having side wings or pieces, 13, 6 being the lines of creasing to form the folding-lines. In this form the pieces at the corners or angles are not cut away, as in Fig. 1, but are creased on one side and cut upon the other, as at 5, so that they may be folded over upon the sides, and so aid in strengthening the body.

8 is the ordinary cellular structure for affording a separate cell or nest for each egg. It is formed, in the usual way, by intersecting walls of pasteboard notched at their points of intersection, the notch in one wall acting as a mortise to the unnotched part of the wall intersecting it. The walls of the cells are carried a little distance beyond or outside of the outer walls of the outer rows of cells, so that when the box is folded and closed up a space, 9, is left between the sides of the inclosing-box and

the outer rows of cells, preventing dangerous jars or concussions from reaching the eggs.

10 represents one of the extra pieces used as a false or extra top or bottom. Preferably it is of light or somewhat elastic card or paste board. At various points on one of its surfaces small projections or supports 11 are secured. The points at which they should be secured are those which coincide with the intersections of the cell-walls, as shown in Fig. 5 and in dotted lines in Fig. 1. While preferably one of these projections or supports is placed at points corresponding to every intersection, as shown, it is evident that a less number might be used, so that the principle of giving to the cells or nests a somewhat elastic top and bottom removed from and held at a little distance from the exterior walls is preserved. It is also evident that the same result could be obtained by fixing these supports 11 to the interior of the top and bottom of the case and then laying the pieces 10 thereon. In practice one of these extra pieces 10 is laid upon the base 1 of the body of the box, with the projections 11 resting upon 1 and holding 10 at a distance therefrom. The cells 8 are then laid thereon and filled with eggs. An extra piece, 10, is then laid upon the cells with the projections 11 upon the outer or upper side, the top is then placed thereon, the sides folded in, and the whole secured in place and the parts together by a strip or strips pasted over the edges and joints and around the sides, such strip or strips also hermetically sealing the package. In Figs. 6, 7, and 8 such strip is represented by 16, which passes over the sides and ends of the package and which is sufficiently wide to leave projecting edges or wings, which are folded over upon the top or bottom and secured by pasting, as shown in Fig. 6. In Figs. 7 and 8 the sides of the body of the case are represented by 2, the sides of the cover by 13, upon 13 being folded the end or side flaps, 7. The strip 16 then not only seals the package, but also holds the flaps 7 against sides or flaps 13 and secures the body and the cover together. This forms a safe and convenient package for a small or limited number of eggs—safe because, as shown in Fig. 5, every egg is removed a distance from the outer walls and is practically suspended in the space within such walls, there being the intervening air-spaces, 9, upon the ends and sides and 12 upon the top and bottom, these air-spaces forming elastic cushions between the cells and their contents and the outer walls; convenient in that the eggs, once packed therein the package, may remain unbroken until opened by the consumer, thus saving the frequent handling and counting of the individual eggs and the resultant percentage of loss. It is evident that if a blow or jar be given to the box—say, for illustration, upon the top 4—it will be carried by the projections 11 to the intersections of the cell-walls, their strongest points, and by them be transmitted to the other side, and thence its effect dissi-

pated with little if any danger of injury to the contents. It is of cheap material and construction and easily used. As it is of knock-down construction, a great number of the blanks may be packed in a small bulk, insuring cheapness of transportation.

While a telescopic knockdown box is herein shown, it is evident that other forms of exterior casing might be used in connection with the false or extra tops and bottoms shown and described, and one principle of the invention—viz., the removal of the cellular structure from the exterior walls and the practical suspension of the eggs within the carrier—be preserved.

I make no claim, *per se*, to the knockdown telescopic box or the cellular structure herein described and shown, as such are old and well known.

What I claim is—

1. In an egg carrier or case, the combination of the cellular structure for containing the eggs, and a false or extra top therefor and a false or extra bottom therefor, both supported at points corresponding to the intersections of the cell-walls away from the outer walls of the carrier or case, substantially as set forth.

2. In an egg carrier or case, the combination of a cellular structure for containing the eggs, and a false or extra bottom and a false or extra top therefor, both provided with projections or supports at points corresponding to the intersections of the cell-walls maintaining them away from the walls of the carrier or case, substantially as set forth.

3. In an egg carrier or case, the combination of a folding or knockdown body, a folding or knockdown cover, a cellular structure for containing the eggs, and an extra top and an extra bottom for such structure, each provided with projections at points corresponding to the intersections of the cell-walls holding it away from the exterior walls of the carrier or case, substantially as set forth.

4. In an egg carrier or case, the combination

of an inclosing-body and a cover therefor, a cellular structure for containing the eggs, having its cell-walls extended beyond the outer walls of the outer rows of cells, a false or extra top and a false or extra bottom for the cellular structure, and supports or projections at points corresponding to the intersections of the cell-walls holding such extra top and bottom away from the exterior walls of the case, whereby air-spaces are formed all around the cellular structure and the cells are removed from contact with the outer walls, substantially as set forth.

5. An egg-package for transportation and sale, consisting of an inclosing case or body, a cellular structure therein containing a single egg in each cell, top and bottom pieces having projections on their exterior faces arranged at points coinciding with the intersections of the cell-walls, and a sealing-strip pasted around the sides and ends and having its edges folded over upon the top and bottom, securing together the parts of the body or case and hermetically sealing the package, substantially as set forth.

6. A sealed package or box consisting of a box-body having side wings or flaps, a cover having side wings, 13, with extending flaps 7, and a sealing-strip pasted around the sides and ends of the box or package and having edges folded over upon and pasted upon the top and bottom, whereby the flaps 7 are held against the sides, the body and cover are secured together, and the package is hermetically sealed, substantially as set forth.

In testimony whereof I have hereunto subscribed my name, in the presence of two witnesses, at Denver, Colorado, on this 3d day of December, 1887.

ADELBERT L. ELLIS.

Witnesses:

Z. F. WILBER,
B. L. POLLOCK.