No. 734,217. PATENTED JULY 21, 1903.

R. A. S. BLOOMER.

FOLDING BOX.

APPLICATION FILED APR. 15, 1903.

NO MODEL.

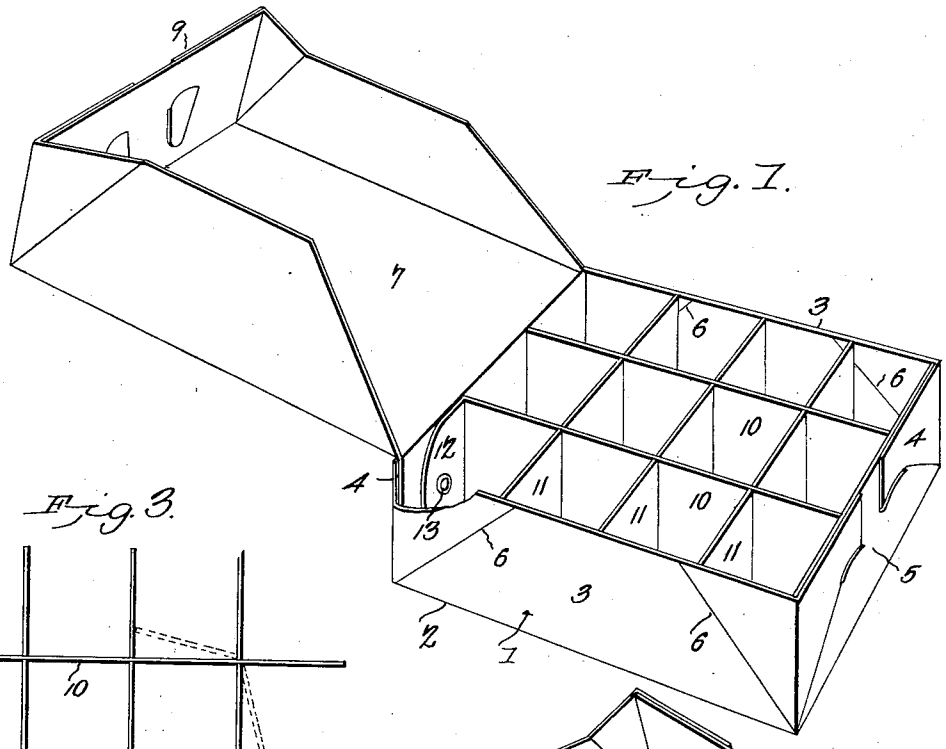

Fig. 1.

Fig. 3.

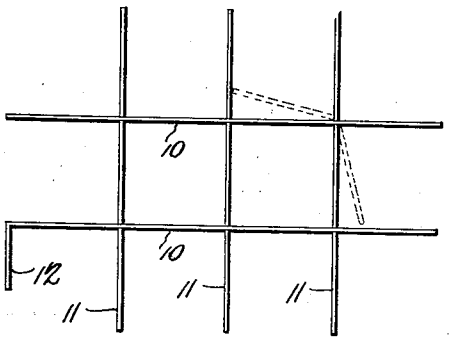

Fig. 2.

Fig. 4.

Witnesses
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No. 734,217. Patented July 21, 1903.

UNITED STATES PATENT OFFICE.

ROBERT A. S. BLOOMER, OF NEWARK, NEW YORK.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 734,217, dated July 21, 1903.

Application filed April 15, 1903. Serial No. 152,770. (No model.)

To all whom it may concern:

Be it known that I, ROBERT A. S. BLOOMER, a citizen of the United States, residing at Newark, in the county of Wayne and State of New York, have invented a new and useful Folding Box, of which the following is a specification.

This invention relates to a collapsible box or crate for shipping eggs, fruits, and other articles, which may be easily folded for convenience in shipping from the maker to the user and which may be readily set up for use without first stapling, interlocking, or otherwise securing the several sections together.

The primary object of the invention is to provide a simple, inexpensive, and durable box or crate of this character provided with a number of collapsible partitions defining a series of cellular compartments adapted to receive the eggs or other articles to be shipped, said partitions being pivotally attached to the box and arranged in such a manner as to permit the same being readily folded within the body of the box, so as to take up very little room and obviate the liability of said cellular structure being separated or lost during shipment.

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, it being understood that various changes in 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.

In the accompanying drawings, Figure 1 is a perspective view of a folding box or crate constructed in accordance with my invention, the lid being open to show the arrangement of the collapsible cells. Fig. 2 is a similar view showing the cells folded within the box. Fig. 3 is a top plan view of the cells detached, and Fig. 4 is a side elevation of the box folded for shipment.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the box or crate, which may be formed of paper, cardboard, strawboard, or other suitable material, consisting of the bottom 2, side pieces 3, and end flaps 4, the end flaps 4 being secured together by means of locking-tongues 5. The side pieces 3 are provided with converging creases or folds 6, which permit the side pieces and end flaps being folded inwardly on the bottom of the box when shipping the same.

The box is provided with a hinged cover 7, preferably a continuation of the rear end flap 4, said cover being also provided with inwardly-folding side pieces 8 and interlocking end flaps 9, so as to permit said cover being collapsed and folded on the bottom of the box, as clearly shown in Fig. 4 of the drawings.

Arranged within the body of the box are a number of cellular compartments adapted to receive the eggs or other articles and consisting of longitudinal strips 10 and transverse strips 11, formed of pasteboard or other suitable material, joined together in the ordinary manner, each strip at the point of intersection being slotted through half its width. One of the longitudinal strips 10 is formed somewhat longer than the rest, the end thereof being bent at right angles, as shown at 12, and pivotally secured to the rear end of the box by means of an eyelet or similar fastening device 13, so as to permit the cells after being collapsed to be turned downwardly and folded on the bottom of the box, as clearly shown in Fig. 2 of the drawings. In order to diminish the length of the collapsed cellular structure and permit the same being folded within the body of the box, one of the outer transverse strips and one of the longitudinal strips are arranged to be folded inwardly on the adjacent cell-section, as shown in dotted lines in Fig. 3, thereby rendering the ends of the cellular structure of uniform length and permitting the same to be folded in position on the bottom of the box.

In packing the empty boxes for shipment the ends of the transverse and longitudinal strips comprising the corner-cell are folded inwardly on the adjacent cell-walls and the structure collapsed in the usual manner and folded downwardly on the bottom of the box, using the eyelet as a pivot.

In setting up the box preparatory to shipping eggs or other articles the collapsed cellular structure is turned upwardly on its pivot until the lower edges of the cells assume a

position at right angles to the bottom of the box, after which the cells are straightened out and the inwardly-folded end strip comprising the corner-cell bent outwardly, as clearly shown in Fig. 1 of the drawings, bracing the sides of the box and forming a strong durable carrier.

It is obvious that it makes no difference which of the four extreme intersections of the cellular structure is used as a pivotal center, provided the strips are inclined in the collapse of the structure in such a direction as to bring that intersection near to one end of the same, and it is also apparent that any one of the longitudinally-disposed strips may be pivotally connected to the box, the main object in view being to permanently attach the cells to the body of the box and permit the cells being folded on the bottom thereof, thereby preventing the cellular structure from becoming detached or lost during transportation.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

1. A box or crate having a collapsible cell structure pivotally secured to one wall thereof whereby said cell structure may be collapsed and folded downwardly within the body of the box.

2. A folding box or crate having a collapsible cell structure pivotally secured to one wall thereof whereby said structure may be collapsed and folded downwardly within the body of the box.

3. In a folding box, a collapsible cell structure pivotally secured to one wall thereof, whereby said cell structure may be turned at right angles to said wall and folded on the bottom of the box.

4. In a folding box or crate a collapsible cell structure comprising transverse and longitudinal intersecting strips defining compartments, one of the longitudinal strips being pivotally secured to one wall of the box whereby said cell structure may be collapsed and folded downwardly within the body of the box.

5. In a folding box or crate, a collapsible cell structure pivotally secured to one wall thereof and consisting of longitudinal and transverse intersecting strips defining chambers, the end of one of the outer longitudinal strips and the end of its companion transverse strip being constructed to be folded backwardly away from each other to diminish the length of the structure when collapsed and to permit said cell structure to be folded downwardly within the body of the box.

6. In a folding box or crate, a collapsible cell structure consisting of longitudinal and transverse strips defining compartments, the end of one of the longitudinal strips being bent at right angles and pivotally secured to one wall of the box whereby said cell structure may be collapsed and folded downwardly within the body of the box.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT A. S. BLOOMER.

Witnesses:

JOSEPH GILBERT,

WILLIAM L. ROBINSON.