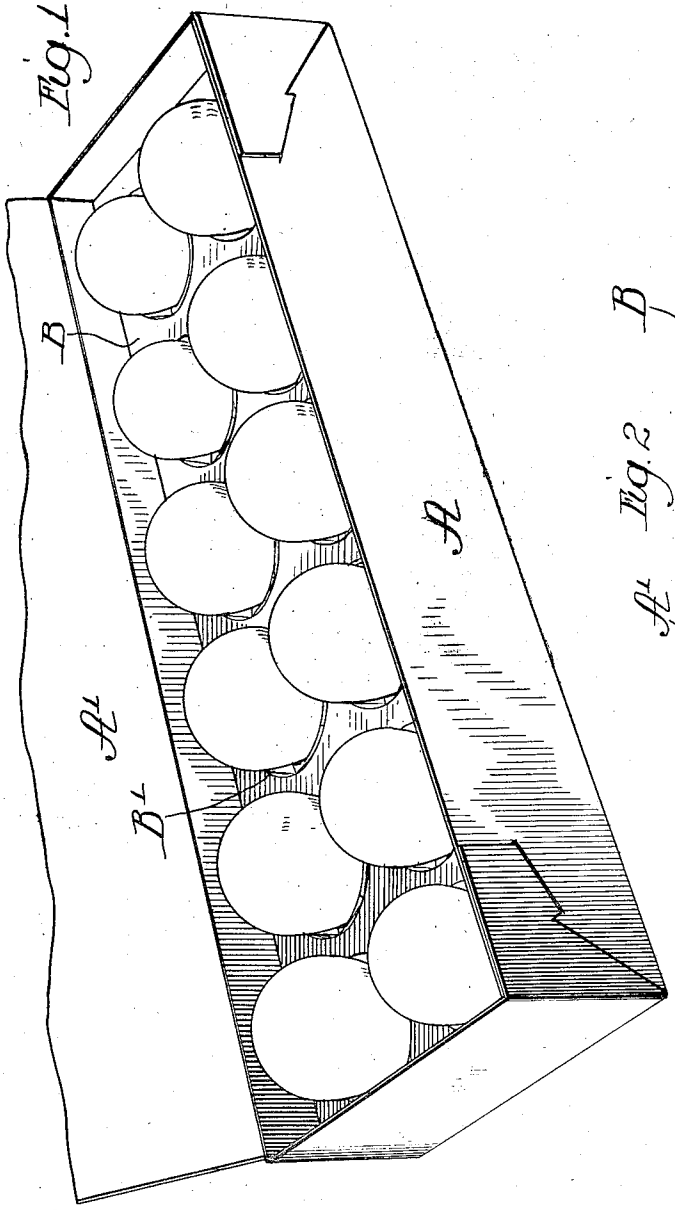
No. 827,961. PATENTED AUG. 7, 1906.

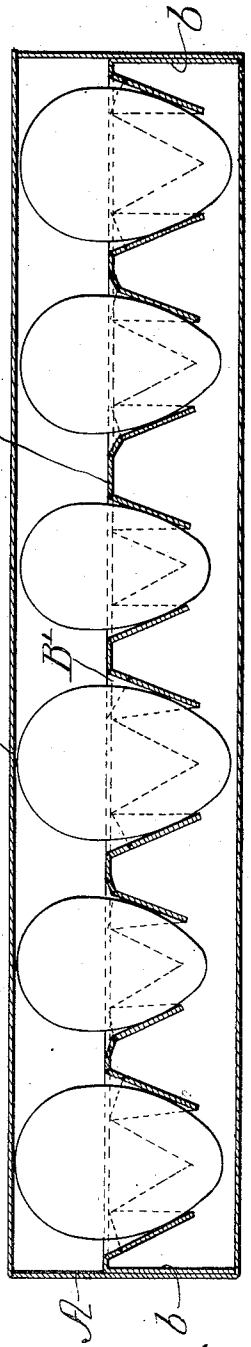
R. J. CARRIER & H. P. SHOTTS.

EGG CASE FILLER.

APPLICATION FILED JULY 12, 1904.

2 SHEETS—SHEET 1.





Witnesses
H. G. Barrett
W. W. Hall

Inventors:
Roy J. Carrier
Harry P. Shotts
by Vooler & Brown
his Attys

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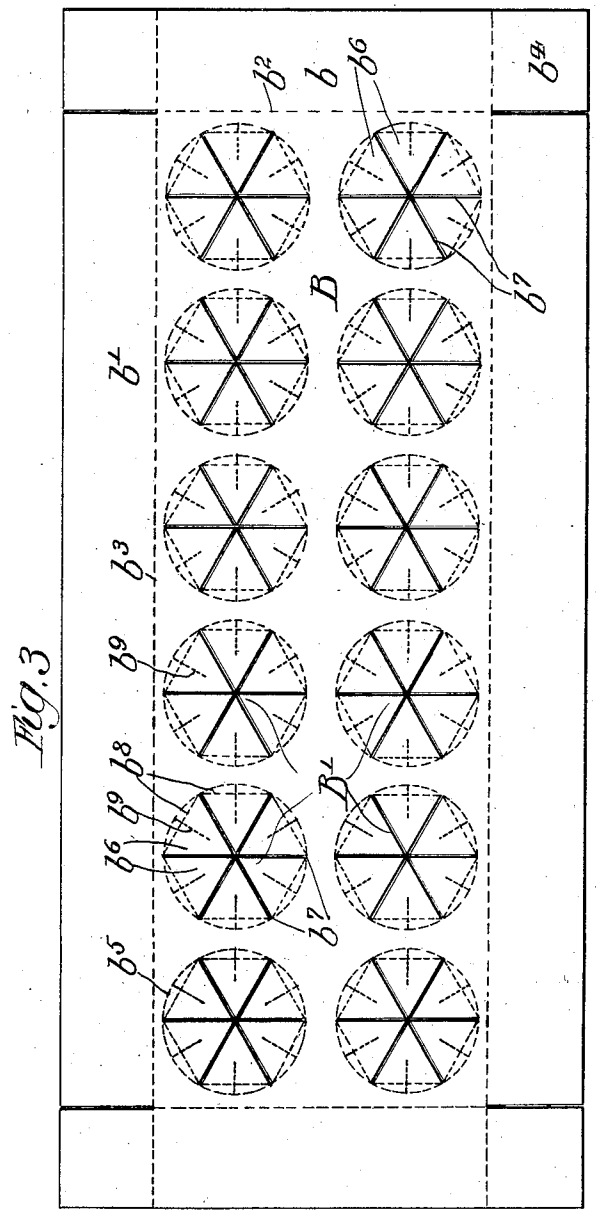

Fig. 3

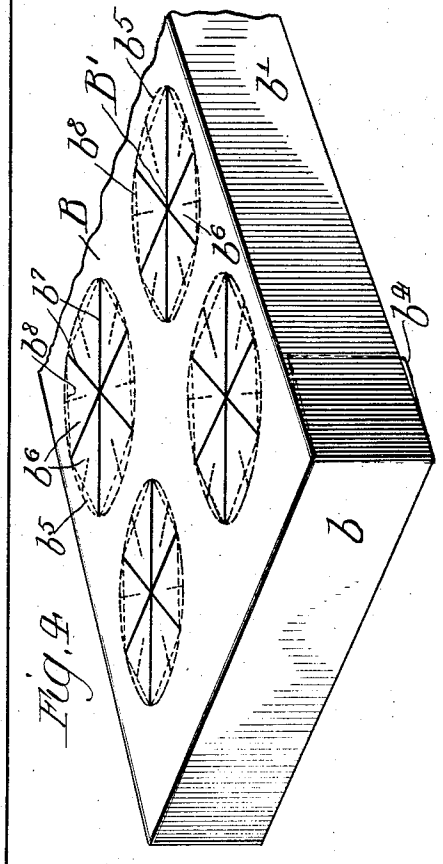

Fig. 4

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UNITED STATES PATENT OFFICE.

ROY J. CARRIER AND HARRY P. SHOTTS, OF CHICAGO, ILLINOIS, ASSIGNORS TO CARRIER-LOW COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

EGG-CASE FILLER.

No. 827,961. Specification of Letters Patent. Patented Aug. 7, 1906.

Application filed July 12, 1904. Serial No. 216,762.

To all whom it may concern:

Be it known that we, ROY J. CARRIER and HARRY P. SHOTTS, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Egg-Case Fillers; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in egg-case fillers for separately supporting eggs in a case or container; and the invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

As shown in the drawings, Figure 1 is a perspective view of an egg-case provided with our improved egg filler or support, the lid being opened to show the arrangement of the eggs therein. Fig. 2 is a longitudinal section thereof. Fig. 3 is a plan view of the blank from which the egg-filler is made, showing the same cut and scored to provide the pockets for the eggs and to form side and end supports therefor. Fig. 4 is a perspective view of one end of the filler when set up.

As shown in the drawings, A designates, as a whole an egg-case, which may be made of any convenient or preferred construction, and A′ designates a swinging lid or cover. B designates the egg-filler, located within said case. Said egg-filler consists of a horizontal partition or diaphragm which is located a distance above the bottom of the case and preferably closer to the top thereof than the bottom and is provided with a plurality of pockets B′, in which the eggs are separately supported. Said diaphragm B may be supported in the case in any suitable manner and is preferably provided at its ends and sides with downwardly-turned integral strips b b', respectively, which rest at their lower margins on the bottom wall of the case. The blank constituting the diaphragm is provided between said end and side strips and the body with score-lines b^2 b^3, about which said strips are folded. The rectangular sections or tabs b^4 at the corners of the blank in the angles between the end and side strips b b' are severed from and are folded vertically flatwise against the side supporting-strips of said filler, as clearly shown in Fig. 4.

Next referring to the manner of forming the pockets B′, which receive the eggs, the same are made as follows: Each of said pockets is circumscribed or defined by a circular or other shaped score-line b^5, and the stock or area within said surrounding score-line is divided into a plurality of triangular-shaped flaps b^6 b^6 by a plurality of lines of severance b^7, extending through the pocket from margin to margin thereof and intersecting at the center of the pocket. As herein shown, each pocket is provided with six flaps, the tapered margins being bounded by the lines of severance b^7 and the outer curved margin comprising a segment of the circle which binds or defines the pocket. The flaps b^6 are adapted to be folded downwardly from the diaphragm and about the score-lines b^5 in oblique positions to constitute supports for the eggs. To effect this result, the eggs are placed in said pockets with the smaller ends directed downwardly and are pressed downwardly against the inner or free ends of said triangular flaps. The score-lines b^5 are made only sufficiently deep to permit the flaps to bend downwardly under the pressure transmitted thereto through the egg; but sufficient strength remains in the stock to cause the flaps to tend to rise or resume their normal horizontal positions, so that the weight of the eggs does not force the same downwardly through the pockets, but is supported by engagement thereof with the lower ends of the obliquely-disposed or converging flaps in the manner clearly shown in Fig. 2. Said flaps being yieldingly connected with the diaphragm afford cushions for the eggs, so as to absorb jars brought upon the case and prevent the full effect of such jars being transmitted to the eggs in a manner to effect the breakage of the eggs. Moreover, the vibration of the case tends, by reason of the tendency of the flaps to resume their horizontal positions, to shift the eggs upwardly in the case they should be pressed down to near the bottom of the case, so that ordinarily the eggs are supported between the top wall of the case and said cushioning-flaps.

In addition to the score-lines b^5, surrounding or defining the pockets, I provide each flap at a point inside of the score-lines b^5 with straight score-lines b^8, extending from one margin to the other of the triangular flap near its base. Said inner score-lines are made weaker than the outer score-lines b^5, so that upon the application of downward pressure to the free ends of the pocket-flaps said flaps first bend or flex on the inner or straight score-lines. Therefore when a small egg is inserted into the pocket the flaps bend along the lines b^8, whereby the effective diameter of the pocket is smaller than when bent or folded along the score-line b^5. In this manner the smaller eggs may be made to fit with the same firmness in the pockets as do the larger eggs. The weakening of the inner straight score-lines is effected in the present instance by means of short score-lines or cuts b^9, intersecting the straight score-lines b^8 near the longitudinal centers thereof, as clearly shown in Figs. 3 and 4. It will be seen from said figures that the smaller eggs are supported by the yielding flaps as firmly and securely as are the larger eggs, while at the same time the pockets are large enough to accommodate the larger eggs and are enlarged by merely inserting therein eggs which are of such size as to bend downwardly the flaps along the outer or curved score-lines b^5.

We claim as our invention—

1. A sheet-material blank for an egg-case filler provided with a plurality of curved score-lines, the stock within each of said circular score-lines being slitted to provide a plurality of triangular flaps which meet at the center of the circular score-line, each flap being provided between its point and the curved line defining its base with another transverse score-line, which is weaker than the curved base score-line.

2. A sheet-material blank for an egg-case filler provided with a plurality of curved score-lines, the stock within each of said circular score-lines being slitted to provide a plurality of triangular flaps which meet at the center of the circular score-line, each flap being provided between its point and the curved line defining its base with another transverse score-line, and a score-line intersecting each inner score-line of each flap.

3. A sheet-material blank for an egg-case filler provided with a plurality of circular score-lines, the stock within each score-line being separated by a plurality of lines of severance which intersect at the center of the circular score-line, thereby dividing said stock into a plurality of triangular flaps, the said flaps being provided inside the first curved base score-lines with transverse score-lines which are weaker than the base score-lines.

In testimony that we claim the foregoing as our invention we affix our signatures, in presence of two witnesses, this 4th day of July, A. D. 1904.

ROY J. CARRIER.
HARRY P. SHOTTS.

Witnesses:
JOHN W. LAW,
BLANCHE N. GEORGE.