

No. 633,384.

Patented Sept. 19, 1899.

C. E. LA FLEUR.
PACKING EGGS FOR SHIPMENT.

(Application filed Mar. 31, 1899.)

(No Model.)

2 Sheets—Sheet 1.

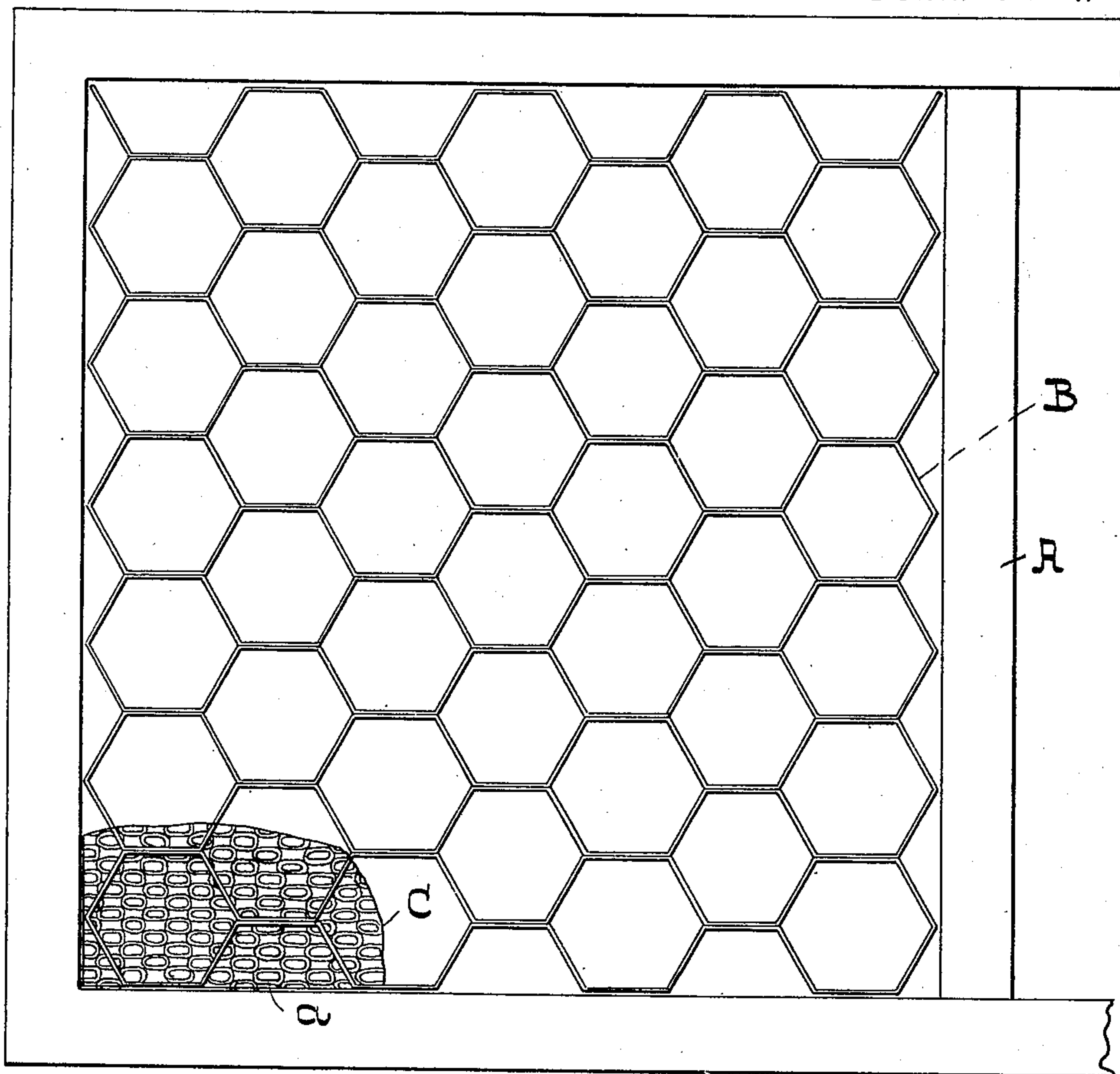


Fig. 1. D

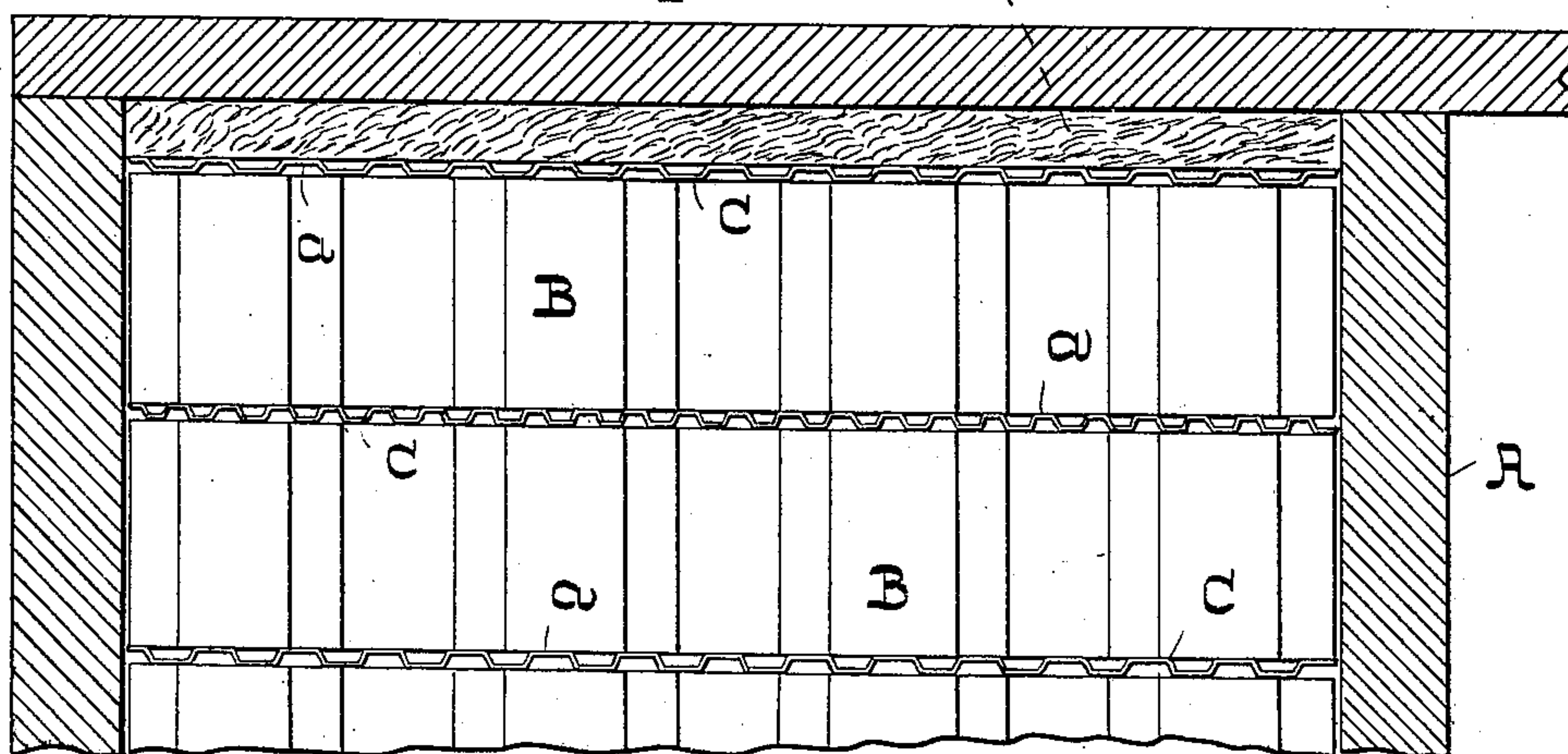


Fig. 2.

WITNESSES

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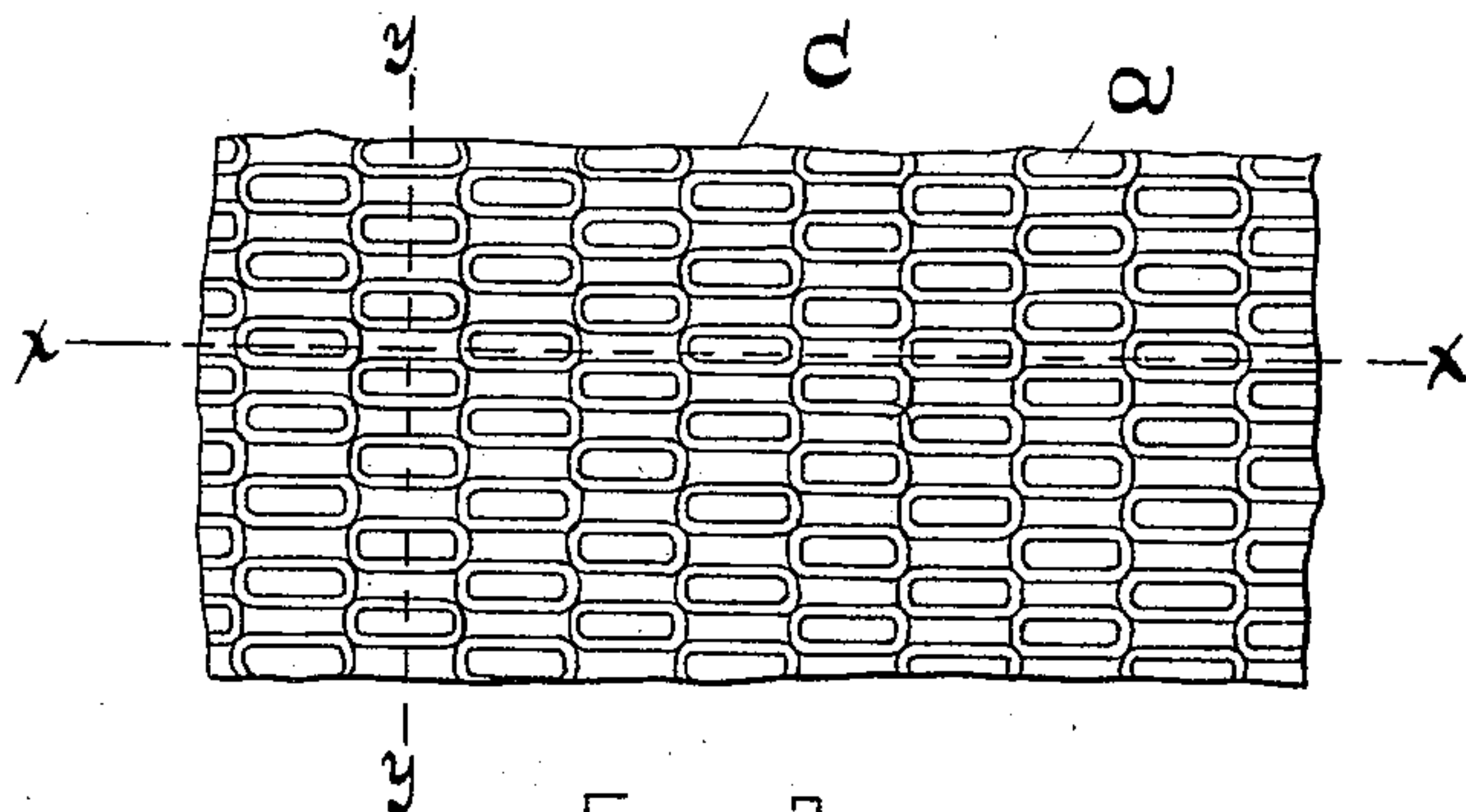


Fig. 3 -

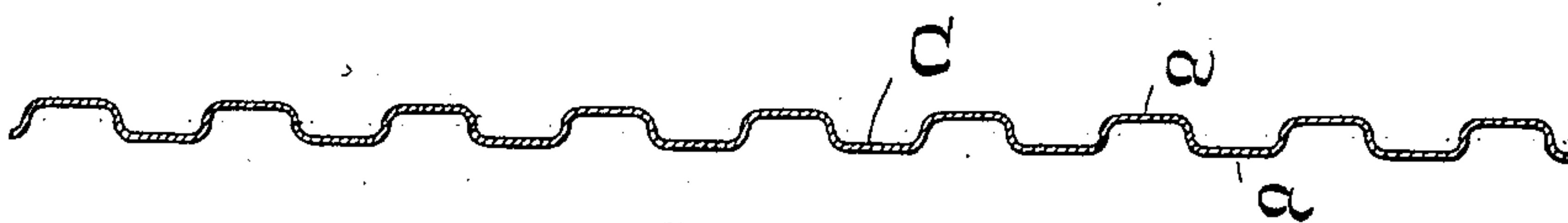


Fig. 4 -

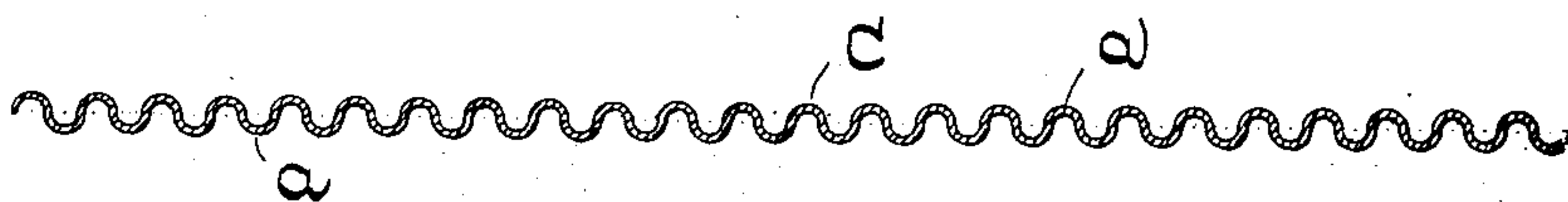


Fig. 5 -

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UNITED STATES PATENT OFFICE.

CHARLES E. LA FLEUR, OF BALTIMORE, MARYLAND.

PACKING EGGS FOR SHIPMENT.

SPECIFICATION forming part of Letters Patent No. 633,384, dated September 19, 1899.

Application filed March 31, 1899. Serial No. 711,205. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. LA FLEUR, of the city of Baltimore and State of Maryland, have invented certain Improvements in the Packing of Eggs for Shipment, of which the following is a specification.

This invention relates to the separation of the fillers in an egg-case by means of flats having roughened surfaces which prevent the independent movement of any of the fillers and preserve the shape of the cells, as will hereinafter fully appear.

While roughened flats of such size as to fit tightly within the case are useful when interposed between fillers having square cells, which to a certain extent maintain their shape and do not have a tendency to collapse as pressure is applied to their edges when the fillers are extended to prevent independent lateral movement of any of the fillers in upending or turning over the filled case, they are especially useful when held between fillers such as are shown in Letters Patent No. 621,609, granted to me on the 21st day of March, 1899, for egg-case fillers, and which from the nature of their construction have at all times a tendency to collapse or close in one direction. When the said patented fillers are separated by smooth flats and the cells filled with eggs, the upending of the case in one direction may be safely done; but if the case is turned in the other direction, so as to bring what might be termed the "side edges" to the top and bottom, there is nothing to support the weight of the eggs and prevent the eggs in the upper rows crushing those in the lower ones.

If the collapsible fillers were all placed in the case in the same relative position and the case not upended or turned over or upended in the safe direction only, roughened flats would be of little use other than to prevent lateral sliding of the fillers when the same do not occupy the entire area of the case; but in the act of inserting collapsible fillers in a case the fillers are not always opened or extended in the same direction, and even should such uniform placing be observed it would be next to impossible to prevent the upending of the cases during transportation in such

way as to crush the contained eggs. It therefore becomes necessary when collapsible fillers are employed to prevent the collapsing or closing of the fillers under any circumstances, and in accordance with the present invention this result is accomplished by the separation of the fillers by flats having roughened surfaces, the points or projections of which catch the edges of the fillers and hold them in an extended condition. As the cases have usually a depth which is greater than that of the entire body of fillers and their flats, I place a flat over the top filler and pack the space between it and the lid of the case with some soft compressible material, such as "excelsior," which holds the fillers and flats together.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a top view of one section of an ordinary egg-case, showing the same as provided with collapsible fillers separated by roughened flats in accordance with the present improvements. Fig. 2 is a front view or elevation of a part of the case with the outer board of the case removed to show the fillers and their separating flats. Fig. 3 is a much enlarged top view of a part of a flat, showing its preferred construction. Fig. 4 is a cross-section of Fig. 3, taken on the dotted line *x x*. Fig. 5 is a cross-section of Fig. 3, taken on the dotted line *y y*.

Referring now to the drawings, A represents one section of the egg-case.

B B are the collapsible fillers, and C C the roughened flats.

The flats are usually made of sheets of wood-pulp or strawboard, and they are formed with rows of corrugations *a*, extending in the same direction; but the ridges of one row are opposite the furrows of the adjoining ones. By this construction the sheets have no appreciable flat spaces and are rough to the hand when drawn over them in any direction.

While I prefer the flats with roughened surfaces formed as described, I do not confine myself to such construction. Plain sheets treated with glue over which is scattered cork in small pieces, a well-known construction,

make very satisfactory flats except that in damp weather the glue becomes soft and has an unpleasant odor.

5 Sheets with projections of any shape pressed from both sides will answer the purpose; but, as before stated, the rows of corrugations formed as specified are preferred.

10 The bottom layer of eggs rests on a flat, (not shown,) and a flat is placed over the upper filler, and the space between it and the lid of the case is filled with a body of excelsior D to place a slight pressure on the fillers and flats.

I claim as my invention—

15 1. In combination with a series of egg-case fillers, interposed flats which have a roughened surface, adapted to engage with the edge of a filler in contact therewith, substantially as, and for the purpose specified.

20 2. In combination with an upper and a lower egg-case filler, an interposed flat having both of its surfaces roughened, adapted to engage with the edges of the fillers in contact therewith, substantially as specified.

25 3. In combination with an egg-case filler, an upper and a lower flat, the flats having each a rough surface the projections of which en-

gage with the edges of the filler and thereby hold the filler from both sides thereof, substantially as specified. 30

4. In combination with an egg-case filler, a flat having a surface with isolated projections thereon, which projections engage with the edges of the filler and thereby prevent the same from moving independently of the flat, 35 substantially as specified.

5. In combination with an egg-case filler, an upper and a lower flat having isolated projections which engage with the edges of the filler, and when held, prevent movement of the 40 upper and the lower edges of the filler independently of each other, substantially as specified.

6. In combination with an egg-case filler, a flat in contact therewith, having projections 45 thereon, whereby it is rough in all directions, and thereby adapted to maintain the shape of the cells of the filler, and prevent movement of the same independently of the flat, substantially as specified.

CHARLES E. LA FLEUR.

Witnesses:

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ARTHUR L. HOMER.