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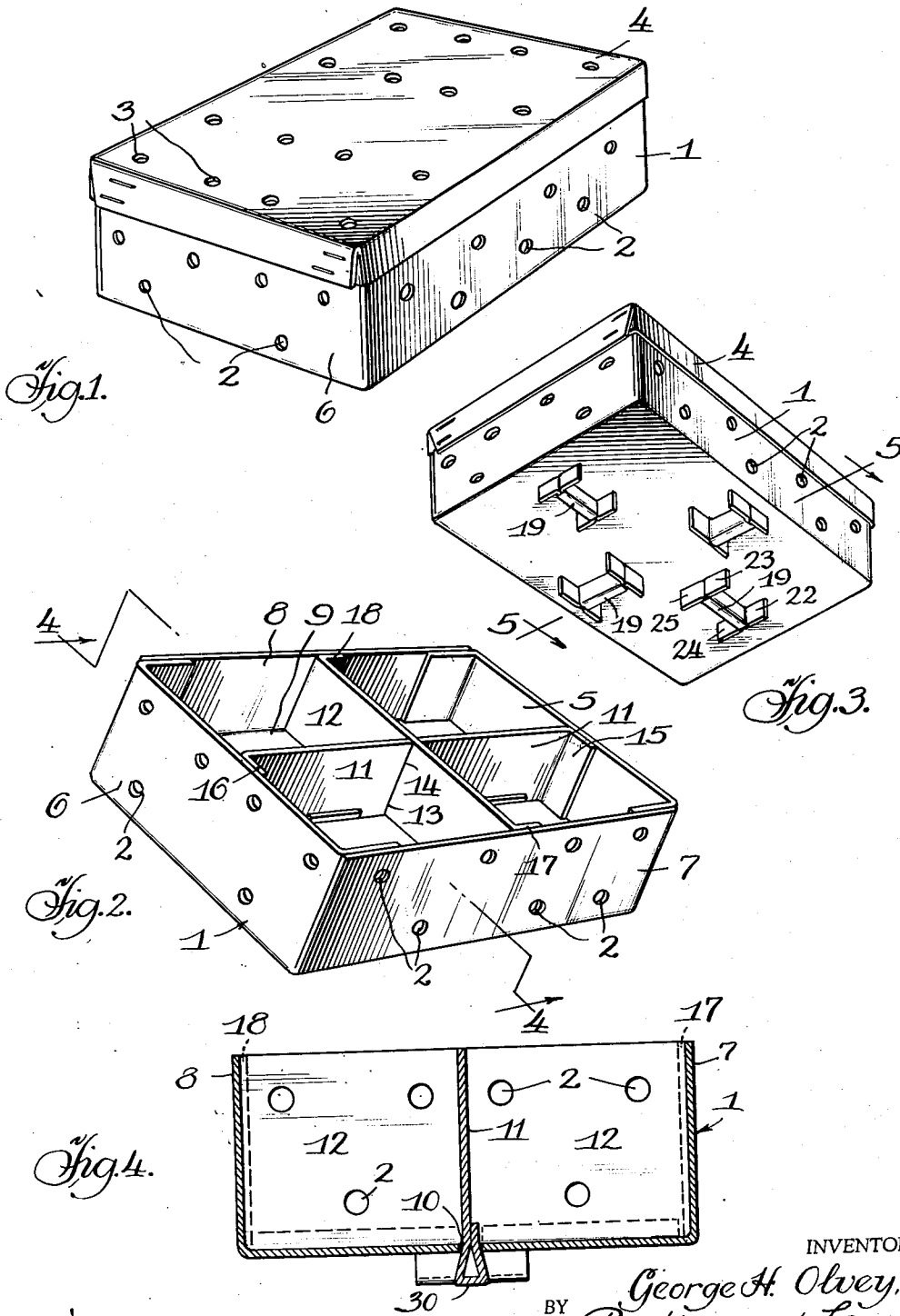
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SHIPPING CONTAINER FOR BABY CHICKS AND METHOD OF MAKING SAME

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2 Sheets-Sheet 1



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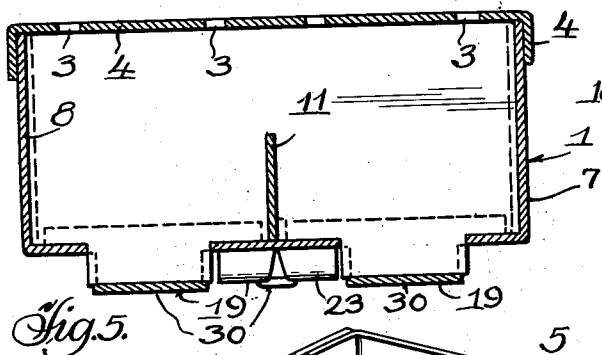
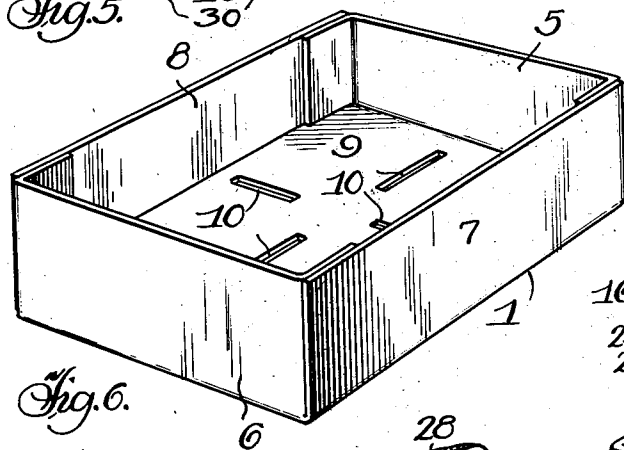
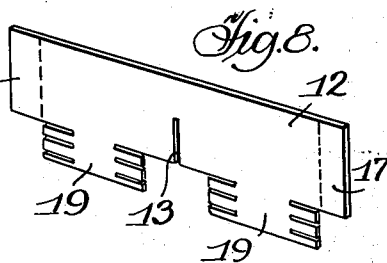
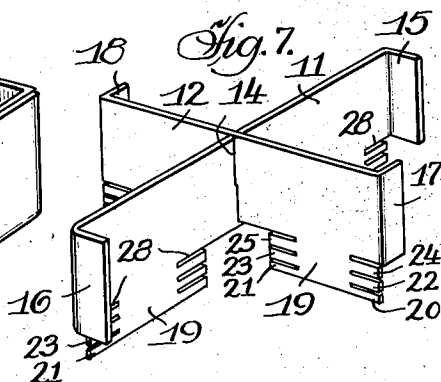
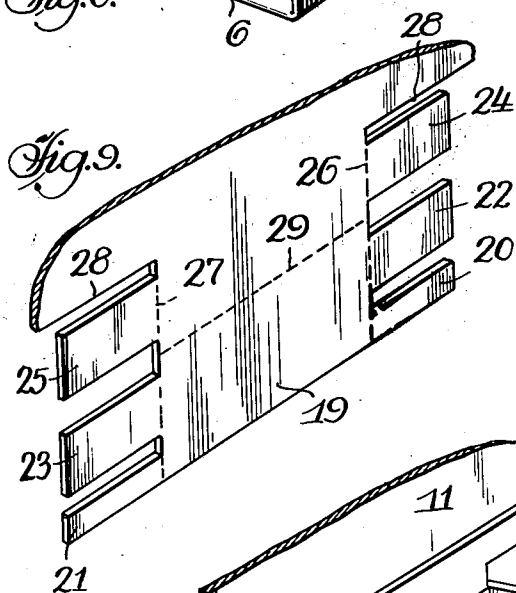
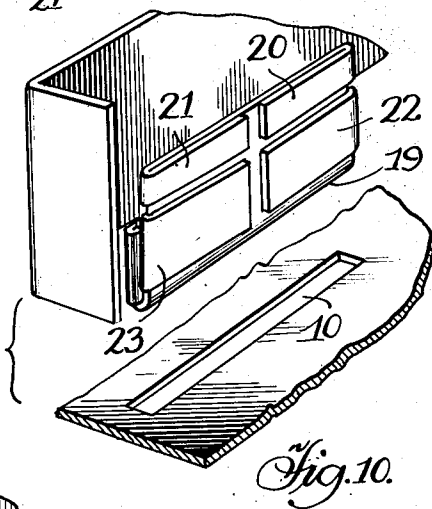
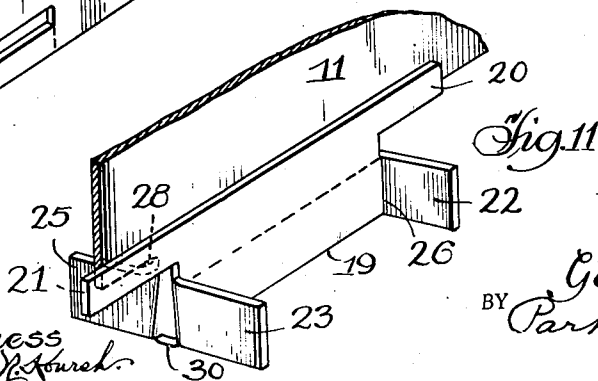
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SHIPPING CONTAINER FOR BABY CHICKS AND METHOD OF MAKING SAME

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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SHIPPING CONTAINER FOR BABY CHICKS AND METHOD OF MAKING SAME

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15 Claims. (Cl. 229—6)

This invention relates to shipping containers for baby chicks, and more particularly to such container constructed to prevent injury to the baby chicks or loss thereof, to provide for better ventilation between the boxes or containers, and generally improve such containers, and to the method of making such containers.

I have found that baby chick boxes or containers as constructed prior to my invention are such as to permit the chicks to get their toes under the partition, which pinches them and causes considerable injury to the chicks and loss thereof. It is well known that when a baby chick is injured so as to show the blood or a raw spot, the other chicks immediately pick such spot and generally kill such injured chick. Also other injuries occur by reason of the old form of container that often cause great loss of chicks being shipped.

Among the objects of this invention is to provide a novel chick container that will prevent the baby chicks from getting their toes under the partitions.

A further object is to provide a baby chick container that will eliminate the necessity of placing separate spacing sticks between stacked containers, and yet give ample ventilation between the containers when stacked during shipping.

A still further object is to provide a container of the class described that will prevent the bottom of a container, or the bottom one of a stack of containers, from resting directly on a cold or wet floor, platform or the like, and thus prevent the baby chicks from becoming chilled during shipment.

Another object is to provide a baby chick shipping container that is economical but strong in construction, light in weight, of good ventilation, efficient in service, durable and pleasing in appearance.

Other objects, advantages and capabilities inherently possessed by my invention will later more fully appear.

My invention further resides in the combination, construction and arrangement of parts illustrated in the accompanying drawings, and while I have shown therein preferred embodiments, I wish it understood that the same are susceptible of modification and change without departing from the spirit of my invention.

In the drawings:

Figure 1 is a perspective view of a chick box embodying my invention and showing the cover in place thereon.

Fig. 2 is a perspective view looking down into the box from above, the cover being removed.

Fig. 3 is a view similar to Fig. 1 but looking toward the bottom of the box instead of the top.

Fig. 4 is a vertical transverse section on the line 4—4 of Fig. 2.

Fig. 5 is a vertical transverse section on the line 5—5 of Fig. 3.

Fig. 6 is a perspective view looking down into the container from the top, with the partitions omitted for the sake of clearness.

Fig. 7 is a perspective view of the longitudinal and transverse partitions in assembled position outside of the box prior to being placed in the box.

Fig. 8 is a perspective view of the transverse partition outside of the box.

Fig. 9 is a fragmentary perspective view of a portion of one of the partitions showing the portion of the partition which extends through the bottom of the container and in flat condition prior to being applied thereto.

Fig. 10 is a fragmentary perspective view of a portion of the bottom of the container including one of the slots, and a portion of one end of one of the partitions showing the bottom projections folded into position to be passed through the hole in the bottom but just prior to being passed therethrough.

Fig. 11 is a fragmentary perspective view of a portion of one of the partitions and showing the bottom projections in the final position they occupy in the finished container but omitting the bottom of the container for the sake of clearness.

As seen in Fig. 1 the container or box 1 is provided with ventilating openings 2 in its sides and ends and ventilating holes 3 in the cover 4 to give the necessary air to the baby chicks in the container during shipment. The container is preferably made of corrugated cardboard but may, if desired, be constructed of any other material suitable for the purpose.

The container 1 is constructed in any desired manner with end walls 5 and 6, side walls 7 and 8 and a bottom 9. The bottom in the form illustrated is provided with four openings 10 extending through the bottom wall 9 and being preferably of rectangular shape although other suitable shapes may be used. In Fig. 7 I have shown the longitudinal partition 11 and the transverse partition 12 prior to their being applied to the interior of the container. The transverse partition 12 as seen in Fig. 8, is formed midway of its length with an upwardly extending slot 13 extending approximately half way of its height, while the longitudinal partition is formed midway of its length at its upper edge

with a downwardly extending slot 14 extending approximately half way of its height, so that these two partitions may be applied to each other at right angles to bring their top edges in substantially the same horizontal plane in a manner that will be readily understood in the art.

The longitudinal partition 11 is formed at its ends with flanges 15 and 16, which when the partitions are applied within the container about the end walls of the container to give added stability, and these flanges may be fastened to the end walls of the container or not as desired. Similar flanges 17 and 18 are formed on the ends of the transverse partition 12 and for a similar purpose. A pair of the assembled transverse and longitudinal partitions prior to being applied to the interior of the container is shown in Fig. 7. Formed on the bottom edge of each of the longitudinal and transverse partitions, two on each, are downwardly extending projections 19 which are alike, and for the sake of convenience only one of them will be described in detail.

As seen in Fig. 9 these downwardly extending projections 19, which are preferably integral with the partitions and stamped out therefrom, are provided with suitably spaced lateral projections 20, 21, 22, 23, 24 and 25. The projections 20 and 21 are preferably but not necessarily thinner than the projections 22 to 25. These projections are preferably for convenience of the same length.

Assuming the partitions assembled as shown in Fig. 7 or, if desired, the longitudinal partition 11 may be applied first and the transverse partition 12 afterwards added, the partitions first have their ears or projections 20 to 25 folded inwardly along the dotted lines 26 and 27 so as to lie flat against the face of the downwardly extending projection 19 after the manner understood from Fig. 10. With these ears lying flat against the projection 19, the latter will be pushed downwardly through opening 10 until the bottom edge 28 of the partition rests against the upper surface of the bottom 9 of the container. The projection 19 is then bent upwardly along dotted line 29, with ears 20 and 21 held flat against the face of projection 19, after which the portion of projection 19 below folding line 29 is forced upwardly through opening 10 until the ears 20 and 21 have been passed upwardly into the container, after which ears 20 and 21 are swung outwardly to lie over the upper surface of the bottom of the container, preferably flat against the partition, to prevent their being pulled downwardly through the opening 10 as will be understood from an inspection of Fig. 11, in which for convenience the bottom of the container has been omitted. The ears or flaps 22, 23, 24 and 25 will then be bent outwardly below the bottom of the container or box so as to prevent the partitions from being pulled upwardly as will also be understood in Figs. 3, 4 and 11. This provides a partition or partitions in a baby chick container locked securely to the bottom of the container in such manner that it will be impossible for the bottom of the container to bow downwardly away from the bottom edges of the partitions or the bottom edges of the partitions to move upwardly away from the bottom of the container and permit the toes of the baby chicks to get underneath the partitions to the injury of the baby chicks.

Also, if desired, the projection 19 may be first bent along the horizontal folding line 29 and the ears 20 to 25 folded backwardly against the

face of projection 19 to bring these parts into the form shown in Fig. 10, after which they may be forced downwardly through the opening 10 and the ears 20 to 25 opened up so that ears 20 and 21 will be above the bottom of the container and ears 22 to 25 will be below the bottom of the container, and when opened up these ears will provide a positive lock against the partition being moved either upwardly or downwardly with relation to the bottom of the container.

As will be understood, any number of partitions desired may be used and in any desired arrangement for the purposes intended. As will be readily understood from an inspection of Fig. 3, the ears 22 to 25 and adjacent parts extending below the bottom of the container will provide means for spacing the tops and bottoms of the containers away from each other when the containers are stacked up in a pile during shipment. This eliminates the necessity of spacing sticks and at the same time gives good ventilation between and around the containers. These projections on the bottom of the containers just referred to also prevent the bottoms of the containers from resting against a cold cement or other floor, and also prevents such bottoms from resting in moisture, snow or other dampness that would chill and injure the chicks during shipment. Also these spacing projections just referred to are confined to the bottom of the box and hence spacing sticks or other spacing projections are not needed to be fastened to the top of the cover as has heretofore been the practice, thus leaving the cover free of any projections that are not needed for protection. Heretofore when spacing sticks were used these sticks were fastened to the lids. In my invention the top of the cover is free of projections and yet when the boxes are stacked ample ventilation is provided therebetween.

As seen in Fig. 4, when the projection 19 of the partition is first pushed downwardly and then upwardly the folds instead of occurring directly on dotted line 29 will occur along lines in alignment with the adjacent edges of ears 22, 23, 24 and 25, thus leaving an enlargement 30 which will further prevent the partition from being pulled upwardly from the bottom of the container. Even when pushing the folded projection 19 downwardly as suggested in Fig. 10, the ears 22, 23, 24 and 25 below the box will still prevent the partition from moving upwardly, while in both methods of insertion referred to the ears 20 and 21 will prevent the bottom from moving downwardly away from the partition. In other words, the partitions are at all times held firmly against any vertical movement with relation to the bottom of the container and are thus securely locked thereto.

As will be understood, the ventilating holes 2 and 3 in the container and cover will be sufficient in number to give ample ventilation.

From the above my improved method of constructing baby chick containers and securing the partitions to the bottoms thereof to prevent any vertical movement of the partitions with relation to the bottom will be readily understood.

While I have described my improved container as for use in shipping baby chicks and prefer it in connection with such use, I wish it understood that it is also susceptible of such other uses to which it may be adapted.

Having now described my invention, I claim:

1. A fiber-board container comprising side and end walls and a bottom, said bottom having an

opening formed therein, a partition having a projection extending through said opening, and an ear on said projection, said ear being folded flat against the projection when being passed with the projection through the opening and being opened up after being passed through the opening, said projection having a fold below the bottom and extending in double thickness from said fold back through the opening.

2. A fiber-board container comprising side and end walls and a bottom, said bottom having an opening formed therein, and a partition having a projection extending through the opening, said projection having a bendable ear extending outwardly beyond the marginal edge of the opening below said bottom, said partition being of single thickness throughout most of its extent but of double thickness where the projection extends through the opening.

3. A fiber-board container comprising side and end walls and a bottom, said bottom having an opening formed therein, and a partition having a projection extending through the opening, said projection having a bendable ear extending outwardly beyond the marginal edge of the opening below said bottom, said projection also extending above the opening and having a bendable ear extending outwardly beyond the confines of the opening above said bottom.

4. A paper-board container comprising side and end walls and a bottom, said bottom having spaced slots therein, one or more partitions having projections on their bottom edges, each of said projections having integral ears foldably extending sidewise therefrom, said projections being each extended through one of said slots with a plurality of ears below said bottom and a plurality of ears above the bottom.

5. A paper-board container comprising side and end walls and a bottom, said bottom having spaced slots formed therein, paper-board partitions in said container, said partitions having projections thereon, each of said projections having a plurality of integral bendable ears thereon, said projections each being formed of double thickness to extend partly above the bottom and partly therebelow, there being a plurality of said ears above the bottom and a plurality therebelow.

6. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection having a pair of ears one on each of its side edges, the projection extending downwardly through the slot with each of the ears extending beyond the confines of the slot below the bottom, said projection having a fold below the slot and extending upwardly again from the fold through the slot in double thickness.

7. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection having a pair of ears one on each of its side edges, the projection extending downwardly through the slot with each of the ears extending beyond the confines of the slot below the bottom, said projection being folded upon itself, the folded portion

extending upwardly through the slot and having a pair of similar ears above said bottom.

8. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection having two vertical edges, two integral bendable ears on each of the two vertical edges vertically spaced apart, said ears being arranged in pairs, the ears of each pair being horizontally aligned, said projection being folded upon itself and positioned in said slot with one pair of ears above said bottom and one pair of ears below the bottom.

9. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection having two vertical edges, two integral bendable ears on each of the two vertical edges vertically spaced apart, said ears being arranged in pairs, the ears of each pair being horizontally aligned, said projection being folded upon itself and positioned in said slot with one pair of ears above said bottom and one pair of ears below the bottom, said projection also having an additional pair of ears below said bottom.

10. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection being folded back upon itself with the double thickness positioned in the slot, said projection having three pairs of integral bendable ears, one pair of said ears being positioned above said bottom and two pairs of the ears being positioned below the bottom, to firmly hold the partition from vertical separation from the bottom.

11. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection being positioned within the slot and having at least one integral bendable ear below said bottom and one integral bendable ear above said bottom, each of said ears extending laterally beyond the confines of the slot to normally prevent the projection from being pulled either upwardly or downwardly through the slot.

12. A paper-board baby chick container comprising side and end walls and a bottom, a paper-board partition in said container, said bottom having a slot directly below the partition and of a width slightly greater than the thickness of the partition, a downwardly extended projection on the partition, said projection having a pair of vertical side edges, each edge having three integral bendable ears extending therefrom in spaced relation, said ears being arranged in pairs, the projection being positioned in the slot with one pair of ears being above said bottom and two pairs of ears being below the bottom, the two pairs of ears below the bottom being extended away from each other, and all of the ears

extending beyond the confines of the slot to prevent movement of the bottom edge of the partition away from the bottom.

13. In a fiber-board baby chick container, a body portion comprising side and end walls and a bottom, said bottom having a plurality of slots formed therethrough, a plurality of partitions, each of said partitions having a projection extending through a slot, means for holding said projections against movement in the slots, said projections extending a substantial distance below said bottom to provide ventilating space between the containers when stacked one on the other during shipping, said projections each also extending a second time through the slot to form a double thickness.

14. The method of securing a partition to a bottom in baby chick containers, which consists in forming a slot in the bottom, forming a projection on the partition with two pairs of ears on the projection, folding the ears back flat against the face of the projection, passing the projection and folded ears downwardly through the slot until the bottom edge of the partition contacts the upper face of the bottom, bending the projection upwardly back upon itself, then

passing the bent portion of the projection together with a portion of the ears upwardly through the slot, and moving the ears outwardly beyond the confines of the slot, with some of the ears being above said bottom and some of the ears being below said bottom.

15. The method of securing a partition to a bottom in baby chick containers, which consists in forming a slot in the bottom, forming a projection on one edge of the partition, forming three vertically spaced pairs of ears on the projection, folding the ears back flat against the face of the projection, passing the projection and folded ears in one direction through the slot until the partition edge contacts the bottom, then bending the projection with one pair of ears back to doubled position and pushing the same in the opposite direction through the slot, then opening up the ears to extend beyond the confines of the slot, so that one pair of ears is above the bottom and two pairs of ears are below said bottom, to firmly lock the partition to the bottom and form extending spacing portions below the bottom.

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