J. M. YARNALL.

EGG CARTON.

APPLICATION FILED AUG. 28, 1919.

1,374,050. **Patented Apr. 5, 1921.**

Fig. 1.

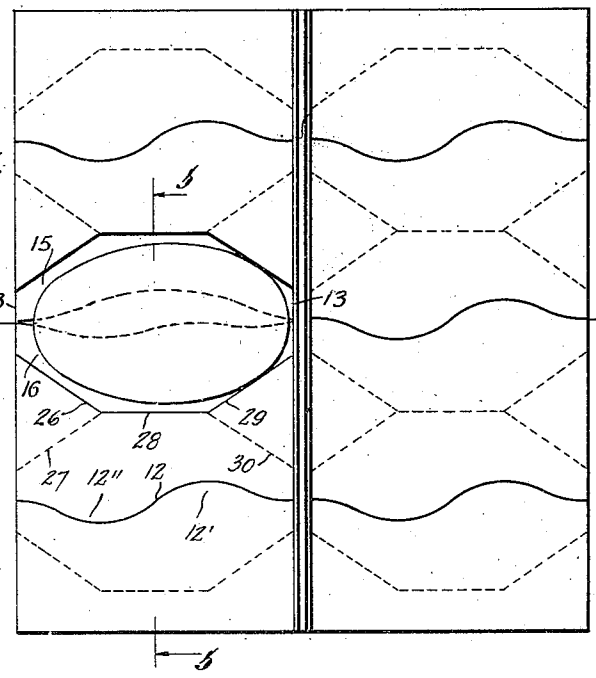


Fig. 6.

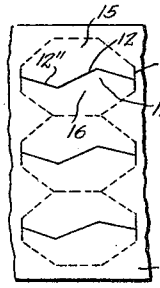


Fig. 7.

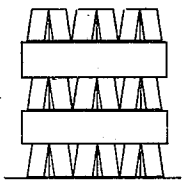


Fig. 2.

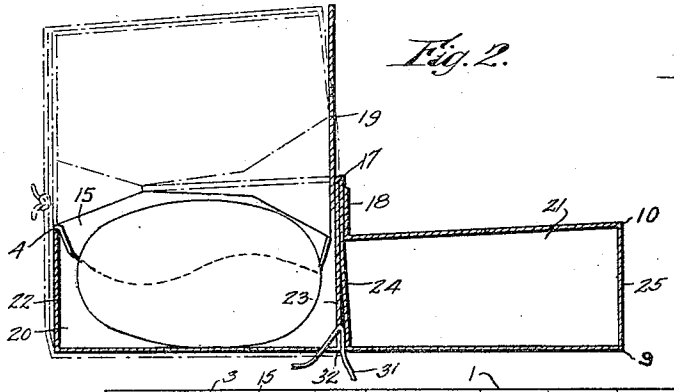


Fig. 3.

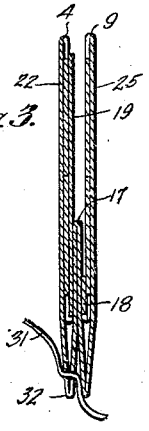


Fig. 4.

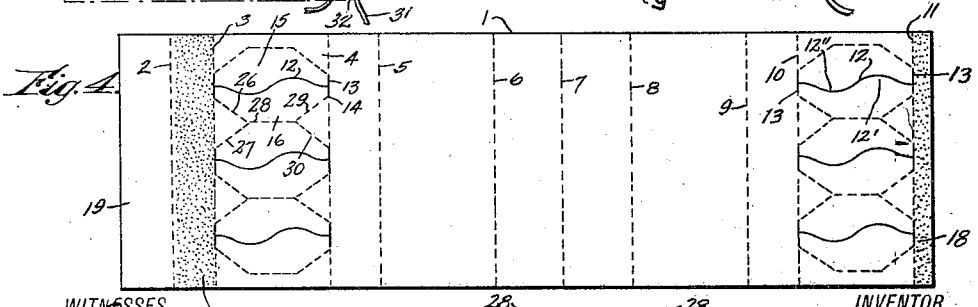
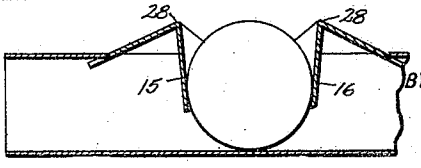


Fig. 5.



WITNESSES

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EGG-CARTON.

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To all whom it may concern:

Be it known that I, JAMES M. YARNALL, a citizen of the United States, and a resident of Yonkers, in the county of Westchester and State of New York, have invented a new and useful Egg-Carton, of which the following is a full, clear, and exact description.

This invention relates to an improved carton or carrier for eggs, and has for an object to provide an improved construction for holding eggs in position and at the same time providing a limited amount of protection with means involving a minimum amount of material in a carton of given size.

Another object in view is to provide a carton which is formed in two parts hinged together with means in each part for receiving eggs so that when they are hinged together there will be a double row of eggs held out of contact but within a minimum space.

A still further object of the invention is to provide a carton for receiving and holding eggs, the arrangement being such that not only is the carton when filled, of minimum size, but the carton may be wholly folded substantially by one operation for shipment or storage and quickly unfolded by a single operation.

In the accompanying drawing:

Figure 1 is a plan view of a small carton open, one egg being shown in position.

Fig. 2 is a section through Fig. 1 on line 2—2, the parts of the box being shown in folded position in dot and dash lines, the same being shown in connection with a tying cord.

Fig. 3 is the carton shown in Fig. 1 represented in a collapsed position.

Fig. 4 shows a blank from which the carton shown in Fig. 1 is made.

Fig. 5 is a detail fragmentary sectional view through Fig. 1 on line 5—5.

Fig. 6 is a detail fragmentary plan view of a blank showing a different form of slit to that shown in Fig. 4.

Fig. 7 is an end view on a greatly reduced scale, of a number of filled stacked cartons disclosing an arrangement whereby the eggs will not carry the weight of the next superimposed box.

In the accompanying drawing a carton has been shown which is designed to receive six eggs, but it will be evident that the carton could be made for receiving twelve or more without departing from the spirit of the invention.

Referring to the drawing by numerals 1 indicates a blank from which the carton is made, said blank being provided with score lines 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11 with a plurality of cuts or slits 12 between the lines 3 and 4 and also between lines 10 and 11. The shape of these slits may be widely varied without departing from the spirit of the invention, the shapes shown in the drawing being a compound curve illustrated in Fig. 4, and a zig-zag shown in Fig. 6. The formation of the slit may be substantially any kind provided the flaps 15 and 16 are arranged so as to have projecting portions 12′ and 12″ overlapping each other so as to support the egg in such a manner that it will in a certain sense float between the walls 22 and 23 and between the end walls 24 and 25. Each slit 12 intersects and merges into side slits 13 at each end, at any point in said side slits, whereby egg supporting flaps 15 and 16 are produced. When the flaps are depressed as shown in Figs. 1, 2 and 5 they are bent along the creases 26, 27, 28, 29 and 30 so as to project above the edges of the carton. In forming the carton the blank is bent along the scoring 7 and then along the other lines so as to produce the formation shown in Fig. 2 after which the parts are secured together by the adhesive matter 17 and 18 being caused to secure the parts together. It is, of course, evident that other securing means may be used without departing from the spirit of the invention, as for instance staples. When the parts are folded and secured together as shown in Fig. 2 the end flap 19 will project upwardly between what may be termed the two sections 20 and 21 which receive the eggs. By depressing the flaps 15 and 16 suitable pockets are produced for receiving and holding the eggs against independent movement and against striking together. After the desired number of eggs have been arranged in the carton one of the sections 20 or 21 is folded over as shown in dotted lines in Fig. 2 and a suitable seal applied to connect the contacting edges together, said seal overlapping the scoring or bent lines 4 and 10. It is, of course, evident that other means may be provided for holding the carton in its filled folded position, as for in-

stance a tying cord 31 normally held by friction in the slit 32.

When the carton has been emptied it will remain approximately in the position shown in Fig. 2. To collapse the carton for storage or shipment pressure is brought on the sides of the sections 20 and 21 between lines 4 and 5 and lines 9 and 10, said pressure being toward the center whereupon the various parts will collapse to the position shown in Fig. 3. When in this position there is practically no waste or unused space, and a maximum number may be stored in a box or a given compartment. After the carton has been collapsed as shown in Fig. 3 and it is desired to again fill the same it is merely necessary to pull or swing the sections 20 and 21 away from each other and they will immediately assume substantially the position shown in Fig. 2 whereupon they may be readily filled. It will be noted that there are no separate or loose pieces provided while the resilient flaps 15 and 16 are used for resisting any independent movement of the respective eggs and also are used for protecting the eggs to a certain extent. It will also be noted that the carton is made from a single piece of material and there is no waste, the material being a minimum quantity required for the particular size box desired. By reason of the holding of the eggs from the side walls 22 and 23 and also 24 and 25 by the flaps 15 and 16 each egg is individually supported by its surrounding members and does not bear the weight of any other eggs. This construction permits the various cartons to be stacked as shown in Fig. 7 and the superimposed cartons carried by the end cartons without any pressure against the eggs in said end cartons.

What I claim is:

1. A carton comprising a pair of hinged sections, each section having a top divided with slits which results in the formation of egg retaining flaps, said tops being integral with the remaining part of the respective sections and a partition member connected to the hinge of said sections, said partition member being positioned to fit between said tops when folded against each other so as to separate the egg carried by said sections.

2. An egg carton comprising a pair of sections hinged together, each section having a bottom, two sides and a top formed with substantially S-shaped slits whereby the material forming the tops adjacent the respective slits present egg retaining flaps and a partition member integral with one of said tops connected at one edge to the hinge of said sections so as to fit between the eggs when said sections are folded against each other.

3. A blank for an egg carton comprising a rectangular body provided with ten transverse lines of scoring whereby the blank is divided into sections, four of said sections being larger than the remaining sections, two of said large sections having substantially S-shaped slits therein whereby the material adjacent said slits forms resilient flaps for holding eggs in place when the blank is folded, and a layer of adhesive on one section adjacent each of the slit sections for holding the blank in a folded position when moved to said position.

JAMES M YARNALL.