

Sept. 26, 1961

S. F. FLYNN

3,001,661

EGG CRATE OR CASE FILLERS OR TRAYS

Original Filed June 4, 1958

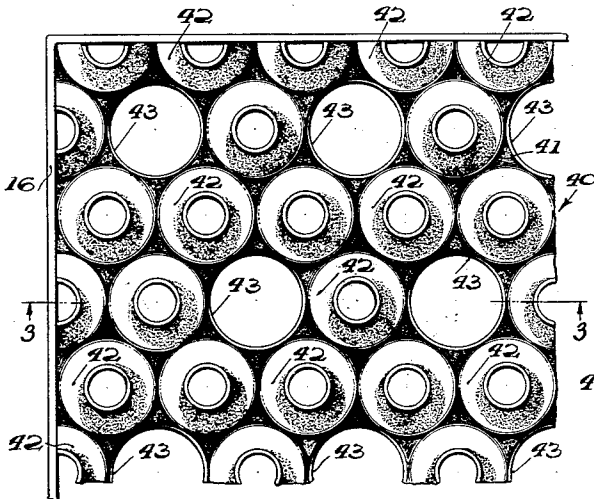


FIG. 1.

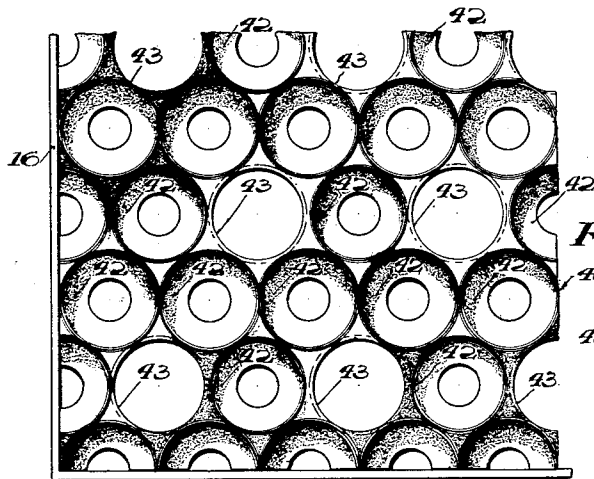


FIG. 2.

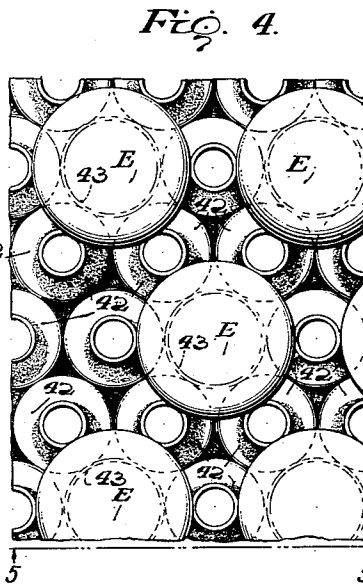


FIG. 4.

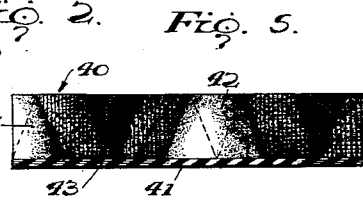


FIG. 5.

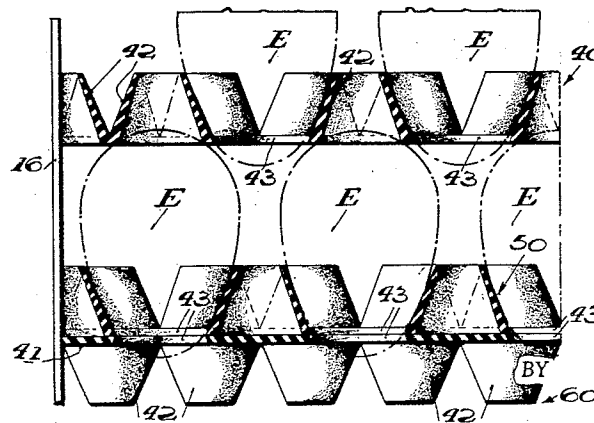


FIG. 3.

INVENTOR

Stanley F. Flynn

W. J. Eccleston

ATTORNEY

1

3,001,661

EGG CRATE OR CASE FILLERS OR TRAYS

Stanley F. Flynn, Valley Forge Army Hospital,
Phoenixville, Pa.

Original application June 4, 1958, Ser. No. 739,955, now Patent No. 2,951,605, dated Sept. 6, 1960. Divided and this application Mar. 23, 1960, Ser. No. 20,798

1 Claim. (Cl. 217-27)

(Granted under Title 35, U.S. Code (1952), sec. 266)

The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

The present invention relates to egg crate or case fillers or trays adapted to be assembled with other like fillers or trays within a crate, to permit the shipment of eggs, Christmas tree ornaments and various other frangible articles placed in the crate or case without the danger of breakage.

The present application is a division of my copending application Serial No. 739,955 filed June 4, 1958, now Patent No. 2,951,605, issued September 6, 1960.

One of the important objects of the invention is to provide an improved filler or tray which will afford complete protection to the crated fragile article.

Another object of the invention is to save cubical space occupied by the assemblage of fillers or trays within a crate or case, thereby permitting the use of smaller crates, or to make more space available in crates or cases of standard size.

Another object is to provide an improved preferably one-piece filler or tray which may be molded of some suitable material such, for example, as plastic, thus effecting material savings in labor and manufacturing costs.

A further object is to provide a filler or tray having long-lasting qualities and one which is capable of withstanding rough usage over a period of years, this alone being a material improvement over the presently-used molded pulp fillers; another and important object being to provide an improved filler or tray capable of being readily nested to thereby save space in shipping.

The foregoing and other objects and advantages of the present invention will appear from the following description and appended claim when considered in conjunction with the accompanying drawings wherein like reference characters designate corresponding parts in the several views.

In said drawings:

FIG. 1 is a top plan view of a corner of the tray embodying the present invention;

FIG. 2 is a bottom plan view of the same;

FIG. 3 is a vertical section taken substantially along the line 3-3 of FIG. 1, looking in the direction of the arrows and showing a portion of a bottom supporting tray like that of FIGS. 1 and 2, but turned at an angle of 180°;

FIG. 4 is a fragmentary top plan view of the tray of FIG. 1, showing several eggs in place; and

FIG. 5 is an edge view taken substantially along the line 5-5, of FIG. 4, looking in the direction of the arrows.

In the form of the tray of the present invention, the eggs, or other fragile objects, which are supported by each tray are not only individually supported and protected against cracking or breakage by being kept out of contact with all other eggs in a given row of eggs, but by also being kept out of contact and thus damage, with all eggs in adjacent rows in the same tray, as well as from eggs in an overlying and/or underlying tray. This is accomplished without the use of horizontal separator sheets or

2

partitions which are required for conventional egg crates or cases now in widespread use. This individual spacing or separation of the eggs, or other objects, is accomplished either by the use of upright disposed separation strips located between adjacent rows of eggs in certain forms of the invention, or by the particular structure or formation of the trays and without the aid of any separator strips, as in at least one other form embodying the present invention.

As viewed in FIG. 1, an upper left-hand corner of a tray is shown in a crate or case 16, the top tray being shown as a whole at 40. The tray consists of a relatively stiff plate, web, or base 41 of plastic, or similar material which is of light weight yet durable and washable provided with parallel regular rows of upstanding resilient flexible tubular members 42 and alternate regular rows consisting of egg-seating perforations 43 and interposed resilient flexible tubular members 42 which are upstanding from base 41 in the same manner and at the same side of said base as the like tubular members 42 in the regular rows. The trays follow, as nearly as possible, the pattern as described. It is to be understood, however, that since these trays in use are stacked one above another with a layer of eggs between, there must be a tubular member 42 above or opposite each egg-seating perforation 43, or vice versa.

As seen in FIG. 4, each of the eggs E is protected by being seated in a socket or perforation 43 of a tray, while being surrounded by a series of the resilient flexible tubular members 42, six such members being shown in this view.

In practice, one of the egg trays, see tray 60 in FIG. 3, is placed upon the bottom of crate 16, with the tubular members 42 inverted to leave an air space and cushion below the first or bottom layer of eggs. A second tray, see tray 50, is placed in upright position, with its plate or web-like base 41 thereof engaging tray 60. A layer of eggs E is now placed in the sockets, or egg-seating perforations 43, after which a third tray, see tray 40, is laid over the large ends of the second layer of eggs, with a tubular member 42 engaging the large end of each of the eggs in the first or bottom layer, and the process is repeated until the case is full. After the top layer of eggs (not shown) is in place, a cap piece, in the form of another one of the trays 40, is placed over that layer to complete the protection of the eggs before the lid or cover of the case is put in place.

While a detailed description of one form of tray has been given, obviously, the invention is not limited to these details, but may assume other forms.

I claim:

An egg tray adapted to be assembled with other like trays inside an egg crate or case to support and protect eggs against breakage, comprising a flat plate made of a relatively stiff material, said plate having parallel regular rows and alternate regular rows, in which every other row consists of egg-seating perforations and interposed resilient flexible tubular members upstanding from one side only of said plate, said perforations and said tubular members being arranged in alternate relationship, the regular rows in between the alternate regular rows each consisting of a plurality of like resilient flexible tubular members arranged side by side in the row and also upstanding from said flat plate, and all of the tubular members in all of the rows being disposed at one and the same side of said flat plate with their axes substantially perpendicular to the plane of the plate.

References Cited in the file of this patent

UNITED STATES PATENTS

2,922,541 Martelli et al. Jan. 26, 1960