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PACKING FOR EGGS AND OTHER BRITTLE ARTICLES

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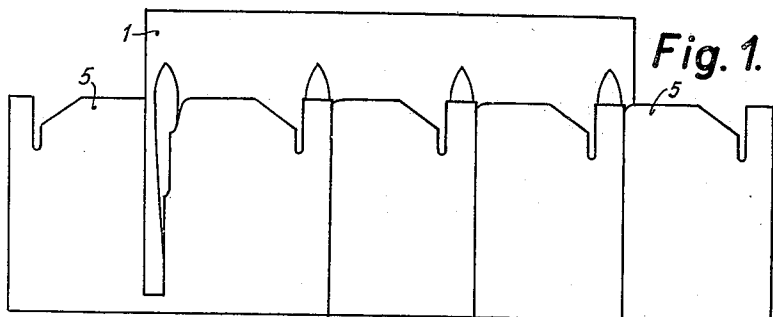


Fig. 1.

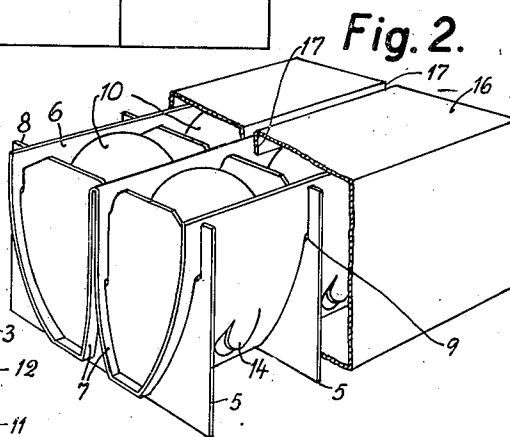


Fig. 2.

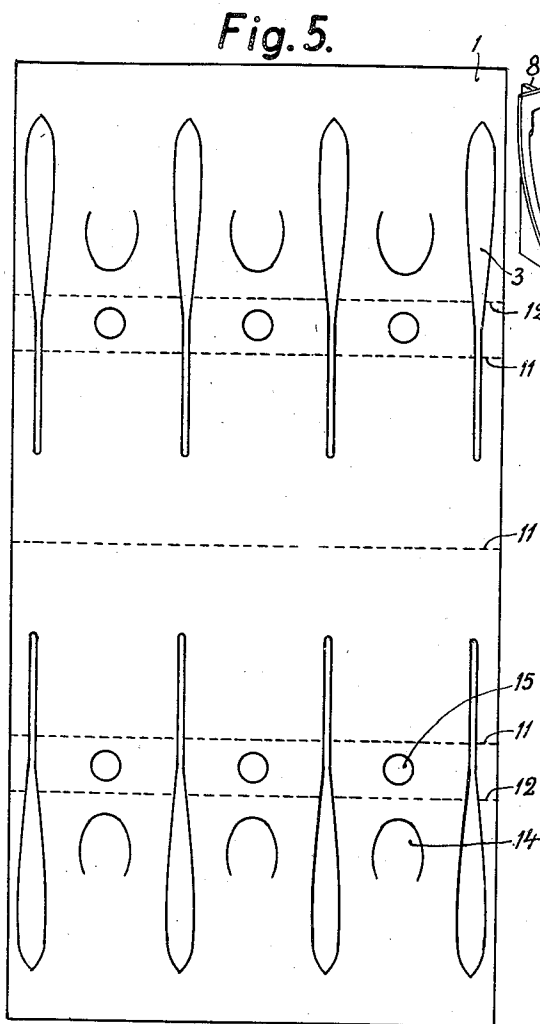


Fig. 5.

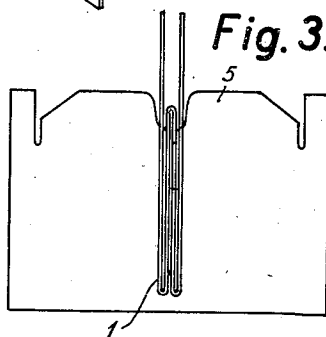


Fig. 3.

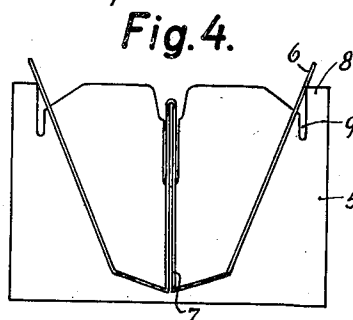


Fig. 4.

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PACKING FOR EGGS AND OTHER BRITTLE ARTICLES

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3 Claims. (Cl. 229—29)

It is known to produce packings for eggs and other brittle articles from a wrapper made of cardboard or similar material and an inset likewise formed from a piece of cardboard or similar material and folded in such manner that it forms parallel grooves subdivided into cells by means of transverse walls inserted in slit-shaped opening in the longitudinal boundary walls of the grooves, in such manner that the said piece of cardboard, owing to its elasticity, will open itself so as to form the said cells automatically when the packing in folded state is released, for instance by being thrown on to a table.

In the heretofore known packings of this nature, no means are used for maintaining the central longitudinal walls in position relatively to the transverse walls, and therefore the said central longitudinal walls might happen to place themselves obliquely on the transverse walls when the packing, from folded state, has been released, and has unfolded itself.

In packing by hand, i. e. by manual insertion of the eggs, it has been necessary to remedy this drawback by bringing the central longitudinal walls into position before the eggs are inserted, but in the case of mechanical packing this drawback is felt more seriously. The present invention has for its object to remedy this drawback and further to arrange the longitudinal walls and the transverse sections in such a manner that the piece of cardboard owing to its elasticity will open itself as to form the said cell when the packing in folded state is released. The invention is mainly characterised in that the slit-shaped openings have a narrow and a wide part serving respectively to pinch the said piece of cardboard in central slits in the transverse walls, and to enable the outer longitudinal walls of the inset to swing freely into contact with the corner parts of the transverse walls as soon as the package is released from its folded state.

In order that the cells formed by the free swinging of the outer longitudinal walls may become so large that eggs of the varying sizes occurring in practice in the case of mechanical packing simply by dropping down into the cell, may be able to adjust themselves properly in the same, it will be preferable according to my invention to fit the bottom parts in the cells with two or more weakening lines whereby the cells, into which the egg drops, in advance is rendered more spacious than the known cells with a V-shaped cross section. Small eggs will thereby easily find their way clear down to the bottom of the cell, in spite of their smaller weight. Larger eggs will

similarly with greater ease be contained in the cell, and finally a greater number of supporting points for the egg will be formed, and the weight of the egg will thereby be more uniformly distributed to the various parts of the packing than in the case of known packings with V-shaped cells.

The packing according to the invention will thus create an increased security of the egg adjusting itself properly in the cell, i. e., with its longitudinal axis vertically disposed, no matter whether the egg be large or small.

It is known to fit such packings with a hole at the bottom of each cell, in such manner that the eggs can be lighted through when they are deposited in the inset of the packing, and according to the invention such lighting holes may preferably be disposed between two of the weakening lines in the said piece of cardboard or the like material.

According to the invention the corner parts of the transverse partition walls may be fitted with vertical, or mainly vertical, incisions in which the outer longitudinal walls will slide down and become firmly seated when the eggs are deposited in the cells.

By the packing according to the invention the central longitudinal walls will thus be attached to the transverse walls before the eggs are inserted, while the outer longitudinal walls are attached automatically by the insertion itself.

Finally the wrapper of the packing is also comprised in the invention, as the said shape of the inset makes it feasible to use a rectangular wrapper having long narrow closing flaps which are pinched into position, along the intermediate longitudinal walls, in the central slits of the transverse wall.

One construction is shown on the drawing, in which

Fig. 1 shows the inset for a packing, in folded state,

Fig. 2 a perspective view of the same in folded position and filled with eggs and partly enclosed by a wrapper,

Fig. 3 an inset, in end elevation, before the longitudinal walls have unfolded themselves,

Fig. 4 the same, after the longitudinal walls have unfolded themselves, and

Fig. 5 the piece of cardboard from which the longitudinal walls are produced.

On the drawing, 1 is a piece of cardboard with weakening lines, in such manner that it can be folded together so as to form two troughs. In the piece of cardboard slits are cut which con-

sist of a narrow part 2 and a wide part 3. In the slits, transverse walls 5 are inserted which also have central slits 4 which together with the slit part 2 secure the attachment of the transverse walls to the piece of cardboard 1.

The inset of the packing which consists of the transverse walls 5 and the piece of cardboard 1 is shown in folded state in Fig. 1. When the inset is to be rendered ready for use, it is released, for instance by being thrown on to a table. The transverse walls 5 will thus adjust themselves at right angles to the piece of cardboard 1, as shown in Fig. 1, and further the outer longitudinal walls 6 of the inset will swing out sideways in consequence of the resiliency of the cardboard. The longitudinal parts 6 will slide without any difficulty along the transverse walls, as the longitudinal walls contain the broad part 3 of the slits of the piece of cardboard 1. The central longitudinal walls 7 of the cardboard, on the other hand, will remain attached in the central slits 4 of the transverse walls, in such manner that the central transverse walls 7 will be unable to swing away from the central position when the packing is released for unfolding. As shown in Fig. 4, the outer longitudinal walls 6 will rest against the corner parts 8 of the transverse walls when the packing is released, and when subsequently the cells formed by the longitudinal walls and the transverse walls are filled with eggs, the longitudinal walls 6 will slip down into slits 9 inside of the corner parts 8 of the transverse walls, as shown in Fig. 2, in which the eggs are marked 10. As shown for instance in Fig. 5, the piece of cardboard 1 has also, besides the weakening lines 11 that serve to separate the four longitudinal walls from one another, a few weakening lines 12 which convert the lower ones of the outer longitudinal walls 6 into bottom parts 13, and each egg will thereby obtain three points of support, viz. along the central longitudinal wall 7 of the cell, a cut resilient tongue 14 on the outer longitudinal wall 6, and on the bottom part 13. The latter may suitably have a central hole 15, through which the eggs inserted in the inset can be lighted, before the inset is enclosed in a wrapper 16.

The wrapper consists of a rectangular piece of cardboard or other suitable material which has folding lines along which the wrapper is bent in such manner that it can be made to enclose the inset and, along two sides, be attached to the inset by means of narrow closing flaps 17, the said flaps being pressed down into the slits 4, alongside the longitudinal walls 7. The folding lines of the wrapper are made or may be made in advance.

The packing may further be made in many other manners, without the scope of the inven-

tion being exceeded, and it may also be used for other brittle articles than eggs.

Having now described my invention what I claim as new and desire to secure by Letters Patent is:

1. A collapsible packing for eggs and other brittle articles including a wrapper, and an inset formed from a piece of cardboard or similar suitable material folded longitudinally of the packing to form an even number of longitudinal walls connected among themselves so as to present substantially a W-shape with parallel troughs having transverse walls inserted in transverse slits spaced apart in the longitudinal walls in positions which will subdivide said troughs into cells and allow the W-shaped inset by virtue of inherent elasticity to open automatically and form the mentioned cells when the packing is released from its collapsed or folded condition, as by placing or throwing the collapsed packing upon a table, end portions upon said transverse walls serving as stops, and the feature which consists in that the slits into which the transverse walls are inserted comprise slit shaped openings which extend continuously across nearly the whole of the longitudinal walls and across the bottom folds of the W-shape of the latter with each slit having a narrow portion at one end in one wall and a wide portion at the other end in the next adjacent wall, respectively, serving to secure the two inner, mutually adjacent, intermediate, longitudinal walls to the transverse walls and allow the outer longitudinal walls to swing free and spread sideways into contact with the outer end portions or stops of the transverse walls upon release of the packing from the collapsed condition.

2. Packing according to claim 1, in which the transverse walls have substantially vertical open slots cut downwardly from the upper edges within the end portions thereof and also immediately, in positions allowing portions of the longitudinal walls to slide down into the same and become fixed therein when eggs are deposited in the cells, while drawing down said portions of said longitudinal walls into said slots.

3. A packing according to claim 1, wherein the wrapper of the packing is formed from a rectangular sheet exclusively assembled with the transverse walls and terminating in narrow closing flaps which become pinched or wedged along the inner or mutually adjacent intermediate longitudinal walls of the inset member in intermediate slotted portions of the transverse wall members when the wrapper is wrapped about said inset and transverse walls and the ends thereof brought down into said intermediate slotted portions from the top of the packing.

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