

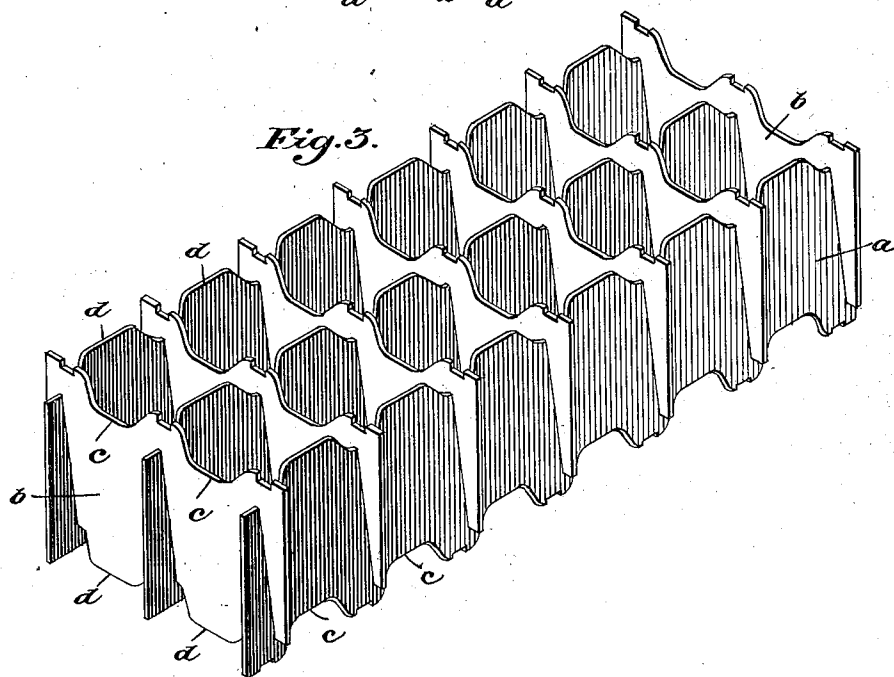
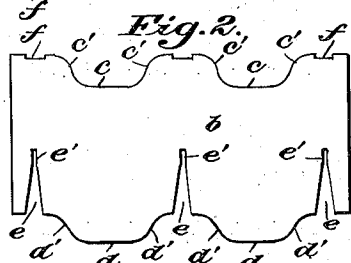
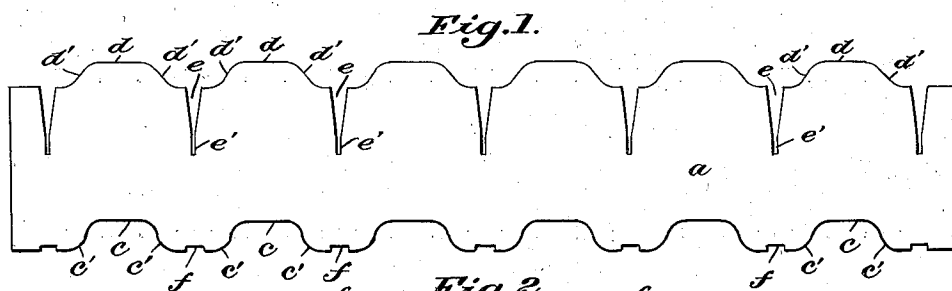
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BOX PARTITIONING

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UNITED STATES PATENT OFFICE

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BOX PARTITIONING

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This invention relates to partitions of the folding or collapsible type adapted to be so opened or set up and placed in boxes as to form substantially square cells or pockets for receiving fragile articles such as eggs, or other articles. Partitions of this type are usually made of pasteboard in the form of strips partially slotted or slitted transversely to enable the strips to cross each other and be interengaged.

While the material of which paper box partitioning is made is of a quite inexpensive grade, yet when the production runs up into the millions the cost is considerable. For this reason the principal object of our present invention is to reduce the amount of material required to make the strips.

Another object of the invention is to provide box partitioning which is attractive in design so that when a packed box is opened the presence of the partitioning will add to, rather than detract from, the display of eggs or other articles in the cells or pockets.

With the above objects in view, and others hereinafter referred to, the invention consists in the partitioning substantially as hereinafter described and claimed.

Of the accompanying drawings:

Figures 1 and 2 are elevations of the two lengths of strips employed for making a partitioning unit of the kind illustrated by Figure 3.

Figure 3 is a perspective view of a complete unit ready for insertion in the long form of box commonly employed.

Similar reference characters indicate similar parts or features in all of the views.

Each strip *a* or *b* has a series of concavities in one edge and a series of convexities in its opposite edge. The edge of each concavity is straight at its mid-length as illustrated at *c*, and at both ends of the straight portion is ogee-shaped, as at *c'*. The edge of each convexity is straight at its mid-length as illustrated at *d* and at both ends of the straight portion is ogee-shaped, as at *d'*.

Alternating with the convexities *d d'* are notches the portions *e* of which have diverging edges and the inner or bottoms *e'* of which have parallel edges *e'* terminating at the mid-

width of the strip. The spaces between the edges *e'* are narrow, substantially equalling the thickness of the material of which the strips are made. The shallow notches *f* in the opposite edges of the strips are the result of cutting or dieing out those portions of the strips which have the recesses *e*.

All of the strips are alike except as to length, and when assembled as illustrated by Figure 3 the strips *a* present their convex edges *d d'* uppermost, while the strips *b* present their concaved edges *c c'* uppermost. The projecting portions of the strips between, or alternating with, the concavities *c*, and the recesses which alternate with the convexities *d*, result in the edges of the strips having a somewhat scalloped appearance which, as shown by Figure 3, is quite attractive. This matter of appearance however is not the chief advantage of the form or structure of the strips.

In the manufacture of the strips they are so cut or died out that the straight and ogee-shaped edges *c, c'*, correspond with the straight and ogee-shaped edges *d, d'*. When a sheet or web of material is being divided to form the strips, the line of cut which forms the edges *c, c'*, of one strip forms, at the same time, the edges *d, d'*, of the next strip. There is very little waste. In practice we find that a saving is effected of approximately 17 per cent of the material, over what is required when strips are formed with one edge straight as in Letters Patent No. 1,534,006 granted to us April 14, 1925.

When the strips are assembled to form partitioning units such as illustrated by Figure 3, the notches *e, e'*, of the strips interengage. Such assembling is facilitated by the flaring notches *e* the diverging side edges of which guide the members which are pushed thereinto. When the crossing members are pushed to final assembled position, the straight spaced edges *e'* of each notch receive between them an uncut portion of a crossing strip.

Each strip has straight edge portions alternating with recesses, said straight portions providing for firm, steady, bearing on the bottom of the box in which a unit is lo-

cated. And this is true whichever way a unit or collection of strips is inserted in a box. This is because every strip, whether a longitudinal one or a transverse one, has a series of straight-edge portions d along one edge, and another series of shorter straight-edge portions which are interrupted by the small notches f along its opposite edge. Such multiplicity of straight bearing edges prevents the existence of any curved bearing edges which are so flexible as to be subject to lateral bending. And yet the strips have such concavities and convexities as to effect a very material saving in the cost of production. And furthermore, since the notches e , e' extend in from the bottoms of concave edge portions, their presence can not have any weakening effect on the opposite edge convexities which bear on the bottom of a box.

The result of this structure is that when the crossed strips are assembled and pushed to the bottom of a box, the pressure caused by the downward movement of the frictionally inter-engaged notches e , e' is transmitted to convex portions of the strips. And since the edges of said convex portions are so shaped as to present elongated bearings on the bottom of the box, there is little or no tendency of said convex portions to bend or curl up due to contact with the bottom of the box.

Having now described our invention, we claim:

1. Box partitioning comprising two sets of strips crossing each other, both edges of each strip presenting alternating convexities and concavities, the convex portions of one edge being opposite the concave portions of the other edge, and one edge of each strip having notches alternating with its convexities, the middle portions of the convexities and concavities presenting straight edge portions, there being only one straight projecting edge of substantial length on each strip for each pocket whereby an elongated bearing foot is provided.

2. Box partitioning comprising two sets of strips crossing each other, both edges of each strip presenting alternating convexities and concavities, the convex portions of one edge being opposite the concave portions of the other edge, and one edge of each strip having notches alternating with its convexities, the middle portions of the convexities and concavities presenting straight edge portions, there being only one straight projecting edge of substantial length on each strip for each pocket whereby an elongated bearing foot is provided the edge portions which connect the convexities and concavities being ogee-shaped.

In testimony whereof we have affixed our signatures.

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