Jan. 18, 1938. W. P. GEMMILL 2,105,645

COMBINATION DIVIDER AND PLATFORM SUPPORT

Filed Dec. 28, 1936

FIG.1.

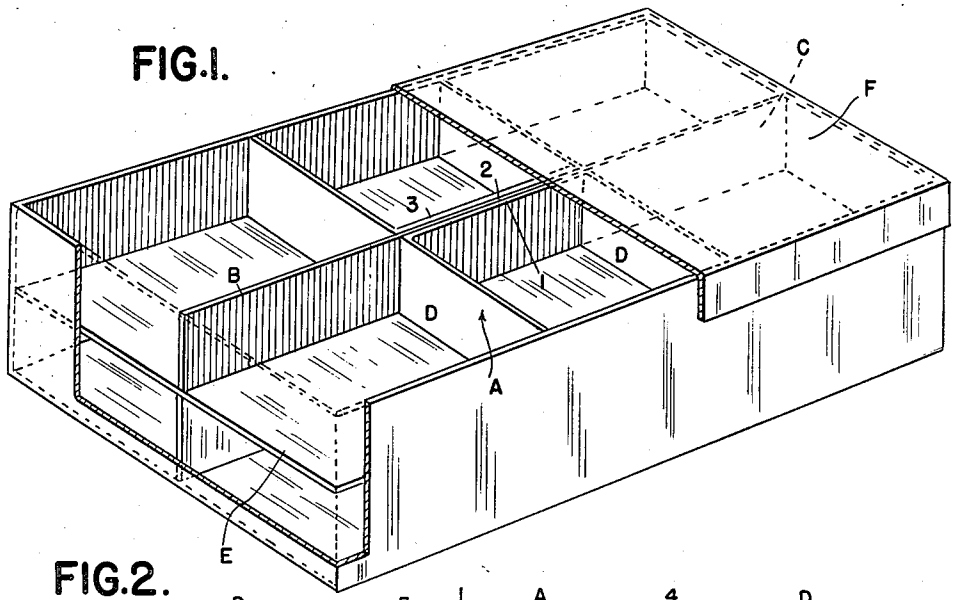
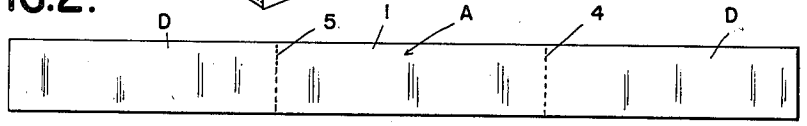



FIG.2.



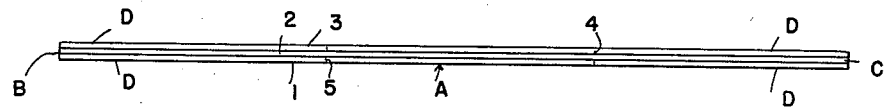
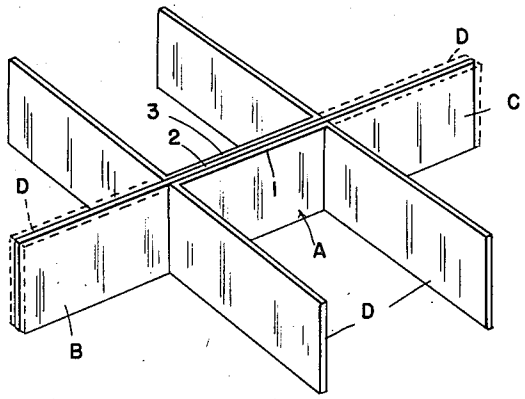




FIG.3.

FIG.4.




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## COMBINATION DIVIDER AND PLATFORM SUPPORT

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2 Claims. (Cl. 217—23)

This invention relates generally to shipping cases or receptacles and refers more particularly to a combined partition and platform support for such receptacles.

One of the essential objects of the invention is to provide a three-ply element of this type that may be fabricated from rolls of cardboard or strip-like material and that is convertible into a set of angularly related partitions for producing substantially rectangular cells in a box.

Another object is to provide a combination that is a comparatively rigid unit that will stand up under weight or strain in the receptacle and that will be free of various objections to the usual loose assembly of notched or slotted partition members which collapse and permit the cover or platform supported upon the upper edges thereof to sink and thereby crush or mar the contents of the receptacle.

Another object is to provide a partition unit that can be used in packing various kinds of merchandise in receptacles, containers, boxes and the like.

Another object is to provide a partition unit that can be manufactured at a comparatively low cost.

Another object is to provide a combination of the type mentioned wherein the wing portions of the unit may be flattened against the head and tail pieces thereof to provide a substantially flat article for shipping purposes, so that a large number of such articles all formed and ready for use in receptacles may be packed and shipped separately, for example, by the partition manufacturer to the manufacturer of the merchandise that is to be packed in the receptacles.

Other objects, advantages and novel details of construction of this invention will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawing, wherein:

Figure 1 is a perspective view of a receptacle with partition units embodying my invention therein and showing parts of the receptacle and cover thereof broken away and in section;

Figure 2 is an elevation of the partition unit in flattened condition;

Figure 3 is an edge elevation of the unit illustrated in Figure 2;

Figure 4 illustrates in full lines the partition unit as used in a receptacle, and by dotted lines the position of the wings when folded inwardly against the head and tail pieces of the unit.

Referrring now to the drawing, A is the body or intermediate zone, B and C, respectively, are the head and tail pieces or outer end zones, and D are the wing portions or outer plies of the outer end zones of a combination partition and platform support embodying my invention. As shown, the body A is laminated and is preferably formed from three strips 1, 2 and 3, respectively, of cardboard. The head and tail pieces B and C, respectively, are integral with and constitute endwise extensions of the intermediate ply or strip 2, while the wings D are integral with and constitute lateral extensions of the outer plies or strips 1 and 3, respectively.

In the process of construction, the strips 1, 2 and 3 forming the combination partition and platform support are cut to the desired length from a roll of cardboard or other suitable material. The strips 1 and 3 are then scored as at 4 and 5, respectively, to permit the wing portions D to bend at right angles to the intermediate strip 2. In practice, the scoring may be done on the strip-like material before the strips are cut from the roll, or after as desired. After being scored, the strips 1 and 3 are secured upon opposite sides of the intermediate strip 2 to form the laminated body A. In this connection, it will be of course appreciated that any suitable means such as glue, paste, thread, rivets, staples, etc., may be used to secure the partition together. The wing portions D may then be bent where scored at right angles to the body A to form the desired configuration for use in a receptacle.

If desired, the combination partition and platform support described herein may be formed from a series of rolls of cardboard or other suitable material. For example, the portions of cardboard from three rolls may be placed side-by-side and then united for a predetermined distance to form the elongated body. The outer surfaces of the united material may then be scored adjacent opposite ends thereof, and following the scoring operation, the united material may be cut from the rolls at predetermined points thereof.

In use, the combination partition and platform supports may be placed one above the other within a receptacle as illustrated in Figure 1, with one or more platforms such as E therebetween, and a suitable cover such as F at the top. Inasmuch as the body A, head and tail pieces B and C, respectively, and wings D are all formed from the same stock or roll of cardboard, it is apparent that the depth of the partition unit is uniform throughout. Consequently, the lowermost partition rests evenly on the bottom of the receptacle; the platform E rests evenly on the upper edges of

said lowermost partition unit; the upper partition unit rests evenly on the platform E; and the cover F rests evenly on the upper edges of the uppermost partition unit, as well as upon the upper edges of the receptacle. As a result, a strong and rigid but light weight structure is provided.

What I claim as my invention is:

1. A three-ply element convertible into a set of angularly related partitions for producing substantially rectangular cells in a box, comprising three separate predetermined lengths of strip-like material arranged in juxtaposition, constituting two outer end zones and an intermediate zone, said intermediate zone having three plies secured to each other, the plies of the outer end zones being free from each other, and means associated with the intermediate zone to constitute bending lines at the extremities of said zone for the outer plies of the outer end zones, the intermediate three-ply zone and the middle ply of each outer end zone constituting walls intervening between adjacent substantially rectangular cells.

2. A three-ply element convertible into a set of angularly related partitions for producing substantially rectangular cells in a box, comprising three separate predetermined lengths of strip-like material arranged in juxtaposition, constituting two outer end zones and an intermediate zone, said intermediate zone having three plies secured to each other, the plies of the outer end zones being free from each other, and transverse score lines at the ends of said intermediate zone constituting bending lines at the extremities of said zone for the outer plies of the outer end zones, the intermediate three-ply zone and the middle ply of each outer end zone constituting walls intervening between adjacent substantially rectangular cells.

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