Feb. 20, 1934. F. BOREN 1,947,446

CRATE

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FIG. 1.

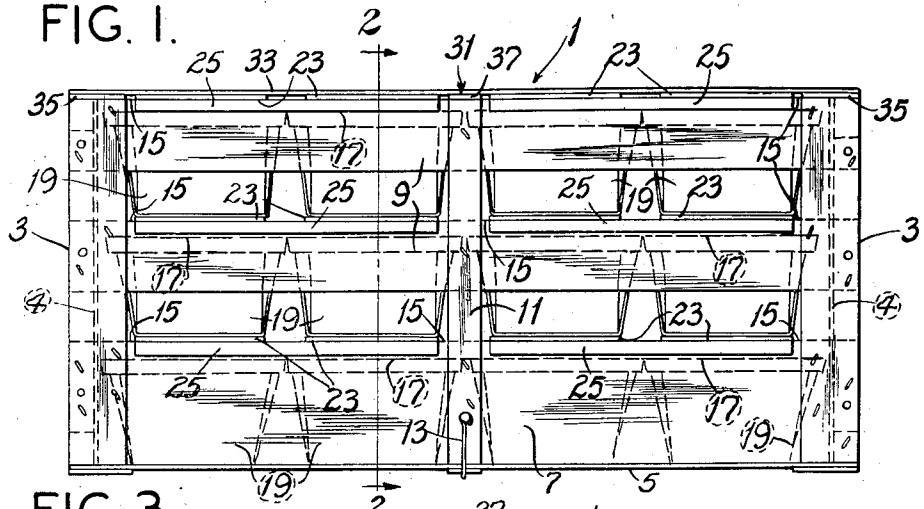


FIG. 3.

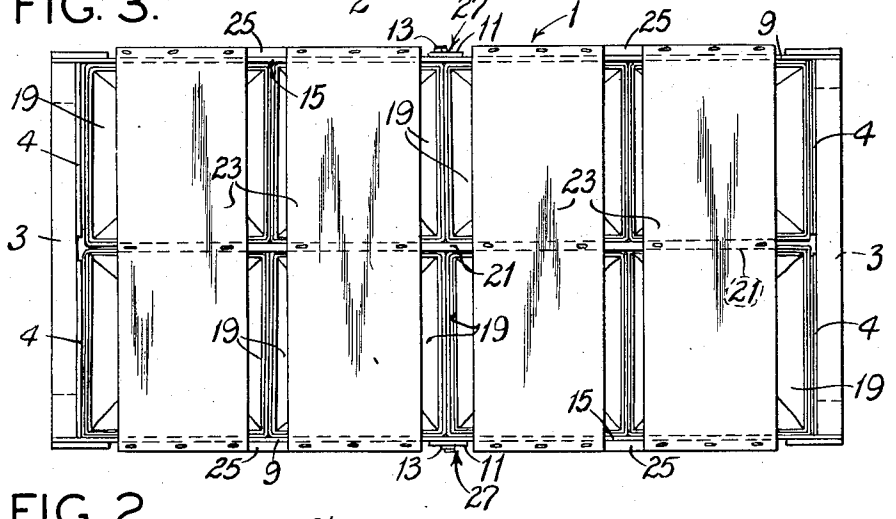


FIG. 2.

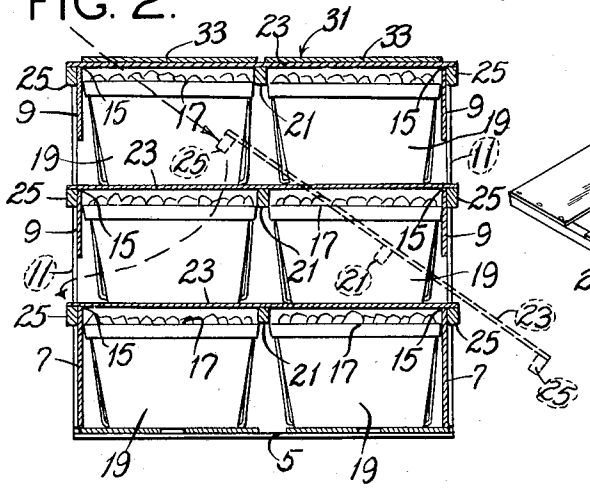
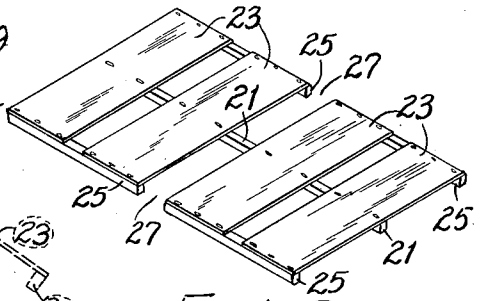


FIG. 4.



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CRATE

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2 Claims. (Cl. 217—40)

This invention relates to crates, and with regard to certain more specific features, to crates for produce and the like.

Among the several objects of the invention may be noted the provision of an improved form of crate in which improved partitions are used to protect the contained produce from damage and to properly maintain the shape of the outer portion of the crate; the provision of a novel shape for said partitions whereby they are readily applied; and the provision of simple and inexpensive means for accomplishing these improvements. Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly comprises the elements and combinations of elements, features of construction, and arrangements of parts which will be exemplified in the structures hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawing in which is illustrated one of various possible embodiments of the invention,

Fig. 1 is a side elevation of a crate embodying the invention;

Fig. 2 is a vertical section taken on line 2—2 of Fig. 1, the dotted lines showing how to apply a lower divider;

Fig. 3 is a plan view of a crate embodying the invention, the cover thereof being removed; and,

Fig. 4 is an isometric view of a divider element per se.

Similar reference characters indicate corresponding parts throughout the several views of the drawing.

Referring now more particularly to Fig. 1, there is shown at numeral 1, the outer box-like portion of the crate in general having ends 3 closed by slats 4 and joined by a bottom 5.

Between the ends 3 are fastened a pair of lower, relatively broad slats 7 and two pairs of upper narrower slats 9. The slats are braced at the central portion of the crate by means of wooden ribs 11 braced by wire as shown at 13.

The lower salts 7 are made broader than the slats 9 in order that their upper edges 15 may be positioned above upper edges 17 of boxes, such as strawberry boxes 19, which are to be carried by the crate. The upper edges 15 of the slats 9 are likewise arranged to be positioned above the corresponding edges 17 of the boxes which ultimately become positioned adjacently and within said slats 9.

A primary feature of the invention is the provision of improved partitions or diaphragms between layers of baskets 19. Each partition or divider, has a central, longitudinal rib 21 to which are fastened cross slats 23 joined laterally by shorter longitudinal ribs 25. The spaces 27 left between the inner ends of the shorter ribs 25 clear the side ribs 11 of the crate upon application of the partition or divider (see dotted lines, Fig. 2), and the whole partition is made short enough so that the outer ends of said short ribs 25 fall short of the crate ends 3. Said spaces 27 reach into the central rib 21 and thus permit of clearing said central crate rib 11 for application of the lower and intermediate dividers (see dotted lines, Fig. 2). It will be clear that if it were not for this feature, the dividers, which for clamping purposes, are wider than the distance between side slats 7 and 9, could not be introduced therein. By this means the intermediate dotted line position shown in Fig. 2 can be assumed and the partition finally positioned on its respective side slats to function both as a support and outside clamp.

As shown in the cross section of Fig. 2, the outer ribs 25 are positioned outside of the upper slats 9 and the central rib 21 is positioned along a median line of the crate. Similar separators, dividers or partitions, are used on the lower slats 7 and the intermediate slats 9 in the case of a crate containing three layers of baskets, which is the usual number, although the invention is not limited to this number of layers.

The cover 31 comprises broad slats 33 joined underneath by end slats 35, and centrally by a single slat 37. The slats 35 are adjacent the end slats 3 and the slat 37 is adjacent the rib 11. As will be seen from the side elevation, the slats 23 of the uppermost partition fit into the space left between the slats 35 and 37, thus presenting a flush and workmanlike appearance.

The advantages of the invention are as follows:

In older forms of partitions, the partitions were carried directly upon the produce-carrying boxes such as strawberry boxes within the crate. Thus the loads of the upper boxes were transmitted to the lower ones; consequently crushing the produce in the lower boxes, particularly if the boxes were generously filled. Furthermore, any excessive extraneous load above the crate was transmitted to and throughout the produce-carrying boxes therein.

Furthermore, the side slats of older forms of crates were not laterally braced and they tended to bulge sidewise.

The present invention overcomes these difficulties because the separators or dividers rest upon the side slats and each layer of boxes transmits its load to its respective set of side slats, rather than to the produce-carrying boxes below. Furthermore, the upper partition receives but does not transmit any outside load.

Also, the positions of the outer longitudinal ribs 25 outside of the respective slats 9 and 7 causes the respective partitions to become effective as clamps to hold the said slats against bulging.

Lastly, the shape of the dividers is such that, although they are broader than the crate opening which they span, they may be readily placed in position, even in the cases of the lower layers of the crate.

Thus it will be seen that each set of side slats is provided with means for preventing bulging thereof, said means functioning as an independent support for one layer of inner produce baskets. Each partition or separator carries the load due to one layer of baskets and no more.

The cost of making this improved form of separator is no more than the cost of making former types in which no bracing action was effected upon the side slats nor where no provision was made for guarding each layer of contained produce-carrying baskets.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

I claim:

1. A crate comprising end members joined by a bottom and by spaced side slats, at least one central rib affixed to said slats, and partitions resting upon respective pairs of said side slats, said partitions having lateral ribs positioned outside of said slats of the box to clampingly hold the same, the partitions also having recesses accommodating said rib during application of the partitions.

2. A crate comprising end members joined by a bottom and by spaced side slats, at least one central rib affixed to said slats, and partitions resting upon respective pairs of said side slats, said partitions having lateral ribs positioned outside of said slats of the box to clampingly hold the same, the partitions also having recesses accommodating said rib during application of the partitions and a central rib running the entire length of each partition.

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