Oct. 7, 1947. M. G. OTIS ET AL 2,428,501

CARRIER

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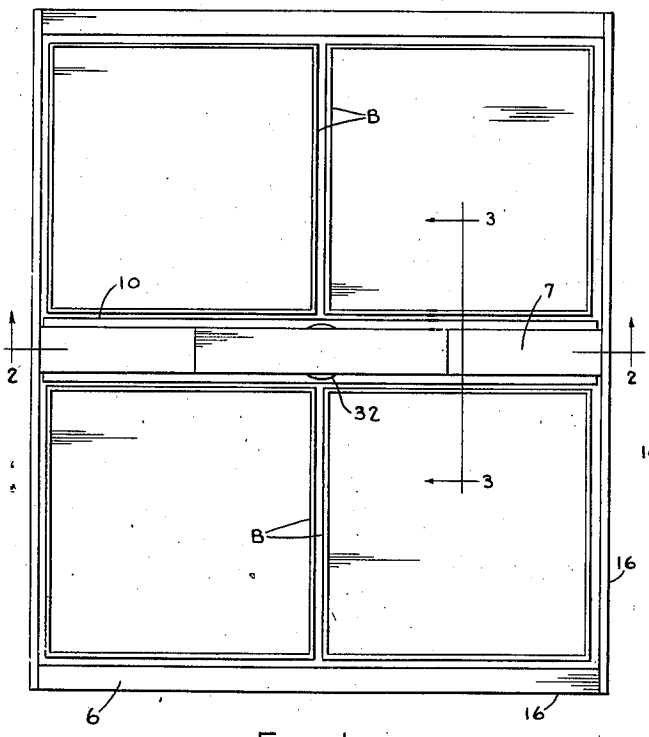


FIG. 1

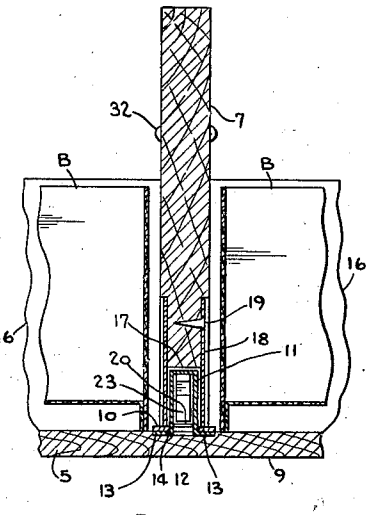


FIG. 3

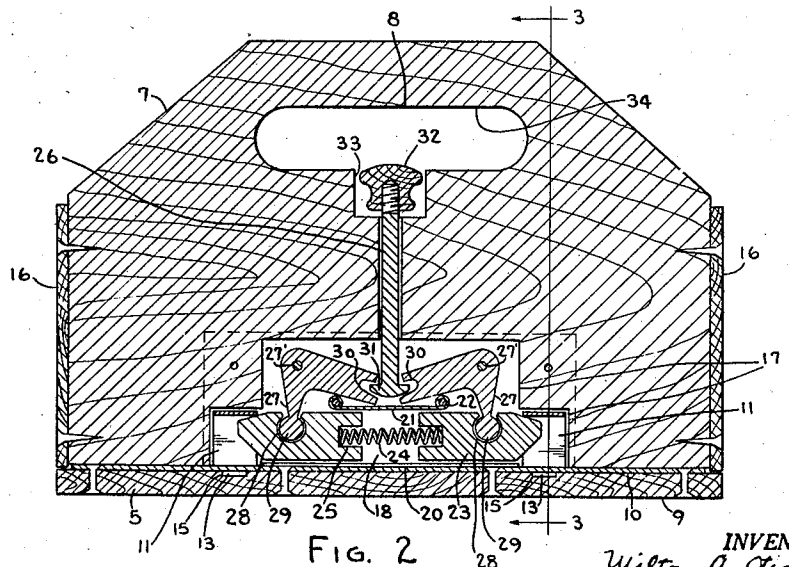


FIG. 2

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CARRIER

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7 Claims. (Cl. 224—48)

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The invention relates to carriers and more particularly to a box carrier.

In harvesting berry crops the pickers are sometimes provided with carriers which hold several boxes for receiving the berries, and after these are filled, they have to be replaced with empty boxes. In removing the filled boxes from the usual fixed type carriers, it frequently happens that berries at the top of the box are crushed or bruised, thus detracting from the appearance of the product and making it less saleable, and sometimes berries are spilled necessitating replacement. The general object of the present invention is to provide a carrier in which the top or siding portion thereof may be removed from the bottom portion, thus exposing the whole of the filled boxes, so that they can be readily removed without danger of bruising, crushing, or spilling the berries and so that time may be saved by the pickers by providing several interchangeable bottom portions for each carrier.

A further object of the invention is to provide a carrier having a bottom portion and a removable top portion provided with a partition with means for releasably locking the partition to the bottom portion so as to form a unit carrier.

The invention further consists in the several features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings:

Fig. 1 is a plan view of a carrier embodying the invention;

Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is a detailed vertical sectional view taken on the line 3—3 of Fig. 1.

The carrier herein shown includes a bottom portion 5 and a siding or top portion 6 having a medial partition 7 provided with a handle portion 8, and means for detachably securing together said bottom and top portion.

The bottom portion 5 may be formed of a flat piece 9 of wood or metal having a medially disposed metal strip 10 riveted or otherwise suitably secured thereto and spaced upstanding U-shaped metal keepers or latch-receiving means 11 whose legs 12 have angled bases 13 of less width extending through slots 14 in the strip 10 and bent back against the same and mounted in recesses 15 in the part 9. The siding portion 6 includes siding 16 of wood or other suitable material suitably secured together and of a height equal to that of a quart berry box B, and the medial partition 7 of wood is secured to opposite sides of the siding 16.

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The lower portion of the partition 7 is cut out as indicated at 17 in Fig. 3 to receive the locking means which is carried by a U-shaped sheet metal plate 18 that is secured to the partition by screws 19 and whose web 20 is cut away to admit the keepers 11. Between the sides of the plate 18 a sheet metal latch guide strip 21 is secured by rivets 22 anchored to said sides. A pair of latches 23 are slidably mounted between the guide strip 21 and the web 20 and are normally urged outwardly into locking engagement with the keepers 11 by a coiled spring 24 interposed between said latches and seated in recesses 25 therein.

For simultaneously retracting the latches 23, a pull rod 26 is operatively connected to both of them by a pair of bell crank levers 27 pivotally mounted on pins 27' carried by the plate 18. Each latch 23 has a slot 28 with a round opening formed therein to receive the rounded head 29 of one arm of the lever 27. The other arms of the levers 27 are provided with notches 30 to receive the headed end 31 of the rod 26 whose upper end is provided with a handle 32 that may be grasped by the thumb and forefinger of the operator and pulled upwardly, thus swinging the notched arms of the levers 27 upwardly and the round headed arms of said levers inwardly, thus moving the latches 27 inwardly out of engagement with the keepers 11, the handle 32 being located in a recess 33 adjacent the handle opening 34, so that the same hand of the operator is used to both carry the siding carrier on its top portion and release the lock connecting said top and bottom portions of the carrier.

The above carrier is adapted to receive four standard quart or pint size berry boxes, and after the picker fills the boxes with the berries or other fruit, the release of the siding portion from the bottom portion and its upward withdrawal therefrom leaves the filled boxes in exposed position on the said bottom portion without touching the boxes, so that crushing, bruising, or spilling of the fruit or breaking of the boxes which may occur where the boxes are lifted out of a one-piece carrier is prevented. Also the boxes may be removed from the carrier in considerably less time than it takes to lift them out of a one piece carrier. Furthermore, several interchangeable bottom portions may be used with a single siding portion, and thus time in handling the berries saved as the picker can release his full boxes in a few seconds and place the siding portion thereof on an empty bottom portion returning in a short time to the picking. Thus the device of the in-

vention not only results in a saving in fruit but also time and labor in harvesting the same.

We desire it to be understood that this invention is not to be limited to any particular form or arrangement of parts except in so far as such limitations are included in the claims.

What we claim as our invention is:

1. A box carrier adapted to receive a plurality of boxes having a flat bottom and removable siding, and means for detaching the siding from the bottom to expose said bottom on all sides and the sides of the boxes for handling.

2. In a box carrier of the character described, the combination of a flat bottom portion, a removable siding portion provided with a handle, and means for detachably securing together said bottom portion and siding portion the removal of said siding portion exposing said bottom portion on all sides and leaving the sides of the boxes fully exposed for handling.

3. In a box carrier of the character described, the combination of a flat bottom portion, a removable siding portion, and means operable from the siding portion for removably locking said portions together the removal of said siding portion exposing said bottom portion on all sides and leaving the sides of the boxes fully exposed for handling.

4. In a carrier of the character described, the combination of a flat bottom portion, a removable siding portion provided with a handle, means for locking said bottom and siding portions together, and means accessible from said handle for releasing said locking means.

5. In a carrier of the character described, the combination of a flat bottom portion, a removable siding portion having a medial partition provided with a handle, and releasable locking means between said partition and said bottom portion.

6. In a box carrier of the character described, the combination of a flat bottom portion provided with a lock keeper, a removable siding portion provided with a latch engageable with said keeper to releasably secure said bottom and siding portions together the removal of said siding portion exposing said bottom portion on all sides and leaving the sides of the boxes fully exposed for handling.

7. In a carrier of the character described, the combination with a bottom portion provided with spaced keepers, a siding portion having a medial partition provided with a handle, a pair of spring pressed latches mounted in said partition and normally engageable with said keepers, and means accessible from the handle for simultaneously withdrawing said latches from engagement with said keepers.

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