Feb. 3, 1953 F. A. PONTI 2,627,358

BOX

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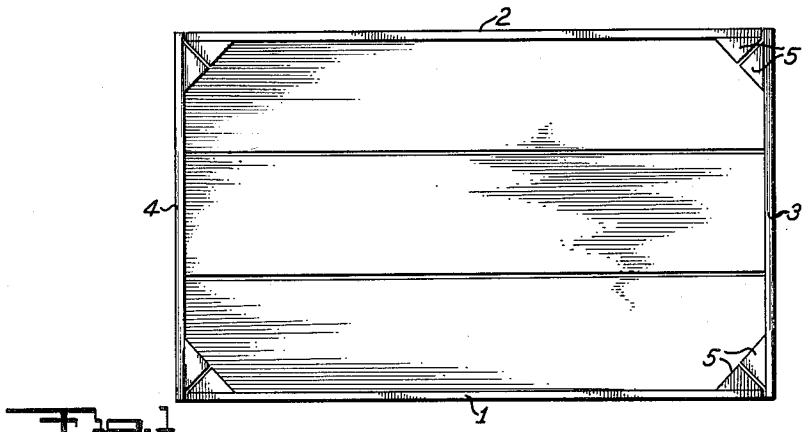


Fig. 1

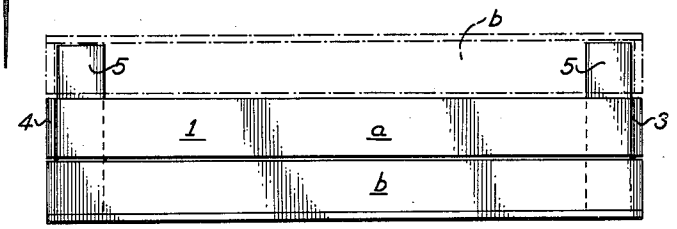


Fig. 2

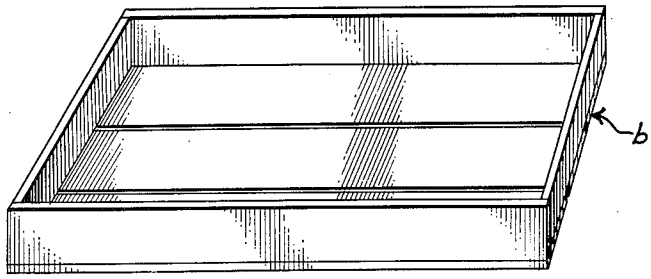


Fig. 3

Fig. 5

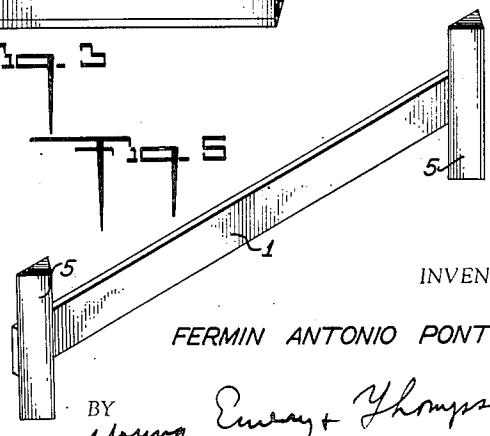
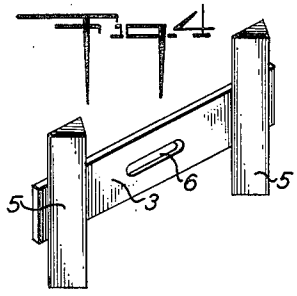


Fig. 4



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BOX

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1 Claim. (Cl. 217—43)

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The present invention refers to boxes in general and more particularly to boxes used for packing fruits and similar goods.

As a matter of fact, a perfect packing or boxing of fruits and like products of agriculture for transportation purposes is of vital importance for the simple reason that their conservation in good marketable conditions entirely depends on the manner of packing the same.

In earlier times, for transporting fruits and like products, the same used to be simply heaped up, without any packing, in railway cars and storerooms of ships, and this way, of course, a relatively high proportion of the transported goods was spoiled or wasted and worthless as marketable products.

Afterwards, due to the necessities imposed by commercial activity, such goods were packed in boxes made of hard or soft wood and preferably of the cheapest wood available, because, after once being used, opened and emptied, these boxes generally remained completely useless for the excessive number of nails employed in strapping.

Then, in order to reduce expenses of packing and transport, it became necessary to manufacture boxes adapted to be utilized again, and it is this class of boxes to which the present invention particularly refers, adding to the advantage of re-utilization the possibility of readily assembling and taking apart a few parts so constructed and arranged that after assembling the same, a strong transport box for fruits and like products is obtained and that after use the box may be readily taken apart, thereby considerably reducing the space occupied by the empty box and the freight to be paid for a transport of the same.

In accordance with the preceding statements, the main object of the present invention is to provide a box for packing and transport of fruit and like products, comprising a composite main frame and two equal bottom or top members, so constructed that the operations of assembling and of taking apart the box may be readily carried out without the necessity of any kind of tools.

Another object of the invention is to provide a box for packing and transport of fruits and like products, composed of but six separate members which, when taken apart, occupy a considerably reduced space with the advantageous result that transport and storage expenses are correspondingly reduced.

Still another object of the invention is to provide a box for packing and transport of fruits and like products, composed of but three pairs of different members, the members of each pair being equal in size, shape and construction, with the advantageous result that the same are readily interchangeable.

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With these objects in view, the present invention will now be fully described and explained with reference to the accompanying drawing, showing in

Figure 1 a plan view of an open box, i. e. without its top member,

Figure 2 a side elevation of the same box with its top member shown in dotted lines,

Figure 3 a perspective view of a bottom or top member of the box,

Figure 4 a perspective view of an end member of the composite main frame of the box, and

Figure 5 a perspective view of one side member of the composite main frame of the box, according to this invention.

Referring to the accompanying drawing, the novel box for packing and transport of fruits and like products, according to the present invention, comprises a composite main frame *a* and two bottom or top members *b*.

The composite frame *a* comprises a pair of like side members **1** and **2** (Fig. 2) and a pair of like end members **3** and **4** (Fig. 4). Each of these members **1–4** is formed by a rectangular board of wood provided at each end with a cross bar **5** of triangular cross section, suitably fixed in place on one and the same surface of each board in such a way that the same substantially extend beyond the two longitudinal edges of said board. Further, the arrangement of these cross bars **5** is such that the same on two opposite members of the frame *a* have one of their longitudinal edges flush with the respective end of said members, whereas the cross bars **5** on the other two opposite members of said frame have their cross bars **5** disposed at a short distance—equal to the thickness of the boards of wood—from the ends of said other opposite members, as has been clearly shown in Fig. 1 of the accompanying drawing.

The bottom or top members *b* of the box are constituted by simple trays as shown in Fig. 3. The length and width of these trays corresponds to the length of the side members **1**, **2** and of the end members **3**, **4**, respectively, of the composite frame *a*, and the height of the walls of the trays *b* preferably corresponds to the length of the projecting portions of the cross bars **5**, as has been clearly illustrated in Fig. 2 of the accompanying drawing.

For the purpose of assembling the box, accord-

ing to this invention, a tray as shown in Fig. 3 is placed on the floor or on a table, and the four members 1–4 are placed on the edges of the walls of said tray in such a way that the lower projections of the cross bars 5 extend into the corners of said tray and that the adjacent cross bars lay flat against each other, thus fixing in place the four members 1–4 so as to form the main frame *a* of the box. Now the box is filled and thereafter the same is closed by simply placing another tray *b* over the projecting ends of the cross bars 5.

In view of that the contents of the box always tend to press the members of the composite main frame *a* outwardly, the bottom and top members *b* will be firmly held in place by the projecting portions of the cross bars 5 without any nailing being required. Nevertheless, for withstanding rough handling of the filled and closed boxes, they suitably are tied by wires, straps or the like.

The end members 3, 4 of the composite main frame *a* are suitably provided with a longitudinal slot 6 for the purpose of facilitating the handling of the boxes.

It has to be understood that the present invention is by no means limited to the specific embodiment as described and shown, but that alterations and modifications may be made in as far as shape and constructive details of parts are concerned, and that such alterations and modifications are to be considered as falling within the scope of the appended claim.

What I claim as new and desire to secure by Letters Patent is:

A box comprising a composite main frame consisting of a pair of end members each with a corner bar at each end of and projecting beyond each side of the member and a pair of side members each with a corner bar at each end of and projecting beyond each side of the member, each corner bar having a triangular cross section, and top and bottom sections each fitting over the projecting ends of the corner bars to form a complete box with the end and side members, each corner of the box having a pair of said bars in substantially face contacting relation which together project into the top and bottom sections and form solid corners.

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