Nov. 24, 1931. J. G. KILMER 1,833,081

PACKING BOX

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Fig. 1.

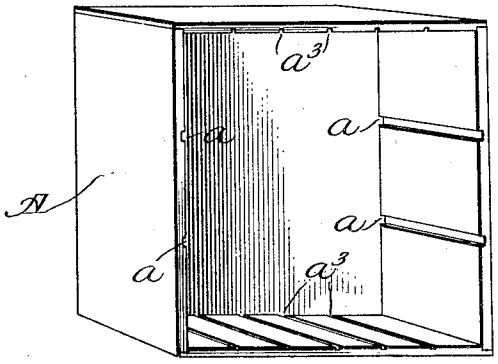


Fig. 2.

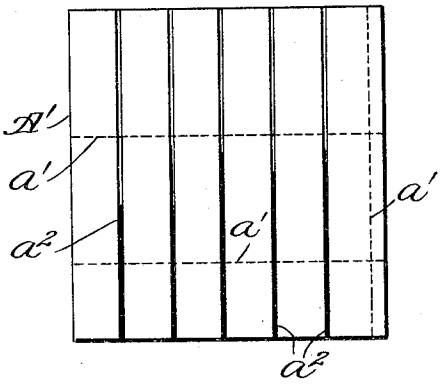


Fig. 3.

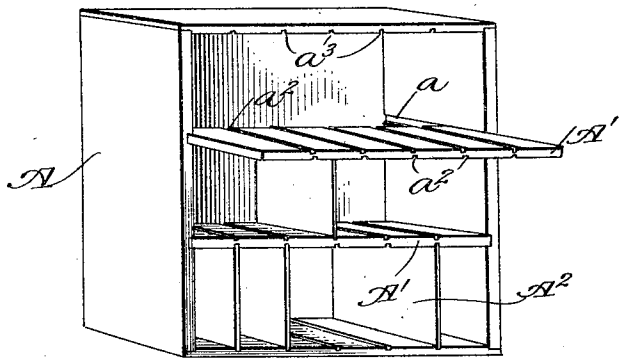


Fig. 4.

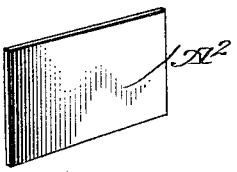
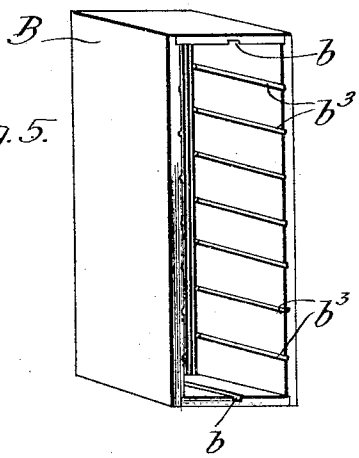


Fig. 5.



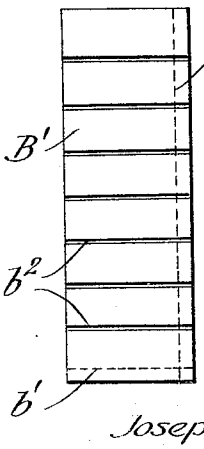


Fig. 6.

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PACKING BOX

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Fig. 7.

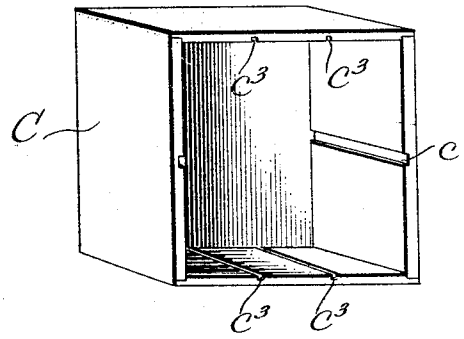
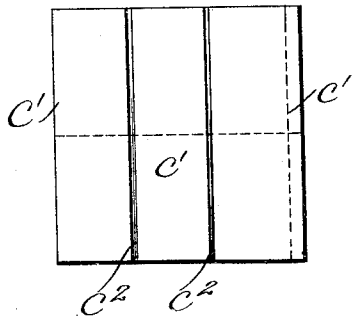


Fig. 8.



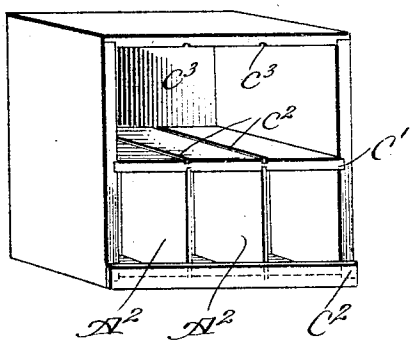


Fig. 9.

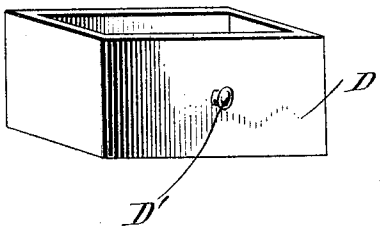


Fig. 10.

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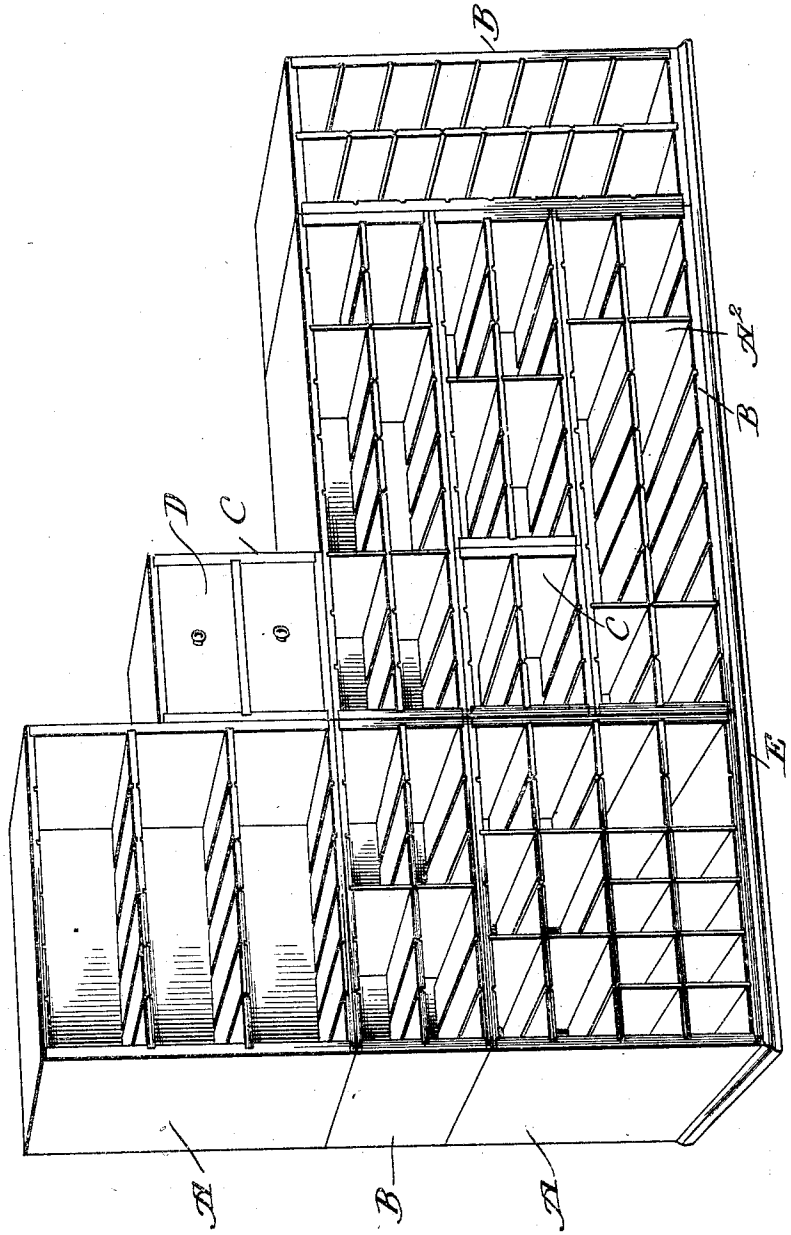
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PACKING BOX

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Fig. 11.



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Patented Nov. 24, 1931

1,833,081

UNITED STATES PATENT OFFICE

JOSEPH G. KILMER, OF SPOKANE, WASHINGTON, ASSIGNOR TO KILMER & SONS COMPANY, OF SPOKANE, WASHINGTON, A CORPORATION OF WASHINGTON

PACKING BOX

Application filed September 24, 1930. Serial No. 484,165.

The present invention relates to improvements in packing boxes and has for its objects, among others, to provide a packing box or case for shipping merchandise, which may be readily utilized, after it has been emptied, as a unit of a cabinet for displaying merchandise in a store or warehouse.

According to common practice, the boxes or cases in which merchandise is shipped or transported from a manufacturer, jobber or wholesaler to a retail dealer, for example, are destroyed after the contents are removed. By the present invention, however, it is possible to utilize such boxes or cases as units of a display cabinet or bin, thus effecting a saving in cost and material.

The invention consists in the construction that will be hereinafter more particularly described in connection with the accompanying drawings, referring to which:—

Figure 1 is a perspective of a shipping box or case, constructed in accordance with the present invention, with its lid or cover removed and emptied of its contents.

Figure 2 is an inside face view of the lid or cover of the box of Figure 1, detached.

Figure 3 is a perspective view showing how portions of the lid or cover of the box are utilized to form partitions within the body of the box.

Figure 4 is a detail view of one of the plates or sub-partition members that may be utilized to divide the spaces formed in the body of the box by partitions obtained from the cover or lid, into smaller compartments.

Figure 5 is a view similar to Figure 1 showing a box or case of slightly different form.

Figure 6 is an inner face view of the lid or cover of the box in Figure 5.

Figure 7 is a view similar to Figures 1 and 5, showing a box of different dimensions from that of Figure 1.

Figure 8 is an inner face view of the lid or cover of the box of Figure 7 detached.

Figure 9 shows the box of Figure 7 interiorly divided by a partition member obtained from the lid or cover of Figure 8.

Figure 10 is a detail of a drawer-like member that may be associated with one of the compartments of the box or case shown in Figure 9.

Figure 11 is a perspective view of a display cabinet or bin formed from boxes or cases of the forms shown in Figures 1, 5 and 7.

In the several figures of the drawings, like parts are designated by the same reference characters.

The packing case or box A of Figure 1 is of square form having its several sides and bottom members formed of any desired thickness and solidly connected in any suitable manner.

The lid or cover A′ is a greater area than a cross section of the interior of the box, so that when it is applied, it can be firmly secured by any suitable fastenings to the edges of the side members of the box. The fastenings should be such, for example screws, as can be readily removed without danger to or materially marring the appearance of the box.

The inner faces of opposite sides of the box are provided with complementary grooves a extending throughout the depth of the sides and of a width not exceeding the thickness of the cover or lid A′.

The cover or lid A′ is provided with indications, shown as dotted lines a', of the dimensions to which it should be reduced to provide partition members adapted to be received in the grooves or channels a of the box.

By sawing the lid or cover A′, for example, along the lines a', two partition or shelf members will be provided, and when these are inserted in the proper channels or grooves a in opposite sides of the box A, and the latter is positioned to rest on one of the sides connecting the aforesaid channeled sides, it will be seen that the box will be divided into three superposed compartments or spaces, and will constitute a means for displaying a series of articles, being open at the front.

In order that the compartments or chambers formed as aforesaid may, if desired, be further subdivided, the inner face of the lid or top A′ is provided with a series of kerfs or grooves a^2, and similar aligned grooves or kerfs a^3 are provided in the inner faces of

the sides of the box a, which are intermediate of and connect the aforesaid sides having the channels a formed therein.

Suitable subdivision plates A^2 are provided for insertion in aligned grooves a^2, a^3, to subdivide the main compartments formed by sections of the lid or top A′ as shown in Figure 3. The subdivision plates A^2 may be formed of metal or any other suitable material.

Figures 5 and 6 illustrate an embodiment of the invention different from that just described merely in that the box or packing case B is of oblong form and has channels b formed in its ends to receive a partition member that is provided by reducing the dimensions of the lid or top B′, as by sawing along lines indicated at b'.

In this embodiment of the invention the partition member is provided at both faces with transverse kerfs or grooves b^2 and similar aligned grooves b^3 are provided in the inner faces of the end walls of the box B to receive, if desired, subdivision plates such as are illustrated in Figure 4.

In the embodiment of the invention illustrated in Figures 7 to 9, inclusive, the packing box or case C is of square form, but of less area than the box A previously referred to. In this embodiment of the invention only a single groove or channel c is provided in each of opposed sides of the box and the lid or cover C′ is provided on its inner face with indications c', as to lines along which it should be sawed to provide a shelf or partition member adapted to be inserted in the grooves c.

In this embodiment of the invention also the lid or top C′ is provided with kerfs or grooves c^2 and similar aligned grooves c^3 are provided in the inner faces of the box sides that are intermediate of and connect the aforesaid channeled sides, so that, if desired, subdivision plates like those shown in Figure 4 may be inserted to divide either of the compartments formed by inserting the reduced lid or top section in the grooves c.

In Figure 9 the lower of the two compartments is shown as being thus subdivided by plates A^2, while the upper compartment is shown as adapted to receive a drawer-like receptacle D.

The drawer D in the embodiment of the invention just referred to may be a smaller packing box or case, from which the lid or top has been removed and to the front wall of which has been applied a handle or pull D′.

As shown in Figure 9, the section of the lid or top C′ provided by cutting the lid along the vertical line c' may be employed as a facing strip C^2 and secured to the edges of the sides of the box to serve as a means for supporting suitable labels.

According to the invention, all of the packing boxes or cases are of rectangular form and of uniform depth, although differing in other dimensions. If desired, after a series of such boxes or packing cases have been emptied, they may be assembled as shown in Figure 11, to provide a cabinet or bin, which will serve to display articles which may or may not have been initially received by a dealer in the several packing cases.

As shown also in Figure 11, the several cases may be mounted on a suitable base E, and if it is desired to make the cabinet-wall structure more attractive, an ornametal top or cover may be provided.

It is believed that the advantages of the invention will be apparent from the foregoing description of the drawings. In practice, the boxes are numbered according to size. The No. 1 box is the smallest size and may be used for small parcel post shipments. This size box (see Figure 10) will constitute a drawer in an assemblage of emptied cases, as represented in Figure 11, and can be used in conjunction with No. 2 box (Figures 7 and 9), which can be used as a bin or drawer of a series of assembled cases. The No. 3 box is represented in Figure 5. The sizes of the several boxes are such as to take care of average size orders, and by the invention, when the boxes or cases have been emptied, the emptied cases may be assembled as shown in Figure 11.

By the invention the waste incident to using packing boxes or cases of common construction, and which are generally destroyed after they have been emptied, is avoided.

Preferably, the tops or lids of the several boxes are connected with the boxes by screws which may be readily removed without materially damaging the box sides or marring the appearance thereof.

The grooves in opposite sides and the kerfs in the intermediate sides of the boxes can be readily produced at a minimum expense prior to the initial forming of the boxes.

I claim:

1. A packing box constructed of rigid, stiff, severable material containing means for supporting a partition and having a lid an undivided portion of which is of greater area than a cross section of the interior of the box, the lid being provided with indications for severing it to the right dimensions to constitute a partition to interiorly divide the box into two compartments.

2. A packing box constructed of rigid, stiff, severable material having paralled grooves formed in the inner faces of opposed walls and having a lid an undivided portion of which is of greater area than a cross section of the interior of the box, the lid being provided with indications for severing it to the right dimensions to adapt it to be inserted in the box and in said grooves, for the purpose described.

3. A packing box constructed of rigid, stiff, severable material having parallel grooves formed in the inner faces of opposed walls and having a lid an undivided portion of which is of greater area than a cross section of the interior of the box, said lid being provided with indications for severing it to dimensions to adapt it to be inserted in the box and in said grooves, and having on one face a groove adapted to receive the edge of a partition plate, whereby the compartment formed between the lid, when in said grooves, and another wall of the box may be subdivided.

4. A packing box constructed of rigid, stiff, severable material having parallel grooves formed in the inner faces of opposed walls and having a lid including an undivided portion which is of greater area than a cross section of the interior of the box, the lid being provided with indications for severing it to the right dimensions to adapt it to be inserted in the box and in said grooves, and having on one face a groove, the wall of the box opposite said grooved face of said lid portion, when the latter is within the box, having a groove in alignment with said groove in the lid.

In testimony whereof I have hereunto set my hand.

JOSEPH G. KILMER.