Nov. 19, 1935. C. L. KELLY 2,021,860

PACKAGE

Filed Feb. 9, 1934

Fig. 1.

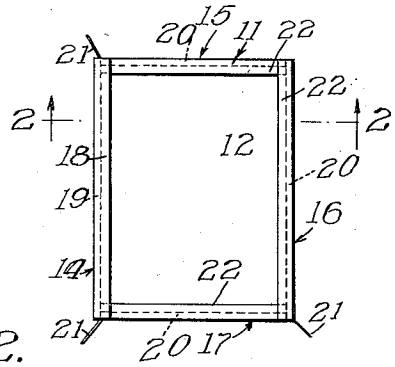


Fig. 2.

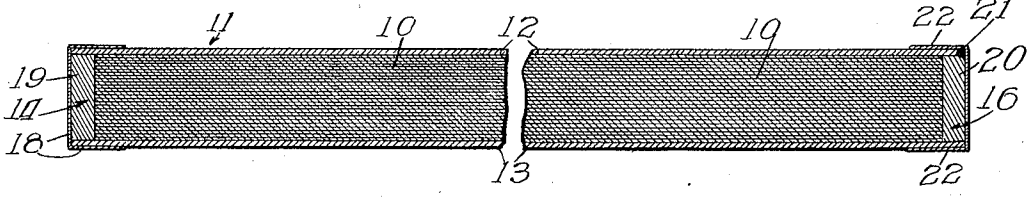


Fig. 3.

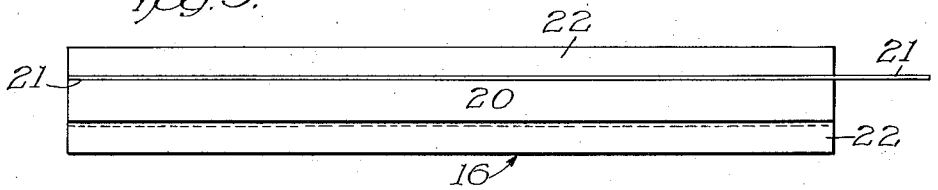


Fig. 4.

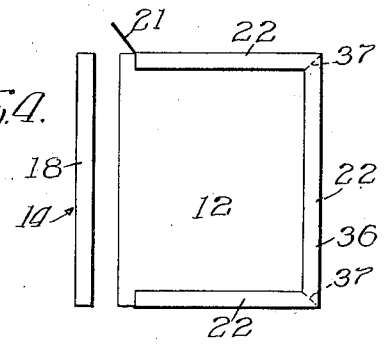


Fig. 6.

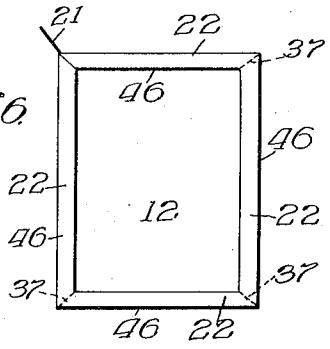
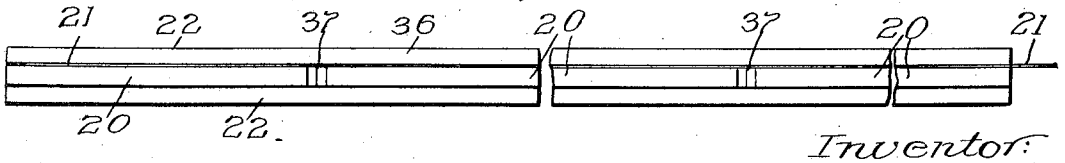


Fig. 5.



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2,021,860

PACKAGE

Charles L. Kelly, Chicago, Ill.

Application February 9, 1934, Serial No. 710,420

5 Claims. (Cl. 229—51)

The present invention relates to box construction and has to do particularly with members of predetermined shape and size readily assembled into boxes at the place where they are to be used rather than at a box factory.

Among the objects of the invention are the following:

A novel side piece for a box or the like and which lends itself readily to use with top and bottom members for forming a box;

A novel combination of spacing strip, binder and rip cord suitable for the production of boxes at the place of user;

A unique box structure in which the materials used in connection therewith are standard and permit of selected assembly to provide containers of different capacities as required;

A unique box structure comprising preformed elements assembled only when required, the elements normally being stored in unassembled relation.

These objects and such other desirable objects as may hereinafter appear are obtained by the novel structure, unique arrangement and improved combination of the elements shown in a device embodying the invention illustrated in the accompanying single sheet of drawing, hereby made a part of this application, and in which:

Figure 1 is a plan view of one embodiment of the invention;

Figure 2 is a sectional view of the device taken in elevation as indicated at the line 2—2 of Figure 1;

Figure 3 shows a form of side wall member constituting an element of the present invention;

Figure 4 is a plan view of a modified form of the invention;

Figure 5 shows a type of side wall member employed in the device illustrated in Figure 4; and

Figure 6 shows a plan view of another form of the invention.

Like reference characters are used in the drawing and throughout the following description for designating similar parts of the illustrated device embodying the subject matter of the invention.

Reference will first be had to Figures 1, 2, and 3. The numeral 10 indicates a stack of sheet material such as carbon paper. It is to be understood that the use of the device is not limited to the packaging of any particular product. Carbon paper is mentioned for illustration.

A box 11 encloses the stack of sheets 10 and comprises similarly shaped top and bottom members 12 and 13, respectively, which are engaged about their edges and held in assembly by side wall members 14, 15, 16, and 17. Side wall members 15, 16, and 17 are of similar construction. Members 14 and 16 are shown in Figure 2. The member 16 is illustrated in Figure 3 to show the side thereof disposed inwardly of the completed box.

For use of the present form of box, there will be kept in the hands of the user a number of top and bottom members 12 and 13 of suitable sizes. Side members may be made in a continuous strip or fastened in quantities. If the latter, a quantity of such side members 14, 15, 16, and 17 of proper lengths and widths will be kept in stock. When a number of boxes of a certain size are needed, a proper number of top and bottom members of the correct size and a proper number of complemental side members will be drawn from stock and assembled. In this manner, a great saving over the space required for the storage of completed boxes is had for the unassembled box material takes up much less space than a box assembled therefrom. Ready-made boxes, when stored, are subject to the hazard of becoming soiled or otherwise damaged.

One method of assembling the top and bottom and side members shown in Figures 1, 2, and 3 into a box comprises use of a form block (not shown) similar in shape to the body of the product to be packaged. It is to be understood, however, that a form block need not be used. Top and bottom members 12 and 13 are registered with the upper and lower faces of such form block, the lateral edge of the members projecting beyond the edges of the block. The member 14 then is inserted between the back edges of the members 12 and 13. Side member 14 includes a strip 18 of paper or other tearable material and a spacing member 19 extending longitudinally thereof to leave the upper and lower longitudinal edge of sections of the strip 18 free for attachment to the top and bottom members. The width of the spacer member 19 corresponds to the interior height of a box to be formed or the thickness of the body of a product to be enclosed. After the member 14 has been disposed at the edge of the uncompleted box with the spacer member 19 between the members 12 and 13, the upper and lower edges of the strip 18 are lapped over and adhesively attached to said members 12 and 13. If desired, strip 18 may be treated over one entire surface before the attachment of spacer 19 thereto and the up-

per and lower surfaces of the spacer 19 may be given a coating of mucilage or other suitable adhesive material and such material used for further securing the members 12 and 13 to the spacer, unless a hinged structure is desired.

The next step is to insert the side wall members 15 and 17 in their respective places. Side wall members 15 and 17 and also side member 16 each comprises a spacer member 20, a ripcord 21 and a tearable strip 22, to which the spacer member and rip cord are attached. An adhesive material may be used for securing the members 20, 21, and 22 together. One end of the rip cord will extend beyond an end of its respective side wall members. The strips 22 are similar in all respects to the strip 18 of the back side wall member 18. Spacer members 19 and 20 are any suitable material such as cardboard. Likewise, the top and bottom members 12 and 13 are generally of cardboard or other durable material of sufficient strength.

Members 15 and 17 are disposed in their respective places in the box structure with the spacer members thereof between and adjacent to the opposed projecting edges of the top and bottom members 12 and 13 so that the upper and lower edges of the tearable strips 22 thereof may be adhesively joined with the top and bottom members. At this time, five of the six sides of the box will have been completed and the box will be of sufficient strength to be self-supporting; the form block, if used, may be withdrawn. The front side wall member 16 may be inserted loosely within the box so as not to become separated therefrom and the box set aside temporarily with other similarly partly assembled boxes to await the placing of the material to be enclosed therein. After placing such material within the boxes, the front wall members 16 are attached therewith in the same manner as members 14, 15, and 17.

By following the method of packaging just described, the user of the boxes need only have the number of assembled boxes on hand for which he has immediate use. The packaging material in the form of top and bottom members 12 and 13 and side wall members 14, 15, 16, and 17 for less definite future use can be stored away in an unassembled state within a comparatively small space compared to that they would occupy if assembled.

When it is desired to open the form of package illustrated in Figure 1, it is only necessary to grasp each of the three rip cords 21, and give each cord a jerk to tear the strips 22 to make them ineffective for holding the top member 12 and side members 15, 16, and 17 together. The top member 12 may then be used as a cover for the box and the strip 18 at the back side of the box may be used as a hinge for the cover thereby keeping the cover from becoming separated and lost from the box.

The device may be assembled directly about the product to be contained therein by using such product similarly to a form block as in the process already described. Then, after placing the side wall members 14, 15, and 17 in place, the member 16 will not be thrust within the box or otherwise temporarily associated therewith, but will be placed permanently in place as a wall therefor.

The form of the invention shown in Figures 4 and 5 differs from that hereinabove described by having a single wall member extending about three sides of the box. This member is designated by the reference character 36 and comprises a strip 22, a spacer member 20 and a rip cord 21 as do the side and front wall members of the box hereinabove described. Notches 37 may be provided in the spacer member 20 at a space interval corresponding to the length of the wall required at the front of the box. Side wall strips 36 will be provided in different lengths and widths and with the distances between the notches, with respect to the distance between the notches and the ends of the strip, varying standardly in accordance with the sizes of boxes to be made therefrom. In this form of the invention the side wall members 36 may be first assembled with top and bottom members 12 and 13 and the back side wall members 14 temporarily associated with the boxes until after the product has been placed therein at which time the back side wall members may be permanently assembled with the box.

Or, if the box is to be assembled about the product to be enclosed thereby, either of the members 14 or 36 may be carried in place first.

This form of the invention has the advantage of having but a single rip cord to be engaged and jerked when the box is to be opened. The box wall member 14, as in the form of the invention first described, contains no rip cord and may serve as a hinge for the top members 12 after the package has been opened.

A modified form of the invention is illustrated in Figure 6 wherein the top and bottom members 12 and 13 are held in spaced apart relation by means of a single side wall member 46 extending continuously about all four of the narrow sides of the box. The side wall member 46, like the side wall members heretofore described as having a rip cord, is provided with a rip cord 21, a spacer member 20 and a tearable strip 22 held together as a unit. In the inner face of the spacer member 20 of the side wall member 46, there may be provided notches such as shown at 37 in Figure 5 and for registering with the corners of the box. The notches 37 better adapt the continuous side wall member 46 to be distorted to fit the product enclosed thereby in a box-like manner.

Generally the embodiment of the invention shown in Figure 6 may be assembled directly about the product, to leave the rip cord 21 extending to the outside of the package. By pulling the rip cord 21 from all four sides of the package illustrated in Figure 6, the top member 12 may be entirely removed from the package. It may be desired to leave the top member hingedly connected to the package. In that event the rip cord will be pulled along but three of the side walls at which time it may be trimmed closely to the section thereof that extends into the fourth side.

What is claimed as new and is desired to be secured by Letters Patent of the United States is:

1. For use in a box having opposed wall members, means for holding such members in assembly and comprising an adhesively coated tearable strip, a spacing member attached to a face of said strip to extend longitudinally thereof to leave a portion of such strip exposed along either edge of said spacing member, and a rip cord attached to such face of the strip contiguously to said spacing member, said spacing member being disposable between aligned edges of such opposed wall members for the support thereof, the exposed portions of such face adhesively engaging said wall members, and said rip cord having an end extending beyond an end of said strip.

2. A box comprising opposed top and bottom members of similar configuration, and a side wall member adjoining the edges of said top and bottom members, said side wall member comprising a strip of tearable adhesively coated material, a spacing member attached to a face of said strip to leave a section of such face exposed along either longitudinal edge thereof, and a rip cord attached to such strip contiguously to said spacing member, said spacing member being disposed between corresponding edges of said top and bottom members for supporting said members in a predetermined spaced relation, the exposed sections of such face of said strip overlapping said opposed walls in adhesive engagement therewith, and an end of said rip cord extending from said side wall for pulling said cord and tearing said strip to open said box.

3. The box described in claim 2, and in which the side walls comprise a single continuous strip of rupturable adhesively coated material and in which there is a single rip cord extending throughout the length of said strip and beyond an end thereof to provide for its convenient engagement for rupturing said strip.

4. The box described in claim 2 and in which the side walls comprise a plurality of strips of adhesively coated material, a spacer on each of said strips, and a rip cord on each of said strips adjacent the edge of the spacer thereon.

5. In a box having opposed top and bottom members, a side closure comprising a spacer fitting between the edges of said top and bottom members, a strip attached to the outer face of said spacer member and extending beyond the edges thereof to overlap the edges of said top and bottom members, and a rip cord adjacent the edge of said spacer member and on said strip.

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