Nov. 19, 1929. W. H. KIECKHEFER 1,736,200

CONTAINER

Filed June 11, 1928 2 Sheets-Sheet 1

Fig. 1.

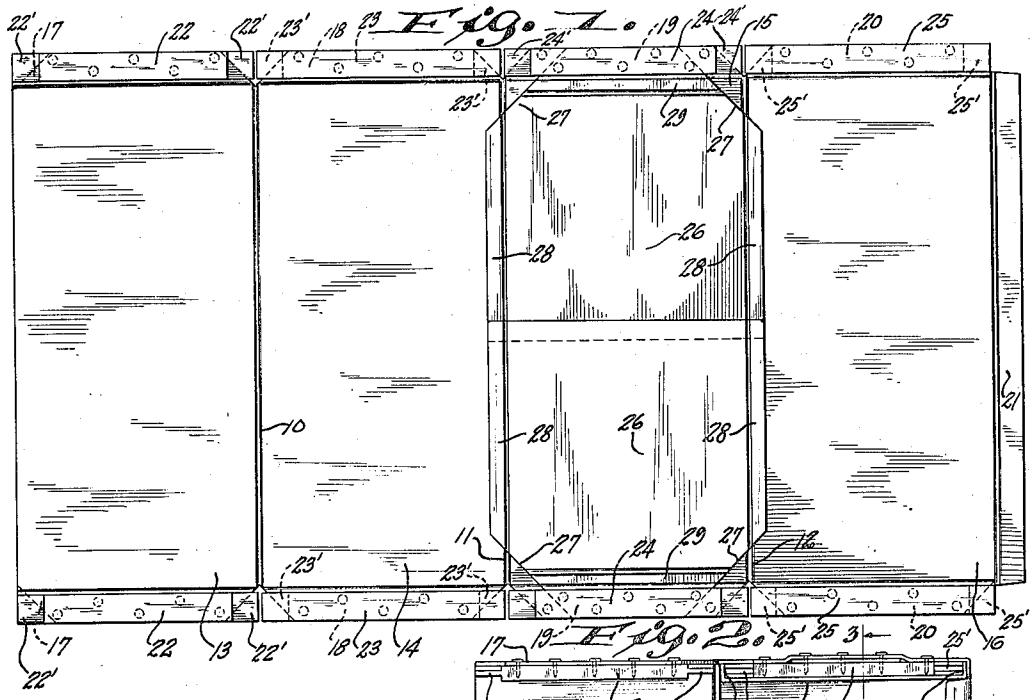

Fig. 2.

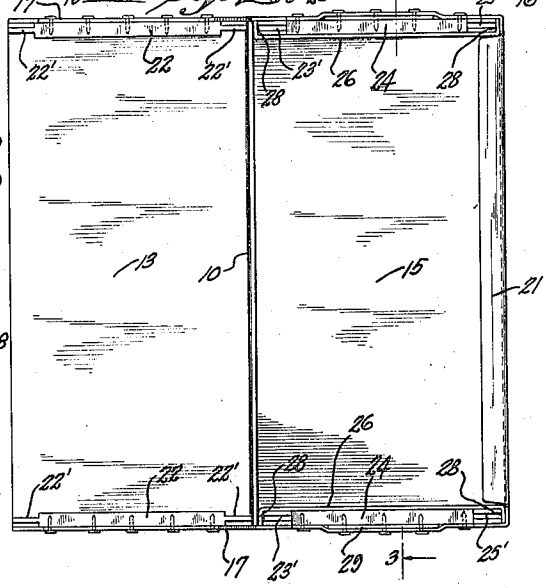

Fig. 4.

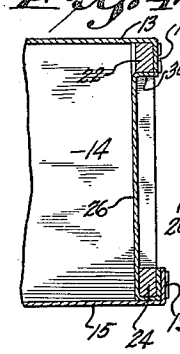

Fig. 5.

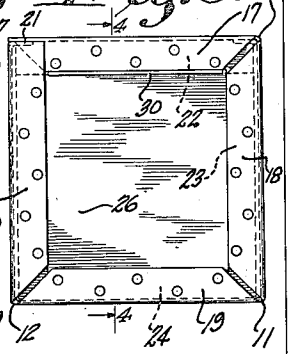

Fig. 3.

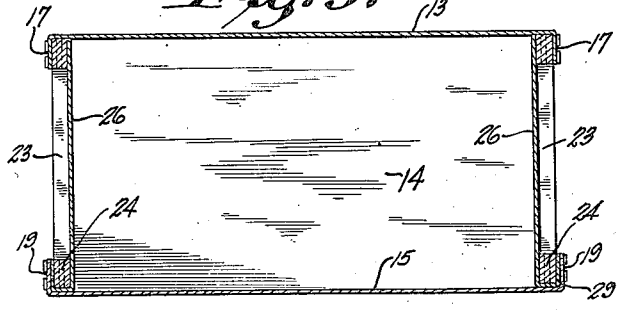

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Fig. 6.

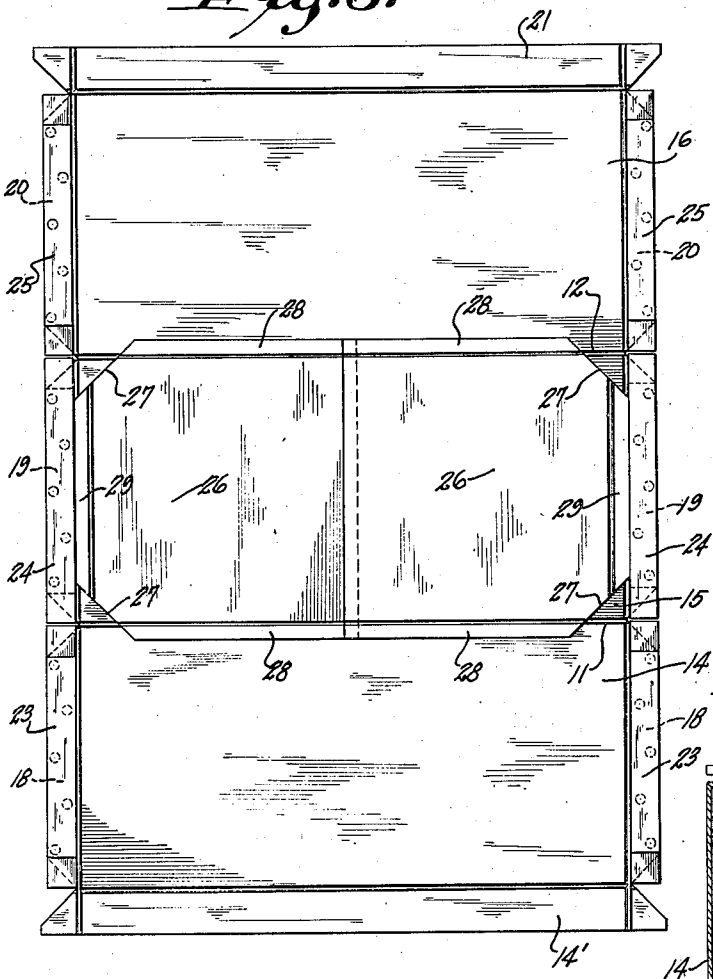


Fig. 9.

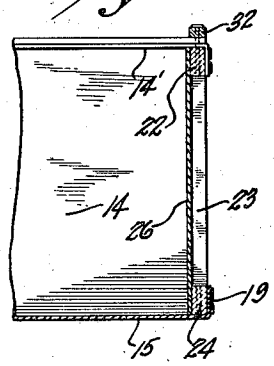


Fig. 8.

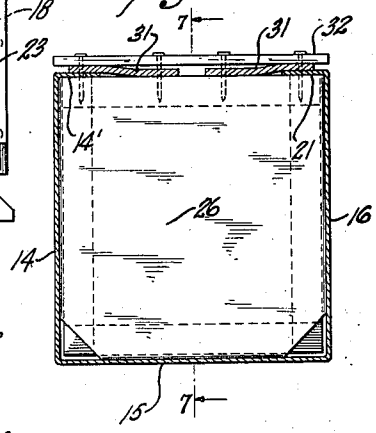
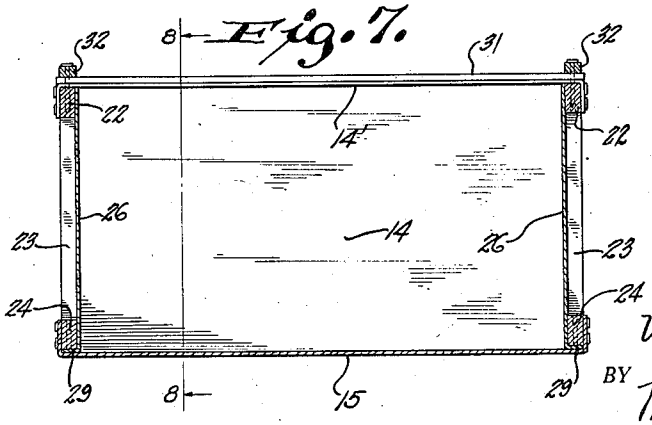


Fig. 7.



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Patented Nov. 19, 1929 1,736,200

UNITED STATES PATENT OFFICE

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CONTAINER

Application filed June 11, 1928. Serial No. 284,642.

This invention relates to improvements in containers.

It is one of the objects of this invention to provide an improved container constructed of a light weight material, which is reinforced in a novel manner to provide stiffness and rigidity so as to permit the stacking of one container on another, to heights where the lower containers are subjected to considerable weight.

It is a more specific object of this invention to provide a container the body of which is constructed of cardboard and the ends of which are reinforced with a frame of wood or other suitable material.

It is a further object of this invention to provide a container in which all of the members are fastened together so that the result is a one piece knock down construction, eliminating the necessity of handling separate parts.

It is a further object of this invention to provide a container which may be shipped in a flat condition.

It is a further object of this invention to provide a container which may be quickly set up by the user.

It is a further object of this invention to provide a container which is simple in construction and well adapted for the purpose described.

With the above and other objects in view, the invention consists of the improved container and all its parts and combinations as set forth in the claims and all equivalents thereof.

In the accompanying drawing, in which the same reference characters designate the same parts in all of the views:

Fig. 1 is a plan view of the container in the flat condition ready for shipment;

Fig. 2 is a plan view of the container assembled, the cover being in the open position;

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2;

Fig. 4 is a fragmentary sectional view taken on line 4—4 of Fig. 5, showing a modified form of end construction;

Fig. 5 is an end view of said modified form;

Fig. 6 is a plan view in the flat condition of a modified form of container;

Fig. 7 is a sectional view on line 7—7 of Fig. 8 of an assembled container embodying the modified form of construction shown in Fig. 6;

Fig. 8 is a sectional view taken on line 8—8 of Fig. 7; and

Fig. 9 is a fragmentary sectional view of a container showing a modified form of end construction.

Referring to the drawing, the main portion of the container comprises a single sheet of paper, cardboard, or other suitable material scored along the lines 10, 11, and 12 to form a cover section 13, a rear section 14, a bottom section 15, and a front section 16. Each of these sections is additionally scored at each end to form cover flanges 17, rear section flanges 18, bottom flanges 19, and front section flanges 20. The corners of the flanges are preferably mitered as shown. The front section 16 is formed with an upper edge flange 21.

Nailed or otherwise secured to the flanges 17, 18, 19, and 20, are reinforcing strips 22, 23, 24, and 25, respectively. These strips are preferably constructed of wood, and as shown, the strips 22 and 24 are formed with end tongues 22′ and 24′, respectively, which are adapted to be received by end grooves 23′ and 25′ in the ends of the strips 23 and 25. It is not desired to be limited to the tongue and groove construction, however, as the ends of the strips may be halved, butted, or may engage in any other suitable manner.

A pair of end members 26 are each formed with mitered lower corners 27, with side flanges 28, and with end flanges 29. The end flanges extend beneath and partially around the strips 24 and are secured by the same means which affix the strips 24 to the flanges 19.

In the modified form of end member illustrated in Figs. 4 and 5 the upper corners are cut out and the upper edge flanged downwardly as at 30. In this form, the wooden strips on the edges of the cover rest on the flanges 30 when the cover is closed and the flanges may be nailed in that position to lock.

the cover down. An additional modified form of end member is illustrated in Fig. 9. In this type the end member is loose and may be inserted as shown and held in place by the contents of the box.

Figs. 6, 7, and 8 show a modified form of container, similar to the principal form, with the exception that it has an additional flange 14′ and that the cover is separate, as are the reinforcing strips 22. As illustrated in Figs. 7 and 8, the cover may consist of pieces of wood 31 which are laid lengthwise of the container and which are held in place by transverse end pieces 32 which are nailed through to the reinforcing strip 22. This type of container may also be provided with a separate fibre board cover with the strips 22 integral therewith, or with wire netting, cloth, or the like. The modified form of end member shown in Fig. 9 may also be used in connection with this modified form.

To set up the container, the sections 14 and 16 are bent upwardly and inwardly on the scored lines 11 and 12. The flanges 18, 19, and 20 are then bent inwardly, and the tongues 24′ on the strips 24 are inserted in the grooves 23′ and 25′ on the lower ends of the strips 23 and 25. Next, the side flanges 28 on the end members 26 are bent outwardly and the end members are raised to position, the flanges 28 fitting in between the outside edges of the strips 23 and 25 and the adjacent sections of the container as shown in Fig. 2. The flange 21 on the upper edge of the section 16 is then bent over as in Fig. 2, and the cover is closed, the tongues 22′ in the cover reinforcing strips 22 fitting within the upper end grooves 23′ and 25′ of the strips 23 and 25. The container may then be sealed by affixing a strip of tape along the front upper edge.

The modified form of container shown in Figs. 6, 7, and 8 is assembled in practically the same manner as the main form except that the strips 22 are inserted separately and a separate cover is nailed on as indicated in Figs. 7 and 8 overlapping the flanges 14′ and 21.

From the foregoing description it may be seen that the improved container is simple in construction, strong and durable, and well adapted for the purpose described.

What I claim is:

1. A knock-down container comprising a main body portion having front, rear, and bottom sections, reinforcing strips of rigid material secured to the end portions of each of said sections, said strips being engageable with one another to hold the container in assembled condition, and end members secured at one end to one of the main body sections and foldable adjacent the end reinforcing strips, said end members being formed with opposite side flanges which are removably insertable between the sides of the container and the reinforcing strips.

2. A knock-down container comprising a main body portion having front, rear, and bottom sections, flanges at the ends of said sections foldable to a position at right angles to the sections, reinforcing strips of rigid material carried by said flanges, said strips being engageable with one another to hold the container in assembled position, and end members secured at one end to one of the main body sections and having opposite side flanges, said end members being foldable adjacent the end reinforcing strips, and the flanges being removably insertable between the reinforcing strips and the sides of the container to maintain the end members in place.

3. A knock-down container comprising a main body portion formed of a single sheet of foldable material scored to form front, rear, and bottom sections and end flanges for each of said sections, reinforcing strips of rigid material carried by said flanges, said strips being engageable with one another to hold the container in assembled position, and end members secured at one end to one of the main body sections and having side flanges, said end members being foldable adjacent the end reinforcing strips, and the flanges being removably insertable between the reinforcing strips and the sides of the container to maintain the end members in place.

4. A knock-down container comprising a main body portion formed of a single sheet of foldable material scored to form front, rear, bottom, and cover sections and end flanges for each of said sections, reinforcing strips of rigid material carried by said flanges, said strips being engageable with one another to hold the container in assembled position, and end members secured at one end to one of the main body sections and having side flanges, said end members being foldable adjacent the end reinforcing strips, and the flanges being removably insertable between the reinforcing strips and the sides of the container to maintain the end members in place.

5. A knock-down container comprising a main body portion formed of a single sheet of cardboard scored to form front, rear, bottom and cover sections and end flanges for each of said sections, said flanges being bendable to positions at right angles to their respective sections, wooden reinforcing strips carried by said flanges, some of said strips having end tongues and others having end grooves, the said strips interlocking with one another by means of said tongues and grooves to hold the container in assembled condition, and end members secured at one end to one of the main body sections and having side flanges, said end members being foldable ad-

jacent the wooden reinforcing strips, and the flanges being removably insertable between the reinforcing strips and the sides of the container to maintain the end members in place.

In testimony whereof, I affix my signature.

WILLIAM H. KIECKHEFER.