H. R. BLISS.

SHIPPING CASE.

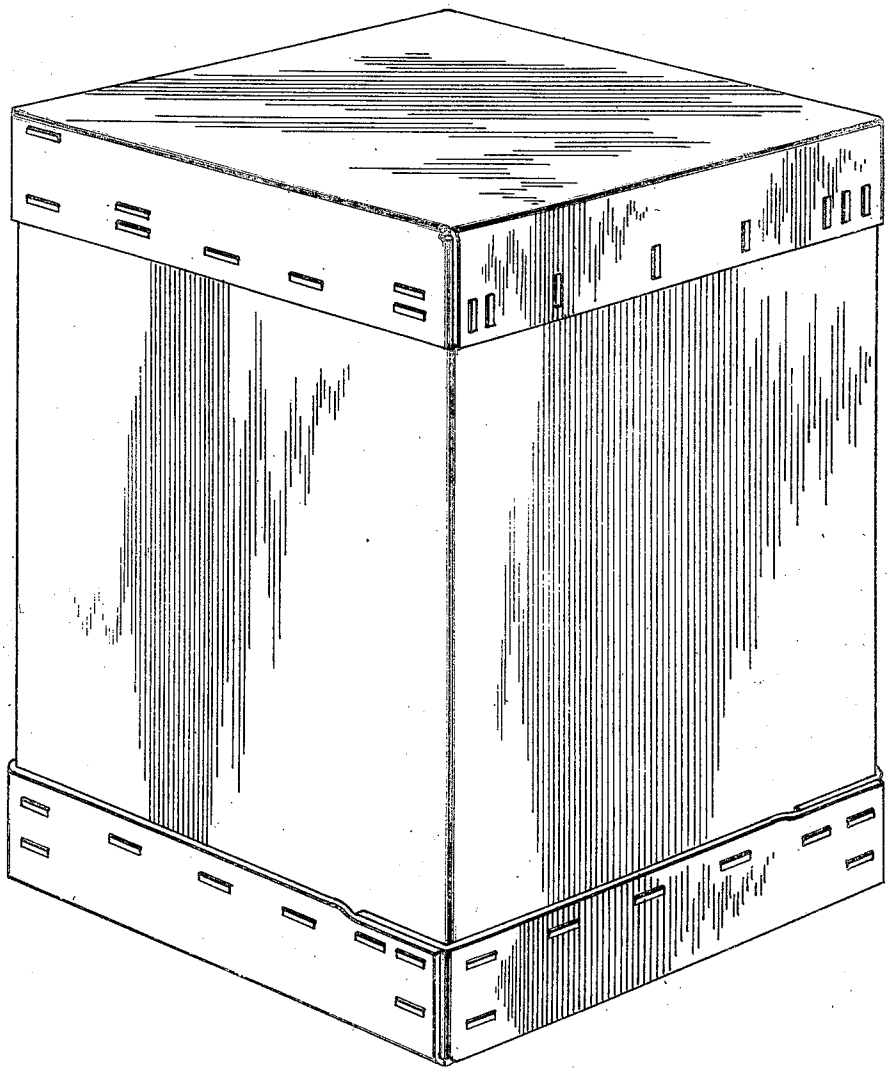
APPLICATION FILED NOV. 15, 1920.

1,430,149.

Patented Sept. 26, 1922

3 SHEETS—SHEET 1.

Fig. 1



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3 SHEETS—SHEET 2.

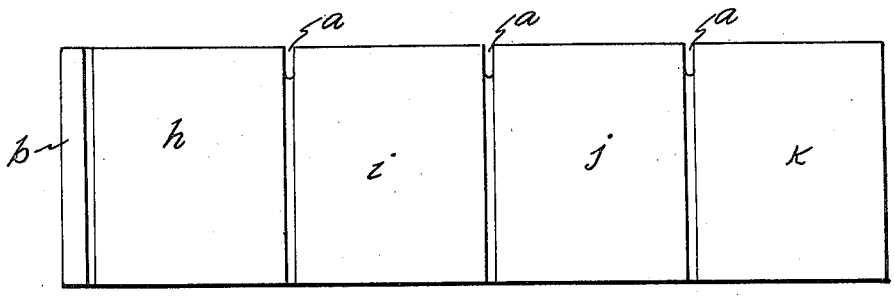


Fig. 2

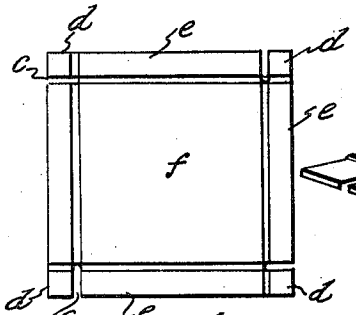


Fig. 3

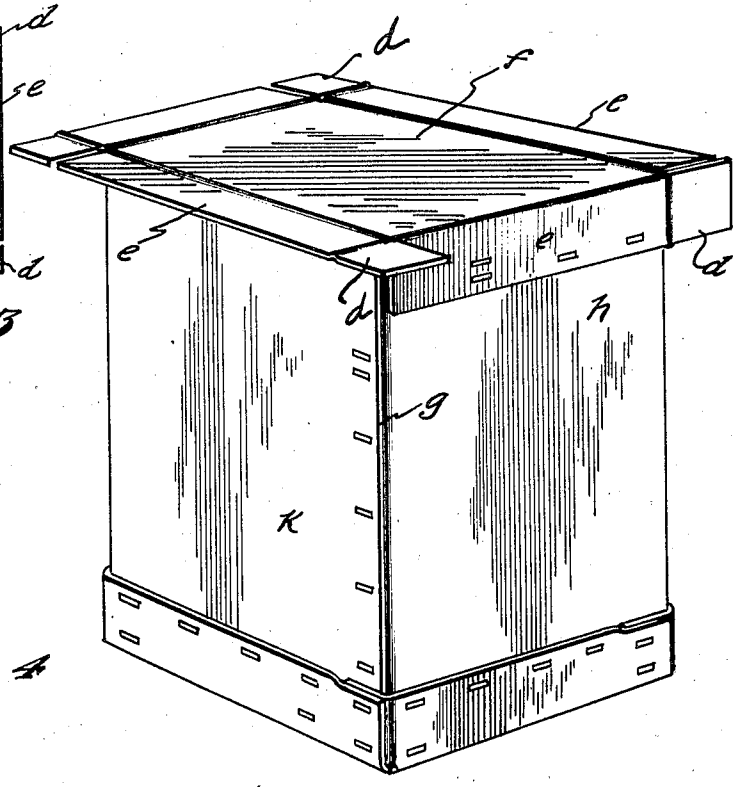


Fig. 4

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3 SHEETS—SHEET 3.

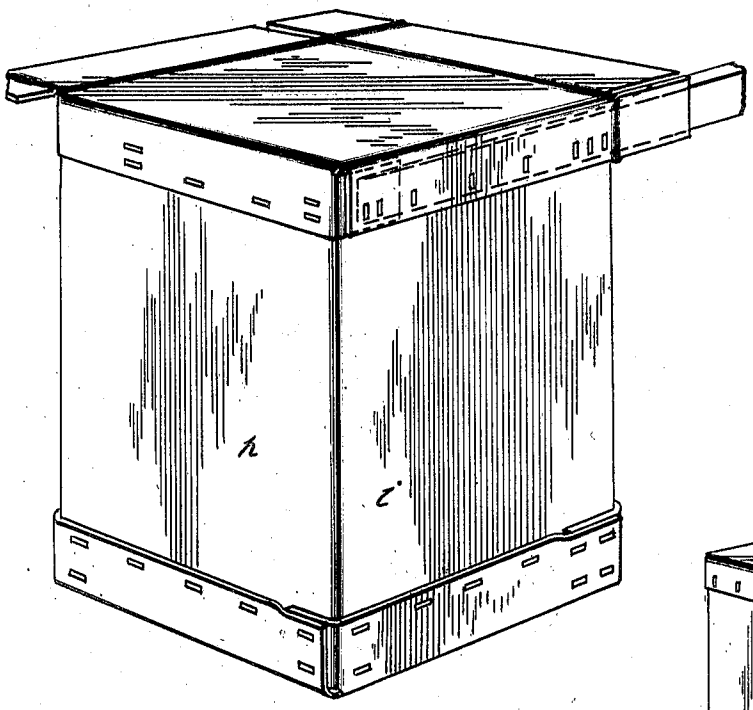


Fig. 5

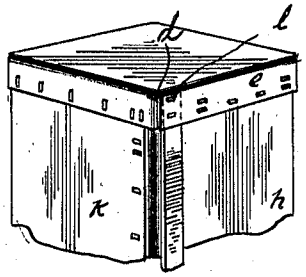


Fig. 7

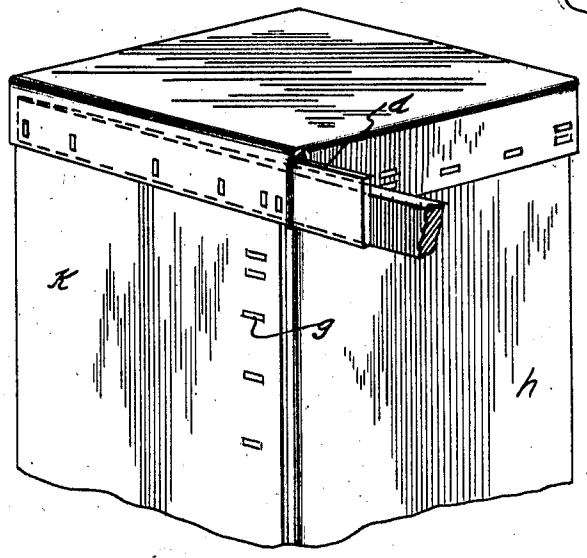


Fig. 6

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Patented Sept. 26, 1922. 1,430,149

UNITED STATES PATENT OFFICE.

HERBERT R. BLISS, OF NIAGARA FALLS, NEW YORK.

SHIPPING CASE.

Application filed November 15, 1920. Serial No. 424,060.

To all whom it may concern:

Be it known that I, HERBERT R. BLISS, a citizen of the United States, residing at Niagara Falls, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Shipping Cases, of which the following is a specification.

This invention relates to shipping cases constructed of fiber board or of equivalent material. It is the object of the present invention to provide a shipping case which can be manufactured from a body blank and two end blanks. The body blank has no extra sealing flanges on it. In previous applications I have described and claimed boxes that were constructed to use a flanged cover to seal the box, but in order to utilize a flanged cover and secure the full capacity of the body of the case it is necessary to provide extra sealing flaps on the body blank. This obviously requires a greater amount of material to construct the case and results in a larger cost, which is a very material consideration in large industrial or mercantile concerns that utilize a vast number of these cases daily in shipments. In the present construction I believe that I am the first one who has ever sealed a shipping case of this character at the end with a flanged lid and wire-stitching without providing any excess flaps on the end of the body blank for this purpose. This will be best understood when the detail construction is described.

In the drawings,—

Fig. 1 is a perspective of the completed box or shipping case.

Fig. 2 is a plan view of the body blank.

Fig. 3 is a plan view of the special blank used for the sealing lid.

Fig. 4 is a perspective of the shipping case showing the sealing lid blade in place and one flange of the lid stitched in place.

Fig. 5 is a perspective of the same case showing the second flange of the lid being stitched in place by the aid of a blade anvil.

Fig. 6 shows the fourth flange being stitched in place.

Fig. 7 is a slightly smaller perspective showing how the end wing of the flange is tucked under the adjoining flange and the case is finally sealed.

Referring to Fig. 2, it will be seen that the blank that is used for the body of the case is the ordinary blank which is used in the so-called recessed end shipping case, wherein the sealing lid is inverted and inset into the end of the body so as to permit the stitching of the lid from the inside of the flanges and the use of the anvil on the outside of the body portion to clinch the fasteners. However, this blank is slotted as at *a*, *a* on each of the three scorings between the four side walls. This blank is recognized as the most economical blank employed in fiber shipping cases. It comprises simply material enough to form the four side walls and a single flange *b* for joining the ends of the blank to set up the four side walls into a rectangular cross section.

In place of the ordinary cover or lid, I employ a special blank as shown in Fig. 3. This, however, is cut precisely like the blank for the lid or cover of the recessed end shipping case but the slots or division lines between the flanges are differently located than in the ordinary lid. In the ordinary recessed end box lid the wings at the ends of the flanges are contained on each of only two flanges on opposite sides of the cover. In my construction it will be seen that the slots *c* are so placed that each cover flange has but one wing *d*. The cover flanges are lettered *e*. The body of the cover is designated *f*.

Now referring to Figs. 4–7, it will be seen how this cover is attached to the box and wire-stitched without the aid of any extra flaps on the body. The manufacturer's seam is designated *g*. This is a seam that ordinarily the manufacturer of the blank puts into the body. The body portion comes collapsed and can be set up simply by forcing out the sides to the rectangular position. However, the stitching of the manufacturer's seam does not extend the entire length of the case from top to bottom, stopping somewhat short of the top edge, as will be evident from Fig. 4.

The first flange of the lid may be wire-stitched or fastened with metallic fasteners. It will be obvious that the lid may be turned back to allow a blade-like anvil, such as shown in Figs. 5, 6 and 7, and in my prior Patent #1,174,943, to be slipped in between the contents of the case and the side wall *h* to clinch the fasteners that are driven in from the outside. The anvil can be drawn out either at the end of the flange through the slot *a* that we know to exist there, (because of the blank construction), or else it

can be drawn out sidewise as the cover *f* can be turned clear back when only one flange is fastened down.

The next step is to turn the flange wing *d* of the flange that has already been stitched either over or under the next flange *e* (as is shown in Fig. 5, where it is turned under). A blade anvil may be slid in either sidewise of the anvil or endwise through the slot *a*. The wire stitches or rivets may be driven into the case and clinched on the under side by the blade anvil which lies between the contents of the case and the inside of the side wall *i*. The anvil can now be drawn out through the slot *a* at the end of the flange that has just been fastened down.

The same operation is repeated on the third flange. This has not been illustrated as it will readily be understood. Finally the fourth flange is stitched down in precisely the same manner as is shown in Fig. 6.

The anvil is then withdrawn and the final flange wing *d* shown in Fig. 6 is then tucked in or over the first flange *e* to be fastened down, and the anvil is slipped up under this wing and the first flange, as is shown in Fig. 7, and the final stitches *l* taken. It will be seen that the stitching on the first flange began somewhat spaced from the end so as to leave an unstitched space at the left hand end of the flange to accomplish this final stitching in of the final flange wing.

It is possible to apply a lid without leaving part of the manufacturer's seam unstitched, as shown in Fig. 4. However, in this event the stitching will have to begin with the flange adjacent to the side wall *k* and go around the box in the same way. As already explained, no slot is necessary to withdraw the anvil in connection with the stitching down of the first flap as obviously the cover can be turned way back and the anvil gotten out without any trouble. Hence it matters not that the manufacturer's seam has been stitched the entire length, provided the side wall that bears the manufacturer's stitches is first stitched to its lid flange.

I have spoken of and illustrated the anvil as if the anvil were moved around and the case stationary, but obviously in actual production the anvil will be a fixed part of a wire-stitching machine and the box will be turned around on the work support to properly present the parts to the stationary anvil.

What I claim is:

1. In a shipping case constructed of fiber or equivalent material, the combination of a body constructed of a blank scored and having four adjoining side walls that can be united to form the body of the case by fastening the ends of the blanks together, the said body having slots running in from one edge at the score lines, and a sealing lid provided with flanges fastened to the side walls of the body by means of metallic fasteners driven from the outside and clinched on the inside of the side walls by an anvil withdrawable through the said slots.

2. In a shipping case constructed of fiber or equivalent material, the combination of a scored blank comprising a plurality of side walls united side by side in the blank and said blank united end to end to form a body, the said body being indented by slots at one edge, an end construction for closing the bottom end of the body, and a sealing cover comprising flanges provided with wings, one for each flange, the said cover being secured upon the sealing end of the body by metallic fasteners driven into the flanges from the outside and clinched on the inside of the side walls by an anvil withdrawable through the slots, the said flange wings being also secured to the next adjacent flange and the two fastened to the side wall.

3. In a shipping case constructed of fiber or equivalent material, a body portion having side walls united to form a container and provided with a plurality of slots at the corners at the sealing end of the body, and a flanged cover fitting over the sealing end of the body, said flanges being secured to the body by metallic fasteners driven into the flanges from the outside and clinched on the inside of the body by an anvil withdrawable through the slots at the corners.

4. In a shipping case constructed of fiber or equivalent material, the combination of a body portion made up of side walls united to form a container and having slots at a plurality or corners at the sealing end of the body, and a flanged lid fitting over the sealing end of the body and provided with flanges having flange wings at their ends, said flanges and wings being united to the body and the wings to adjacent flanges by metallic fasteners driven through the flanges and wings from the outside and clinched on the inside of the side walls of the body by an anvil withdrawable through the slots in the corners.

5. In a shipping case constructed of fiber or equivalent material, the combination of a body made up of side walls united to form a container and provided with slots at a plurality of corners of the sealing end, and a lid provided with flanges having wings, the said flanges being secured to the side walls and the wings to adjacent flanges and the side walls by metallic fasteners driven in from the outside and clinched on the inside of the body by an anvil withdrawable through the slots at the corners, and the final wing being secured to its adjacent flange by an anvil inserted between the outside of the adjacent side wall of the case and the flange or wing.

6. A shipping case constructed of fiber board or equivalent material and having a body provided with a bottom and side walls united to form a container and provided with one or more slots at the corners of the sealing end of the body, and a flanged cover fitted over such end and having flanges that are successively fastened to the body by metallic fasteners, the final flanges of the cover being fastened by metallic fasteners driven into the flange and body from the outside and clinched on the inside of the cover against a blade anvil which is withdrawable from the container at the corners, substantially as described.

In testimony whereof I affix my signature.

HERBERT R. BLISS.