

G. C. BABCOCK.
WIREBOUND BOX.
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1,371,208.

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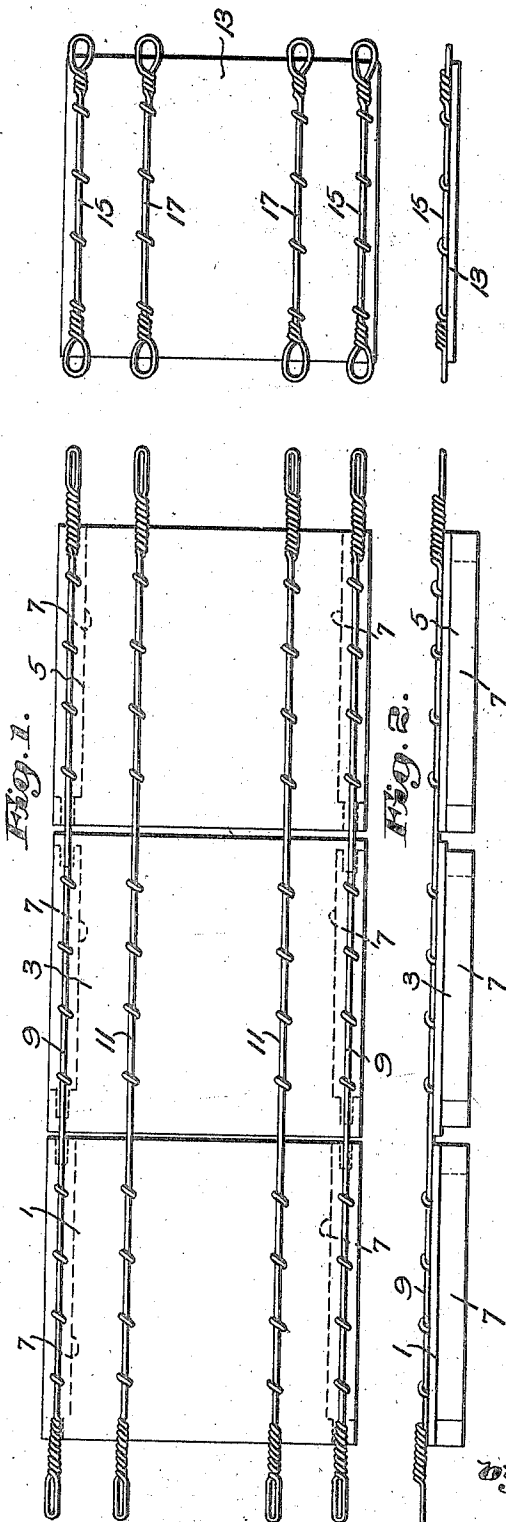


Fig. 1.

Fig. 2.

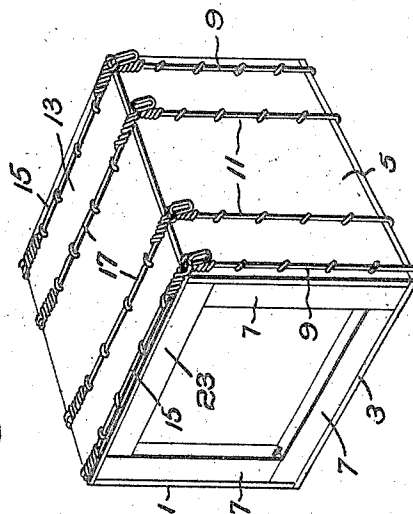


Fig. 3.

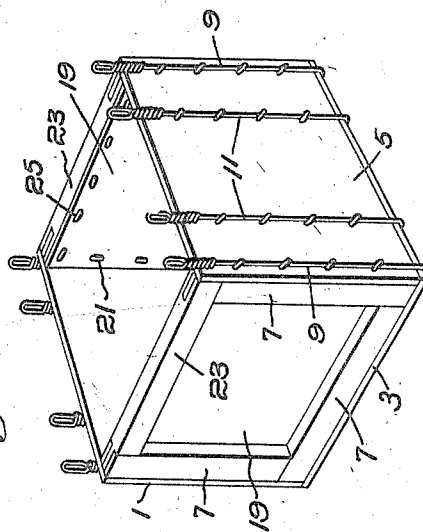


Fig. 4.

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UNITED STATES PATENT OFFICE.

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WIREBOUND BOX.

1,371,208.

Specification of Letters Patent.

Patented Mar. 8, 1921.

Application filed March 3, 1917. Serial No. 152,394.

To all whom it may concern:

Be it known that I, GUILFORD C. BABCOCK, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Wirebound Boxes, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to boxes of the wire-bound type and its purpose is to provide a box having the advantages as a shipping container of the so-called "wirebound" box such as is described in reissued Letters Patent No. 12,725, granted Nov. 26, 1907, and which has a detachable lid and may be used as an open-topped receptacle for the storage and handling of material.

I accomplish the purposes set forth by means of the construction hereinafter described and of which an illustrative embodiment is shown in the accompanying drawing, wherein:

Figure 1 is a plan view of some of the box parts before assembling in box form;

Fig. 1^a is a similar view of the box top.

Fig. 2 is a side view thereof;

Fig. 2^a is a similar view of the box top.

Fig. 3 is the perspective view of the box as an open-top container; and

Fig. 4 is a perspective view of the box with the lid in place ready for shipment.

Referring particularly to Figs. 1 and 2, I show there a box blank comprising three side sections 1, 3 and 5 formed of suitable side material provided with lateral cleats 7 and fastened together in coöperative foldable relationship by longitudinal binding wires 9 which extend over the cleats and are secured by staples straddling the same and driven through the side material into the cleats and preferably also by one or more intermediate binding wires 11. The blank is constructed preferably in accordance with the process described in Patent No. 1,128,252 granted Feb. 9, 1915, on any suitable form of box machine of which several are known. As will be well understood by those skilled in the art, the side sections 1, 3 and 5 are secured together by the wires in a coöperative foldable relationship, with their edges so related that the parts may be folded together into the position shown in Fig. 3 and the cleats will interlock, as by having

the tenons enter the mortises when mortise and tenon cleats are used, and the wires will be tensioned over the edges of the box firmly to hold the same. I further provide for each box a cover section 13 which may be similar to the walls of the side sections 1, 3 and 5, for example it may be a suitable sheet of veneer. I do not, however, utilize cleats corresponding to the cleats 7 of the side sections in connection with this cover, but I secure to it binding wires 15 corresponding in position to the binding wires 9 of the box body and a wire or wires 17 corresponding to the wire or wires 11. When the three sided blank is bent up into box form, as shown in Figs. 3 and 4, the top or cover 13 is adapted to be fitted as a fourth side of the box with the wires 15 and 17 mating with the wires 9 and 11 respectively so that they may be secured thereto to form bindings completely encircling the closed box.

Referring now to Fig. 3, the three sections 1, 3 and 5 are folded up into box form and are assembled in the usual manner with end closures 19, which may be and preferably are sheets of veneer. These closures may be placed interiorly of the cleats 7 which partially frame the ends of the box and are secured thereto in any desired manner as by being stapled or nailed thereto from the interior of the box, as shown at 21. In accordance with my invention I also utilize separate cleats 23 corresponding to the fourth side of the completed box and I assemble these with the cleats 7 adjacent the upper edges of the end closures 19 and secure them in place. Herein I have shown staples 25 passing outwardly through the end closure 19. Preferably as shown the cleat 23 is secured to the cleats 7 by devices passing through the mating parts thereof such as the mortises and tenons illustrated.

By this means there is provided a box with three sides, two ends and an open top which is sufficiently strong to resist the strains of handling and carrying with a load therein for short distances and under such conditions as it is possible to carry an open box. The cleat 23 moreover provides a convenient grip for handling the box and there is no danger of breaking or cracking the veneer sides 19. When it is desired to ship the contents of the box the separate cover 13 is used, which is such that it can con-

veniently be stored when the box is being used as an open-topped container. The cover is placed on top of the box as indicated at Fig. 4 resting on top of the cleats 23 and is secured in place by fastening together the mating wires of the top and the box body. The wires 15 placed over the cleats 23 securely hold down the ends of the cover and the bindings formed by the cooperation of the wires 9 and 15 may be firmly tensioned over the frames formed by cleats 7 and 23. The resulting package is a receptacle only slightly inferior to the wirebound box wherein the encircling binding wires are stapled to all four cleats and has the superiorities of the wirebound type of box over the rigid container formed of parts nailed together whether or not reinforced by metal. At the same time the box is practicable for use as an open-topped container and will stand up under the wear of such use although the thin sheet materials characteristic of wirebound construction may still be used.

In the drawings I have shown the ends of the various wires bent back upon themselves and intertwined with the standing parts of the wires. I prefer to use this construction as it provides readily separable fasteners for the box which can be used again and again and when the box is used without a cover as shown at Fig. 3, no raw ends of wire are left projecting to tear the hands or the clothing. Therefore, the desirability of the box as a temporary container. These fasteners are utilized by passing the twisted part of one wire into the bight of another, reeving it tight and bending over the first as a hook (see Fig. 4). It will be understood, however, that I might provide other forms of fastening or that the wires on the cover and box body may be twisted together in the ordinary manner.

Having thus described my invention and briefly indicated some of the important advantages thereof, what I claim and desire to secure by Letters Patent is:—

1. A box comprising a plurality of side sections each comprising side material and lateral cleats cooperating partially to frame the ends of the box, binding wires tensioned over said sections and secured to the cleats thereof, end closures fastened to the cleats of said side sections and additional cleats cooperating with the cleats of said side sections to complete the framing of the box ends and a cover section adapted for superposi-

tion on said additional cleats and having wires secured thereto in position to mate with the wires on the side sections whereby when secured thereto bindings will be provided completely encircling the closed box.

2. A method of making a box comprising assembling side material with cleats to form three sides of the box, connecting the same in cooperative foldable relationship by longitudinal binding wires stapled to said cleats, folding said sides, securing end closures to the cleats, securing additional cleats to the upper edges of said closures to connect and brace the upper ends of the cleats of said side sections and forming a cover for said box adapted to rest on said additional cleats and having wires disposed across the same in position to mate with the wires of the side sections when the cover is in position.

3. The open-top box substantially as described, having the three side sections, 1, 3 and 5, comprising side material with cooperative cleats connected by wires under tension, the lid-supporting cleat 23 corresponding to the fourth side of the box and interlocked with the cleats of the side sections, and the end closures 19 secured to said cleats.

4. A box comprising three side sections each comprising side material and cleats arranged to interlock when the sides are in box form, binding wires secured to said cleats and connecting said sections under tension, end closures secured to said cleats, cleats corresponding to the fourth side of the box secured in position at the upper edge of said end members and interlocking with the cleats of the side sections, and a separate cover for said box adapted to rest on said cleats for the fourth side and having means thereon for securing it to said wires.

5. An open-top box comprising three separate sections of side material and cleats corresponding to the sides and bottom of the box, connected together in foldable relationship by continuous binding wires, separate cleats for the fourth side of the box adapted to engage with the cleats of the side sections to form end frames for the box, and end sections secured to the cleats of the fourth side of the box and the cleats of the side sections to close the ends and hold the parts in open top formation.

In testimony whereof I have signed my name to this specification.

GUILFORD C. BABCOCK.