A. CASTELLAR.

SHIPPING BOX.

APPLICATION FILED JULY 18, 1917.

1,263,036.

Patented Apr. 16, 1918.

2 SHEETS—SHEET 1.

FIG. 1.

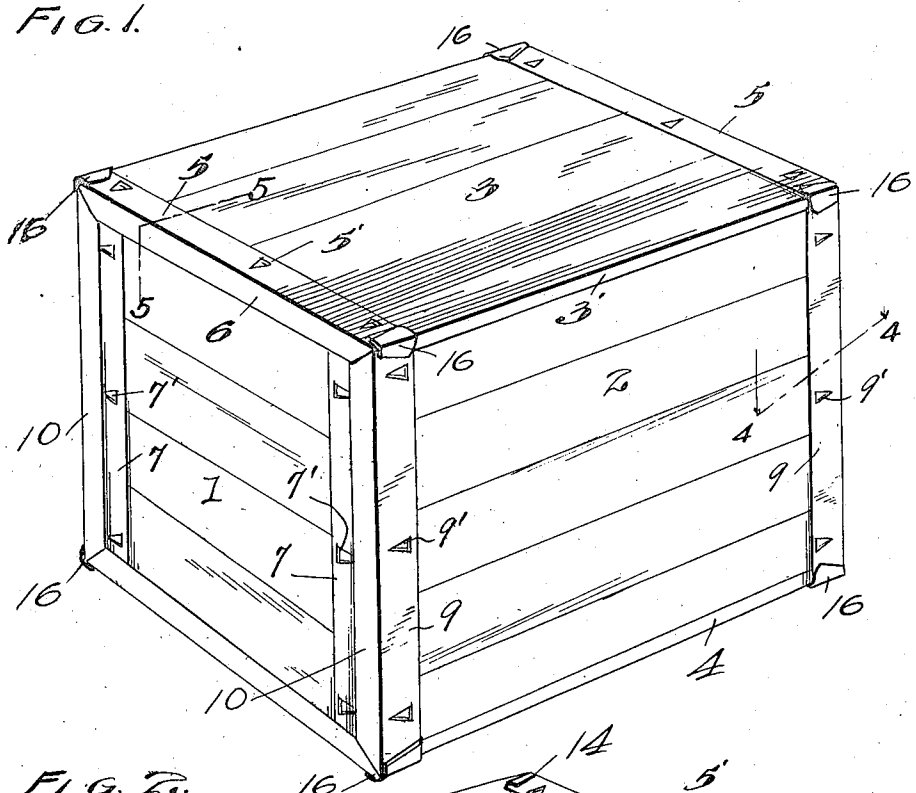


FIG. 2.

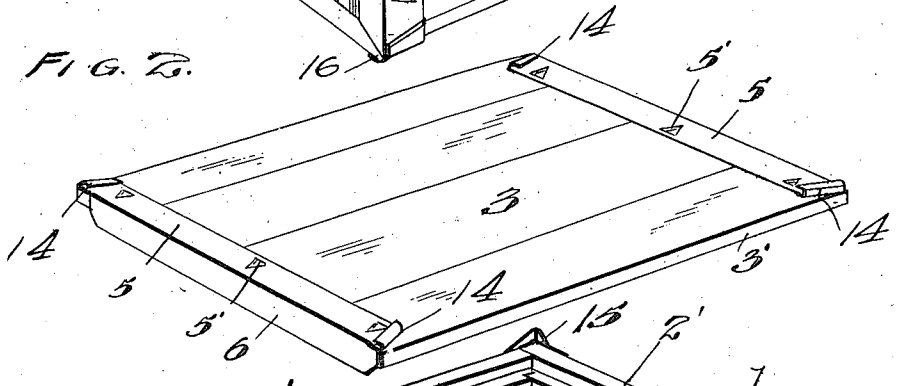
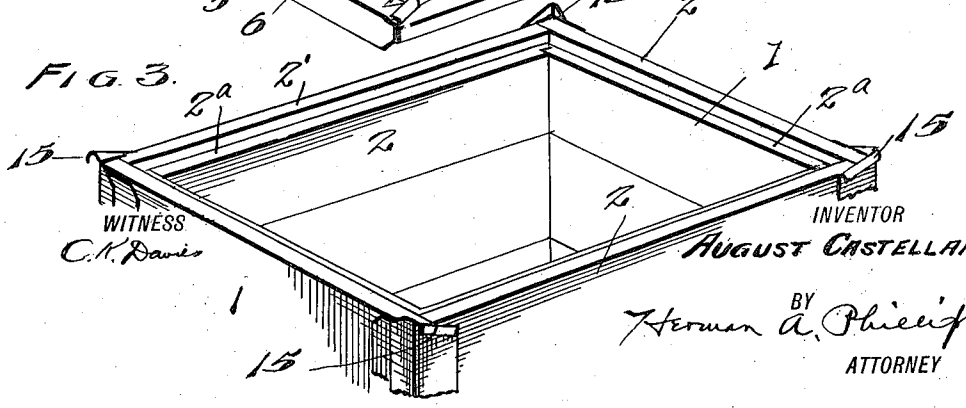


FIG. 3.



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2 SHEETS—SHEET 2.

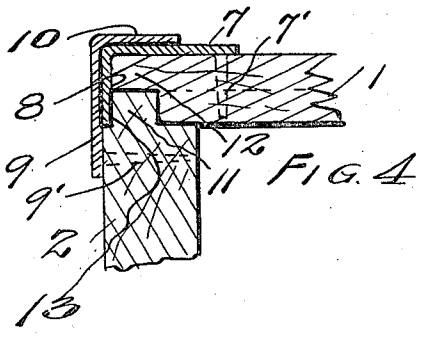


FIG. 4

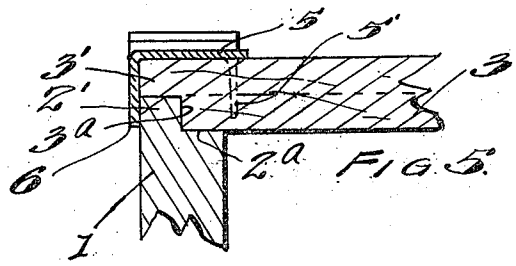


FIG. 5.

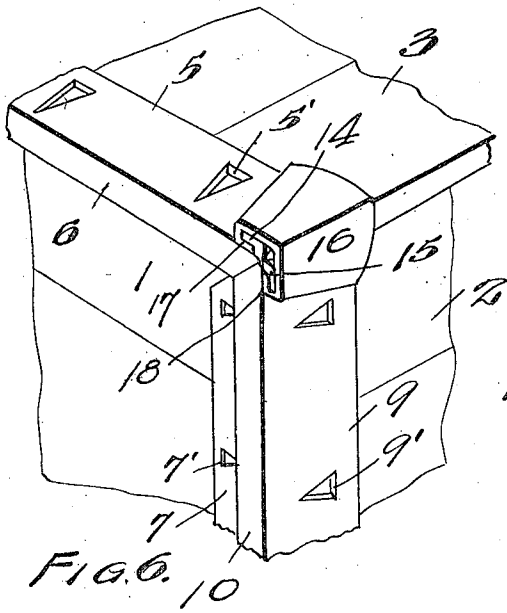


FIG. 6.

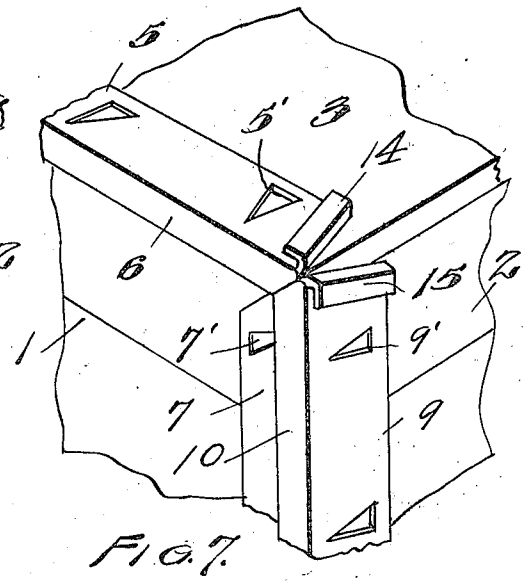


FIG. 7.

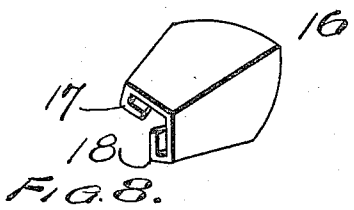


FIG. 8.

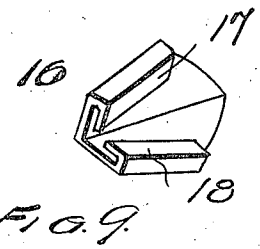


FIG. 9.

WITNESS

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UNITED STATES PATENT OFFICE.

AUGUST CASTELLAR, OF PUEBLO, COLORADO.

SHIPPING-BOX.

1,263,036. Specification of Letters Patent. Patented Apr. 16, 1918.

Application filed July 18, 1917. Serial No. 181,340.

To all whom it may concern:

Be it known that I, AUGUST CASTELLAR, a citizen of the United States of America, residing at Pueblo, in the county of Pueblo and State of Colorado, have invented certain new and useful Improvements in Shipping-Boxes, of which the following is a specification.

My present invention relates to improvements in shipping boxes or crates, of the knock down type, and is designed for the purpose of providing a box which may be quickly assembled and securely fastened together, and which may with equal facility be taken apart and compactly nested for transportation or storage.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles of my invention.

Figure 1 is a perspective view of a box constructed according to my invention.

Fig. 2 is a perspective view of the lid removed.

Fig. 3 is a perspective view of the box, or rather of its upper portion, the lid removed for convenience of illustration.

Fig. 4 is an enlarged sectional view of a joint between side and end, as for instance at the line 4—4 in Fig. 1.

Fig. 5 is another sectional detail view, showing the joint between an end and the lid, or the joint between an end and the bottom would be the same, as at line 5—5 Fig. 1.

Fig. 6 is a perspective corner view, showing an angular locking plate, and Fig. 7 is a similar view with the locking plate removed.

Fig. 8 is a perspective view of the corner angular locking plate, and Fig. 9 is a similar view of the inner side of this locking plate.

In the preferred embodiment of my invention as illustrated in the drawings I have indicated the ends as 1 1, the sides 2, 2, the top 3, and the bottom 4, forming a rectangular box, of convenient desirable size, preferably of wood. The top or lid 3 is a removable member, being formed with a grooved edge to provide the shoulders $3'$ and 3^a which fit into the grooved upper edge of the box which has shoulders $2'$ and 2^a to receive these shouldered portions of the lid. The same relation exists between the bottom 4 of the box and the box itself, as exists between the lid and box.

Along two ends of the lid I provide a metallic strip 5, which has spurs $5'$ struck from its body and these spurs are driven into the wood of the lid to fasten the metallic strip to the lid. The strips have overhanging flanges 6, which, when the lid is in position on the box, project over the upper edges of the ends 1, 1, of the box, and these flanges, in conjunction with the joint between the lid and edge of the end, hold the lid firmly in its closed position.

A somewhat similar joint is effected between the ends 1 and sides 2, and these joints permit the sides to slide and be withdrawn from the ends. Thus the ends have metallic plates or straps 7 along their edges fastened by the spurs $7'$ to the ends and their flanges 8 overhang the ends or edges of the ends 1. The sides also have angle strips as 9 with the usual fastening spurs $9'$, and the flanges 10 of the angle strips are spaced beyond the ends of the sides in order to embrace the flanged plates or strips 7, as in Fig. 4. In addition to this engagement of the angle metal strips, the adjoining ends of the sides and ends are grooved to form engaging shoulders 11 and 12 respectively, and the edge of the side is grooved or undercut slightly as at 13 to accommodate the flange 8 of the angle plate 7. In Fig. 4 it will be seen that the two members, sides and ends of the box may readily slide into or out of engagement in assembling the box body, and of course all four corners of the box are the same as that illustrated in Fig. 4.

To lock the box sections together I employ fastening devices at each corner which co-act with the hooked ends 14 and 15 of the respective metal strips 5 and 9 of the top and bottom sections and the two side sections. The top and bottom sections each have four of these hooked ends and the two sides each have four hooked ends, arranged in pairs as indicated in Fig. 7.

The end hooks are locked together in pairs by the corner plates 16 which are angular in formation and formed with the underbent flanges 17 and 18.

In assembling the sections of the box, the sides and ends are first secured together by sliding their respective parts into engagement and the bottom is then fitted to the grooved bottom edge of the box body, after

which the four corner plates are applied. It will be noted that the hooks 14 and 15 diverge from each other, and that the corner plates have their flanges on tapering or converging lines to correspond to the lines of the hooks. Thus the corner plate is slipped over the ends of the hooks, with the wide end first and the plate, when shoved home draws the adjoining ends of the metal strips 5 and 9 in close relationship, thus locking the corners together. After the sides, ends, and bottom have been applied, the top or lid is placed in position, and the remaining corner plates used to fasten the parts together.

What I claim is:—

1. The combination in a knock down box with an end section, of a top section having an angular metallic plate overhanging the end section and an inclined hook at the end of the plate, a side section having a similar plate and hook, and a tapering corner plate having flanges to engage said hooks for locking the sections together.

2. In a box construction, the combination of a fastening device comprising angular metallic plates located at right angles on adjoining sections of the box and forming overhanging flanges, complementary outwardly diverging, hooks at adjacent ends of said plates, and a tapering corner plate formed with flanges to engage said hooks.

In testimony whereof I affix my signature.

AUGUST CASTELLAR.