Sept. 3, 1935. J. J. HENZE 2,013,151

SHIPPING CRATE

Filed June 5, 1933

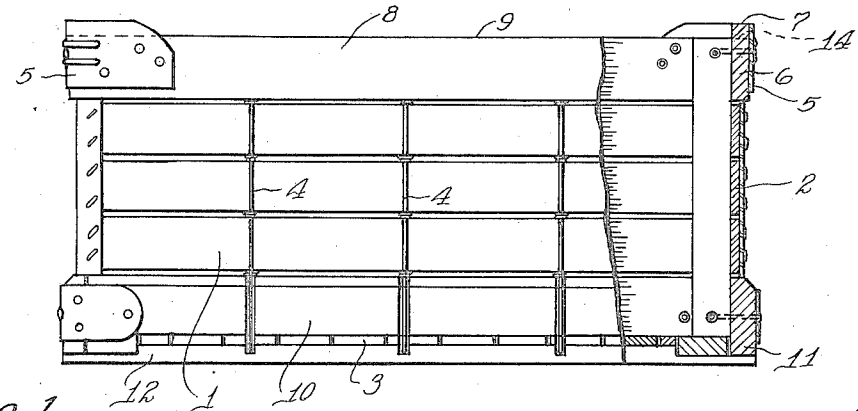


Fig. 1.

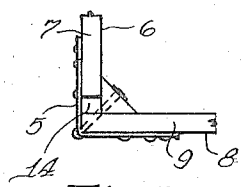


Fig. 3.

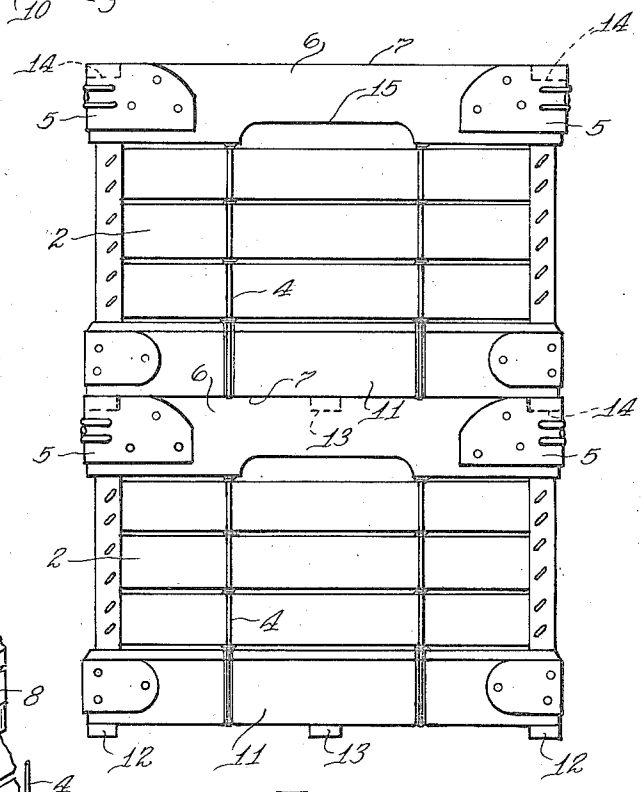


Fig. 2.

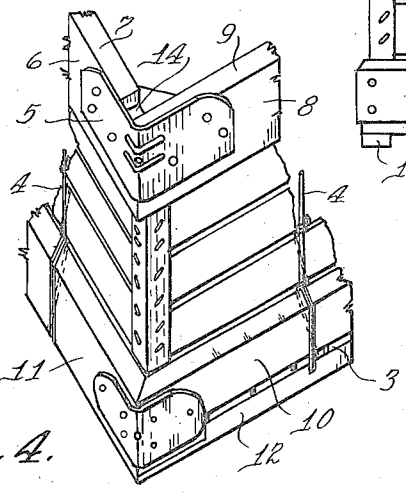


Fig. 4.

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SHIPPING CRATE

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2 Claims. (Cl. 217—5)

The present invention pertains to a novel box or crate and has particular reference to that class of shipping box or crate that is constructed of wood slats and reinforced by interlaced wires and by corner gussets.

The primary object of the present invention is to provide a box or crate that may be conveniently piled one on top of another in tiers that are regular and not easily knocked down. Each box has projecting members provided on the bottom thereof to serve as sliding bars by means of which the box may be slipped along a supporting surface and each box is provided with definitely arranged recesses and corner gussets that receive said slide bars when one box is placed on top of another to retain the boxes in a position where one lies directly on top of the other in a manner whereby the upper box cannot be slipped off the top of the lower box without first raising the former vertically so that the ends, or one of the ends, of the slide bars are clear of the gussets and recesses.

With the above and other ends in view the invention consists in matters hereinafter set forth and more particularly pointed out in the appended claims, reference being had to the accompanying drawing, in which

Figure 1 is a side elevation of the present box, partly broken away and in cross section;

Fig. 2 is an end elevation of two boxes piled one on top of the other;

Fig. 3 is a fragmentary top plan of one of the boxes, and

Fig. 4 is a fragmentary perspective view illustrative of the corner construction.

Like characters of reference are employed throughout to designate corresponding parts.

The present boxes are constructed with side panels 1, end panels 2 and a bottom 3 which are secured together by nails, rivets or bolts in the manner well known to the art. In the present illustration the boxes are of the wood slat construction and reinforced by interlaced wires 4.

Corner gussets 5 are secured to each of the upper corners of the box and the top rails 6 of the end panels 2 are formed in a manner whereby the upper edges 7 thereof lie flush with the upper edges of the gussets 5. The top rails 8 of the side panels 1 are formed so that their upper edges 9 lie spaced downwardly from the upper edges of the gussets 5.

The side panels 1 are provided with lower rails 10 and the end panels are provided with lower rails 11 and the bottom slats 3 are secured between these lower rails. Slide bars 12 are secured to the bottom 3, there preferably being three such bars provided. The outside bars are secured so that they lie flush with the outside faces of the side rails 10 and therefore parallel thereto and extending entirely across the bottom of the box so that the ends thereof lie flush with the outside faces of the bottom end rails 11. A central slide bar 13 is provided and is secured to the bottom 3 in parallel relation to the slide bars 1 with its ends terminating flush with the inside surface of the bottom end rails 11.

Each of the top end rails 6 are provided with notches 14 of a width corresponding to the width of the slide bars 12 and of a depth corresponding to the thickness of the bars 12. The distance at which the top edge 9 of the upper side rail 8 lies beneath the upper edge of the gussets 6 is approximately the same as the depth of the notches 14.

Each of the upper end rails 6 are provided with cut-away portions 15 that serve as grasping means by which the box may be conveniently handled.

When the boxes are piled one upon another the slide bars 12 on the bottom of the upper box rest upon the top edges 9 of the upper side rails 8, the ends of the slide bars being received in the notches 14 in the end rails 6 and butting against the inside surfaces of the gussets 5. The central slide bar 13 has opposite ends butting against the inside surfaces of the upper end rails 6 and in this manner the upper box cannot be removed from the lower box without first raising the same vertically.

The slide bars 12 and 13 in addition to providing a projecting means that engages the box beneath in a manner to retain one box upon another serve as a means for protecting and reinforcing the bottom of the box when the same is being moved around, the usual practice being to slide the boxes. They also provide means whereby one box may be slid to its position on top of another by sliding the box longitudinally with the slide bars engaging one of the upper end rails 6.

Although a specific embodiment of the present invention has been illustrated and described it is to be understood that various changes may be made within the scope of the appended claims without departing from the spirit of the invention, and such changes are contemplated.

What I claim is:

1. A box comprising a bottom, side and end panels, said end panels being formed to project upwardly above said side panels, slide bars se-

cured to said bottom panel and adapted to rest upon the upper edges of said side panels when one box is placed on top of another with the bottom of the upper box resting upon the top of the upwardly extending end panels, notches formed in the upper edges of said end panels through which the ends of said slide bars extend, and gussets secured to the corners of said box against which the ends of said slide bars butt.

2. A box comprising a bottom, side and end panels, said end panels being formed to project upwardly above said side panels, slide bars secured to said bottom panel and adapted to rest upon the upper edges of said side panels when one box is placed on top of another with the bottom of the upper box resting upon the top of the upwardly extending end panels, notches formed in the upper edges of said end panels through which the ends of said slide bars extend, gussets secured to the corners of said box against which the ends of said slide bars butt, and a centrally disposed guide bar mounted in a manner whereby its ends engage said end panels.

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