

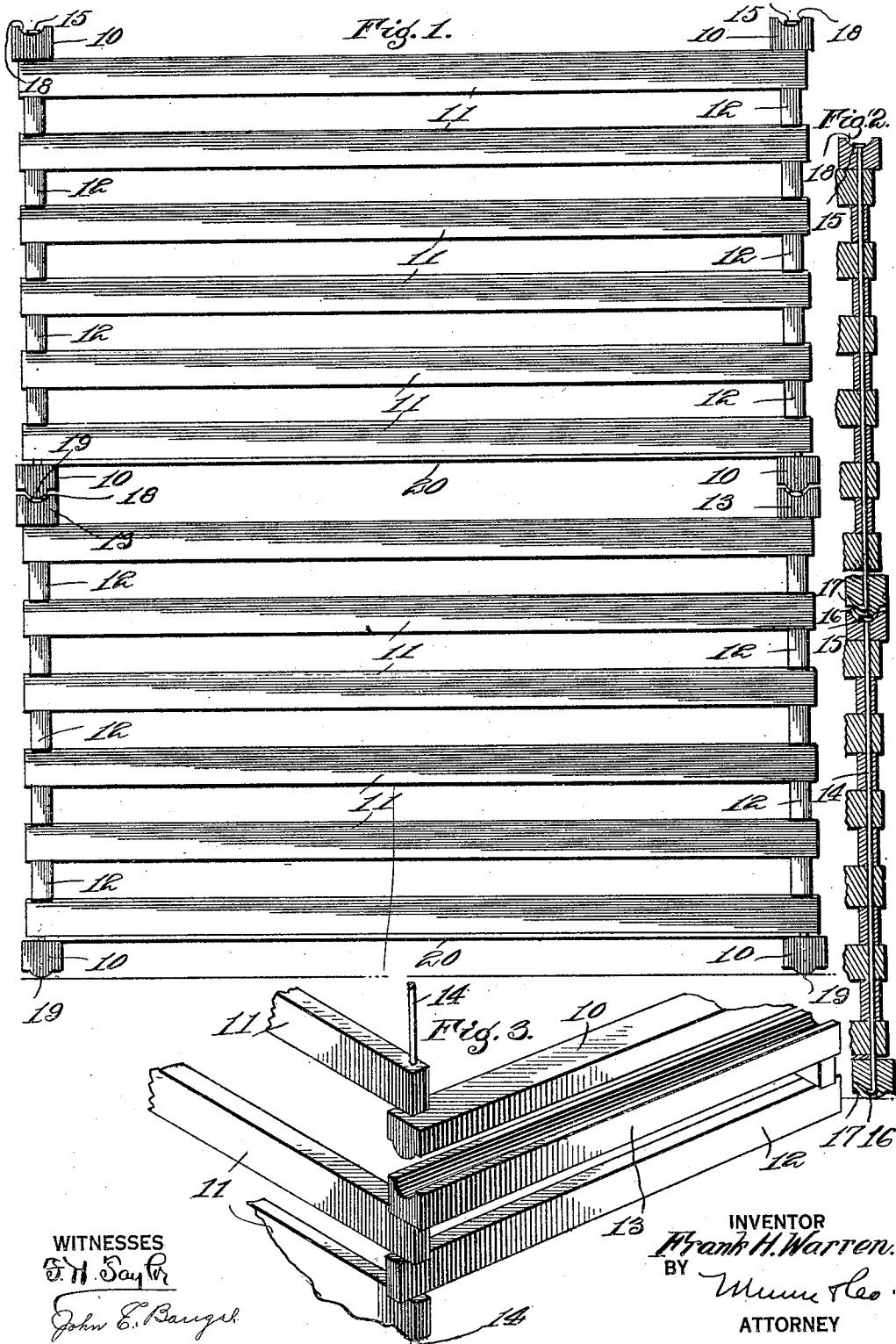
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FOLDING CRATE

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FOLDING CRATE

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This invention appertains to improvements in folding crates generally, and more particularly to a type thereof as is usually employed for the packing and shipping of onions and the like.

An object of the invention is to provide a crate of the class set forth, which embodies an extremely simplified construction and arrangement of parts whereby the stacking of two or more of the crates, one upon the other, as in the packing of the same in storage ware-houses or loading them in freight cars or the like is facilitated and the several superimposed crates in each stack or tier thereof will be vertically alined in engaged relation such as will allow for the utilization of all available space to be occupied by the stacks or tiers and will prevent accidental displacement of individual crates from position.

Another object of the invention is to provide a slatted crate structure with means for securing the overlapping end portions of the slats together in a manner that the side and end walls of a completed crate, may be readily folded against one another in a usual manner and into compact form for storage in stock or reshipment and whereby the securing means will in no way interfere with the stacking or loading of the crates as hereinbefore indicated nor injure the contents of a crate.

With the foregoing and other equally important objects and advantages in view, the invention resides in the certain new and useful combination, construction and arrangement of parts as will be hereinafter more fully described, set forth in the appended claims and illustrated in the accompanying drawing, in which:

Figure 1 is a side elevation of two of the improved crates arranged in stacked or superimposed relation;

Figure 2 is a vertical section, taken on the line 2-2 of Figure 1; and

Figure 3 is an enlarged fragmentary perspective view of adjacent corner portions of a pair of crates in position for loading or stacking.

Referring to the drawing, the embodiment

of the invention, as illustrated therein by way of example, is constituted in a pair of oppositely arranged lower transverse bars 10, on which are arranged superimposed alternate pairs of longitudinal and transverse slats 11 and 12, respectively, and a pair of upper transverse bars 13 are supported in position on the opposite ends of the uppermost pair of the longitudinal bars 11.

The adjacent ends of these several pairs of bars 10, 11, 12 and 13 are arranged in overlapping relation and are secured together on vertical members or rods 14 passing vertically through alined openings in the same; the upper ends of the members or rods 14 being headed, as at 15, and the lower ends thereof bent angularly inward, as at 16, and into engagement with slotted openings 17 formed in the lower inner portions of the lower inner side portions of the bottom transverse bars 10. By this arrangement, the opposite side and end walls of the crates will hinge on these members or rods 14 and may be folded one against the other in the usual manner of this type of such containers.

In the present instance of the invention, the top or upper bars or rails 13 have their uppermost faces longitudinally grooved, as at 18, while the lower faces of the bottom or lowermost bars or rails 10 are formed with longitudinally extending beads or rounded tongue portions 19, which will seat in the grooves 18 of the upper bars or rails 13, when one of the crates is placed in position on another, as in the stacking of a number of the crates in tiers within a storage warehouse or freight car or the like.

As shown in Figure 1, a suitable bottom 20 is provided for each crate and the same is interposed between the bottom or lower transverse bars or rails 10 and the adjacent of the longitudinal slats 11. Similarly, closures (not shown) will also be provided, and these will be placed in position on the uppermost of the longitudinal slats 11 and beneath the upper transverse bars or rails 13.

It is to be noted that the relative positions of the bottom and upper transverse bars or rails 13 may be reversed without in any way

affecting the utility of the same as hereinbefore stated.

Without further description, it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention or its scope as claimed.

I claim:

1. In a crate having its opposite side and end walls formed of parallel slats arranged with their opposite ends disposed in overlapped superimposed relation, the uppermost pairs of said slats being parallel and disposed in the same plane, the lowermost pair of slats being parallel with each other and with said uppermost pair, one of said parallel pairs having longitudinally extending grooves formed in the outer horizontal face thereof, the other of said parallel pairs having longitudinally extending tongues formed with the outer horizontal face thereof, whereby the tongues of one crate will engage in the grooves of a next adjacent crate when two or more of the crates are stacked one upon the other, and a securing member engaged through the overlapping ends of said slats at each corner of the crate.

2. In a crate having its opposite side and end walls formed of parallel slats arranged with their opposite ends disposed in overlapped superimposed relation, the uppermost pairs of said slats being parallel and disposed in the same plane, the lowermost pair of slats being parallel with each other and with said uppermost pair, one of said parallel pairs having longitudinally extending grooves formed in the outer horizontal face thereof, the other of said parallel pairs having longitudinally extending tongues formed with the outer horizontal face thereof, whereby the tongues of one crate will engage in the grooves of a next adjacent crate when two or more of the crates are stacked one upon the other, a securing member engaged through the overlapping ends of said slats at each corner of the crate and flat heads formed at one end of each of said members and seated in said grooves, the opposite ends of said members being bent about the outer horizontal face of said tongues, said tongues being formed with transverse grooves for the reception of said bent ends whereby said ends will lie substantially flush with the surface of said tongues.

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