

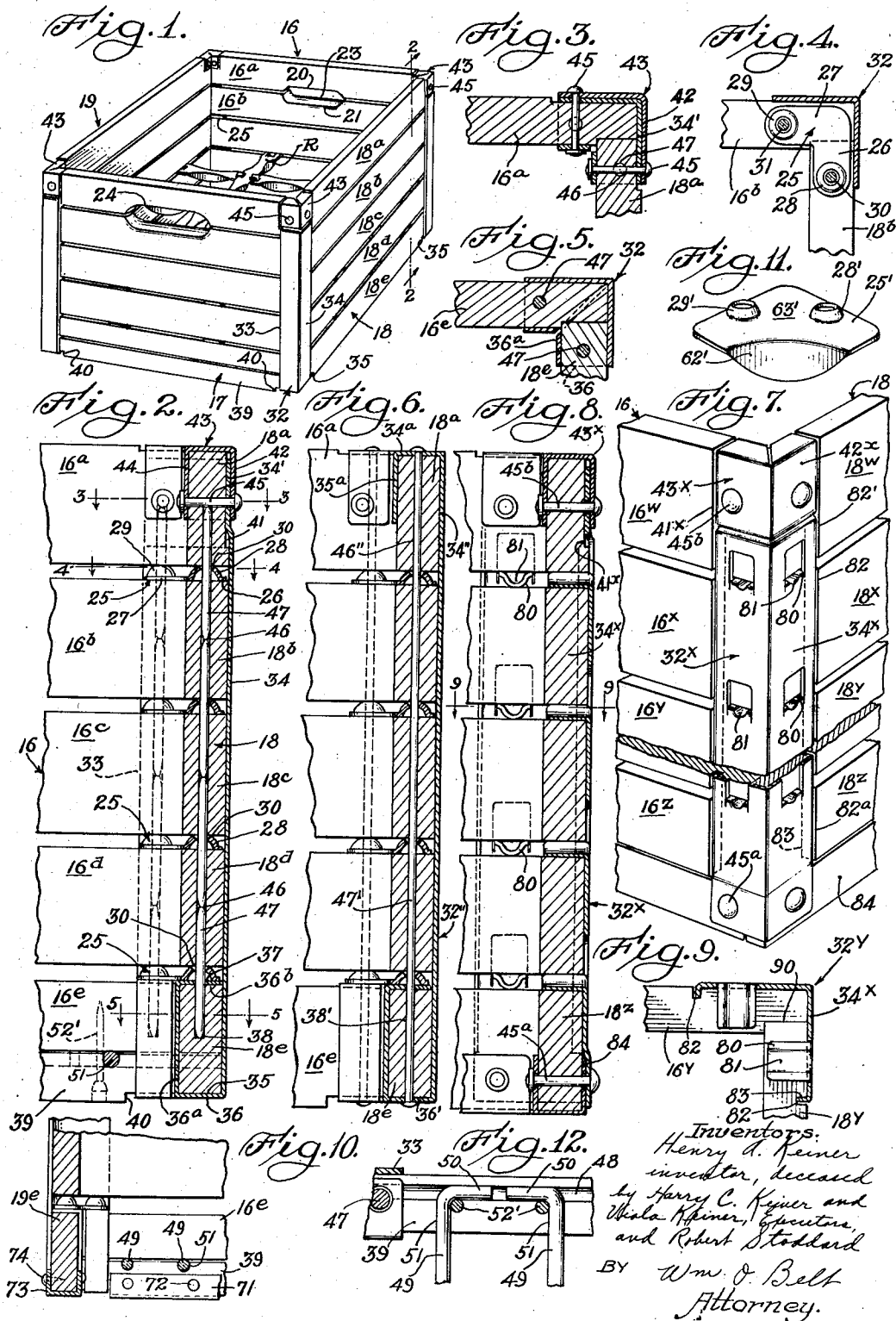
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CRATE FOR MILK BOTTLES AND THE LIKE

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CRATE FOR MILK BOTTLES AND THE LIKE

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This application is a continuation in part of application Serial No. 16,312, filed April 15, 1935.

This invention relates to crates for milk bottles and the like and the primary object is to improve the construction of such crates.

Crates having the walls thereof formed from a plurality of spaced apart slats have been so constructed heretofore that it has been quite difficult to replace broken slats because of the manner in which the slats were secured, and another important object of the invention is to facilitate the replacement of a broken slat and to enable this to be accomplished quickly and economically.

A further object is to effectively reinforce the corners of a crate and an ancillary object is to utilize corner reinforcements to space the slats apart.

Still further objects are to insure rigid support for the lowermost slats of the walls of the crate and thereby increase the rigidity of the crate; to reinforce the walls of the crate intermediate the top and bottom edges thereof; to effectively protect the corners of the crate at the ends of the uppermost and lowermost slats thereof; and to provide a crate of simple and economical construction which will effectively withstand severe usage.

Selected embodiments of the invention are illustrated in the accompanying drawing wherein—

Fig. 1 is a perspective view of a crate embodying one form of the invention;

Fig. 2 is a vertical sectional view taken substantially on the line 2-2 on Fig. 1;

Figs. 3, 4 and 5 are horizontal sectional views taken respectively on the lines 3-3, 4-4 and 5-5 on Fig. 2;

Fig. 6 is a view, similar to Fig. 2, showing a modified form of construction;

Fig. 7 is a perspective view of one corner of a crate embodying still another form of the invention;

Fig. 8 is a view, similar to Figs. 2 and 6, of the form of the invention shown in Fig. 7;

Fig. 9 is a horizontal sectional view taken substantially on the line 9-9 on Fig. 8;

Fig. 10 is a fragmentary vertical sectional view illustrating a further modified construction for the bottom of the crate;

Fig. 11 is a perspective view of a modified form of separator employed in the invention; and

Fig. 12 is a horizontal sectional detail view.

The crate as illustrated in Figs. 1 to 5, inclusive, includes end walls 16 and 17 and side walls 18 and 19. Each of these walls is made up of a plurality of slats. The uppermost slat 16a of the end wall 16 has a medially located recess 20 in the lower edge thereof and the next lowermost slat 16b has a medially located recess 21 in the upper edge thereof. The recesses 20 and 21 cooperate to provide a handhole 23, a similar handhole 24 being provided in the end wall 17.

The side walls 18 and 19 extend between the end portions of the end walls 16 and 17 and the ends of the walls at each corner of the crate are firmly interconnected to prevent separation, and these corners are protected to prevent damage thereto and reinforcements are provided at these corners to increase the rigidity of the crate. The slats comprising the various walls are spaced apart for purposes well understood in the art. The means for spacing the slats apart have been combined with means for reinforcing the corners. To this end combined separating and reinforcing members 25, shown in plan in Fig. 4 and in side elevation in Fig. 2, include right angularly extending limbs 26 and 27. Embossures 28 and 29 are provided near the ends of the limbs 26 and 27 to appear in relief on the top sides of the members 25. Openings 30 and 31 are respectively provided in the embossures 28 and 29.

The corner member 32 is provided at each corner of the crate and each corner member comprises right angularly extending parts 33 and 34 which are respectively engaged with the outer faces of the end and side walls. Each of the lowermost slats of the side walls, as, for example, the slat 18e of the side wall 18, has a recess 35 in the lower edge at each end thereof. The part 34 of each corner member includes an extension which, in the case of the side wall 18, is folded into the recess 35 adjacent the corner member as indicated at 36 (Fig. 2). The extension is then folded up over the inner face of the lowermost slat 18e of the side wall, as indicated at 36a, and then across the top edge of this slat to terminate in spaced relation with the outer face of the slat, as indicated at 36b. An opening 37 is provided in the section 36b in alignment with a bore 38 extended partially through the slat 18e from the upper edge thereof.

Each end wall includes a shoe piece 39, to be described more fully hereinafter, at the lower end thereof, and each shoe piece has a recess 40 in the lower edge at each end thereof. The part 33 of each corner member 32 includes an extension like the extension 36 which is arranged in the adjacent recess 40, and this extension also includes sections which extend over the inner face of the shoe piece and the inner face of the lowermost slat of the end wall. Another section of the extension extends across the top of this lowermost slat of the end wall and is arranged similarly to the section 36b.

The uppermost slat of each wall is recessed on its outer face near the ends thereof, as indicated at 41, and the upper ends of the parts 33 and 34 of the corner members are inset as is illustrated in Fig. 2 wherein the upper section 34' of the part 34 is inset to be disposed in the recess 41 in the outer face of the slat 18a. The upper sections of these parts are so inset to permit the limbs of corner caps to be extended thereover in alignment with the main extent of the parts 33 and 34. This is also illustrated in Fig. 2 wherein a depending limb 42 on the corner cap, generally indicated by 43, is aligned with the main extent of the part 34. The corner cap 43 includes a depending limb 44 which depends over the inner face of the slat 18a and it also includes other depending limbs which embrace the upper slat 16a of the end wall 16 in the same way in which the limbs 42 and 44 embrace the slat 18a. The opposite depending limbs are connected together and to the slats embraced therebetween by rivets such as 45. The slats of each of the walls intermediate the top and bottom slats have a bore therein near each end thereof, such bores being indicated by 46 in Fig. 2, and pins 47 are passed through these bores to secure the slats in position. The pins 47 are of a length about equal to the height of the slats of the walls, which slats are of uniform height.

In assembling a wall, for example, the wall 18, the bottom slat 18e is inserted into the area enclosed by the lower end of the part 34 and the sections 36, 36a and 36b of the extension of said part 34. The bore 38 that extends about halfway through slat 18e is aligned with the opening 37 in the section 36b. Then a pin 47 is passed through the opening 37 into the bore 38. Since the bore 38 preferably extends only halfway through the section 18e a pin 47 so installed projects above the section 36b. Then one of the combined separating and reinforcing members 25 is arranged in position by passing the pin 47 through the opening 30 in the embossure 28. Then the bore 46 at the proper end of the slat 18d is passed over the installed pin 47 which then extends about halfway through this bore 46. Thus when a second pin 47 is inserted into the bore 46 it will engage the top of the first pin and will extend above the top edge of the slat 18d. Then another combined separating and reinforcing member 25 is positioned above the slat 18d by passing the second pin 47 through the opening 30 in the embossure 28 of this member. The slats 18c and 18b are mounted in position in the same manner as the slat 18d and then the slat 18a is mounted over the slat 18b. The lower edge of the slat 18a rests on the top of the embossure 28 of the combined separating and reinforcing member 25 at the top of the slat 18b, and the uppermost pin 47 projects into the bore 46' that extends about halfway through the slat 18a. The above described procedure is also car-

ried out at the opposite end of the wall 18 which is therefore completed when the slat 18a is in position.

Then the end wall 16 is built up in a similar manner starting with the lower slat 16e to which a shoe piece 39 will have been joined as will be described. The combined shoe piece and slat 16e are handled in the same manner as the slat 18e. When the slat 16a is in position the wall 16 will have been built up.

Next the corner member 43 is installed at the top of the corner between the walls 18 and 16 with the depending parts thereof positioned as described. Rivets 45 are passed through the depending parts of the corner member 43, parts 33 and 34, and the uppermost slats and fasten these parts together. These rivets extend across the upper ends of the uppermost pins 47 and prevent displacement of the pins. Thus the end and side walls are securely connected at each corner since the above procedure is carried out at each corner of the crate.

The lowermost slats 16e and 17e of the end walls 16 and 17 are of less height than the other slats in the end and side walls but when the shoe pieces 39 are added to the slats 16e and 17e the aggregate height of these slats and shoe pieces is equal to the height of the other slats. The shoe pieces 39 are joined to the slats 16e and 17e by nailing or in other suitable manner, and the location of the nails will be described more fully hereinafter.

As best shown in Fig. 12, the shoe pieces 39 are routed in their upper surfaces near the outer edges thereof to provide grooves 48. A plurality of rods 49 are provided and these rods are arranged in pairs to provide bottle supports at the bottom of the crate. Each of these rods has a right angularly extending foot portion 50 at each end and these foot portions 50 are mounted in the grooves 48. As illustrated in Fig. 10, grooves 51 are formed in the top surface of the shoe pieces 39 which extend from the grooves 48 to the inner sides of the shoe pieces 39. The grooves 51 are arranged in pairs across the crate so that when rods 49 are rested therein a pair of rods will extend below each of the bottle receiving spaces defined by suitable dividing rails R provided in the crate between the top and bottom edges thereof, as is well understood in the art. The nails which interconnect the shoe pieces 39 and the bottom slats 16e and 17e preferably pass through the shoe pieces adjacent the grooves 51 so as to pass through the right angle defined by the foot portions 50 and the main extent of the rods 49. Nails so located are indicated by 52' and it is these nails that secure the shoe pieces to the lower slats. In the illustrated form of the invention the foot portions 50 are rested in the grooves 48 to extend toward each other but it is to be understood that the foot portions could be arranged to extend in opposite directions without departing from the purview of the invention.

The combined separating and reinforcing members 25 of the form shown in Fig. 4 do not provide ledges or platforms on which ice may be supported at the corners of the crate and do not include bottle engaging flanges which will retain the bottles in the corner bottle receiving spaces against movement. Therefore a combined separating and reinforcing member such as that illustrated in Fig. 11 may be provided for use between the slats of the side and end walls. This member is indicated by 25' and includes embossures 28' and 29' similar to the embos-

5 sures 28 and 29 but instead of including right angularly extending limbs the member 25' is formed from a substantially square sheet of material which is bent downwardly diagonally opposite the outermost corner thereof to provide a bottle engaging flange 62'. The space intermediate the depending flange 62' and that part of the member 25' aligned with the embossures 28' and 29' provides an ice supporting platform 63'. The flanges 62' serve to hold the bottles in the corner bottle receiving spaces against movement.

15 In the invention as thus far described, the slats of the various walls have been secured in position by passing short pins 47 through bores extending through the slats at opposite ends thereof. When one of such slats is broken the rivets 45 passing through the uppermost slat in the wall in which the broken slat is contained are removed as well as the other rivets passing through the corner caps 43 through which these first named rivets pass. The corner caps 43 are then removed after which the slats may be lifted from position, and when the broken slat is reached 20 it is removed and replaced and the wall is re-assembled as described.

25 In Fig. 6 a modified form of construction for the interconnection of the slats of the walls is shown and in this construction no corner caps are provided at the upper edges of the corners. In this construction the lower ends of the corner members, generally indicated by 32, are arranged in the same manner as the lower ends of the corner members 32 and the slats 18e and 18e are mounted in position in the manner described. However, instead of employing a plurality of short pins 47 a long pin 47' is provided. Furthermore, the bores in the uppermost slats extend entirely through these slats as indicated at 46'' and the long pins 47' extend through these bores 40 as illustrated in Fig. 6. Also, the upper end of the part 34'' of the corner member 32 is bent inwardly as indicated at 34a to pass across the top of the slat 18a and this part is then bent downwardly as indicated at 35a to extend over the inner face of the upper slat 18a and the pin 47' passes through an opening in the part 34a. To prevent displacement of the upper end of the pin 47' it is peened over. It will also be noted that the pin 47' extends through a bore 38' that extends entirely through the lowermost slat 18e. The lower end of the pin 47' extends through an opening in the section 35' and this end of the pin 47' is also peened over. Rivets are passed through the parts 34'' and 35a and the uppermost rail 18a to secure this rail in position. The part of the corner member 32' corresponding to the part 33 of the corner member 32 is arranged similarly to the part 34'' of the corner member 32' to embrace the upper edge of the slat 16a. When a broken slat is to be replaced in a construction employing the pins 47' the peened parts at corresponding ends of the required pins 47' are straightened to permit removal of these pins whereupon the parts such as the parts 34a and 35a are straightened to permit the removal of the slats down to the broken slat.

70 In Fig. 10 a modified form for the shoe piece 39 is illustrated and herein the lower end and parts of the inner and outer faces of the shoe piece 39' are embraced by a metallic strip 71 which is retained in position by nails 72 or the like. Moreover, a metallic strip 73 embraces the

bottom edge and lower parts of the inner and outer faces of the bottom slab 19e of the side wall shown herein. This strip 73 is retained in position by nails 74 or the like. Thus, Fig. 10 shows how the bottom edges of the crate may be effectively protected against damage.

The form of the invention shown in Figs. 7, 8 and 9 does not employ pins such as 47 and 47' and means for spacing the slats one from the other are provided on the corner reinforcing members as 32x. The upper slats 16w and 18w of the side walls 16 and 18 of the crate in this form of the invention are recessed at 41x similarly to the manner in which the slats 16a and 18a are recessed. The upper part of the right angularly extending portion 34x of the corner reinforcing member 32x is bent inwardly to fit into this recess, as clearly illustrated in Fig. 8, so that the limbs as 42x of a corner cap 43x, which parts are similar to the parts 43 and 42 of the form of the invention shown in Figs. 1 to 5, may be fitted over the inset upper parts of the part 34x where the parts 32x and 34x lie in substantially the same plane.

In order to insure separation of slats as 18w and 18x and 16w and 16x from each other tongues 80 are struck from the parts as 34x to extend inwardly from the parts as 34x at right angles thereto, and these tongues have grooves 81 embossed therein to increase the thickness of the tongues 80. The tongues 80 are struck from the parts as 34x at those places where a space between slats as 18w and 18x is to be provided.

35 As best shown in Fig. 9, the outer faces of the slats 18x, 18y, 16x and 16y are grooved, as indicated at 32, and lips are formed at the outer free edges of the parts as 34x and are extended into these grooves. Grooves as 82' are provided in alignment with the grooves 82 to extend from the lower edges of slats as 18w to the recesses as 41x and grooves as 82a are formed in the lower slats as 18z in alignment with the grooves 82. However, as best shown in Fig. 7, the lips 83 do not extend to the bottom of the parts as 34x.

The lips as 83x terminate in spaced relation with the lower edges of slats as 18z and substantially U-shaped strips 84 are fitted over the lower edges of the slats as 18z and the lips 83 terminate in spaced relation with the upper edges of these strips 84. These strips 84 protect the lower edges of the lowermost slats against damage.

In assembling a crate employing corner reinforcing members as 32x, one end of a slat as 16y is slipped between two spaced tongues 80 so that the lower edge of the slat rests on the flat portion of the lower of the two tongues on each side of the groove 81 therein and so that the upper edge of the slat engages the outwardly disposed face of the embossed groove in the uppermost of the two tongues. This slat as 16y is abutted with the part as 34x, as clearly shown in Fig. 9, and then a slat as 18y is fitted in between the two aligned tongues 80 on the other part or leg of the reinforcing member 32 and the end of this slat as 18y is fitted into a rabbeted groove 90 at the adjacent end of the slat as 16y, which groove is provided on the inner face of this slat. The lips 83 are fitted in the grooves 82 of the slats as 16y and 18y whereby a tight joint is provided at the corner. In a similar manner other intermediate slats as 16x and 18x are fitted in position. Then the uppermost slats as 16w and 18w are positioned above the uppermost tongues 80 and the lowermost slats having the strips 84 mounted thereon are engaged with the undersides of the lowermost tongues as

80. Rivets as 45a are then passed through the parts as 34x and the limbs of strips as 84 as well as through the lowermost slats as 18z in the manner shown in Fig. 8 whereby the lowermost slats including the strips 84 are firmly secured in position. The corner caps as 83x are disposed in position and rivets as 45b are secured in position in the manner illustrated in Fig. 8 whereupon the uppermost slats are secured in position. When the rivets 45a and 45b are secured the slats corner reinforcing member strips as 84 and corner caps as 43x are tightly fastened together. Upon breakage of a slat one or the other of the rivets 45a or 45b are removed, depending upon which is closest to the broken slat, and the slats up to the broken slat are removed whereupon the broken slat is removed and replaced and the parts are again assembled.

The crate of this invention has the corners thereof effectively protected against damage and after one of the slats is broken in the use of the crate as happens frequently this slat may be replaced easily. In the forms of the invention employing pins, the pins in part interconnect the slats and impart rigidity to the crate and the loose mounting of the slats on the pins facilitates repair and replacement without lessening this rigidity. In the form of the invention wherein pins are not employed it is only necessary to remove the rivets in order to enable replacement of a broken slat.

Uniform spacing of the slats is insured by this invention and where the spacing means are provided on separate parts these separate parts impart rigidity to the crate. Moreover, the manner of mounting the bottle supporting rods in the crate is simple and can be accomplished at low cost and enables the rods to be firmly held against displacement.

Selected embodiments of the invention have been illustrated and described but it is to be understood that these are capable of variation and modification and therefore the invention is not to be limited to the precise details set forth but is to be understood as including such changes and alterations as fall within the purview of the following claims.

We claim:

1. In a crate comprising a wall consisting of a plurality of slats, the uppermost and the lowermost of the slats in said wall having bores extending only part way therethrough at each end thereof, the other of said slats having bores extending entirely therethrough at each end thereof, and a plurality of pins removably mounted in said bores and interconnecting the slats.

2. In a crate comprising a wall consisting of a plurality of slats, the uppermost and the lowermost of the slats in said wall having bores extending only part way therethrough at each end thereof, the other of said slats having bores extending entirely therethrough at each end thereof, a plurality of pins removably mounted in said bores and interconnecting the slats, and means for preventing displacement of said slats from said pins.

3. In a crate comprising a wall consisting of a plurality of slats of substantially equal height, the uppermost and the lowermost of the slats in said wall having bores extending only part way therethrough at each end thereof, the other of said slats having bores extending entirely therethrough at each end thereof, a plurality of pins of a length substantially equal to the height of said slats and removably mounted in said bores to extend into the bores in at least two of said slats to thereby

interconnect said slats, and means for preventing displacement of said slats from said pins.

4. In a crate comprising walls consisting of a plurality of slats of substantially equal height, the slats in one wall having corresponding ends thereof abutting the end portions of the slats in the adjacent wall at each corner of the crate, and plates disposed between the end portions of abutting slats at each corner of the crate to reinforce the corners of the crate and space the adjacent slats in each wall one from the other, certain of said plates including parts extending between the end portions of adjacent walls to provide platforms for supporting ice or the like in said crate.

5. In a crate comprising walls consisting of a plurality of slats of substantially equal height, the slats in one wall having corresponding ends thereof abutting the end portions of the slats in the adjacent wall at each corner of the crate, and plates disposed between the end portions of abutting slats at each corner of the crate to reinforce the corners of the crate and space the adjacent slats in each wall one from the other, certain of said plates having bottle engaging flanges formed thereon intermediate the end portions of adjacent walls.

6. A crate comprising a wall including a plurality of slats superimposed one upon the other when in assembled position, each of said slats having a bore therein and the said bores being disposed in registration or alignment with each other when the said slats are in assembled position, and a plurality of pins interconnecting the slats in said wall, each of said pins extending across the joint between two adjacent ones of said slats and having portions projecting into the bores in the said two adjacent slats.

7. A crate comprising a wall including a plurality of slats superimposed one upon the other when in assembled position, each of said slats having a bore therein and the said bores being disposed in registration or alignment with each other when the said slats are in assembled position, and a plurality of pins interconnecting the slats in said wall, each of said pins extending across the joint between two adjacent ones of said slats and having portions projecting into the bores in the said two adjacent slats, and means for preventing displacement of said slats from said pins including a removable fastening element extended transversely through the said wall adjacent the upper end thereof and bearing upon the upper end portion of the uppermost one of said pins.

8. A crate comprising a wall including a plurality of slats superimposed one upon the other when in assembled position, each of said slats having a bore therein and the said bores being disposed in registration or alignment with each other when the said slats are in assembled position, and a plurality of pins interconnecting the slats in said wall, each of said pins extending across the joint between two adjacent ones of said slats and having portions projecting into the bores in the said two adjacent slats, the bores in the uppermost and lowermost ones of said slats extending only partially therethrough and the bores in the other and intermediate ones of said slats extending entirely therethrough.

9. A crate comprising a wall including a plurality of slats superimposed one upon the other when in assembled position, each of said slats having a bore therein and the said bores being disposed in registration or alignment with each other when the said slats are in assembled po-

sition, and a plurality of pins interconnecting the slats in said wall, each of said pins extending across the joint between two adjacent ones of said slats and having portions projecting into the bores in the said two adjacent slats, and means for preventing displacement of said slats from said pins including a removable fastening element extended transversely through the said wall adjacent the upper end thereof and bearing upon the upper end portion of the uppermost one of said pins, the bores in the uppermost and lowermost ones of said slats extending only partially therethrough and the bores in the other and intermediate ones of said slats extending entirely therethrough.

10. A crate comprising a wall including a plurality of slats superimposed one upon the other when in assembled position, each of said slats having a bore therein and the said bores being disposed in registration or alignment with each other when the said slats are in assembled position, a spacing member arranged between each two adjacent ones of said slats and having an opening therein, and a plurality of pins interconnecting the slats in said wall, each of said pins extending across the joint between two adjacent ones of said slats and through the opening in the spacing member disposed therebetween and having portions projecting into the bores in the said two adjacent slats.

11. A crate comprising two intersecting walls each including a plurality of slats superimposed one above the other when in assembled position, each of said slats having a bore therein and the bores in the slats of each of said walls being disposed in registration or alignment with each other when the said slats are in assembled position, a plurality of pins interconnecting the slats in each of said walls, spacing and reinforcing members arranged at the corner formed by the intersection of said walls, each of said spacing and reinforcing members having an apertured portion disposed between two adjacent slats in one of said walls and having another apertured portion disposed between two adjacent slats at the same level in the other of said walls, each of said pins extending through one of said apertured portions of one of said spacing and reinforcing members and having portions projecting into the bores in the two adjacent slats between which the said spacing and reinforcing member is arranged.

12. A crate comprising two intersecting walls each including a plurality of slats superimposed one above the other when in assembled position, each of said slats having a bore therein and the bores in the slats of each of said walls being disposed in registration or alignment with each other when the said slats are in assembled position, a plurality of pins interconnecting the slats in each of said walls, spacing and reinforcing members arranged at the corner formed by the intersection of said walls, each of said spacing and reinforcing members having an apertured portion disposed between two adjacent slats in one of said walls and having another apertured portion disposed between two adjacent slats at the same level in the other of said walls, each of said pins extending through one of said apertured portions of one of said spacing and reinforcing members and having portions projecting into the bores in the two adjacent slats between which the said spacing and reinforcing member is arranged, the bores in the uppermost and lowermost of the slats in each of said walls

extending only partially therethrough and the bores in the other and intermediate ones of said slats extending entirely therethrough.

13. A crate comprising two intersecting walls each including a plurality of slats superimposed one above the other when in assembled position, each of said slats having a bore therein and the bores in the slats of each of said walls being disposed in registration or alignment with each other when the said slats are in assembled position, a plurality of pins interconnecting the slats in each of said walls, spacing and reinforcing members arranged at the corner formed by the intersection of said walls, each of said spacing and reinforcing members having an apertured portion disposed between two adjacent slats in one of said walls and having another apertured portion disposed between two adjacent slats at the same level in the other of said walls, each of said pins extending through one of said apertured portions of one of said spacing and reinforcing members and having portions projecting into the bores in the two adjacent slats between which the said spacing and reinforcing member is arranged, and means for preventing displacement of the slats in each of said walls from the said pins therein including a removable fastening element extended transversely through each of said walls adjacent the top thereof and bearing upon the uppermost one of said pins therein.

14. A crate comprising two intersecting walls each including a plurality of slats superimposed one above the other when in assembled position, each of said slats having a bore therein and the bores in the slats of each of said walls being disposed in registration or alignment with each other when the said slats are in assembled position, a plurality of pins interconnecting the slats in each of said walls, spacing and reinforcing members arranged at the corner formed by the intersection of said walls, each of said spacing and reinforcing members having an apertured portion disposed between two adjacent slats in one of said walls and having another apertured portion disposed between two adjacent slats at the same level in the other of said walls, each of said pins extending through one of said spacing and reinforcing members and having portions projecting into the bores in the two adjacent slats between which said spacing and reinforcing member is arranged, the bores in the uppermost and lowermost of the slats in each of said walls extending only partially therethrough and the bores in the other and intermediate ones of said slats extending entirely therethrough, and means for preventing displacement of the slats in each of said walls from the said pins therein including a removable fastening element extended transversely through each of said walls adjacent the top thereof and bearing upon the uppermost one of said pins therein.

15. A crate comprising two intersecting walls each including a plurality of slats, each of said slats having a bore therein and the said bores in the slats of each of said walls being disposed in alignment or registration with each other when the slats are in assembled position, separate spacing and reinforcing members arranged at the corner formed by the intersection of said walls, each of said spacing and reinforcing members having an apertured portion extending between two adjacent slats in one of said walls and having another apertured portion extending between two adjacent slats at the same level in the other of said walls, a plurality of pins each inter-

locking at least two adjacent slats in each of said walls, each of said pins having a portion extending across the point between two adjacent slats in one of said walls and through an apertured portion of a spacing and reenforcing member disposed therebetween and having portions

extending into the said bores in the said two adjacent slats.

HARRY C. KEINER,
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ROBERT STODDARD.