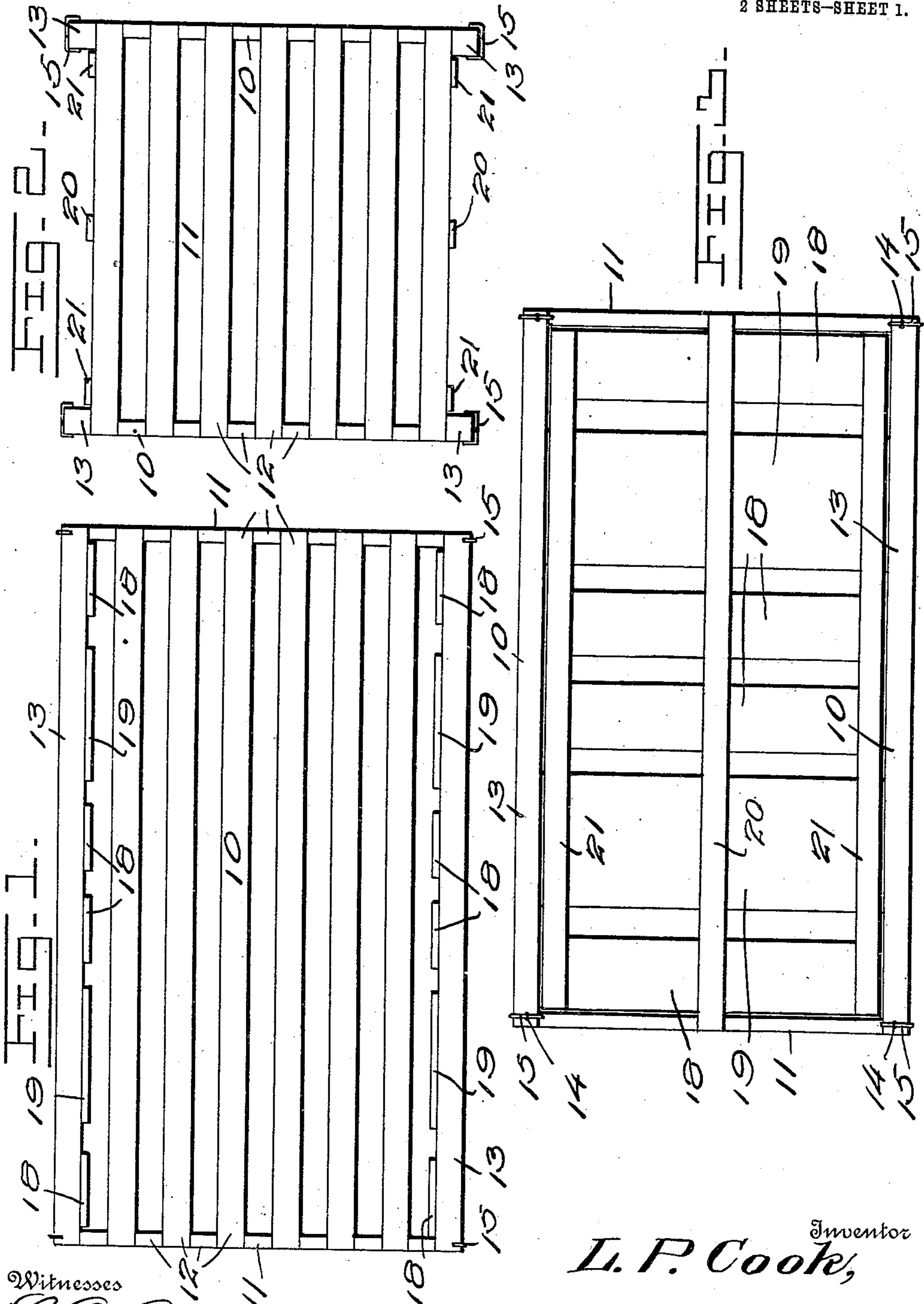


L. P. COOK.
FOLDING CRATE.
APPLICATION FILED APR. 9, 1910.

991,701.

Patented May 9, 1911.

2 SHEETS—SHEET 1.



Witnesses

M. L. Lowry
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L. P. Cook, Inventor

By Woodward & Chandler.

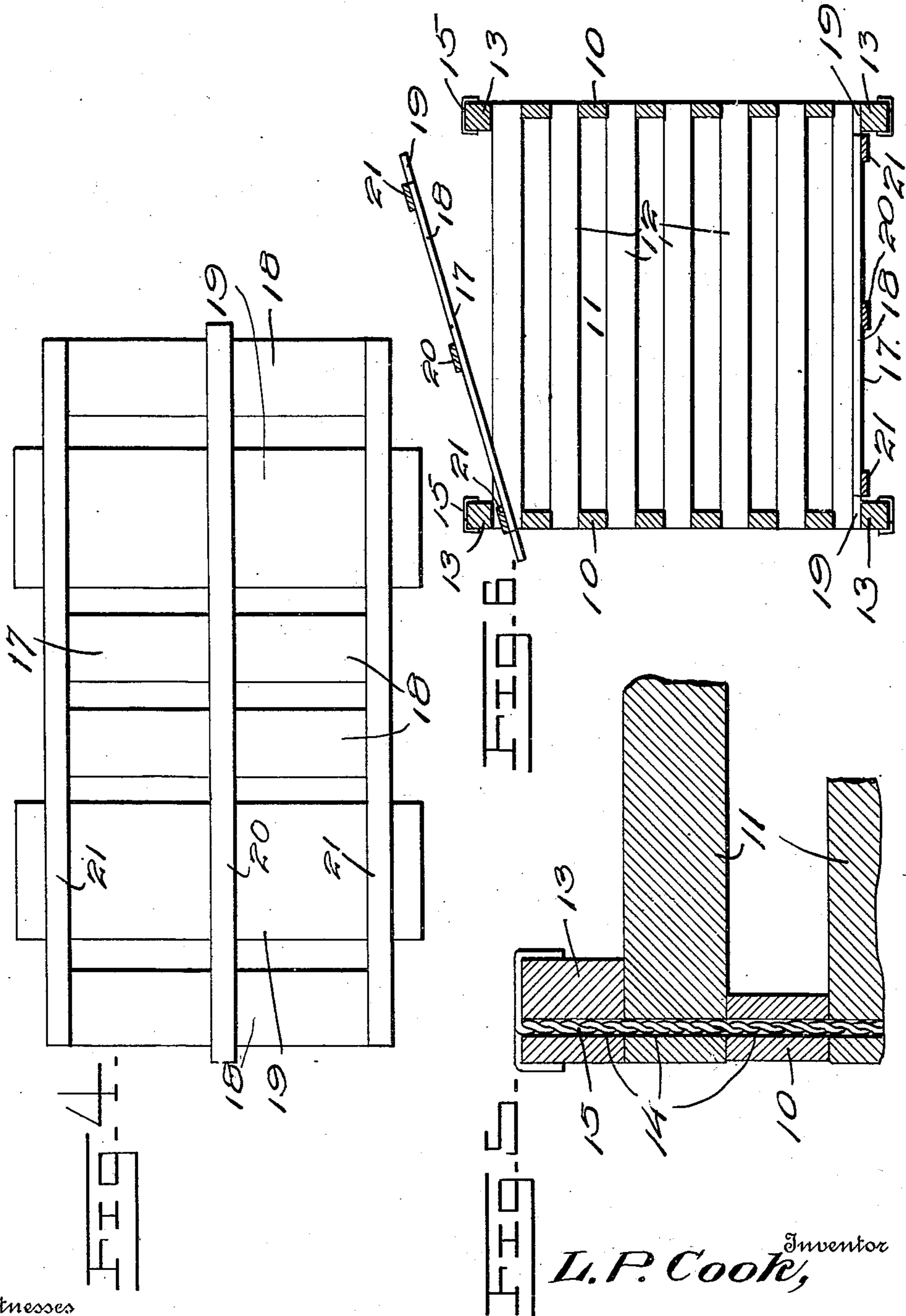
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L. P. Cook, ^{Inventor}
By *Woodward & Chandler*.
Attorneys

UNITED STATES PATENT OFFICE.

LEANDER P. COOK, OF COTULLA, TEXAS.

FOLDING CRATE.

991,701.

Specification of Letters Patent.

Patented May 9, 1911.

Application filed April 9, 1910. Serial No. 554,357.

To all whom it may concern:

Be it known that I, LEANDER P. COOK, a citizen of the United States, residing at Cotulla, in the county of Lasalle and State of Texas, have invented certain new and useful Improvements in Folding Crates, of which the following is a specification.

This invention relates to folding crates, and more particularly to those of the collapsible and knock down type, and has for its object to provide a novel means for engaging a top and bottom detachably with a crate provided with constantly pivoted sides and ends.

A further object is to provide a pivotal connection for the sides and ends arranged to reinforce the engaged portions against liability of splitting.

An important object is to provide detachable top and bottom portions arranged to be held resiliently locked in engaged position without the use of special connections, the top and bottom sections themselves having transverse and longitudinal retaining slats and connecting strips so arranged as to be adapted for resilient locking engagement between slats of which the sides and ends are formed.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings: Figure 1 is a side view, Fig. 2 is an end view, Fig. 3 is a top view, Fig. 4 is a plan view of a modified detachable closure section in detached position, Fig. 5 is a fragmentary sectional view of the connection of the sides and ends, Fig. 6 is a transverse section of the crate showing one of the closure sections in engaged position and the other in introductory position.

Referring to the drawings, there is shown a receptacle comprising pivotally connected sides 10 and ends 11 formed of a plurality of central slats 12, the sides having enlarged outer slats 13. The spaces between the slats of the sides receive the intersecting ends of the slats forming the end portions 11. The extremities of all the slats are provided with vertical passages 14, disposed in registry and receiving commonly a pair of twisted wires 15, the opposite ends of which project outwardly of the upper and lower en-

larged slats 13 and are bent laterally in opposite directions, and inwardly over the sides of the adjacent strips 13, being compressed inwardly thereagainst and bracing it against the liability of splitting as will be readily seen.

With the exception of the use of the twisted wires having their ends extended in opposite directions to brace the strips 13 against splitting, the construction above provided is common in a large number of prior devices.

The top and bottom of the crate is closed by means of the closure sections 17, each similarly formed, and comprising a plurality of transverse thin slats 18, the length of which is the same as the width of the receptacle between the inner faces of the side slats, each section being provided adjacent each end with longer and wider slats 19, of similar material, the length of which is equal to the width of the receptacle between the outer faces of the slats and are arranged to yieldingly project beneath the outer slats 13, as illustrated. The transverse slats 18 and 19 are connected by two longitudinally extending edge strips 21 and one intermediate latch strip 20. The strips 21 are secured to the opposite ends of the strips 17 in a similar relation, the latch slats 19 projecting similarly outward thereof, and the latch strip 20 is secured across the transverse slats, the ends of the strip 20 projecting outwardly beyond the edges of the narrow end slats of the closure sections, and being adapted to project over the slats of the ends for support of the sections when in engaged position, as illustrated.

In use, the sides and ends being assembled as described, the side portion of the closure section outwardly of one of the strips 21 is inserted between the slats 13 and 12 at one side of the top and bottom respectively, from the inside. This insertion should be made until the edge strip 21 is disposed beneath the slat 13. The opposite side of each section is then depressed, the extremities of the latch strip 20 being engaged upon the upper outer end slats beyond the outer edges of the connecting narrow end slats, and serving as a fulcrum to overcome the resistance to the depression of the closure section by the resilient transverse slats 18 and 19. The depression of the sections is continued until the projecting portions of the slats 19 can be forced beneath the adjacent side strip 13,

which when done, the strips 21 spring outwardly from beneath the opposite slats 13, the section being thus held securely against lateral movement by the abutment of the outer edge strip 21 against the opposite side slats 13, while the end transverse slats of the closure section abut against the inner faces of the upper slats of the end 11. When engaged in this manner, the collapsing of the sides and ends is prevented by the rigidity of the closure sections.

It will be seen from the foregoing that an extremely cheap and efficient as well as durable crate is provided which will occupy a minimum amount of space when folded, the assemblage of which will require a minimum amount of time and labor, and which is liable in a minimum degree to become deranged in use.

By the disposition of the extremities of the slats 18 flush with the outer edges of the members 21 the deflection of either side of the closure members is rendered more easy, as if these ends projected beyond the members 21 a greater amount of deflection would be necessary to carry them below the members 13. The shortening of the central slats 18 obviates the liability of their extremities striking against the adjacent central slats 12.

What is claimed is:

1. In a crate, the combination with a plurality of pivotally connected side and end portions formed of intersecting slats of a twisted pivotal strand engaged through said intersecting portions at each corner and extending the full height of the crate thus constructed, the terminal ends of said strand being separated and projecting in opposite directions and in direct and binding contact with the slats to reinforce the same against tendency to split, and further providing

means for preventing the several slats comprising the crate from separating.

2. A crate comprising pivotally connected ends and sides, the latter having openings therethrough adjacent to the upper and lower edges, twisted strands engaged through said intersecting portions at each corner and extending the full height of the crate thus constructed, the terminal ends of said strands being separated and projecting in opposite directions and in direct and binding contact with the slats to reinforce the same against tendency to split, and further providing means for preventing the several slats comprising the crate from separating, a resilient bottom and top for said crate each of which is similarly constructed and composed of two longitudinal contacting strips and a centrally disposed strip, narrow slats secured to the said strips with the projecting ends of the centrally disposed strip projecting a suitable distance beyond the outer edges of the slats, and wide slats also secured to said strips and having their ends projecting a suitable distance beyond the outer edges of the oppositely arranged strips, said wide slats being, positioned at a suitable distance from the narrow end connecting slats, whereby said bottom and top of the crate are yieldingly and detachably located below the upper and lower rails of the crate, to hold the latter in a rigid position when unfolded with the projecting ends of the centrally located slats in direct and binding contact with the end slats of said crate.

In testimony whereof I affix my signature, in presence of two witnesses.

LEANDER P. COOK.

Witnesses:

J. H. GALLMAN,
M. C. COOK.