

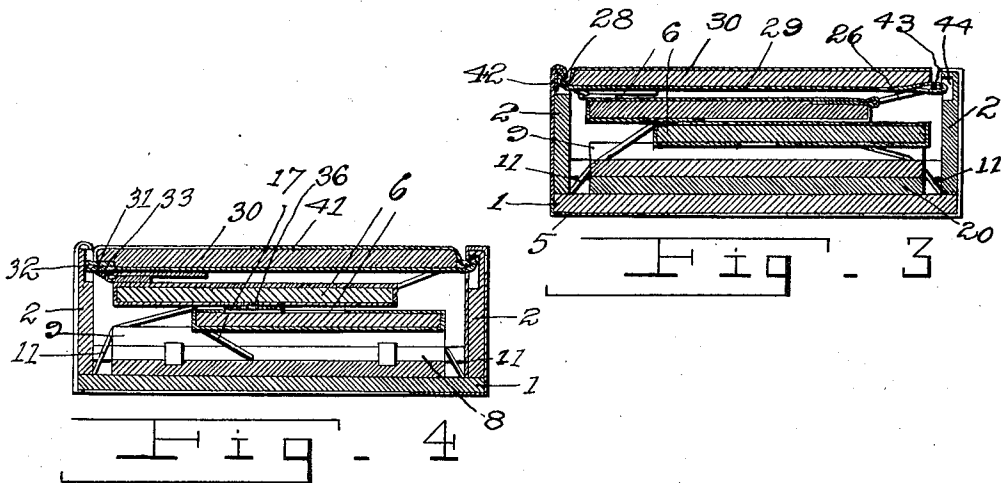
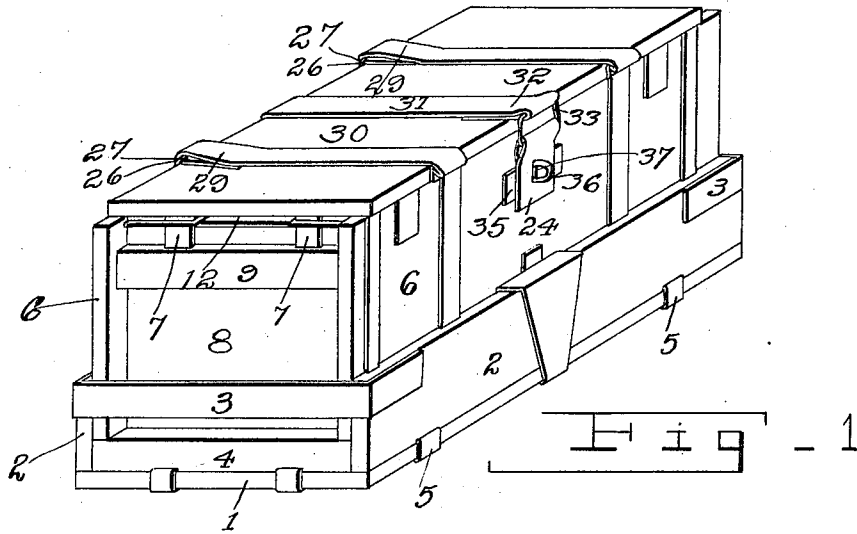
G. M. BROWN.
FOLDING CRATE.

APPLICATION FILED SEPT. 25, 1911.

1,036,555.

Patented Aug. 27, 1912.

3 SHEETS—SHEET 1.



Witnesses

Herbert A. Porter.
H. K. Parsons

Inventor

G. M. Brown

By Harry Eldred Chanale

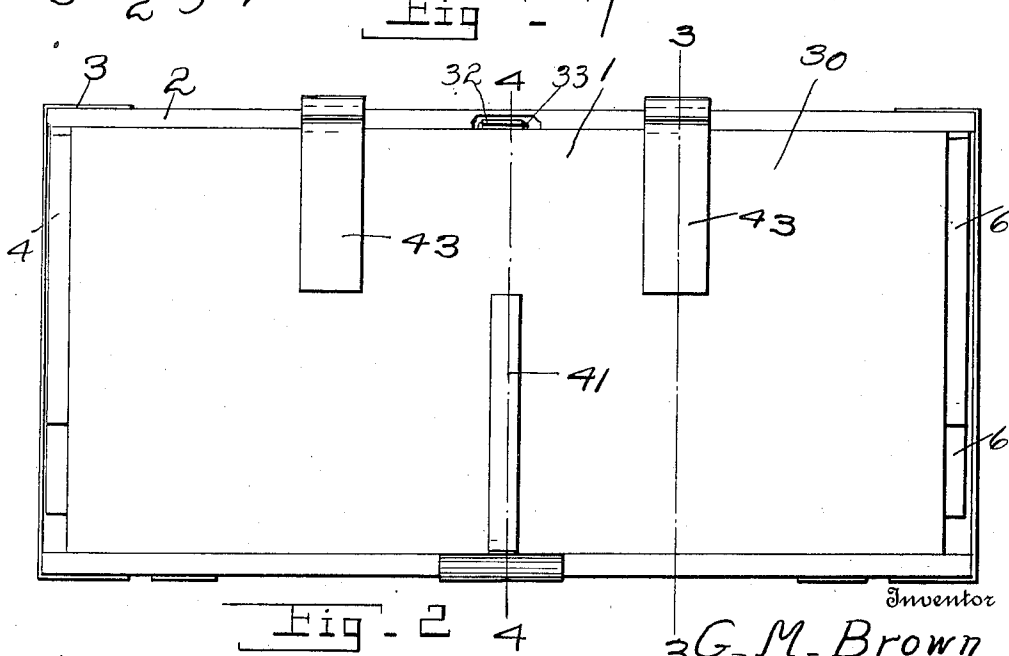
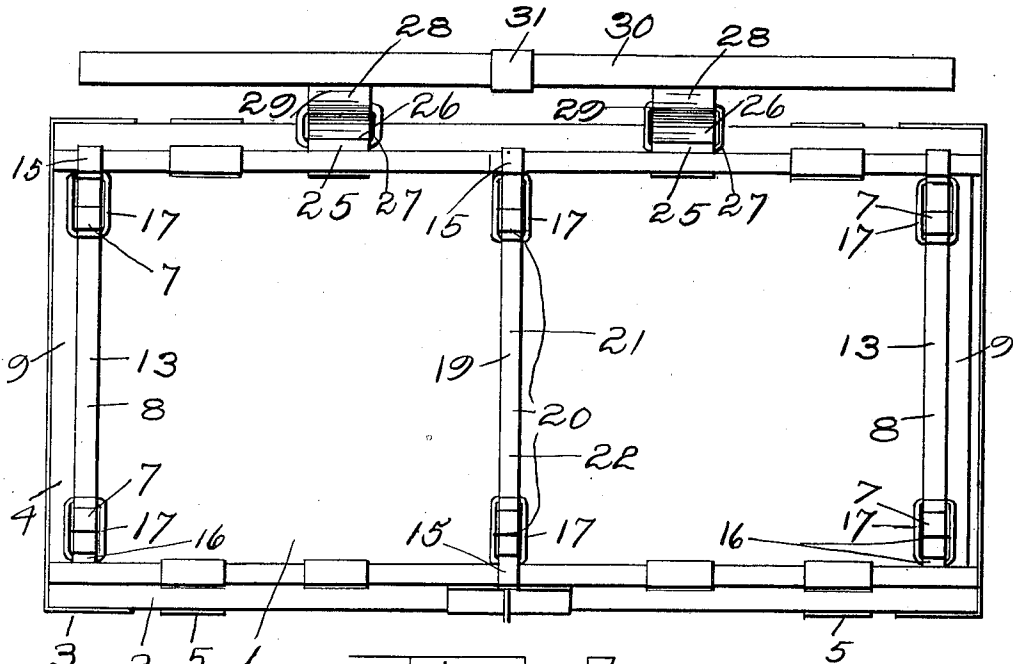
Attorney

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3 SHEETS—SHEET 2.



Witnesses

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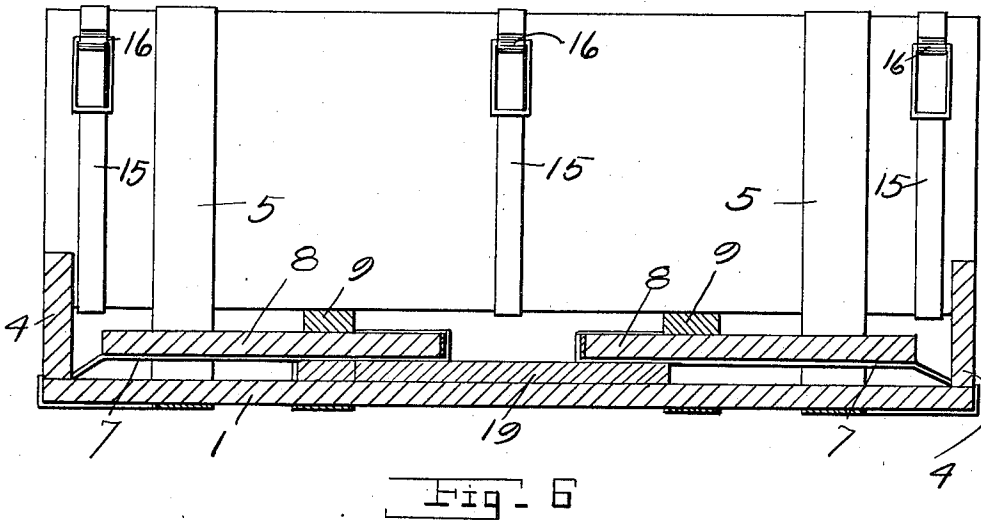
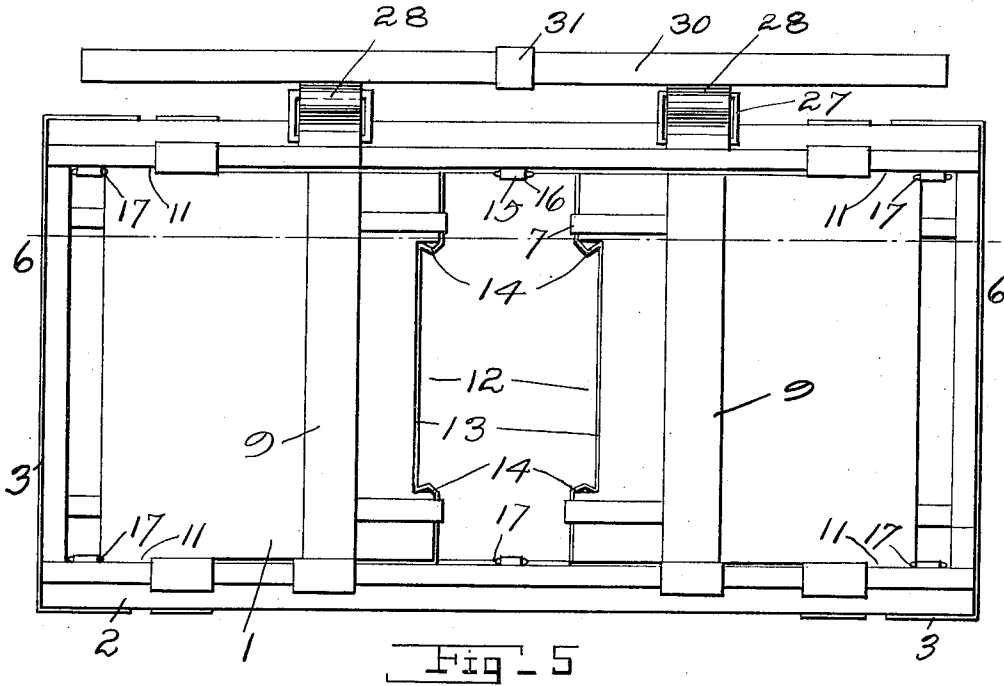
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3 SHEETS—SHEET 3.



Inventor

G. M. Brown

Witnesses

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Attorney

UNITED STATES PATENT OFFICE.

GEORGE M. BROWN, OF SAN BERNARDINO, CALIFORNIA, ASSIGNOR OF FORTY-NINE ONE-HUNDREDTHS TO CHARLES M. STOCKWELL, OF SAN BERNARDINO, CALIFORNIA.

FOLDING CRATE.

1,036,555.

Specification of Letters Patent.

Patented Aug. 27, 1912.

Application filed September 25, 1911. Serial No. 651,141.

To all whom it may concern:

Be it known that I, GEORGE M. BROWN, a citizen of the United States, residing at San Bernardino, in the county of San Bernardino and State of California, have invented certain new and useful Improvements in Folding Crates, of which the following is a specification.

My invention relates to improvements in folding crates, and has for its leading object the provision of an improved form of crate of this character which may be readily collapsed when not in use to facilitate the packing away of the crate in small space or the reshipment of the crate to its original owners when emptied and which will thus prolong the life of the crate and enable the same to be used a number of times instead of being broken up and destroyed as is the case with ordinary noncollapsible crates.

The further object of my invention is the provision of improved and novel flexible connecting or hinged members for securing the various parts to the base in such manner as to permit of considerable relative movement of the base and parts when the same are being folded together.

Another object of my invention is the provision of improved means for securing the various parts in collapsed position and also in securing said parts in extended or operative position.

Other objects and advantages of my improved collapsible crate will be readily apparent by reference to the following description taken in connection with the accompanying drawings and it will be understood that I may make any modifications in the specific structure shown and described within the scope of my claim without departing from or exceeding the spirit of my invention.

Figure 1 represents a perspective view of my crate in assembled position. Fig. 2 represents a top plan view of the same in closed position. Fig. 3 represents a sectional view on the line 3—3 of Fig. 2. Fig. 4 represents a cross sectional view on the line 4—4 of Fig. 2. Fig. 5 represents a plan view of my crate in partially opened position. Fig. 6 represents a longitudinal sectional view on the line 6—6 of Fig. 5, and Fig. 7 represents a top plan view of the complete assembled crate with the cover

swung open to permit of a view of the interior of the crate.

In the drawings, in which similar characters of reference are employed to denote corresponding parts throughout the several views, the numeral 1 designates the bottom of the crate having rising therefrom the side portions 2 connected at their upper portions by the end straps 3 and at their lower portions by the end boards 4 which rest on the bottom 1. Extending across the bottom near each end are the metal brace straps 5 which are bent around the edges of the bottom and extend beneath the side portions 2 and project upward in the interior of the crate. The upper portion of the said straps 5 are secured to the inner faces of the folding or collapsible side sections of the crate, the straps 5 being reversely bent over and secured to the upper edges of the side sections. Similar straps 7 are secured to the bottom near its ends and extend reversely therearound and are secured to the folding end sections 8 of my crate, said end sections 8 being reinforced near their top by the battens 9. By reference to the drawings, it will be observed that the sides 6 have their lower edges spaced above the bottom of the crate and have inclined recesses 10 formed in said edges in which the straps 5 fit.

The end sections 8 are formed with laterally projecting shoulder portions 11 which fit beneath the sides 6 when the crate is assembled and serve to hold the sides 6 upward in correct position. To lock the end sections in raised position between the sides and thus to hold the sides apart, I form centrally of the ends in their upper edge the recesses 12 faced by the resilient strips 13 having their ends slidably engaged beneath the bends of the straps 7 and having inwardly extending bossed portions 14. Extending around the ends of the sides 6 are the bracing straps 15 having near the upper edges of the sides 6 the offsets 16 in which are engaged and pivotally secured the loops 17 adapted to span the upwardly projecting end portions 18 of the ends 8 and to be swung down past the bosses 14 which serve to resiliently hold the loops in position to brace and secure the ends, as is clearly illustrated.

To divide the crate, as when it is used to

contain eggs and to further brace the sides 6, I provide the partition 19 having the upwardly projecting portions 20 providing the recess 21 faced by the plate 22 similar to the plates 14 and adapted to engage the loops 23 supported by the intermediate bracing straps 24 of the sides.

Secured to the sides 6 are the straps 25 providing the loops 26 for engaging the hinge links 27 which are also engaged in the loops 28 of the straps 29 carried by the top 30. Said top has secured thereto an additional strap 31 having a loop 32 receiving the link 33 bearing the depending plate 34. A bracket plate 35 secured to one of the sides 6 serves to rotatably support the ends of the staple member 36 adapted to be engaged in the slot 37 of the plate 34 when the crate is open or to be swung against the side 6 out of the way when it is desired to collapse the crate.

To collapse the crate it is merely necessary to swing the links 17 and 24 upward out of engagement with the partition and ends and to then place the partition in the bottom of the crate and swing the ends down thereupon. I then swing the side bearing the clasp member 36 downward upon top of the ends 8 and lastly swing the other side member to lie upon top of the first. To secure the parts in folded position, I secure to one of the side sections 2 the brace plate 38 adjacent the recess or socket 39 for receiving the hooked end 40 of the brace 41. Said side 2 also has formed therein the recesses 42 for receiving the loop ends 28. The brace members 29 are formed with hook portions 43 which fit downward into the recesses 44 of the second side member 2, while to engage the hooks 43 and lock the same and thus the cover sections 30 in closed position, I secure to the side 2 the resilient plates 45 having hooks 46 for interlocking engagement with the hooks 43 as is most clearly illustrated in Fig. 3.

From the foregoing description taken in connection with the accompanying drawings, the construction of my improved collapsible or folding crate should be readily understood, and it will be seen that I have provided an extremely simple and durable crate embodying but few parts which may be readily placed in condition for use or may be easily folded into collapsed position and which will have few parts all adapted to be contained within the solid or unfolding base portion of the crate and which will prove highly desirable in every particular.

I claim:

A collapsible crate including a bottom having fixed side and end portions, side sections having their ends resting upon the end portions, flexible straps secured to the bottom at their lower ends and to the side sections at their upper ends, end sections arranged interiorly of the end portions, flexible straps secured to the bottom and at right angles to the first named straps and having their upper ends secured to the end sections, recesses formed in the free ends of the end sections, resilient bosses mounted in the recesses, loops carried by the side sections and adapted to engage the bosses to hold the end and side sections in their unfolded position, a socket carried by one of the side sections, resilient hook plates carried by the other side section, a cover hinged to one of the side sections, a pair of hooks carried by one edge of the cover, a single hook carried by the other edge, whereby when the side and end sections are folded the single hook engages said socket and the pair of hooks engage the hook plates to hold the crate against accidental unfolding.

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

GEORGE M. BROWN.

Witnesses:

LE ROY S. MESSMER,
RUHR McCUNE.