

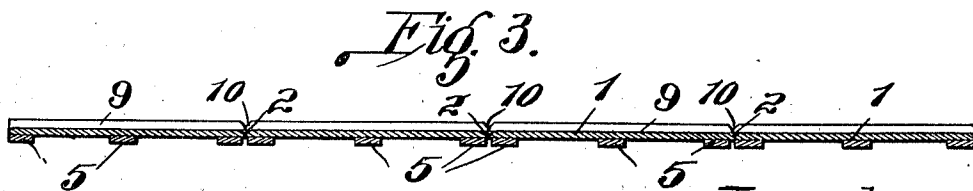
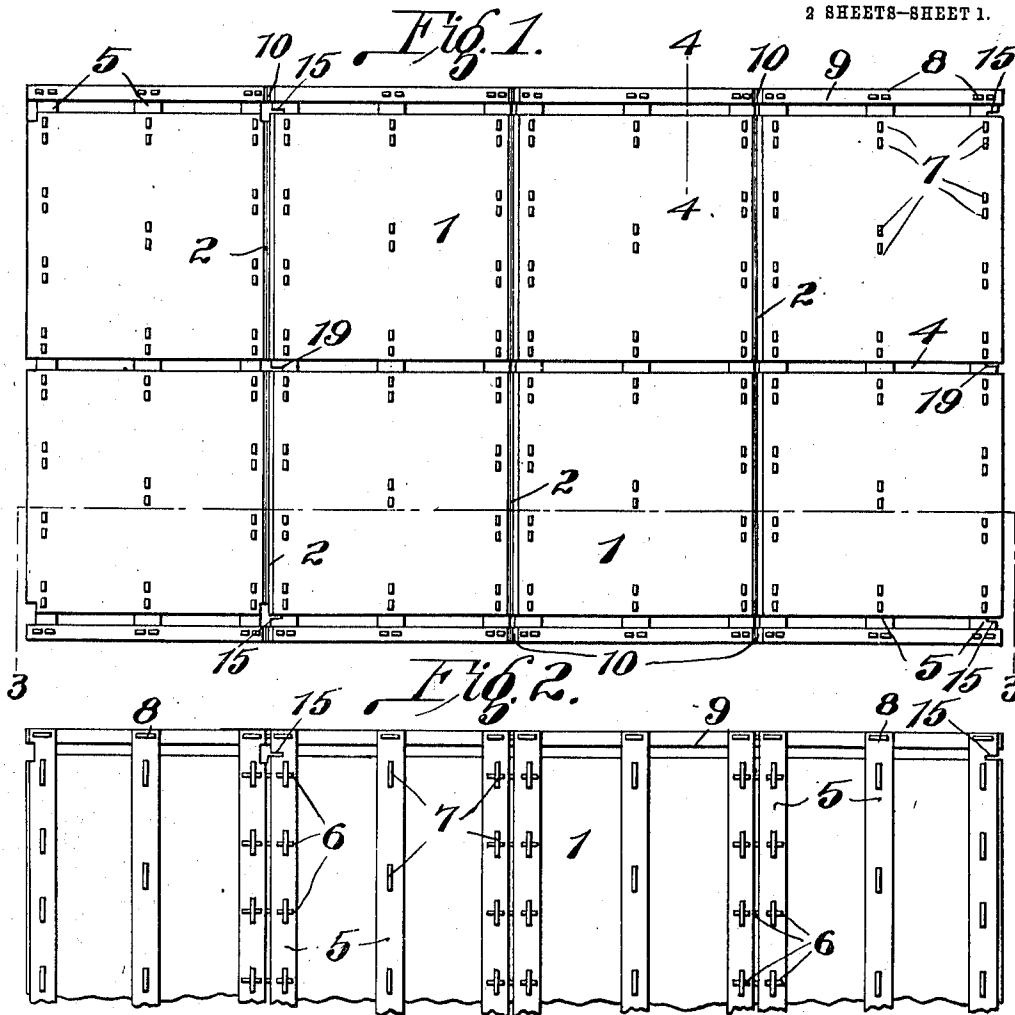
G. M. WALKER.
KNOCKDOWN SHIPPING CRATE.

APPLICATION FILED JAN. 20, 1908. RENEWED SEPT. 8, 1910.

988,414.

Patented Apr. 4, 1911.

2 SHEETS—SHEET 1.



Inventor:-

Attest.

Edgar T. Farmer.

M. Smith

Fig. 4. Gaines M. Walker.



By
Kigdon Zougan.
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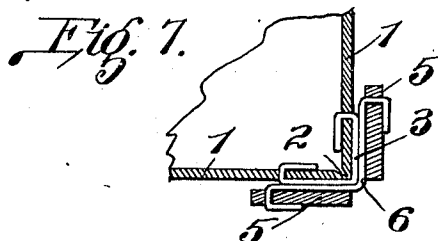
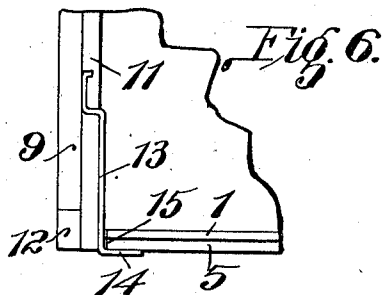
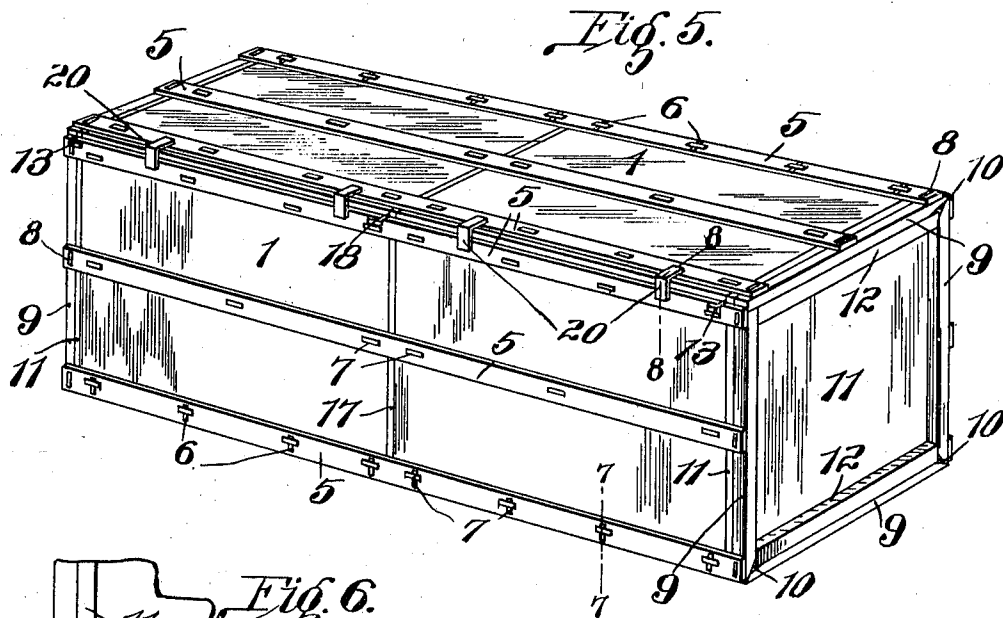


Fig. 8.

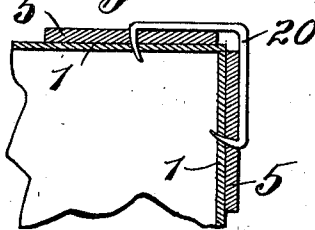


Fig. 9.

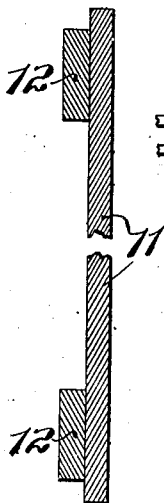
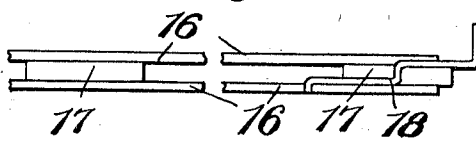


Fig. 10.



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UNITED STATES PATENT OFFICE.

GAINES M. WALKER, OF ST. LOUIS, MISSOURI.

KNOCKDOWN SHIPPING-CRATE.

988,414.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Application filed January 20, 1908, Serial No. 411,864. Renewed September 8, 1910. Serial No. 581,095.

To all whom it may concern:

Be it known that I, GAINES M. WALKER, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Knockdown Shipping-Crates, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a knock down shipping crate, particularly adapted for use in shipping eggs and vegetables, and which crate is constructed in knock down form in order that it will occupy a comparatively small amount of space while being transported, and which crate comprises a minimum number of parts which are readily fitted together when assembled for use; and when set up, said crate being strong and substantial in order to withstand rough usage due to transportation and handling.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in the claims, and illustrated in the accompanying drawings, in which:—

Figure 1 is a plan view of the body portion of my improved crate, the same being open or in knock down form, and which view shows the inside of the body; Fig. 2 is a plan view of a portion of the body, and showing the outside of the body; Fig. 3 is a longitudinal section taken on the line 3—3 of Fig. 1; Fig. 4 is an enlarged detail section taken on the line 4—4 of Fig. 1; Fig. 5 is a perspective view of the crate assembled and set up for use; Fig. 6 is a detail plan view of one corner of the crate showing the fastening devices for uniting the end and side walls of the crate; Fig. 7 is an enlarged detail section taken on the line 7—7 of Fig. 5; Fig. 8 is an enlarged detail section taken on the line 8—8 of Fig. 5, and showing the fastening devices utilized for connecting the top with one of the sides of the crate; Fig. 9 is a vertical section of one of the end walls or panels of the crate; Fig. 10 is a plan view of a portion of the partition located at the center of the crate.

The body of the crate comprises a plurality of longitudinally extending sections 1, of thin material, such as wood veneer, and said sections being provided with transversely disposed scores or shallow V-shaped

grooves 2, at proper intervals apart; so that when said sections are bent at said scores at right angles to one another, a crate which is perfectly square in cross section is formed. Staples 3, of ductile material, are arranged on the outside faces of the sections 1, and said staples 3 extend across the scores 2, and the ends of said staples extending through the body of the veneer and being clamped to the inside face thereof, thus providing ductile hinges for the portions of the sections 1 separated by the scores 2.

A narrow space 4 is formed at the center of the body, which space extends longitudinally the entire length of said body, and which space receives the edges of the partition when the crate is set up.

Transversely disposed on the outside faces of the sections 1 forming the body of the crate are reinforcing strips 5, and a pair of said strips being arranged immediately adjacent and on each side of the scores 2; and there being single strips arranged midway between said pairs of strips.

The members of each pair of strips 5 which are arranged opposite and adjacent the scores 2 are joined by ductile metallic staples 6, the ends of which are embedded in said strips, thus providing hinges for said strips when the same move with a hinging action relative one another. These strips are fastened to the sections 1 by means of staples 7, or similar fastening devices, and both ends of all the strips are extended slightly beyond the side edges of the sections 1; and fixed to said extended ends, by means of staples 8, are longitudinally extending reinforcing strips 9, which are approximately twice the thickness of the sections 1, and these reinforcing strips 9 are provided with scores 10, which correspond with the scores 2, thus permitting the reinforcing strips 9 to readily bend with the sections 1 when the same are folded into position to form the crate.

The end walls of the crate comprise rectangular sections 11, of wood, or analogous material, the edges being of such thickness as that they will readily fit in the spaces between the reinforcing strips 9 and the side edges of the sections 1 when the crate is set up; and secured to the outside face of each end wall, at the top and bottom, are reinforcing strips 12.

Hooks 13 are fixed to the inside faces of the end walls, at the upper corners thereof,

and which hooks project slightly beyond the side edges of said end walls, and the ends of said hooks being bent laterally, as designated by 14; and when the crate is set up, 5 said hooks engage in notches 15 formed in the corresponding reinforcing strips 5, and thus said hooks maintain the tops of the side walls of the crate in position when said crate is set up.

10 The partition for the crate comprises a pair of veneer sections 16, and fixed thereto and arranged between said sections are the vertically disposed strips 17, the ends of which project slightly beyond the top and 15 bottom edges of the sections 16, in order to fit between the spaces 2 between the top and bottom of the crate when set up.

The upper corners of this partition are provided with hooks 18, counterparts of the 20 hooks 13, the ends of which hooks 18 engage in notches 19 formed in the reinforcing strips 5 at the tops of the side walls of the crate.

When the crate is set up for use, the free 25 edge of the top of said crate is secured to the upper edge of the adjacent side wall by means of staples 20, or similar fastening devices.

I claim:—

30 1. The herein described knock down shipping crate, comprising a body formed of thin sections of material provided with scores at the points where said body is to bend, ductile fastening devices secured to the 35 body and arranged transversely relative to the scores, reinforcing strips transversely disposed on the outer face of the body and extending the entire width thereof, and certain of which reinforcing strips cover the 40 ductile fastening devices, ductile staples uniting the pairs of strips arranged adjacent the scores, reinforcing strips fixed to the

ends of the first mentioned reinforcing strips and spaced apart from the ends of the sections of material forming the body of the 45 crate, and end walls arranged at the ends of the body when the same is set up for use, and the edges of which end walls occupy the spaces between the edges of said body and the second mentioned set of reinforcing 50 strips.

2. A knockdown shipping crate, comprising a body formed of a pair of sections of thin material, which sections are scored 55 transversely on their inner faces at the points where said body is bent, ductile fastening devices secured to the body and extending transversely across the scores, reinforcing strips transversely disposed on the 60 outer face of the body, and there being a pair of reinforcing strips arranged adjacent and on each side of the scores formed in the body, and ductile staples uniting the pairs of strips arranged adjacent the scores.

3. A knockdown shipping crate, comprising a body formed of a pair of sections of thin material, which sections are scored 65 transversely on their inner faces at the points where said body is bent, ductile fastening devices secured to the body and extending transversely across the scores, reinforcing strips transversely disposed on the 70 outer face of the body, there being a pair of reinforcing strips arranged adjacent and on each side of the scores formed in the body, 75 ductile staples uniting the pairs of strips arranged adjacent the scores.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

GAINES M. WALKER.

Witnesses:

M. P. SMITH,
E. L. WALLACE.