

J. E. MAHONEY.

GRATE.

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933,911.

Patented Sept. 14, 1909.

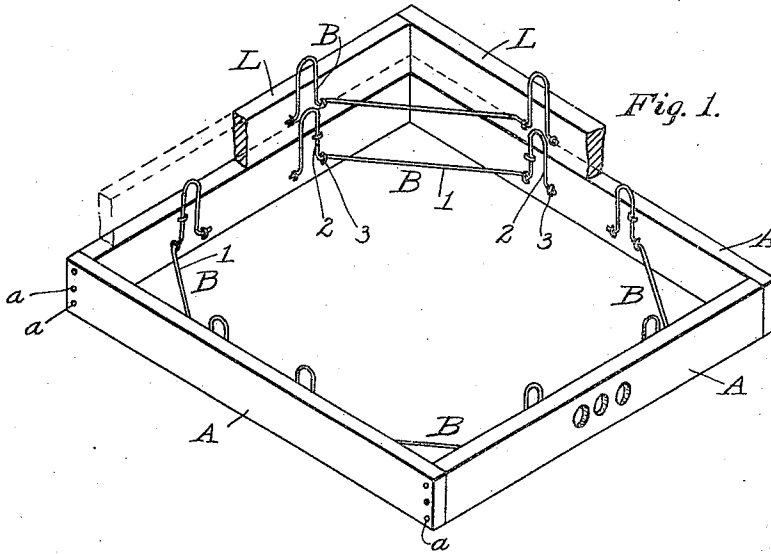


Fig. 1.

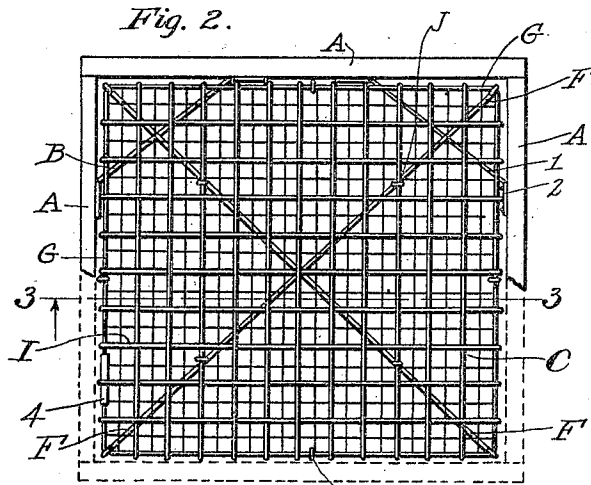


Fig. 2.

Fig. 5.

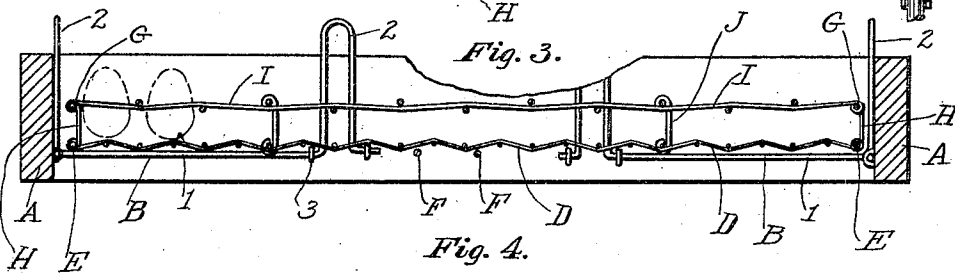
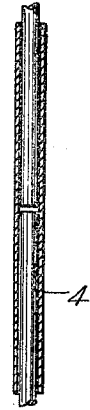
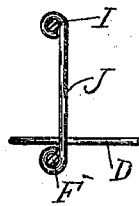


Fig. 3.

Fig. 4.



Witnesses,

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CRATE.

933,911.

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To all whom it may concern:

Be it known that I, JAMES E. MAHONEY, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Improvement in Crates, of which the following is a specification, reference being had to the accompanying drawing.

My improvement relates particularly to crates used for storing and shipping eggs, fruit, and other similar articles or products.

The object of the invention is to produce a crate which may be treated as one of any desired number of sectional units adapted to be stacked upon each other, all the parts of the crate being adapted for easy and economical construction and for efficient interengagement with other like crates treated as sectional units.

In the accompanying drawings, Figure 1 is a perspective view of a frame of a crate embodying my improvement; Fig. 2 is a plan of such a crate, a portion of the frame being broken away; Fig. 3 is an upright cross section on the line 3—3 of Fig. 2; Fig. 4 is a sectional elevation showing one of the upright stays of the tray; Fig. 5 is a detail sectional view illustrating the manner of joining the ends of the border wires of the tray.

Each sectional unit may be regarded as a crate, or a plurality of such sectional units may be regarded as constituting a crate. Each sectional unit consists of a shallow rectangular open frame and a rectangular tray adapted to rest entirely within the walls of said frame.

Referring to said drawings, A, A, A, A are the side pieces of the rectangular frame of one of the unit sections. The ends of said side pieces are joined to each other in any suitable manner, as by means of nails or screws, *a, a*. And said frame is braced in each corner by a wire brace piece, B, which has a horizontal body, 1, and the ends of which are bent into inverted U-form members, 2, which rest flatwise against the inner faces of the adjacent side pieces, A, and project above the upper edges of said side pieces. Said U-shape members and the ends of said body, 1, are firmly joined to the adjacent side pieces, A, by any suitable means, as, for example, staples, 3. The body, 1, is placed low enough to make room for the tray to enter above said bodies and rest upon the latter and be entirely below the upper edges of the

side pieces, A. Thus it will be seen that said brace pieces perform two functions—(1) bracing the frame, and (2) forming supports for the tray. And, as will be hereinafter described, said brace pieces perform a third function—serving as standards to engage the side pieces of a like superposed frame and retain it in position. And it will be observed that said brace pieces are unitary structures, the body, 1, and the U-shape pieces, 2, being formed of a single piece of wire, and that said pieces may be easily and economically manufactured and easily and cheaply applied to the frame.

C is the tray of the crate. This is preferably divided into compartments, each of which is adapted to receive one egg or one piece of fruit or other article. The floor of said tray is composed of a flat wire netting, D, provided with a strong, rectangular border wire, the meshes of said wire netting being small enough to prevent the passage of articles which are to rest in the tray. The meeting ends of the border wire are secured by a sheet metal sleeve, 4, as shown in Fig. 5. Two supporting and bracing wires, F, extend diagonally across each other and across the lower surface of the wire netting and have their ends attached to the border wire, E, at the corners of the tray. Said bracing wires may be regarded as a part of the fabric which constitutes the bottom of the tray.

At a short distance above the border wire, E, is a similar rectangular border wire, G, supported by short upright wire standards, H. Parallel cross wires, I, extend across the rectangular frame formed by the border wire, G, in two directions, and have their ends bent around the border wire, so as to divide the space within said border wire into many rectangular spaces or compartments, each of which is adapted to hold an egg or other similar article. Said cross wires are preferably interwoven, each passing over one and then under the other of the cross wires extending in the other direction, whereby a wire fabric of large mesh is formed.

Within the space inclosed by the border wires, E and G, the fabric formed by the cross wires, I, and the bottom of the tray formed by the wire netting, D, and the bracing wires, F, may be joined to each other by any desired number of stays, J, secured to said upper fabric and to said bottom. The drawings show four such stays.

A second crate identical with the one already described may be set upon the latter, the side pieces, L, L, thereof resting by their lower edges upon the upper edges of the side pieces, A, A, A, A, of the first frame, the corresponding upright faces of the side pieces of the one frame being in the same planes with the corresponding faces of the upper frame, and the upper ends of the U-shape members of the frame, B, B, B, B, bearing against the inner faces of the side pieces, L, L, and forming standards or stops for holding said second frame in position upon the first frame. The second frame, being identical with the first frame, as above stated, has similar U-shape members for engaging a third frame identical with the first and second. Thus, it will be seen that any desired number of said frames may be stacked upon each other and all held against lateral shifting.

It will be understood that for some articles or goods the tray need not be divided into compartments.

I claim as my invention:

1. A crate comprising a shallow unit frame consisting of side pieces and corner braces, standards rising above the inner faces of said frame pieces, and a tray supported by said corner braces and approximately filling said frame, substantially as described.

2. A crate comprising a shallow unit frame consisting of side pieces and unitary brace pieces embodying standards rising above the edges of the side pieces, and a tray supported by said brace pieces and approximately filling said frame, substantially as described.

3. A crate comprising a shallow unit frame consisting of side pieces and unitary brace pieces embodying U-shape standards rising above the edges of the side pieces, and a tray supported by said brace pieces and approximately filling said frame, substantially as described.

4. An apparatus of the nature described, said apparatus comprising a plurality of sectional units, each unit consisting of a frame and a tray approximately filling said frame, and each such frame being provided with unitary brace pieces and U-shape standards rising above the frame, said brace pieces extending beneath and supporting the tray, substantially as described.

In testimony whereof I have signed my name, in presence of two witnesses, this fifteenth day of June, in the year one thousand nine hundred and eight.

JAMES E. MAHONEY.

Witnesses:

PHILLIP R. HIXSON,
FRED W. IVEY.