

No. 827,028.

PATENTED JULY 24, 1906.

H. H. MAY.
FOLDING GRATE.

APPLICATION FILED MAR. 17, 1906.

2 SHEETS—SHEET 1.

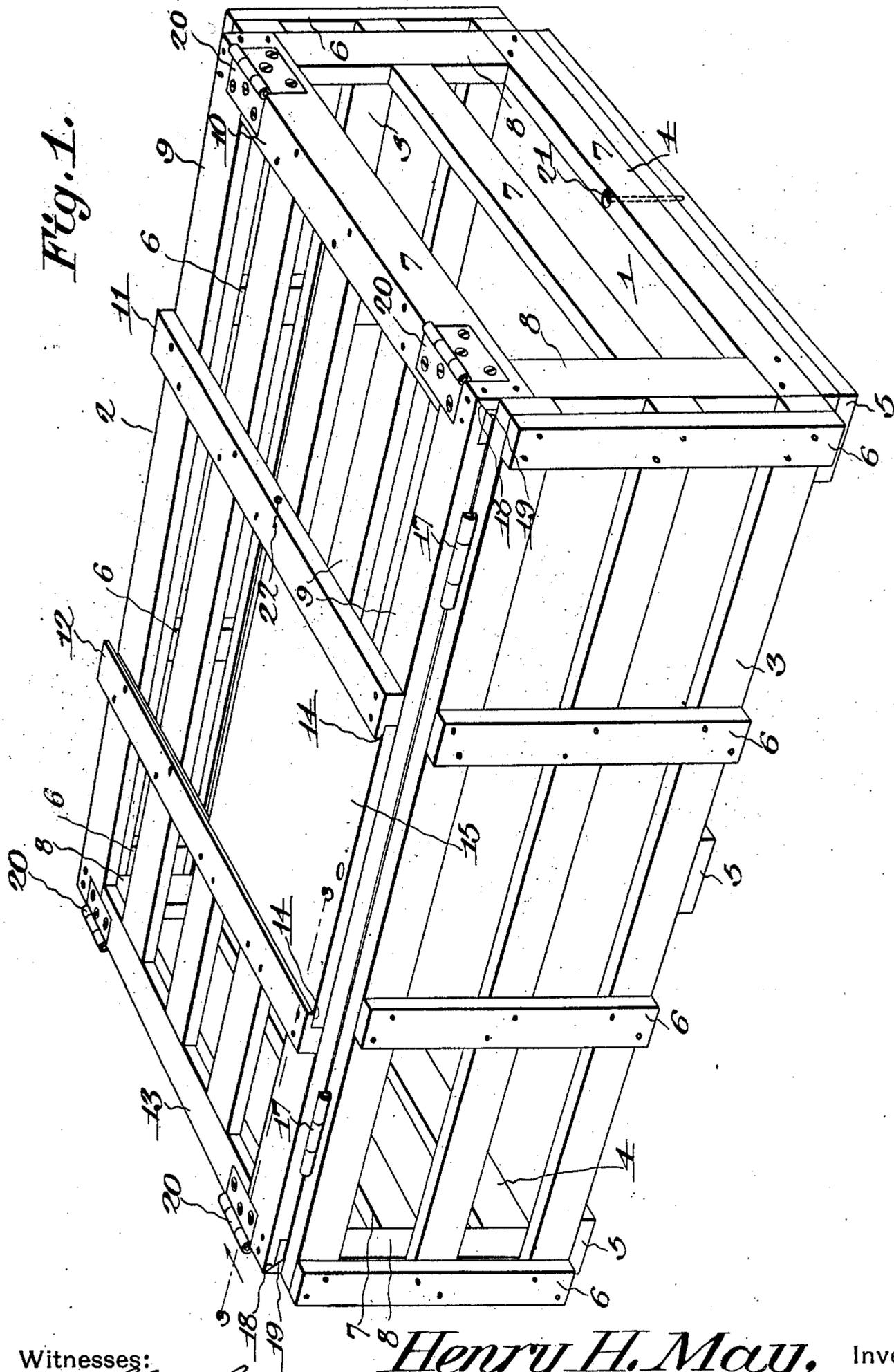


Fig. 1.

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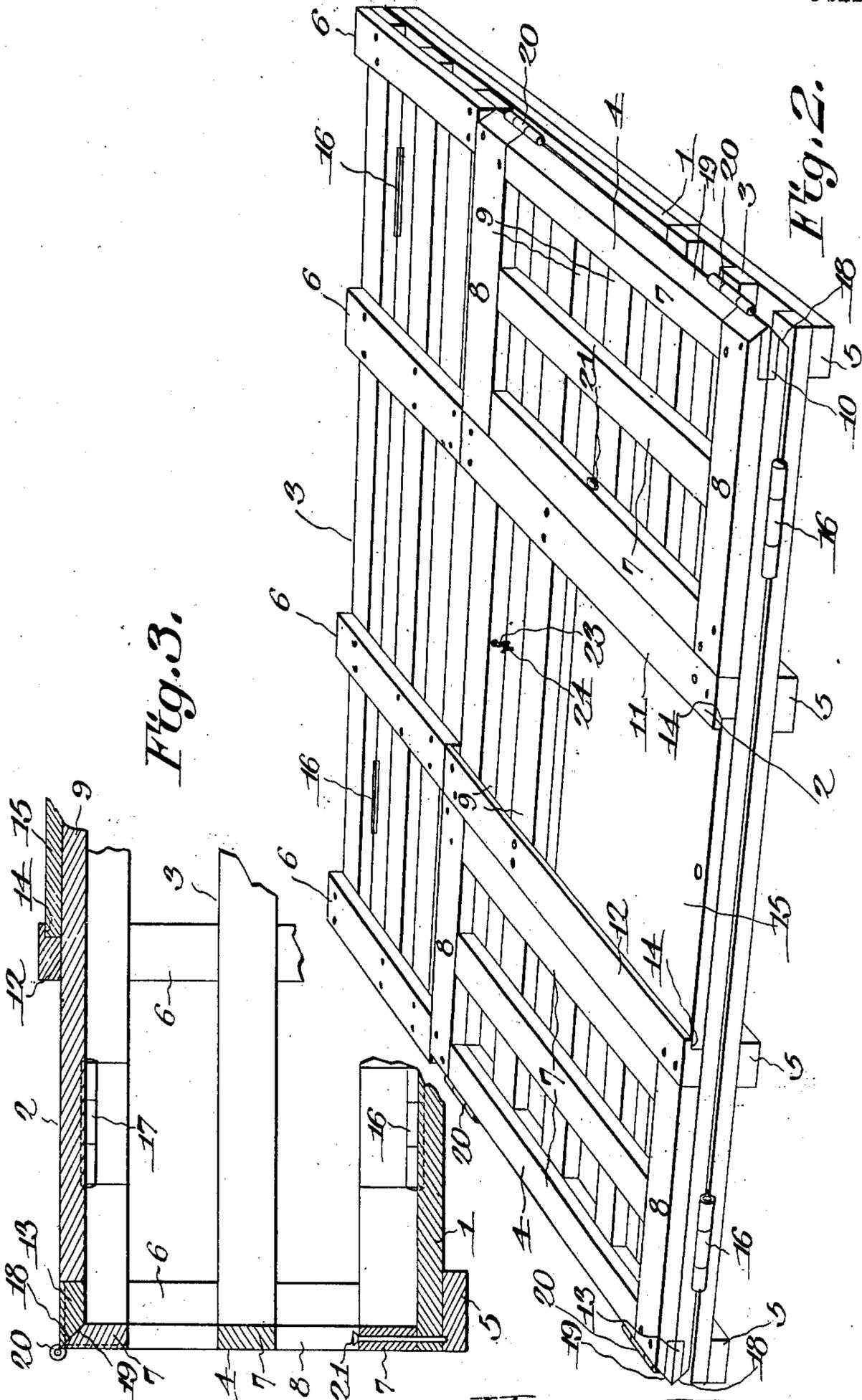
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

HENRY H. MAY, OF NEW ALBIN, IOWA, ASSIGNOR OF ONE-HALF TO
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FOLDING CRATE.

No. 827,028.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed March 17, 1905. Serial No. 250,633.

To all whom it may concern:

Be it known that I, HENRY H. MAY, a citizen of the United States, residing at New Albin, in the county of Allamakee and State of Iowa, have invented a new and useful Folding Crate, of which the following is a specification.

This invention relates generally to folding crates, and particularly to one adapted for use in shipping poultry.

The object of the invention is to provide a simple and novel form of folding crate in which the parts shall be so constructed and combined as to present the greatest stability in use with a minimum danger of breakage and which may be folded perfectly flat for purpose of reshipment.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a folding crate, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective exhibiting the crate as it appears when set up for use. Fig. 2 is a similar view showing the crate knocked down for reshipment. Fig. 3 is a sectional detail view of one corner of a crate, taken on the line 3-3, Fig. 1, and looking in the direction of the arrow thereon.

The crate comprises a bottom 1, top 2, sides 3, and ends 4. The bottom is herein shown as constructed solid, although, if preferred, it may be composed of slats, and is strengthened by transverse battens 5, of which there are three shown, although this number may be increased if found necessary or desirable.

The top, sides, and ends are shown as open-work structures, constructed, preferably, of slats of wood, and the sides are reinforced by vertical battens 6, secured exteriorly thereof, although, if preferred, they may be arranged interiorly of the crate if found advantageous. Each end 4 is shown as composed of three transverse slats or members 7, secured to vertical slats or members 8, preferably by having their terminals rabbeted to overlap, and are secured together in any suitable manner. As herein shown, the slats 7 and 8 all occupy the same plane; but, if preferred, the upper and

lower slats may be disposed exteriorly of the slats 8 and still be within the scope of the invention. The top 2 is constructed of longitudinal slats 9 and transverse slats 10 and 13 and door-guides 11 and 12, secured to the slats 9 and serving to brace them against yielding. A number of the slats 9 terminate with the guides 11 and 12, which latter are rabbeted on their opposed faces, as shown at 14, to receive a sliding door 15, by which ingress may be had to the interior of the crate.

The sides are connected to the bottom by pairs of hinges 16, and the top is connected with the sides by pairs of hinges 17, the leaves of the hinges being disposed on the interior of the crate, thereby to permit the structure to be folded out flat, as shown in Fig. 2.

In order to hold the crate set up, the ends fit between the sides, as clearly shown in Fig. 1, the end slats 10 and 13 of the top being beveled at 18, and the upper slats 8 of the ends being similarly beveled at 19 for this purpose, the ends and top being held combined by hinges 20, the leaves of which are disposed exteriorly of the crate, thus to permit the ends to be folded over upon the top, as shown in Fig. 2. When the ends are in the position shown in Fig. 1, they will lie flush with the terminals of the sides, and thus present rigid braces, which will prevent any collapsing of the sides and top. To prevent the ends from moving when the crate is set up, locking-pins 21 are employed which pass through the lower slats 7 and into the bottom, as clearly shown in Figs. 1 and 3. When the crate is collapsed, as shown in Fig. 2, the ends are folded over upon the top, and the pins 21 engage orifices 22 in the guides 11 and 12, and thus securely hold the parts combined. To prevent the sides from lifting or becoming separated while in transit, there is a hook 23 provided, which is carried by one of the slats 9 and engages with a staple 24, arranged in the floor of the crate adjacent to one side thereof.

When the crate is folded or knocked down, one side rests upon the bottom, the top rests upon the other side, and the two ends are folded in over the top, forming thereby a rectangular or quadrilateral structure, all the edges of which are bounded by one perimeter.

By the manner in which the parts of the crate are constructed and assembled a struc-

ture that will be cheap and readily manufactured is produced and one that will withstand rough usage without becoming damaged. Furthermore, by the manner of combining
 5 the ends with the top and by their coaction with the inner walls of the sides the crate when set up is positively held against collapsing, thereby avoiding the use of hooks or locking devices, such as are commonly employed
 10 in articles of this character.

Having thus described the invention, what is claimed is—

1. A crate comprising a bottom, a top, sides and ends, hinges connecting the bottom,
 15 sides and top and being so located that one side may assume a position in the plane of the bottom, and the opposite side may assume a position in the plane of the top, said top and bottom and their respective aligned
 20 sides adapted to come together when the crate is knocked down, said ends being hinged to the top in such manner as to swing up over the top and lie in the same plane, a locking device for holding the parts in

knocked-down positions, and locking devices for fixing the ends in set-up positions upon the bottom, and for fixing the ends in
 25 knocked-down positions upon the top.

2. A crate comprising a bottom, a top, sides and ends, hinges connecting the bottom,
 30 sides and top and having their leaves disposed interiorly of the crate, hinges connecting the ends and top and having their leaves disposed exteriorly of the crate, door-guides carried by the top and provided with locking
 35 devices that are adapted to engage with orifices in the ends and the bottom to hold the crate set up, and to engage with the orifices in the ends and the guides to hold the crate
 40 knocked down.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY H. MAY.

Witnesses

FRED P. PRICE,
 T. F. HANNOFIN.