No. 634,733. Patented Oct. 10, 1899.

G. A. JONES.

FOLDING CRATE.

(Application filed Oct. 12, 1898.)

(No Model.)

Fig. 1

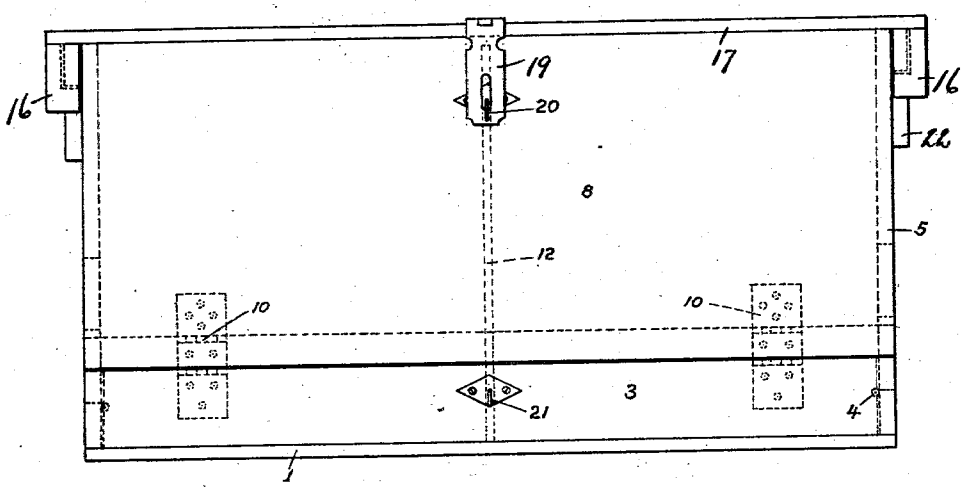


Fig. 2

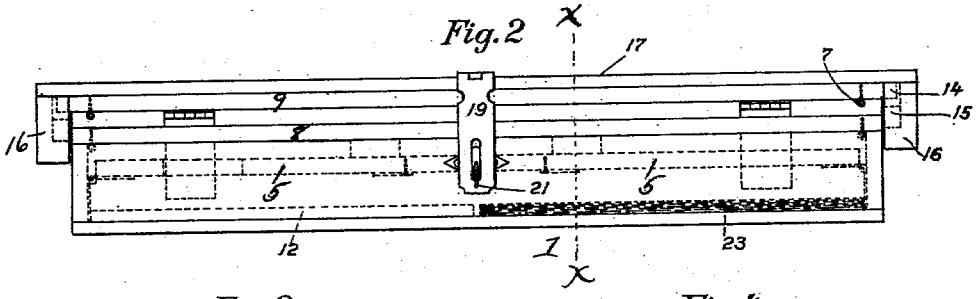


Fig. 3

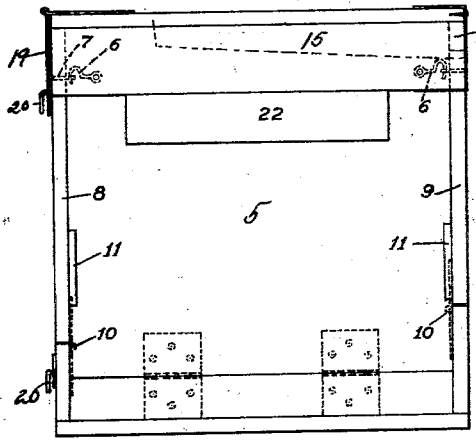
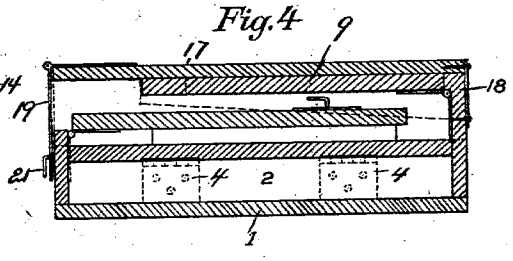


Fig. 4



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UNITED STATES PATENT OFFICE.

GEORGE A. JONES, OF RICHMOND, VIRGINIA.

FOLDING CRATE.

SPECIFICATION forming part of Letters Patent No. 634,733, dated October 10, 1899.

Application filed October 12, 1898. Serial No. 693,322. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. JONES, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Folding Crates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in folding crates, and has for its object to construct a crate which when empty may be folded so as to occupy comparatively small space to that which the same occupies when it is in the built-up form.

The invention aims, therefore, to economize in space, and thereby economize in the cost of shipment of the empty crates or "emptiem," as they are usually termed.

Briefly described, the invention consists of a bottom with two stationary ends and two stationary side strips secured thereto, the ends proper being adapted to fold. The side of the box or crate forming the rear is provided with two projections or lugs, which are adapted to engage in runways formed therefor on the underneath face of the lid or cover. When the box or crate is in the built-up form, this construction permits a vertical movement being imparted to the lid or cover, as will be hereinafter more fully described.

The invention finally consists in the novel construction, combination, and arrangement of the parts to be hereinafter more specifically described, and particularly pointed out in the claim.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification and wherein like figures of reference indicate similar parts throughout the different views, in which—

Figure 1 is a front view of my improved crate in the built-up form. Fig. 2 is a like view of the same in the folded form. Fig. 3 is an end view of the crate in the built-up form, and Fig. 4 is a cross-sectional view taken on the line x x of Fig. 2.

Referring now to the drawings by reference-figures, 1 denotes the bottom, which has secured to its upper face at each end a strip 2 of less length than the width of the bottom, so as to permit the securing upon the bottom along its sides the strip 3 of the same length as the bottom and of greater depth than the strip 2. The two side edges of the bottom and the outer face of the strip 3 are therefore flush, and the ends of the bottom are flush with the outer face of the strip 2 and the ends of the strip 3.

Connected to the inner face of the strips 2 by means of suitable hinges 4 are the ends 5, which are adapted to fold inwardly within the box or crate. These ends have secured to their inner faces, near their upper ends, suitable hooks 6, which are adapted to engage eyelets 7, provided therefor in both the front and rear sides of the crate. This front 8 of the crate is secured by hinges 10, connected to its inner face and to the inner face of the front strip 3, while the rear side 9 is connected by like hinges and in like manner to the rear strip 3. In order to permit the folding of the two ends without their engaging the hinges 10, I provide the said ends with cut-away portions 11, which allows the said ends to readily pass the hinges when folding.

A removable partition 12 may be provided centrally of the crate and is secured to the sides by hooks and eyes in the same manner as the ends.

The rear side is provided with a projection or lug 14, which may be formed integral with the said side and is adapted to engage in grooves 15 formed therefor in the inner face of the cleat 16, that are secured to the top or cover 17 at the ends thereof. These grooves or runways are slightly inclined or wider at their rear ends, so as to permit the operation of the lugs or projections therein and the consequent folding of the lid or cover upon the box or crate. The runways are closed at their rear ends by means of a clamp 18, secured to the rear end of the cleat 16. The lid or cover has secured to its upper face, near its front edge, a hinged hasp 19, which when the box or crate is in the built-up form is adapted to engage with the swiveled hook 20, carried by the front 8, and when the crate is in the knockdown or folded form is adapted to engage with a like hook 21 in the front strip 3.

Suitable end cleats 22 are secured on the ends at a point where they will receive the

cleats 16 and also serve as handles for the crate.

When folding the crate, the central partition is first placed in the bottom of the crate, where it will be directly under one of the ends when the said end is folded. The space in under the other end may be employed for the sheet of pasteboard usually employed for separating the eggs or the like usually packed in crates of this character, as shown at 23. The pasteboard pockets may then be folded in the well-known manner and laid upon these sheets of pasteboard, and the partition and the ends are then folded inwardly and will lie wholly within the side strips 3. The front 8 is next folded upon the ends and, lastly, the rear 9, and the top or cover and the latter fastened by the hasp, as heretofore stated.

By such a construction it will be observed that when in the knockdown form the crate does not occupy more than one-third the amount of space required for the same when in its built-up form, and the construction is simple, yet strong and durable, and not as liable to become damaged through rough handling when empty as the ordinary crate.

It will be noted that various changes may be made in the detail of construction without departing from the spirit of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a folding crate, the combination of the bottom, side and end strips secured to the upper face of said bottom, said side strips being of greater depth than the end strips, sides 8 and 9 hinged to the inner face of said side strips, ends 5, hinged to the inner face of said end strips, lugs formed on the side 9 at each upper corner of its ends, a sliding lid or cover, cleats secured to the underneath face of said lid or cover at each end thereof, said cleats being provided with grooves or runways to receive the lugs on side 9 for holding said lid, a hasp secured to the upper face of the lid, a swiveled hook secured to the side 8 to receive said hasp when the crate is in the built-up form, and a separate swiveled hook secured to the front side strip to receive said clasp when the crate is folded, substantially as described.

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

GEORGE A. JONES.

Witnesses:
WALLACE MURDOCK,
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