G. H. DIERS.

FOLDING CRATE.

APPLICATION FILED NOV. 4, 1913.

1,116,250. **Patented Nov. 3, 1914.**

2 SHEETS—SHEET 1.

Fig. 1.

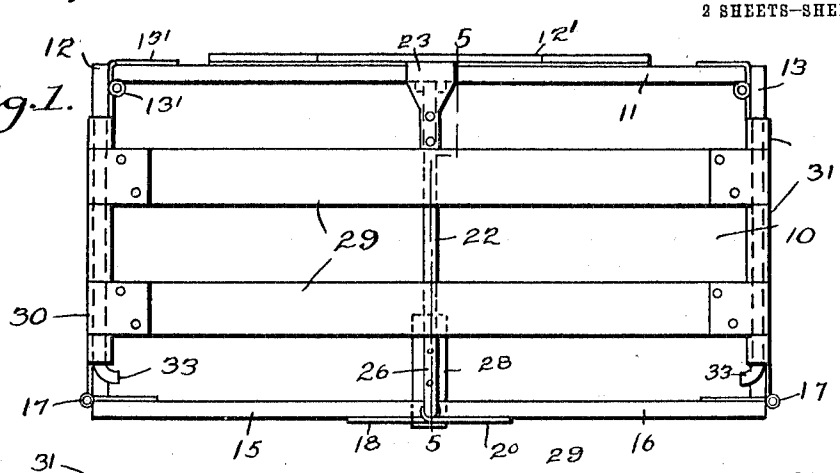


Fig. 2.

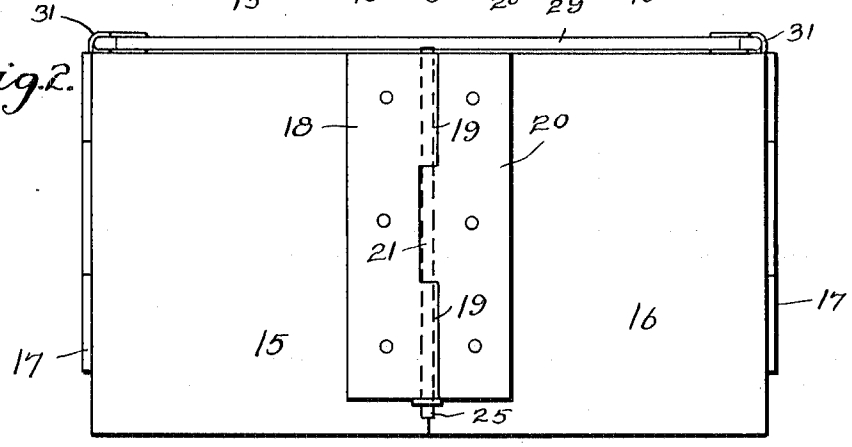
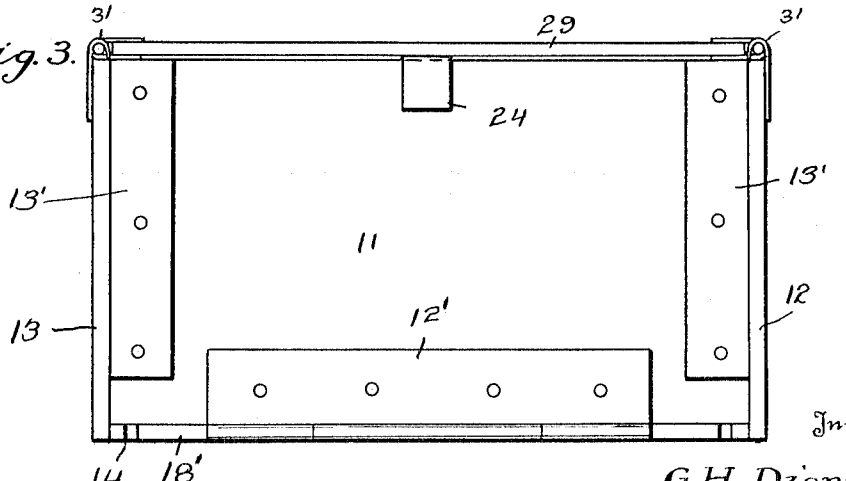


Fig. 3.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

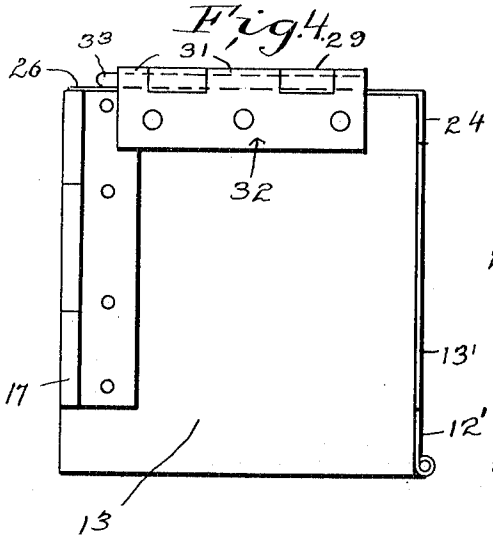


Fig. 5.

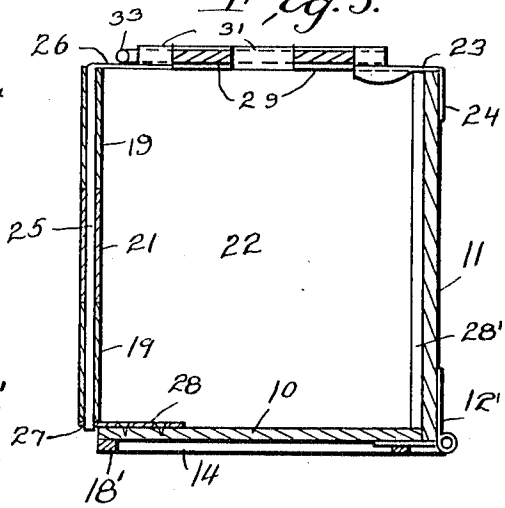
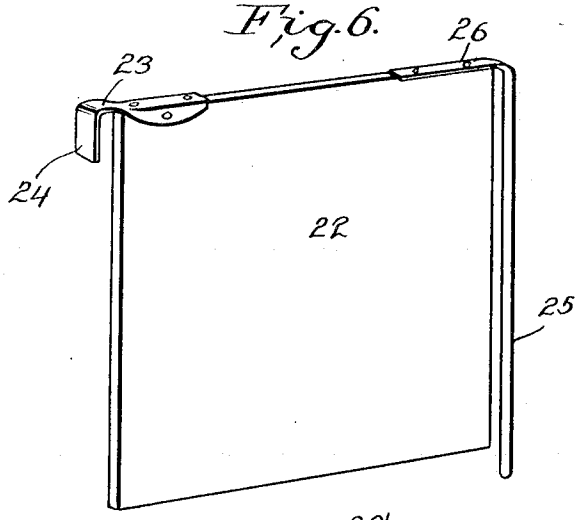


Fig. 6.



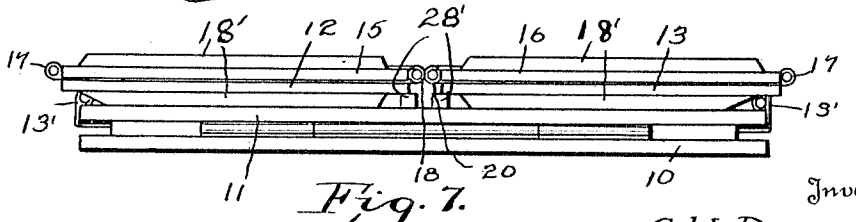


Fig. 7.

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UNITED STATES PATENT OFFICE.

GEORGE H. DIERS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRANK B. BUSZIN, OF CHICAGO, ILLINOIS.

FOLDING CRATE.

1,116,250. Specification of Letters Patent. Patented Nov. 3, 1914.

Application filed November 4, 1913. Serial No. 799,171.

To all whom it may concern:

Be it known that I, GEORGE H. DIERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 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 comprehends improvements in folding crates, and relates more particularly to those which are especially adapted for shipping eggs and similar commodities.

One of the objects of the invention is to provide a folding crate which may be easily and quickly folded into a compact form to facilitate shipment and storage and which may also be very quickly set up after having been folded.

Another object of the invention is to provide a folding or collapsible crate of extremely simple and practical construction, cheap to manufacture and one which shall be a general improvement over those of a similar nature now in use.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination and arrangement of parts, as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a top plan view of my improved crate, Fig. 2 is a front elevation thereof, Fig. 3 is a rear elevation, Fig. 4 is an end elevation of the crate, Fig. 5 is a transverse sectional view taken on the plane of line 5—5 of Fig. 1, and on a different scale, Fig. 6 is a detail perspective view of the partition, showing the hook and pintle carried thereby, and Fig. 7 is a rear edge view, showing the crate as it appears when folded, the partition and top bars being omitted.

Referring in detail to the drawings by numerals, 10 designates the bottom of the crate to which is hingedly secured a rear wall 11 by means of the hinge 12′, said rear wall, when the crate is set up, engaging the rear longitudinal edge of the bottom, as clearly shown in Fig. 5. End walls 12 and 13 are secured to the ends of the rear wall 11 be means of the hinges 13′ and carry upon the inner side adjacent their lower edges transverse cleats 14 which assist in supporting the bottom 10.

The front wall of the case is formed in two sections, designated 15 and 16 respectively, said sections being secured by means of hinges 17 to the free vertical edges of the end walls 12 and 13. These front wall sections 15 and 16 carry adjacent their lower edges upon their inner sides, supporting cleats 18′ which, when the crate is set up, engage the lower face of the bottom and help to support the latter.

A plate 18 in the form of a hinge section, having the sleeves or knuckles 19 is secured to the front wall section 15 adjacent the free vertical edge thereof and coöperates with a similar plate 20 secured to the front wall section 16 and having a knuckle 21, which is adapted to fit between the knuckles 19.

A partition 22 divides the crate into two compartments and carries upon its upper edge adjacent the rear end thereof a hook 23 which is adapted to engage the outer face of the rear wall 11. This hook is clearly shown in Fig. 6, and it will be noted that it if formed of a single piece of metal and has a bill portion 24 which extends parallel to the rear vertical edge of the partition 22.

To connect the plates 18 and 20, I provide a pintle or rod 25 which is extended angularly adjacent its upper end, as indicated by the numeral 26, and rigidly secured to the top edge of the partition 22. When the partition is in position, as shown in Figs. 1 and 2, the pintle 25 extends through the knuckles 19 and 21 and also through an opening 27 formed in a keeper 28 carried by the bottom 10 and projecting forwardly beyond the same. Guide cleats 28′ extend transversely across the rear wall 11 and form a channel in which the rear edge of the partition 22 is received.

To partly close the top of the crate, I provide a pair of bars or slats 29 which have sleeves or knuckles 30 secured to their extremities. These knuckles fit between the knuckles 31 formed by the plate 32 secured to the upper edges of the end walls 12 and 13. Hinges or pintles project through the

knuckles 30 and 31 and so connect the bars 29 to the end walls of the crate.

From the foregoing description taken in connection with the accompanying drawings, it will be apparent that, when the crate is set up, the hook 23 and pintle 25 will hold the walls of the crate firmly in their proper position. Now when it is desired to fold the crate, the pins 33 are first withdrawn from the knuckles 30 and 31 so as to permit of the bars 29 being detached. Then the partition 22 is lifted, causing the pintle 25 to be withdrawn from the knuckles 19 and 21 and so disconnect the two front wall sections. As shown in Fig. 7, the bottom can then be swung against the outer face of the rear wall, the front section folded against the outer faces of the end walls, and said end walls folded against the inner side of the rear wall. This method of folding the crate, produces a very compact form of receptacle, which may be packed in very little space. The partition 22 and flaps 29 are preferably strapped or secured in some suitable way to the body portion of the crate when the latter is folded.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the scope and spirit of the invention as claimed.

Having thus described my invention, I claim:—

1. A receptacle comprising a bottom, a rear wall, a pair of end walls, a front wall section hinged to each of said end walls, a partition removably positioned within the receptacle and extending at right angles to the rear wall, a pin carried by said partition and means carried by said front wall sections for engagement by said pin, whereby the sections are held so as to close the front of the receptacle.

2. A receptacle comprising a bottom, a rear wall, a pair of end walls, front wall sections hinged to said end walls, a partition removably positioned within the receptacle and extending at right angles to the rear wall, a pin carried by said partition and extending parallel to and spaced from the front edge of the partition, and coöperating plates secured to the front wall sections, said plates being formed with knuckles through which the pin is adapted to project, whereby said wall sections are held so as to close the front of the receptacle.

3. A folding crate, comprising a bottom, a rear wall hinged thereto, end walls hinged to said rear wall, means carried by the end walls for engaging under the bottom, front wall sections hinged to said end walls, a partition removably positioned within the crate and extending at right angles to the rear wall thereof, a pin carried by said partition, and coöperating plates carried by the front wall sections and formed with knuckles through which the pin is adapted to project, whereby said wall sections are held so as to close the front of the crate.

4. A folding crate, comprising a bottom, a rear wall hinged to said bottom, end walls hinged to said rear wall, front wall sections hinged to the end walls, a partition removably positioned within the crate, a pin carried by said partition, coöperating plates carried by the front wall sections and formed with knuckles through which the pin projects to hold the front wall sections in operative positions, and a keeper secured to the bottom through which said pin also projects.

5. A folding crate, comprising a bottom, a rear wall hinged thereto, end walls hingedly secured to said rear wall, front wall sections hinged to the end walls, supporting cleats carried by the end walls and front wall sections for engagement with the lower face of the bottom, a partition removably positioned within the crate, a hook carried by said partition for engagement with the outer face of the rear wall, a pin carried by said partition and extending parallel to the front edge thereof, plates carried by the front wall sections, said plates being formed with knuckles through which the pin is adapted to project, and a keeper carried by the bottom through which said pin also projects.

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

GEORGE H. DIERS.

Witnesses:
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JOHN TEMPEL, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."