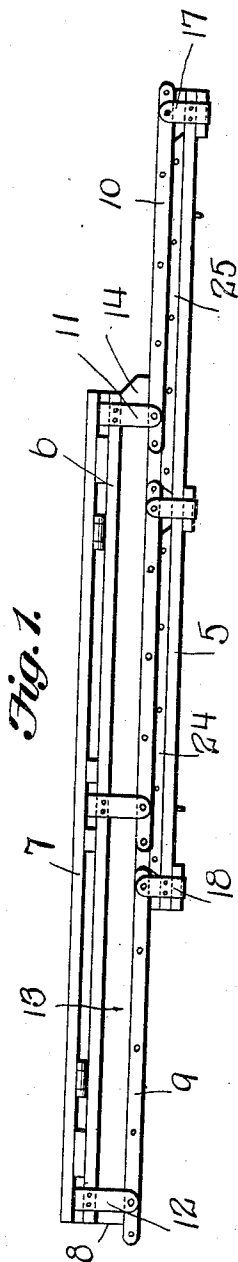


965,042.

D. O. SMITH.
EGG CRATE.
APPLICATION FILED JAN. 18, 1910.

Patented July 19, 1910.
2 SHEETS—SHEET 1.



Witnesses

Lehas. b. Richardson
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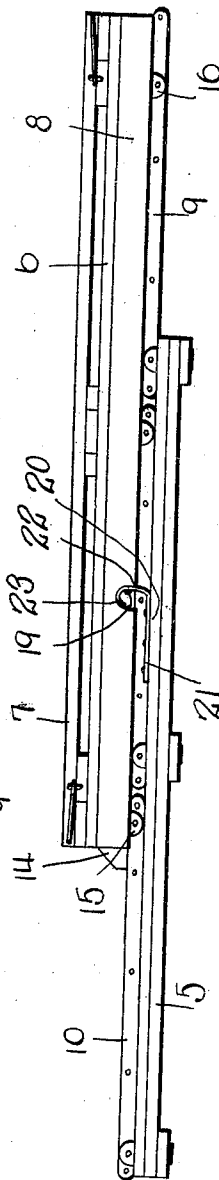
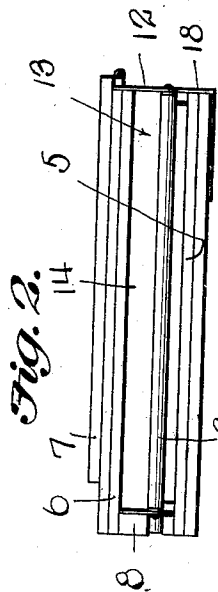


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

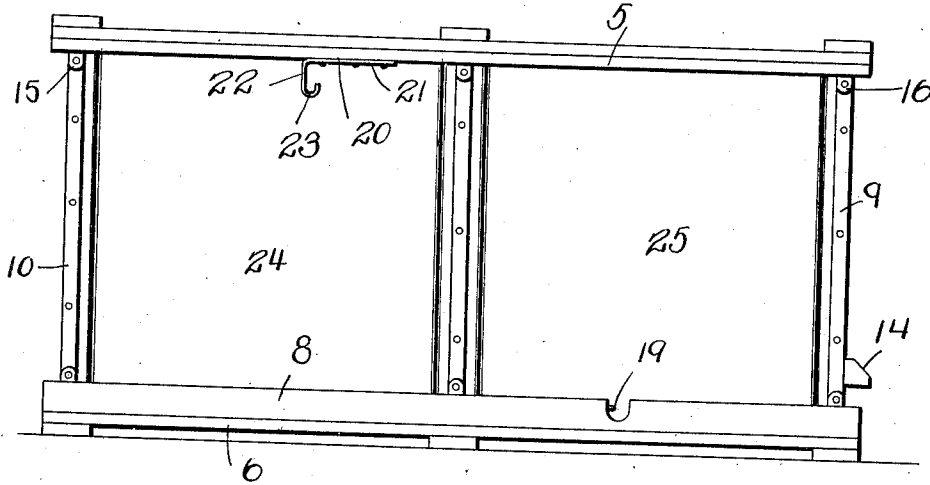


Fig. 5.

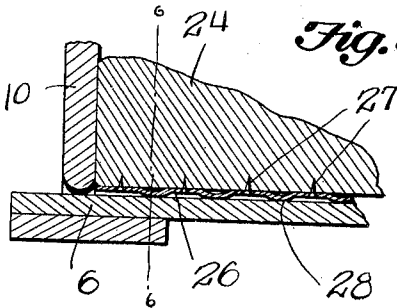


Fig. 6.

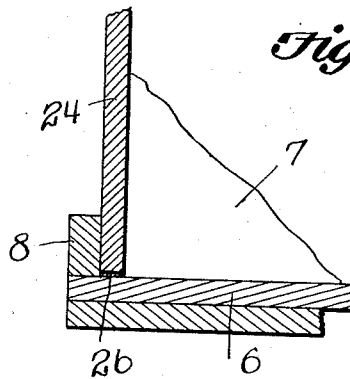
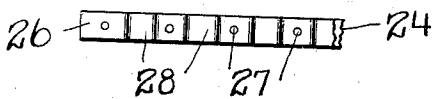


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID O. SMITH, OF BLUFF CITY, TENNESSEE.

EGG-CRATE.

965,042.

Specification of Letters Patent. Patented July 19, 1910.

Application filed January 18, 1910. Serial No. 538,695.

To all whom it may concern:

Be it known that I, DAVID O. SMITH, a citizen of the United States, residing at Bluff City, in the county of Sullivan and State of Tennessee, have invented new and useful Improvements in Egg-Crates, of which the following is a specification.

This invention relates to improvements in crates and more particularly to the type known as folding crates.

It has for its object the provision of a device of that kind provided with a spring lock adapted to automatically lock the parts together against accidental opening after the crate has been folded.

Another object is the provision of a construction which, when folded, will form a pocket for the reception of the egg holding receptacles when the crate is used for an egg crate.

With these and other objects in view, as will more hereinafter fully appear, the present invention consists in certain novel details of construction and arrangement of parts hereinafter to be more fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form, proportion, size and minor details of the device may be made within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing, forming a part of the specification: Figure 1 is a side elevation of the device in folded position. Fig. 2 is an end view of the same. Fig. 3 is a view similar to Fig. 1, and showing the reverse side of the crate. Fig. 4 is a bottom plan view of the crate in set-up position. Fig. 5 is a sectional plan view, taken through one corner of the crate when the latter is in set-up position. Fig. 6 is a fragmentary, vertical section taken through one corner of the crate on the line 6—6 of Fig. 5 when the crate is in set-up position. Fig. 7 is a fragmentary front elevation of the strip for frictionally holding the bottom against displacement.

Similar numerals of reference are employed to designate corresponding parts throughout.

What will subsequently be termed the front side of the crate is designated by the numeral 5, the opposite or rear side being

designated by 6. These members may be of any required length and width and are of equal dimensions. The lid or cover is designated by the numeral 7 and is hingedly united to the upper edge of the rear side 6 as clearly shown in Figs. 1 and 3.

By reference now to Figs. 1 and 4 inclusive, it will be seen that the rear side 6 is provided on its inner surface and adjacent its lower edge with a cleat 8. The cleat 8 corresponds in length to the length of the side and is fixedly secured thereto in any preferred manner. The opposite ends are designated by the numerals 9 and 10, and connection between the ends and front and rear sides is effected in the following manner: By reference now to Fig. 1, it will be seen that extending laterally from the opposite end portions of the upper edge of the rear side 6 are a pair of arms 11 and 12. The arms are preferably formed of single pieces of sheet metal and at one end are fixedly secured to the rear side 6 while their opposite ends are pivoted at points adjacent the corners of the upper edges of the ends 9 and 10. The portions of the arms 11 and 12 between their secured and pivoted ends correspond in length to the width of the cleat 8. With this construction, it will be evident when the ends 9 and 10 are folded parallel with the rear side, as shown in Fig. 1, a space will be formed between the said rear side and ends which will constitute a pocket 13 to receive the paper holders for eggs when the crate is being shaped in folded position back to the center.

In order to provide a bottom for the pocket 13 a cross piece 14 is provided. This member is fixedly secured to the end 10 and extends transverse the latter and is so positioned that when the said end is folded parallel with the front and rear sides and between the latter, as shown in Fig. 1, the said cross piece 14 will enter the space between the said end 10 and one end of the rear side 6, so that when the paste boards have been folded and inserted into the pocket they will be prevented from movement beyond the cross piece 14.

Connection between the cleat 8 and lower sides of the ends 9 and 10 is established by means of a pair of short lugs 15 and 16 fixedly secured adjacent to the opposite ends of the cleat and having openings which aline with similar openings formed in the lower sides of the ends 9 and 10, this alined open-

ing receiving pivot pins by means of which the ends are pivoted to the cleat. With this construction, it is evident when the rear side 6 is moved to the right from the position shown in Fig. 1, the front side will move relatively to the rear side 6 until the ends 9 and 10 are perpendicular to the said front and rear sides. It might here be stated that connection between the ends and opposite ends of the front side 5 is established by means of a pair of lugs 17 and 18 secured at one end to the opposite end portions of the front side and at their opposite ends pivoted to the ends 9 and 10. The structure shown in Fig. 1 illustrates the connection between the upper edges of the front side 15 and ends 9 and 10. It will, of course, be understood that a similar connection will be established between the lower edges of the ends 9 and 10 and front side 5.

When the parts are in position as shown in Figs. 1 and 3, it is evident that some means must be employed for holding the parts against movement in order to prevent opening of the crate while being handled. This construction is carried out in the following manner: By reference now to Figs. 3 and 4, it will be seen that extending inwardly from the longitudinal side of the cleat 8 and located adjacent one end thereof is a semi-circular slot 19 and fixedly secured to the inner face of the front side wall 5 and adjacent the lower edge thereof is a keeper 20. When the parts are in set up position, as shown in Fig. 4, the keeper 20 will be diagonally opposite the slot 19 and in such position that when the sides and ends are folded parallel it will enter the slot 19. The keeper is preferably formed of a resilient piece of metal including an elongated shank portion 21 which is fixedly secured to the front side 5, the said front shank portion terminating in a lateral extension 22 which in turn terminates in an arcuate-shaped end 23. The curvature of the end 23 is a fraction greater than the width of the recess 19 so that when the end and recess are in coincidence a slight pressure will be necessary in order to force the end into the recess. When, however, the end is within the recess it will frictionally bind on the walls thereof and prevent accidental outward movement of the sides and ends. In the present instance, the crate is shown to be provided with a pair of bottoms designated by the numerals 24 and 25. It must be understood that I am not to be limited to its specific structure, since it will be understood that a single bottom might be equally as well employed without departing from the spirit of the invention.

By reference to Fig. 4, it will be seen that

the bottoms are, at one end, hingedly united to the front side 5 and at a point in a plane with the upper side of the cleat 8, so that when the parts are in open position, as shown in Fig. 4, the free ends of the bottom will bear on the upper side of the cleat, the latter operating to support the bottoms in a horizontal plane. In order to prevent accidental upward movement of the bottom, it will be seen by reference to Fig. 5 that the free end of the bottom 24 is provided with a resilient metallic strip 26 and this strip is secured to the bottom by a plurality of tacks 27 arranged at intervals throughout the length of the strip and the metal therebetween bulged or bowed outwardly, as shown at 28. By virtue of the bowed portions 28, it will be evident that when the bottoms are being forced into position, as shown in Fig. 4, these bulged portions will be depressed against the rear side wall 6 whereby the bottoms will be frictionally held against movement when the crate is in set up position.

From the foregoing, it can be seen that I have provided a device which is exceedingly simple in its structure, and inexpensive in manufacture, embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum.

Having thus described the invention, what is claimed, is:—

In a folding crate, the combination with front and rear sides, ends and bottom; of a cleat extending longitudinally of and secured to the inner face and located adjacent the lower edge of the rear side, a plurality of arms fixedly secured at one end of the upper edge of the rear side and adjacent to the opposite ends thereof and having their opposite ends pivoted on the upper side and adjacent to one corner of each of the ends, the portions of the arms between their secured and pivoted ends corresponding approximately to the width of the cleat whereby a pocket is provided between the rear side and ends when the latter are folded parallel with the rear side and bearing on the cleat, a cross piece arranged on the outer face of one of the ends and adapted to enter the space between said end and rear side and form a closure for one end of the pocket when the sides and ends are folded parallel, and a connection between the opposite end portions of the cleat and lower sides of the ends.

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

DAVID O. SMITH.

Witnesses:

R. L. FICKLE,
JOHN WEBB.