No. 670,840. Patented Mar. 26, 1901.

J. CLARKE.

FOLDING BOX.

(Application filed Sept. 26, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

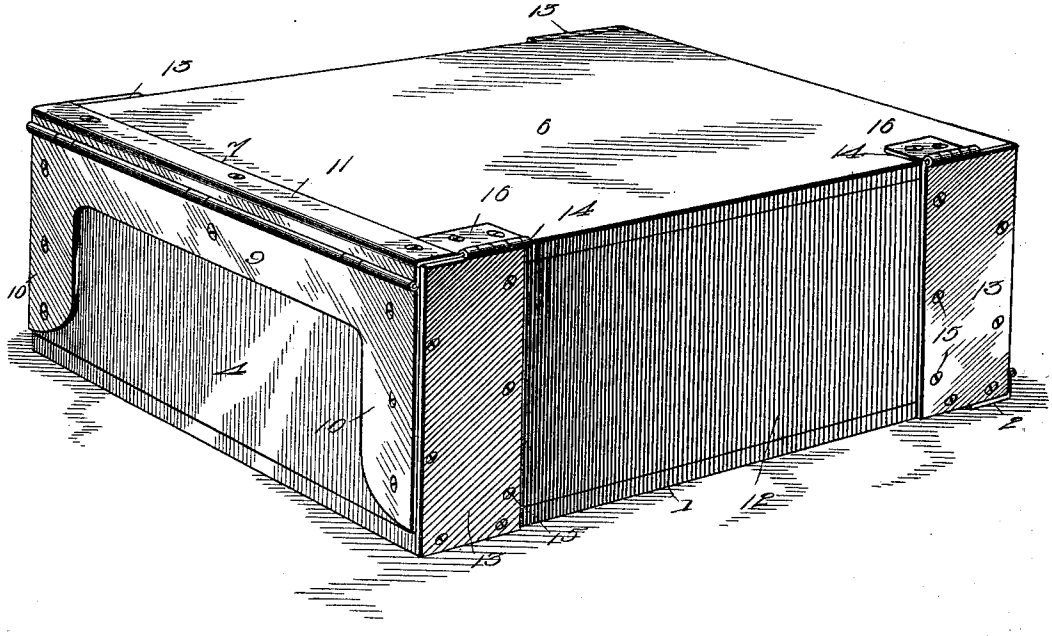
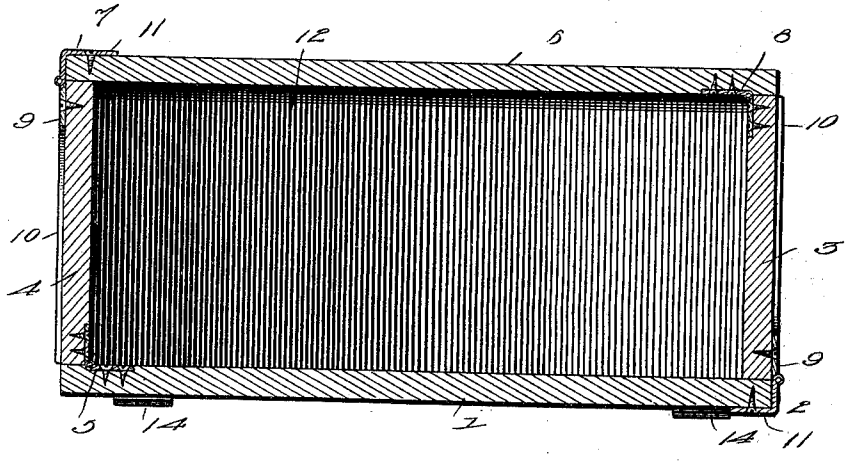


Fig. 2.



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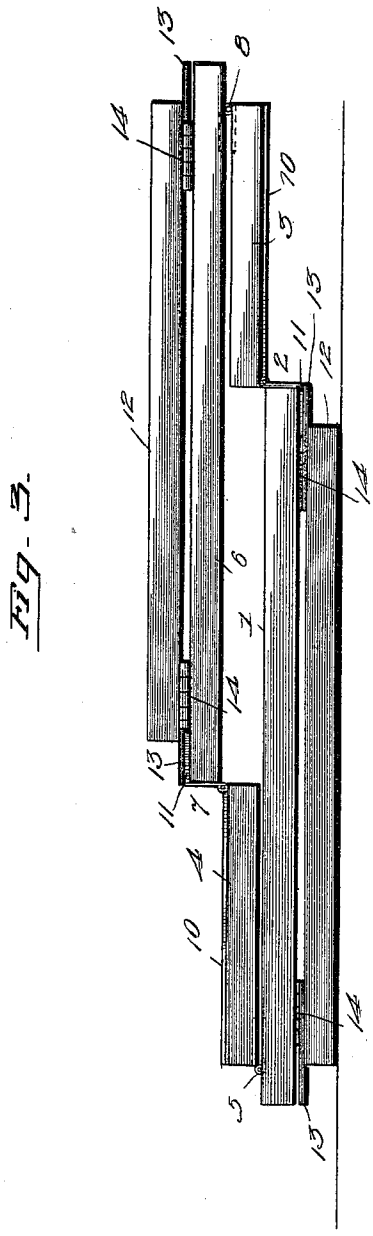


Fig. 3.

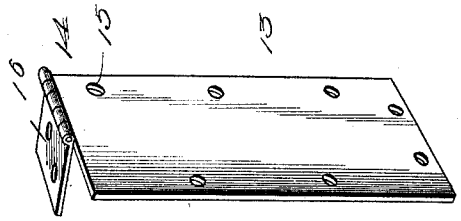


Fig. 5.

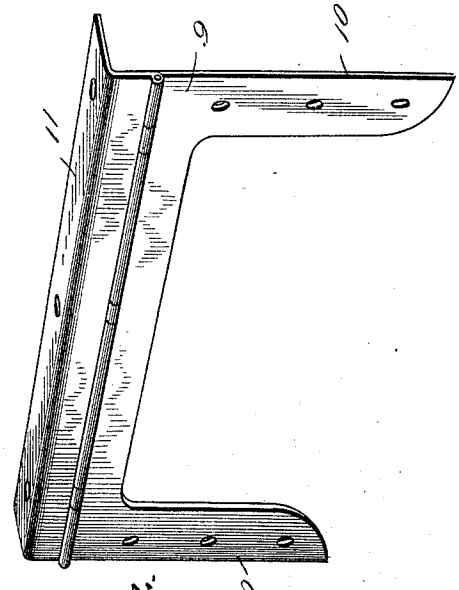


Fig. 4.

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JO CLARKE, OF ELLIJAY, GEORGIA.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 670,840, dated March 26, 1901.

Application filed September 26, 1900. Serial No. 31,164. (No model.)

To all whom it may concern:

Be it known that I, JO CLARKE, a citizen of the United States, residing at Ellijay, in the county of Gilmer and State of Georgia, have invented new and useful Improvements in Folding Boxes, of which the following is a specification.

This invention relates to new and useful improvements in folding crates or boxes; and its primary object is to provide a device of this character which is simple and durable and which may be readily folded into compact form.

A further object of the invention is to provide a device with hinges of peculiar construction, whereby the parts may not only be folded together in proper position, but may be secured in proper relation when opened out.

With these objects in view the invention consists in providing a base to which are hinged the ends of the box, one of said ends being provided with a hinge located within the box, while the opposite end is provided with a hinge outside of the box, whereby both of the ends will fold downward in the same direction. The cover of the box is hinged to the ends in the same manner, and the hinges are so arranged that when said ends are folded down the cover will move down therewith. The sides of the box are provided with hinges of peculiar construction, whereby they may swing between the edges of the ends and top and bottom of the box, and when said box is folded these sides are swung up upon the top and down under the bottom thereof, respectively. The hinges of the sides are of such construction that one of the leaves of each hinge may be secured to the ends of the box, and thereby lock the same in opened position.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of the box. Fig. 2 is a longitudinal section therethrough. Fig. 3 is an elevation of the box after the same has been collapsed. Fig. 4 is a view of one of the end hinges, and Fig. 5 is a perspective view of a side hinge.

Referring to said figures by numerals of reference, 1 is the bottom of the box, of any desired size and material, which is provided with a hinge 2, extending over one end thereof and secured to one of the ends 3 of the box. The second end 4 of the box rests upon the base 1 and is secured thereto by means of a hinge 5, said hinge, however, being secured to the inner surfaces of both the bottom 1 and the end 4.

The cover 6 rests upon the ends 3 and 4, and a hinge 7, similar to hinge 2, connects the same at a point above the inner hinge 5, while the inner hinge 8 is arranged above the outer hinge 2 before referred to. By this construction it will be seen that the ends 3 and 4 are free to swing downward in one direction, carrying therewith the cover 6. The inner hinges 5 and 8 may be of any desired form; but the outer hinges 2 and 7 are preferably of the form shown in Fig. 4. By referring to said figure it will be seen that the hinge is provided with a leaf 9, having parallel arms 10, which are adapted to extend along the sides of the ends 3 and 4, said ends being secured thereto by means of screws or in any other suitable manner. The second leaf 11 of the hinge is L-shaped in cross-section and is adapted to extend transversely of the top or bottom, to which it may be secured.

Arranged between the edges of the ends, the top, and the bottom are sides 12, to the ends of which are secured, preferably, rectangular leaves 13 of hinges 14. These rectangular leaves are adapted to extend laterally from the ends of the sides and over the ends of the end sections 3 and 4. Apertures 15 are arranged along the edges of two of the leaves 13, whereby the same may be secured to the sides and to the ends and bottom of the box. The second leaves 16 of these hinges are adapted to be secured to the bottom of the box. The remaining hinges 14 connect the second side of the box to the top, the large leaves 13 thereof being adapted to overlap the ends and bottom of the crate. It will thus be seen that one of the sides is hinged to the top, while the opposite side is secured in a similar manner to the bottom of the crate. Those portions of the leaves 13 which overlap the ends and bottom and top of the crate are adapted to be secured thereto by means

of screws or in other suitable manner, thereby securely fastening the box in opened position.

When it is desired to fold the box, the screws in the leaves 13 of the hinges 14, which engage the ends and the bottom and top of the box, are removed, and the sides are then swung upon their hinges until they rest upon the top and below the bottom, respectively. The ends are then free to swing downward, as before described, carrying the top therewith, and the box is then in collapsed position, such as shown in Fig. 3.

It will be seen that by constructing a box in this manner I procure a device which is simple and durable and which may be readily locked in open position.

It is obvious that either one of the sides 12 can be used for a cover when it is desired to remove articles from the box, the remaining sides serving to hold the parts in proper relation.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make all such changes as fairly fall within the scope of my invention.

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

1. The combination with a bottom and top, of ends hinged thereto and adapted to swing downward in one and the same direction, sides adapted to rest between the edges of the top, bottom and ends of the crate, one of said sides being hinged to the top and the remaining side hinged to the bottom, and leaves to the hinges of the sides adapted to overlap and be secured to the ends and top or bottom of the crate, whereby the same may be fastened in opened position.

2. In a folding box or crate, the combination with a top and bottom, of ends therebetween, a hinge-leaf secured to each end and extending along the edges thereof, a second leaf hinged to each of said leaves and extending transversely of the top and bottom of the box at diagonally opposite edges thereof respectively, hinges within the box for securing the ends to the top and bottom at the remaining adjacent edges, sides adapted to lie between the top and bottom and the ends of the box, hinges connecting one of said sides to the top of the box, hinges connecting the remaining side to the bottom of the box, and leaves to the hinges adapted to overlap, and be secured to, the ends and top or bottom of the box.

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

JO CLARKE.

Witnesses:
GEO. D. TAUKERSLEY,
GEO. W. GATES.