No. 644,796. Patented Mar. 6, 1900.

H. B. DREW.

KNOCKDOWN CRATE.

(Application filed May 17, 1899.)

(No Model.)

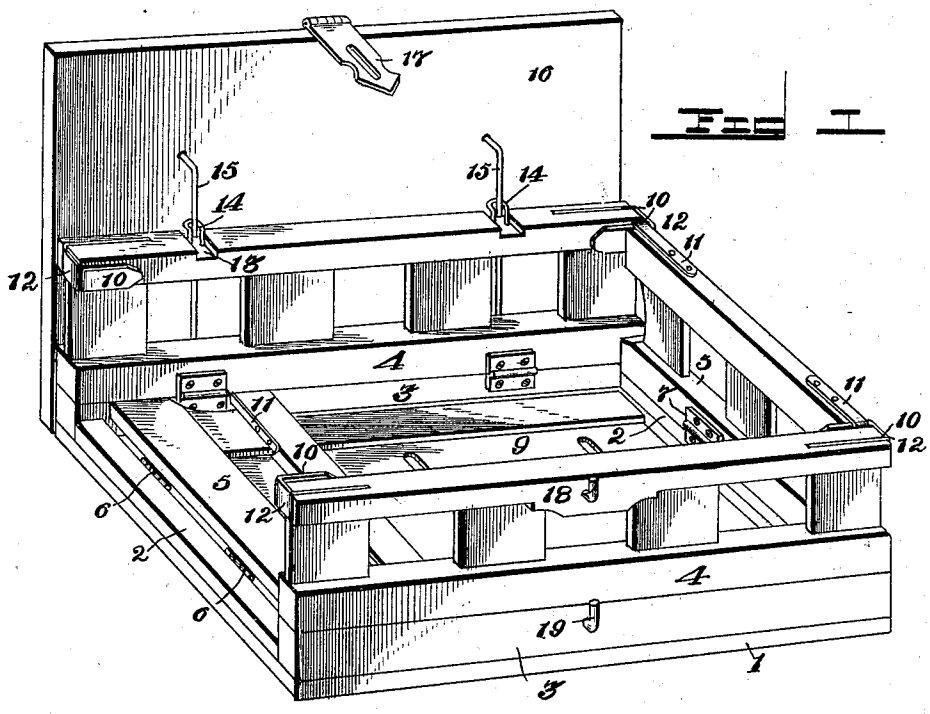


Fig. 1

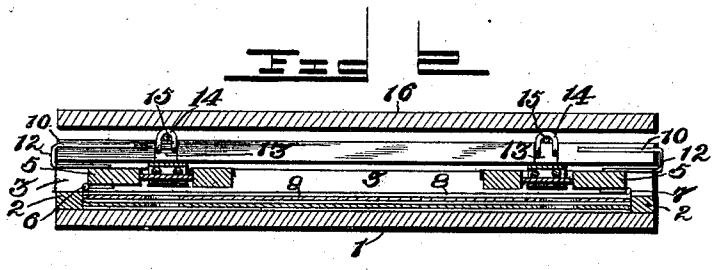


Fig. 2

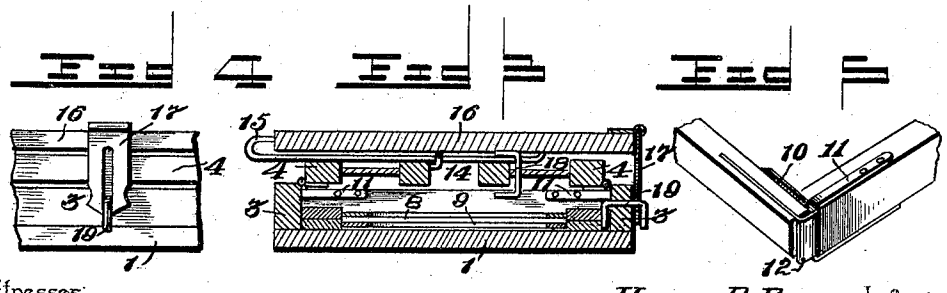


Fig. 4 Fig. 3 Fig. 5

Witnesses

John Maupin

T. J. Riley

Harry B. Drew Inventor

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HARRY B. DREW, OF KITTERY, MAINE.

KNOCKDOWN CRATE.

SPECIFICATION forming part of Letters Patent No. 644,796, dated March 6, 1900.

Application filed May 17, 1899. Serial No. 717,192. (No model.)

To all whom it may concern:

Be it known that I, HARRY B. DREW, a citizen of the United States, residing at Kittery, in the county of York and State of Maine, have invented a new and useful Knockdown Crate, of which the following is a specification.

The invention relates to improvements in knockdown crates.

The object of the present invention is to improve the construction of collapsible or knockdown crates and boxes and to provide a simple, inexpensive, and efficient one capable of being compactly folded and adapted when collapsed to form an interior compartment for the reception of partitions for separating berry-boxes and the like.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a collapsible or knockdown crate constructed in accordance with this invention, the lid or cover being raised and one end being folded. Fig. 2 is a longitudinal sectional view, the crate being folded. Fig. 3 is a transverse sectional view of the same. Fig. 4 is a detail view illustrating the manner of locking the crate when folded. Fig. 5 is a detail view illustrating the manner of interlocking the sides and ends.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates the bottom of the crate, provided on its upper face with transverse bars 2 and longitudinal bars 3, located at the sides and ends of the bottom and having the sides 4 and ends 5 of the crate connected with them by hinges 6 and 7, which permit the said sides and ends 4 and 5 to fold inward, as clearly illustrated in Figs. 2 and 3 of the accompanying drawings. The transverse bars 2 are narrower than the longitudinal side bars 3, and the ends 5 of the crate are folded inward over the bottom, the bars 2 serving to space the ends 5 from the upper face of the bottom to provide an inner compartment or space 8 for the accommodation of partitions 9 for separating berry-baskets and the like. The sides 4, which are hinged to the bars 3, fold inward upon the ends, the wider bars 3 offsetting the sides 4 a sufficient distance from the bottom 1 to provide the necessary space for the ends 5. The sides 4 and 5 are shown in the accompanying drawings constructed of open-work to provide a ventilated crate for shipping berries and the like; but it will be readily apparent that they may be of any other desired construction.

When the sides and ends are in a vertical position, they are interlocked by means of horizontal tongues 10 and loops or eyes 11. The tongues, which are located on the inner faces of the sides, at the top thereof, have substantially L-shaped shanks 12 arranged on the outer edges of the sides and extended between the strips or pieces of which the top portions of the sides are constructed, and the eyes or loops are arranged on the ends 5. The loops consist of strips of metal of substantially oblong form secured to the upper and lower edges of the top bars of the ends and projecting outward therefrom. The loops and tongues by connecting the sides, as shown, prevent the said sides and ends from swinging outward beyond a vertical position, and at the same time they permit them to fold inward.

The rear side of the crate is provided at its top with recesses 13, and it has eyes 14 arranged thereat and receiving transverse guide-rods 15, arranged on the inner face of the lid or cover 16 and extending beyond the rear edge thereof to permit the same to clear the rear side 4 in folding the parts. The rods 15 slidingly connect the lid or cover with the upper edge of the rear side of the crate, and they permit the said lid or cover to be arranged over the bottom when the crate is folded or is in position for use. The connection between the lid or cover and the rear side also forms a hinge-joint to permit the lid or cover to be swung upward and downward, and the sliding connection enables the cover to be arranged in an upright position at the back of the box or crate when the same is open.

The lid or cover is provided at its front edge with a hasp 17, adapted to engage fastening devices 18 and 19, mounted, respectively, on the front side of the crate and on the front side bar 3 and adapted to secure the lid or

cover when the parts are folded and also when the crate is in use. The fastening devices, which may be of any desired construction, are shown pivoted and are adapted to be readily engaged with and disengaged from the slot of the hasp.

The invention has the following advantages: The crate, which is simple and comparatively inexpensive in construction, is adapted to be collapsed and compactly folded, so that it may be stored in a small space and also in order that it may occupy but a small amount of space when returning it to a shipper. The sides and ends are arranged so that when they are folded they will be offset from the bottom of the crate to provide an interior compartment or space for the accommodation of partitions for separating berry-boxes and the like. The devices for interlocking the sides and ends prevent those parts from swinging outward beyond a perpendicular position and at the same time they permit them to fold inward readily.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

A knockdown or collapsible crate or box, comprising a bottom provided at its upper face with longitudinal and transverse bars, one set of bars being wider than the other, the sides and ends hinged to said bars and adapted to fold inward over the bottom and offset therefrom to provide a space or compartment, when the crate or box is folded, the rear side being provided at its upper edge with recesses, the eyes arranged within the recesses, the cover, the guide-rods extending across the inner face of the cover, passing through the said eyes and slidingly and hingedly connecting the cover to the rear side, whereby the cover is adapted to be arranged over the bottom, when the parts are folded, and is capable of being arranged in an upright position at the back of the crate or box, when the same is open, the upper and lower fastening devices mounted on the front side and a hasp mounted on the cover on the front edge thereof and adapted to engage either of the fastening devices, substantially as, and for the purpose described.

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

HARRY B. DREW.

Witnesses:
WILLARD T. SPINNEY,
ADDIE M. MELOON.