

T. P. UMFRIES.
FOLDABLE SHIPPING CRATE.
APPLICATION FILED JUNE 13, 1908.

940,754.

Patented Nov. 23, 1909.
3 SHEETS—SHEET 1.

Fig. 1.

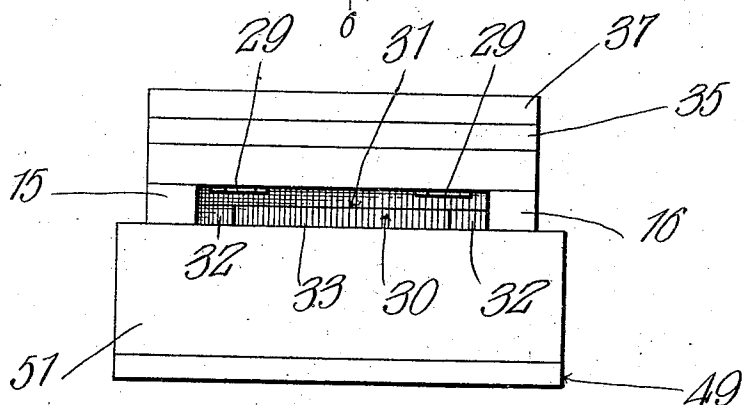
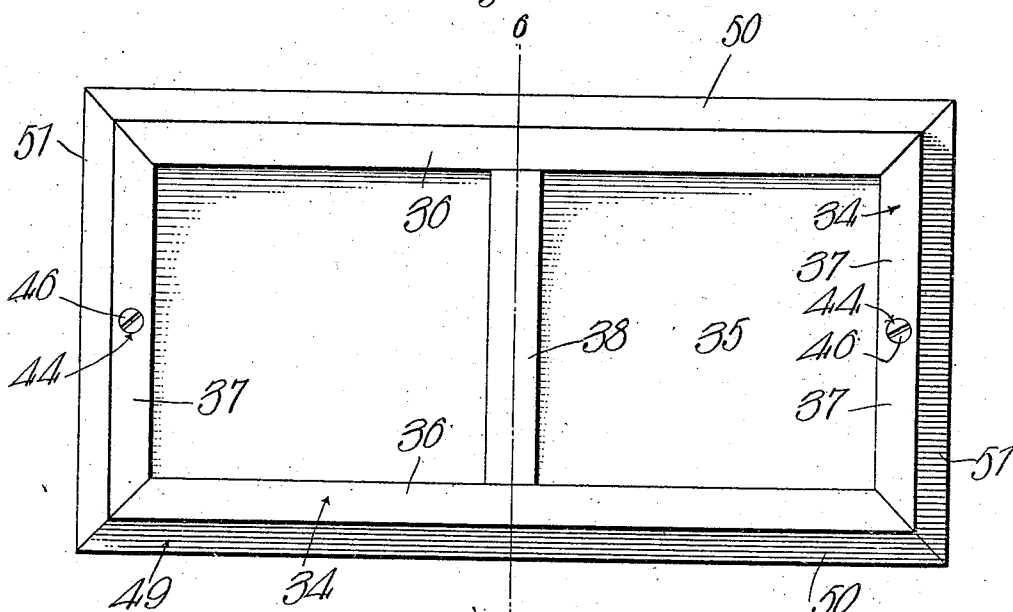


Fig. 2.

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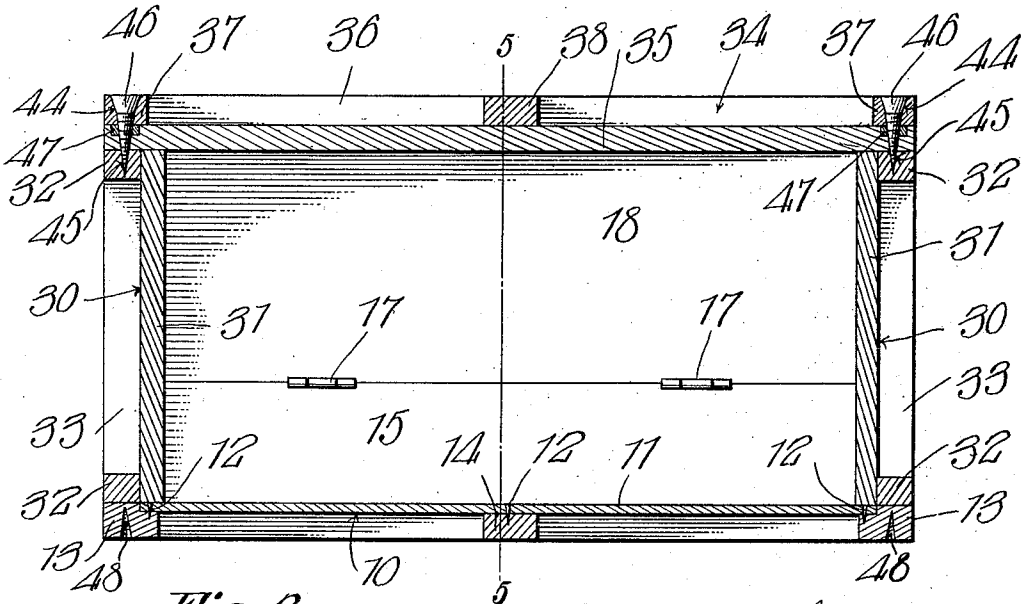


Fig. 3.

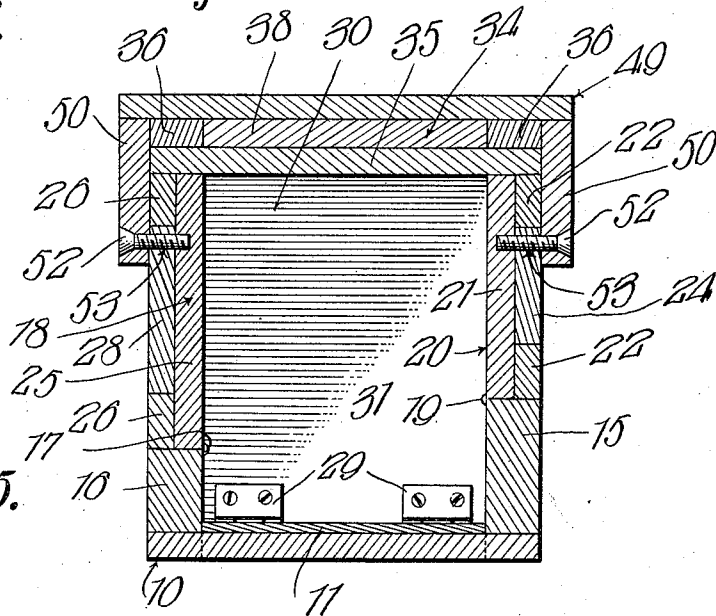


Fig. 5.

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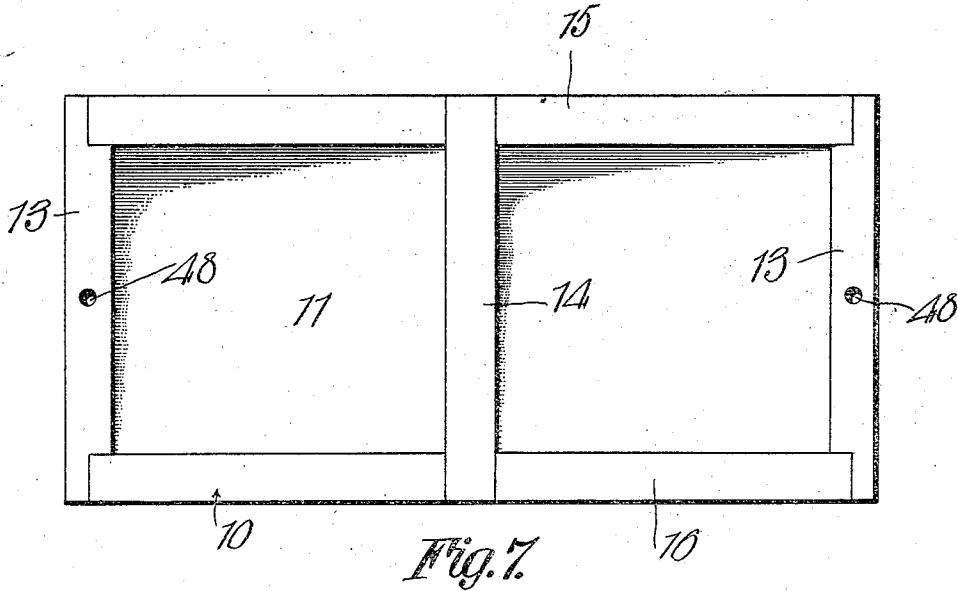
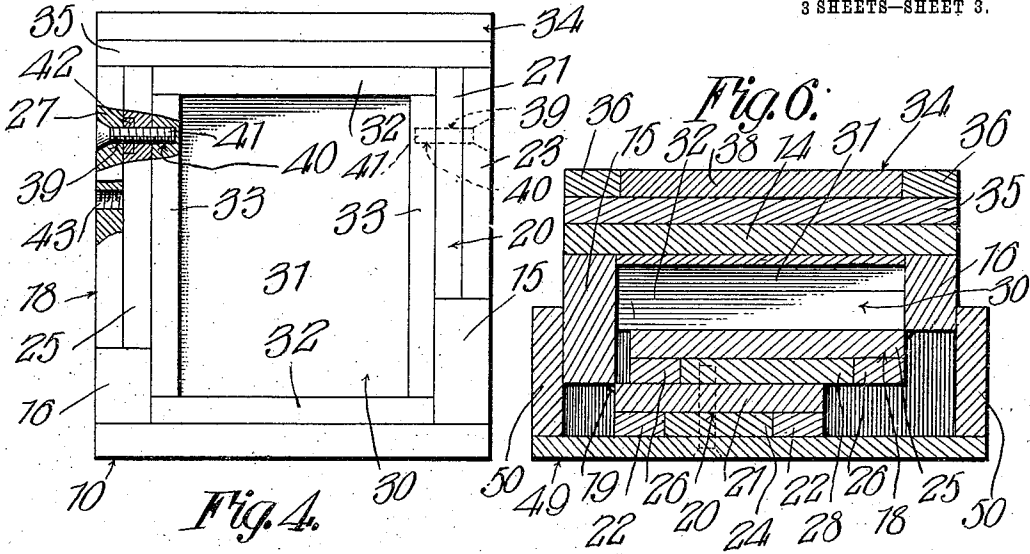
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

THOMAS P. UMFRIES, OF CEDARTOWN, GEORGIA.

FOLDABLE SHIPPING-CRATE.

940,754.

Specification of Letters Patent.

Patented Nov. 23, 1909.

Application filed June 13, 1908. Serial No. 433,366.

To all whom it may concern:

Be it known that I, THOMAS P. UMFRIES, a citizen of the United States, residing at Cedartown, in the county of Polk, State of Georgia, have invented certain new and useful Improvements in Foldable Shipping-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.

The invention relates to foldable or collapsible crates, and more particularly to the class of shipping crates adapted to be folded and having means for holding it when set up or in a folded position.

The primary object of the invention is the provision of a folding crate having a bottom or base, hinged side and end sections foldable upon the said bottom or base, a detachable top and means for maintaining the crate either in a folded or set up condition.

Another object of the invention is the provision of a folding crate which is readily foldable in a compact manner, simple, efficient, durable and inexpensive in the manufacture.

With these and other objects in view the invention for example, consists in the construction, combination and arrangement of parts as will be hereinafter more particularly referred to and as illustrated in the accompanying drawings which disclose the preferred form of embodiment of the invention, however, changes, variations and modifications may be made such as come properly within the scope of the claims hereunto appended without departing from the spirit of the invention.

In the drawings:—Figure 1 is a top plan view of the shipping crate in a folded position, and ready for shipment. Fig. 2 is an end view thereof. Fig. 3 is a longitudinal vertical sectional view of the crate when in an upright condition. Fig. 4 is an end view of the crate when in an upright condition. Fig. 5 is a transverse sectional view on the line 5—5 of Fig. 3. Fig. 6 is a transverse sectional view on the line 6—6 of Fig. 1. Fig. 7 is a bottom plan view.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

In the drawings, the numeral 10 designates the base or bottom of the shipping

crate which may be constructed of any suitable material and of any desirable shape and which base includes a board or plate 11 secured by fasteners 12 upon end strips 13 and an intermediate brace strip 14 which latter and end strips are fitted into longitudinal side extensions 15 and 16 respectively, which side extension 15 is of greater height than the side extension 16 and both of which are arranged in vertical parallel relation to each other. Secured to the upper edge of the side extension 16 by hinges 17 is a foldable side section 18 and to the side extension 15 at the upper edge thereof, secured by hinges 19 is a foldable side section 20 which latter includes a narrow board or plate 21 having secured to its outer face at the edges thereof longitudinal strips 22, end strips 23 and a central brace strip 24 while the foldable side section 18 includes a wide board or plate 25 with respect to the board or plate 21 and has secured to its outer face at the edges thereof longitudinal strips 26, end strips 27 and a central brace strip 28.

Foldable upon the board 11 of the base and secured thereto by hinges 29 are end sections 30, each of which includes a board or plate 31 having secured to the outer face thereof upper and lower strips 32 and side strips 33 and which end sections are adapted to be folded inwardly upon the base 10 while the wide side section is folded upon the latter and the short side section is brought in contact with said wide side section when folded thereon.

Upon the upper free edges of the side and end sections when in a vertical upright position is mounted a detachable top or cover 34 including a board or plate 35 having secured to its outer face at the edges thereof longitudinal strips 36, end strips 37 and a central brace strip 38. It is obvious that the longitudinal end and brace strips on the side sections and top or cover reinforce the same and also prevent them from warping.

At opposite ends and near the upper edge of each side section are openings 39 which are adapted to register with openings 40 in the side strips 33 of the foldable side section and which openings receive threaded bolts 41 carrying threaded washers 42 whereby the said end sections will be connected to the said side sections when the same are in an upright position. A distance removed

from the openings 39 in the side section 20 are openings 43 and when said section is folded upon the end sections the said openings 43 will register with the openings 39 in the side section 18 which is folded in position against the end section 20 so that the bolts 41 will pass through the openings 43 and by the threaded washers 42 thereon the foldable sections of the crate are held in a collapsed or folded condition.

In the top or cover 34 at opposite ends thereof are openings 44 adapted to register with openings 45 through which pass threaded bolts 46 having threaded washers 47 so that when the said top or cover is in position for closing the crate when set up the said top or cover will be detachably secured thereto. In the end strips 13 of the base 10 are openings 48 through which pass the bolts 46 for securing the top or cover 34 to said base when the crate is in a folded condition for shipment. To receive the crate when folded is an auxiliary top or cover 49 having side walls 50 and end walls 51 to form a supporting tray or receptacle. This top or cover 49 is to be used in lieu of the top or cover 34 when the crate contains heavy merchandise for shipment therein. To secure the auxiliary top or cover 49 upon the crate when in upright position there are fasteners 52 which are brought into locking engagement with openings 53 in the central brace strips 28 of the foldable side sections.

When the crate is folded and ready for shipment the auxiliary top or cover 49 receives the same and is locked therein by the fasteners 52 whereby the crate is compact

in its folded condition and can be easily and readily handled in shipment when folded.

What is claimed is—

1. In a folding crate, a base, side and end sections foldable upon the base, a detachable top, threaded apertured washers embedded centrally in opposite ends of said top, one of said side sections containing threaded sockets adapted to register with said apertured washers when inwardly folded upon the other side section, screw fasteners engaging said washers and registering sockets to lock the crate in folded position and an auxiliary top adapted to receive the crate when folded and to fit over the top thereof when in a set up position.

2. In a folding crate, a base, side and end sections foldable upon the base, a detachable top, threaded apertured washers embedded centrally in opposite ends of said top, one of said side sections containing threaded sockets adapted to register with said apertured washers when inwardly folded upon the other side section, screw fasteners engaging said washers and registering sockets to lock the crate in folded position, an auxiliary top adapted to receive the crate when folded and to fit over the top thereof when in a set up position, and screw fasteners adapted to secure the auxiliary top in either of the latter positions on the crate.

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

THOMAS P. UMFRIES.

Witnesses:

JNO. L. TISON,
W. W. TISON.