C. B. GUTHRIE.

COLLAPSIBLE SHIPPING CRATE.

APPLICATION FILED SEPT. 7, 1912. RENEWED SEPT. 6, 1913.

1,079,702. **Patented Nov. 25, 1913.**

2 SHEETS—SHEET 1.

Fig. 1.

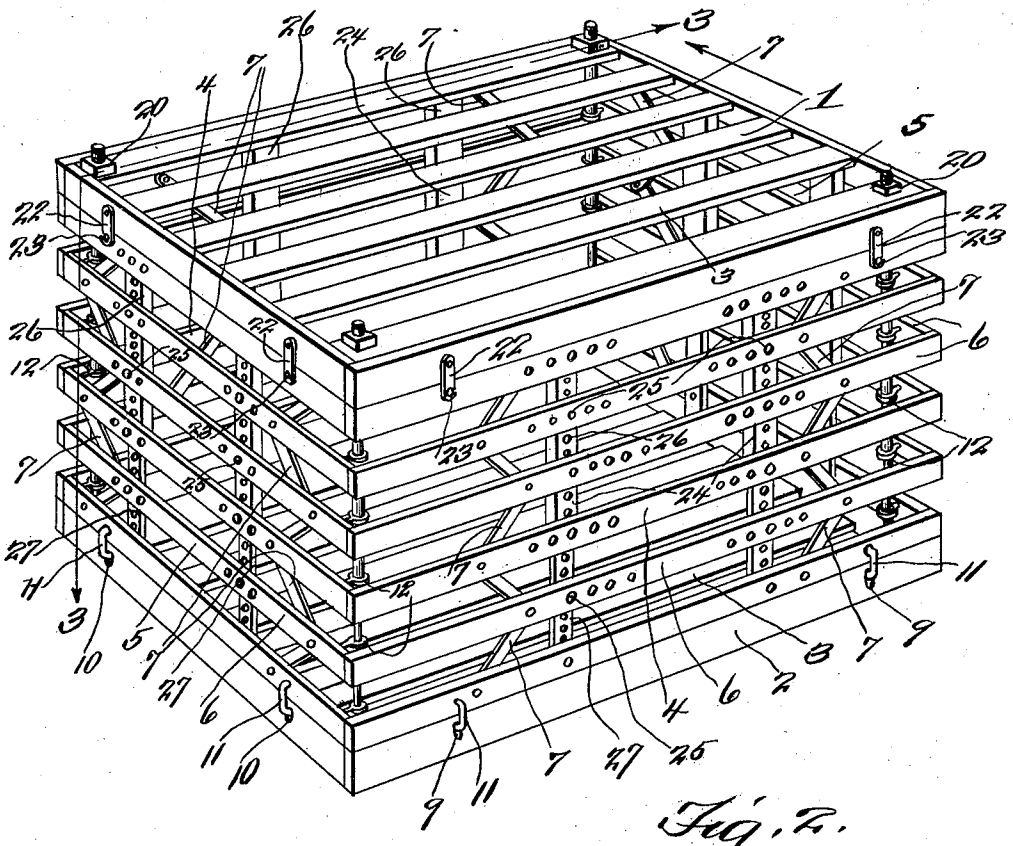
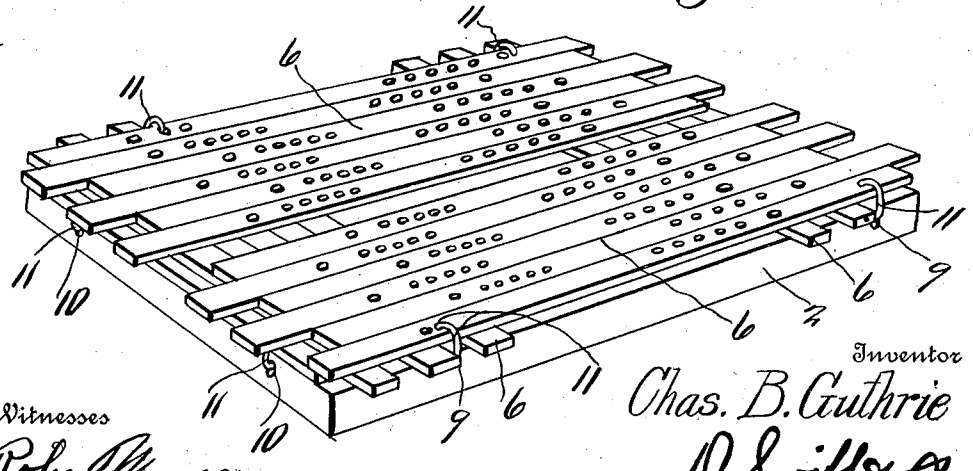


Fig. 2.



Witnesses

Rohe Meyer

Francis G. Boswell.

Inventor

Chas. B. Guthrie

By D. Swift & Co

Its Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

C. B. GUTHRIE.

COLLAPSIBLE SHIPPING CRATE.

APPLICATION FILED SEPT. 7, 1912. RENEWED SEPT. 6, 1913.

1,079,702. **Patented Nov. 25, 1913.**

2 SHEETS—SHEET 2.

Fig. 3.

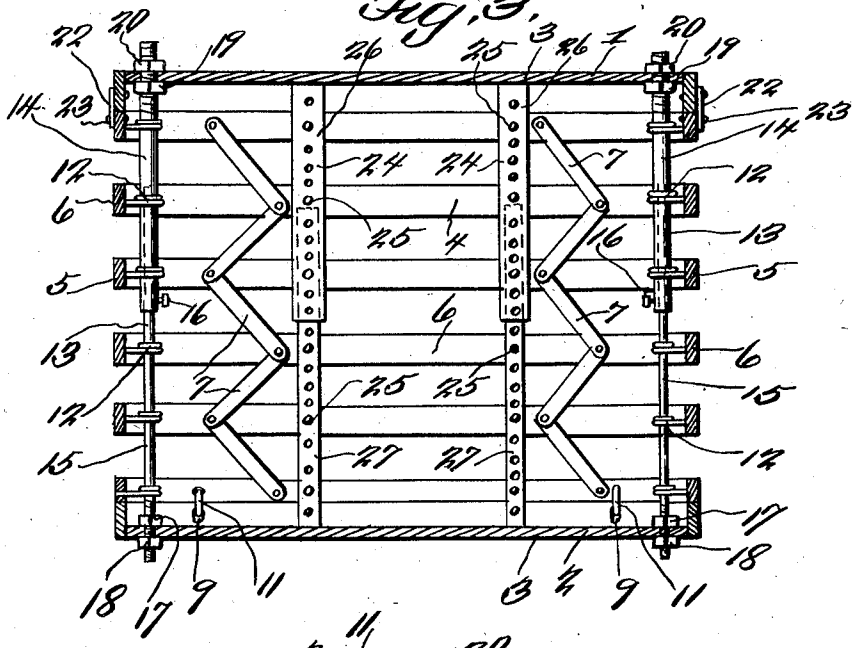


Fig. 4.

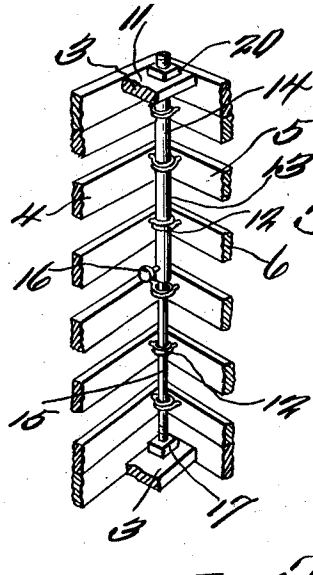
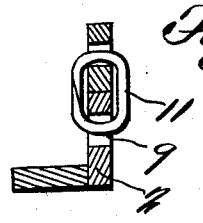


Fig. 5.



Witnesses

Rohe Meyer

Francis J. Boswell.

Inventor

Chas. B. Guthrie

By D. Swift & Co

Its Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLS B. GUTHRIE, OF SLAB FORK, WEST VIRGINIA.

COLLAPSIBLE SHIPPING-CRATE.

1,079,702. Specification of Letters Patent. Patented Nov. 25, 1913.

Application filed September 7, 1912, Serial No. 719,107. Renewed September 6, 1913. Serial No. 788,445.

To all whom it may concern:

Be it known that I, CHARLS B. GUTHRIE, a citizen of the United States, residing at Slab Fork, in the State of West Virginia, have invented a new and useful Collapsible Shipping-Crate; 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 relates to a new and useful collapsible shipping crate.

As one of the objects of the invention it is the aim to provide a simple and efficient crate, in which novel and desirable features of construction are involved.

As further stated, one of the features of construction is the provision of means, whereby the height of the crate may be increased or decreased, so that the same may hold a greater or smaller quantity.

Another feature of the invention is the provision of corner rods, each consisting of telescoping sections, to receive eyes of the sides of the box or crate at its corners, for holding the sides extended.

Another feature of the invention is the provision of telescoping members for holding the various parts of the structure rigid.

In the drawings there is disclosed certain features of construction, and in practical fields the patentee has a right to alterations, provided the alterations are comprehended within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a view showing the crate extended or opened. Fig. 2 is a view showing the crate collapsed. Fig. 3 is a sectional view on line 3—3 of Fig. 1. Fig. 4 is an enlarged detail view of one portion of the crate, to more clearly define the structure thereof. Fig. 5 is a detail view.

Referring to the drawings 1 and 2 designate the top and bottom of the crate, each of which is constructed of slats or the like 3. The sides and ends 4 and 5 of the crate are constructed of slats 6, pivoted together in sequence by the bars 7, so as to hold the slats in proper relation. The lower slats of each side and each end are connected to the slots 9 and 10 of the bottom, by means of links 11. The adjacent end portions of the sides and ends are provided with eye bolts 12, which, when the sides and ends are extended, are arranged in registration, so as to receive the vertical stay rods 13, in order to hold the sides and ends extended. These vertical stay rods are constructed of telescoping sections 14 and 15, held in adjusted positions relative to one another by the members 16. The sections 15 of said stay rods pass through the bottom of the crate, there being shoulders 17 and nuts 18, for holding the sections in position, while the sections 14 extend through the top of the crate. The sections 14 are provided with shoulders 19 and nuts 20, thereby affording means for holding the top in place. To further secure the top in position links 22 are provided, which engage members 23 of the upper slats of the sides and ends of the crate. To hold the crate rigid or firm, bars 24 are bolted to the slats of the sides and ends, upon the inside of the crate, by means of the bolt 25. These bars 24 are constructed of telescoping sections 26 and 27, held in adjusted positions relative to one another by the devices 28, in order to fit the crate at different heights.

From the foregoing it will be seen that there has been constructed a novel, simple and efficient collapsible crate, and one which comprises strength and rigidity, as well as being practical.

To arrange the crate in a collapsed position as shown in Fig. 2, the top is first removed by removing the nuts 19 and 20, then by removing the rods 13, and subsequently removing the bars 24 by taking out the bolts 25, the ends and sides may be collapsed in a closed position, because the link 7 may then close together. Owing to the side bars of the bottom of the crate being slightly raised, the eye bolts 12 of the end pieces of the crate will not interfere with the folding of said end pieces. Furthermore, in practice the eye bolts 12 may be made considerably smaller, than is shown in the drawings. Furthermore, in practice the links 11 at the sides of the crate may be made long enough to allow the sides of the crate to fold. Moreover, the eye bolts of the sides, like the eye bolts of the ends may be made smaller, and in this case, the sides may fold without interference of said eye bolts. It is to be readily understood that the sides and ends do not have to fold absolutely flat against one another, when the crate is collapsed.

The invention having been set forth, what is claimed as new and useful is:—

A shipping crate, comprising a top and bottom sides and ends constructed of slats, means for connecting the sides and ends to the top and bottom, lazy tong links connecting the slats of the sides and ends, eye bolts carried by the adjacent ends of the slats of the sides and ends and arranged in registration, corner stay rods consisting of telescoping united sections passing through the registered eye bolts for holding the sides and the ends rigid, means for holding the telescoping sections of the stay rods in adjusted positions, said telescoping sections having nuts upon their upper and lower ends, one above and below the top and bottom of the crate for holding the top and bottom in position, bars comprising telescopically united sections bolted to the slats of the sides and ends, thereby affording rigidity and strength for the crate, and means for holding the sections of the bars in adjusted positions.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLS B. GUTHRIE.

Witnesses:
W. G. TENCH,
ERNEST ECHOLS.

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