T. F. LOUGHRAN.

CRATE.

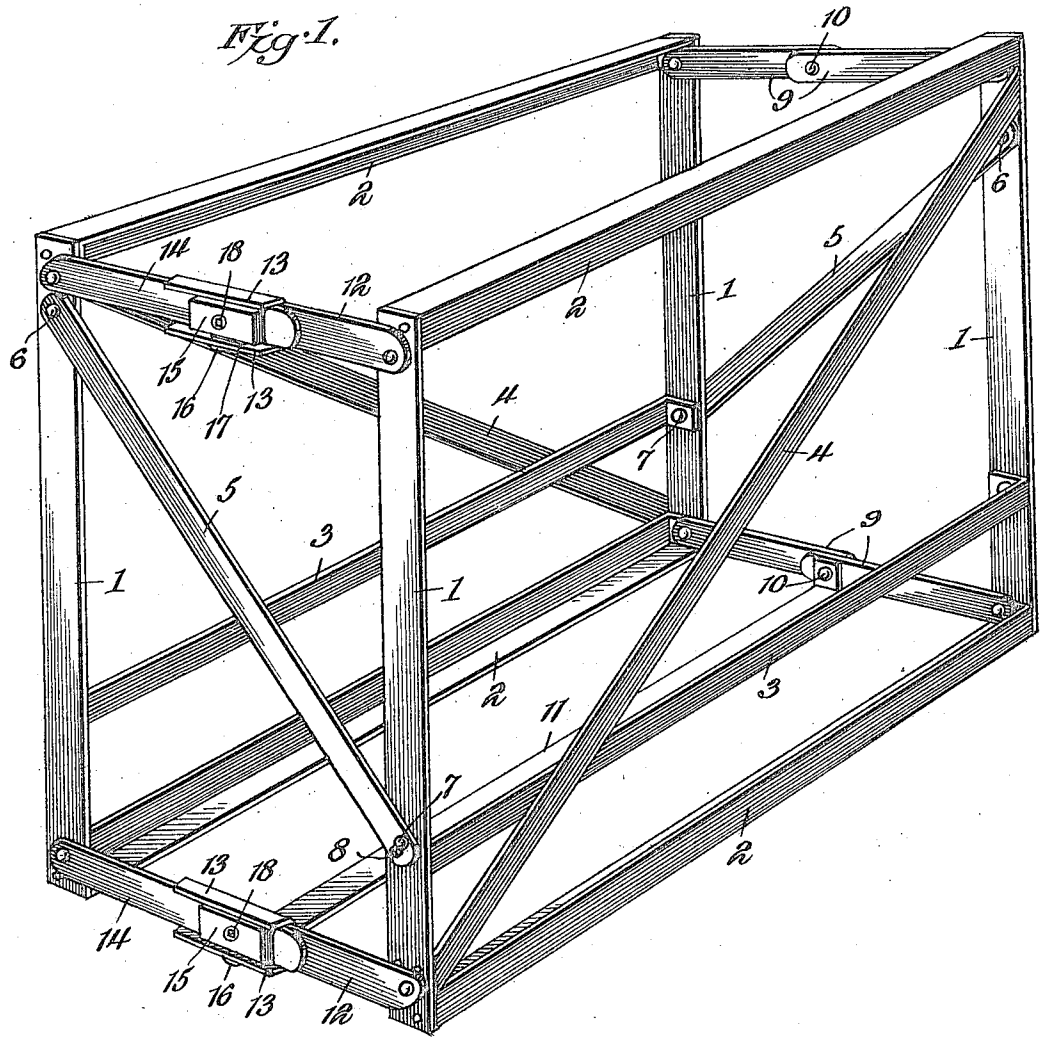
APPLICATION FILED FEB. 3, 1921.

1,412,694.

Patented Apr. 11, 1922.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

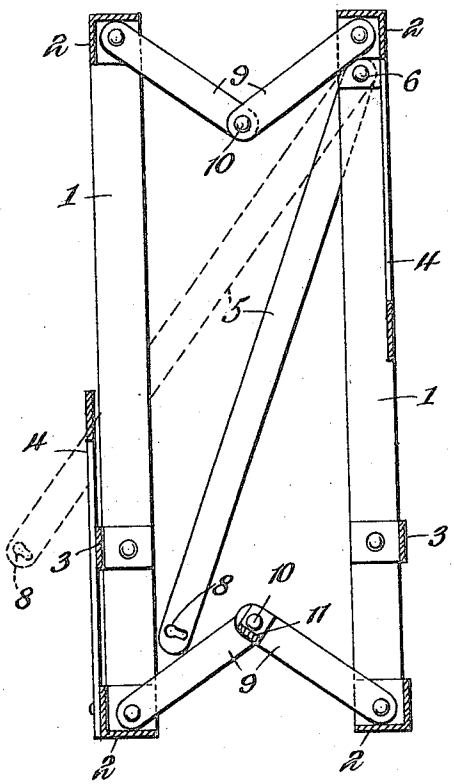


Fig. 3.

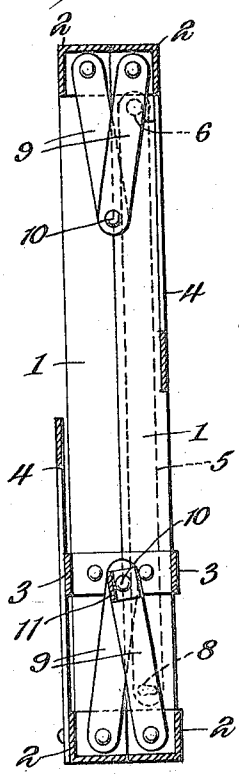


Fig. 4.

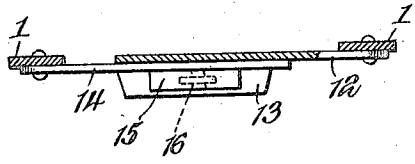
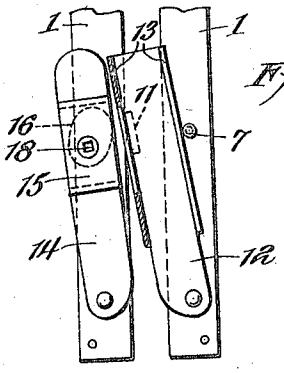


Fig. 5.



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UNITED STATES PATENT OFFICE.

THOMAS F. LOUGHRAN, OF WINONA, MINNESOTA.

CRATE.

1,412,694. Specification of Letters Patent. Patented Apr. 11, 1922.

Application filed February 3, 1921. Serial No. 442,286.

To all whom it may concern:

Be it known that I, THOMAS F. LOUGHRAN, a citizen of the United States, residing at Winona, in the county of Winona and State of Minnesota, have invented new and useful Improvements in Crates, of which the following is a specification.

My present invention pertains to crates and it contemplates the provision of a device that may be employed for the shipment of sewing-machines, phonographs and the like and after shipment has been completed the crate is adapted to be collapsed to return to the original shipper.

The invention further contemplates a collapsible metallic crate through the use of which conservation of wood is accomplished.

The invention further contemplates a crate that is durable and strong and one that may be readily adjusted about an article to be shipped and this with but a slight amount of effort on the part of those practicing the invention.

The invention in all of its details will be fully understood from the following description and claims when the same are read in connection with the drawings accompanying and forming part of this specification, in which:

Figure 1 is a perspective view of my novel crate when the same is properly set up. The view however does not disclose an article as encased by the crate ready for shipment.

Figure 2 is an elevation of one end of the crate as partially collapsed.

Figure 3 is an elevation of the same end of the crate as disclosed in Figure 2 but showing the crate as fully collapsed.

Figure 4 is a detail view of the lock construction I employ to retain the members of the crate in proper position during shipment thereof.

Figure 5 is a detail view illustrating the position assumed by the locking mechanism, when the crate is collapsed ready for the return journey to the original shipper.

My novel device is to be formed of iron, steel or other suitable material and comprises the upstanding posts 1 of flat type construction at the extreme ends of which are the long bars 2 and said bars are secured to the posts 1 as illustrated.

At a point slightly below the longitudinal center of the upstanding posts 1 I provide the brace members 3 that are secured in a permanent manner to said posts 1, and extending at an angle from the lower end of one post 1 to the upper end of an opposing post 1 are brace bars 4.

Manifestly the bars 3 and 4 assist with the members 2 in producing a strong device.

Extending from and hinged to the upper and lower ends of two of the posts 1 are short rods 9 that are hinged to each other as indicated by 10. One post 1 is provided with the hinged members 12 at its upper and lower ends and these members 12 are provided with integral lip portions 13 for an important purpose soon to be disclosed. The lower lip 13 of each member 12 is provided with a lock-receiving aperture 17 as shown and movably secured to the other upstanding post 1 are members 14 that are provided with locks 15 that rest when the crate is assembled in the channels formed by the lips 13 of member 12.

The locks 15 are provided with the keyhole 18 into which the ordinary well known sewing-machine or similar key is inserted to operate the keeper 16 into and out of the aperture of the lips 13.

In order to materially assist the locks 15 to prevent casual collapse of the crate I provide on the end walls of the posts 1 the cross brace bars 5 that are hinged at 6 and are adapted to take over a pin 7 of the opposing post 1 as shown.

In the practical use of the invention the crate is adjusted as appears in Figure 1 and after the shipment has been received, the purchaser merely unlocks the bars 12 and 14 and allows said members to gravitate downwardly or upwardly, as the case may be. The rods 5 may then be released from the pins 7 and the crate removed from around the article. The crate is then collapsed as shown in Figure 3 and the members 9, 12 and 14 will assume positions alongside the posts 1.

It will be gathered from the foregoing that the invention is very inexpensive to produce and because of its construction may be used indefinitely to make successive shipments of bulky machines and the like. Moreover, the up-keep of the device is quite immaterial and because of the material employed the possibility of the crate becoming inoperative is decreased.

Having described my invention, what I claim and desire to secure by Letters Patent is:—

1. In a crate the combination of upstand-

ing members, side bars secured to the upstanding members, cross bars secured to the sides of the upstanding members, hinged members hinged to the upstanding members, cross bars hinged to the ends of some of the upstanding members, pins formed on the upstanding members to receive one end of the last-named bars, and bars secured to several of the upstanding members and locking means for retaining the bars in rigid manner to each other; said means comprising a channel formed on one of the members and a lock secured to the opposing members and adapted to seat in the channels of the members.

2. In a crate, the combination of members, bars secured to the members, hinged portions secured to the first named members, cross bars hinged to the ends of the first-named members, pins formed on said members to receive one end of one of the bars, and bars secured to some of the first-named members and means for retaining the bars in rigid position to each other; said means comprising a channel formed on one of the members and locking means secured to the opposing members and adapted to seat in the channel.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS F. LOUGHRAN.

Witnesses:
LEO F. MURPHY,
W. V. LINDSAY.