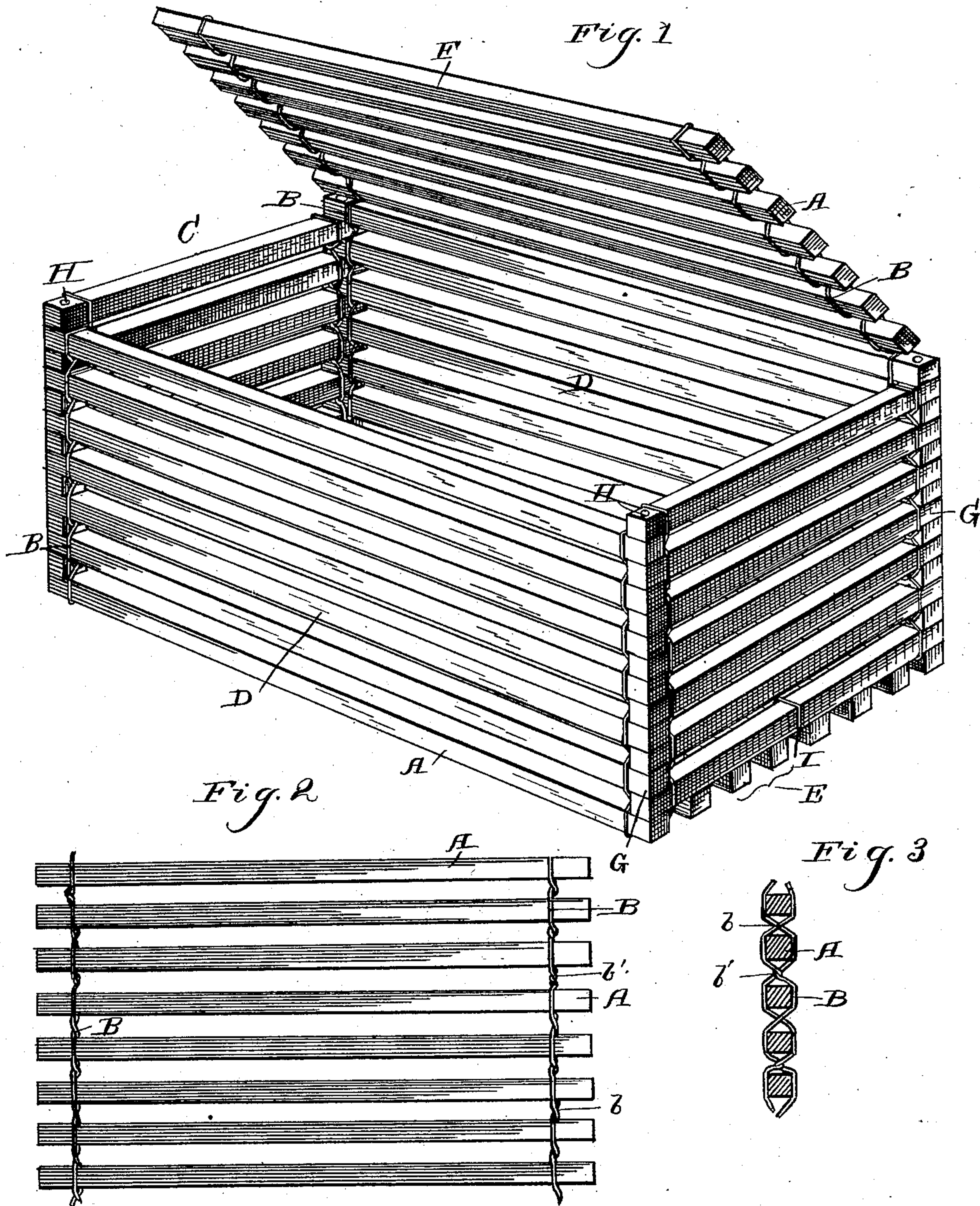


(No Model.)

T. F. LERCH.
CRATE.

No. 365,442.

Patented June 28, 1887.



Witnesses:
J. C. Turner
J. S. Barker.

Inventor:
Tyburtus F. Lerch
by Doubleday & Lies
Attys

UNITED STATES PATENT OFFICE.

TYBURTUS F. LERCH, OF CANTON, OHIO, ASSIGNOR TO HENRY FISHER, OF
SAME PLACE.

CRATE.

SPECIFICATION forming part of Letters Patent No. 365,442, dated June 28, 1887.

Application filed February 23, 1886. Serial No. 192,917. (No model.)

To all whom it may concern:

Be it known that I, TYBURTUS F. LERCH, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Crates, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a perspective view of a crate made according to my invention. Fig. 2 is a plan view of the web or fabric employed in making up the crate.

In the manufacture of the crate herein shown I make use of a fabric of substantially the character illustrated in Fig. 2, and consisting of a series of slats, A, connected together near their ends by wires B, which also serve to properly separate and space slats or bars A. In making this fabric, which may be done either by hand or by any machinery adapted therefor, the wires B B are made to encircle one of the slats A near its ends, and are then crossed or twisted, after which the two strands of wire are again separated, a second slat introduced between them, and then again crossed or twisted, and so on to any desired extent, the fabric being rolled or packed in any suitable receptacle as fast as made.

In making a crate of the construction shown in Fig. 1, fabrics of the hereinbefore-described character and of two different widths are employed, the ends C C of the crate being made from a web of fabric of less width than that from which the sides D D, bottom E, and top or cover F are made. Portions of the fabrics, of right length to form a crate of the desired size, are cut from the respective webs, and the ends of the cut wires twisted together to prevent their separation and the slats becoming detached. The wider fabric is next bent around the end pieces, C C, in the manner shown, the ends of those slats which form the ends and sides of the crate interlapping to form the corners of the crate.

H H are nails, screws, or pegs, which may be passed through two or more of the interlocking ends of slats A, and thus made to assist in keeping the crate in proper shape.

I I are binding wires or cords passing around the lower end slats and the wires B or other part of the bottom of the crate, and operating to hold the bottom up close against the ends

C at all points intermediate between the front and rear sides. One or more of such binding wires or cords I may be employed at each end of the crate, although I have usually found one at each end, arranged about midway between the front and rear sides, sufficient.

By reason of the slats of the end section of the crate being connected with each other by the wires B, the slat to which the bottom is directly wired or connected is not required of itself to sustain the whole weight of the contents of the crate, but is strengthened or supported by the other slats to which it is tied. This advantage, in addition to the fact that the bottom—and top, when desired—may be detachably secured to the ends without the use of nails or screws, which would quickly destroy the slats, or without necessitating the cutting or otherwise forming the end pieces for this purpose, arises from making the ends and sides being formed from a flexible slatted fabric. It will be seen that the wires B are formed with loops or eyes at regular intervals, which loops surround the slats near their ends; and while I prefer to employ two strands of wire at each end of the slat, this is not necessary, as a single wire may be used, and will in some cases work satisfactorily. The two strands of wire may be simply crossed, as at *b*, or may be twisted one or more times, as at *b'*. The greater the number of twists in the wire, the tighter will the eye or loop inclose the slats. I have found that it is sufficient to simply cross the wires connecting the slats which make up the fabric from which the sides and bottom of the crate are made, but that it is better to twist the wires between the slats forming end pieces, C, as they should be somewhat more rigid than the other parts of the crate. The fabric is so made up that the spaces between the slats are of the same width as are the slats, so that when the ends of the slats interlap, as at G, they shall rest directly one upon the other, thus adding materially to the strength and rigidity of the crate.

The cover F of the crate may be formed from the same piece of fabric as are the sides and bottom, as shown in Fig. 1, in which case the wires B will act as the hinges upon which the cover swings; or an ordinary board cover may be hinged to one of the sides.

The fabric herein described may be manu-

factured and sold to users, who may construct therefrom crates of sizes to suit their convenience.

Among the advantages incident to a crate of this character are lightness and cheapness and the facility with which it may be knocked down and reshipped to sender after having been emptied of its contents.

By the employment of the fabric herein shown, the depth of the crate may be varied or made to suit the requirement to which it is put, without necessitating that each piece from which the sides, bottom, and ends are made should be specially manufactured for each different size of crate intended to be put up, as would be necessary were the slats fastened to rigid strips, as has heretofore been common.

It is well known that the small boxes in which berries are shipped, and which a crate such as mine is adapted to carry, vary considerably in height. In order to meet all requirements, and a demand which has been long felt by users of such berry-boxes, it is desirable that each user should be able to quickly, easily, and cheaply construct a crate of a size to suit the particular style of boxes which he employs, and yet that all users should be able to make up their crates from the same

material. This object I have attained by the use of my invention, in which both the sides, bottom, and ends are made from a fabric such as described. This is rendered easy by reason of the fabric being flexible at all points throughout its length, so that the side pieces may be bent around the end pieces, whatever be the height of the latter; but this flexibility makes it desirable that the binding-wires I should be employed, as shown, in order to keep the bottom from sagging away from the end pieces.

I am aware that fabrics similar to that shown herein have been employed for making fences; and hence I do not claim such as my invention.

What I claim is—

A crate having end pieces formed from a fabric, consisting of slats A and connecting-wires B, and having sides and a bottom formed from a similar fabric, the ends of the slats of the sides and of the ends interlapping, as at G, substantially as set forth.

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

TYBURTUS F. LEROIL.

Witnesses:

HENRY FISHER,
J. P. FAWCETT.