

May 27, 1952

G. J. SCHMITZ

2,598,136

BANANA CRATE

Filed Oct. 4, 1949

2 SHEETS—SHEET 1

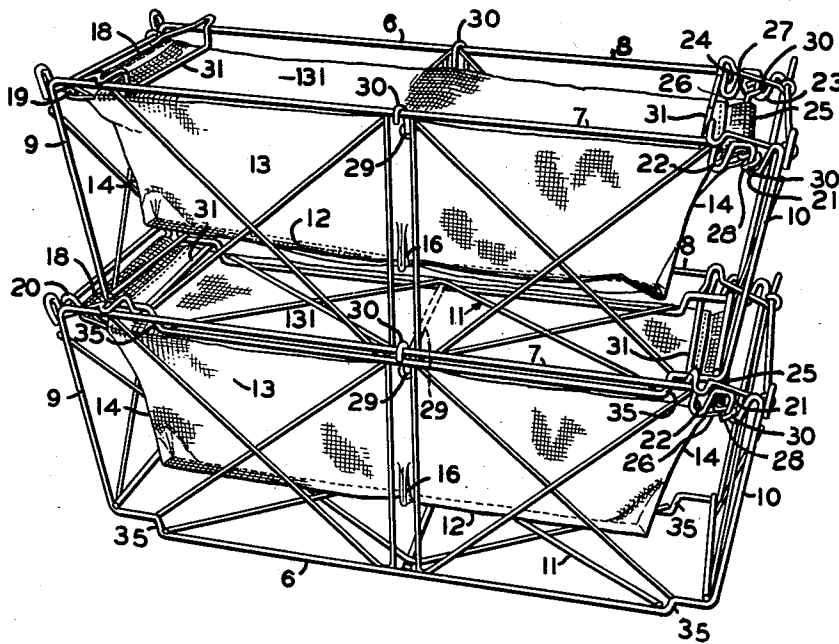


FIGURE 1.

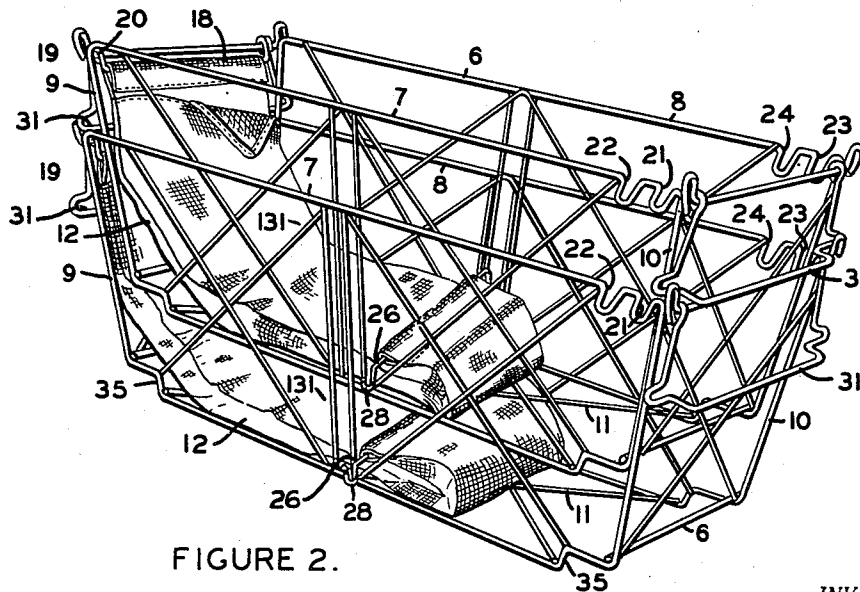


FIGURE 2.

INVENTOR.
GEORGE J. SCHMITZ
BY

Marvin B. Davis
ATTORNEY

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G. J. SCHMITZ

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2 SHEETS—SHEET 2

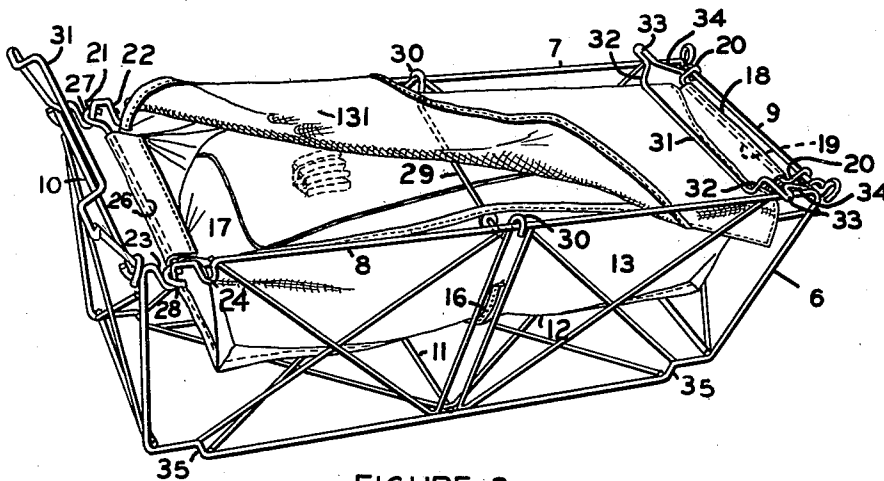


FIGURE 3.

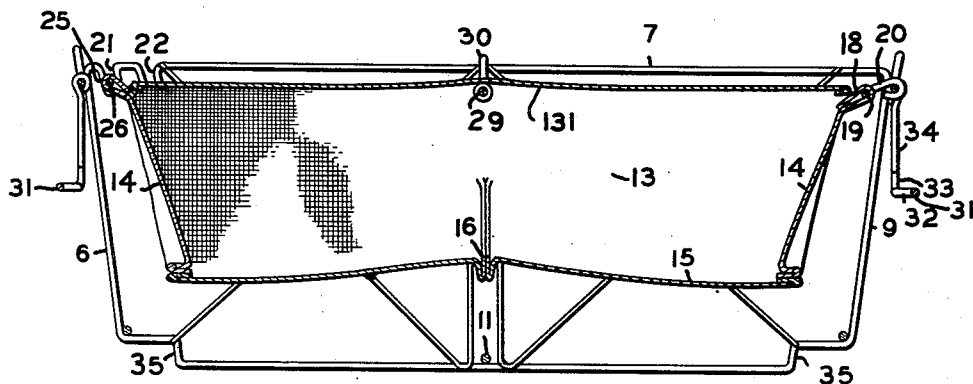


FIGURE 4.

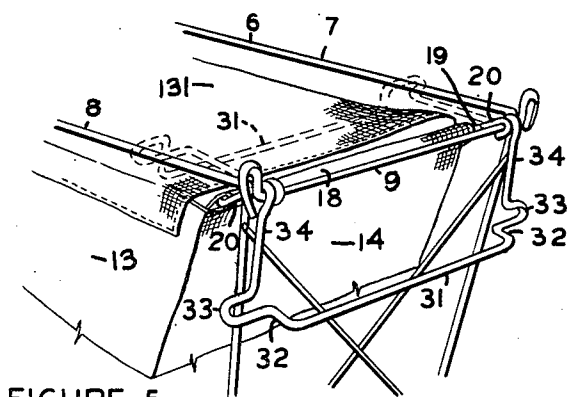


FIGURE 5.

INVENTOR.
GEORGE J. SCHMITZ
BY

Mannell Davis
ATTORNEY

UNITED STATES PATENT OFFICE

2,598,136

BANANA CRATE

George J. Schmitz, Kansas City, Mo.

Application October 4, 1949, Serial No. 119,419

5 Claims. (Cl. 150—51)

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This invention relates to a banana shipping crate and more particularly to one having a shallow flexible lining spaced and suspended from the crate to prevent chafing of the lining and bruising of the bananas.

Heretofore bananas have been shipped on the stalk and placed in deep round type vertical baskets with a cloth lining that would often permit the bananas to become bruised and chilled during shipment.

An object of the present invention is to provide an improved horizontal shipping crate that supports a depending or suspended flexible lining spaced from the side walls and bottom of the crate to prevent the flexible wall from coming in contact with the side walls or bottom of the crate.

Another object of the present invention is to provide spaced cross members inside of the crate near the top thereof from one wall to the opposite wall of the shipping crate and latch or anchor in position to the crate walls to support the flexible liner.

Another object of the present invention is to stretch by anchorage the depending or suspended liner within the crate to prevent any appreciable movement of the liner from side to side during the rocking action of a steam vessel at sea, on shipping trucks or trains.

Another object of the improved invention is to provide a cross member preferably at an intermediate point of the length of the horizontal crate to support a mid-portion of the liner, the liner being arched at the bottom to prevent undue sagging and chafing on the bottom of the banana crate.

Another object of the improved invention is to provide fulcrumed support members at the ends of the crate that may be swung into position across the top of the crate near the ends thereof to support a like basket thereon, each crate having an interlocking co-acting member on the bottom thereof to prevent shifting of one crate on another.

With these objects in view the invention will be better understood by the accompanying drawings and the more detailed description that follows.

In the drawings:

Figure 1 is a perspective view of a pair of improved crates with the improved type of lining and one crate being stacked upon the other to illustrate the interlocking or latching members to prevent shifting of one crate upon the other.

Figure 2 is a perspective view of a pair of improved empty crates nested together for shipping

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purposes, one end of the lining being unlatched and resting on the bottom of the crate to permit nesting of the crates.

Figure 3 is a perspective view of the crate with the improved liner illustrating a few of many bananas which are cut from a stalk and wrapped in a blanket to prevent freezing.

Figure 4 is a longitudinal interior broken view in elevation of the improved crate and lining.

Figure 5 is a perspective fragmentary view of one end of the crate and anchored liner with one of the fulcrumed supports opened outward and dotted on the crate in its supporting position.

The crate 6 is composed of wire open type side walls 7 and 8 which are connected to and spaced by end walls 9 and 10. The side walls 7 and 8 and end walls 9 and 10 are inclined from a vertical position and have their respective lower edges spaced closer together than their upper edges, the walls converging from the top toward the wire open type bottom 11 of the crate for nesting or stacking of the crates when they are empty.

The improved liner 12 comprises side walls 13 spaced apart by end walls 14 all of which converge from top to bottom and join the liner bottom 15 which is arched by the gather 16 to prevent sagging and chafing of the liner on the bottom 11 of the crate. It will be noted that the liner is smaller than the crate and definitely spaced from the crate walls. The liner is preferably made from flexible and non-elastic material to hold its shape when in a depending or suspended stretched position as explained in the following description. The flexible improved liner 12 in one form has insulation qualities, has a separate additional insulated blanket 17 or may be combined into a double liner with insulated material therebetween.

The upper end 18 of one end wall liner 14 has a fold over a wire anchor or cross bar 19 which is secured to the crate end wall 9 by stirrup formed ends 20 bent at right angles and preferably pivoted on the wire formed wall 9. The side wire formed walls 7 and 8 have latch recesses 21, 22, 23 and 24 formed in the upper portion of the side walls and near the opposite end wall 10. The upper end 25 of the opposite end wall liner 14 has a fold over a wire anchor or cross bar 26 which has right angled hooked ends 27 and 28 latched into some of the recesses of the side walls to give the proper stretch in the lining to prevent sagging. A center anchor support wire 29 located at the mid-way point of the length of the crate is passed through the lining side walls 13 near the top of the liner and has hooks 30 to hook

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on to the side walls 7 and 8. This wire support 29 passes below the cover and prevents the center of the liner from sagging to the wire bottom 11 of the crate. A cover 131 on the liner is attached to one of the side walls 13.

Fulcrummed support bars or cross members 31 hold the liner cover 131 down on the blanket or insulated liner and have right angle bends 32 turned upward at right angles and outward for support reverse bends 33 that normally rest on the side walls 7 and 8. The reverse bends 33 are formed with extended arms 34 bent at right angles thereto and pivoted on the wire formed end walls 9 and 10. These fulcrummed support bars 31 support a like crate and latch the lower edges 35 of side walls 7 and 8 of a like crate into interlocked position to prevent shifting of stacked crates.

In the operation of packing the crate it is quite obvious that the fulcrummed bars 31 are swung outward, the liner cover 131 swung outside of the crate, the blanket if separate from the liner opened and the liner is stretched and anchored with the bar 26 latched into the proper recesses. Bananas are cut from the stalk and packed, covered by the blanket and insulation liner cover. An insulated double liner may be preferred in some cases. The fulcrummed bars 31 are raised, swung inward on the cover of the liner to hold it in position. The bends 32 and 33 therein are supported on the side walls 7 and 8 and support and latch a like crate thereon by means of co-acting offset wires 35 in the lower portion of side walls 7 and 8.

When the crates are shipped empty they are nested as illustrated in Figure 2 with bars 26 unlatched and the greater part of the liner resting on the bottom of the crate and one end of the liner still anchored to cross bar 19.

What I claim as new and desire to secure by Letters Patent is:

1. A banana shipping crate comprising side walls spaced by and joined to end walls, a stirrup shaped member, said stirrup shaped member fulcrummed on the top of one end wall, a cross bar, a cloth liner having side walls spaced by and joined to end walls with a bottom and top cover, one of said cloth liner end walls having the top thereof joined to and depending from said stirrup, the opposite end wall having the top thereof supported by said cross bar latched into the side walls of said crate, said liner forming a receptacle and being spaced from all of the crate walls and bottom of said crate to prevent chafing thereof and bruising of fruit when placed in said liner.

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2. A banana crate comprising side walls and end walls, a stirrup member, a cross bar, said stirrup connected to one crate end wall, a receptacle being smaller than the crate, said receptacle suspended within said crate and supported near the end walls of said crate by said stirrup member and said cross bar, and said receptacle being stretched between said stirrup shaped member and said cross bar and spaced from the walls of said crate.

3. A banana shipping crate comprising side walls spaced by and joined to end walls, a stirrup shaped member, said stirrup shaped member fulcrummed on the top of one end wall, a cross bar, a flexible receptacle having side walls spaced by and joined to end walls with a bottom and top cover, one of said end walls of said flexible receptacle joined to and depending from said stirrup, the opposite end wall supported by said cross bar latched into the side walls of said crate, said flexible receptacle being stretched between said stirrup shaped member and said cross bar and spaced from all of the walls and bottom of said crate.

4. A banana crate comprising side walls and end walls, a stirrup member, a cross bar, said stirrup connected to one crate end wall, a receptacle suspended within said crate and supported near the end walls of said crate by said stirrup member and said cross bar, and said receptacle being spaced from the walls of said crate.

5. A banana shipping crate comprising flared sides and ends, a fabric liner receptacle having flared sides and ends with a bottom and top cover, cross bars, said fabric liner receptacle ends supported on said cross bars, said cross bars secured to the sides of said crate, said liner being spaced from the crate sides and ends and said bottom of said crate, said liner being stretched between said cross bars, and said liner receptacle being arched on the bottom to prevent chafing on the crate.

GEORGE J. SCHMITZ.

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