

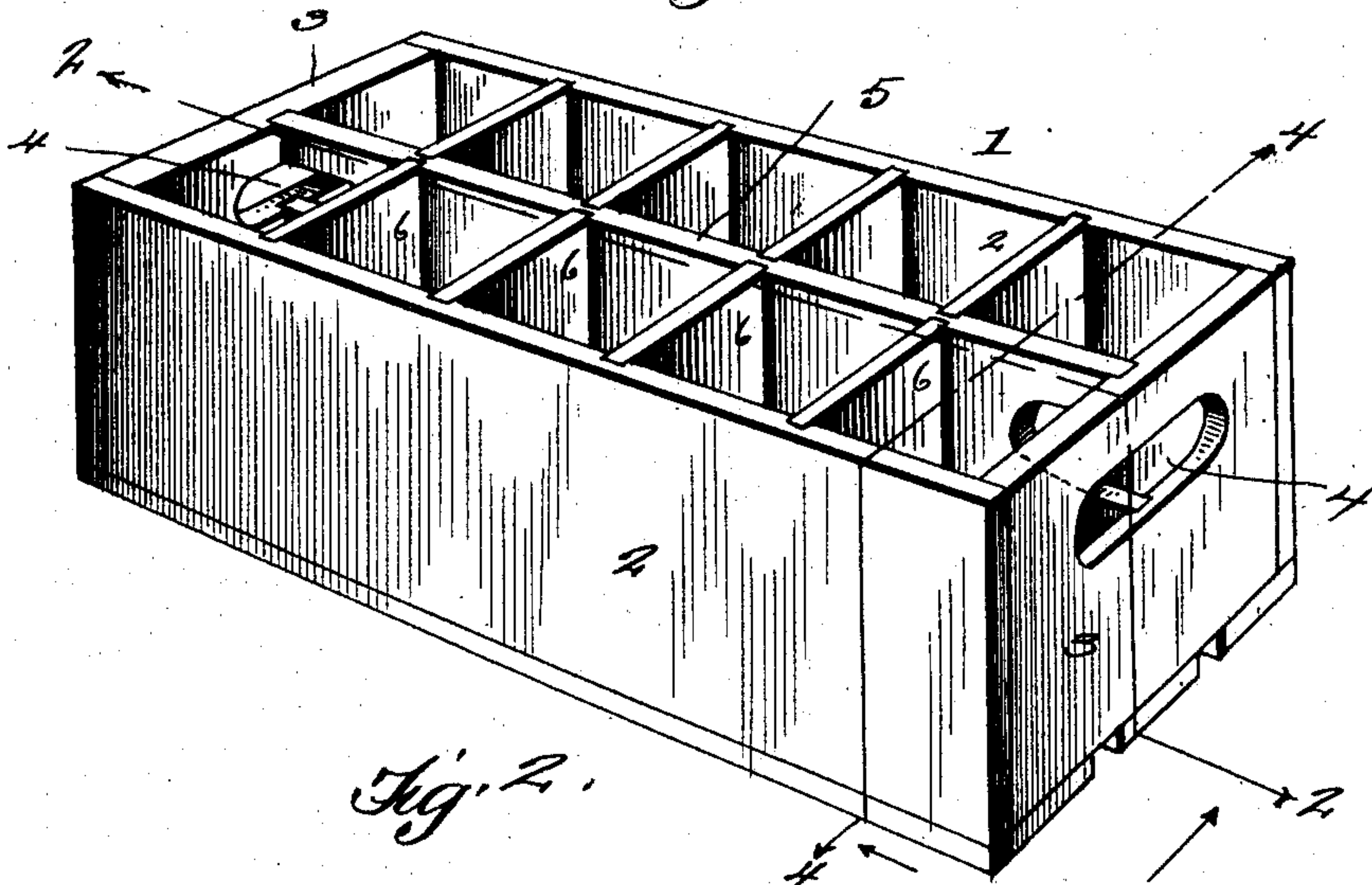
J. A. LIEBLER.  
BOX.

APPLICATION FILED APR. 20, 1908.

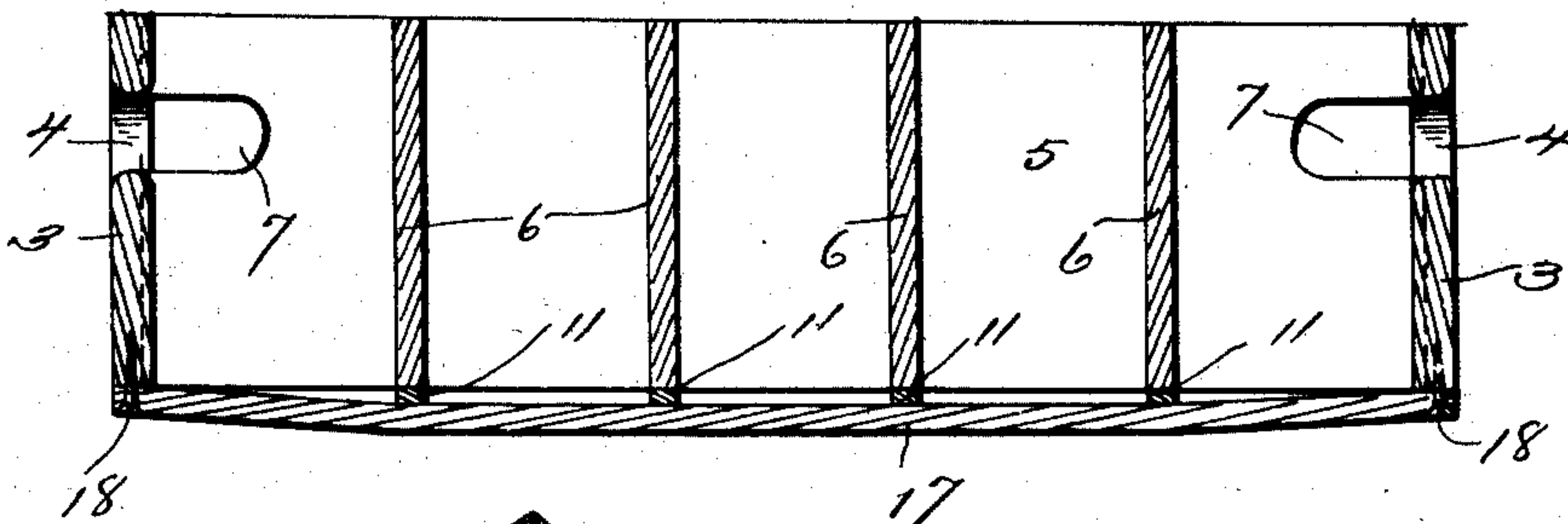
908,784.

Patented Jan. 5, 1909.

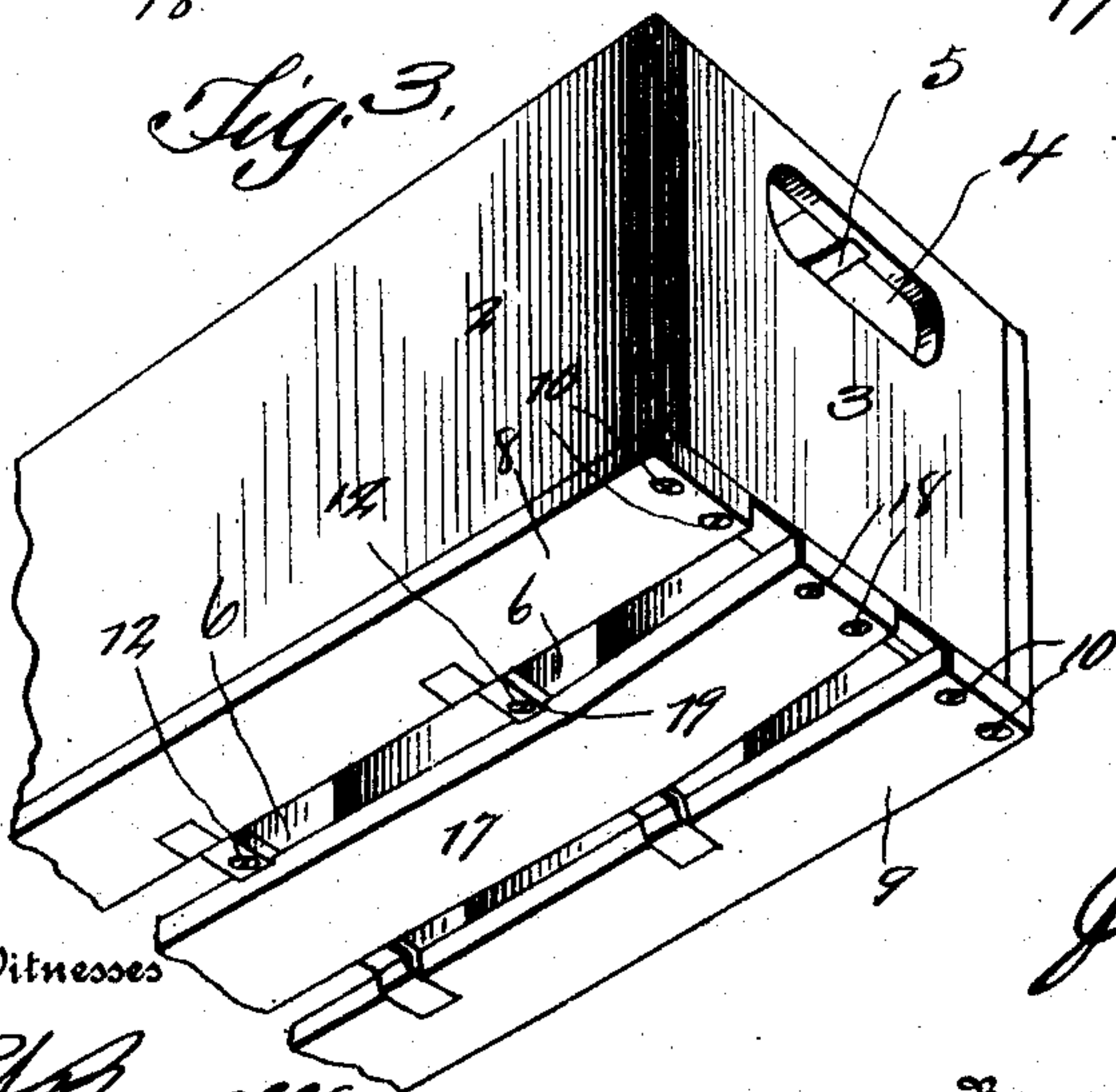
*Fig. 1.*



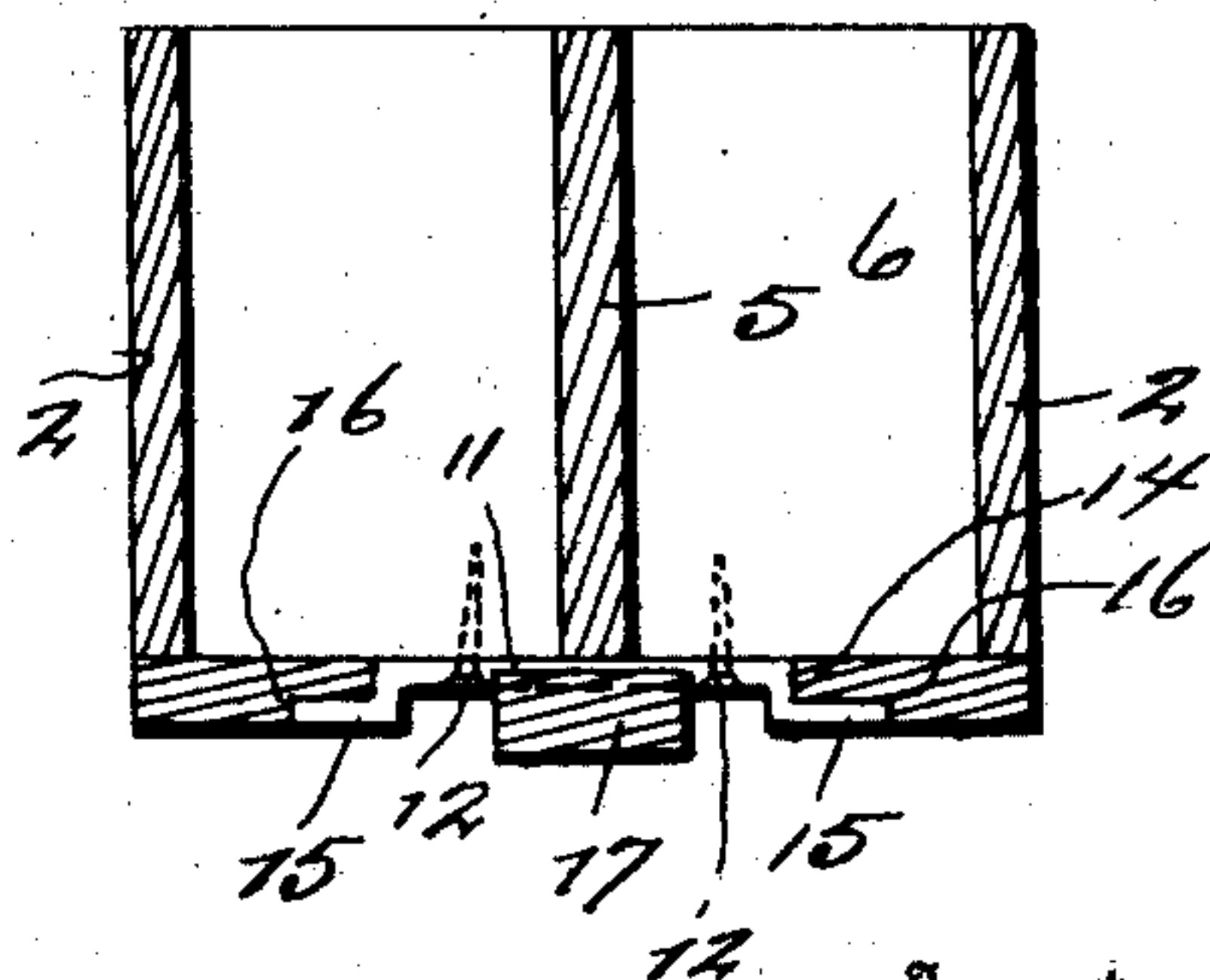
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

*A. H. Brownell.*  
*E. H. Bond*

Inventor

*Joseph A. Liebler*

By

*Lochman & Co.*

Attorneys



# UNITED STATES PATENT OFFICE.

JOSEPH A. LIEBLER, OF NEW YORK, N. Y., ASSIGNOR TO MANHATTAN BOX COMPANY, A CORPORATION OF NEW YORK.

## BOX.

No. 908,784.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed April 20, 1908. Serial No. 428,102.

*To all whom it may concern:*

Be it known that I, JOSEPH A. LIEBLER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Box, of which the following is a specification.

This invention relates to certain new and useful improvements in boxes of that class designed for holding and carrying bottles of seltzer, vichy, soda water, beer, etc., and it has for its objects among others to provide an improved box of this character which shall have the bottom thereof so constructed and strengthened that the life of the box shall be materially lengthened. It is well known that it is the bottom of the box that more readily breaks, and it is my aim to so strengthen the bottom of the box that the slats thereof shall be firmly held so they cannot shift and so disposed that they cannot give in any way. The bottom is strengthened and supported by means of metallic plates secured to the partitions of the box, and their ends are let into the sides of the side strips of the bottom, the intermediate strip being disconnected from the said plates, and in some instances slightly bowed downward and under tension, being secured at its ends only, so that the weight of the bottles thereon will not tend to press it off, the weight of the bottles being sustained principally by the side strips.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a box embodying my present invention. Fig. 2 is a vertical longitudinal section of the same on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of a portion of the box, looking from the under side thereof. Fig. 4 is a vertical cross section on the line 4—4 of Fig. 1.

Like numerals of reference indicate like parts throughout the several views.

Referring to the drawings 1 designates the box which is of the compartment type, of wood, designed to hold a plurality, usually a dozen, bottles. It comprises two sides 2, two ends 3, having the hand-holes 4, and the

longitudinal partitions 5, and transverse partitions 6, all of which may be of the well known or any approved form of construction, the hand-holes, in this instance, being shown as extending into the ends of the longitudinal partition 5, at the ends thereof, as seen at 7 in Figs. 1 and 2. The bottom of the box is composed of a plurality of strips, in this instance shown as three in number. The outer strips 8 and 9 are secured at their ends to the ends 3 of the box by suitable means, as the screws 10.

To the under side of each of the transverse partitions 6 is secured a metal bar or plate 11, each plate being secured upon each side of the longitudinal partition 5 by suitable means, as the screws 12. These plates are offset at their ends, as seen at 13, the vertical shoulders 14 engaging the adjacent edges of the strips or slats 8 and 9, as seen clearly in Fig. 4, and the end portions 15 seated in recesses 16 of said strips or slats 8 and 9, so as to be flush with the outer faces of said strips.

17 is the center or intermediate slat or strip of the bottom. It is secured at its ends to the ends 3 of the box by suitable means as the screws 18, said center strip or slat being disconnected throughout the remainder of its length, and having the portions opposite the plates 11 bearing against said plates. When the center strip has its under face level with the others, as seen in Fig. 1, it is provided with transverse grooves 19 to receive the adjacent faces of the plates 11. The depth of these grooves will be dependent upon the amount of bulge which it is desired to give the said center strip. In Fig. 2 this center strip is shown as without the transverse grooves and the bulge in said center strip is clearly shown. By this latter construction, the slats or strips forming the bottom of the box are held to position firmly by the metal plates or bars, the latter holding the side strips of the bottom against movement in all directions so that they cannot shift in any way, and by reason of the offsets the metal plates lie firmly against said strips. While the upper faces of the strips of the bottom are practically flush, still the center strip is not called upon to sustain much of the weight of the bottles. The metal plates bind all of the parts of the box together, and a box thus constructed will be found very strong and durable and not easily broken. This construction gives the



bottom of the box that carries the total weight of bottles a strong support in the center; all parts of the bottom and iron bands can readily be taken apart and any broken part easily exchanged for new part with any ordinary tools without the employment of skilled labor as there are no rivets.

The improvement is applicable to all sorts of boxes having slatted bottoms, whether for carrying bottles of vichy, seltzer, beer, soft drinks, or any other substance.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages; for instance, when not bulged, the center strip may be secured intermediate its ends.

What is claimed as new is:—

1. In a box of the character described, the combination with the sides, ends, and partitions, of transverse metallic means secured to the transverse partitions at the bottom and having offsets engaging the side slats of the bottom the shoulders formed by said offsets engaging the edges of the outside slats.

2. In a box of the character described, the combination with the sides, ends, and partitions, of transverse metallic means secured to the transverse partitions at the bottom and having offsets engaging the side slats of the bottom the shoulders formed by said offsets engaging the edges of the outside slats, and an intermediate bottom strip beneath said transverse metallic means the body portions of said metallic means bearing directly against the bottoms of said partitions.

3. A box for the purpose described having a slatted bottom with its intermediate strip normally slightly bowed downwardly and transverse metallic plates disconnected from the bowed strip and engaging the side strips of said bottom.

4. A box for the purpose described, comprising sides, ends and partitions, and a bottom of slats, the outside slats of said bottom being secured at their ends to the ends of the box, metal plates secured to said partitions and having their ends offset and engaging and seated in the adjacent edges of the out-

side slats, and an intermediate slat secured at its ends only to the ends of the box and bearing against the under surface of the body portion of said plates.

5. A box for the purpose described, comprising sides, ends and partitions, and a bottom of slats, the outside slats of said bottom being secured at its ends to the ends of the box, metal plates secured to said partitions and having their ends offset and engaging and seated in the adjacent edges of the outside slats, and an intermediate slat secured at its ends only to the ends of the box and bowed downwardly.

6. A box for the purpose described, comprising sides, ends, partitions and a slatted bottom, the outside slats of said bottom having recesses in their adjacent under faces, metal plates secured to the partitions and having at their ends shoulders engaging the adjacent ends of the outside slats and end portions seated in the recesses thereof.

7. A box for the purpose described, comprising sides, ends, partitions and a slatted bottom, the outside slats of said bottom having recesses in their adjacent under faces, metal plates secured to the partitions and having at their ends shoulders engaging the adjacent ends of the outside slats and end portions seated in the recesses thereof and an intermediate slat secured at its ends only and bowed downwardly intermediate said ends.

8. A box for the purpose described, comprising sides, ends, partitions and a slatted bottom, the outside slats of said bottom having recesses in their adjacent under faces, metal plates secured to the partitions and having at their ends shoulders engaging the adjacent ends of the outside slats and end portions, seated in the recesses thereof, and an intermediate slat secured at its ends only and bowed downwardly intermediate said ends, said intermediate slat having transverse grooves opposite said metallic plates.

JOSEPH A. LIEBLER.

Witnesses:

FRANK BOSLET,  
LOUIS BAER.