

(No Model.)

E. L. WILLITS.
CRATE OR FRUIT CASE.

No. 414,622.

Patented Nov. 5, 1889.

Fig. 1.

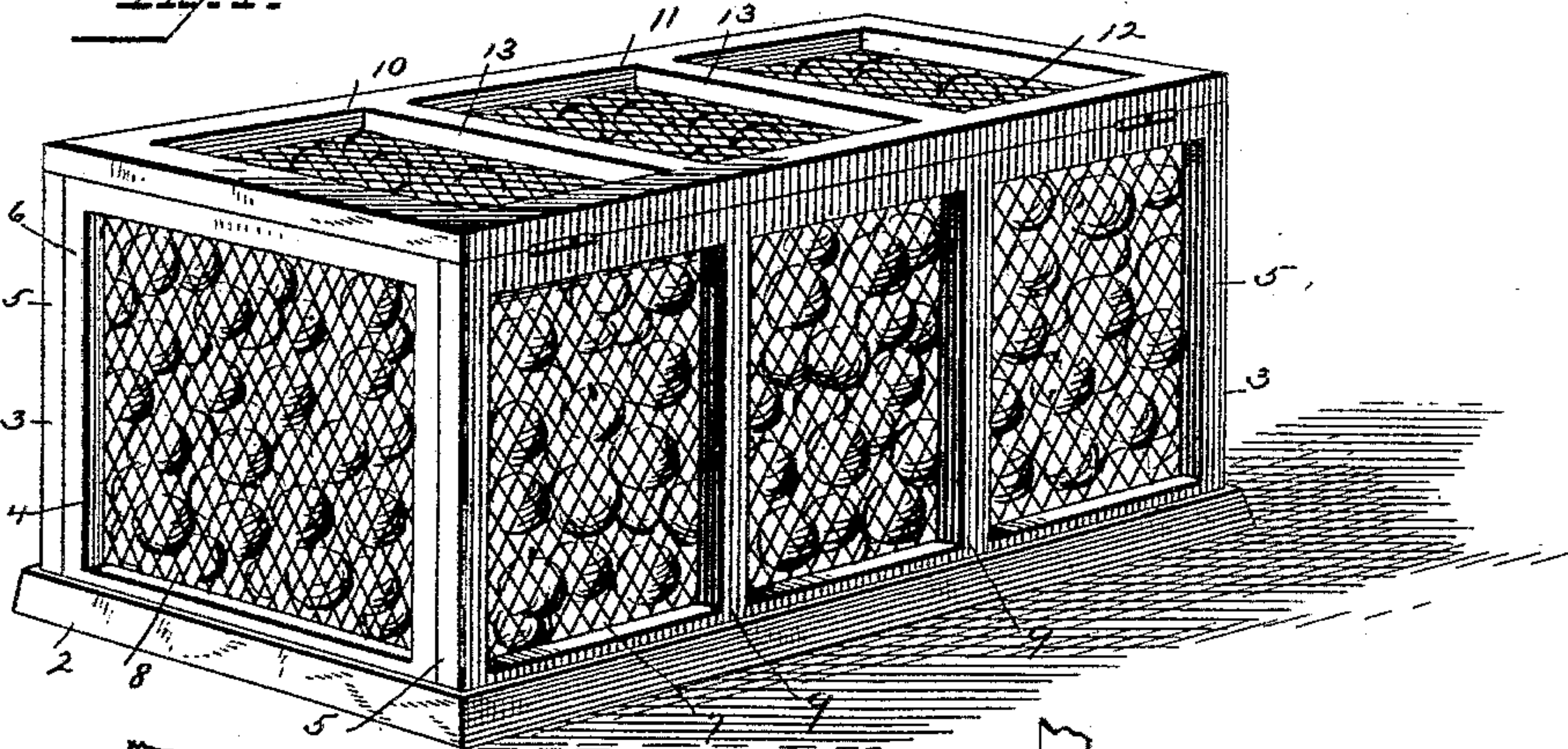


Fig. 2.

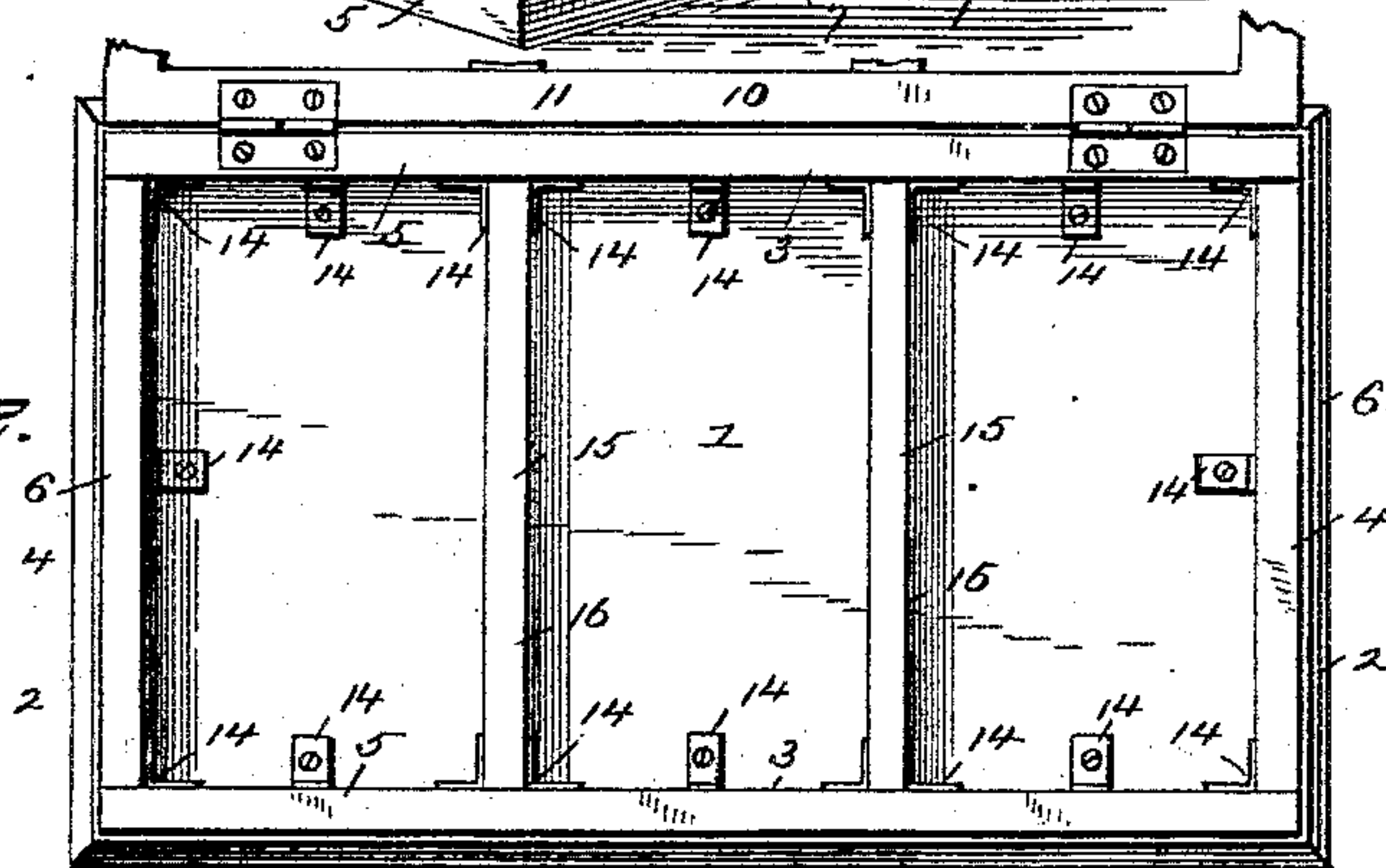


Fig. 3.

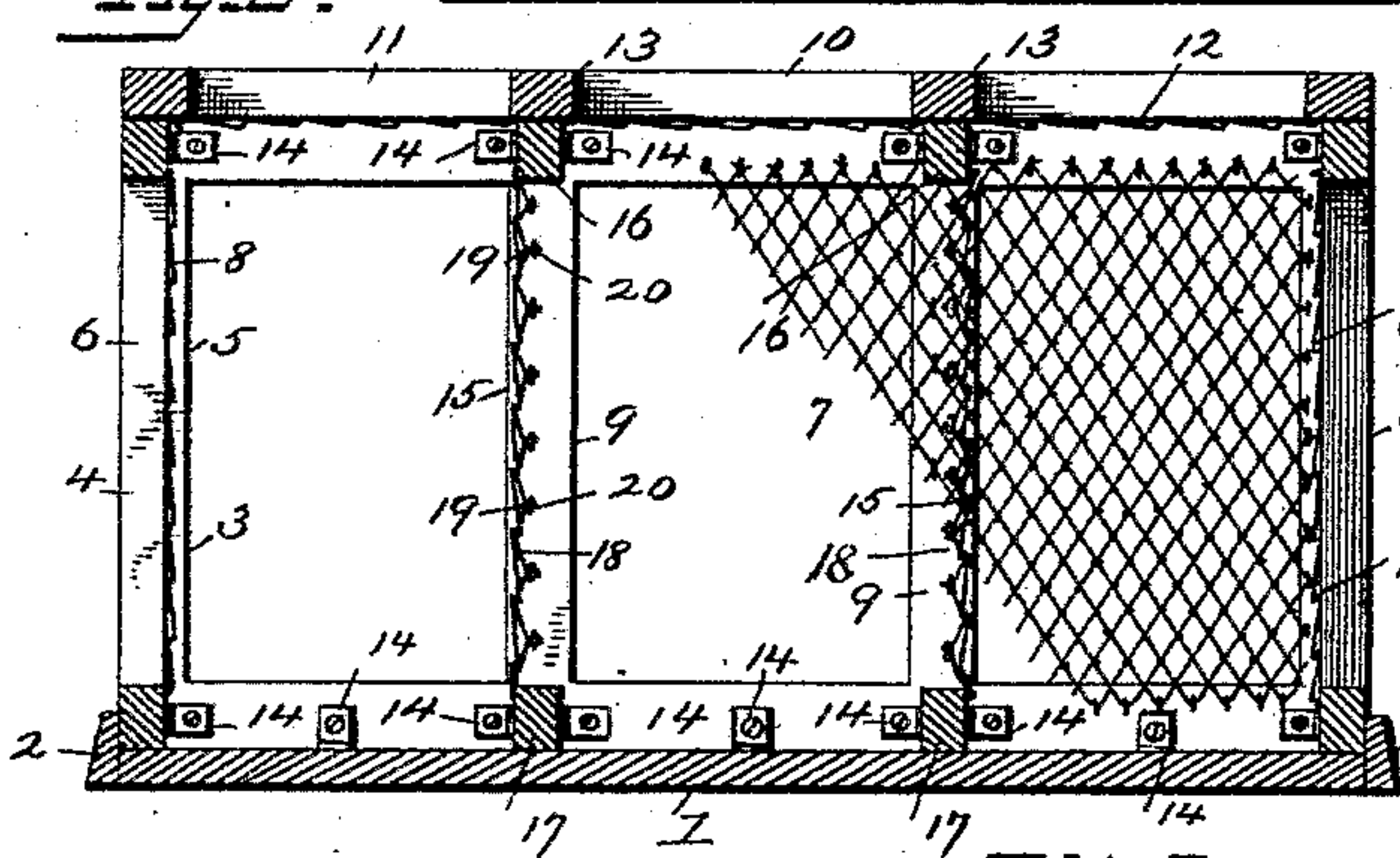


Fig. 4.

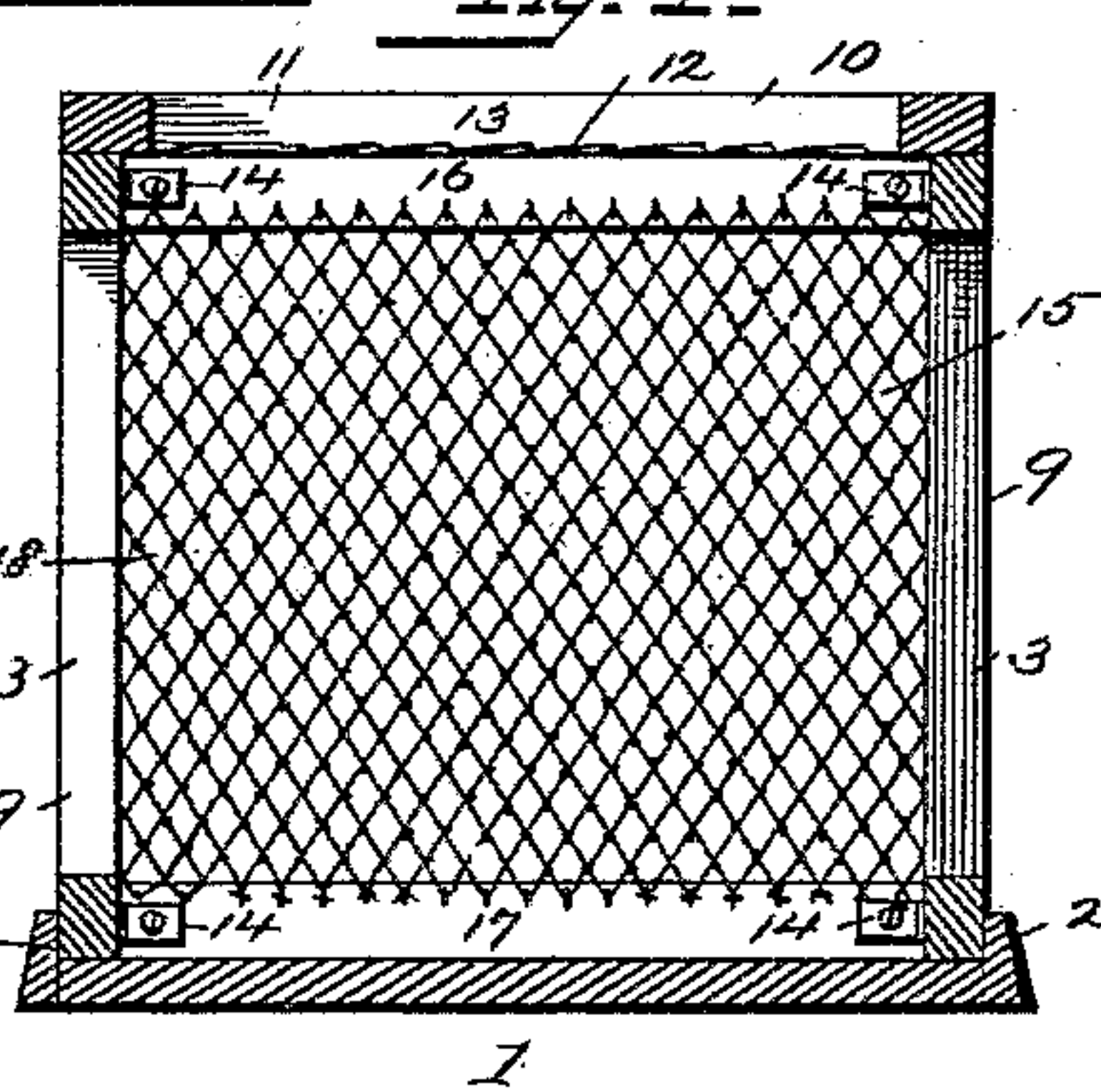
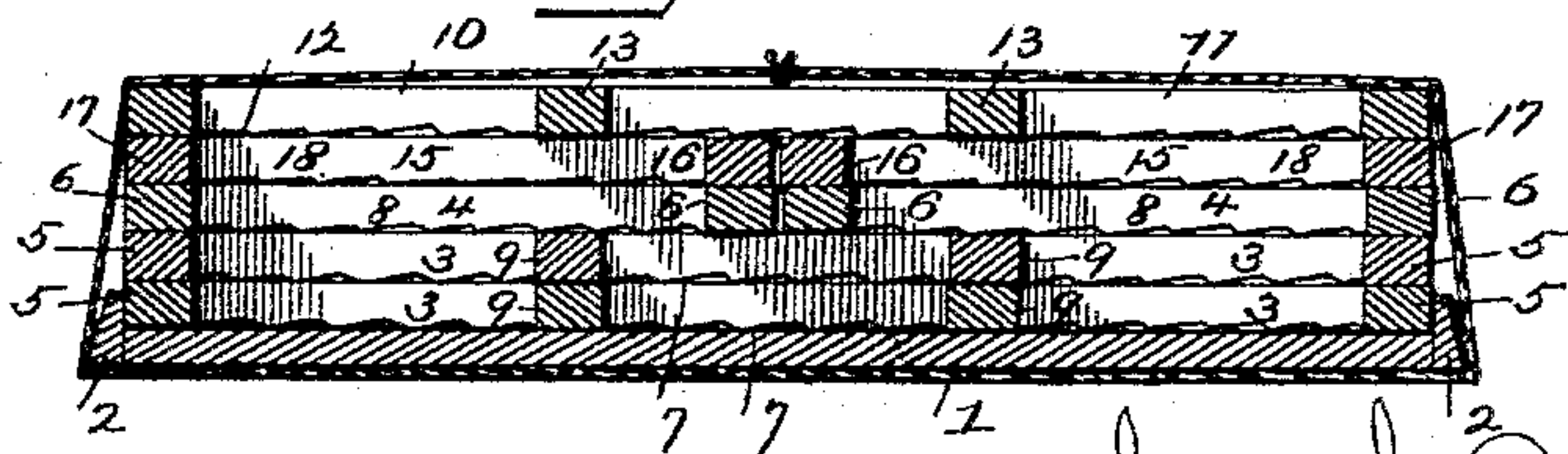


Fig. 5.



Witnesses

Howell Barth

Inventor

E. L. Willits

By his attorneys

Johnson & Johnson

UNITED STATES PATENT OFFICE.

ED L. WILLITS, OF ALMA, NEBRASKA, ASSIGNOR OF ONE-HALF TO WALTER C. MURRAY, OF SAME PLACE.

CRATE OR FRUIT-CASE.

SPECIFICATION forming part of Letters Patent No. 414,622, dated November 5, 1889.

Application filed August 15, 1889. Serial No. 320,891. (No model.)

To all whom it may concern:

Be it known that I, ED L. WILLITS, a citizen of the United States, residing at Alma, in the county of Harlan and State of Nebraska, have invented new and useful Improvements in Crates or Fruit-Cases, of which the following is a specification.

My invention relates to knockdown crates; and it consists in the improved construction and arrangement or combination of parts hereinafter fully disclosed in the description, drawings, and claims.

The objects of my invention are to provide a knockdown crate with wire-netting sides and partitions to admit of the crate serving as a show-case; to provide improved means for detachably connecting the sides and bottom of the crate; to provide improved means for sustaining the sides in their proper relative positions to the bottom, and to provide improved removable partitions for the crate. These objects are attained in the crate illustrated in the accompanying drawings, forming part of this specification, in which the same reference-numerals indicate the same parts, and in which—

Figure 1 represents a perspective view of my improved crate; Fig. 2, a top plan view showing the lid opened; Fig. 3, a longitudinal vertical section; Fig. 4, a transverse vertical section, and Fig. 5 a longitudinal vertical section of the knocked down crate ready for return shipment.

In the drawings, the numeral 1 indicates the bottom, which is preferably solid and has cleats 2 secured to its edges and projecting with their upper edges above the upper side of the bottom.

The sides 3 and ends 4 of the crate are formed of open rectangular frames 5 and 6, having sheets or pieces 7 and 8 of wire-netting secured to their inner sides or faces. The sides 3 are formed with vertical stiles 9 at intervals, the number of said stiles being governed by the number of partitions employed in the crate.

The lid or cover 10 of the crate is composed of a rectangular frame 11, having a sheet or piece of wire-netting 12 secured to its under side and having cross-stiles 13, which correspond to the vertical stiles 9. Said lid or

cover is hinged at one edge to the upper edge of one of the sides of the crate and may have any suitable lock or fastening at its free edge. The hinges for said lid or cover are preferably separable, so as to admit of the lid being removed when the crate is knocked down.

The lower edges of the sides and ends fit within the projecting upper edges of the cleats 2 upon the bottom, and are secured to said bottom by elbows or angle-braces 14, secured upon the inside of the crate to the bottom stiles of the sides and ends and to the bottom; or they may be simply secured by nails or screws driven through the bottom into the bottom stiles.

The ends of the crate fit between the end stiles of the sides and are secured to them by elbows or angle-braces 14 in the corners. The partitions 15 consist of the top stiles 16, bottom stiles 17, and sheets or pieces 18 of wire-netting, and said top and bottom stiles are secured to the top and bottom stiles of the sides by elbows or angle-braces 14 in the corners between the same. The side edges of the wire-netting of the partitions have the twisted ends 19 of the meshes of the same inserted through and secured by staples 20, which at the same time serve to secure the wire-netting of the sides to the vertical stiles 9.

The crate will be ventilated for the shipment of fruit and similar articles through the wire-netting of the sides, ends, and top, and it will form a convenient and neat-appearing show-case for its contents, which may be viewed through said wire-netting.

When the crate is to be knocked down for return shipment or for other empty shipment, the lid or cover is unhinged, the twisted ends of the meshes of the wire-netting of the partitions are drawn out of their staples, and the angle-braces or elbows are removed, said angle-braces or elbows being preferably screwed or loosely nailed to the parts which they connect. The sides, ends, partitions, and lid may then be packed one upon the other and upon the bottom between the cleats of the same, the bottom and lids confining the other parts, and a rope or other tie may be passed around the entire knocked-down crate to hold the parts together. Thus the crate will occupy but a comparatively small space, and the

knocking down or setting up of the crate may be quickly and easily down.

The cleats 2 of the bottom will serve to brace and stiffen the crate and to retain the sides and ends of the crate in their proper relative position at right angles to each other.

Having thus fully described the construction and arrangement or combination of the several parts of my improved knockdown crate and its uses and advantages, what I claim as new is—

1. In a knockdown crate, the combination of its sides having vertical stiles and covered with wire-netting, partitions consisting of top and bottom stiles secured to said sides, and sheets or pieces of wire-netting having the twisted ends of their meshes projecting at their side edges, and staples inserted into the vertical stiles of the sides over said twisted ends and over the meshes of the wire-netting of said sides, substantially as described.

2. In a knockdown crate, the combination of the sides 3, having the vertical stiles 9 and the wire-netting 7, the partitions 15, having the top and bottom stiles 16 and 17 and the wire-netting 18, formed with the twisted ends

19, the angle-braces 14, detachably secured to the top and bottom stiles of the sides and of the partitions, and the staples 20, securing the twisted ends 19 and the wire-netting 7 to the stiles 9, substantially as described.

3. An improved knockdown crate composed of the bottom having the cleats 2 upon its edges, the sides 3, having the vertical stiles 9 and the wire-netting 7, the ends 4, having the wire-netting 8, the lid 10, having the cross-stiles 13 and wire-netting 12, and having separate hinges, the partitions 15, having top and bottom stiles 16 and 17 and wire-netting 18, formed with the twisted ends 19, the angle-braces 14, detachably connecting the sides, ends, bottom, and stiles of the partitions, and the staples 20, securing the twisted ends 19 and the wire-netting 7 to the vertical stiles 9, substantially as described.

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

ED L. WILLITS.

Witnesses:

C. C. FLANSBURG,
JOHN EVERSON.