

G. KLENK.
STORAGE AND SHIPPING CRATE.
APPLICATION FILED JULY 15, 1908.

912,273.

Patented Feb. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

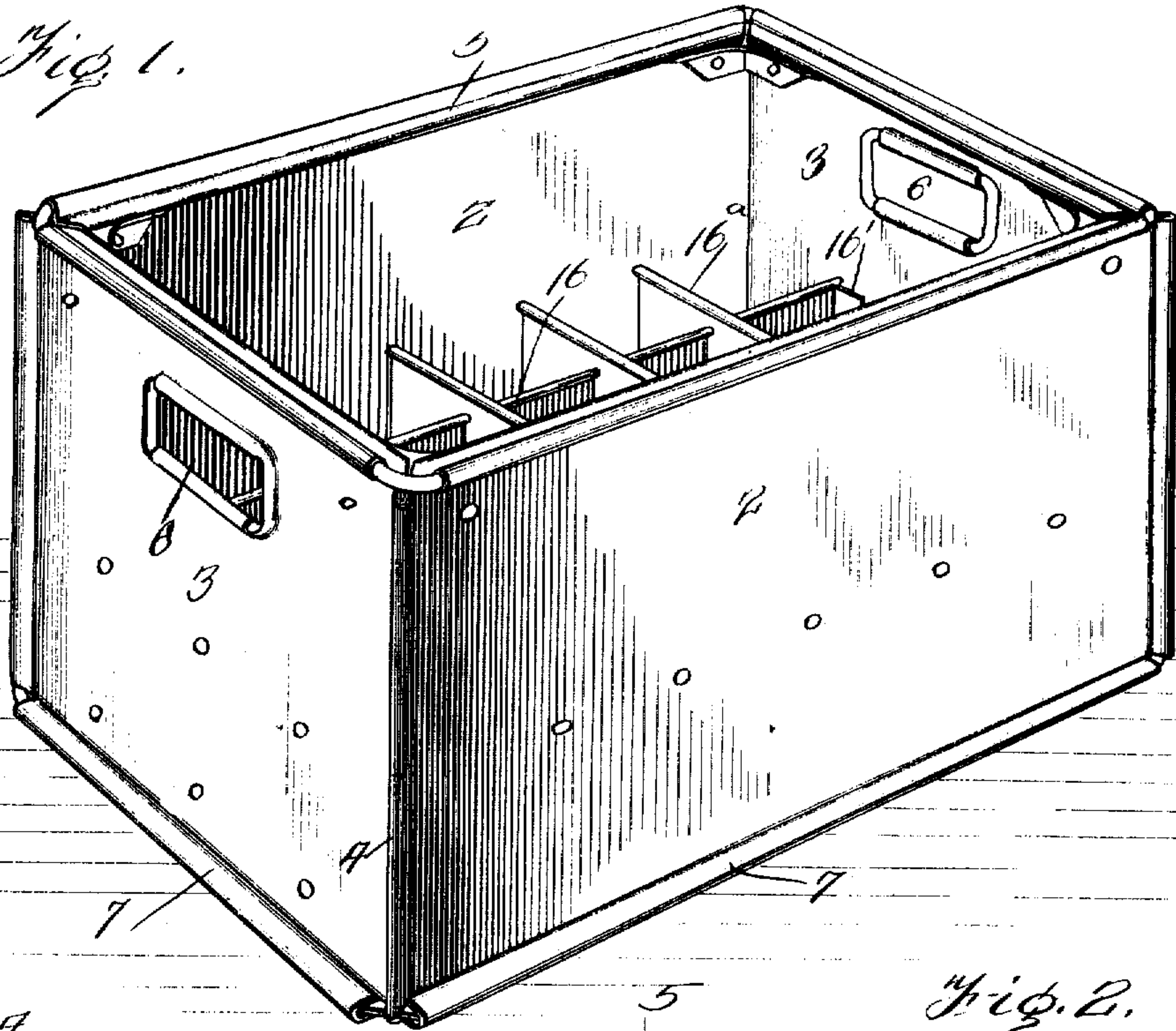
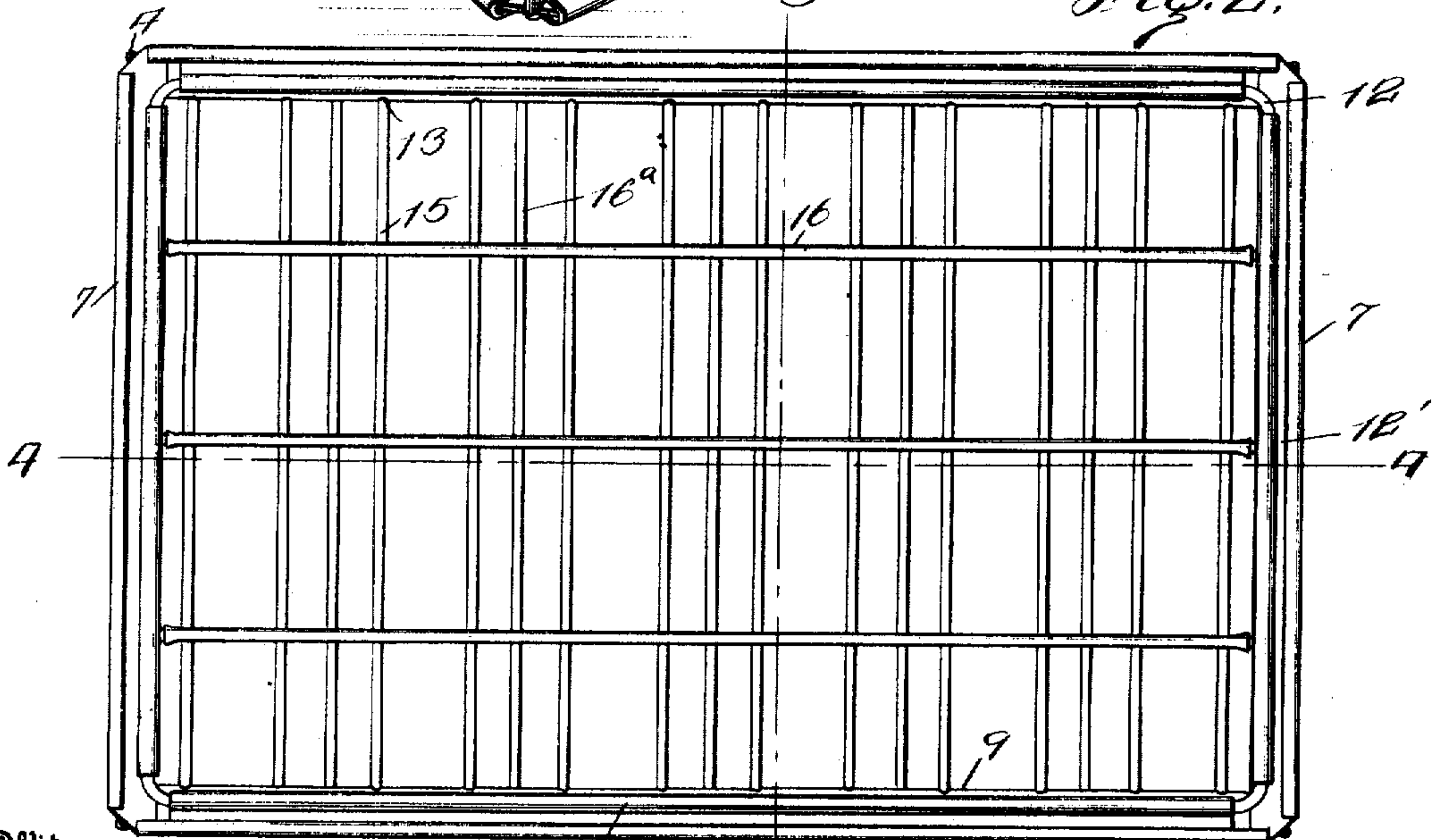


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

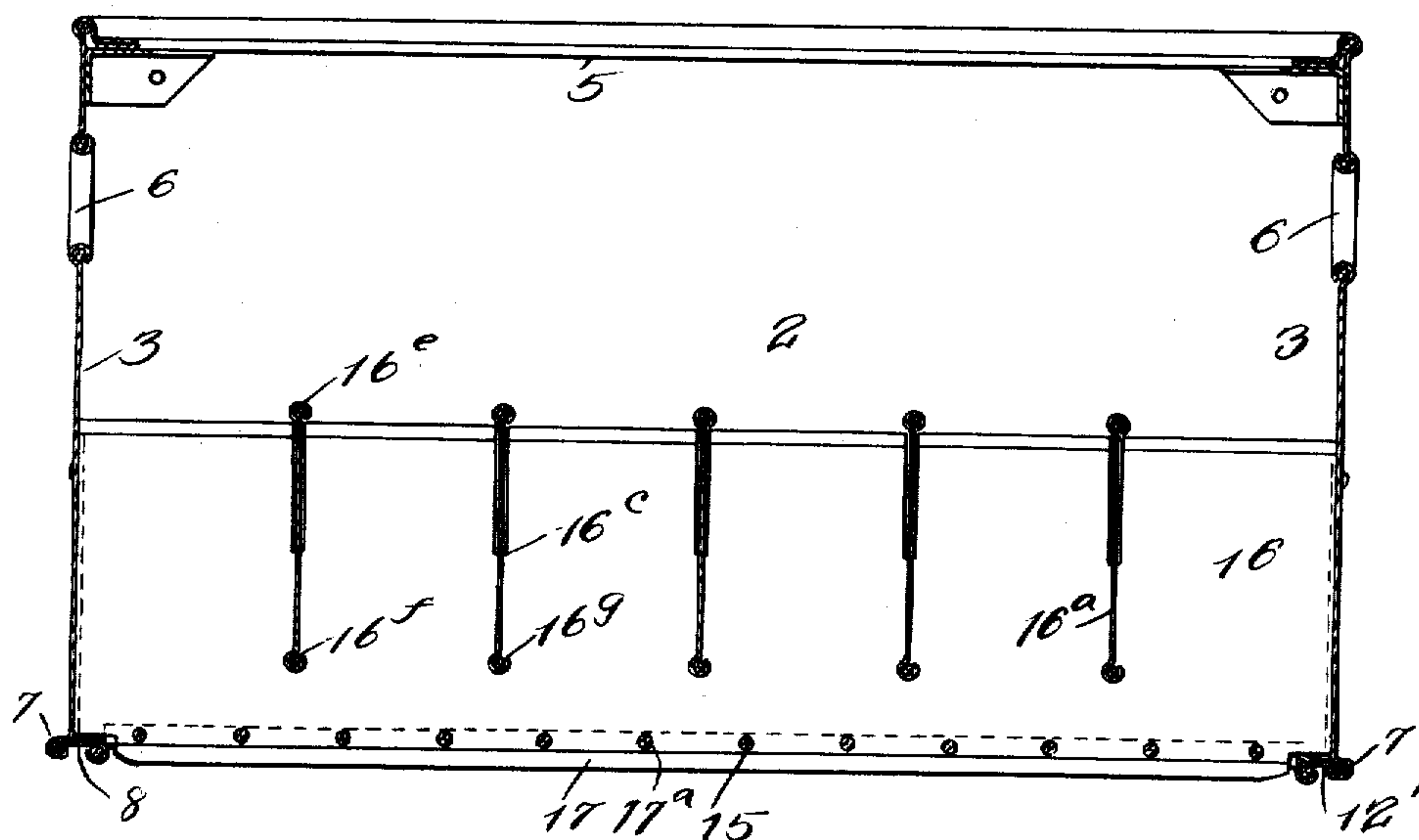


Fig. 5.

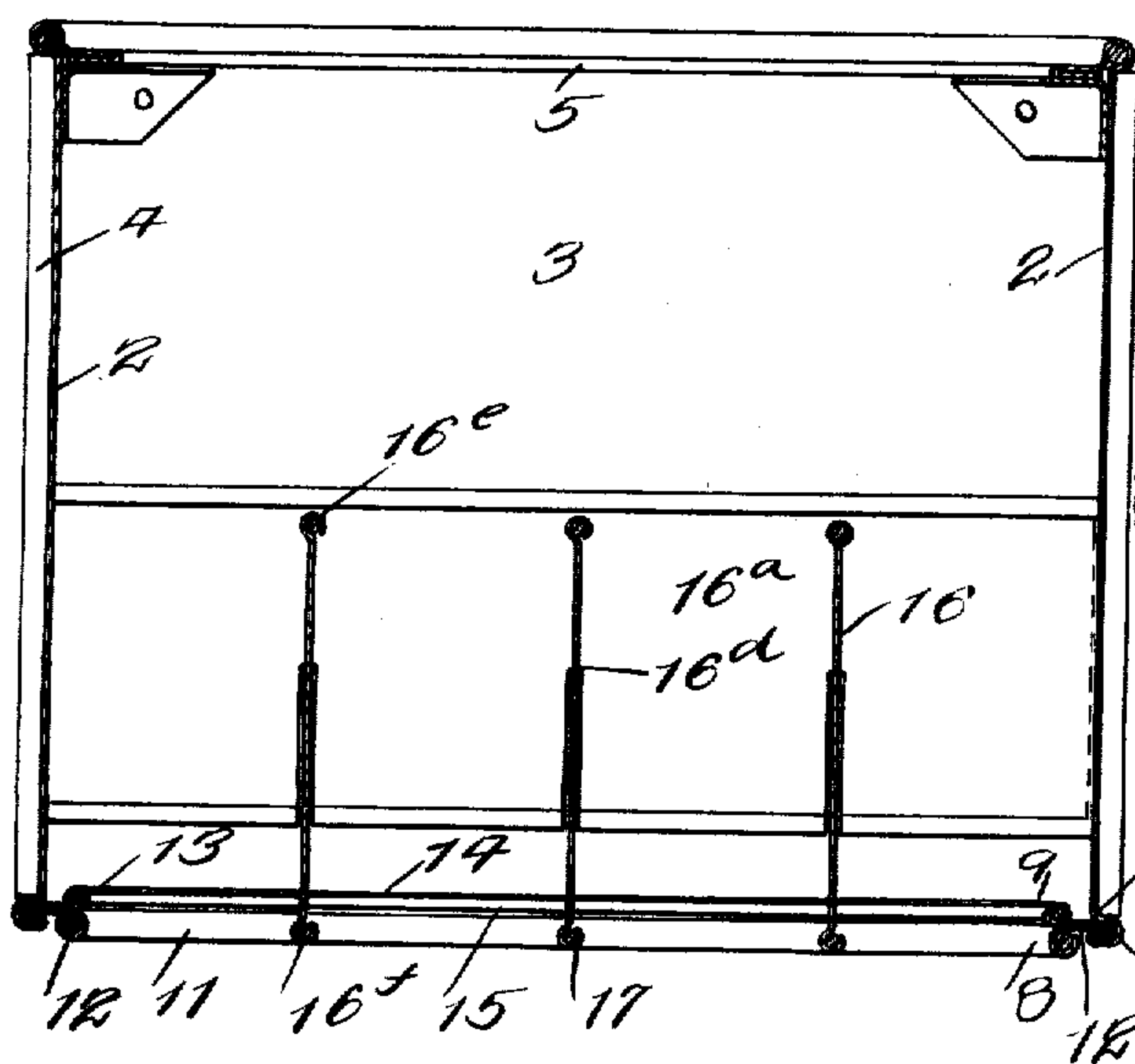
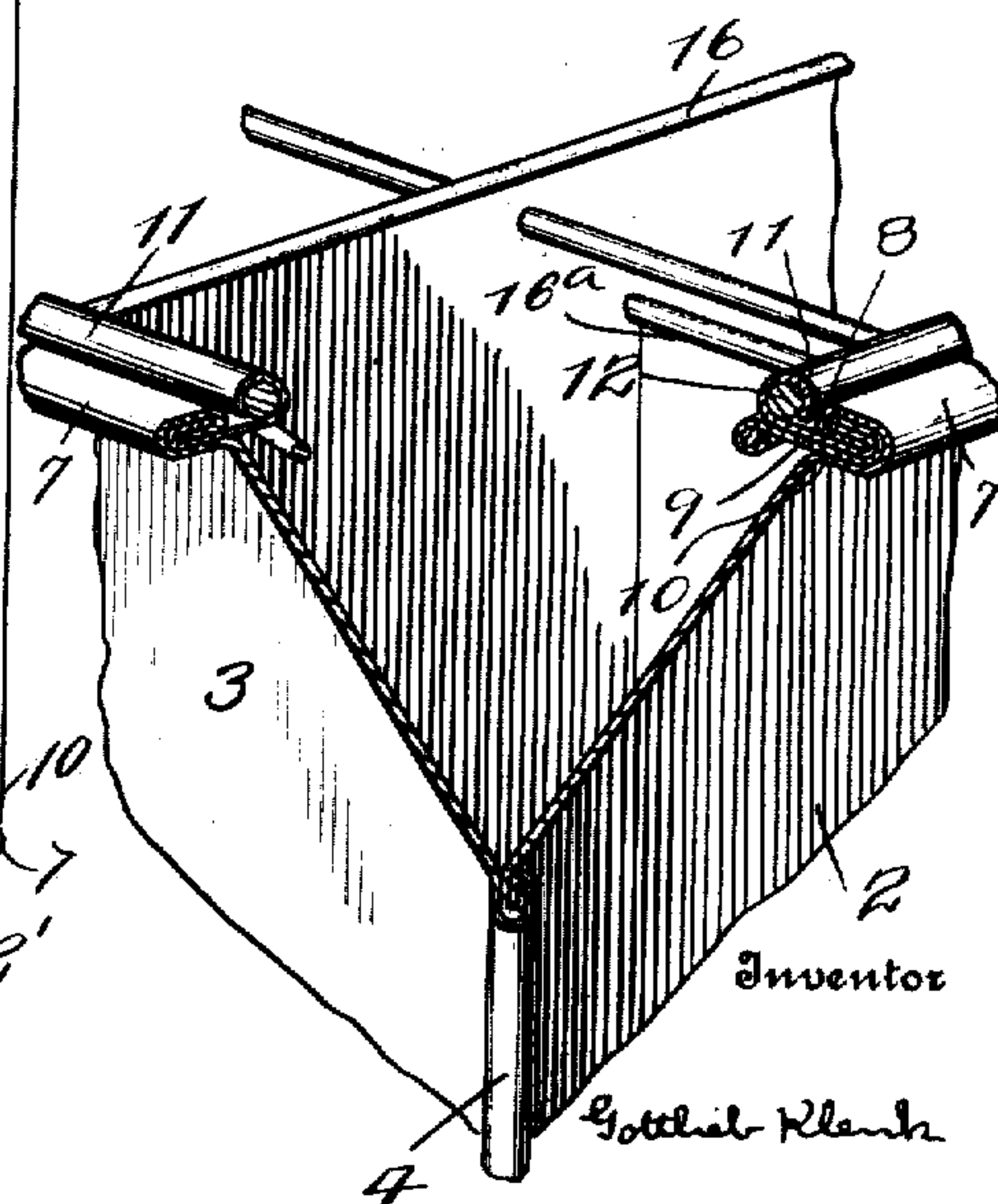


Fig. 3.



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UNITED STATES PATENT OFFICE.

GOTTLIEB KLENK, OF DEFIANCE, OHIO, ASSIGNOR TO THE DEFIANCE PRESSED STEEL COMPANY, OF DEFIANCE, OHIO.

STORAGE AND SHIPPING CRATE.

No. 912,273.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed July 15, 1908. Serial No. 443,733.

To all whom it may concern:

Be it known that I, GOTTLIEB KLENK, a citizen of the United States, residing at Defiance, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Storage and Shipping Crates, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to metal bottle crates and has for its object to provide a simplified construction of the bottle cell partitions and the bottle-supporting bars which will at the same time furnish ample frictional resistance to oppose the undesirable sliding of the crate upon the floor or other supporting surface.

Figure 1 is a perspective view of the box as a whole. Fig. 2 is a bottom plan view. 20 Fig. 3 is a sectional view along a diagonal plane of one of the lower corners of the box. Fig. 4 is a longitudinal section along the line 4—4 of Fig. 2. Fig. 5 is a cross section along the line 5—5 of Fig. 2.

25 The box is made of sections of sheet metal suitably secured together and properly reinforced.

2—2 indicate the side walls and 3—3 the end walls, each consisting of a generally rectangular section of sheet metal, the side and end sections being crimped together to form the corner flanges 4. The top of the box is preferably provided with a depressed inturned reinforcing flange 5 and the end walls are cut to form the hand-holds 6 which are constructed and finished in any desirable manner.

The side and end walls at their lower edges are bent outwardly and then inwardly to form the flange 7, and the outer edges of the horizontal strips 8 and 9 are folded with the metal of this flange as shown in Fig. 3 of the drawings, whereby the flange is reinforced and the strips held securely in place around the bottom edges of the box. The side and end walls are given an additional bend at 10 so as to engage the top of the bent back portion of the strips 8 and 9. The strips 8 are four in number, one for each side or end of the box, and the strips 9 are two in number, one for each of the long sides of the box. The lower strips 8 are beaded at their inner edges to form a downwardly projecting rectangular flange 11, within 55 which is inclosed the wire 12. By this con-

struction the flange 11 is spaced evenly from the lower outer edges of the box and a rectangular stacking rest 12' surrounding this flange is provided for. The upper strips 9 are likewise beaded at 14 at their inner edges and through perforations 13, spaced at equal intervals along this beading 14, is passed the bottle-supporting wire 15 which in one continuous piece is threaded back and forth from one of the beadings 14 to the other in the manner illustrated in the drawings. This construction of the bottom edges of the box and the bottle-supporting bars is described, illustrated and claimed in my application Serial Number 394,000.

70 The cell-forming partitions consist of two sets of sheet metal strips 16 and 16^a intersecting each other at right angles and formed with the end flanges 16', by which they are riveted to the side and end walls of the box and supported in proper position. I prefer to allow for the inter-section of these partition strips by vertically slotting for the upper half of its width at the point of intersection one of the intersecting strips, as at 16^c, and similarly slotting for the lower half of its width the other intersecting strip, as at 16^d. These partition strips are suitably reinforced at their upper and lower edges by wires 16^e and 16^f around which the metal of the strips is beaded, the wire for each one of the strips running in one direction passing the through perforations 16^g in the strips running in the other direction when necessary.

90 The partition strips 16^a which are disposed in a direction perpendicular to the bottle-supporting bars 15 are extended downwardly to a point such that the lower edge of the beadings 17 are flush with and lie in the same horizontal plane with the lower edges of the flange 11. The bottle-supporting bars 15 are passed through perforations 17^a in the strips 16. This downward extension of the longitudinal strips 16 accomplishes a number of objects. It provides additional support for the bottle-carrying bars 15; it furnishes an increased frictional contact with the floor or conveyer and it protects the bottle-carrying bars from injury. The amount of material used in the box and the number of necessary operations carried on in its manufacture are also minimized.

What I claim is:

1. In a metal box, sheet metal, cell-form- 110

ing strips, the lower edges of said strips being flush with the floor engaging surfaces of the box.

2. In a rectangular metal box, sheet metal
5 sides and ends, partitioning means extending between two opposite walls of the box, and cell forming sheet metal strips extending between the other two opposite walls, said
10 strips being beaded at their lower edges to lie in the same plane with the floor engaging surfaces of the box.

3. In a rectangular metal box, the combination with side and end walls suitably secured together, of article supporting bars
15 arranged horizontally in the lower part of the box interior and cell-forming sheet metal walls connecting opposite sides of the boxes, some of the cell-forming walls being arranged to support the article-supporting bars
20 and beaded at their lower edges to lie in the

same plane with the floor engaging surfaces of the box.

4. In a metal box, the combination with the side and end walls suitably secured together, of a downwardly extending rectangular flange inset from the lower edges of
25 the box, cell-forming partition walls of sheet metal, and article-supporting bars carried by the side walls of the box and some of the said partition walls, the said last mentioned
30 walls being adapted at their lower edges to furnish floor engaging surfaces flush with the said rectangular flange.

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

GOTTLIEB KLENK.

Witnesses:

HENRY NEWBEGIN,
C. C. HOFFMAN.