

No. 864,852.

PATENTED SEPT. 3, 1907.

I. U. MINEHART & C. C. HUNTER.
KNOCKDOWN CRATE.

APPLICATION FILED DEC. 4, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

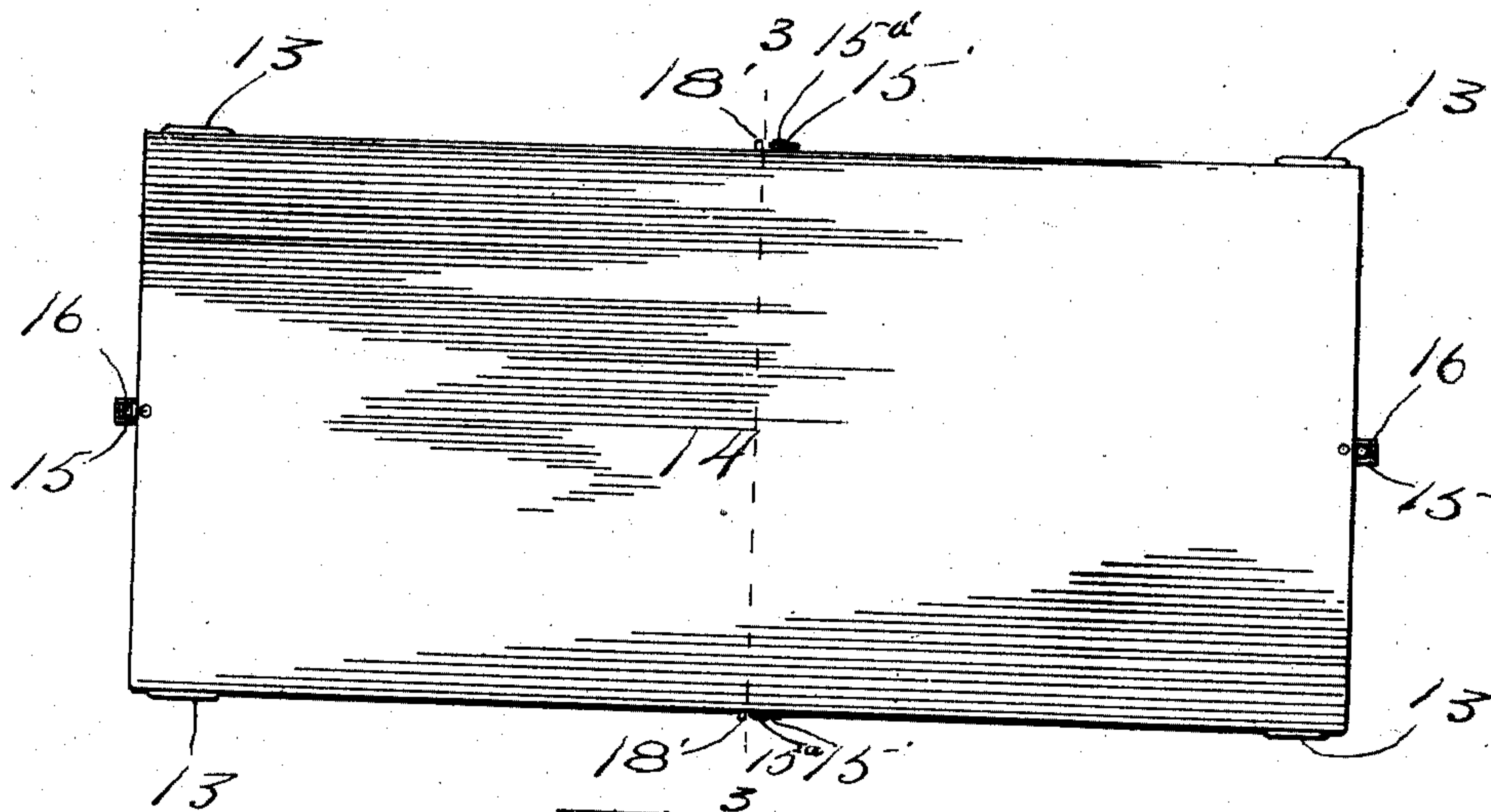
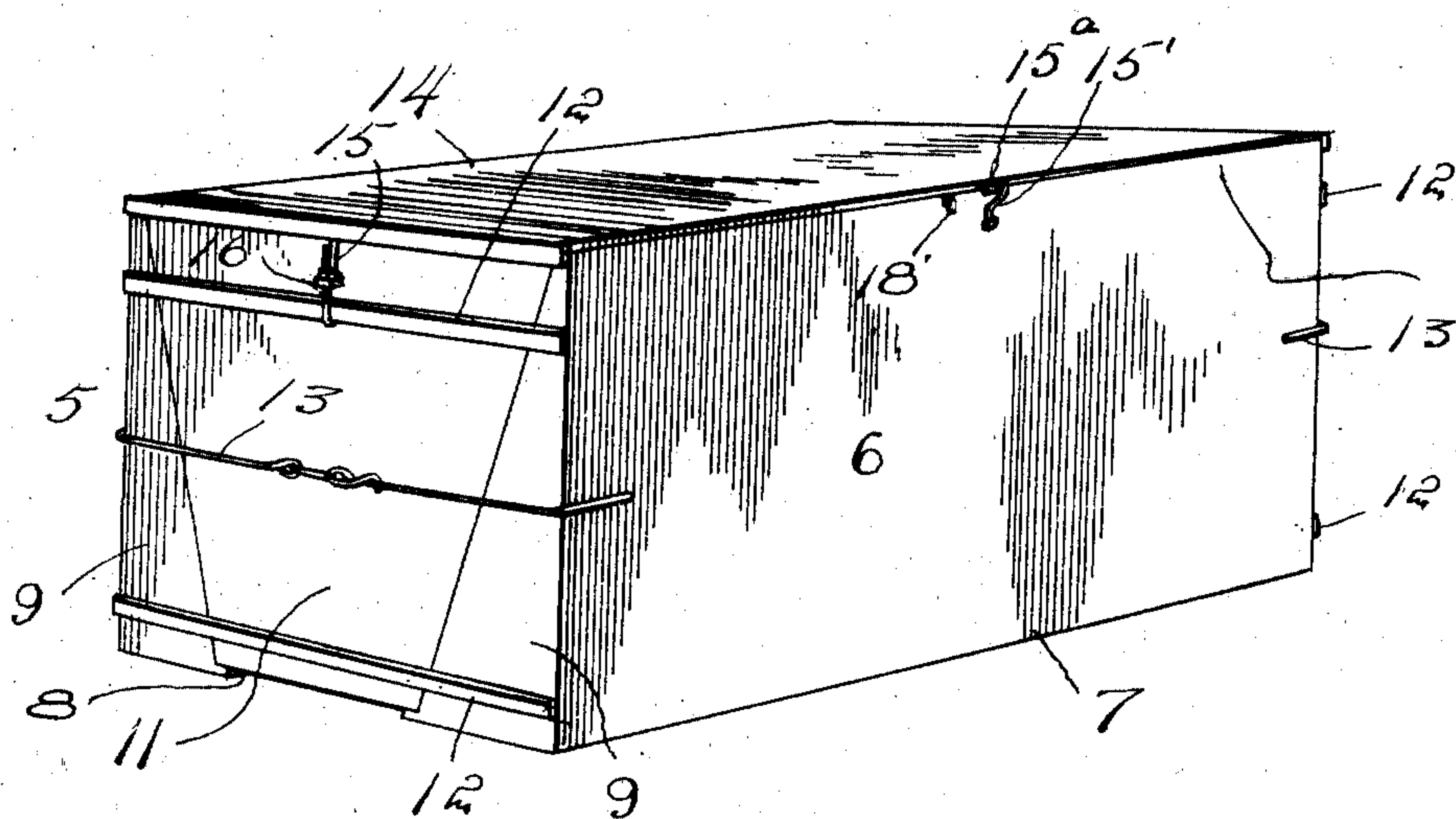


Fig. 2.

Witnesses

J. C. Simpson
J. C. Jones

Inventors

Irvin U. Minehart
Charles C. Hunter

By

Charles C. Hunter

Attorney

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2 SHEETS—SHEET 2.

Fig. 4

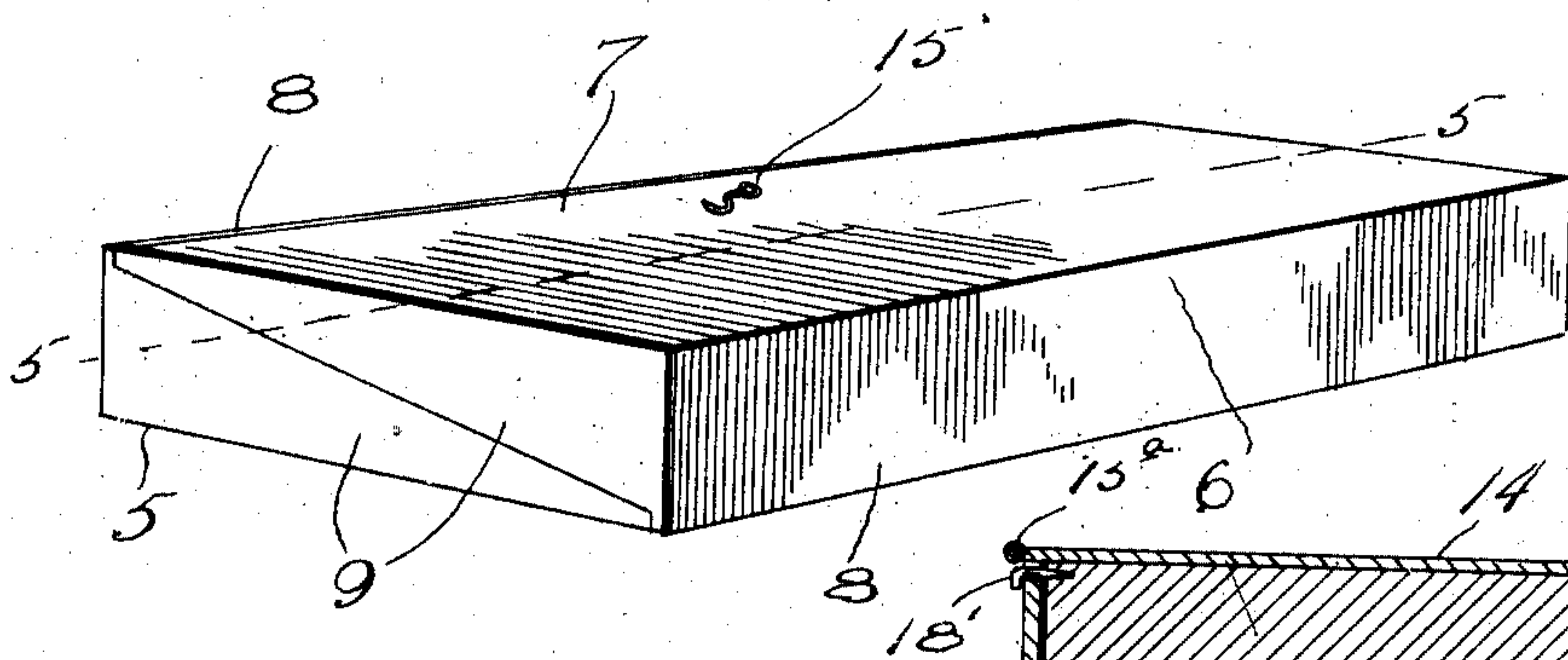


Fig. 3

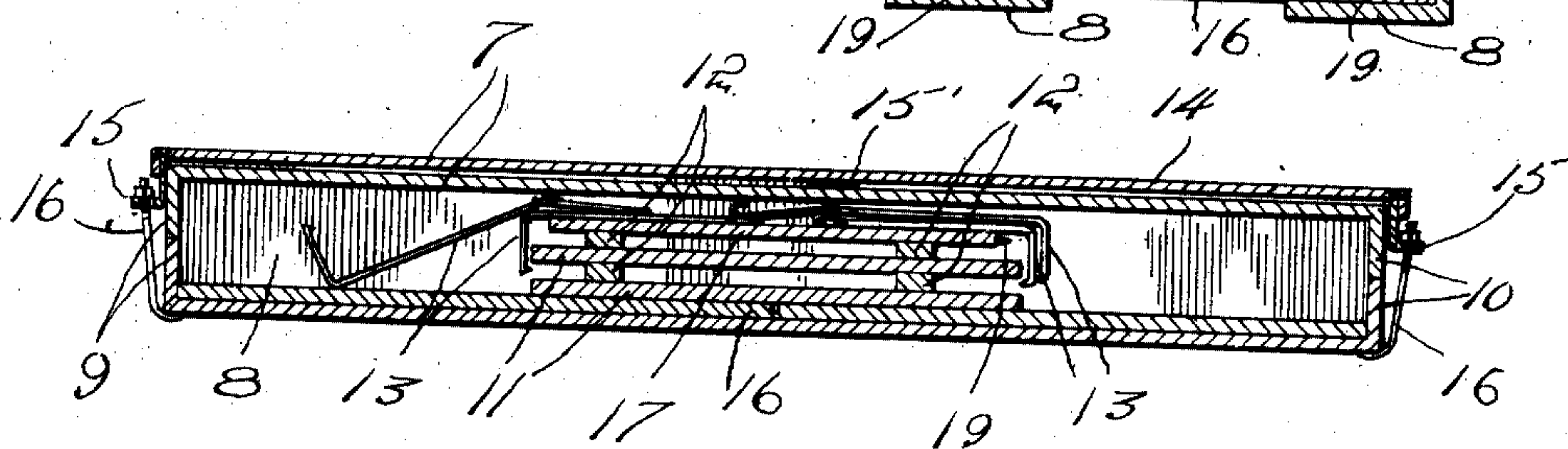
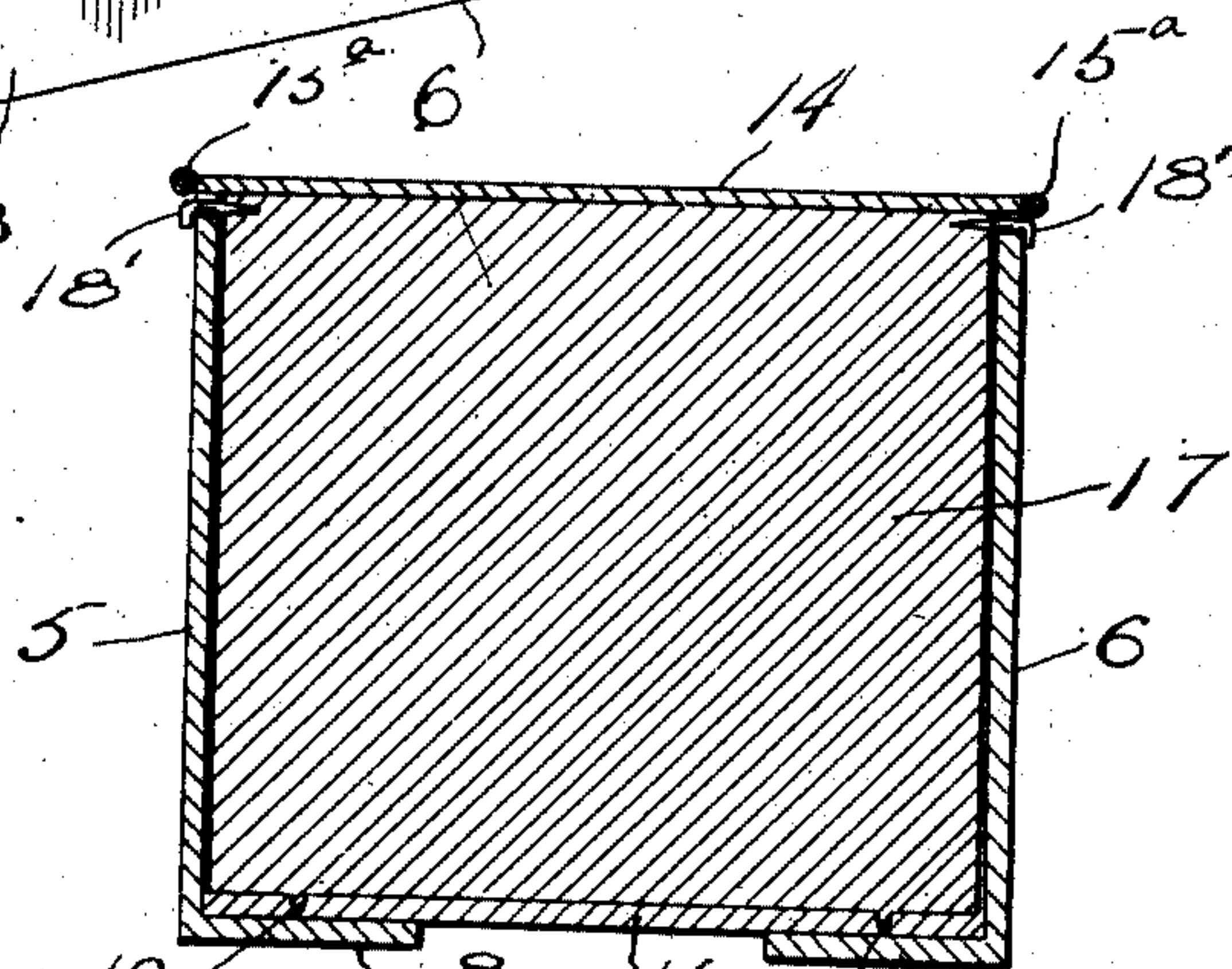


Fig. 5

Witnesses

J. C. Simpson.
J. C. Jones

Inventors

Irvin U. Minehart.
Charles C. Hunter.

By

Charles C. Hunter

Attorney

UNITED STATES PATENT OFFICE.

IRVIN U. MINEHART AND CHARLES C. HUNTER, OF ROGERS, IOWA.

KNOCKDOWN CRATE.

No. 864,852.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed December 4, 1905. Serial No. 290,196.

To all whom it may concern:

Be it known that we, IRVIN U. MINEHART and CHARLES C. HUNTER, citizens of the United States, residing at Rogers, in the county of Linn, State of Iowa,

5 have invented certain new and useful Improvements in Knockdown Crates; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to crates and more particularly to knock down crates and has for its object to provide a crate including a plurality of separable sections which may be easily and quickly placed in operative position or knocked down and disposed to occupy little

15 room during return shipment.

Other objects and advantages will be apparent from the following description.

In the drawings forming a portion of this specification and in which like numerals of reference indicate

20 similar parts in the several views, Figure 1 is a perspective view of the present crate shut up, Fig. 2 is a top plan view of Fig. 1, Fig. 3 is a transverse section on line 3—3 of Fig. 2 looking toward the adjacent end, Fig. 4 is a perspective view of the crate in closed position,

25 Fig. 5 is a longitudinal section on line 5—5 of Fig. 4.

Referring now to the drawings, the present invention comprises two sections 5 and 6, each including a side wall 7 extending vertically and having an inwardly extending horizontal board 8 secured thereto at its

30 lower edge. Each section also includes end pieces 9 and 10 respectively, each having the form of a right angled triangle and these end pieces are disposed with their bases secured to the ends of the boards 8 and with their altitude secured to the walls 7, the end pieces being disposed with their slanting edges in upwardly

35 divergent relation.

Wedge shaped end boards 11 are disposed between the pairs of end pieces 9 and 10, with their minor ends directed downwardly, as will be readily understood,

40 and parallel transversely extending cleats are secured to the end boards in pairs at opposite sides thereof, as shown at 12, these cleats extending laterally beyond the end boards and at opposite sides of the end pieces to hold the end boards in position.

45 Clamping members 13 are engaged with the sections 5 and 6 at opposite ends thereof to hold them with the slanting edges of their end pieces tightly against the corresponding edges of the end boards 11. A top 14 is

disposed upon the crate and carries retaining members 15 which engage the upper outer cleats 12 of the end boards. Other fasteners 15' are carried by the side walls 7 and engage loops 15^a, carried by the top 14.

A bottom board 16 is disposed upon the boards 8 within the crate and a division piece 17 is disposed within the crate to divide it within two compartments,

55 this division piece having laterally turned fingers at its upper end which are turned downwardly at their extremities as shown at 18' and which engage over the side boards 7. Pins 19 extend downwardly from the division piece 17 and engage the bottom board to hold the

60 division piece against movement when the top is in position.

When the crate is not in use, the clamps are disconnected and the sections 5 and 6 are disposed in reversed position with respect to each other, the slanting

65 edges of the end pieces of one section being disposed upon those of the end pieces of the other section, the free edges of the wall 7 then resting against the free edges of the boards 8. When in this position, the walls 7 lie in spaced relation to each other and the division

70 piece 17, end pieces 11, bottom board 16 and clamps 13, may be disposed in the space therebetween, the top 14 is disposed upon one of the walls 7 and the fasteners 15 are arranged to hold the two sections in their last described positions by being engaged beneath the walls 7

75 of the lower section.

What is claimed is:

A crate comprising vertical side walls, inwardly extending end pieces carried by the side walls and extending throughout the height thereof, end boards disposed between

80 the end pieces at each end of the crate, cleats carried by the end boards and extending at opposite sides of the end pieces, clamps engaged with the crate to hold the walls against separation, inwardly extending boards secured to the bottoms of the walls, a bottom board disposed between the walls and resting upon the inwardly extending

85 boards, a division piece disposed within the crate, a top for the crate, and means for holding the top in position when the crate is set up, said end pieces being arranged to rest against each other at their inner edges when the

90 crate is in its knock down condition, to hold the walls in spaced relation for the reception of the bottom board, top, division piece, and end pieces therebetween.

In testimony whereof, we affix our signatures, in presence of two witnesses.

IRVIN U. MINEHART.
CHARLES C. HUNTER.

Witnesses:
P. W. SAWYER,
W. A. HUTCHINS.