

(No Model.)

B. L. GALE.
KNOCKDOWN BOX.

No. 521,310.

Patented June 12, 1894.

Fig. 1

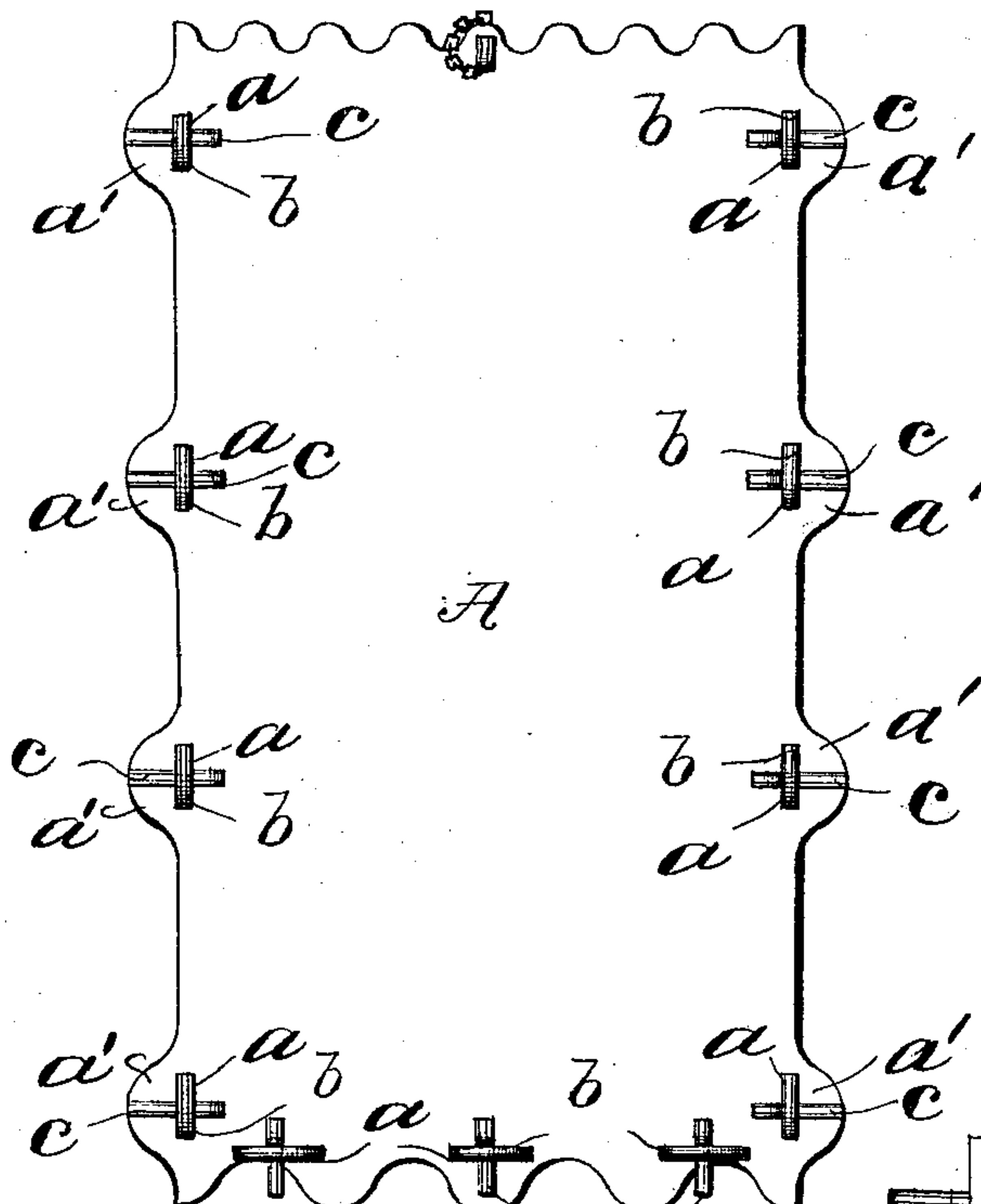


Fig. 2

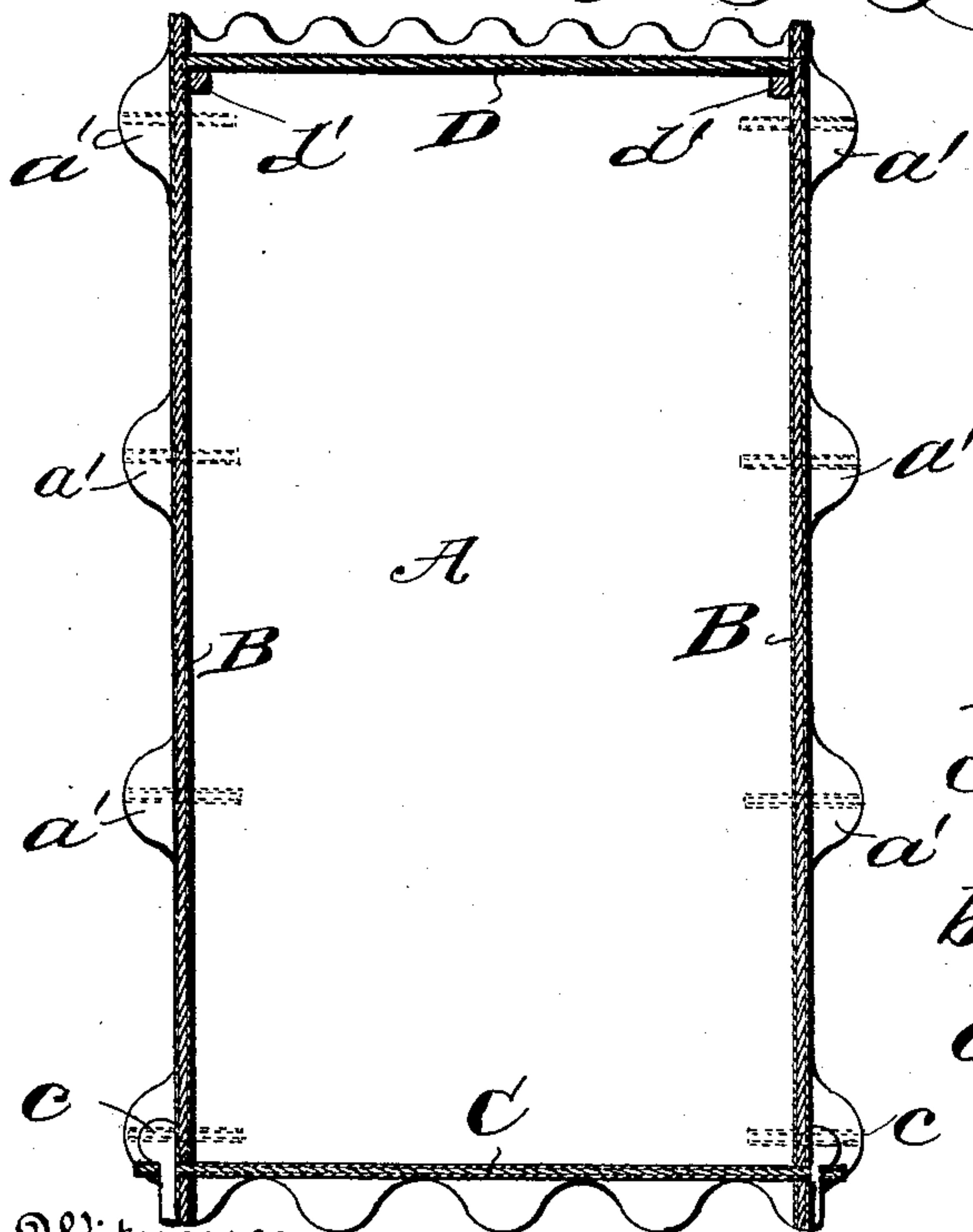
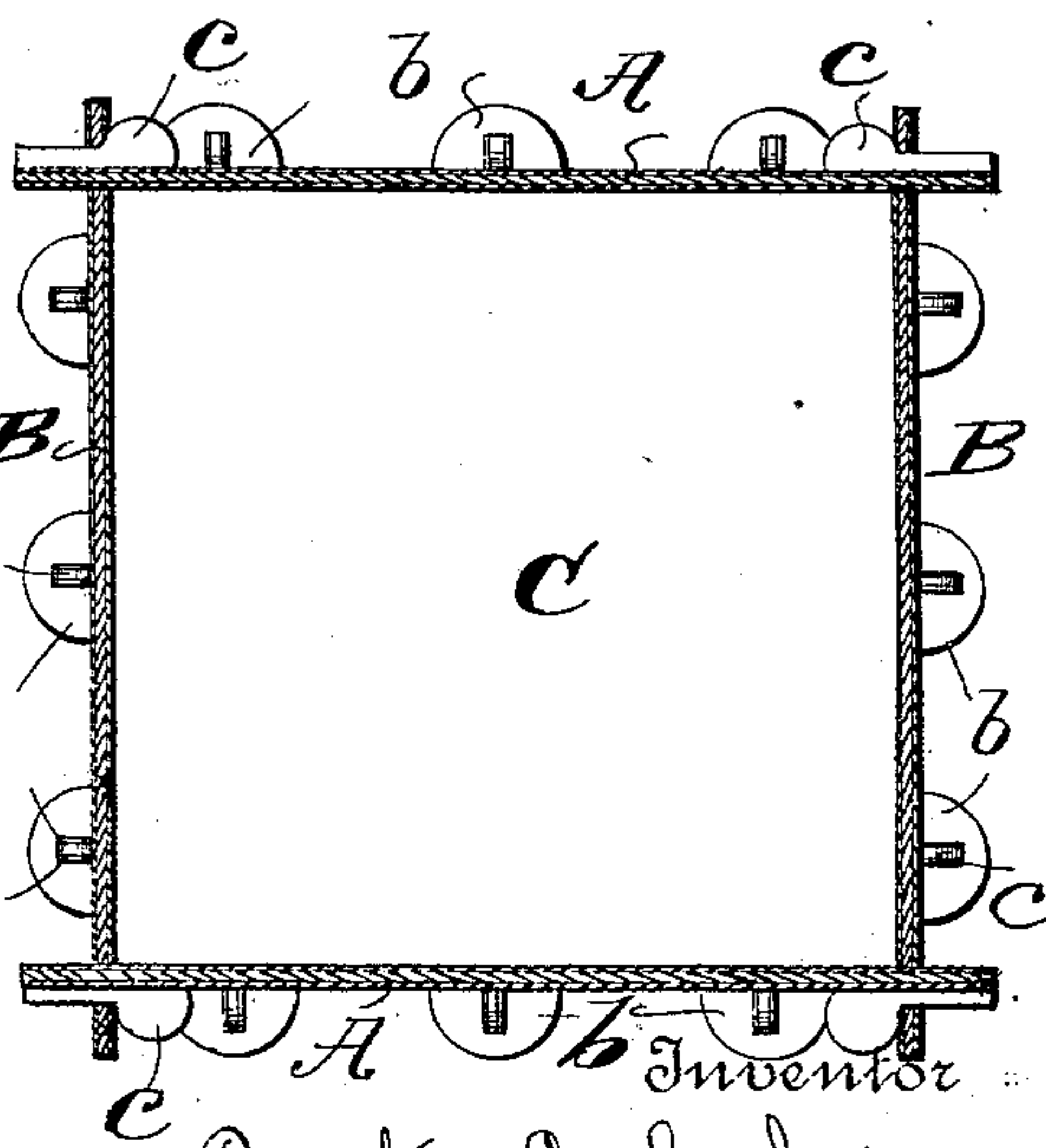


Fig. 3



Witnesses

W. W. Schmitt
Jesse D. Kung'ory

By *Burton L. Gale*
Whitaker & Prentiss Attorneys.

UNITED STATES PATENT OFFICE.

BURTON L. GALE, OF WARREN, PENNSYLVANIA, ASSIGNOR TO THE
WARREN EXTENSION TABLE COMPANY, OF SAME PLACE.

KNOCKDOWN BOX.

SPECIFICATION forming part of Letters Patent No. 521,310, dated June 12, 1894.

Application filed March 10, 1894. Serial No. 503,170. (No model.)

To all whom it may concern:

Be it known that I, BURTON L. GALE, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Knockdown Boxes; and I 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.

My present invention relates to wooden boxes for various purposes which can be taken apart and shipped or stored in small compass.

In the accompanying drawings I have illustrated the best form in which I have contemplated embodying my invention and my invention is disclosed in the following description and claims.

In the drawings, Figure 1 is a view in elevation of a box constructed in accordance with the principle of my invention. Fig. 2 is a vertical, and Fig. 3 is a horizontal section, and Fig. 4 is a detail of a mode of pivoting the cover.

The material which I employ and which I find best suited to my construction is a board of about three sixteenths of an inch thickness formed of two or more layers of veneer or like thin wooden sheets united in a single piece of material, the grain of the wood in the different layers preferably running in different directions. If preferred, the outside sheets may have the grain in like directions in order to simulate a solid board.

The box is formed of two side pieces A A, and two end pieces B B, a bottom C and it may also be provided with a top or cover. The side pieces A A are provided near each edge except the top edge with slots as at *a*, and a rounded projection *a'* opposite each slot, while the end pieces B B are provided with perforated tenons *b*, which pass through the slots of the side pieces and the two are secured together by the pins *c*, made preferably from the same material as the other parts of the box. The bottom C is provided with the perforated tenons or ears *b* which pass through the slots near the lower edge of the

sides and ends and are secured in place also by pins *c*.

The cover D is made of the same material as the other parts and is pivoted preferably by pins or pintles *d* which may be made integral with the cover or made separate and attached thereto. The pintles engage apertures or slots in two of the sides of the box and the free end of the cover rests upon a ledge *d'* secured to one side.

Of course the cover may be hinged in other ways if desired and the main body of the box may be made of parts having at one edge slots and at the other tenons as will be readily understood. Such form would have the advantage of the sides being made all of one pattern, but the box would be less symmetrical.

The boxes may be made without the cover and when made of the proper size, form excellent waste paper receptacles. Larger sizes can be used for clothes hampers or for any other purpose for which they may be found convenient. By making them in the knock-down form they can be shipped and stored at little cost.

The pins *c* are inserted in the tenons from the inner sides of the same and the function of the rounded projections *a'* is to protect these pins. The pins are so constructed that when inserted as here indicated they cannot be forced so far through the tenons as to extend beyond the projections.

What I claim, and desire to secure by Letters Patent, is—

1. The herein described knock-down wooden box having the different parts of the same engaging each other by a slot and tenon construction and the tenons secured by pins passing through them, the parts so united being formed of veneers firmly united with the grain running in different directions.

2. The herein described knock-down box, the walls of which are formed of composite parts or panels made of layers of wood veneering with the grain running at different angles, the said parts being joined by having one edge provided with slots and the engaging edge provided with tenons entering said

slots and pins passing through said tenons, the edge provided with slots being also provided with projections extending beyond the pins.

- 5 3. The herein described knock-down box constructed of composite wooden parts or panels having the grain running in different directions, the parts composing the main body of the box held together by a slot and tenon
10 construction, a bottom provided at all edges

with tenons engaging slots in the sides of the main body, pins securing said tenons, and a cover pivoted to the main body.

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

BURTON L. GALE.

Witnesses:

M. P. MOE,

CORA B. GALE.