

G. B. REED.

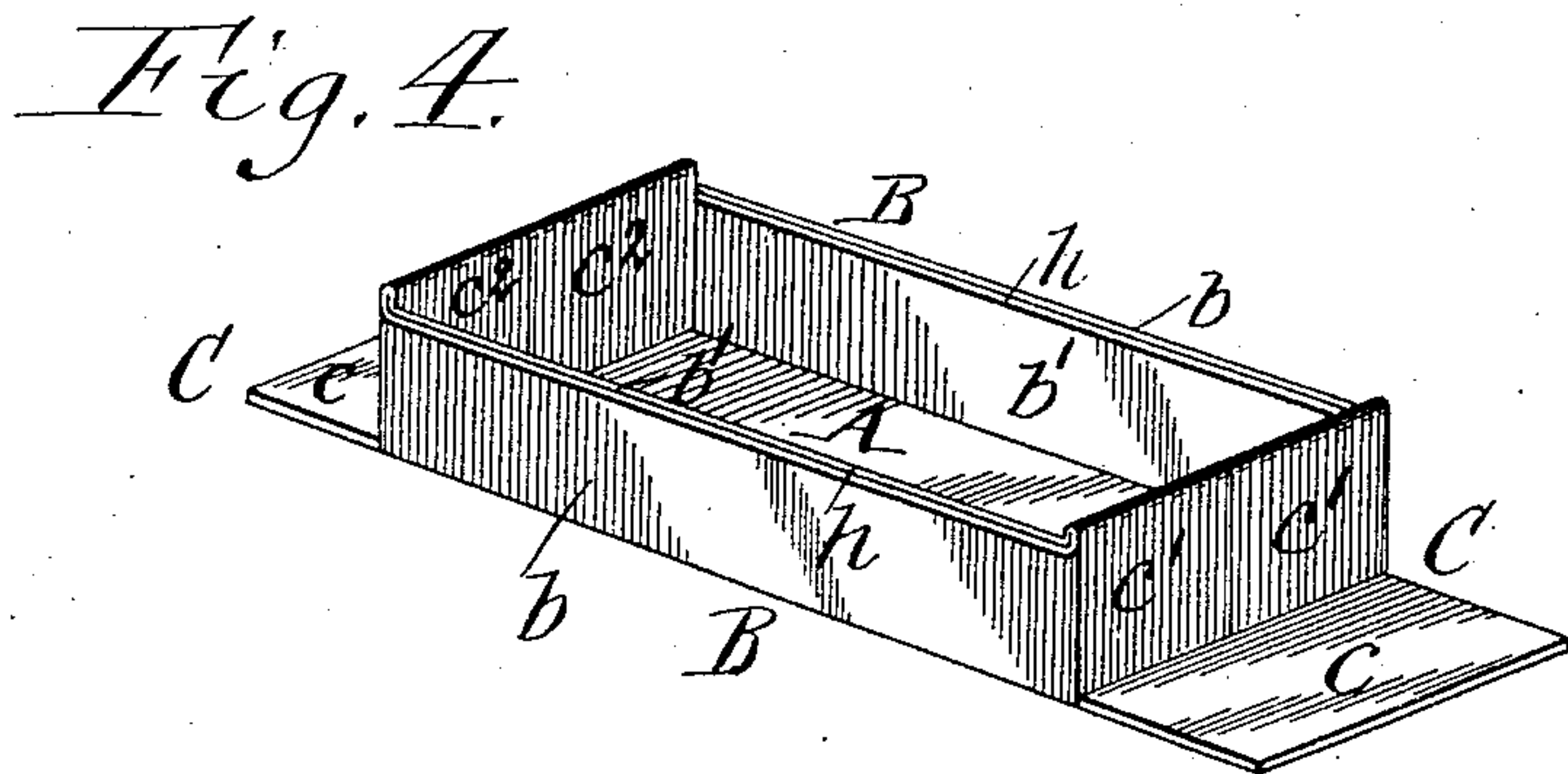
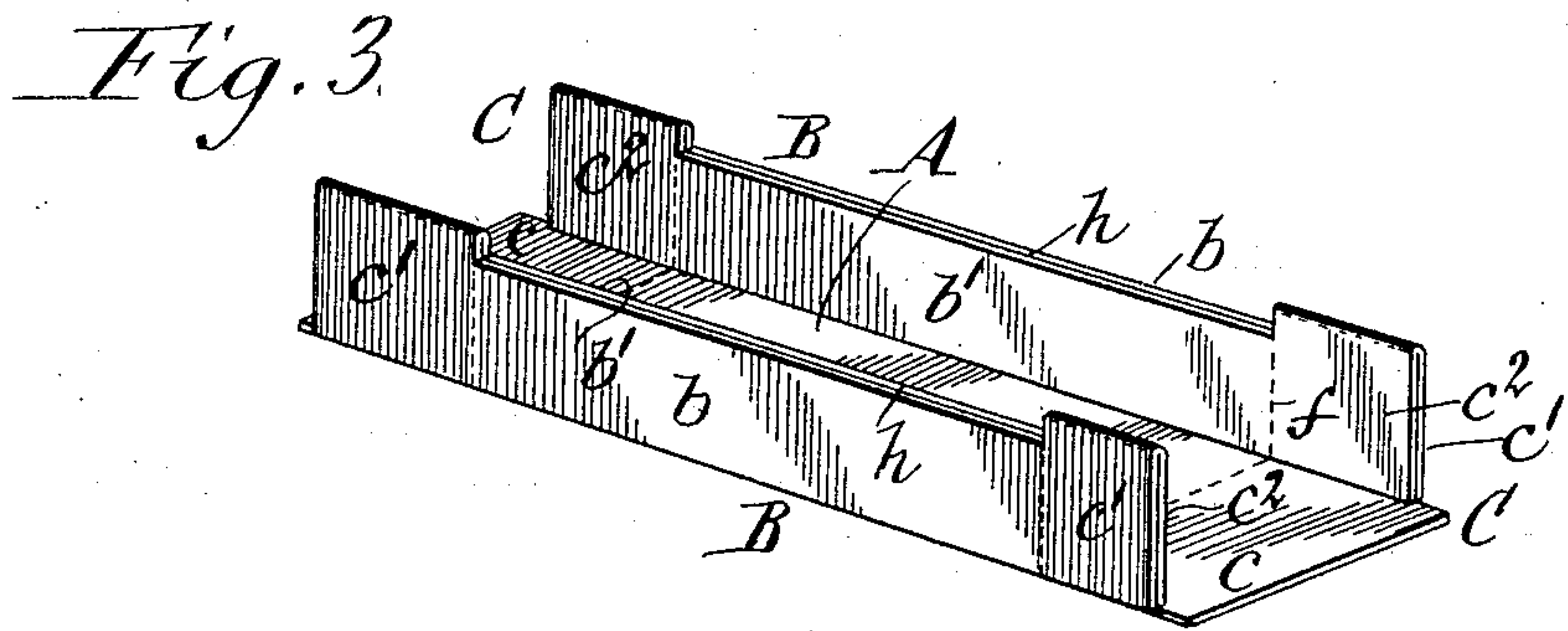
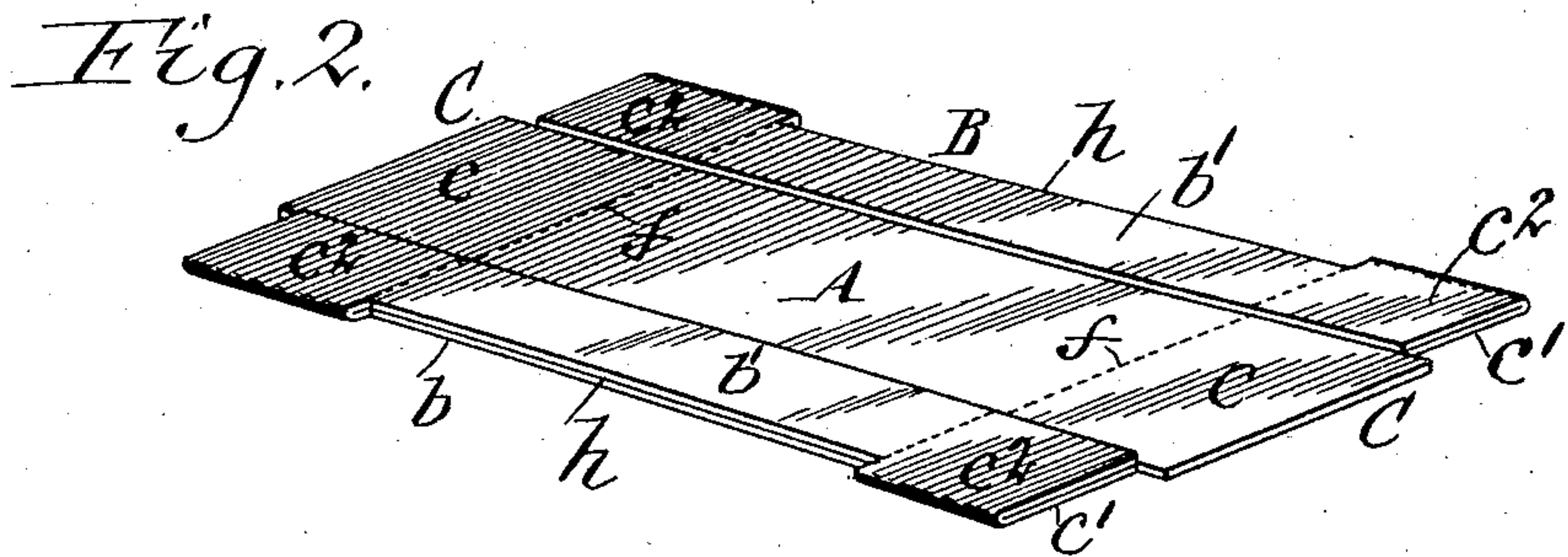
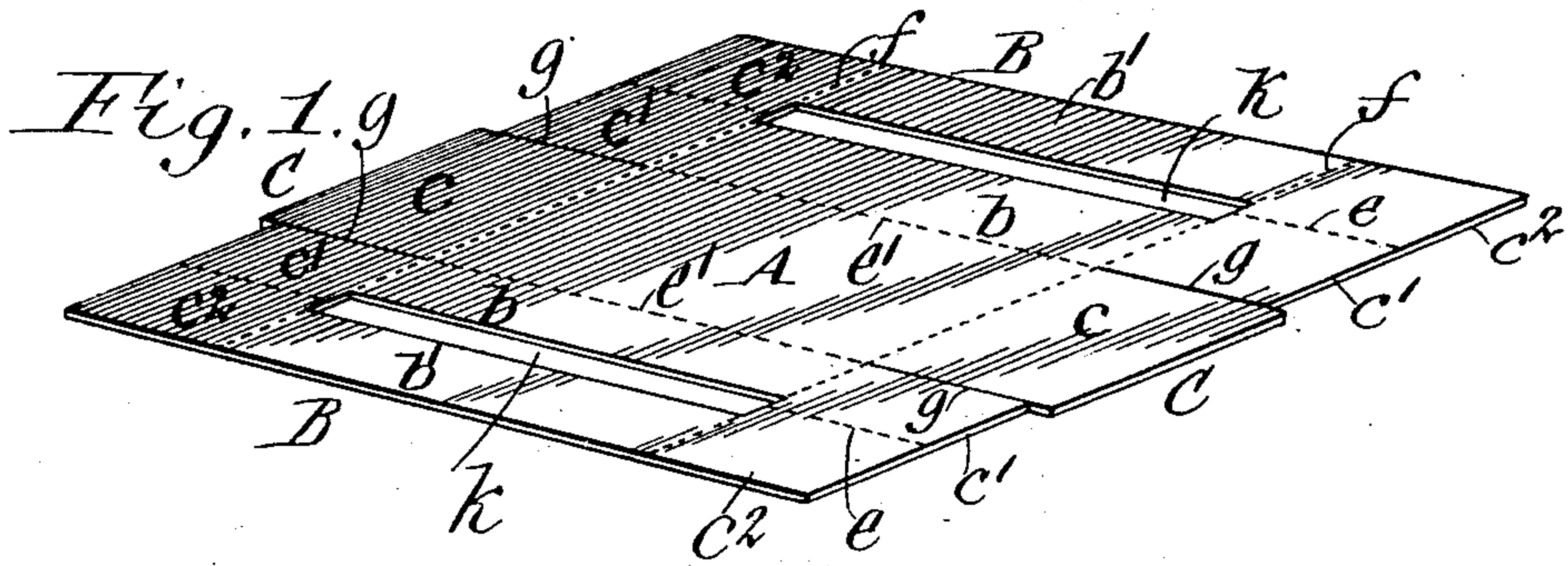
BOX.

APPLICATION FILED FEB. 13, 1909.

939,166.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.



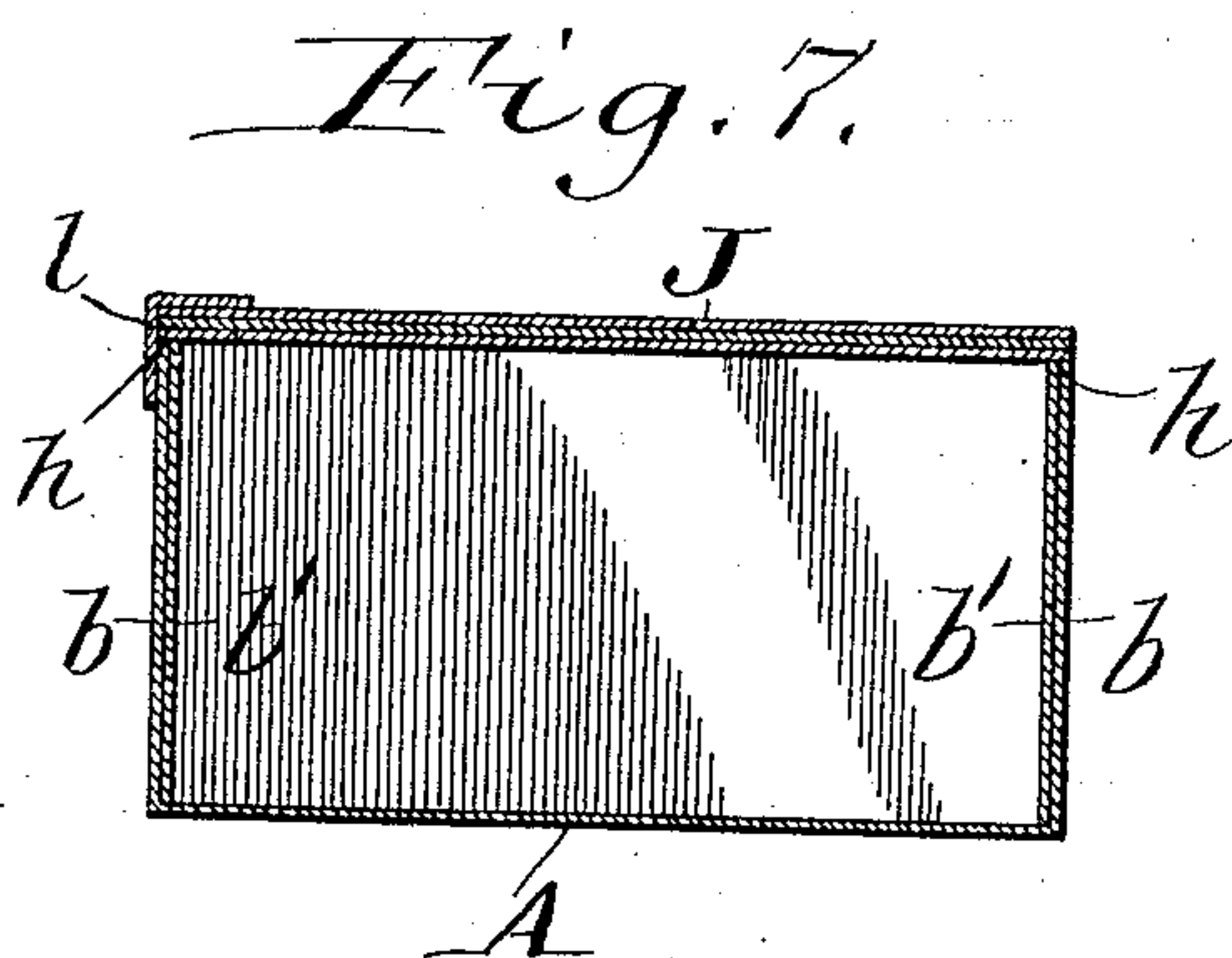
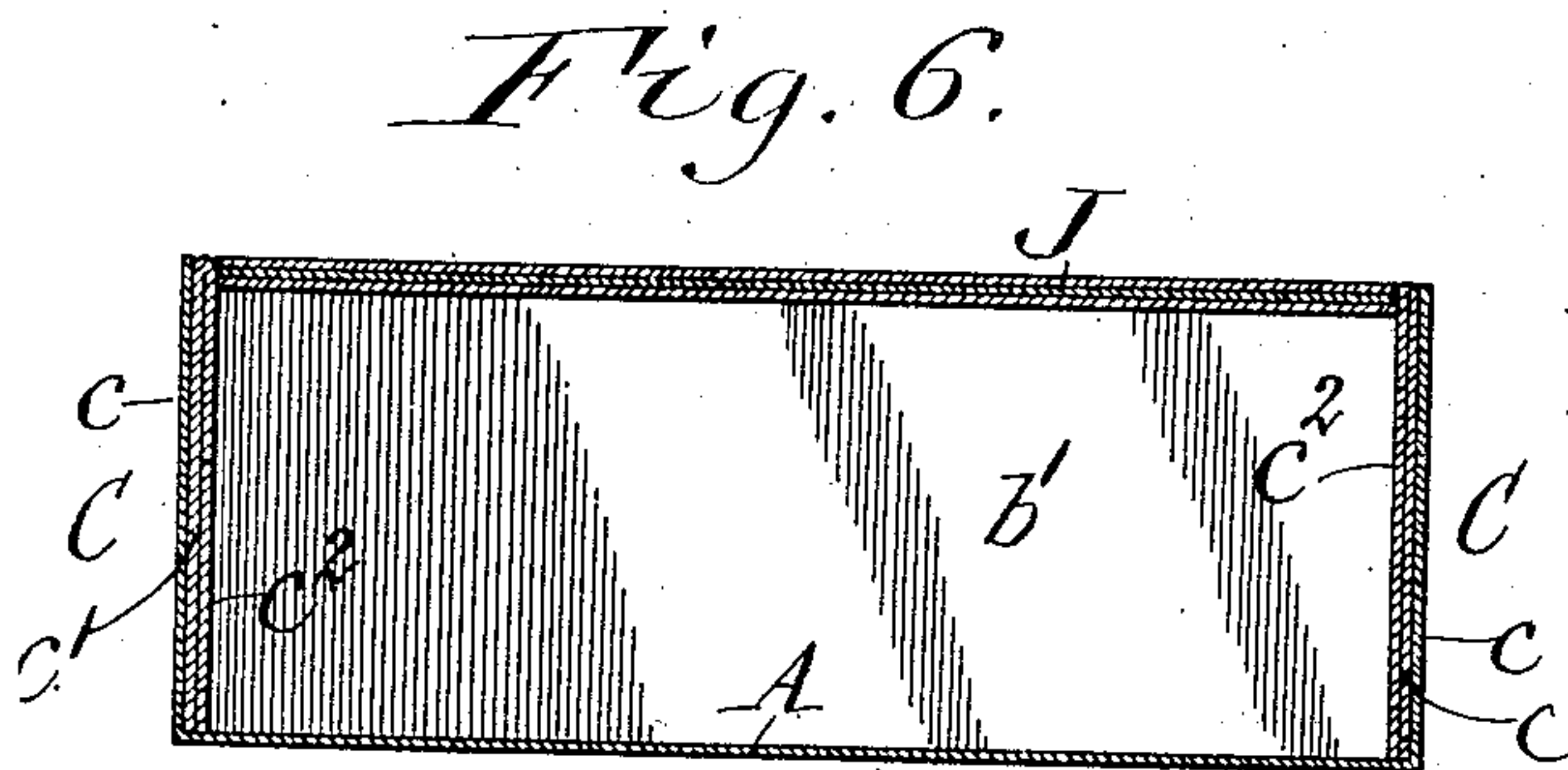
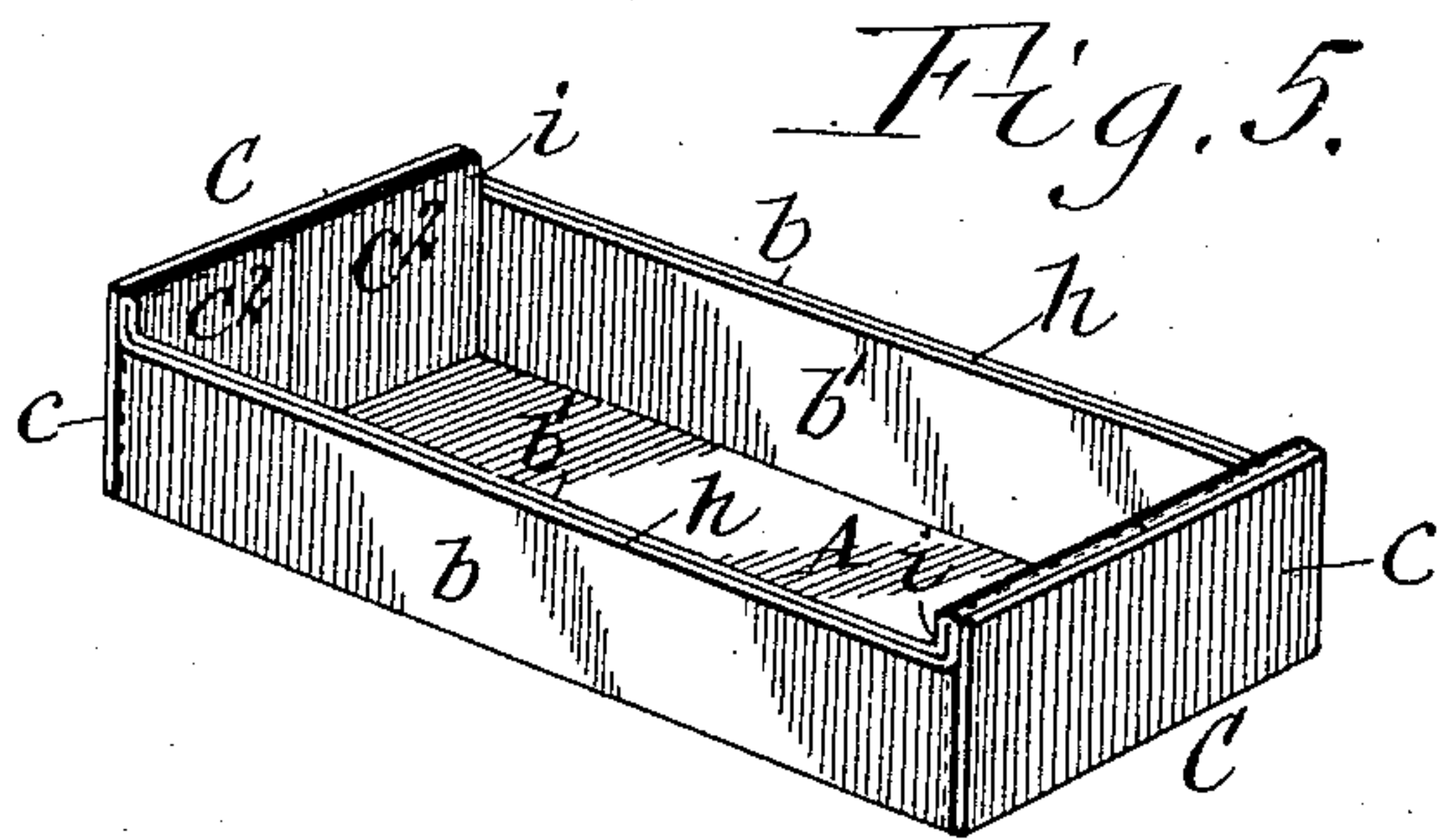
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UNITED STATES PATENT OFFICE.

GEORGE B. REED, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO ALFRED T. KIRKLAND, OF BUFFALO, NEW YORK.

BOX.

939,166.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed February 13, 1909. Serial No. 477,589.

To all whom it may concern:

Be it known that I, GEORGE B. REED, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Boxes, of which the following is a specification.

The object of this invention is the production of an improved paper box of simple, durable and inexpensive construction which is more particularly designed for packing cigars.

In the accompanying drawings consisting of 2 sheets: Figure 1 is a perspective view of a blank from which the body of my improved box is formed. Figs. 2, 3, 4 and 5 are similar views showing this blank in different stages of the folding operation whereby the same is converted into the box. Figs. 6 and 7 are vertical longitudinal and cross sections, respectively, of my improved box showing the body provided with a lid and the outer sides of the body and lid and the inner side of the lid provided with a finishing sheathing.

Similar letters of reference indicate corresponding parts throughout the several views.

The body of my improved box comprises a bottom A, two side walls B, B and two end walls C, C. The bottom consists preferably of a single ply. Each of the side walls consists of an outer ply *b* connected at its lower end to the adjacent side of the bottom and an inner ply *b*¹ disconnected at its upper end from the adjacent end of the companion outer ply. Each of the end walls consists of an outer ply *c* connected at its lower end with the adjacent end of the bottom, an intermediate ply composed of two sections *c*¹, *c*¹ which meet at their opposing inner ends while their outer ends are connected respectively with the adjacent ends of the outer plies of both side walls and an inner ply also composed of two sections *c*², *c*² which meet at their inner ends while their outer ends are connected with the adjacent ends of both inner plies of the side walls.

In Fig. 1, is shown the flat blank from which the body is formed and which is cut from a sheet of paper or other suitable material of the desired thickness. In this blank the outer plies of the side walls are arranged lengthwise on opposite sides of the bottom ply, the inner plies of the side walls are arranged lengthwise along the outer sides of

the outer plies of the side walls, the outer plies of the end walls are arranged at opposite ends of the bottom ply, the intermediate end ply sections are arranged in the corners between the outer plies of the end and side walls, and the inner ply sections of the end walls are arranged in the corners between the inner side wall plies and the sections of the intermediate plies of the end walls. This blank is provided with four longitudinal scorings *e*, *e*, *e*¹, *e*¹ and with two transverse scorings *f*, *f* along the connected meeting edges of the several parts of the blank to permit of folding the same readily and with four longitudinal slits *g*, *g* between the outer and intermediate plies of the end walls to permit of lapping the sectional end plies against the inner sides of the integral outer plies of said end walls.

In forming this box the inner plies of the side and end walls along opposite longitudinal edges of the blank are first folded on the scorings *e*, *e* inwardly over the outer plies of the side walls and the intermediate plies of the end walls, as shown in Fig. 2. The doubled longitudinal portions of the blank are now turned upwardly on the scorings *e*¹, *e*¹ at right angles to the bottom ply and outer end plies, as shown in Fig. 3. Then the doubled sections of the inner and intermediate plies of the end walls are bent toward each other at right angles to the side walls so that the sectional plies at corresponding ends of the box meet at their inner opposing ends, as shown in Fig. 4. The outer plies of the end walls are then turned upwardly against the outer sides of the sections of the intermediate plies of the end walls, as shown in Fig. 5, whereby the folding operation of the body of the box is completed. The several parts of the box body are secured in this position by means of glue or other suitable means so as to hold them in the proper position relatively to each other.

The cover or lid J of the box may be constructed in any suitable manner but preferably of a plurality of layers, plies or sheets of paper, as shown in Figs. 1 and 7. The front and rear edges of the cover rest on the upper edges of the front and rear walls of the box and the end edges thereof are confined between shoulders or rabbets *i* on the upper portions or edges of the end walls and is flush with the top thereof, the same

as in wood boxes as now commonly constructed. To permit of thus arranging the top of the lid flush with the upper edges of the end walls of the body, the upper edges *h* of the longitudinal side walls are so constructed that they terminate at their upper edges short of or below the upper edges of the end walls. This is effected by removing the stock at the upper edges of the inner and outer layers or plies forming the front and rear walls. The removal of this portion of the front and rear walls may be effected either before or after the blank is folded into box shape but is preferably effected by cutting longitudinal slots *k* in the blank while the same is in its flat condition, as shown in Fig. 1, each of said slots extending transversely across one of the scores or lines *e* along which the inner and outer plies of the respective side walls are folded relatively to each other and also extending lengthwise from one to the other of the scores or lines *f* along which the end plies *c*¹, *c*² are folded or bent relatively to the side plies *b*, *b*¹. The lid may be connected along its rear longitudinal edge with one of the side walls of the body by a flexible hinge *l* in the usual manner and its front end may be nailed down or otherwise fastened to the other side wall in the same manner now commonly practiced.

I claim as my invention:

A box having a bottom, two side walls and two end walls, said bottom consisting of a single ply, each of said side walls consisting

of an outer ply connected with its lower end to the adjacent side of the bottom and an inner ply disconnected at its upper end from the upper end of the companion outer ply, and each of said end walls consisting of an outer ply connected at its lower end with the adjacent end of the bottom, an intermediate ply composed of two sections which meet at their opposing inner ends while their outer ends are connected respectively with the adjacent ends of the outer plies of both side walls, and an inner ply also composed of two sections which meet at their inner ends while their outer ends are connected with the adjacent ends of both inner plies of the side walls, and their upper edges are connected with the upper edges of the intermediate ply sections, the upper edge of the side walls terminating below the upper edges of the end walls and constructed by forming slots in the blank from which said body is made, each of said slots extending transversely across the line on which the inner and outer plies of the respective side wall are folded relatively to each other and also extending from one to the other of the lines on which the inner plies of the end walls are bent relatively to the respective side wall plies.

Witness my hand this 1st day of February, 1909.

GEORGE B. REED.

Witnesses:

ALFRED T. KIRKLAND,
THEO. L. COPP.