

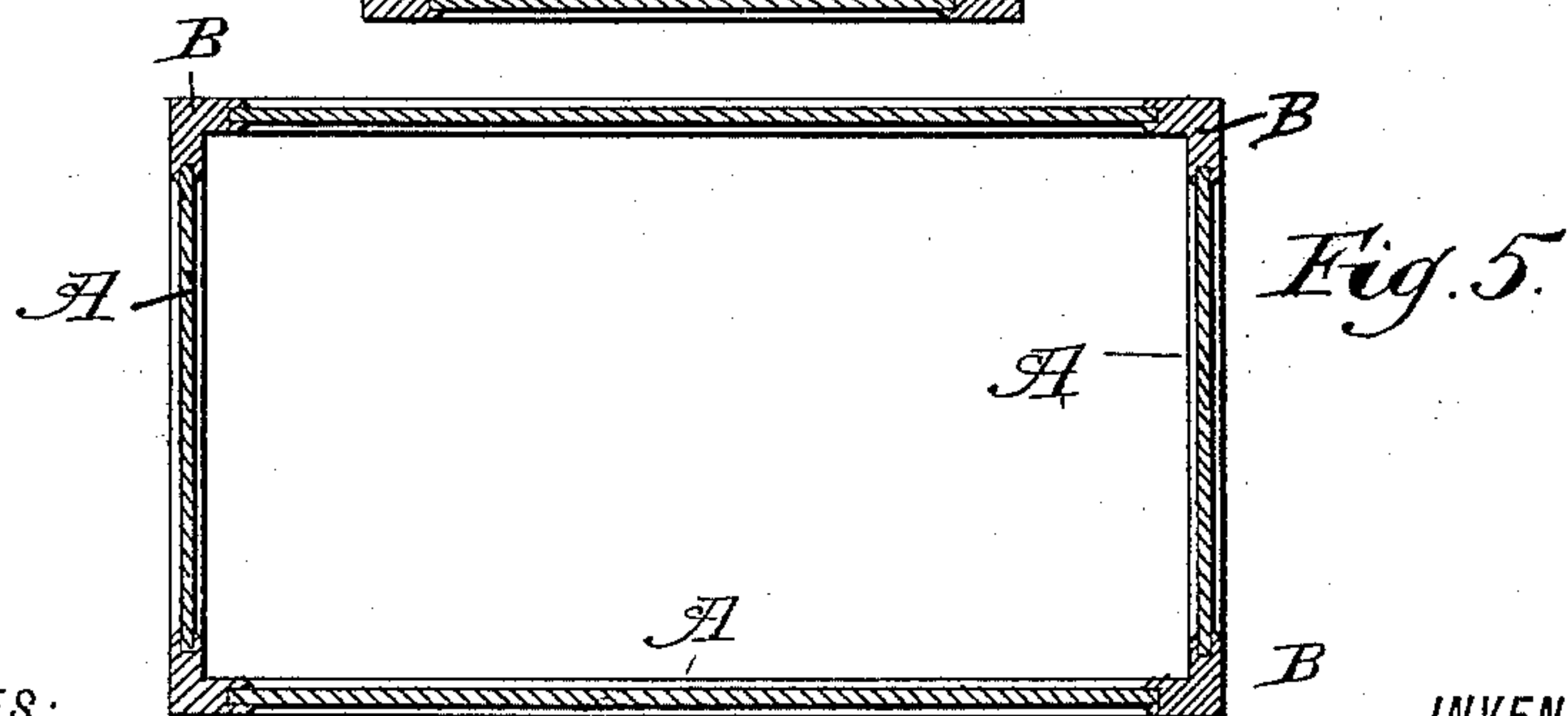
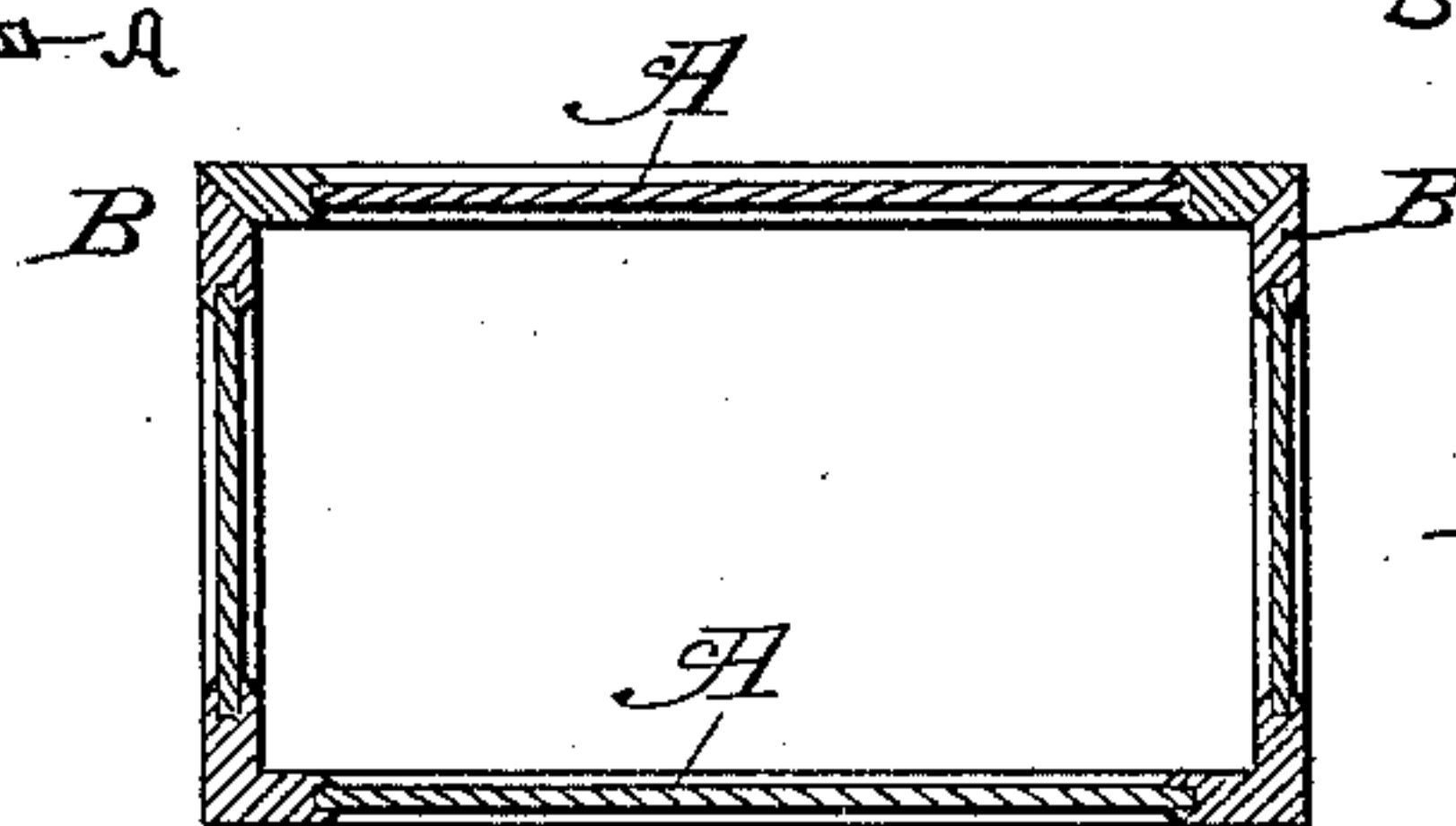
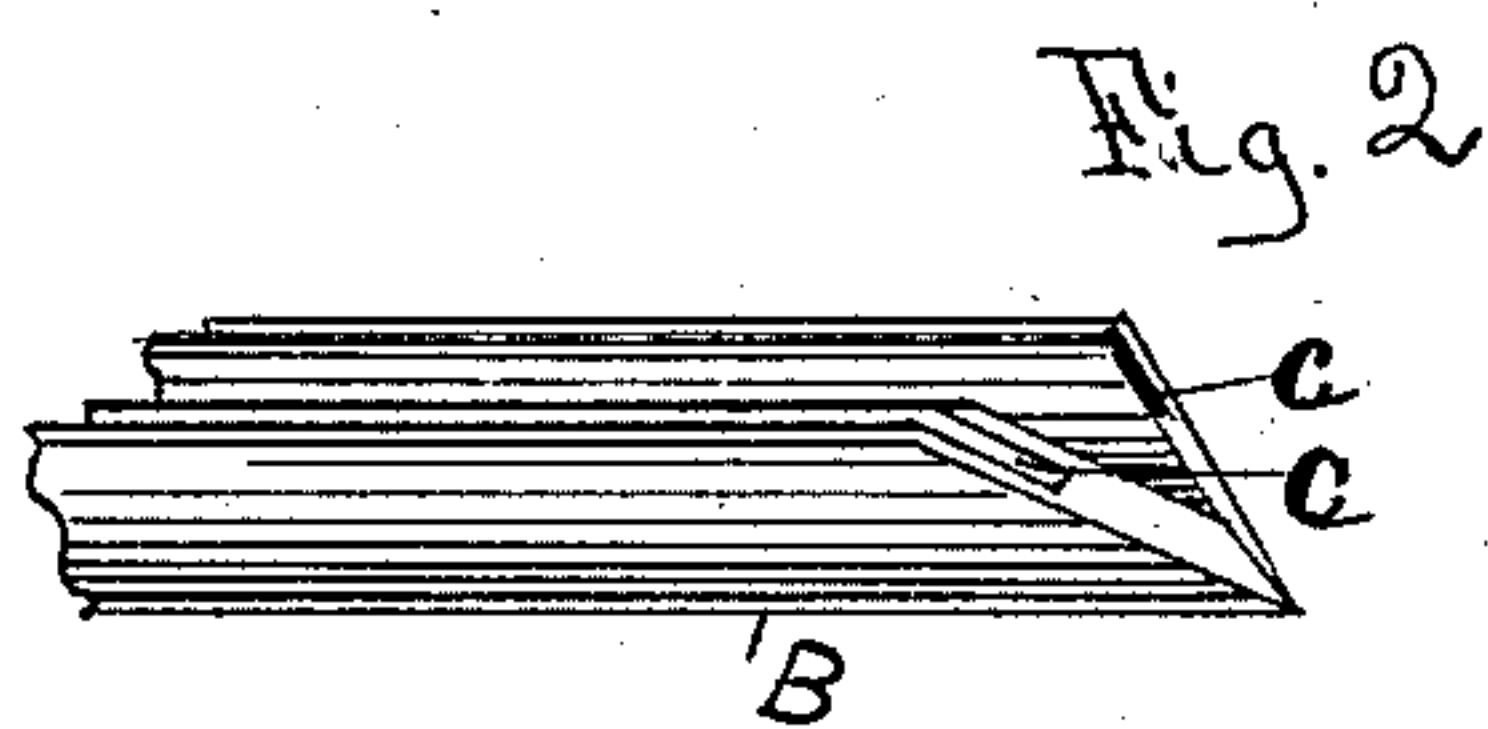
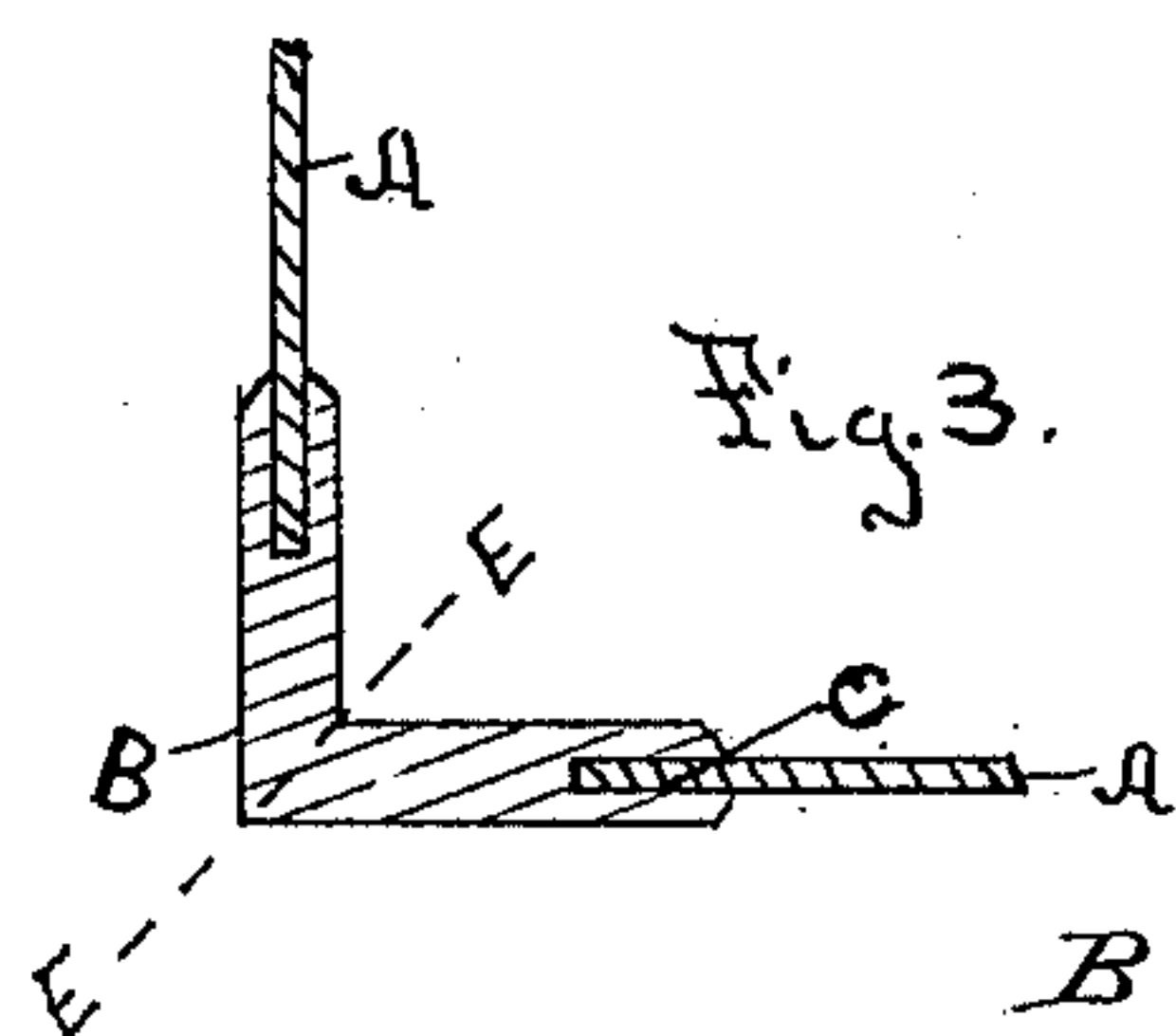
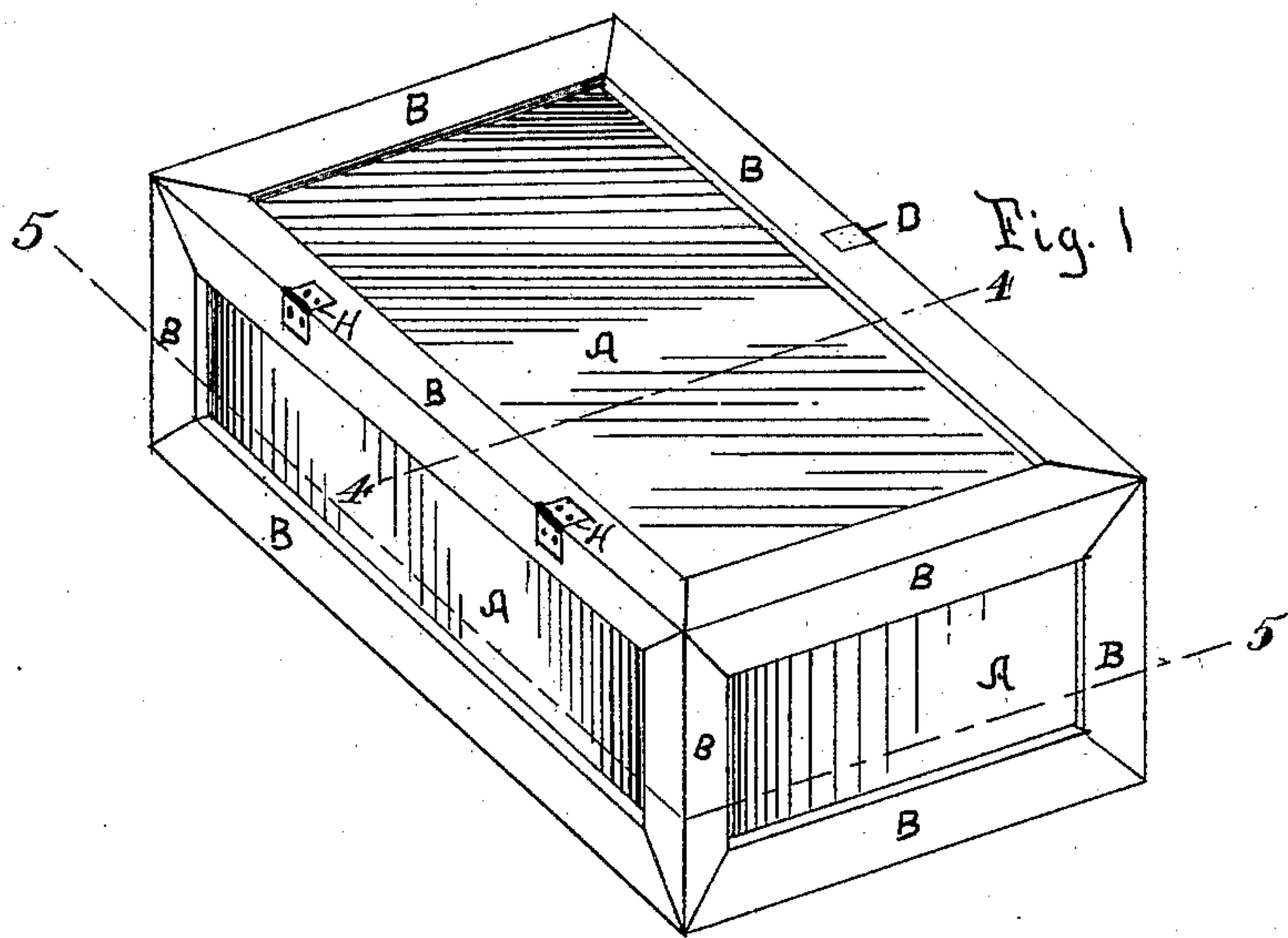
(No Model.)

A. T. LINDERMAN.

BOX.

No. 378,601.

Patented Feb. 28, 1888.



WITNESSES:

Wimiford Linderman.  
M. A. Grant,

INVENTOR

Albert T. Linderman

# UNITED STATES PATENT OFFICE.

ALBERT T. LINDERMAN, OF WHITEHALL, MICHIGAN.

## BOX.

SPECIFICATION forming part of Letters Patent No. 378,601, dated February 28, 1888.

Application filed October 18, 1887. Serial No. 252,713. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT T. LINDERMAN, a citizen of the United States, residing at Whitehall, in the county of Muskegon and State of Michigan, have invented a new and useful Improvement in Boxes, of which the following is a specification.

My invention relates to that class of packing-boxes in which the body of the box is made of veneer and is supported by a surrounding frame of angle-wood.

The objects of my improvement are, first, to provide a light, strong, handsome, and cheap box; and, second, to combine angle-wood with thin veneer in such a way as shall make a strong and serviceable box, even when the veneer is too thin to allow the use of nails. I accomplish these objects in the manner shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a complete box. Fig. 2 is a broken perspective view of a piece of the angle-wood frame. Fig. 3 is a plan or sectional view of a piece of angle-wood with a broken view of the veneers inserted in the grooves made to receive them in the angle-woods. Fig. 4 is a section on the line 4 4, and Fig. 5 a section on the line 5 5, of Fig. 1.

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

To make my improved box, the angle-woods B are cut with grooves C C, Fig. 2, in their edges. Their ends are then mitered at the proper length to make the box of required size. The veneers A are then cut to the length and width necessary, and the bottom piece of veneer is then taken in hand and the four bottom angle-woods are placed about it. The edges of the veneer are pressed into the recesses or grooves C in the edges of the angle-woods, a light dressing of glue being applied to the mitered ends of the angle-woods and also to the edges of the veneer that go into the grooves in the angle-woods. This dressing of glue applies to all the mitered ends of the angle-woods as they go together, as well as to all the edges of the veneers.

The four pieces of angle-wood and piece of veneer inserted into the grooves in their edges first alluded to form the bottom of the box. The corner-posts of angle-wood are then put

in place upon it and the side and end pieces of veneer are slid down the grooves in their edges. The top angle-wood frame is now filled with veneer in the same manner as was the bottom and put in place, the top edges of the veneer sides and ends being pressed into the grooves in the lower or pendent edges of the angle-wood top frame. The box is then put into an all-around clamp, where a pressure is brought upon all sides of it. In this position it is allowed to remain until the glue has had time to set, after which, to make the cover operative, I cut, with a thin saw, the top angle-woods apart at the angle, as shown by the dotted lines E in Fig. 3, all around the top of the box. The cover can then be removed and fastened back in place with the hinges H or similar device. The clasp D is applied to hold the cover down.

My improved box is well adapted for use as a cigar-box, being made cheaply out of veneer too thin and fragile to nail together. The panel effect of the angle-woods, which can be of different-colored wood than the veneer, adds to the appearance of the box.

The right-angular angle-woods B are strong and light and easily sawed out of boards or plank without material waste, and the groove in the edges cut at the same time by the use of a special machine which I have invented for the use, or they can be cut in the ordinary way very cheaply. The veneer panel serves to bring the inner and outer surfaces of the angle-woods even at the joints where they join each other, thereby forming a smooth and even surface upon the inner and outer sides of the box at the cubical corners thereof.

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

A packing-box consisting of right-angular angle-woods B, embracing every corner, joined at their ends, with their inner and outer surfaces even at the joints, and severally having grooves in their edges, and of the panels of thin material fitting into the grooves, substantially as described.

ALBERT T. LINDERMAN.

Witnesses:

WINNIFRED LINDERMAN,  
M. A. GRANT.