

J. Q. MATTHEWS.
 KNOCKDOWN BOX OR CASE.
 APPLICATION FILED MAY 18, 1908.

912,590.

Patented Feb. 16, 1909.

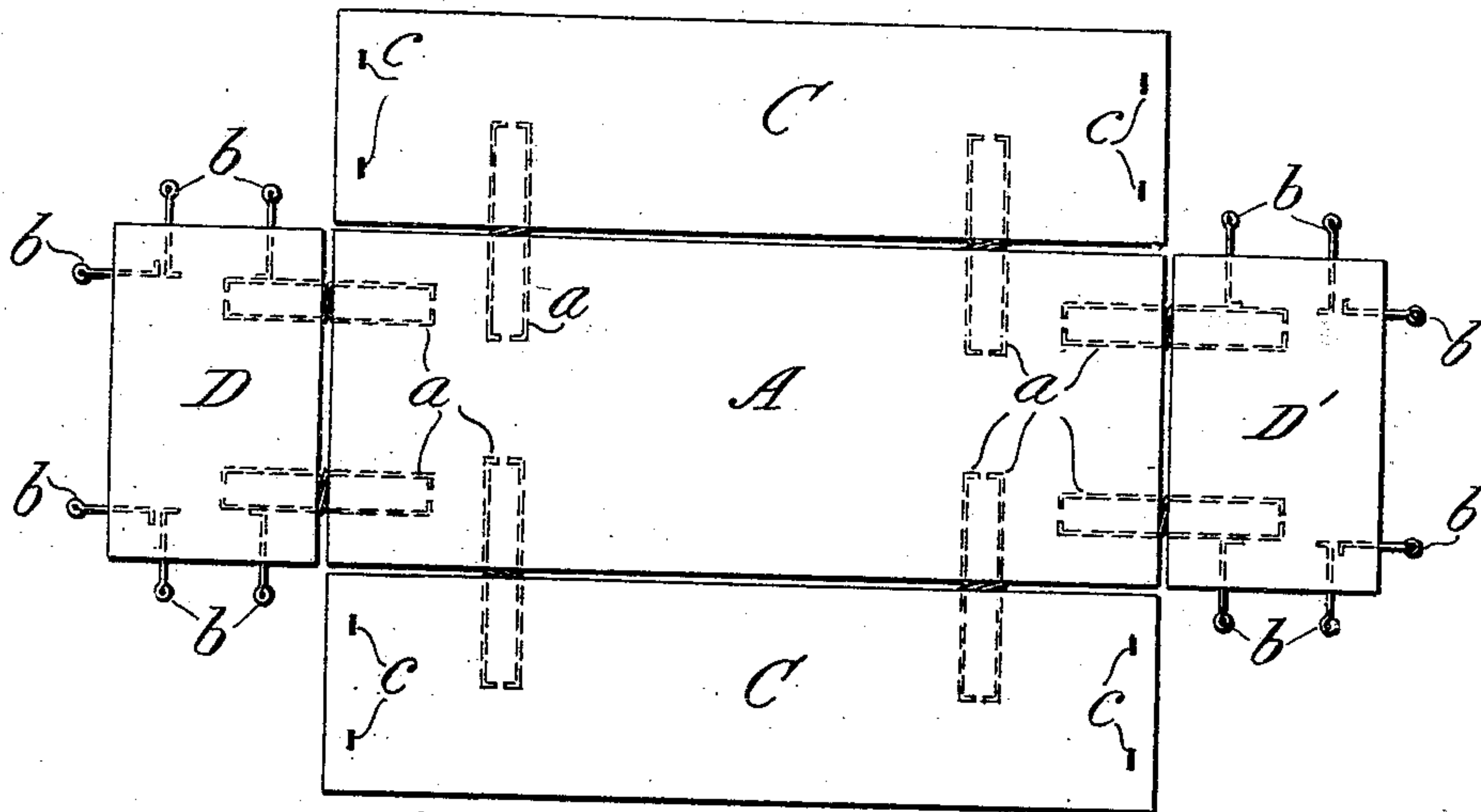


Fig. 1.

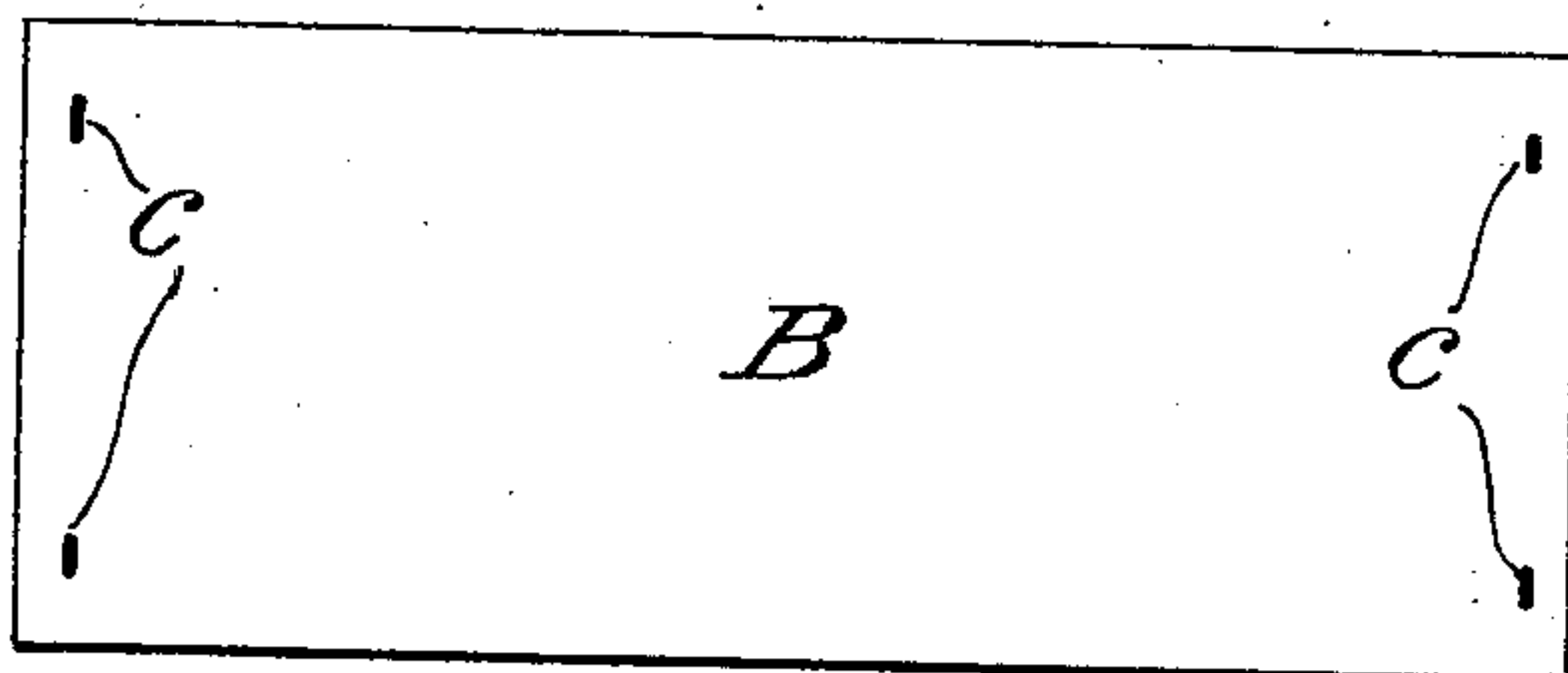


Fig. 2.

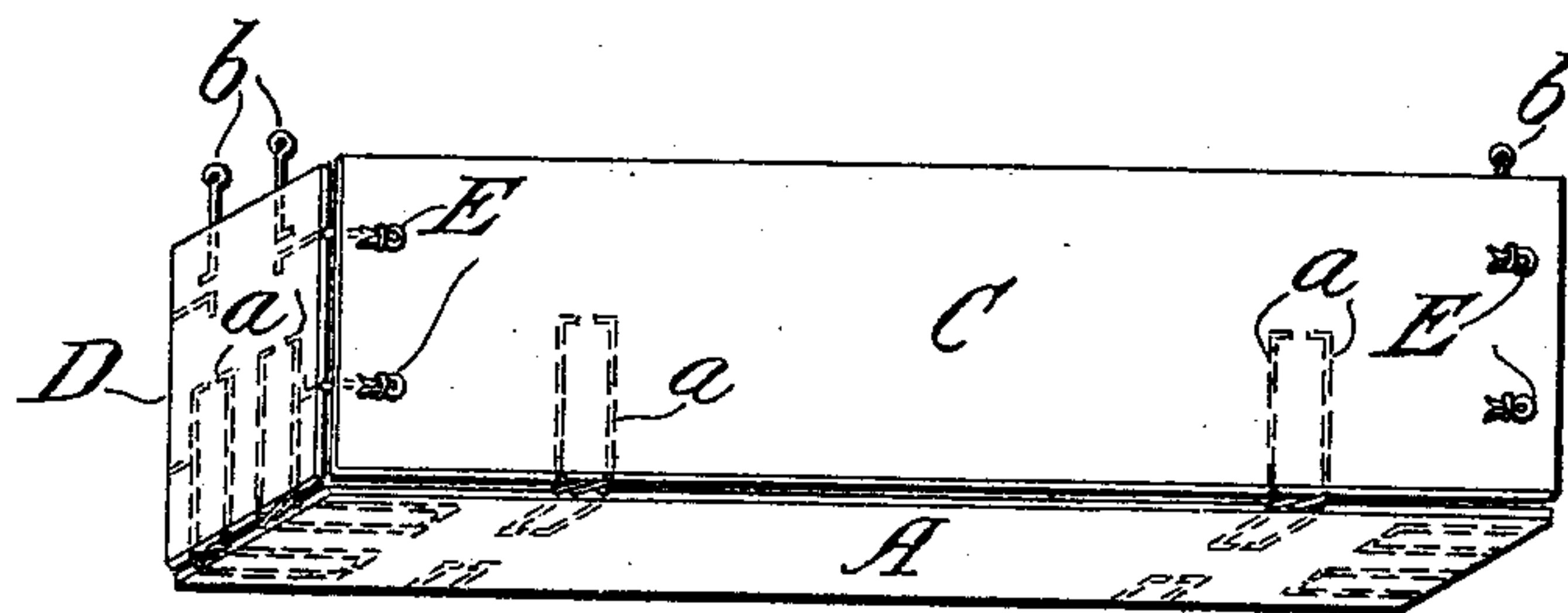


Fig. 3.

Witnesses,
 Geo. R. Hermann.
 Chas. L. Kavanaugh.

Inventor,
 John Q. Matthews
 By his Attorney
 H. W. Sanford.

UNITED STATES PATENT OFFICE.

JOHN Q. MATTHEWS, OF DENVER, COLORADO.

KNOCKDOWN BOX OR CASE.

No. 912,590.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed May 18, 1908. Serial No. 433,605.

To all whom it may concern:

Be it known that I, JOHN Q. MATTHEWS, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented a new and useful Knockdown Box or Case, of which the following is a full and complete description and specification, reference being had to the accompanying drawing, which is hereby made a part thereof.

My invention relates to improvements in knockdown boxes or cases in which the sides and ends are fastened to the bottom in such manner as to lie in one flat plane when desired, or may be erected into box form by raising the sides and ends hinging upon the fasteners, and providing for the ready attachment of the top without the use of nails, screws, or clamps.

The objects of my invention are:—to provide a light, cheap and easily handled box or case, which may be quickly erected into form for use, or reduced to the least possible compass when not in use; and generally, to improve the construction, durability and efficiency of this class of devices. I attain these objects by the novel construction and combination of the various parts as illustrated in the accompanying drawing.

In the accompanying drawing, Figure 1 represents the sides, ends and bottom of the device, fastened together and laid down flat. Fig. 2 represents the top of the device. Fig. 3 represents one corner of a box after the various parts of my device have been erected into place and fastened.

Similar letters of reference indicate the same parts in the different views shown.

A. is the bottom, B. the top, C. and C. the sides, and D. and D'. the ends of the device.

a, a, etc. represent hinge-fastenings connecting the sides and ends to the bottom.

b, b, etc. represent wires fixed in the ends of the box, one end of these wires being fixed the other being free and terminating in a loop, as indicated.

c, c, etc. represent holes or slots in the sides and top to permit the looped-wires above mentioned to pass through them. The said loops are designed to receive and retain the fasteners E. E. etc. so that the box may be retained in form.

The bottom, sides, ends and top of the device are preferably made of wood, or other fiber pulp, made into sheets, and cut to

the required form and size. The various wire fasteners mentioned are pressed into the body of the pulp while it is yet wet. When completed thus far, the device shows the form represented in Fig. 1. To make the box, the sides and ends are turned up, the fastening wires *a, a*, etc. acting as hinges as well as fasteners. The looped-wires *b, b*, etc. are then passed through the corresponding slots *c, c*, etc. designed to receive them, and held in place by the fasteners E. E. etc. which may be of any convenient form. Then to put on the top, the upper wires *b, b*, etc. in the ends of the device are passed through the slots *c, c*, etc. in the top, and the fasteners E. E. etc. passed through the loops in these wires and adjusted, as in the case of the sides and ends. The box is then complete. The holes or slots mentioned also serve as a means of ventilation for the box.

I have throughout shown what I regard to be the preferred form of construction of the various parts, but changes and modifications of structure and arrangement, particularly of the form and adjustment of the wire fasteners, may be made. And in general, changes may be made within the scope of the invention without altering the principle involved.

My claims are:—

1. In the construction of knockdown boxes or cases, a box or case whose sides, ends, bottom and top are cut from sheets of hardened fiber-pulp; whose sides, ends and bottom are fastened into one flat piece by wires embedded in the pulp; and whose sides, ends and top are provided with other wires having one end embedded in the body of the said sides, ends and top, the other end being free, substantially as and for the purposes described.

2. In the construction of knockdown boxes or cases, a box or case whose sides, ends, bottom and top are composed of hardened pulp; whose sides, ends and bottom are assembled and held in place in one flat piece by means of wires embedded in the pulp, which said wires act as hinges when it is sought to erect the parts into box form; whose sides and ends are provided with other wires having one end embedded in the pulp, the other being free and terminating in a closed loop; whose sides and top are provided with holes or slots designed to permit the said free ends of the looped wires

to pass through them, the loops being designed to receive and retain an appropriate fastener, whereby the whole is erected and sustained in proper box form while in use,
5 substantially as and for the purposes described.

In testimony whereof, I have hereunto set

my hand in the presence of two witnesses,
this 13th. day of May, 1908.

JOHN Q. MATTHEWS.

Witnesses:

F. W. WEBBER,

WM. C. KAVANAGH.