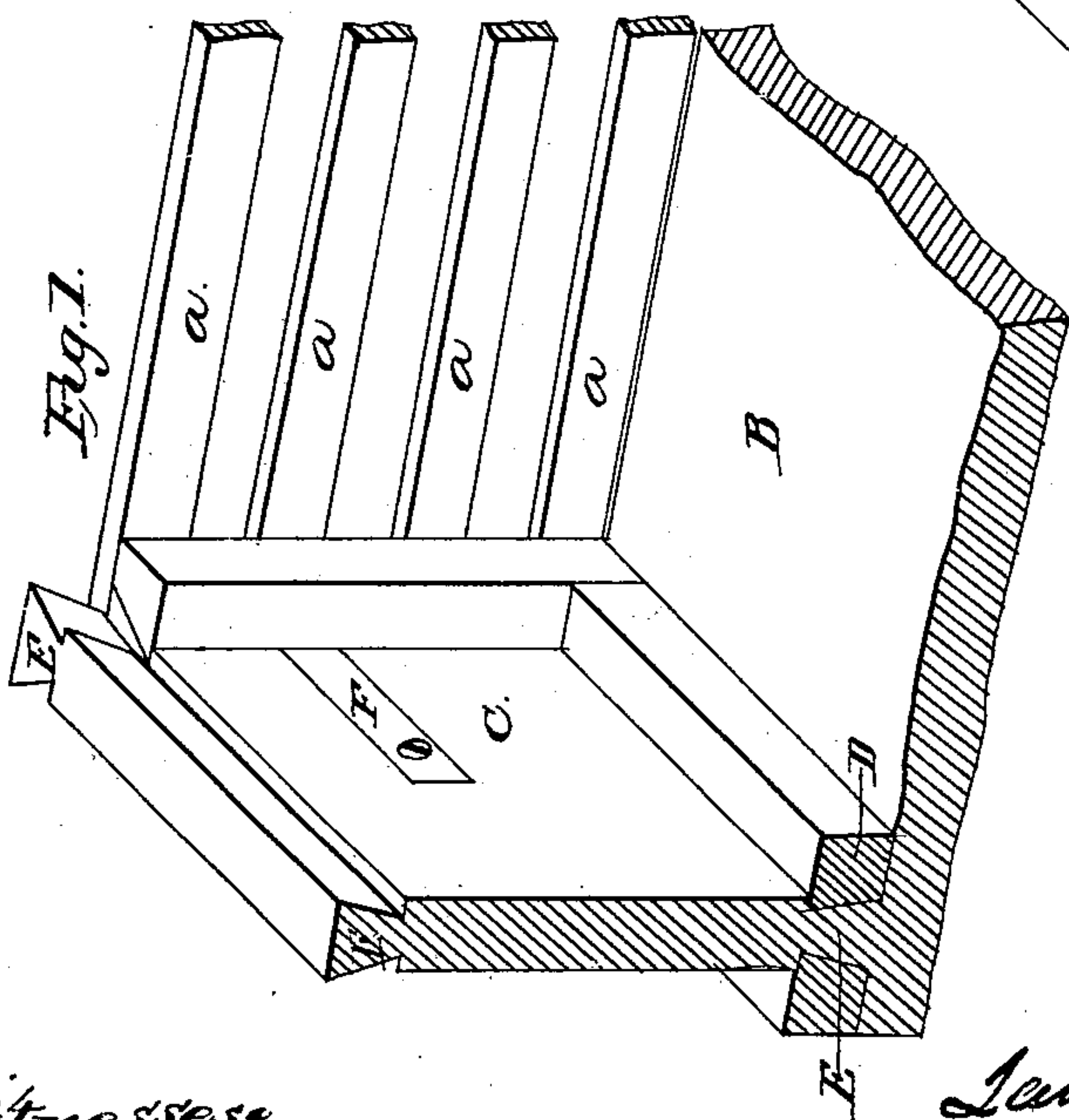
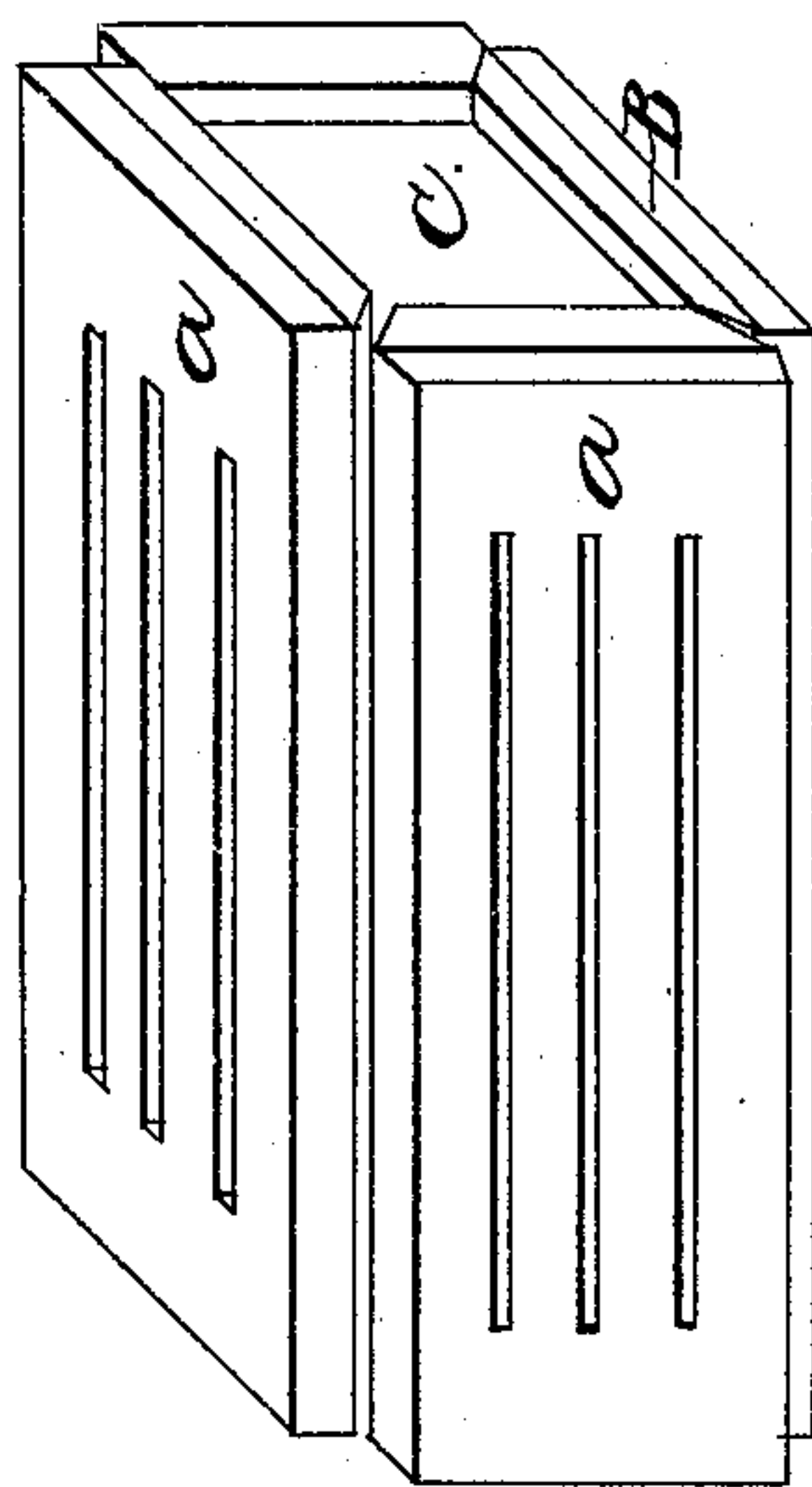
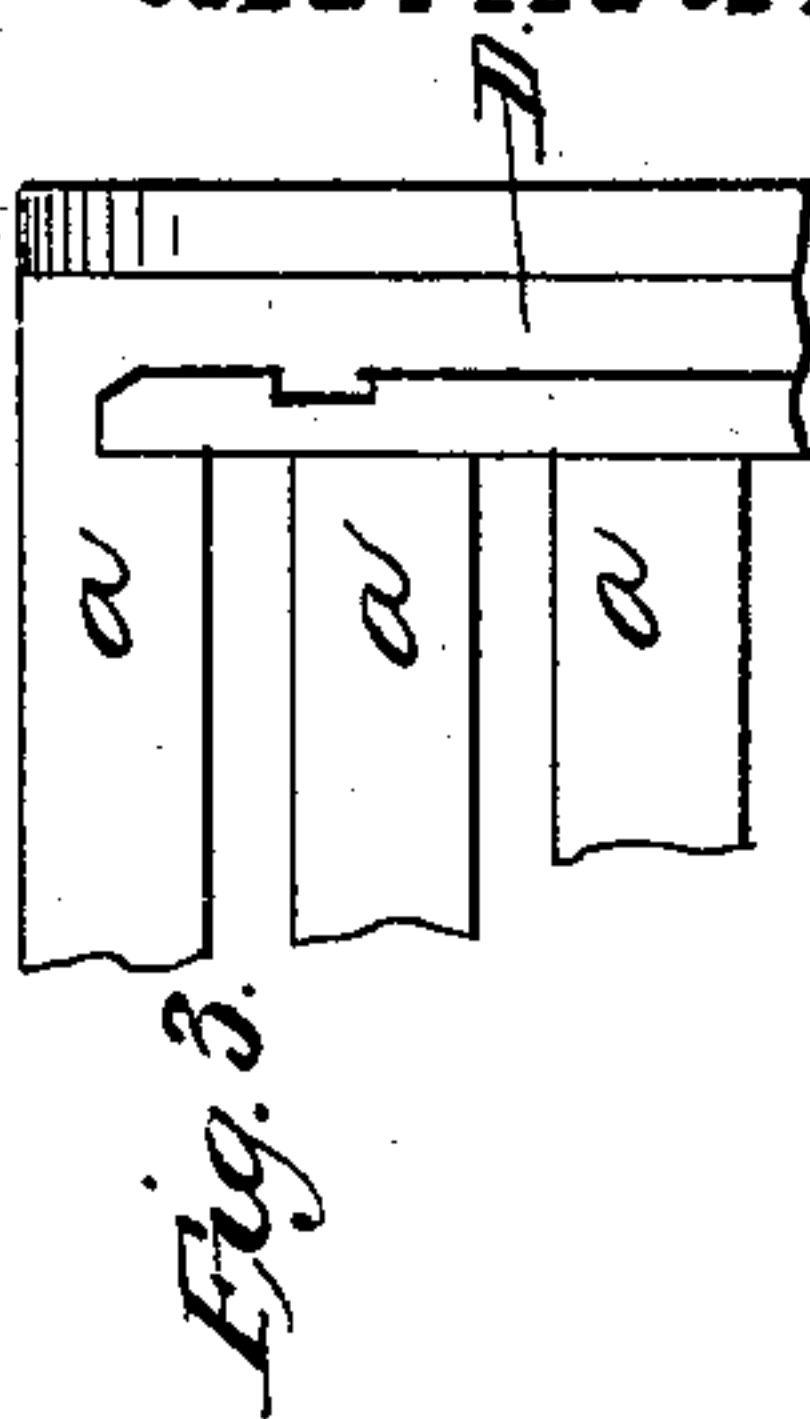
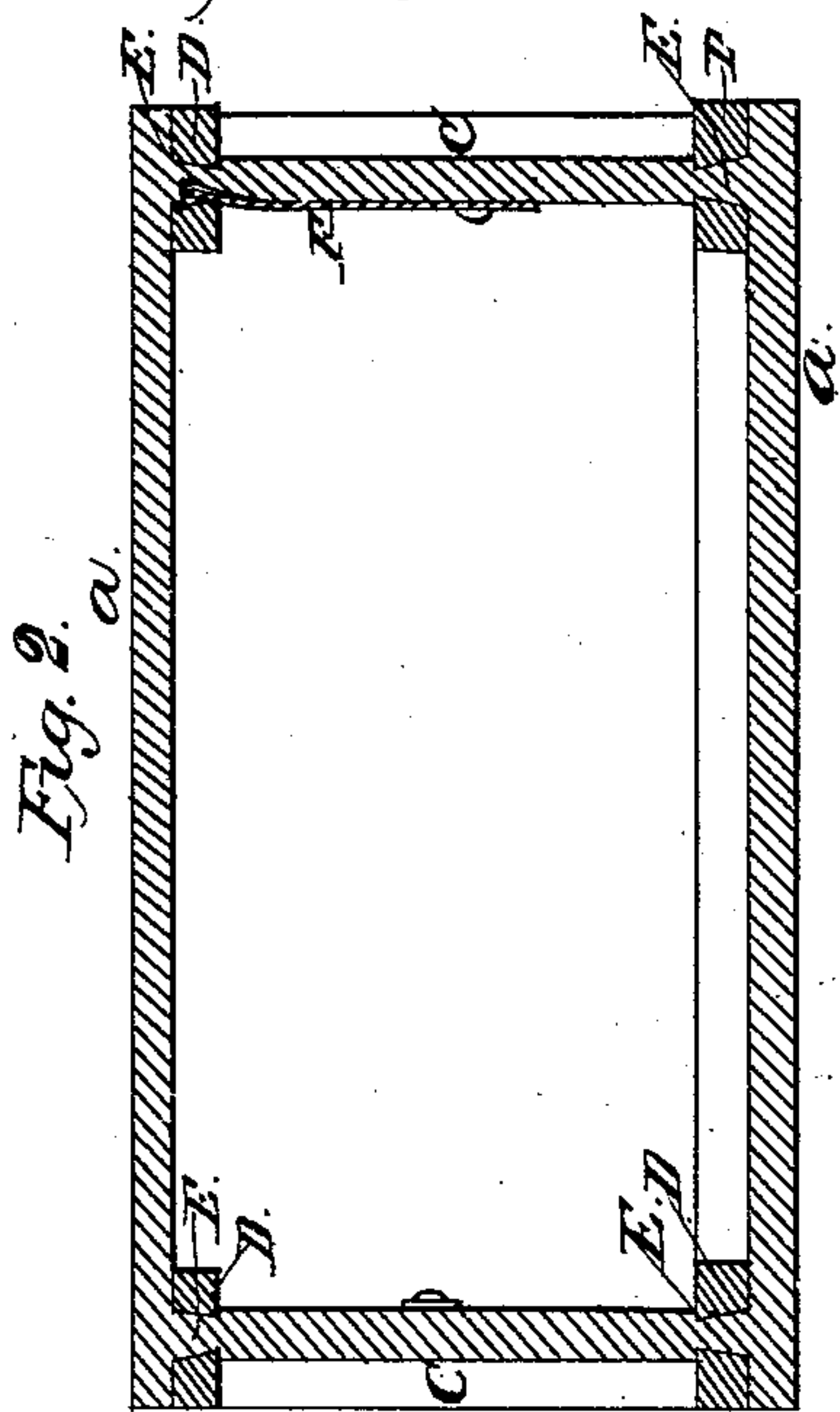


J. S. Shields

Fruit Crate

N^o 84,139.

Patented Nov 17, 1868.



Witnesses:

*C. F. Gleason
A. Ruppert.*

Inventor:

James S. Shields

*D. P. Holloway & Co
Attys.*



JAMES S. SHIELDS, OF MEDORA, INDIANA.

Letters Patent No. 84,139, dated November 17, 1868.

IMPROVED FRUIT-BOX

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES S. SHIELDS, of Medora, county of Jackson, State of Indiana, have invented a new and improved Box, or Fruit-Crate; and I hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, due reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a sectional perspective view.

Figure 2 is a longitudinal section.

Figure 3 is a perspective view.

Figure 4 is a sectional view of the bottom of the lid.

Similar letters of reference indicate corresponding parts.

My invention consists in constructing a box or crate whose sides and ends are united to each other by means of cleats and grooves, and which are held in position by secret springs.

It can be readily taken apart, and packed in compact bales, as will be hereinafter more fully described.

In the drawings—

A are the sides and lid of the crate, which have a number of longitudinal slots terminating near their ends. Bevelled pieces, so related to each other as to form grooves, are secured to their inner surfaces, across the ends.

B is the bottom, differing from the sides only in its not being slotted.

C are the end pieces, surrounded by a cleated rim.

D are the grooves.

E are the cleats.

F are the secret springs, which are secured to the inner surface of the end pieces, and lie in grooves therein, which grooves are continued into the cleats, so that the springs may be depressed sufficiently to leave a smooth surface on the cleat. Their reaction causes them to press tightly against the inner bevelled pieces forming the grooves.

The operation of my invention is as follows:

The sides and ends of the box or crate being fitted

together, press the end of the vertical secret spring into the groove on the cleat, with the point of a pen-knife-blade, or other suitable instrument; this will enable you to remove the lid, by sliding it to the right or left. Similar pressure on the horizontal spring disengages the sides, and allows them to be lifted off the cleats. The ends slide out of the grooves at the bottom. Place the bottom piece in its natural position, and it will be found that two of the bevelled pieces on the lid will slide into its grooves, thus permitting their inner surfaces to come into close contact.

By placing either of the sides in a similar position, the other will slide into it in the same manner.

The sides and the top and bottom piece may be bound together in bales, as may also the end pieces, or they may be carried in boxes of convenient size.

From the foregoing description of the nature and operation of my invention, it is evident that cleats, grooves, and secret springs may be used in boxes or crates of any construction as to form or material; that the benefits to be derived from my invention are not, therefore, confined to any particular kind of box or crate; that it is very easily joined together or taken apart, and packed in bales for shipping, which is the leading feature of my invention.

Having thus described the nature and operation of my invention,

I claim—

1. A box or crate, having its ends secured therein by means of cleats on the end pieces, and grooves on the sides, top, and bottom of the box, substantially as shown, and for the purpose described.

2. In combination with the ends of the box, the secret springs F, substantially as shown and described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JAMES S. SHIELDS.

Witnesses:

DANIEL JACKSON,
M. W. TANNER.