

(No Model.)

J. A. AUSTIN.  
File and Binder.

No. 233,910.

Patented Nov. 2, 1880.

Fig. 1.

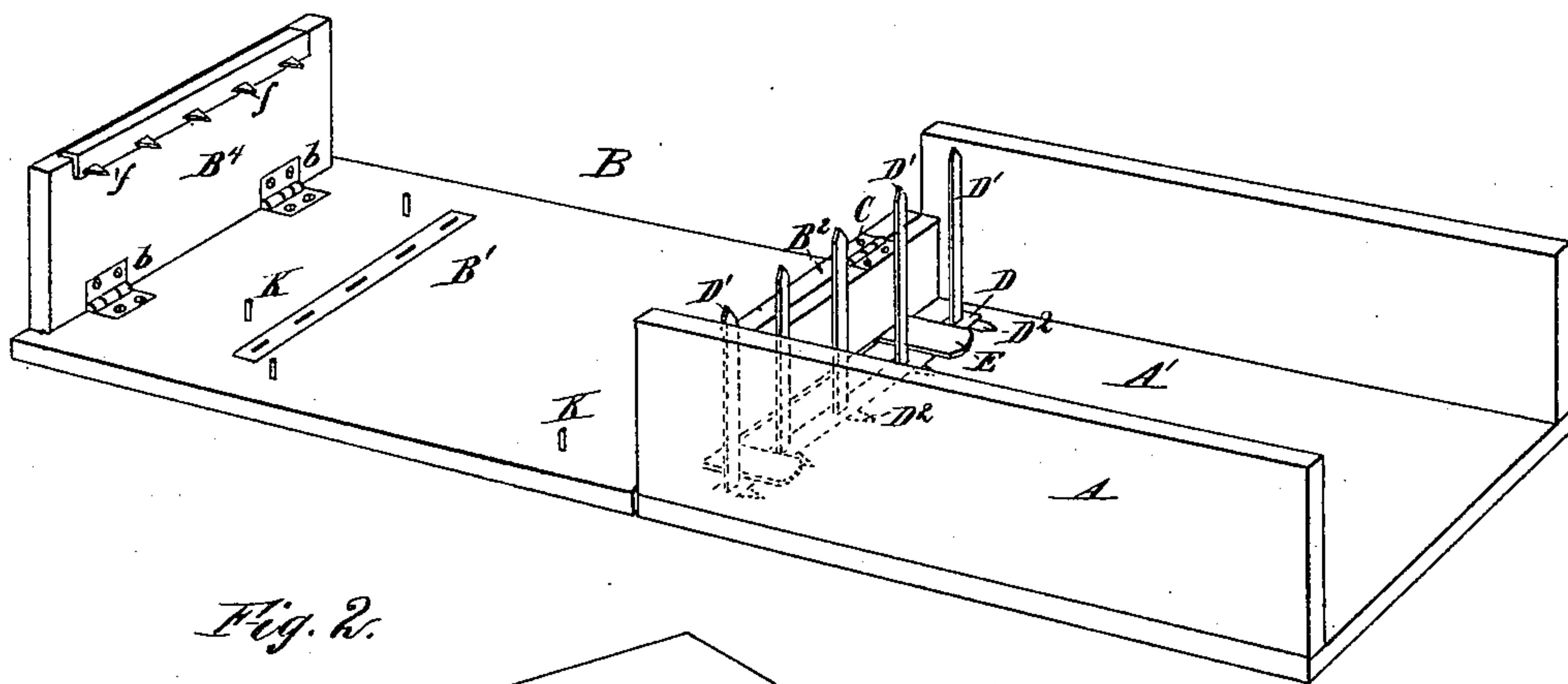


Fig. 2.

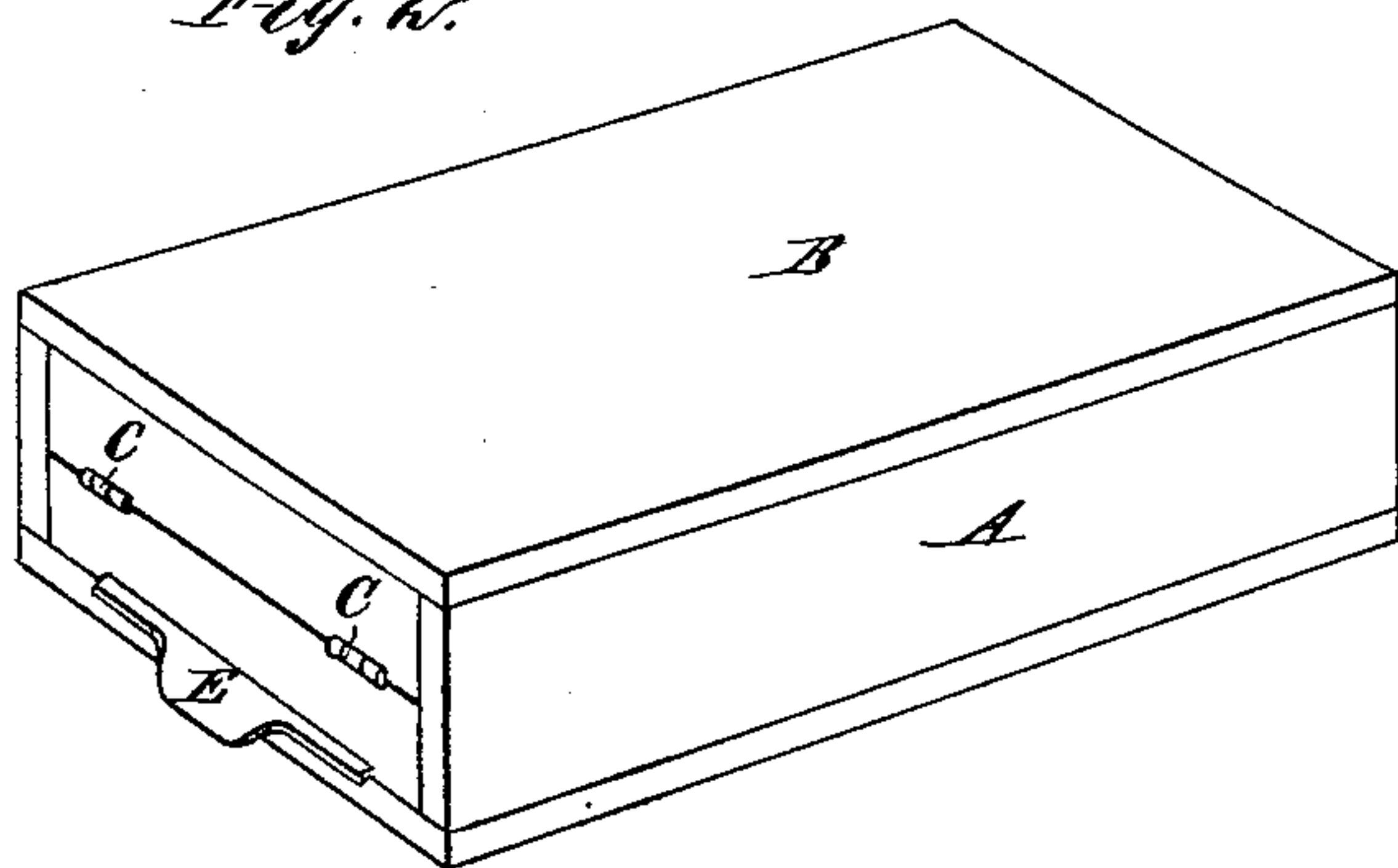


Fig. 4.

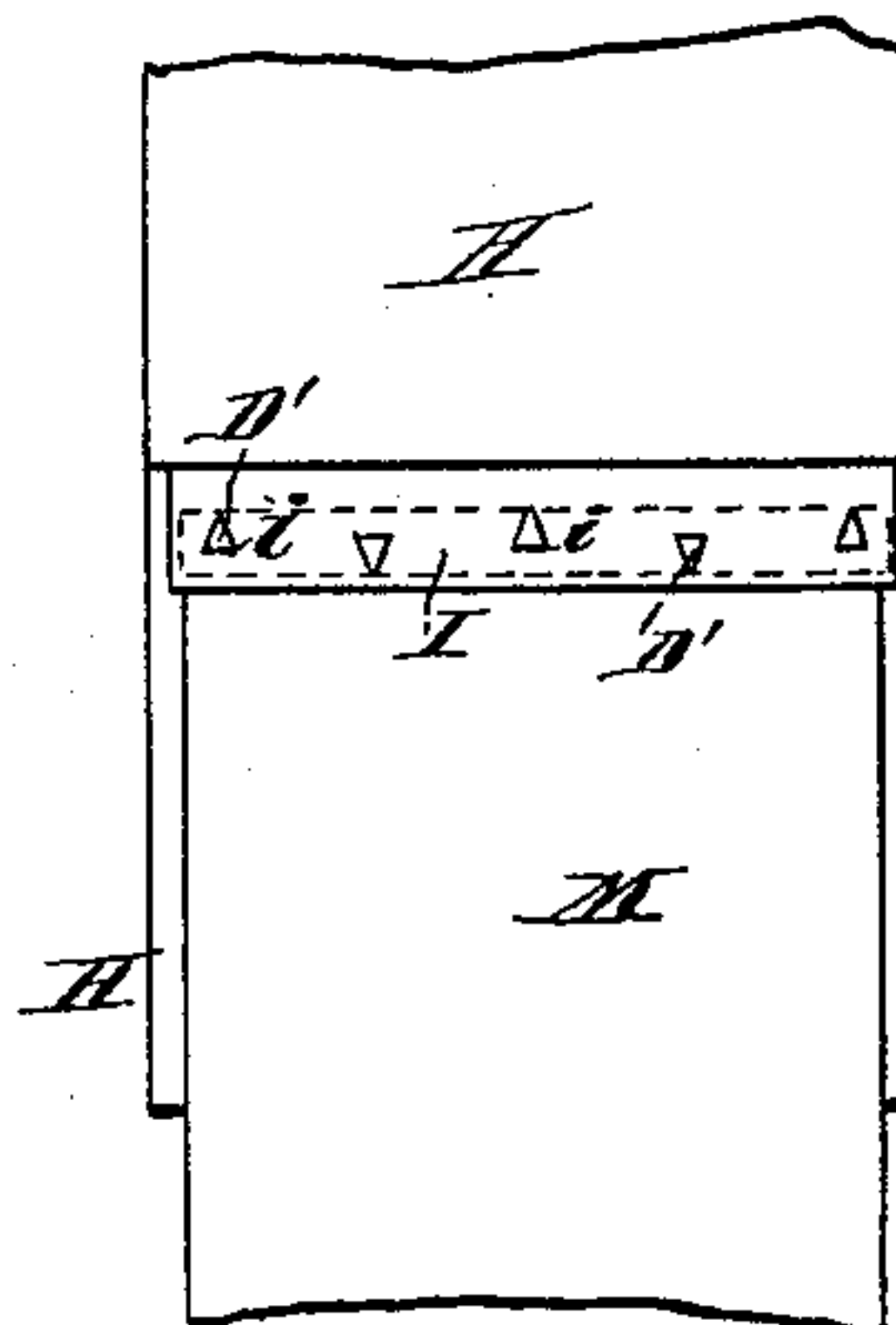


Fig. 3.

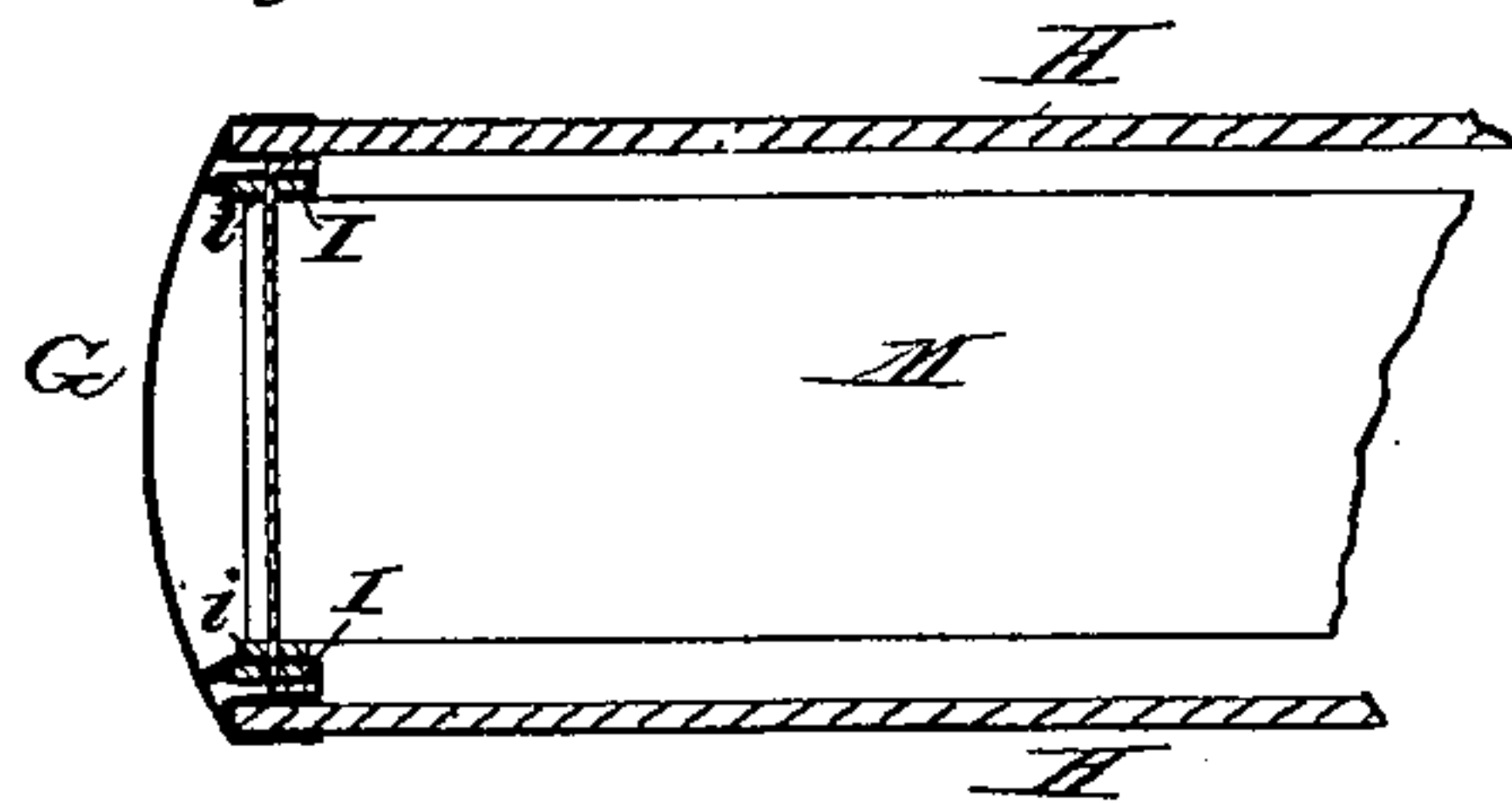
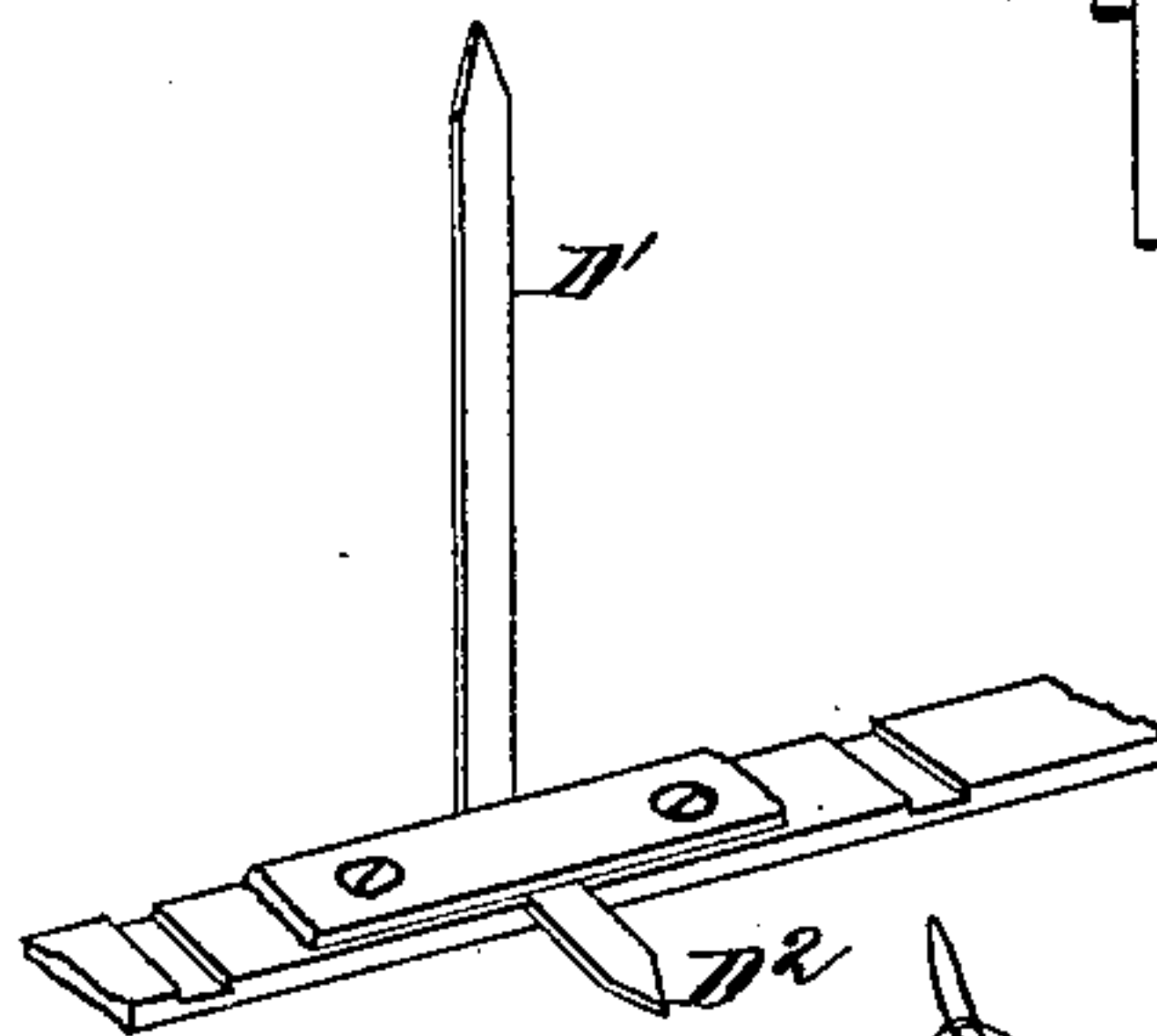


Fig. 5.



WITNESSES—

Charles R. Searle.  
Charles C. Stetson

INVENTOR—

James A. Austin  
by his attorney  
J. L. Stetson.

# UNITED STATES PATENT OFFICE.

JAMES A. AUSTIN, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND  
SAMUEL I. KNIGHT, OF SAME PLACE.

## FILE AND BINDER.

SPECIFICATION forming part of Letters Patent No. 233,910, dated November 2, 1880.

Application filed May 14, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES A. AUSTIN, of New York city, in the State of New York, have invented certain new and useful Improvements in Combined File and Binder, of which the following is a specification.

My invention relates to that class of modern appliances which are used when, in conducting a large correspondence, various papers, and particularly letters, are received and required to be stored where they can be immediately accessible during the period of their accumulation, thus serving as a file, and then, after a week, a month, or other period, when a considerable quantity has accumulated, the whole are removed and permanently attached together, or bound within covers, constituting a book for subsequent reference.

My invention presents marked advantages over anything for analogous purposes before known to me.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is a perspective view of my improved device ready to receive the first letter. Fig. 2 represents the same closed in perspective from the back. Fig. 3 is a central vertical section through a mass of letters and their binding-covers and back, showing the pins or spurs bent to hold them. Fig. 4 is a top view of the same with the top cover thrown back, and Fig. 5 shows a modification where the plate D has cross-slots and the spurs D<sup>2</sup> are held in place therein by a secondary plate riveted upon plate D.

Similar letters of reference indicate corresponding parts in all the figures.

The slight metallic fastenings by which the papers are held together are transferred at the period of binding from a stout frame or box in which the papers are filed to covers, which may be closely analogous to ordinary book-covers, for subsequent storage and reference.

I will first describe the box and its connected parts.

A and B indicate respectively the body and the cover of the box, certain parts being desig-

nated by further marks, as A' A<sup>2</sup>. They are hinged together by the butts C. The depth in the interior is a little greater than the thickness of the mass of papers to be accumulated.

D is a strip of brass or other suitable metal let into a recess in the base A' of the body.

D' D', &c., are long spurs of brass or other bendable metal extending upward from the plate D, and pointed, as shown.

D<sup>2</sup> D<sup>2</sup>, &c., are shorter spurs attached to the other side of the plate D, and lying for the present in a plane parallel to the lower surface of said plate. The bottom A' is recessed, to also allow for these short spurs D<sup>2</sup>.

E is a locking-plate inserted through a slot in the back A<sup>2</sup> of the body of the box. It serves to lock down the plate D.

The several letters as they are received are extended properly in an approximately plane condition, and, having been previously pricked to initiate the holes, are engaged on the pins D' and forced down thereon. Thus conditioned the box may be closed by closing the cover B, and the several letters may be any time referred to by simply opening the box again and manipulating the letters in the same manner as the leaves of a book.

The cover (designated, when necessary, by the simple letter B) is composed of the main plate B', back B<sup>2</sup>, and an outer or front end, B<sup>4</sup>. The latter is hinged to the part B' by butts b, and is adapted to perform two important functions: One, it serves as a means of effectively protecting the outer or front edges of the several papers M during the period while they are stored in the box. Another, it serves as a means for pricking or initiating the holes in the letters which receive the long spurs D'. This latter function is effected by the aid of short teeth f, fixed on the inner face of the folding part B<sup>4</sup>. The box is opened wide, the letter laid on the inner face of the cover in the proper position, and the hinged end B<sup>4</sup> is pressed down smartly upon it. The teeth f are thus pricked through the letter in the proper positions. Holes are made in the body B' of the cover to allow the points of the teeth f to enter freely. I face the surface adjacent to the holes with metal to preserve their form,



very closely matching to the teeth  $f$ , so that they will impress sharp and clear holes in the respective letters.

When it is desired to remove the letters with their fastening means from the box and to bind them in the covers, the locking-piece E is removed, and the papers M, with the strip D and its spurs  $D' D^2$ , removed from the box and transferred to the binding or book covers. These latter parts are designated G H I, G being the flexible back, H H the main bodies of the covers, and I I inner flaps or fastenings, flexibly connected to the interiors of the book-covers near the back, and formed with perforations  $i$  corresponding to the spurs  $D'$ . The covers being brought into the proper position, the spurs  $D'$  are inserted through the holes  $i$  in the corresponding flap I, and when thrust through as far as they will go by compressing the mass of letters M with tolerable force the protruding ends of the metal  $D'$  are clinched down. Where a number of these spurs  $D'$  are employed they should be clinched down by folding the alternate spurs in opposite directions. This engages one side of the mass of papers with the cover.

Now, the whole is turned over on the table and I prepare to make the hitherto idle spurs  $D^2$  available by extending them upward at right angles to the plate D. The next step is to insert their points through the holes  $i$  in the corresponding flap I. When this has been done and they have been fully thrust through these short spurs  $D^2$  are clinched down to engage them strongly with their corresponding flap I. These spurs  $D^2$  should also be folded alternately in opposite directions. When this is effected the book is complete, and the covers may be closed on the mass of letters to close the book or opened to expose the mass in the obvious manner.

Insurance and railroad companies or other concerns having reports from agents or other papers of uniform, or nearly uniform, size may hold them temporarily or permanently by my file and binder with great facility, very completely, and with little expense.

The transfer from the file to the binder may be either at irregular intervals when a sufficient quantity of papers are accumulated or regularly when a certain time has passed. In either case the book as thus produced should be properly marked and dated before filing away. A stock of the plates D, with their spurs  $D' D^2$ , being kept at hand, a fresh one

is introduced in the box as soon as the loaded one is removed, and, on being locked by the locking-piece E, the filing is ready to go on as before.

It will be observed that my spurs  $D' D^2$  are not round, but flattened in a plane parallel to the back. This arrangement allows a liberal width of spur without weakening the paper or increasing the risk of the letter getting loose by tearing out. It also allows the metal to be folded down easily in the required position. The mode of attaching these spurs which I have adopted in these experiments is to punch corresponding long holes in the plate D, insert the strips forming the spurs, and secure them by solder.

To aid in holding the sheets in position for pricking the holes by the teeth  $f$ , I can use marks alone; but I prefer to use projections or pins on the under face of  $B'$ , as indicated by K in Fig. 1.

Modifications may be made in the forms of the details. The number of the spurs  $D' D^2$  may be varied. I prefer for ordinary letters five spurs. Each may be about three-sixteenths of an inch wide.

Fig. 5 shows a modification in which the plate D is formed of two thicknesses of thin metal pivoted together. The recesses for the folded spurs  $D^2$  are produced by making cross-slots in one of the plates at the points required.

I claim as my invention—

1. In a file and binder, the flat spurs  $D' D^2$ , detachably fixed in a single plate, D, with their flat faces in a plane parallel to the back G of the book, as herein specified.

2. The plate D, having the two sets of spurs  $D' D^2$ , adapted to serve, in combination with the paper M and book-covers G H and inner flaps, I, with their holes  $i$ , as herein specified.

3. In a file and binder, the cover B, having a hinged front,  $B^4$ , with teeth  $f$ , adapted to serve the double functions of producing the holes for the binding-pins and also of covering and protecting the front edges of the sheets M, as herein specified.

In testimony whereof I have hereunto set my hand, at New York city, N. Y., this 10th day of May, 1880, in the presence of two subscribing witnesses.

J. A. AUSTIN.

Witnesses:

THOMAS D. STETSON,  
CHARLES C. STETSON.