

No. 855,037.

PATENTED MAY 28, 1907.

T. J. AMBERG.
SLIDING DRAWER CONSTRUCTION FOR FURNITURE.

APPLICATION FILED APR. 2, 1906.

Fig. 1.

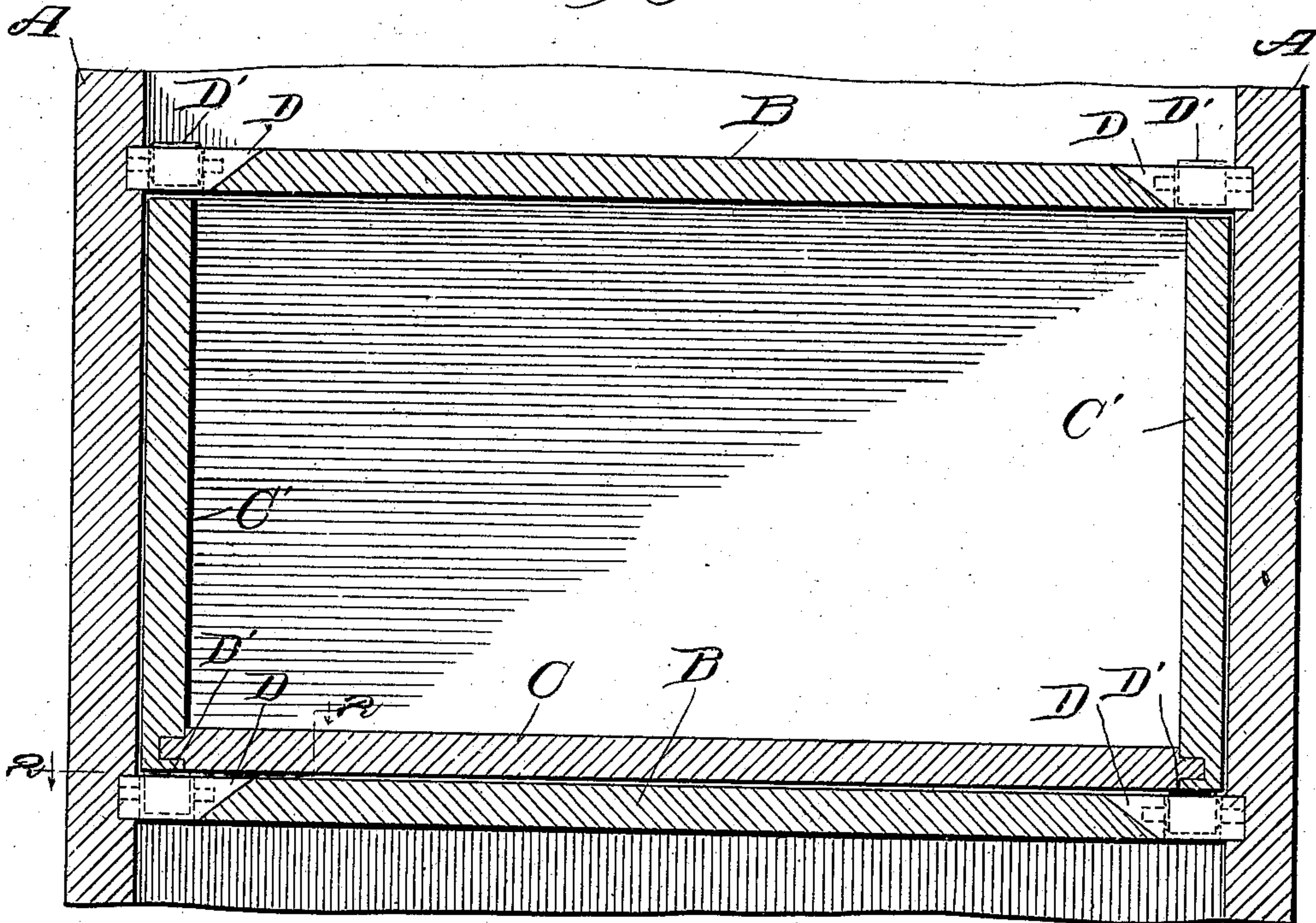


Fig. 2.

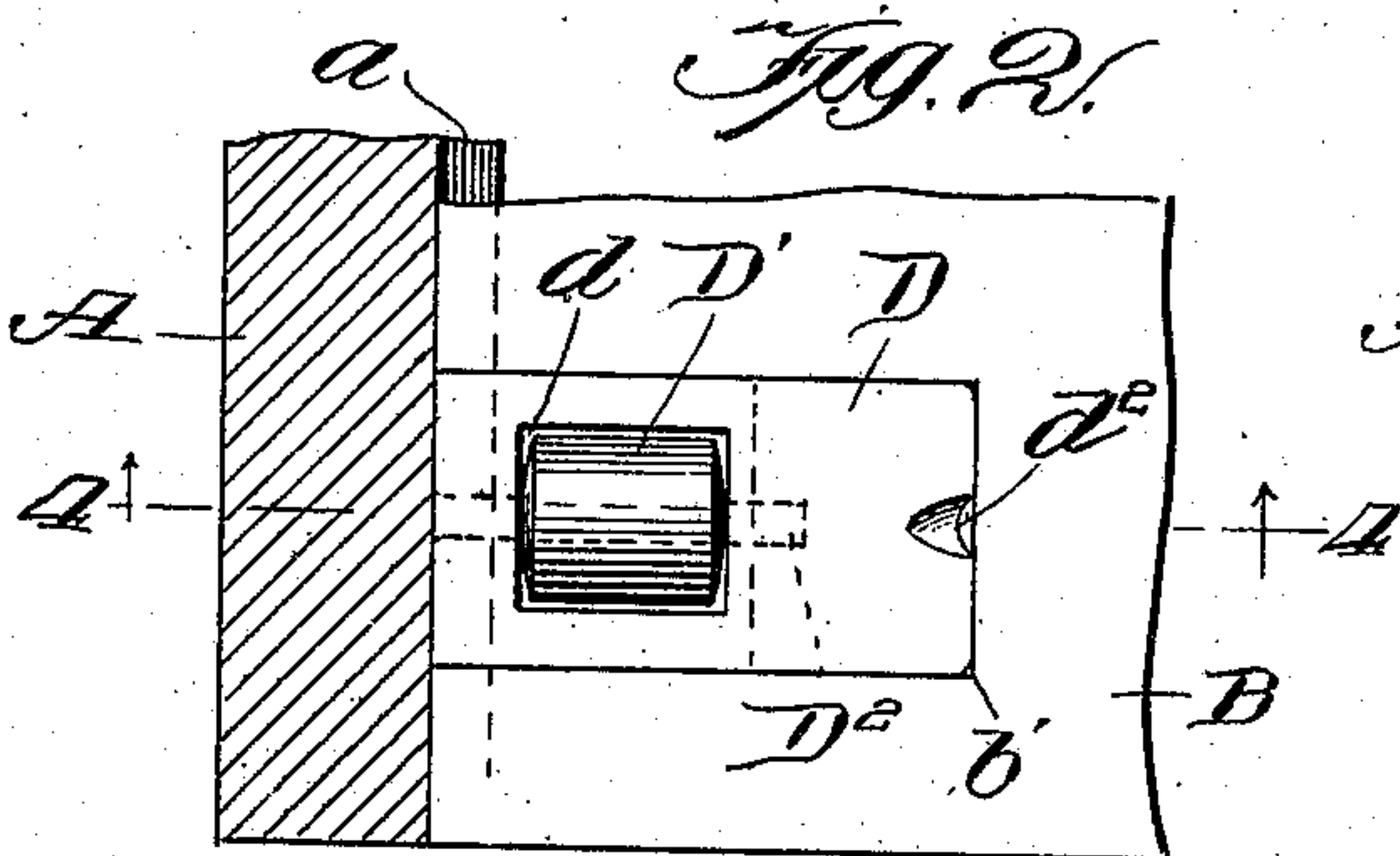


Fig. 3.

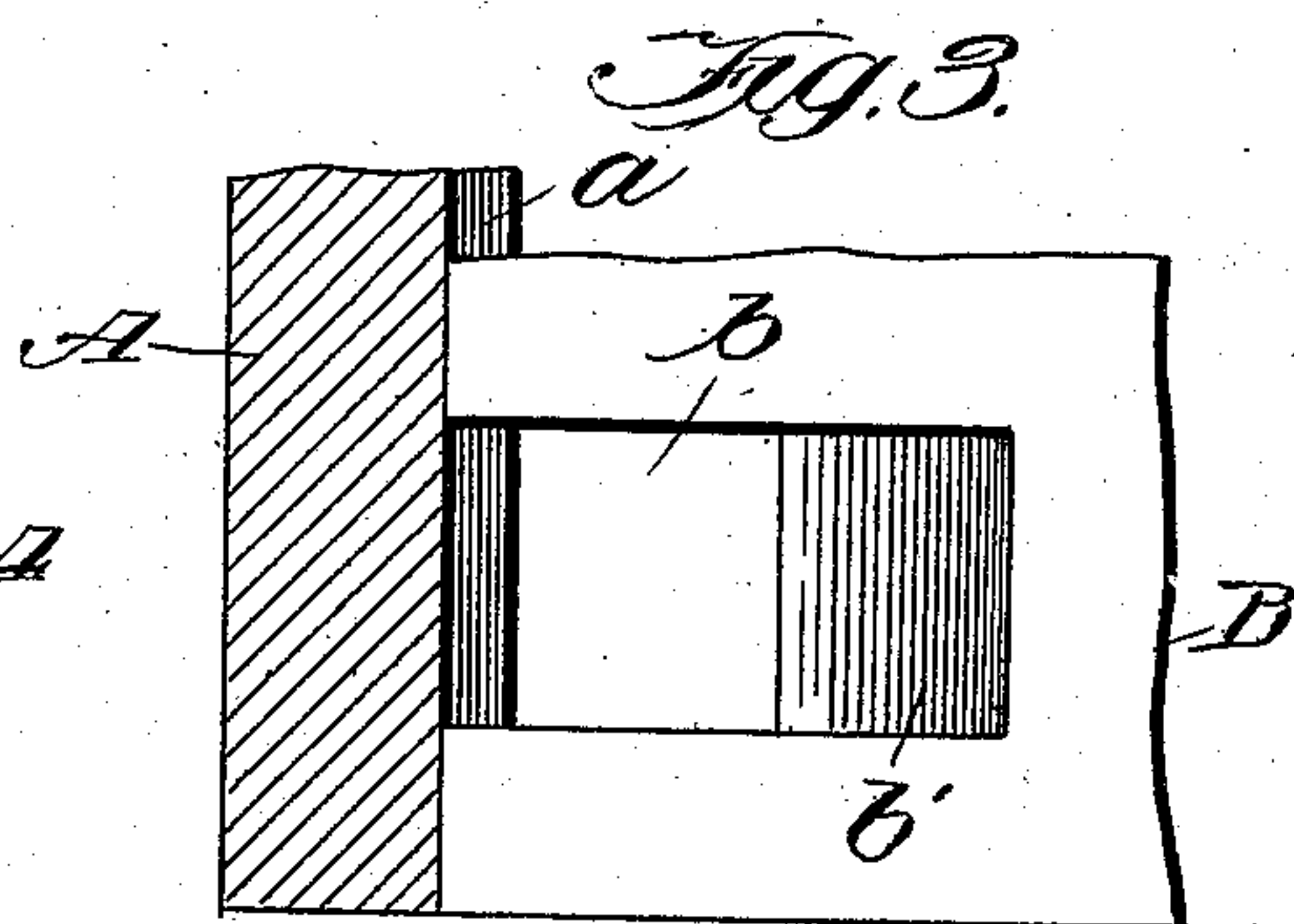


Fig. 4.

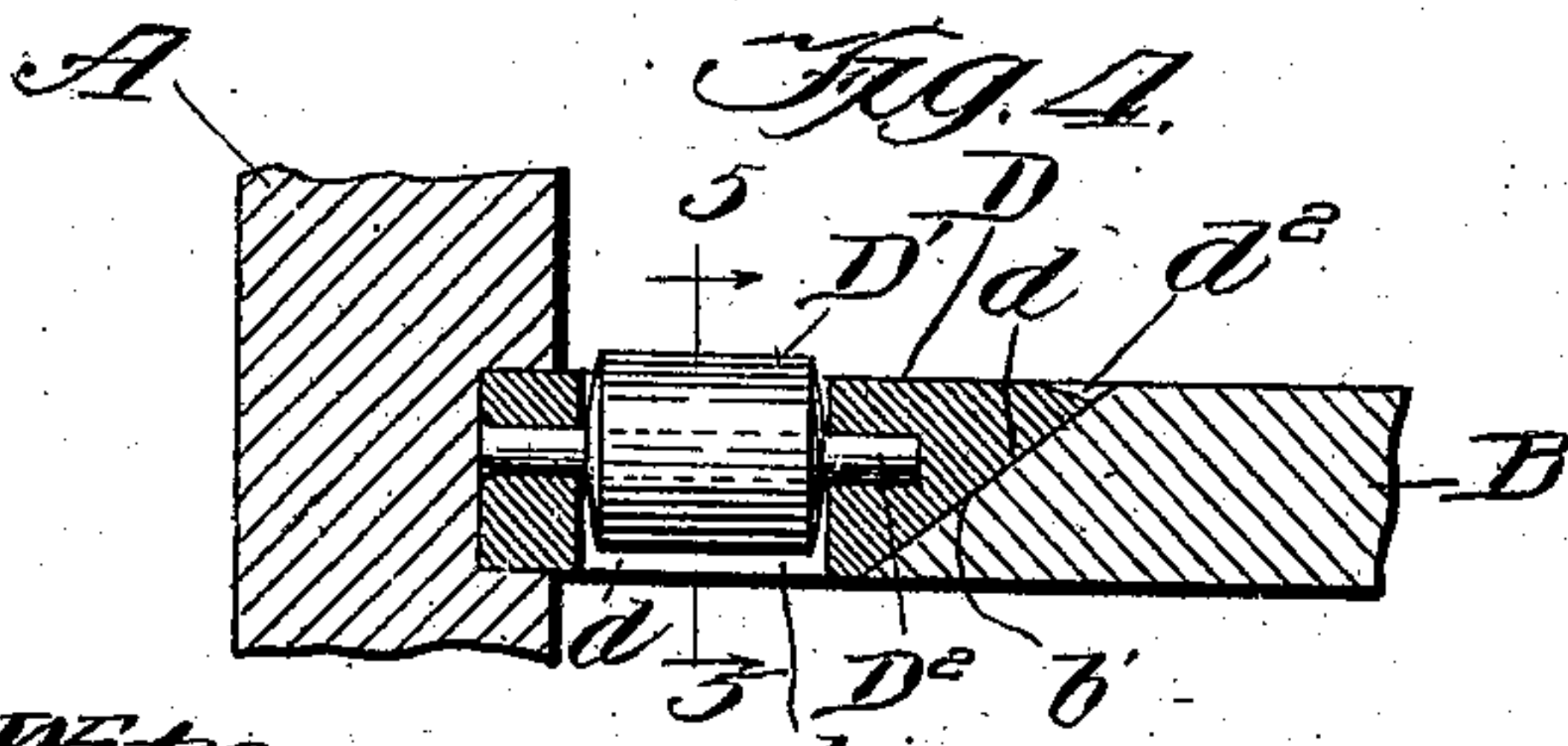
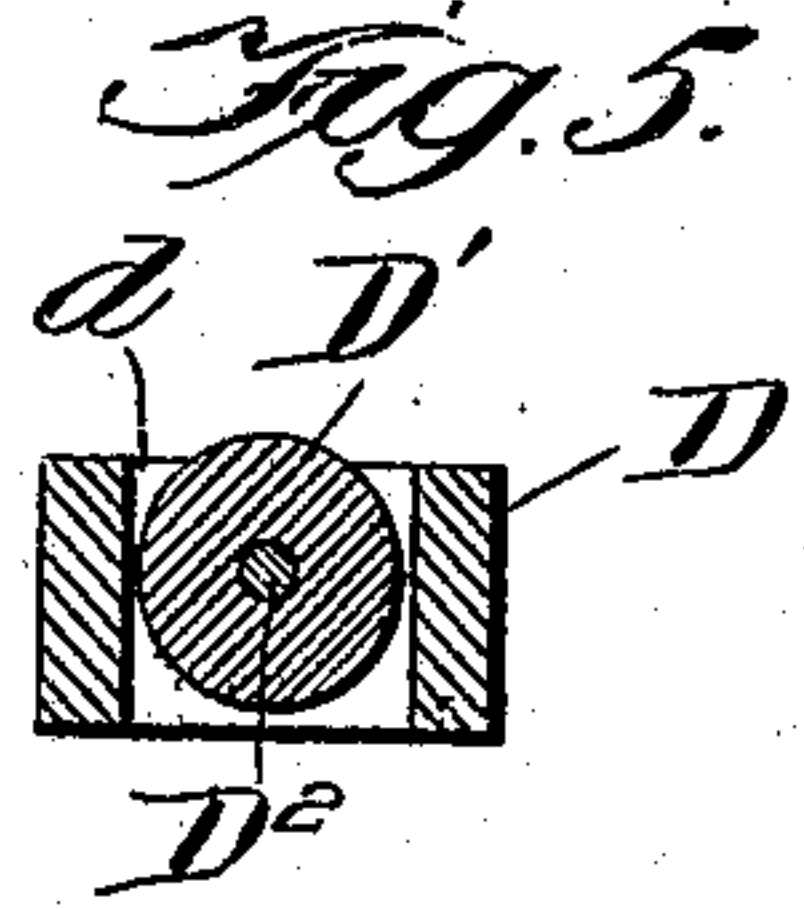


Fig. 5.



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UNITED STATES PATENT OFFICE.

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SLIDING-DRAWER CONSTRUCTION FOR FURNITURE.

No. 855,037.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed April 2, 1906. Serial No. 309,368.

To all whom it may concern:

Be it known that I, THEODORE J. AMBERG, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sliding-Drawer Constructions for Furniture; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in cabinets, desks and other articles of furniture provided with drawers, designed to facilitate the opening and closing of the drawers, and the invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

Among the objects of my invention is to provide an improved bearing support for the drawers of cabinets, desks and other articles of furniture constructed to reduce the frictional resistance in the movement of the drawer upon the ledge or shelf supporting the same, and a further object of the invention is to simplify such bearing devices and reduce the cost of applying them to the cabinet or like structure.

As shown in the drawings:—Figure 1 is a cross-sectional view of a simple form of drawer, and the members of a cabinet or the like, constituting the cell or compartment for the drawer. Fig. 2 is a detail section, taken on line 2—2 of Fig. 1. Fig. 3 is a like section with the roller bearing device removed. Fig. 4 is a section, taken on line 4—4 of Fig. 2. Fig. 5 is a transverse section, taken on line 5—5 of Fig. 4.

As shown in the drawings,—A A designate the vertical walls of what may be a filing cabinet or other article of furniture provided with sliding drawers, and B B shelves extending between said vertical walls and constituting supports for the drawers. The said vertical members are shown as provided on their inner faces with grooves *a a* which receive the ends of the shelves, and by which said shelves are supported. The said horizontal shelves and vertical members constitute compartments or cells to receive the drawers. A single drawer is shown in section in Fig. 1, comprising bottom and side walls C C¹, respectively, said drawer being

supported on the subjacent shelf B. The said shelves B may assume various forms and dimensions so long as each shelf affords a support for each end of the drawer supported thereby. That is to say, each shelf may extend continuously from one vertical member to the other, or from front to rear of the compartment, or said shelf may be made of smaller dimensions in either direction.

My improved bearing devices, which directly support the drawer when in place in its compartment or cell, and which facilitate the opening and closing of the drawer, are located one at each end of the shelf B and preferably near the front margin of said shelf. The said bearing device comprises a suitably shaped block D, preferably made of metal and provided with an opening *d* which receives a bearing roller D¹ that is rotatively mounted on a pin D² that extends through said opening *d* and through an axial bearing opening in the roller D¹. The bearing blocks of said devices are located in the plane of the shelf, and the rollers mounted in said blocks project above the plane of the upper face of the shelf for rolling contact with the bottom of the drawer. For this purpose, each shelf is provided at its ends with recesses *b* which open to the end margin of the shelf and are made of a contour to receive the bearing blocks therein. Said bearing blocks are made of a length to extend to the end margins of the shelf so that the outer ends of said blocks are supported on the lower walls of the grooves of the upright members of the cabinet structure. The inner ends of the blocks are supported on the shelf and the said inner ends and the corresponding parts of the end walls of the recesses are formed to constitute supports for said inner ends of said blocks. As herein shown, said inner ends of the blocks are tapered or beveled on their under faces, as shown at *d*¹, and the inner end wall of each socket *b* is provided with a correspondingly tapered face *b*¹. It will be observed, therefore, that the bearing blocks are each supported at one end on the vertical member of the cabinet or like structure, and at its inner end upon the shelf. It will be furthermore observed that said bearing blocks, while being held reliably in place, are capable of being readily removed from or inserted into said recesses. Such removal may be accom-

plished by inserting the finger nail or a suitable thin implement between the thin inner end of the block and the shelf and raising the inner end of the block, whereupon the block and its roller may be readily lifted from its recess. If desired, the block may be detachably fixed to the shelf by a small brad or tack down into the shelf and engaging a notch d^2 at the inner end of the block.

The journal pins D^2 are preferably fixed in the blocks and the rollers rotate thereon. As herein shown, said pins are seated in suitable apertures extending inwardly from the outer ends of the blocks, and the outer ends of the pins are upset over the outer ends of the blocks to avoid accidental release of the same when handling the bearing device.

The construction described affords an exceedingly simple and economical bearing device for drawers, and one which necessitates but little added work to the cabinet structure to apply the same. It will be observed that the outer supports for the bearing blocks (the lower walls of the grooves a) are ready at hand, said grooves being provided to receive the ends of the shelf, and the formation of the recesses b in the shelves entails but little added labor. The bearing devices are capable of being assembled in the cabinet structure and removed without the necessity of disturbing the cabinet structure itself.

I claim as my invention:—

1. The combination with a vertical member and a horizontal shelf of a cabinet structure and the like supported on said vertical member, of a roller bearing device comprising a block removably supported at one end on said vertical member and at its other end on said shelf, and a bearing roller carried by said block, said block being provided at its end remote from the vertical member with a downwardly facing beveled surface contacting with an upwardly facing beveled surface of said shelf.

2. The combination with the vertical members and horizontal shelf of a cabinet structure and the like, arranged to constitute a compartment for a drawer, and a sliding drawer therein, said vertical members being grooved on their inner faces to receive the ends of said horizontal shelf, of roller bearings comprising bearing blocks seated in recesses in the ends of said shelf, the outer ends of said blocks being supported in the grooves in the vertical members, and the inner ends thereof supported on said shelf, and rollers mounted in said blocks.

3. The combination with the vertical member and a horizontal shelf of a cabinet structure and the like, the former provided with a horizontal groove to receive the end of the shelf, said shelf being provided at its end with a recess, of a roller bearing device comprising a block seated in said recess and supported at its inner end on the shelf and at its outer end in said groove, and a bearing roller mounted in said block.

4. The combination with the vertical member and a horizontal shelf of a cabinet structure and the like, the former provided with a horizontal groove to receive the end of the shelf, said shelf being provided at its end with a recess, of a roller bearing device, comprising a block seated in said recess and supported at its inner end on the shelf and at its outer end in said groove, a bearing roller mounted in an opening in said block, and a pin seated in an opening extending inwardly through the end of said block, on which said roller is mounted.

In testimony, that I claim the foregoing as my invention I affix my signature in presence of two witnesses, this 30th day of March A. D. 1906.

THEODORE J. AMBERG.

Witnesses:

C. CLARENCE POOLE,
G. R. WILKINS.