

(No Model.)

D. E. HUNTER & H. E. DAVIDSON.  
DRAWER AND SUPPORT THEREFOR.

No. 573,978.

Patented Dec. 29, 1896.

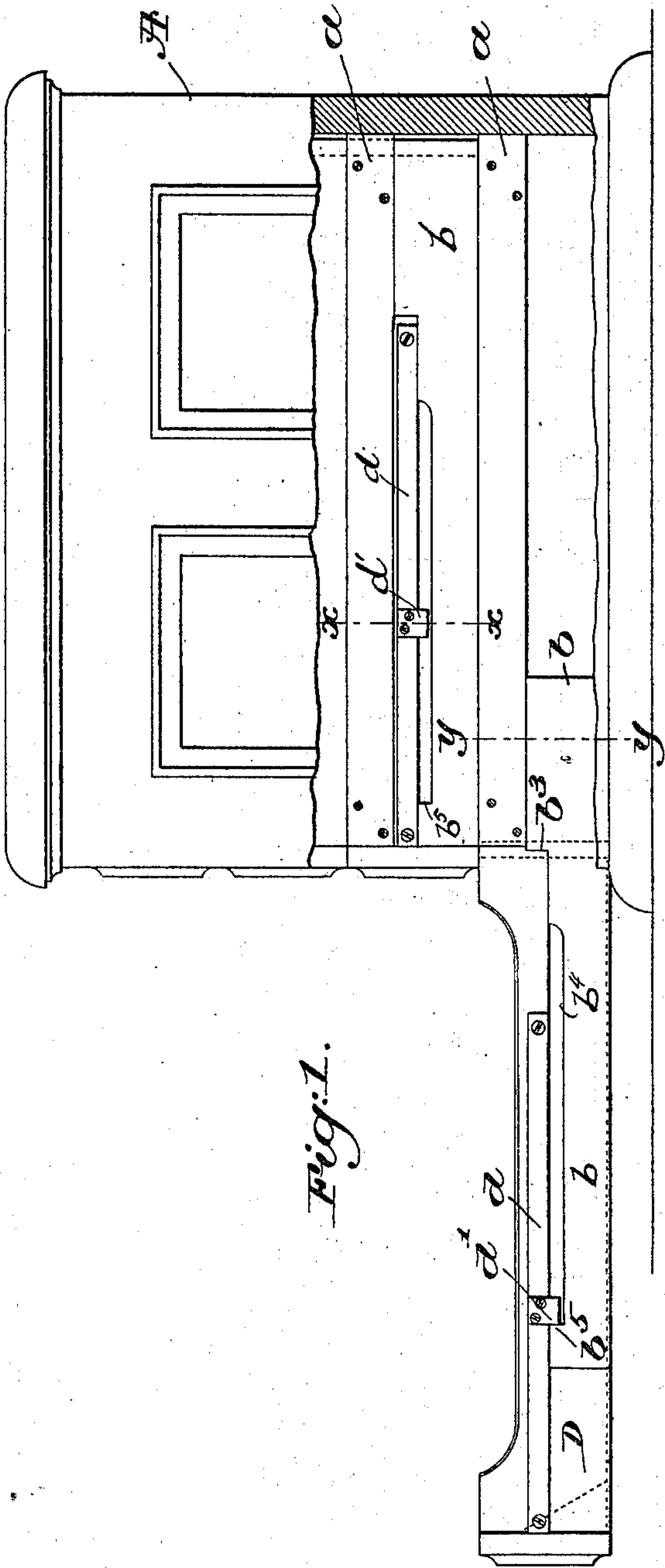


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

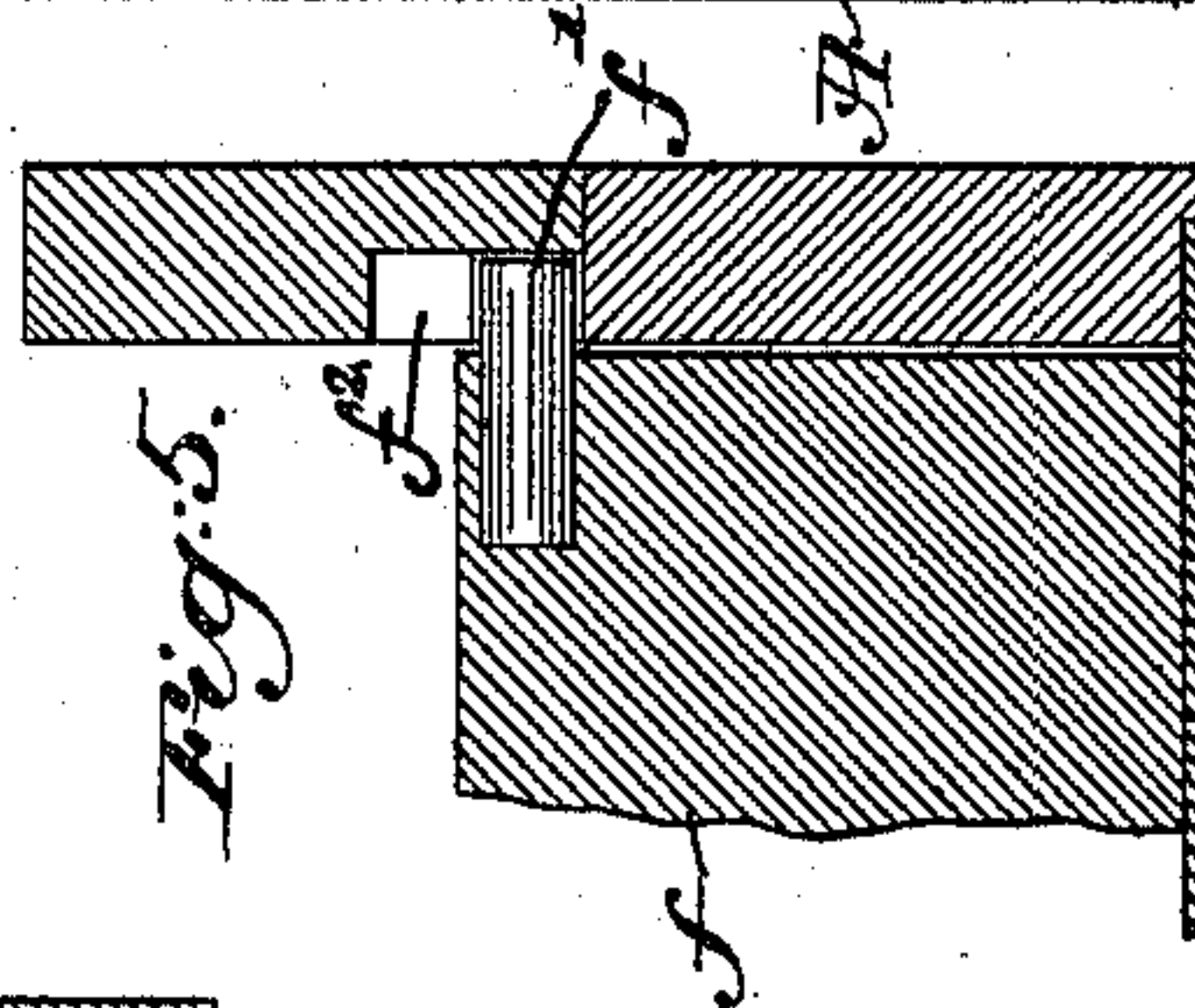
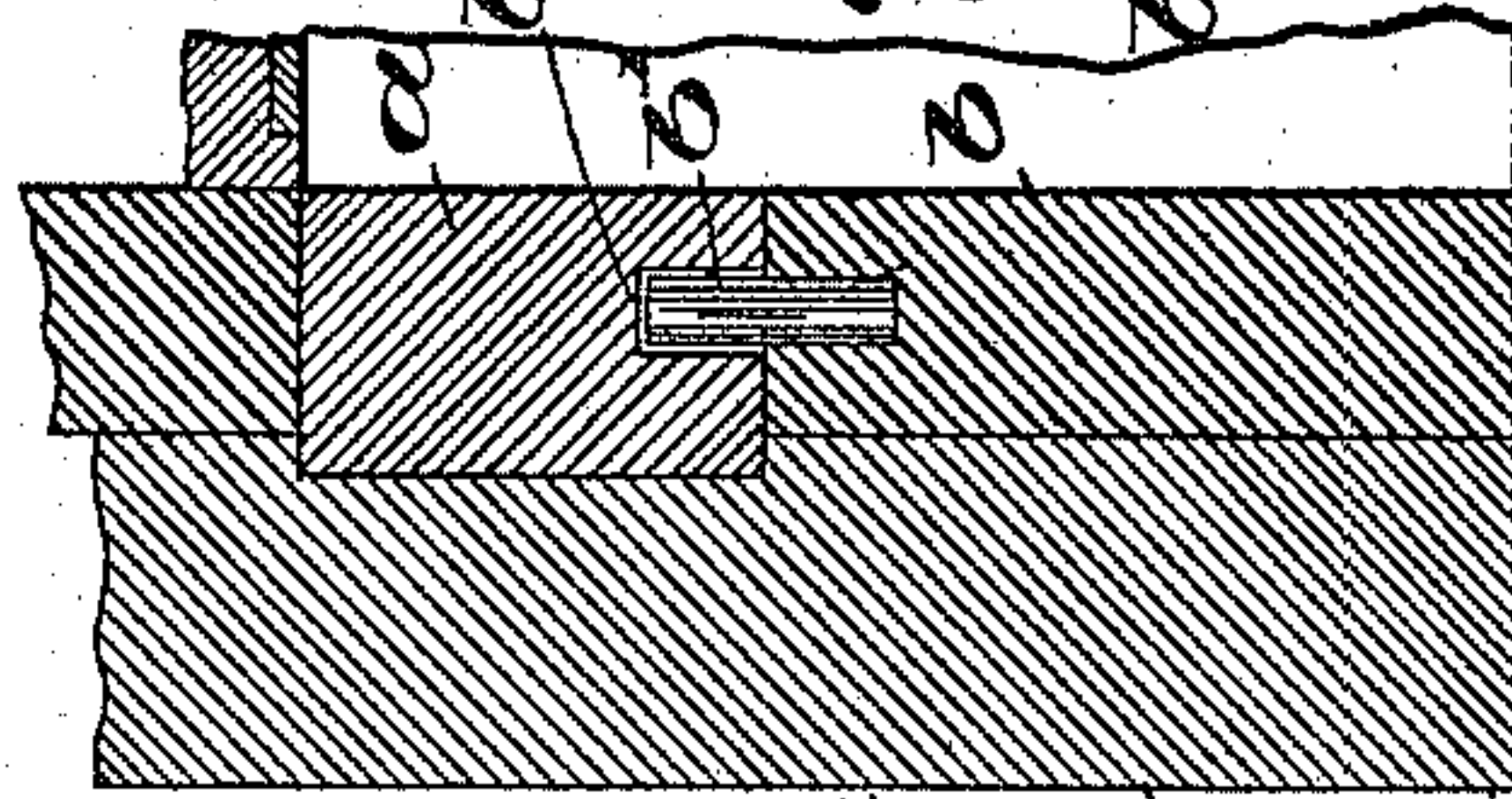
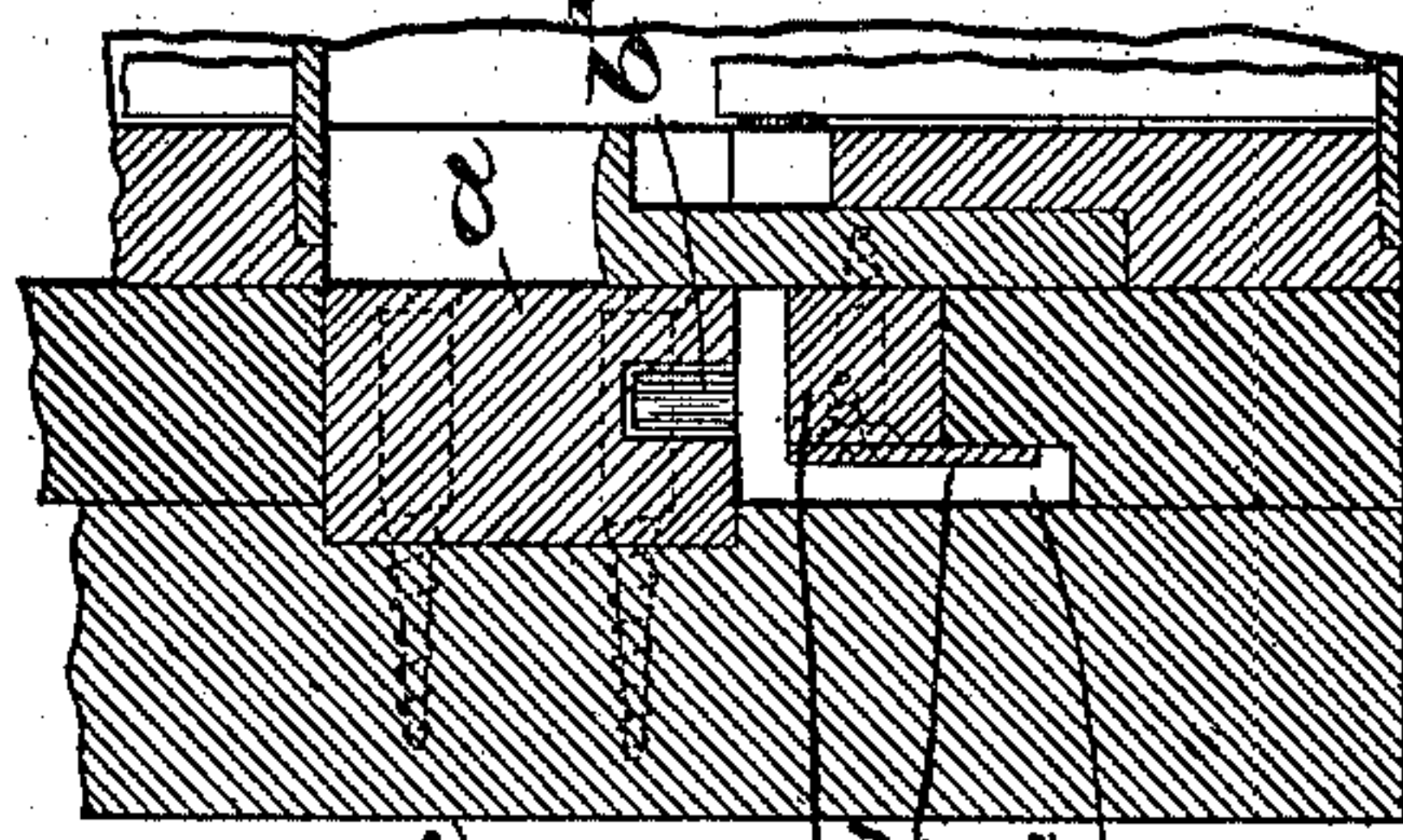


Fig. 5.

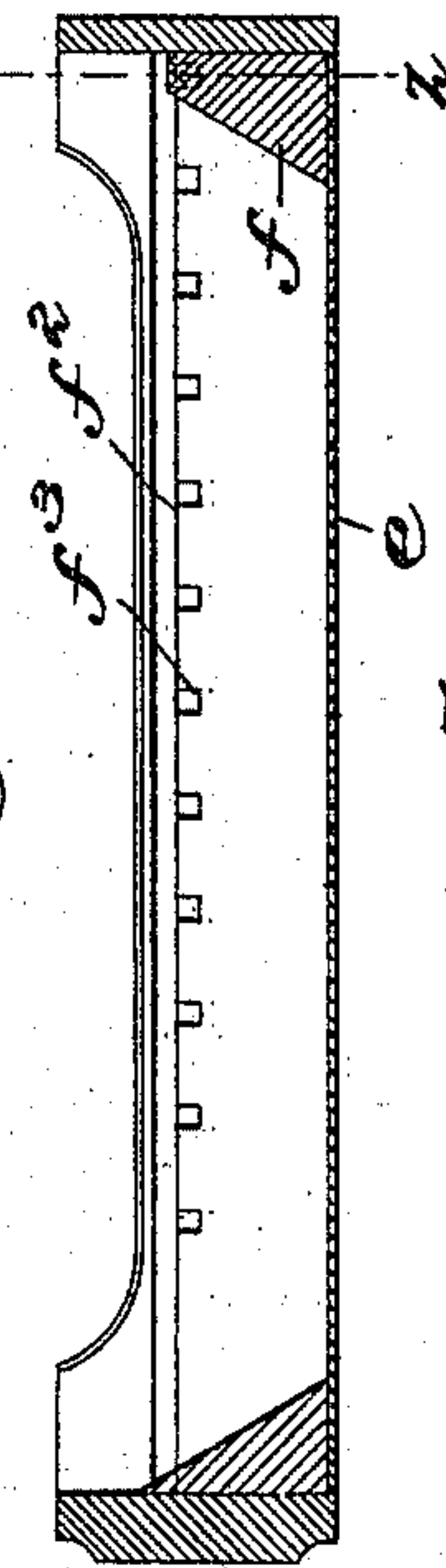
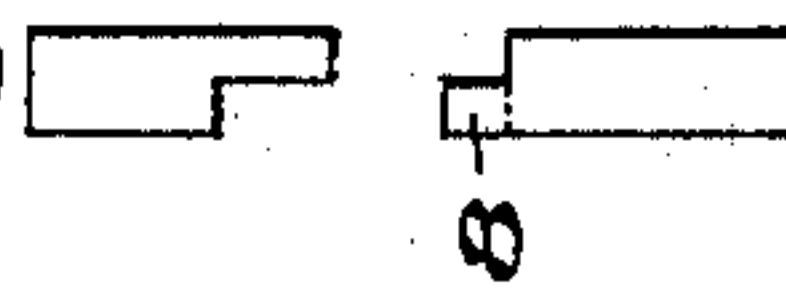


Fig. 7.

Fig. 6.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## DRAWER AND SUPPORT THEREFOR.

SPECIFICATION forming part of Letters Patent No. 573,978, dated December 29, 1896.

Application filed March 31, 1893. Serial No. 468,595. (No model.)

*To all whom it may concern:*

Be it known that we, DAVID E. HUNTER, a subject of the Queen of Great Britain, residing at Cambridge, and HERBERT E. DAVIDSON, of Watertown, county of Middlesex, State of Massachusetts, have invented an Improvement in Drawers and Supports Therefor, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In catalogue and other similar cases containing a series of drawers it is customary to separate the drawers by division-strips and runs, upon which the drawers are supported and made to slide. These division-strips and runs are usually of such thickness that when the case contains several drawers arranged vertically the aggregate thickness of the several division-strips and runs equals or exceeds the depth of one or more drawers and represents so much waste or unutilized space.

In many instances where it is desirable to provide as many drawers as possible in a restricted space, as, for example, in a safe or vault, it becomes a great desideratum to utilize for drawers the waste space represented by the several division-strips and runs.

Additional space is wasted by the prevailing custom of employing wood drawer-bottoms set into grooves formed in the sides a short distance from their lower edges, the aggregate thickness of the several bottoms, together with the aggregate waste space between the bottom grooves and the lower edges of the sides, representing usually more than the depth of one or more drawers.

The prime object of this invention is to improve the construction of catalogue and other drawer-cases and drawers, and the means for hanging the drawers, whereby the waste space referred to may be utilized for additional drawers and the largest number of drawers concentrated in the smallest possible space.

The invention also comprehends a novel method of retaining inclined card-blocks in position in the drawers.

Figure 1 of the drawings represents a case of drawers constructed in accordance with this invention; Fig. 2, a vertical cross-sectional detail, taken on the dotted line  $xx$ , Fig.

1, the parts being shown upon an enlarged scale; Fig. 3, a cross-sectional detail, on an enlarged scale, taken on the dotted line  $yy$ ; Fig. 4, a vertical longitudinal section through the middle of one of the drawers; Fig. 5, a vertical cross-sectional detail, taken on the dotted line  $zz$ , Fig. 4; and Figs. 6 and 7, details showing one manner of constructing the sides of the drawers.

Referring to the drawings, the case or frame A may be of any desired shape and construction, it being a simple shell formed without the usual division-pieces to separate the drawers.

In the embodiment of our invention herein shown we have secured to the inner faces of the sides of the case suitable parallel cleats or runs  $a$ , properly spaced for the several drawers, and between these runs slide the auxiliary slides  $b$ , preferably of the form commonly known as the "Taylor" slide, the slides being guided both top and bottom by the cleats or runs. Tongues  $b'$  in the upper edges of the slides run in suitable grooves  $b^2$  in the under sides of the runs, and serve to limit the movements of the slides when the latter are drawn out. The slides  $b$  are cut down for a greater part of their length to leave a shoulder  $b^3$ , and the slides are also provided with a rabbet  $b^4$ , terminating in a shoulder  $b^5$  near the outer end of the slide.

The drawers D of suitable or desired shape are arranged between the several pairs of slides  $b$  and are provided with long side cleats  $d$ , which rest upon the tops of the slides and support the drawers, as best shown in Figs. 1 and 2, said cleats extending nearly or quite to the front of the drawer, so that when the latter is closed it will rest at its front end upon the supporting-slides and thereby be prevented from sagging. Plates or ears  $d'$  on the cleats  $d$  run in the rabbets  $b^4$  and by contact with the shoulders  $b^5$  prevent the withdrawal of the drawers beyond a certain point.

Referring to Fig. 1, when a drawer is pushed into the case it is supported throughout the entire length of the cleats  $d$  upon the slides  $b$ , which latter rest throughout their entire lengths upon the runs  $a$ . The drawer is thus firmly supported when pushed into the case.

When the drawer is withdrawn from the



case, it first slides out on the slides  $b$  until the ears  $d'$  strike the shoulders  $b^5$  on the slides, which causes the drawer and slides to be thereafter withdrawn together until the  
 5 tongues  $b'$  on the slides reach the ends of the grooves  $b^2$  and prevent further withdrawal of the slides and drawer, the parts being then in the positions shown by the bottom drawer, Fig. 1. In this position it will be seen that  
 10 in the construction shown the slides are firmly supported by their inner ends between the runs  $a$ , so that the slides cannot sag, and as the drawer rests throughout almost its entire length upon the slides the drawer cannot  
 15 sag, the slides serving not only as carriers for the drawer, but also to prevent the drawer being withdrawn too far.

By carrying the drawers at the sides in this manner the usual division-strips and runs  
 20 between the drawers are dispensed with and the drawers placed one immediately above another.

In order to obviate the usual waste of space which results from the employment of thick  
 25 wood drawer-bottoms set into grooves in the sides of the drawers, we have provided the drawers with thin sheet-metal bottoms  $e$ , secured in suitable manner, as by screws, to the lower edges of the sides, front, and back  
 30 of the drawer, and preferably set in flush with the said lower edges.

By dispensing with division-strips and the thick wood drawer-bottoms, as above described, we are enabled to gain, as a rule, at  
 35 least one additional drawer in every three or four.

Prior to this invention it has been customary to employ card-blocks having dowel-pins in their under sides adapted to be dropped  
 40 into one or another of several sets of holes in the drawer-bottom to retain the blocks in desired positions. Such a construction is, however, impracticable with the thin metallic bottoms which we propose to use, for the pins,  
 45 if of sufficient length to possess any holding properties, would protrude through into the drawers beneath. We therefore provide the card-blocks  $f$  with side pins  $f'$ , adapted to enter longitudinal grooves  $f^2$ , formed in the inner  
 50 faces of the sides of the drawers, said grooves at regular intervals having notches  $f^3$ , into which the pins on the card-blocks may be dropped to retain the blocks in adjusted position. To adjust the block, it is raised  
 55 sufficiently to clear the pins from the notches  $f^3$ , when the pins may be moved along in the grooves until the block has reached the desired position, when the pins are dropped into the proper notches to retain the block in a  
 60 new position.

In order to form the grooves  $f^2$  and the notches  $f^3$  so as to present a clean and smooth

appearance, we prefer to form the same as indicated in Figs. 5, 6, and 7.

Referring to Fig. 6, we take a board which is to form the side of a drawer and split the same from end to end through the middle, as indicated by the full lines 5. We then rabbet each part of the board, as shown in Fig. 7, and cut through the raised portion 8 to form the notches. The two parts are then glued together, as in Fig. 5, to form the completed side for the drawer.

This invention is not limited to the particular embodiment of the invention herein employed to illustrate the invention, for it is evident the invention may be embodied in other forms than the particular one herein shown.

We claim—

1. The case, the drawer-carrying slides, and runs for and on which the same may slide in the said case, combined with the drawer having its sides between said slides and having long supporting-cleats projecting from its sides freely resting upon the said slides, cooperating portions of said drawer and slides constituting stops to limit the direct outward movement of the drawer, said cleats extending nearly or quite to the front of the drawer, substantially as described.

2. The case, and runs secured thereto, combined with slides rabbeted along their outer sides at their upper edges, the rabbets terminating in stops at either end thereof, and a drawer resting upon said slides, long supporting-cleats projecting from its sides resting upon said slides, and vertical ears on the drawer to run in said rabbets and cooperate with said stops, substantially as described.

3. A drawer for a card-catalogue or similar case, having grooves channeled lengthwise in the inner faces of its opposite sides, shallow notches being provided in the lower edges of said grooves, said notches having parallel, vertical walls to prevent lateral movement of the pins held thereby, combined with a block adapted normally to rest on the bottom of the said drawer, said block having at either end a pin projecting laterally therefrom into the adjacent grooves, being positively held thereby against removal, said pins being adapted to rest in said notches when the said block is in normal position, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

DAVID E. HUNTER.  
 HERBERT E. DAVIDSON.

Witnesses:

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