

No. 795,931.

PATENTED AUG. 1, 1905.

P. B. PIERCE.
SECTIONAL BOOKCASE.
APPLICATION FILED AUG. 29, 1904.

Fig. 1

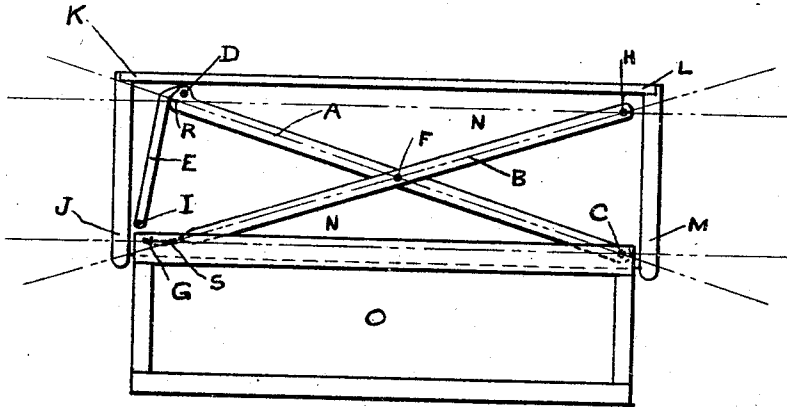


Fig. 2



Fig. 3

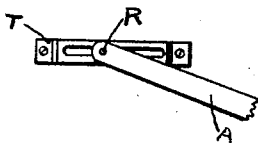


Fig. 5

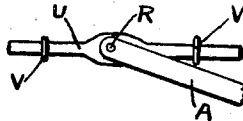


Fig. 7

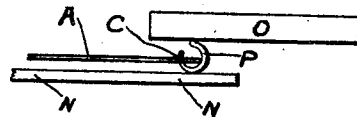


Fig. 4

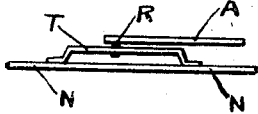


Fig. 6

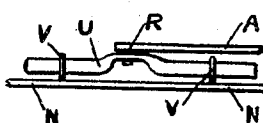
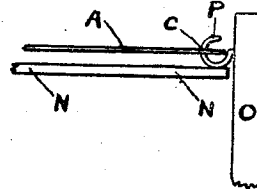


Fig. 8



Witnesses:

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Inventor

Paul B. Pierce

UNITED STATES PATENT OFFICE.

PAUL B. PIERCE, OF AGRICULTURAL COLLEGE, MICHIGAN.

SECTIONAL BOOKCASE.

No. 795,931.

Specification of Letters Patent.

Patented Aug. 1, 1905.

Application filed August 29, 1904. Serial No. 222,665.

To all whom it may concern:

Be it known that I, PAUL B. PIERCE, a citizen of the United States, residing at Agricultural College, in the county of Ingham and State of Michigan, have invented a new and Improved Sectional Bookcase, of which the following is a specification.

This invention relates to an equalizing device for drawers, doors, and the like, the object being to so guide the drawer or door that it cannot bind or stick while being pushed into or drawn out of its case.

By virtue of the invention the drawer or door is not only held at all times parallel to its case, but is forced to follow a straight line as it moves inward and outward, being allowed no longitudinal motion.

I attain these objects by the construction shown in the accompanying drawings, in which—

Figure 1 is a general plan view of the mechanism as attached to a sectional bookcase. Fig. 2 is a front view of the same. Fig. 3 is a plan view of another means of guiding the movable end of lever A. Fig. 4 is a front view of the same. Fig. 5 is a plan view of a third means of guiding the movable end of lever A. Fig. 6 is a front view of the same. Fig. 7 shows the mode of attaching lever A to the door of a sectional bookcase. Fig. 8 is another view of the same with door in different position.

Similar reference characters refer to like parts throughout the specification.

Referring to Fig. 1, J K L M represent the sectional bookcase, O the door of the case, and N is a board in top of case, upon which the door O rests and slides, being guided by a screw-hook at C and a screw-eye G, which screw-hook and screw-eye are attached to the under side of the door, their connection being shown through the door by dotted lines. A and B are two levers, which are pivoted together at F. The lever A is fastened to the back side of the door O at C, which connection is shown in detail in Figs. 7 and 8, which will be explained later. The lever A is pivoted to the link E at D, which link is pivoted to the case at I. The lever B is pivoted to the case at H and is reduced and passes through a screw-eye G in the back of the door O, which connection is shown through the door by dotted lines. The three pivot-joints C, F, and D are not in a straight line, D being back of the straight line passing through C and F. (Shown as a dash-and-two-dot line in Fig. 1.)

Also the distance from D to F is slightly less than the distance from F to C. The object of these two peculiarities is to secure approximately a straight-line reciprocating motion for a point R located in a straight line with F and C and at the same distance from F as C, while the actual motion of the point D must be the arc of a circle (described about I) by virtue of the link E swinging about I as a center as the door O is pushed in and drawn out of the case. The end of the lever B where it passes through the screw-eye G is curved, so that a point S the same distance from F as H and lying in a straight line with F and H will (as the lever slides through the screw-eye, said sliding caused by the opening and closing of the mechanism as the door O is pushed into or drawn out of the case) remain in a straight line through C and G. The distance from F to H is equal to the distance from F to C.

Fig. 2 is simply the front view of the mechanism as it would appear detached from the case.

Figs. 3 and 4 are the top and front views, respectively, of another means for guiding the point R. At R a pin is riveted in the lever A, which pin slides in a slot in the piece T, fastened to the board N.

Figs. 5 and 6 are the top and front views, respectively, of a third means for guiding the point R. The piece U is pivoted to the lever A at R and slides through the eyes V V, which eyes are fastened to the board N.

Figs. 7 and 8 show the mode of attaching the lever A at the point C to the door O. Fig. 7 shows door O in position to be either pushed into the case or lowered. Fig. 8 shows the door lowered. The screw-hook P passes through a hole in the lever A at C, thus forming a combined pivot and hinge joint between the lever A and the door O.

It is evident from the above description that this combination of levers may be attached to drawers or any other slidable bodies for the purpose of preventing them from binding or sticking while being moved in and out.

Having now explained my improvement, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a case, a slidable body which may be moved into and out of the case, a lever pivoted at one end to said case and having a sliding engagement with said slidable body at its other end, a second lever pivoted to said slidable body at one end and pivoted

to said first lever intermediate its ends, and a link connected to said case at one end and to the free end of said lever at the other end.

2. The combination of a case, a sliding door that may be moved into and out of the same, two levers pivoted together intermediate their ends, one end of each lever being connected to said sliding door, the opposite end of one lever being pivoted directly to the case, and a link connecting the free end of the other lever to the case.

3. The combination of a case, a door slidable therein, a lever pivoted at one end to said case, a ring fixed near to one edge of said

door, the free end of said lever being reduced to slide in said ring, a second ring secured near the opposite edge of said door, a second lever pivoted in said ring, and having a yieldable connection with said case at its other end, and a pin connecting said levers intermediate their ends.

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

PAUL B. PIERCE.

In presence of—

EMMA PETERSEN,

EDWARD N. PAGELSEN.