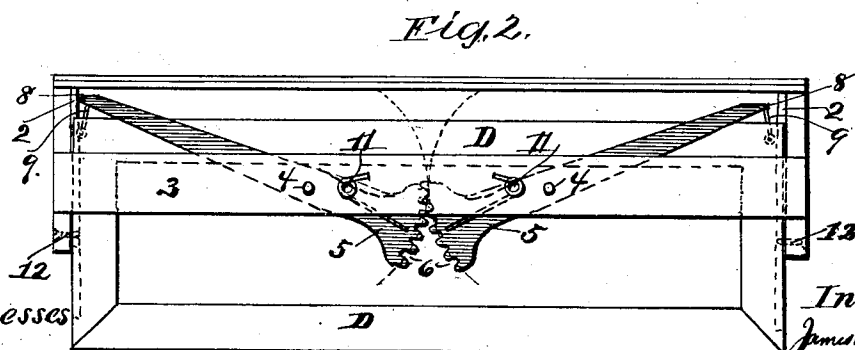
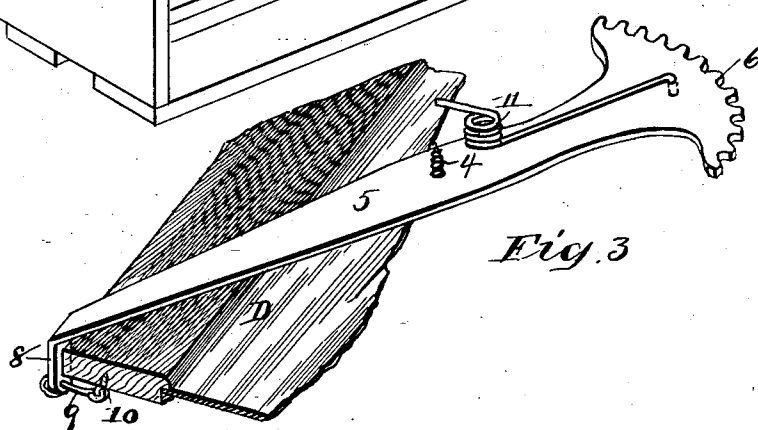
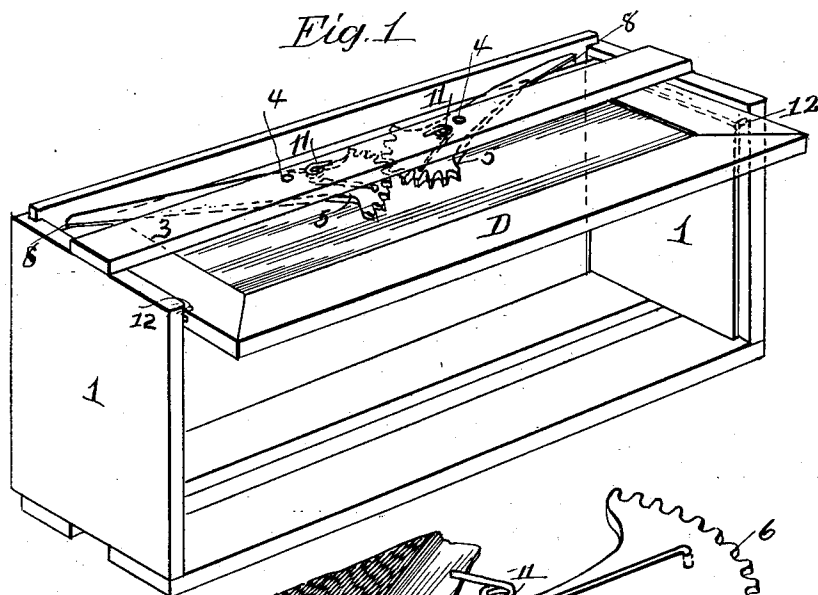


No. 739,007.

PATENTED SEPT. 15, 1903.

J. L. KERSHAW.
SECTIONAL BOOKCASE.
APPLICATION FILED JAN. 26, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES L. KERSHAW, OF CLEVELAND, OHIO.

SECTIONAL BOOKCASE.

SPECIFICATION forming part of Letters Patent No. 739,007, dated September 15, 1903.

Application filed January 26, 1903. Serial No. 140,605. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. KERSHAW, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Sectional Bookcases, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has particular reference to the class of bookcases in which doors are suspended vertically from pivotal points or hinges near their upper edges and in which the doors when swung up to a horizontal position are slid back horizontally within the case; and the specific objects of the invention are to provide automatically-operating mechanism to withdraw the door within the case when released in the horizontal position and will also serve to prevent the door from binding or jamming against the sides of the case under any possible condition of handling. Ordinarily a door of this character, being long and narrow, must be handled absolutely in the center and pushed or pulled with great care, or some corner of the door will bind or catch on the sides of the case. With the addition of this device, however, the door can be handled from either corner and will move as smoothly as if handled from the center.

My invention consists in the employment of equalizing-levers pivoted upon the case and so connected with one another and with the opposite ends of the door that both ends of the door must move simultaneously, and the movement of the door must be linear, neither end being able to take precedence of the other.

My invention further consists in the combination and arrangement of the various parts and in the specific construction of details, as hereinafter described, shown in the accompanying drawings, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of one section of a sectional bookcase, showing the equalizing device secured to the upper longitudinal bar of the case. Fig. 2 is a plan view of the same; and Fig. 3 is a perspective view of a small portion of a door, showing one of the equalizing-levers, its actuating-spring, and the manner in which it is connected to the rear extremity of the door.

ing-levers, its actuating-spring, and the manner in which it is connected to the rear extremity of the door.

In the views, 1 1 are the sides of the case, upon shoulders 2 in which the door D rests when in a horizontal position and withdrawn within the case.

3 is a longitudinal bar which connects the sides of the case and lies over the door when withdrawn within the case. To the under side of this bar are pivoted at 4 the equalizing-levers 5, so as to lie between the bar and door and not obstruct the space beneath the door required for books. These levers are provided with segmental geared extremities 6, which intermesh centrally between the ends of the case, their pivotal points 4 being at equal distances from this center, so that the actions of the levers shall be exactly alike. These levers extend diagonally toward the opposite rear corners of the case and are of equal length. They are there positively connected with the opposite rear corners of the door in such a manner that the doors can move freely and also can be dropped to the vertical position without difficulty. A connection such as is shown in the drawings can be employed for this purpose, where 8 is a downwardly-extending extremity for each lever, 9 is a short link, and 10 an eye inserted in the door underneath when in the horizontal position and on the back of the door when in the vertical position. Spiral springs, such as 11, are embedded in the cross-bar 3, each spring having one extremity embedded in the bar and the other in the geared extremity of a lever, so that the levers will operate with energy to withdraw the door when it is swung up to the horizontal position. In order to close the door tightly, it may be expedient to place the eyelets 10, to which the connecting-links 9 are attached, a little below the pivotal point 12 of the door. This will afford a tendency to keep the door closed and dust-proof at all times.

The operation of the device is simple and the initial cost extremely low.

I do not claim the exact shape of the levers or the arrangement; but I believe myself to be the first to regulate the movement of a horizontally-moving bookcase-door by means of equalizing-levers of any form which pro-

vide strictly parallel movements to the opposite ends of the door.

In case the eyes of the links connecting the ends of the levers with the doors should be somewhat open and there should be more or less lost motion accordingly it is best to have the downwardly-turned extremities of the levers directly engage the back edge of the door, so that in pulling out the door from one corner the rear extremity of the lever on the other end would directly push out that end of the door; but in pulling out the door a little lost motion in the links would do no harm.

15 Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with a case and a door adapted to slide horizontally therein, equalizing-levers pivoted upon said case, and provided with geared extremities engaging with one another centrally between the sides of the case and with rearwardly-extending extremities downwardly turned, eyes in the ends of the door, and links connecting said downwardly-turned extremities of the levers and said eyes, substantially as described.

In testimony whereof I hereunto set my hand this 20th day of January, 1903.

JAMES L. KERSHAW.

Witnesses:

WM. M. MONROE,
C. H. OLDS.