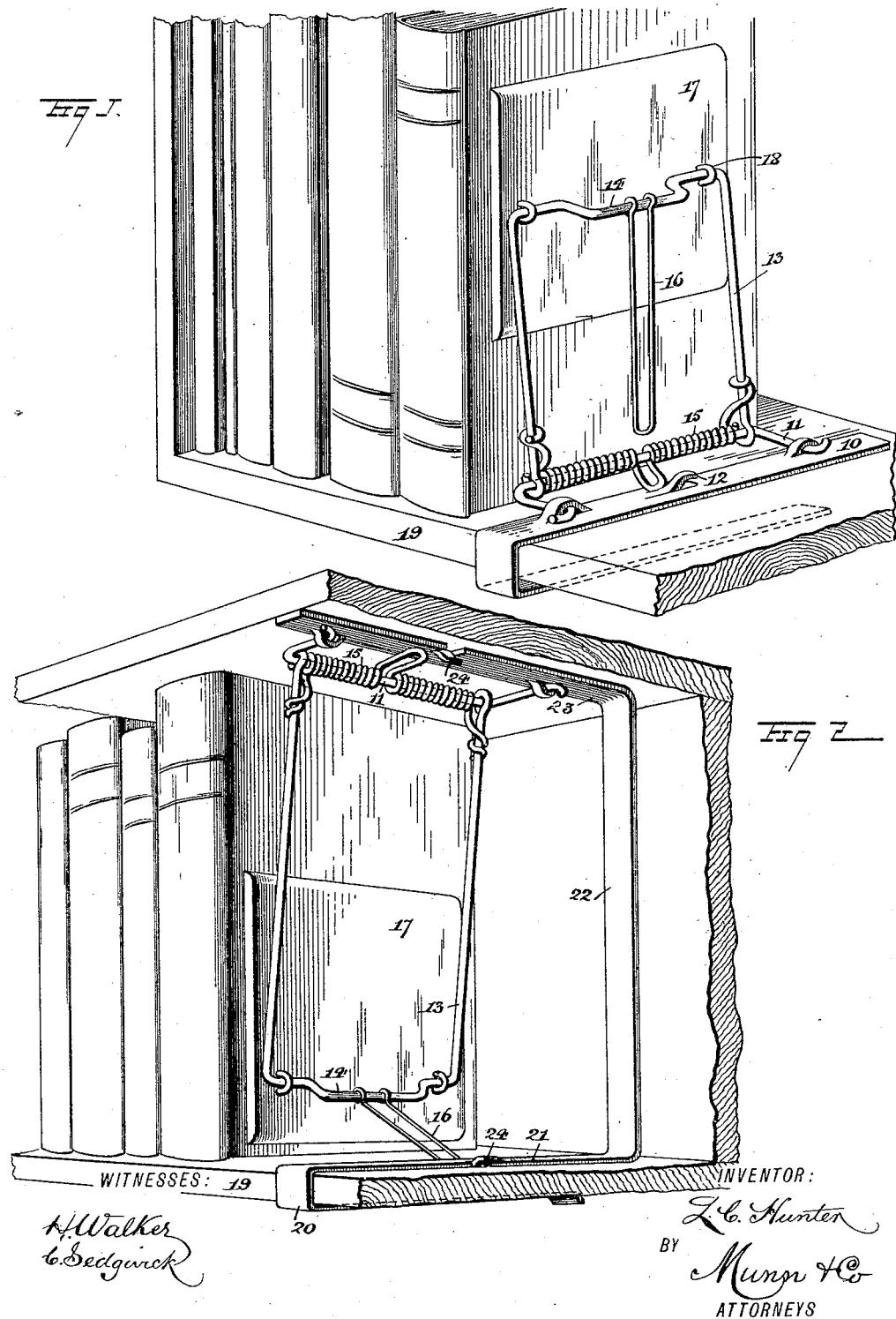


(No Model.)

L. C. HUNTER.  
BOOK SUPPORT.

No. 452,673.

Patented May 19, 1891.



# UNITED STATES PATENT OFFICE.

LEWIS C. HUNTER, OF FORT WAYNE, INDIANA.

## BOOK-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 452,673, dated May 19, 1891.

Application filed August 7, 1890. Serial No. 361,287. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS C. HUNTER, of Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful Improvement in Book-Supports, of which the following is a full, clear, and exact description.

My invention relates to an improvement in book-supports, and has for its object to provide a device capable of attachment to any book-shelf or its equivalent which will automatically force the books along upon the shelf to close up a space created by the removal of a book, and at the very moment the book is withdrawn, and to so construct the device that a withdrawn book may be replaced or others may be added without adjusting the device.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a perspective view of the device attached to a shelf and represented as holding books in position upon the shelf, and Fig. 2 is a similar view of the device in a slightly-modified form.

The base 10 of the device usually consists of a strip of spring metal bent practically to a U shape and forming thereby a clamp, the members of the clamp being adapted for engagement one with the top and the other with the bottom surface of the shelf. Upon the upper face of the upper member of the base-clamp the extremities of a yoke 11 are suitably secured, and between the extremities of the yoke a tongue 12 is produced in or upon the said member, which tongue may be struck up from the metal constituting the base or may be attached thereto or otherwise formed integral therewith. The tongue 12 is curved and preferably extends laterally of the base in the direction of one end. Upon the yoke 11 the ends of the members of an essentially U-shaped arm 13 are pivoted, the upper bow-section of which arm extends laterally outward beyond the plane of the members, forming thereby a handle or handle-hold 14. Upon the bow-section of the yoke 11 between the members of the U-shaped arm 13 a spring

15 is coiled, which spring at its extremities is attached to the members of the U-shaped arm 13, and at or near the center of the spring it 55 is bent outward from the yoke and carried downward to an engagement with the upper face of the base-clamp 10, bearing against the said clamp ordinarily at one side of its tongue 12. Upon the handle 14 of the arm 60 13 a hasp 16 is pivoted, which hasp is adapted for engagement with the tongue 12, and to the bow-section of the arm at each side of the handle portion thereof a board or plate 17 is 65 hinged or pivoted, which board or plate is adapted for engagement with the side of the book nearest thereto. The board or plate is usually attached to the arm by means of staples 18, which staples are inserted in the board at or near the central portion thereof, one 70 near each side edge.

In operation the clamp-base is slid upon the shelf 19 from the front thereof, one member of the base engaging with the upper surface of the shelf and the other member with 75 the under face thereof. The tension of the spring 15 is such that if the shelf is empty the spring will force the plate or board 17 down to an engagement with the upper surface of the shelf. It will thus be observed 80 that when the arm 13 is carried to a vertical position, or practically so, and a book, or a number of books, is inserted between the plate or board and one end of the case or the board of a similar device the said board will 85 bear against the side of the book nearest thereto with sufficient force to cause all the books following to bear snugly one against the other.

In the event that a book is withdrawn from 90 the shelf, as soon as the book is removed the spring, acting upon the arm 13 and the arm against the plate or board 17, forces the book engaging with the plate or board to so bear against the others as to quickly close any 95 space created by the removal of the book. The books are thereby kept in a compact mass; but the spring 15 is sufficiently weak to permit the arm 13 to be conveniently carried outward by the insertion of a book between the board 17 and the opposite bearing of the books without the necessity of drawing upon the handle 14 of the device. When, however, a number of books is to be placed

upon a shelf, the arm 13 may be held in an upright position by grasping the handle 14, carrying the arm outward and engaging the hasp 16 with the tongue 12 of the base.

5 When the books have been arranged upon the shelf and the hasp disengaged from the tongue 12, the board 17 will accommodate itself to the number of books arranged in front of it.

10 In Fig. 2, I have illustrated a slight modification of the device, the modification consisting only in the shape of the base and the location of the yoke with which the arm 13 is connected. The base in said modification is preferably formed of a single piece of spring metal, and consists of lower parallel and horizontal members 20 and 21, constituting a U-clamp, corresponding to the base shown in Fig. 1, and a perpendicular member 22, which member unites an upper horizontal member 23 with the lower twin-members 20 and 21. In the application of this form of base the double member is slid upon the shelf, holding the books in the same manner as the base in Fig. 1. The vertical member then engages with the back of the book-case, and the upper member 23 rests against the under face of the shelf, above that upon which the books are placed. Both the lower horizontal member 21 and the upper horizontal member 23 may be provided with a transversely-arranged tongue 24, with either of which tongues the hasp 16 may be engaged. The yoke is secured to the upper member 23 of the base, and the arm 13 extends downward instead of upward. By this arrangement the board 17 is made to press against the books from a point at or above center to their bottom edge, or practically so.

30 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improved article of manufacture, a book-support consisting of a yoke adapted to be secured to a shelf, an essentially U-shaped arm pivoted to the yoke, a spring engaging with the arm and yoke, and a plate or board pivoted to the bow-section of the arm, substantially as shown and described.

40 2. In a book-support, the combination, with a base provided with a tongue and a yoke secured horizontally to the base, of an essen-

tially U-shaped arm pivotally attached to the yoke, a spring bearing at its upper end against the arm and having a bearing also against the base, and a board or plate pivoted to the bow-section of the arm, substantially as shown and described.

3. In a device of the character described, the combination, with a base adapted for attachment to a shelf and provided with a tongue, and a yoke secured to the base, of an essentially U-shaped arm pivotally attached to the yoke, a spring having end bearings against the members of the arm, and an intermediate bearing against the base, a plate or board pivoted to the bow-section of the arm, and a hasp attached to the said bow-section adapted for engagement with the tongue of the base, substantially as and for the purpose specified.

4. In a device of the character described, the combination, with a base adapted for engagement with a shelf, and a yoke attached to the base, of an essentially U-shaped arm, the members of which are pivoted to the yoke, a spring carried by the yoke and bearing against the members of the arm near its ends and provided with an intermediate extension engaging with the base, a handle formed in the bow-section of the arm, and a plate or board pivotally attached to the said bow-section of the arm at each side of the handle portion, substantially as and for the purpose specified.

5. In a device of the character described, the combination, with a base adapted for attachment to a book-shelf or equivalent support and provided with a tongue, and a yoke attached to the base at each side of the tongue, of an essentially U-shaped arm pivoted upon the yoke, a spring coiled around the yoke, having end bearings against the members of the arm and an intermediate bearing against the base, a handle laterally formed in the bow-section of the arm, a board or plate pivoted to the said bow-section at each side of the handle, and a loop attached to the handle and adapted for engagement with the tongue of the base, as and for the purpose set forth.

LEWIS C. HUNTER.

Witnesses:

ISAAC MOWER,  
CHRIST PIEPENBRINK.