(No Model.)

F. W. HARRISON.

BOOK OR COPY HOLDER.

No. 457,476. Patented Aug. 11, 1891.

Fig 1

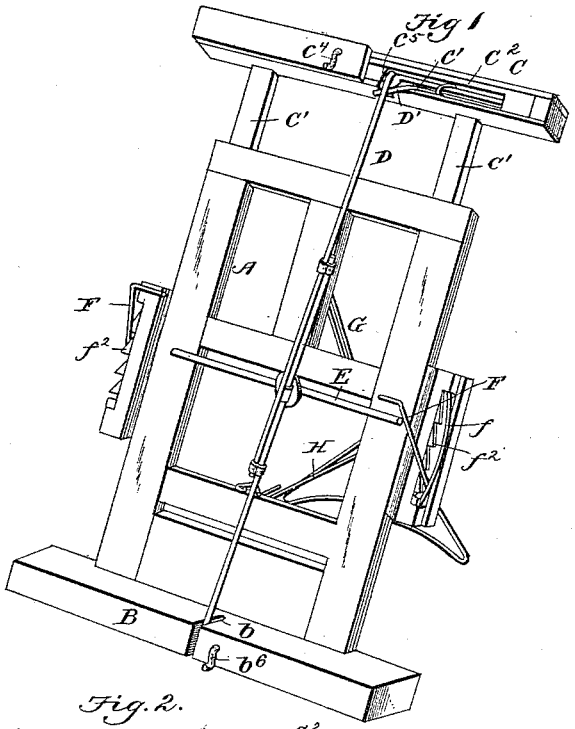

Fig. 2.

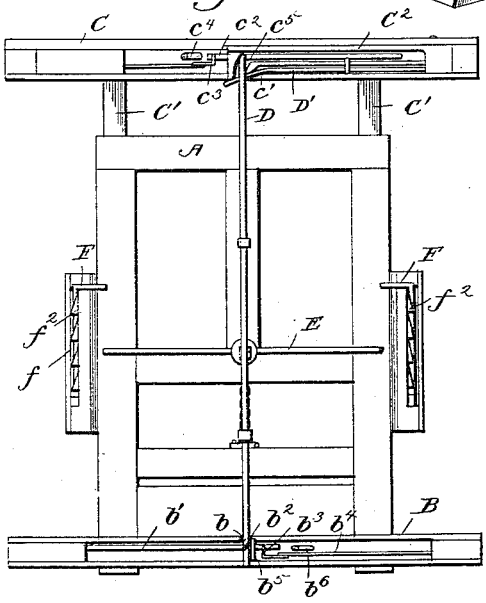

Fig. 3.

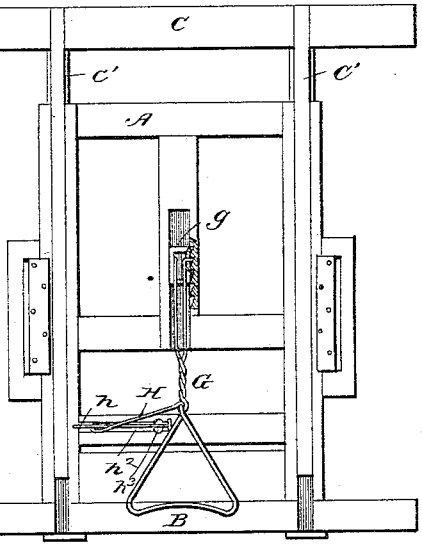

Fig. 4.

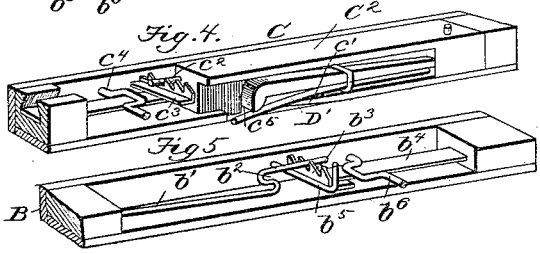

Fig 5

Witnesses
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UNITED STATES PATENT OFFICE.

FRANCIS W. HARRISON, OF WELLSTON, OHIO.

BOOK OR COPY HOLDER.

SPECIFICATION forming part of Letters Patent No. 457,476, dated August 11, 1891.

Application filed April 20, 1891. Serial No. 389,612. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. HARRISON, a citizen of the United States, residing at Wellston, in the county of Jackson and State of Ohio, have invented new and useful Improvements in Book or Copy Holders, of which the following is a specification.

My invention relates to an improvement in book or copy holders; and it consists in the certain peculiar features of construction and arrangement of parts more fully described hereinafter, and definitely pointed out in the claims.

The object of my invention is to produce and provide an improved holder for copy or for books which will embody the essential requisites of convenience, simplicity, and perfection in working. This object I attain by the construction illustrated in the accompanying drawings, in which like letters of reference indicate like parts in the several views, and in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a front elevation with the face of the upper and lower casings removed, showing the binding-bars in an elevated position. Fig. 3 is a rear elevation. Fig. 4 is a detail perspective of the upper casing, and Fig. 5 is a detail perspective of the lower casing.

In the drawings, A represents the frame; B, the lower casing, on which the bottom of a book is adapted to rest. This casing has a lateral slot b at its center and a hollow center, in which is secured a spring-catch b', which extends across the slot and has a socket b^2 formed therein at a point adjacent to the slot, the projecting upper end of the socket extending across the slot when the spring is forced down. The extreme end of the catch-spring engages with teeth of a rack-bar b^3, located on the end of a flat spring b^4, so that the catch may be forced down, but is prevented from springing out by coming in contact with the teeth.

b^5 is a guide for the end of the catch to prevent a lateral movement of the same.

b^6 is a crank extending across the interior of the casing and engages with the spring of the rack to force the same back out of engagement with the catch. The top of the casing over the rack is slightly cut away, so that the end of the retaining-bar, hereinafter described, may readily be inserted in the socket of the catch, but when the bar is forced down the projection over the socket prevents the same from becoming disengaged from the catch.

C is the top casing secured on extensions C′, dovetailed in the back of the frame, so that the height of the holder may be varied. This casing has a hollow center, in which a frame C^2 is pivoted, so as to move out and in, at its inner end. This frame has a lug c^2 on its inner end, which engages with the teeth of a spring-actuated rack-bar c^3, the teeth on said bar being inclined downwardly to admit the lug to pass over the same when moving down, but prevents the lug and frame from moving out. To allow of this movement, a crank c^4 is placed through the casing and engages the spring of the rack and forces the same back, so that the teeth escape the lug. In the frame is formed a channel c^5, in which is pivoted a retaining-bar D, the latter being composed in sections slidingly secured together to accommodate different lengths of books or copies.

D′ is a spring secured in the end of the frame in the upper casing and extending below the channel in the frame and the retaining-bar. This spring normally projects outward, and is forced down by the retaining-bar. The under wall of the casing is inclined at c', so that the spring will be guided in its downward movement.

E is a pivoted index and leaf-holder slidingly secured on the retaining-bar.

On the sides of the frame are secured cove-holders F working in grooves in projections on the sides. These holders are pivoted near the lower ends of the projections and have flat springs f, which engage their outer sides.

f^2 are teeth secured on the projections, against which the holders are pressed, so that the same may be elevated to either a vertical or inclined position and retained in place.

G represents the inclined support for the back, composed of two metal bars twisted together near their centers, their upper ends being pivoted in the sliding block g, which works in a dovetail groove in the center bar of the frame. This groove has a series of indenta-

tions in its sides, as shown in dotted lines, in which the ends of the supporting-bars engage, the bars being loosely pivoted in the block, and by pressing the two together the ends are disengaged from the notches in the groove. To prevent the bars from becoming disengaged from the block I place a vertical metal strip in the block between the same.

H represents the brace pivoted to the support and having an elongated loop in its end, through which a guide-rod h passes, the latter being secured to the frame. Below this rod is a groove h^2 terminating in a depression h^3 near the center, in which the end of the brace rests when the support is thrown out. The guide-bar is made with a crimp in its end, and its inner end is loosely fixed to the frame, so that it acts as a catch to retain the brace in its adjusted position.

In operation the book is placed on the frame. The retaining-bars are then placed between the leaves and are forced down into the groove in the lower casing, its lower end engaging the socket in the spring-catch. It is then forced down and is securely locked in position by the end of the catch engaging with the teeth of the bar b^5. By forcing the bar down, the spring beneath the same on the top casing is forced in or down and is retained in this position. When it is desired to turn the page or release the book, the crank on the lower casing is removed, disengaging the catch, and the spring beneath the retaining-bar immediately forces it up to a horizontal position out of the way, so that the book may be readily handled without having the retaining-bar in an annoying position. When the thickness of the book demands greater space between the retaining-bar and the frame, the crank on the upper casing is turned, forcing the teeth on the bar located therein out of engagement with the lug on the frame C^2, so that the frame may be slightly elevated to accommodate the thickness, the inclination of the teeth, however, preventing the frame C^2 from moving farther than is required, but permitting the same to be readily forced down. This result is also accomplished with the lower end of the retaining-bar, so that the distance between the main frame and the same may be regulated to suit the size of the book.

In the construction of the frame C^2 a horizontal channel is formed at right angles to the other channel in the frame. The two channels are joined by an inclined way, so that as the retaining-bar is forced up its natural tendency will be to follow and lie in the horizontal channel, whereby it is retained in a horizontal position.

I am aware that many minor changes in the construction and arrangement of the parts of my device can be made without in the least departing from the nature and principle of my invention.

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

1. In a book or copy holder, the combination, with the supporting-frame, of a casing on the top thereof, a spring-actuated retaining-bar pivoted in the casing, a casing at the lower end of the frame, and a spring-catch in the casing for engaging the lower end of the retaining-bar, substantially as described.

2. In a book or copy holder, the combination, with the supporting-frame, of an upper casing adjustably secured thereon, a frame pivoted within said casing, means for adjusting said frame, a retaining-bar secured in the frame in the casing, a spring for actuating said bar, and a catch at the lower end of the holder for retaining the bar in an adjusted position, substantially as described.

3. In a copy-holder, the combination, with the supporting-frame, of a casing at the top thereof, a pivoted frame C^2 in the casing, having horizontal and vertical channels formed therein, a retaining-bar pivoted in the channel, a spring in the casing projecting below the bar, and a catch at the bottom of the holder for retaining the bar in position when adjusted, substantially as described.

4. In a book-holder, the combination, with the supporting-frame, of an adjustable casing at the top thereof, a spring-actuated retaining-bar pivotally secured in the casing, means for adjusting the bar relative to the frame, a catch at the bottom of the frame with which the lower end of the bar engages, and means for retaining the catch in an adjusted position relative to the frame, substantially as described.

5. In a book-support, the combination, with the supporting-frame, of a casing adjustably secured at the top thereof, a sectional retaining-bar pivoted in the casing, a spring below the bar, an index and leaf-holder on the bar, and a spring-catch at the lower end of the holder for retaining the bar in a lowered position, substantially as described.

6. In a book-support, the combination, with the frame, of a casing at the top of the frame, a pivoted frame C^2 in the casing, a lug on the end of the same, a spring-supported tooth-bar with which the lug engages, a crank for moving the bar, a retaining-bar pivoted in the frame C^2, a spring for forcing the bar up, a casing at the lower end of the supporting-frame, a spring-catch within the casing, having a socketed end in which the lower end of the retaining-bar is placed when adjusted to retain the book in place, a tooth-bar engaging said catch, and a crank for moving the bar out of engagement with the catch, substantially as described.

7. In a book-support, the combination, with the frame, of cover-holders arranged on the sides thereof, teeth with which said holders engage, and springs for retaining the holders in contact with the teeth, substantially as described.

8. In a book-holder, the combination of the frame having a dovetailed groove in the rear thereof, and a series of notches in the side walls of the groove, a block in the groove,

an inclined support having its upper end formed with two pieces the ends of which are loosely pivoted in the block and adapted to be forced in and out by the notches, a brace having a looped end, and a guide-rod passing through the loop and forming a retaining-catch for the same, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS W. HARRISON.

Attest:
M. T. VANPELT,
W. L. EVANS.