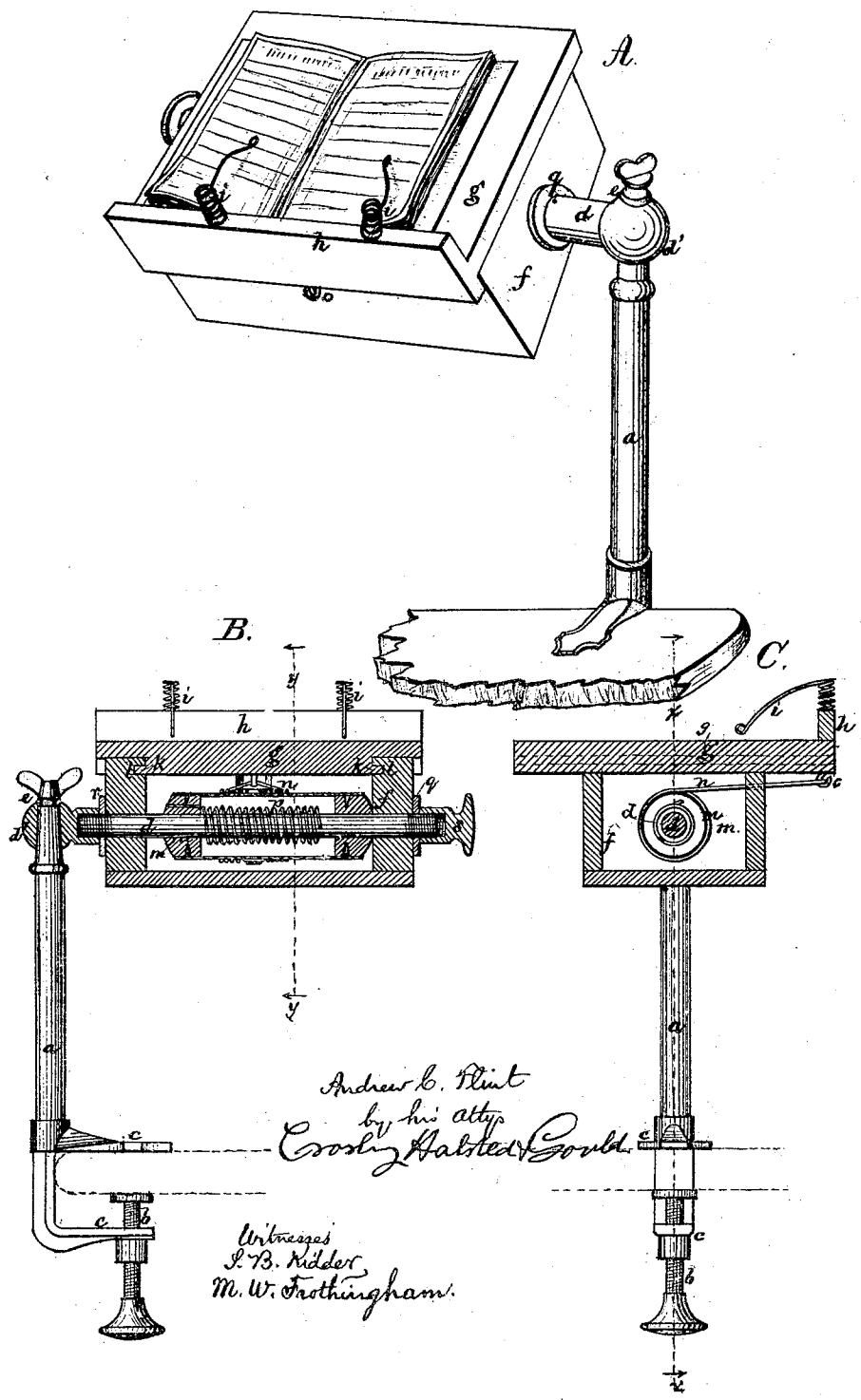


*A. C. Flint,
Book Support.*

No 103593.

Patented May 31, 1870.



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by his atty
Crossy Habsted Gould*

*Witnesses
S. B. Kidder
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United States Patent Office.

ANDREW C. FLINT, OF CHELSEA, MASSACHUSETTS.

Letters Patent No. 103,593, dated May 31, 1870.

IMPROVED READING-STAND.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ANDREW C. FLINT, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented an Improved Reading-Stand; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates to the construction of a reading-stand or book-holder to be attached to a chair or table, and designed to hold an open book at such height, such degree of vertical inclination, and such angle laterally, as shall present the pages in the most desirable position to be read by the person sitting before it, in the chair or at the table.

In my invention, I employ a book-holding frame or table, turning upon a horizontal arm or shaft, which is mounted upon a vertical shaft or spindle, and swings freely (in horizontal directions) upon the top of said spindle, the foot of the spindle being provided with a clamping device, by which the apparatus can be fastened to the arm or seat of a chair, or to a table-top.

My invention consists, primarily in combining with a stand, having these provisions for horizontal swinging movement and adjustment of angular position, a book-holding slide, which may be moved upward or downward upon the frame which supports it, and which is self-retaining, as to position, to whatever extent it is so moved.

The drawing represents a stand embodying the invention.

A shows the stand in perspective.

B is a section on the line $x x$.

C is a section on the line $y y$.

a denotes a vertical and stationary spindle, secured to the chair or table by a clamp-screw, b , and arms $c c$.

To the top of this spindle, one end of a horizontal arm or shaft, d , is jointed, as seen at d' , the joint permitting the arm to swing horizontally upon the vertical spindle, and the freedom of movement of the arm being controlled by a suitable nut and screw, or screw and washer, as seen at e .

Upon this arm or shaft is mounted a box or frame, f , that turns axially upon the shaft, and upon the top of this box or frame is the book-holder g , provided with a ledge or rest, h , against which the bottom of the open book rests, and with springs, $i i$, that hold the open pages in position. The box or frame turns axially upon the shaft to set the book-holder at any desirable degree of inclination, and the holder is arranged to slide up and down upon the top of the box, with provision for retaining it in any position to which it is slid, so that, by setting it up or down, the book

is brought to whatever position, in respect to height, the reader may wish.

The book-holder has on its under side two tongues, k , which slide in grooves l ; and on the shaft d , within the box f , is a roller, m , turning loosely on the shaft, and having wound upon it a cord, n , one end of which is fixed to the roll, and the other end to a hook, o , at the lower end of the slide or holder g .

Within the roller is a coiled spring, p , whose tendency is to turn the roller and wind the cord upon it, the winding of the cord drawing up the slide or holder g . The stress of the spring is so adjusted as to nearly counterbalance the tendency of the holder to descend, so that the holder is slid up with the slightest pressure of the hand, and the winding stress of the spring may be increased or diminished by rotating the box upon the shaft d , one end of the spring being fastened to the shaft, so that it is more or less coiled or uncoiled in accordance with the direction of rotation of the box upon the shaft.

The box f sits between a fast flange or collar, q , on the shaft d , and a loose collar, r , and, by turning a nut, s , the box may be more or less tightly confined between these collars, so as to regulate its ease of movement upon the axis or shaft d , in adjusting its angle of inclination.

It will thus be seen that the apparatus combines capability of movement of the book-holder in every direction, so that the book may be set at any lateral angle, at any degree of vertical inclination, and at any height, as required by the position, the eye-sight, or the disposition of the reader, and that such provision is made for adjustment of the parts as to their ease of movement, as will make it within the power of even the most unskilled or ordinarily-skilled persons to manipulate the holder in its compound or different movements.

By thus having a stand, in which the book is so easily placed and held, and brought to the most desirable height and position to be read, the trouble and annoyance of holding a book in the hands are obviated.

I claim—

A reading-stand, having a free-moving counterbalanced slide, substantially as described.

Also, the arrangement of the roll or pulley, spring, and slide, with reference to the shaft d , by which the stress of the slide-sustaining spring is regulated or increased or diminished by rotation of the slide upon the shaft, substantially as described.

AND. C. FLINT.

Witnesses:

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