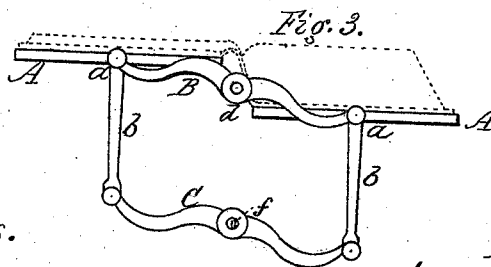
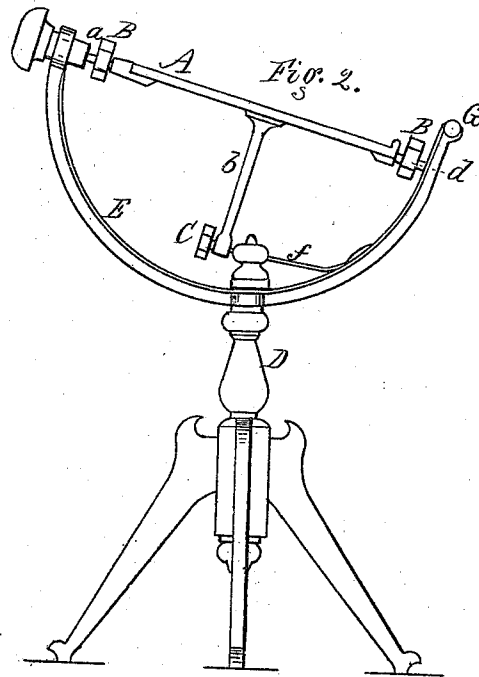
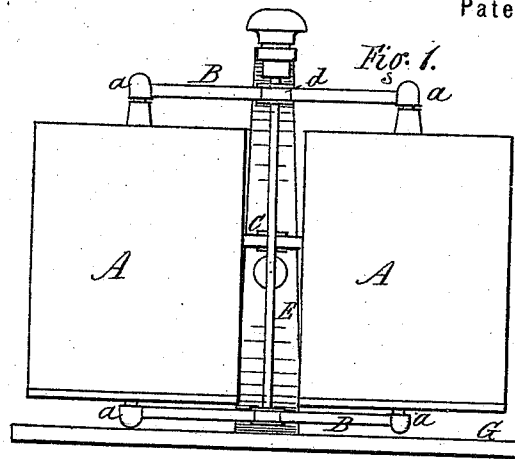


J. B. ANNIN.
Book-Stands.

No. 140,107.

Patented June 24, 1873.



Witnesses.
H. D. McNaughton
W. A. Loder,

Inventor
James B. Annin,
per R. F. Osgood,
att'y.

UNITED STATES PATENT OFFICE.

JAMES B. ANNIN, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN BOOK-STANDS.

Specification forming part of Letters Patent No. **140,107**, dated June 24, 1873; application filed May 9, 1873.

To all whom it may concern:

Be it known that I, JAMES B. ANNIN, of the city of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Self-Adjusting Book-Stands; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention consists, essentially, of a swinging frame made in two halves and hung upon pivoted arms, in such a manner that when an open book is placed thereon the frame will adapt itself to place so as to present the two open pages of the book nearly or quite in line, as hereinafter described.

In the drawings, Figure 1 is a plan; Fig. 2, an elevation at right angles to Fig. 1. Fig. 3 is an elevation of the self-adjusting frame removed from place, and showing in dotted lines an open book resting thereon.

The self-adjusting frame consists of two leaves or plates, A A, of a size sufficient to hold the halves of an open book, as shown in dotted lines, Fig. 3. These leaves are hung by pivots *a a* to the ends of levers B B, which in turn are centrally pivoted to any support which will allow the free swinging of the levers. To the bottom of each leaf is attached a stiff pendent arm, *b*, and the lower ends of these arms are pivoted to a single central lever, C, which is parallel with the levers B, and pivoted in its center so as to turn with them.

The effect of this arrangement, when one side or the other of the frame is depressed, is to keep the leaves A A horizontal at all times, though in different planes from each other, as shown in Fig. 3.

This frame may be hung in any suitable supporting device, such, for instance, as a stand or a bracket which may be attached to the wall.

The drawings show a stand, D, which rests upon legs, and has a segment or bow, E, within which the frame is suspended by the central pivot-bearings *d d*, connected with the two upper levers B B. A torsion-spring, *f*,

may form the axis or pivot of the lower lever C, and by its elasticity allow the frame to depress on either side when weight is applied.

The frame is preferably set at an angle so as to present the book properly to the reader. If desired, the stand may be made to adjust higher or lower by the use of a screw; and if desired, also, the segment E may be made to adjust vertically to change the angle of the frame.

A round, G, is employed in front, which forms a hand-support and a resting device for the riser. If desired, it may be made in the form of a narrow leaf or shelf.

The action will be readily understood. The open book is placed with its two sides upon the plates A A. Any preponderance in the thickness and weight of the book on one side will correspondingly depress that side of the frame, as shown at the right in Fig. 3, so that the upper or reading surface of the book is always level on both sides. As the leaves of the book are turned one way or the other, the frame will correspondingly adjust itself to place so as to keep the open surface of the book level.

This device is of service in holding large books of all kinds in offices, houses, churches, &c. It will be also found of service to accountants in the use of heavy account-books, where it is desired to keep the upper open surface of the book flat for writing.

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

The levers B B, connected together by the rods *a a*, in combination with the leaves A A, levers C C, rods *b b*, and pivots *f d*, the whole constructed, arranged, and operating substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAS. B. ANNIN.

Witnesses:

R. F. OSGOOD,
HENRY M. THOMAS.