

(No Model.)

J. W. RANSON & J. L. H. BARR.

BOOK HOLDER.

No. 337,435.

Patented Mar. 9, 1886.

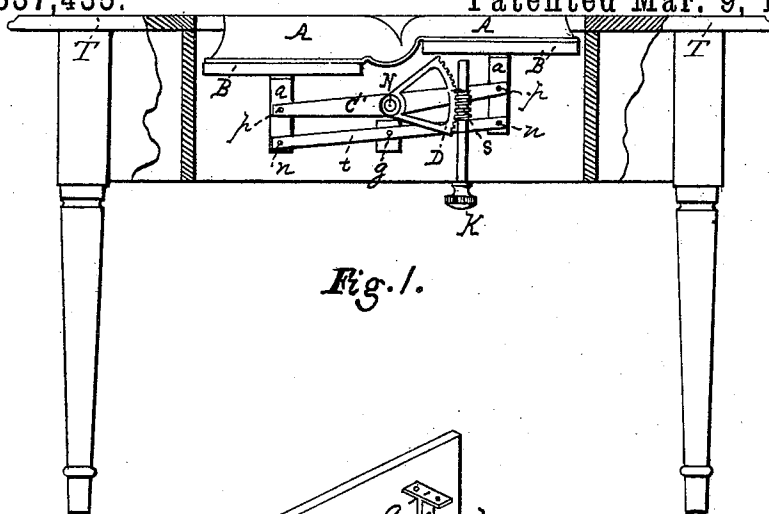


Fig. 1.

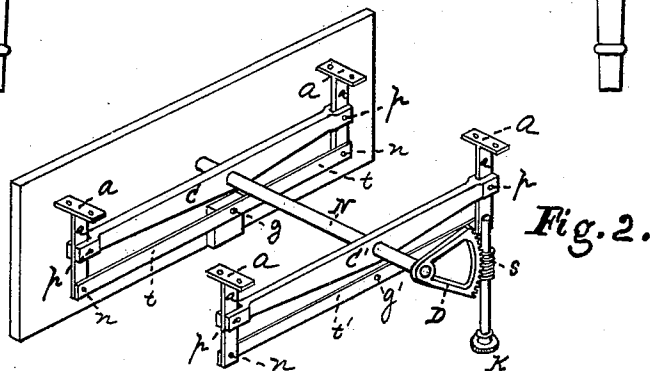


Fig. 2.

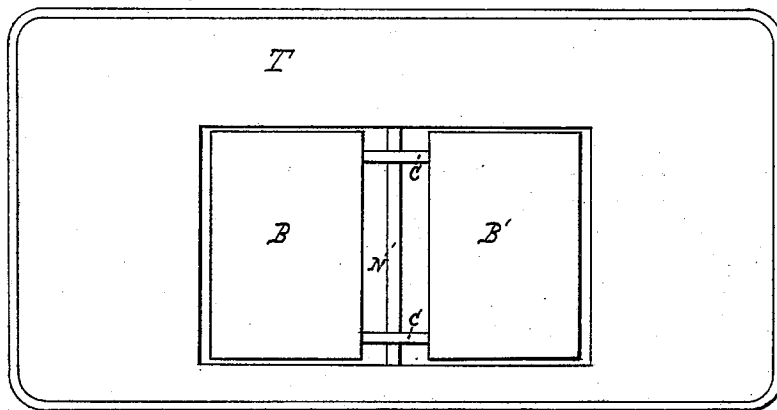


Fig. 3.

Witnesses:

C. T. Hines.
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UNITED STATES PATENT OFFICE.

JOSEPH W. RANSON AND JAMES L. H. BARR, OF BATAVIA, OHIO.

BOOK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 337,435, dated March 9, 1886.

Application filed July 2, 1885. Serial No. 170,542. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH W. RANSON and JAMES L. H. BARR, citizens of the United States, residing at Batavia, in the county of Clermont and State of Ohio, have invented a new and useful Improvement in Book-Holders, of which the following is a specification.

Our invention relates to improvements in desks which are used for holding any kind of books—such as record or account books—in which writing is done.

The objects of our invention are to provide a durable, efficient means of holding the book so that the surface of the pages can be readily adjusted to a level with top of the table or desk to which the improvement is applied, and to connect the two platforms upon which the book lies in such a manner that when one side is raised the other is depressed in like proportion. These objects are accomplished by the following mechanism, in which—

Figure 1 is a front view with part of the desk cut away, showing general arrangement of mechanism with book in position. Fig. 2 is an isometric perspective view of mechanism detached from desk. Fig. 3 is a top view showing aperture in top of desk to receive the book, together with part of the mechanism.

Similar letters refer to like parts throughout the several views.

The mechanism is here shown in its simplest form as attached to a level-topped table or desk. It can, however, be attached as well to a desk or table having a slanting lid or top.

In Fig. 1, A is the book in position, the lids resting upon the two platforms B B'. These platforms, on the under side and near each end, have T-shaped pieces *a* firmly attached, which project downward and are hinged to the ends of levers C C' by means of pins *p*, passing laterally through them and the forked ends of the levers, as shown.

Through the levers C C', and firmly attached thereto, is the shaft N. This shaft is provided with suitable bearings at each end, and acts as the center upon which the levers C C' vibrate.

Firmly attached to the end of the shaft N is a segment of worm cog-gearing, D, into the

teeth of which engage the threads of the screw or worm S. This screw revolves on journals shown at each end of the threaded part, which have bearings in blocks securely attached to the front rail of the table. (Not shown.) These blocks bear against the shoulder formed at each end of the threaded part of the screw and prevent the screw from having any longitudinal movement while being rotated or at rest. The lower part of the screw is made long enough to project below the side rails of the desk, sufficient to receive the knob K, so placed to the right of the center of the length of the desk as to be within easy reach of the hand, and at the same time not interfere with the knees of the person writing.

The platforms B B' are held in position, always parallel with the top of the desk, by the following means: The T-shaped pieces *a*, which are hinged to the ends of the levers C C', and to the tops of which the platforms B B' are attached, project downward below the ends of levers C C', and are hinged to the ends of the pieces *t t'* by means of pins or rivets, as shown at *n*. The pieces *t t'* have holes *g g'* at the center of their length. Through these holes are screws, which loosely attach the pieces to the frame of the desk, as shown. The manner in which this operates will be shown hereinafter.

It is obvious that if the knob K is rotated by the hand the threads of the screw S engaging in the teeth of the segment cog-gear D will cause the shaft N to rotate on its bearings with a greater or less degree of motion, in proportion to the amount the knob is turned. The levers C C', being firmly attached to the shaft, are made to vibrate perpendicularly, and, being attached to the platforms B B' at their ends, will cause one of them to ascend while the other descends. The pieces *t t'* being of the same length as levers *c c'*, and hinged at the same distance from the center, and being attached at the ends to the ends of the T-shaped pieces, as shown and described, it is obvious that with any amount of motion, up or down, of the platforms necessary for the purpose described, this combination of parts will hold the pages

of the book always level with the top of the table, in accordance with the principles upon which this well-known mechanical movement operates.

5 I claim—

The platforms B B and levers C C', the T-shaped pieces *a*, attached to the under side of the platforms, the pieces *t t'*, and the shaft N,

operated by and in combination with the worm-gear D S, for the purpose described.

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Witnesses:

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