C. L. BOAL.

BOOK HOLDER.

APPLICATION FILED JAN. 27, 1917.

1,254,569.

Patented Jan. 22, 1918.

2 SHEETS—SHEET 1.

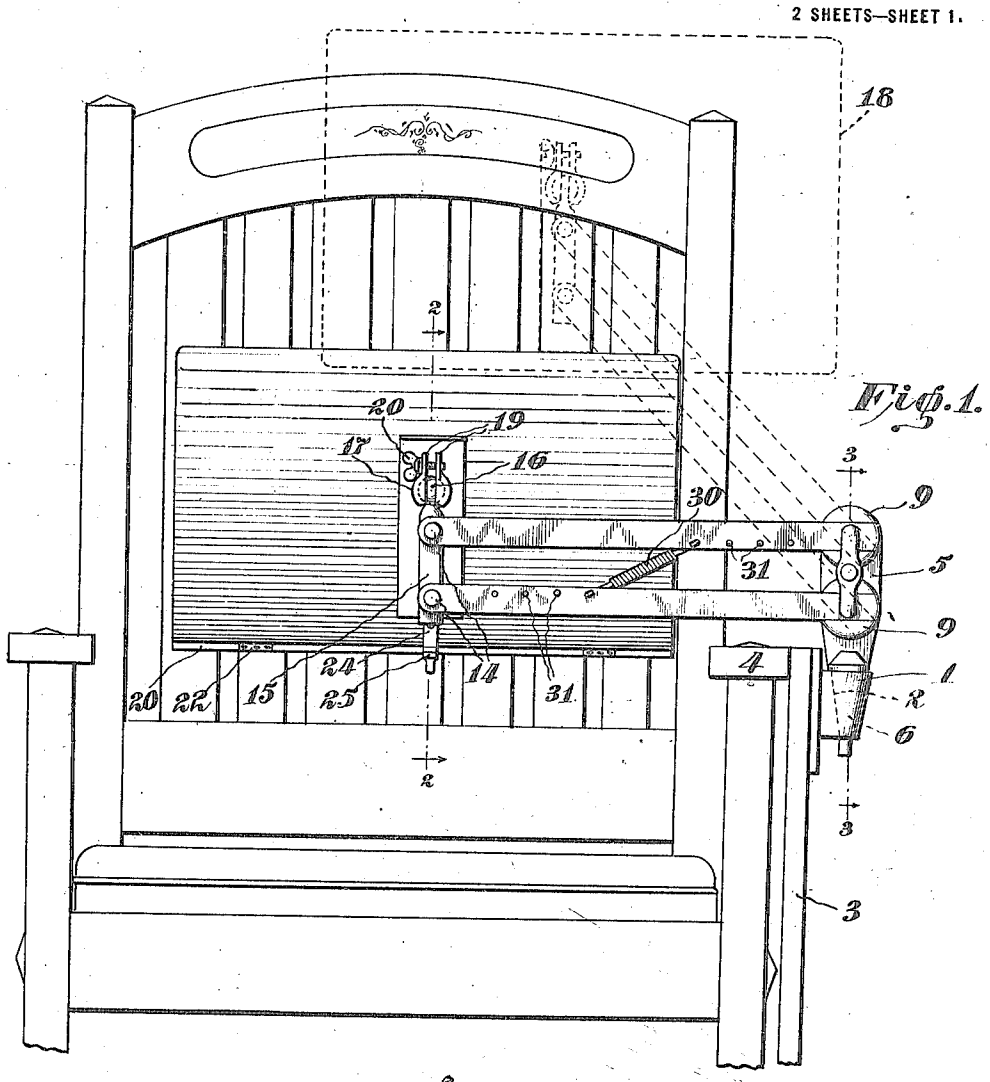


Fig. 1.

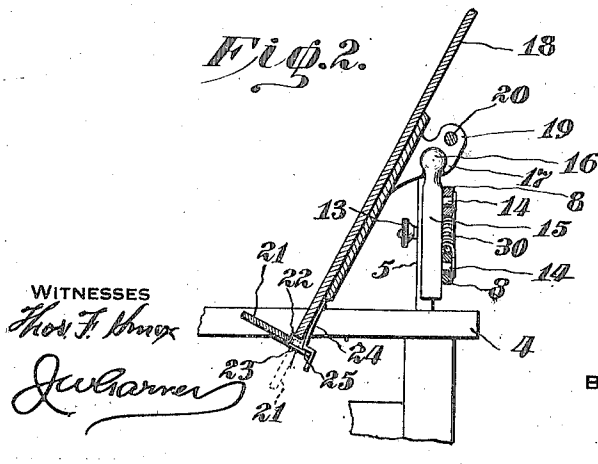


Fig. 2.

WITNESSES

Thos. F. Knox

J. W. Garner

INVENTOR

C. L. Boal

BY Victor J. Evans

ATTORNEY

C. L. BOAL.

BOOK HOLDER.

APPLICATION FILED JAN. 27, 1917.

1,254,569.

Patented Jan. 22, 1918.

2 SHEETS—SHEET 2.

Fig. 3.

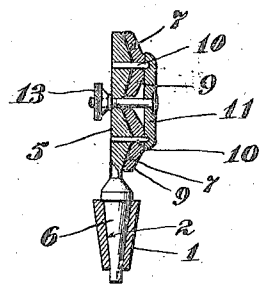


Fig. 4.

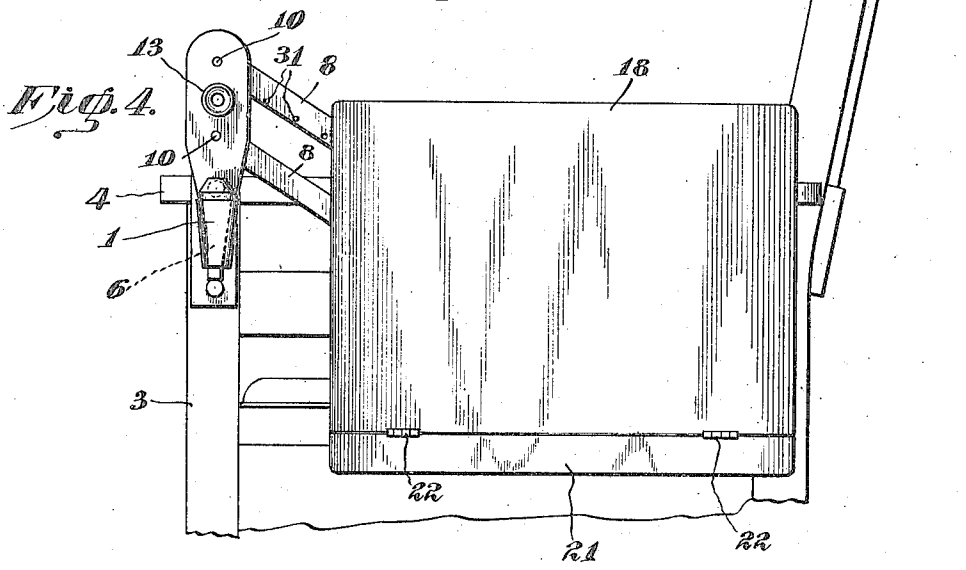
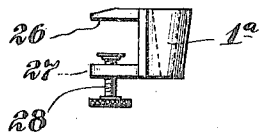


Fig. 5.



INVENTOR

C. L. Boal

BY Victor J. Evans

ATTORNEY

WITNESSES

Thos. F. Knox

J. W. Garner

UNITED STATES PATENT OFFICE.

CHARLES L. BOAL, OF ZANESVILLE, OHIO.

BOOK-HOLDER.

1,254,569. Specification of Letters Patent. Patented Jan. 22, 1918.

Application filed January 27, 1917. Serial No. 144,904.

To all whom it may concern:

Be it known that I, CHARLES L. BOAL, a citizen of the United States, residing at Zanesville, in the county of Muskingum and State of Ohio, have invented new and useful Improvements in Book-Holders, of which the following is a specification.

This invention is an improved book holder for attachment to a chair, table, desk, window, stool, shelf, or other supporting object or article of furniture and for use in holding a book or paper in a convenient position for reading, the object of the invention being to provide an improved device of this character which may be adjusted to the desired height, and arranged at any desired angle or at any desired distance from the user, and which may be used in writing or drawing, or in place of a lap board for sewing, and may be also used in a kindergarten to support books, charts and the like and also as a music rack, and which can be arranged out of the way and alongside the chair or other support, and may be further readily and entirely detached from the chair or other support and laid aside, as desired.

The invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings:—

Figure 1 is an elevation of a book holder constructed and arranged in accordance with my invention, and showing the same attached to an arm chair and arranged in front of the same, the book holder being shown in one position in full lines and in another position in dotted lines.

Fig. 2 is a detailed vertical sectional view of the book holder on the plane indicated by the line 2—2 of Fig. 1.

Fig. 3 is a similar view of the same on the plane indicated by the line 3—3 of Fig. 1.

Fig. 4 is an elevation of the same when turned back and arranged in lowered position at one side of an arm chair.

Fig. 5 is a detailed sectional view showing a modified construction of the supporting or base member.

In the embodiment of my invention I provide a supporting or base member 1 which is shown in Fig. 1 as a bracket having a downwardly contracting socket 2 and secured to the opposite side of a vertical bar 3 which bar is secured at the outer side of one of the arms 4 of a chair. A standard 5 is provided which has a downwardly tapered lower portion 6 which is fitted in the socket 2 so that said standard is detachably and pivotally mounted on the base or supporting member. The standard is provided on one side with a pair of friction bearing members 7, arranged one above the other and here shown as conical. A pair of adjusting and supporting bars 8 are provided at their outer ends with bearing members 9 which are arranged in opposed relation to the bearing members 7 and are pivotally mounted upon pivots 10 which project out from the center of said bearing members 7, the inner faces of the bearing members 9 being concave to receive the bearing members 7. The face of one of said members is lined with fibrous material to increase the friction between said members. A clamping bar 11 bears on the outer sides of the members 9 and is connected to the standard 5 by a bolt 13 so that by adjusting the winged nut on said bolt the friction between the bearing members may be increased or diminished at will.

The free or inner ends of the bars 8 are pivotally connected as at 14 to a standard 15. Said bars are parallel with each other and said standard 15 is held by said bars 8 under all conditions vertically and in parallel relation to the standard 5 as will be understood. The standard 15 is provided at its upper end with a ball 16 and is engaged by a socket member 17 on the rear side of a book holder, table or board 18. The socket member 17 comprises a pair of clamping members 19 recessed in their opposing sides to receive the ball 16 and said clamping members are connected together by an adjusting screw 20 so that the clamping members of the socket member may be frictionally gripped on the ball as required to enable the book holder, table or board 18 to be held in any desired position in which it may be placed, whether horizontal or inclined. The ball and socket connection between the book holder and the standard 15 also enables the book holder to be arranged in any desired relation with the supporting bars 8. Said supporting bars by reason of their pivotal connection to the standards may be arranged in either horizontal position or in any desired inclined position to support the book holder in either lowered or elevated position as may be desired, universal angular adjustment of the book holder being provided for and the pivotal connection 6 between the standard 5 and the

supporting or base member 1 enabling the book holder to be swung or arranged transversely across the chair or at one side of the same or in any other desired position as will be understood.

At the lower side of the book holder, table or board 18 is an extension member 21 which is hinged as at 22 and hence may be arranged in line with the member 18 to increase the width of the latter if desired or may be arranged at right-angles thereto, as shown in Fig. 2, to form a supporting ledge for a book or other object. The said member 21 is provided at one side with a lug 23. A detent spring 24 is also provided, which is secured at its upper end to the rear side of the member 18 and is provided near its free, lower end with a shoulder 25 to engage the lug 23 and coact with said lug in supporting said member 21 when the latter is arranged at right-angles to the member 18.

It will be understood that the arms 8 may be held at any desired adjusted position, to enable the book holder to be correspondingly held, by tightening the bolt 13 as required to secure the requisite friction grip between the pivoting and bearing members 7, 9 of the standard 5 and supporting bars 8 respectively. To succeed in holding the supporting bars in adjusted position and somewhat relieve the members 7, 9 of stress I provide a coil retractile spring 30 which is arranged in an inclined position and has its ends adjustably secured to the bars 8, said bars having adjusting openings 31 to receive the hooks formed at the ends of said springs.

In Fig. 5 I show a modified construction of the supporting or base member in which the same is designated as 1^a and is provided with a flange 26 at one side to bear on an arm of the chair and is also provided, at its lower side, with a lug 27 in which engages a vertically arranged clamping screw 28, said clamping screw being adapted to bear against the lower side of the chair arm, table top or other device to which the book holder is to be attached and to hence enable the base or supporting member to be readily attached to said chair arm, table top or other object.

While I have herein shown and described a preferred form of my invention I would have it understood that changes may be made in the form, proportion and construction of the several parts, without departing from the spirit of my invention and within the scope of the appended claim.

Having thus described my invention, what I claim is:—

In a device of the class described, a main standard having conical friction bearing members on one side, a holder, a standard supporting the holder, parallel bars pivotally connected to said standards, and arranged for movement in a vertical plane to raise or lower the holder, said bars having concave friction bearing recesses in frictional contact with the bearing members of the standard and the pivots which connect the said bars to the main standard extending through the centers of said bearings, a clamping bar bearing against the parallel bars at a point opposite said bearings and engaging the said pivots, and an adjusting screw connecting the clamping bar to the main standard and provided with an adjusting nut.

In testimony whereof I affix my signature.

CHARLES L. BOAL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."