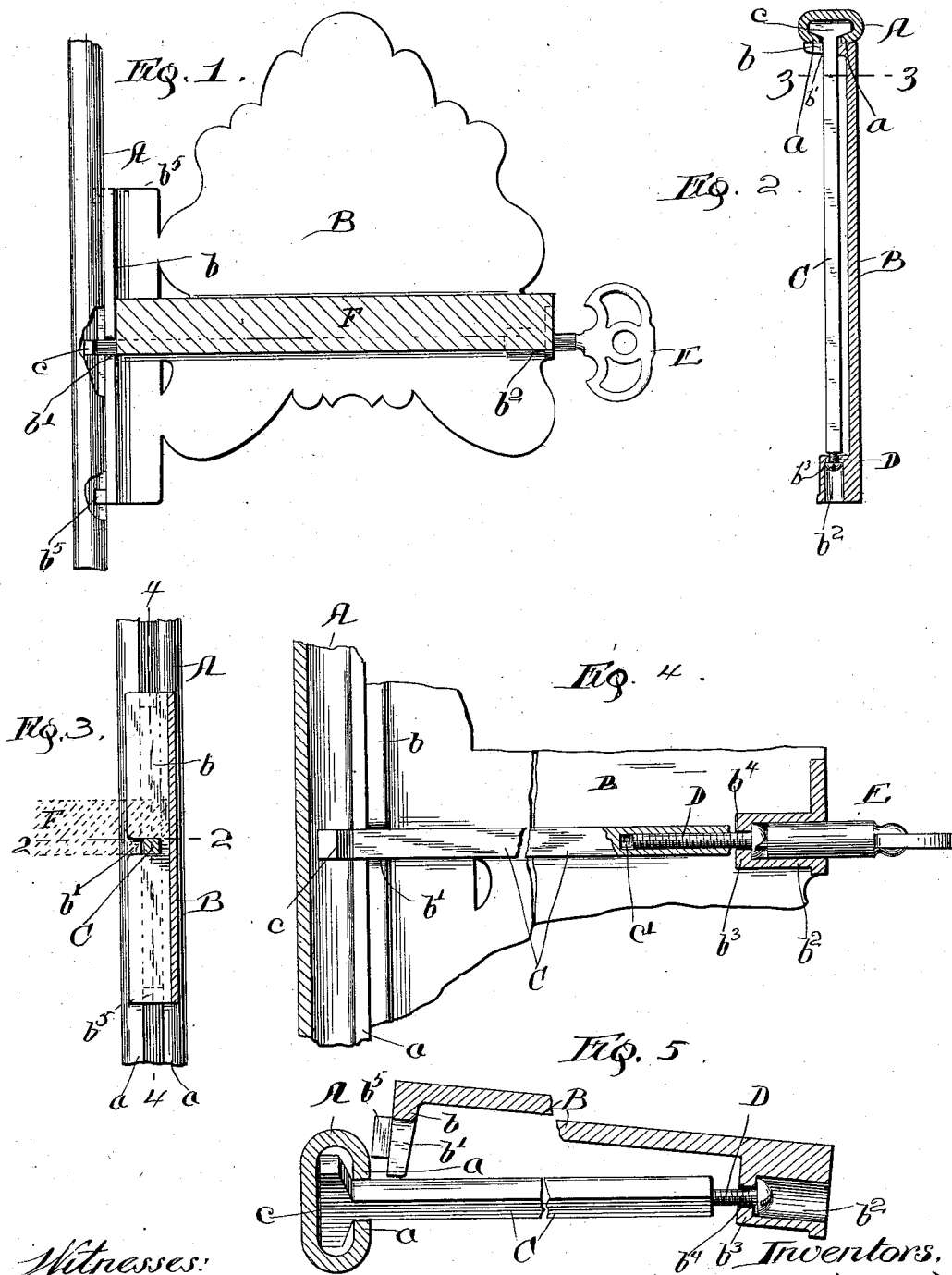


(No Model.)

W. H. & F. A. WINSLOW.
LIBRARY SHELVING.

No. 568,825.

Patented Oct. 6, 1896.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM H. WINSLOW AND FRANCIS A. WINSLOW, OF CHICAGO, ILLINOIS.

LIBRARY-SHELVING.

SPECIFICATION forming part of Letters Patent No. 568,825, dated October 6, 1896.

Application filed January 29, 1896. Serial No. 577,248. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. WINSLOW and FRANCIS A. WINSLOW, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Library-Shelving, of which the following is a specification.

Our invention relates to certain improvements in library-shelving, the purpose of which is to construct a shelving which shall be neat, compact, easily adjustable upon its support, and removable therefrom.

To such end the invention consists in certain features of construction described in this specification, and particularly pointed out in the appended claims.

Our invention is illustrated in the accompanying drawings, of which—

Figure 1 is a side view of the bracket and standard, the shelf itself being shown in cross-section. Fig. 2 is a horizontal longitudinal section on line 2 2, Fig. 3. Fig. 3 is a vertical section on line 3 3, Fig. 2. Fig. 4 is a vertical longitudinal section on line 4 4, Fig. 3, but showing the device upon a larger scale and certain portions being broken away; and Fig. 5 is a view similar to Fig. 2, but showing the bracket about to be removed from the standard and upon a larger scale than Fig. 2.

Referring to the drawings, A is an upright supported in any suitable manner and forming one of the standards for supporting the shelves. These uprights are located at each end of the shelves and are preferably constructed of channel-iron, the edges of which are bent toward each other to form dovetailed grooves, as seen in Figs. 2 and 5, and upon these uprights are adjustably secured the brackets B, to which our invention more particularly pertains. The brackets are formed with heads or slides b , which slide upon the outer edges of the inturned ends a of the channel-iron, which are made true, so that the slides b may have a perfect bearing-surface against the faces a . The head or slide b is provided with lugs b^1 , extending into the slot between the edges of the inturned ends, thus forming guides to hold the bracket in a vertical plane.

The brackets are secured to the uprights by means of bolts C, preferably square, and

provided with heads c (see Figs. 2, 4, and 5) of a thickness small enough to easily pass between the edges of the inturned ends of the uprights, but of a width large enough when turned at right angles to the slot to be prevented from being withdrawn therefrom. The slide b is provided with a notch or recess b' , in which the bolt C rests, and the outer end of the bracket is provided with a hollow lug b^2 . (See Figs. 2, 4, and 5.) The hole in the lug b^2 is in a line concentric with the bolt C, and the end of the hole nearest the bolt is provided with a shoulder b^3 , having a hole b^4 , through which passes the screw D. The head of the screw D rests against the shoulder b^3 , and the bolt C is tapped and screw-threaded, as seen at c' , (see Fig. 4,) to receive the screw D. We have shown a key E for operating the screw, said key having a shank approximately of the diameter of the hole in the lug and provided with a blade to engage with the slit in the screw D.

It is obvious that any suitably-shaped head upon the screw may be used and a correspondingly-shaped key applied thereto, as, for instance, the head may be squared and a square hole provided in the key.

The bolt C has been shown and described as being square, but it is obvious that any shape may be used, the important feature being that it shall be non-rotatable with reference to the notch b' when seated within the same. The square bolt is preferred for the reason that it makes a better support for the shelf. The shelf F rests upon the bolts C, and it may be notched to fit the lug b^2 , and in fact the entire lower edge may be notched, as seen in Fig. 3, so as to be fitted to the square bolt.

To remove the bracket, the screw D is loosened enough to withdraw the lugs b^5 from the slot. The bracket is then swung away from the upright, as seen in Fig. 5, until the bolt is entirely disengaged from the notch b' , when said bolt may be rotated about ninety degrees upon its axis, or until the head c is parallel with the slot, when the head may be withdrawn therefrom. To adjust the shelves upon the uprights it is only necessary to loosen the screws D slightly, then raise or lower the brackets to the desired point and tighten the screws.

In actual practice we have found this means of removing and replacing the brackets very simple, yet extremely effective.

We claim as new and desire to secure by
5 Letters Patent—

1. The combination with an upright having an undercut groove, and a bracket having a bearing-face adapted to rest against the faces of the overhanging edges, and guiding-
10 lugs extending into the groove, of a clamping device having a horizontal portion extending into the groove and engaging with the overhanging edges thereof, said portion having sufficient lateral extent to prevent its
15 withdrawal from the groove, but thin enough when given a quarter-turn to permit of its insertion or removal therefrom, and means for preventing the turning of said portion when in a clamped position; substantially as
20 described.

2. The combination with an upright having an undercut groove, of a bracket having a bearing-face adapted to rest against the faces of the overhanging edges, and guiding-
25 lugs extending into the groove, a notch in said bearing-face registering with the over-

hanging edges, a clamping device normally seated in said notch whereby the rotation of said device is prevented, said, clamping device having a portion extending into the un- 30
dercut groove and of sufficient lateral extent to prevent its withdrawal therefrom, but thin enough when given a quarter-turn to be removed therefrom; substantially as described.

3. The combination with an upright having an undercut groove, of a bracket having a bearing-face resting against the faces of the overhanging edges, and guiding-lugs entering the groove, a bolt having a head adapted 40
to engage with the overhanging edges, means for normally preventing the rotation of said bolt, a hollow lug provided with a suitable shoulder, and a screw resting against said shoulder and connected with the bolt; sub- 45
stantially as described.

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Witnesses:

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