

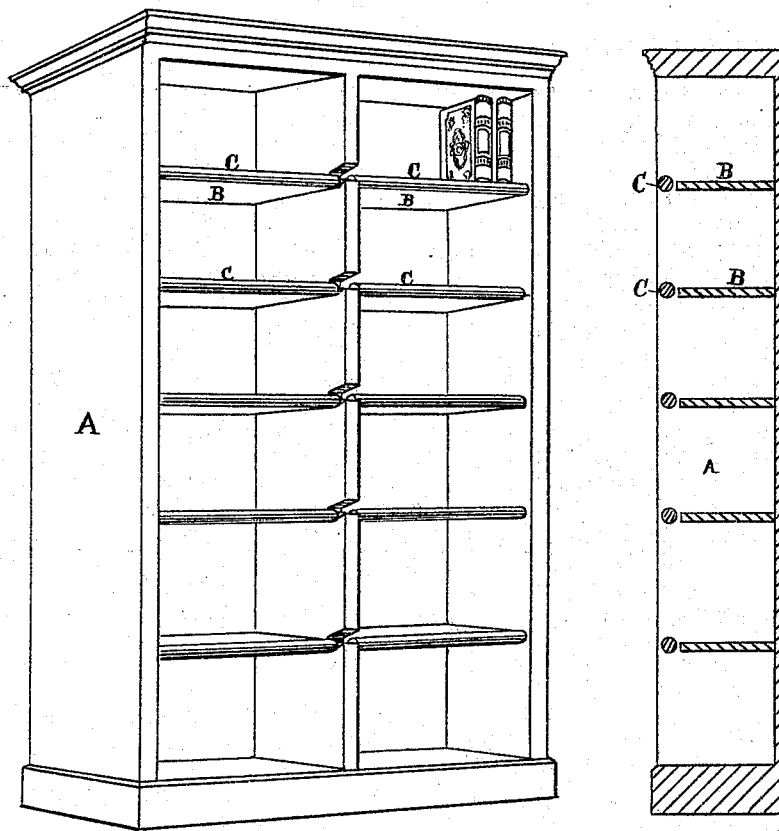
J. L. BOONE.
BOOK-SHELVES.

No. 182,157.

Patented Sept. 12, 1876.

Fig. 1

Fig. 2



Witnesses
Chas & Page
Olwyn S. Stacy

Inventor
John L. Boone

UNITED STATES PATENT OFFICE.

JOHN L. BOONE, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN BOOK-SHELVES.

Specification forming part of Letters Patent No. **182,157**, dated September 12, 1876; application filed July 6, 1876.

To all whom it may concern:

Be it known that I, JOHN L. BOONE, of San Francisco city and county, State of California, have invented an Improvement in Book-Shelves; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

My invention consists in attaching rollers to the front edges of book-shelves, so that when a book is withdrawn from or placed upon the shelf, it will move over the roller instead of over the edge of the shelf, as more fully explained below.

Referring to the accompanying drawing, Figure 1 is a perspective view. Fig. 2 is a sectional view.

Let A represent a book-case or other series of shelves, for containing books. B B are the shelves, upon which the books are supported in a standing position.

The edges of book-shelves are ordinarily made sharp, so that a book which is frequently taken down from and replaced upon the shelves, soon becomes worn out, its lower edges being destroyed by the sharp corners of the shelves over which it is dragged, especially if the shelf upon which it is kept is higher than the level of the person's head who handles it, or if the books are very heavy—such as books of record and heavy account-books.

To obviate this difficulty I mount a roller, C, just in front of the edge of each shelf, so that the lower edges of the book will rest upon and roll over the roller, both when the books are being taken down from the shelf or placed

upon it. This roller can be made of wood, metal, india-rubber, or other suitable material. I prefer to use wooden rollers and cover them with a thin layer of soft india-rubber or other soft elastic or yielding material.

Ordinary rubber tubing can be drawn over the wooden or other roller, and thus furnish a soft and yielding covering for the book to rest upon, and it will, owing to its yielding and adhesive nature, insure the rotation of the roller when the book is being moved over it, so that there will be no rubbing friction on the book-edge.

The rollers may be variously applied, but I provide any suitable metal bearings, which are fixed to the under side of the shelves so as to project out far enough to support the roller clear of the shelf-edge, and so that its upper edge is slightly above the level of the shelf-surface.

The shelf must be wide enough to support the books without allowing any of them to touch the roller, so that the roller can rotate freely.

I do not confine myself to any particular style of roller, nor to any particular arrangement for supporting the roller or applying it to the shelf-edge.

What I claim is—

A book-shelf, B, in combination with a roller, C, arranged along its front edge, as described, for the purpose set forth.

In witness whereof I have hereunto set my hand and seal.

JOHN L. BOONE. [L. S.]

Witnesses:

CHAS. G. PAGE,
ELWYN T. STACY.