

S. A. SMITH.  
Bracket for Book-Shelves.

No. 200,772.

Patented Feb. 26, 1878.

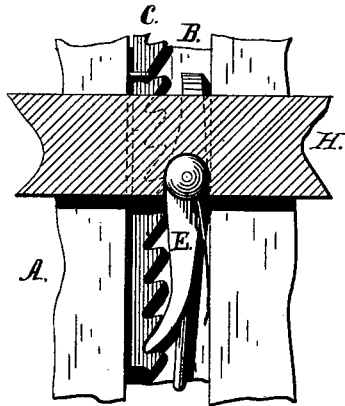


FIG. 1.

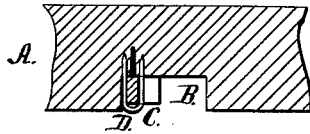


FIG. 2.



FIG. 3.

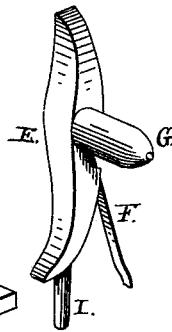


FIG. 4.

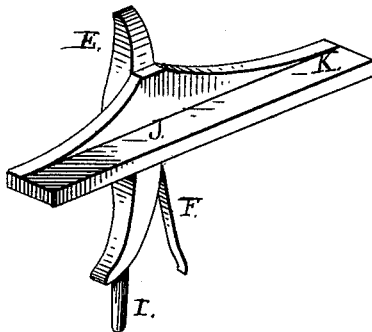


FIG. 5.

ATTEST:

*Milton B. Winchell*  
*Jos. T. Rich*

INVENTOR.

*Scott A. Smith*

# UNITED STATES PATENT OFFICE.

SCOTT A. SMITH, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN BRACKETS FOR BOOK-SHELVES.

Specification forming part of Letters Patent No. 200,772, dated February 26, 1878; application filed December 18, 1877.

*To all whom it may concern:*

Be it known that I, SCOTT A. SMITH, of Providence, in the State of Rhode Island, have invented a new and useful Adjustable Shelf-Rest; and I do hereby declare that the following specification, taken in connection with the drawings, making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view of my invention, with sections of the side and shelf of a book-case. Fig. 2 is a transverse section of the side, showing groove and rack. Fig. 3 is a section of the rack. Fig. 4 is a perspective view of the rest. Fig. 5 is a modification of the same.

The object of my invention is to produce a strong and durable rest for shelves, which may be easily and quickly adjusted to any desired height, and which shall at the same time be so attached to and connected with the sides and the shelves that it will not occupy any of the book-space; and consists in the improvements hereinafter described.

The common form of adjustable shelf now in use consists of a wooden rack in each corner of the case, which receives the ends of a wooden cross-piece upon which the shelf rests. The racks and cross-pieces infringe upon the book-space to the extent of their thickness, while a slight upward movement of the shelf often allows the latter to drop entirely out. Again, in order to get the necessary strength, the rack-teeth are very coarse, which prevents a close adjustment, and frequently occasions a considerable loss of space.

I will now, for convenience, proceed to describe my invention in connection with a book-case, although it is also designed for shelves for holding merchandise and other articles as well as books.

A, Figs. 1 and 2, represents the perpendicular side of a book-case, upon the inner surface of which I make two perpendicular grooves, B, separated from each other a distance about equal to two-thirds the width of the shelf.

Within and upon one side of the groove B I place a metallic rack, C, as shown in Figs. 1, 2, and 3, and secure it by staples D or other equivalent means.

E, Figs. 1 and 4, is a pawl, which is placed within the groove B, and engages the rack C through its gravitation or the action of a

spring, F, attached thereto, the latter, however, not being necessary, but may be used with a better result.

G is a horizontal pin, projecting from the pawl E beyond the inner surface of the case upon which the shelf H rests, and which is received within a slot upon the under side of the latter.

I is an extension of the pawl E, which, coming in contact with the wood, offsets the leverage arising from the increased weight of metal at the other end, and prevents the pawl from dropping out when the pressure is entirely removed therefrom during the adjustment of the shelves, and which also serves as a lever to disengage the pawl. The pawl E may, if desired, be attached to the shelf by sinking the pin G below the surface upon the under side of the shelf, and closing the slot by a thin piece of metal attached to the shelf, or by the use of a simple staple driven over the pin G; and thus the shelf and support can be made to move together.

I have thus far described my invention as consisting of two perpendicular grooves upon the inner surface of each side of the case, each groove being provided with its rack and pawl, as described. A single groove, however, in each side of the case is sufficient where great strength is not required.

The pawl E, instead of having a projecting pin, G, is made with a horizontal cross-bar, J, as shown in Fig. 5, upon which the end of the shelf rests, which is cut away upon the under side to receive it.

It will now be readily observed that the rack C and the pawl E are within the surface of the side of the case, while the projecting pin G or cross-bar J, as the case may be, is let in flush with the under surface of the shelf, so that the book-space is not trespassed upon in either direction.

The rack C, being made of metal, enables me to obtain the requisite strength with teeth very fine, as compared with the wooden racks now in use, which secures a close adjustment of the shelves and saves any loss of space.

The spring F, while it throws the pawl E into engagement with the rack, is aided in the subsequent performance of its office by the weight of the shelf and the books or other

articles thereon, all of which has a tendency to retain it in its engaged position.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the grooved upright B, the pawl E, constructed with a projecting pin, G, or cross-bar J, the rack C, and the shelf

H, the whole constructed, arranged, and operating in the manner substantially as described.

SCOTT A. SMITH.

Witnesses:

WALTER B. VINCENT,  
JOS. T. RICH.