(No Model.)

C. EGGELSTON.

RATCHET BAR AND BRACKET SHELVING.

No. 246,875. Patented Sept. 13, 1881.

Fig. 1.

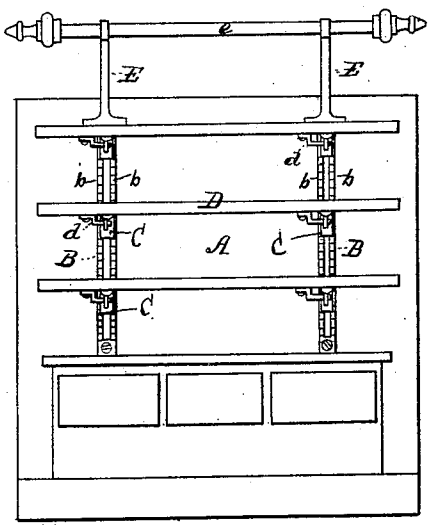


Fig. 2.

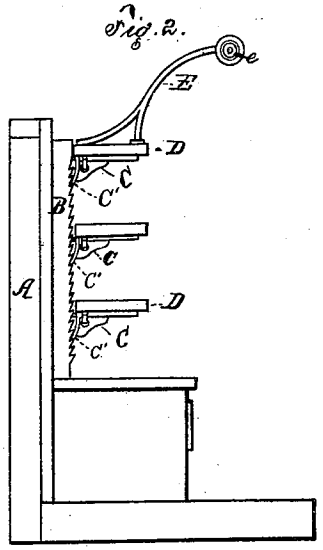
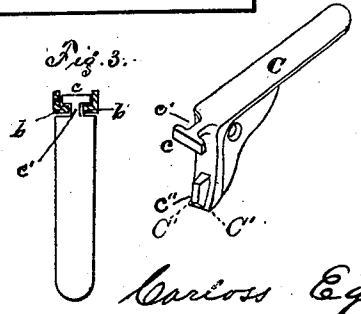


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

CARLOSS EGGELSTON, OF MACON CITY, MISSOURI, ASSIGNOR OF ONE-THIRD TO JOHN W. PATTON.

RATCHET-BAR AND BRACKET SHELVING.

SPECIFICATION forming part of Letters Patent No. 246,875, dated September 13, 1881.

Application filed January 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, CARLOSS EGGELSTON, of Macon City, county of Macon, State of Missouri, have invented a new and useful Improvement in Ratchet-Bar and Bracket Shelving; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the combinations of devices and appliances hereinafter described, and more fully pointed out in the claims.

In the drawings, Figure 1 is a front elevation; Fig. 2, a side view of a set of shelving embodying my invention; Fig. 3, separate views of ratchet-bar and bracket.

It is the object of my invention to produce a system of shelving constructed in such a manner that the shelves shall be rigid and yet easily moved at any time.

A is a wall or partition. B are the ratchet-bars. C are the brackets for holding the shelves. D are the shelves. *d* are cleats or ears; E, overhanging brackets; *e*, rod running across overhanging brackets E.

The ratchet-bars B are provided with teeth cut at such an angle that when the brackets C are raised up they will readily ride over the ratchet-bar B, although when they are raised to the required height and released they will immediately be caught by the angular upturned teeth and securely held in position. Any additional weight which may be added only serves to make the catch on the ratchet-bar B more secure.

Each of the upright ratchet-bars B is composed of two ratchets formed on the flanges *b* of the side pieces and separated by a sufficient space to admit the neck or shank *c'*, terminating in a cross-head, *c*, which takes behind said flanges, and may be moved up or down, as required.

The ratchet-bars B may be secured to wall or partition A by any suitable means. In the drawings it is shown screwed on, with the heads of the screws countersunk into the ratchet-bar B.

The bracket C is provided with an elongated end at the top, having a cross-head running crosswise, for the purpose of passing into the slot and holding the bracket in position. At the lower portion of the back part of the bracket, which takes an inward turn to more readily engage with the ratchets, is a small shoulder, *c''*, which also runs up and down in the space between the toothed flanges, for the purpose of steadying the bracket. The back portion of the bracket curves downwardly and rearwardly, terminating in edges and forming catches C' C' on opposite sides of the shoulder *c''*, as shown in Fig. 3, these catches being for the purpose of engaging the teeth of the ratchets.

The shelves D may be made of any suitable width or breadth, and may be rigidly secured to the brackets C by means of cleats or ears *d*, which are situated on the under side of the shelves and pass through holes or sockets formed in the upper part of the bracket C. On the upper side of the top shelf are situated overhanging brackets E, which may be made of a plain rod of iron, or any other suitable material. The ends are formed into sockets for the purpose of receiving rod *e*.

The rod *e* may be composed of wood, iron, or any desired material. It may be securely fastened to or be made a part of overhanging bracket E, or be simply rested within the sockets formed in the end of the same, and be used for suspending a curtain, or for the purpose of hanging articles to make a display in a store.

In shelving generally used in stores the great difficulty has been that when it was necessary to make a greater or smaller space between the shelves it is imperative to take away the brackets, which are usually only nailed to the wall or partition and nail them up at the required position. In my device, however, it will be seen that a shelf may be moved up and down without either removing the shelf or bracket by simply raising the front part of the shelf, which disengages the jaw at the bottom of the bracket from the teeth of the ratchet-bar, leaving it free to act in the manner desired, and it is not necessary to remove the article standing on the shelf when raising or lowering it.

The brackets are constructed in such a manner that they may be removed at will without taking down the ratchet-bar, so that in my device as many or few shelves may be used as desired.

This device is equally well adapted for the shelving in book-cases, pantries, &c., and will be found exceedingly convenient in such locations.

I am aware that in bracket-shelving a ratchet-upright has been provided with parallel longitudinal flanges having outwardly-turned lips embraced by a double claw formed on the inner end of a bracket-arm, from which arm another projects downwardly, and is provided with a catch to enter between the flanges and engage the ratchet-teeth of the upright, and I do not claim such invention.

In my invention the side pieces and ratcheted flanges inclose and conceal the device by which the bracket is mainly secured—viz., the cross-head—thus giving the shelving-supports a neat smooth edge-finish, the ratchet-teeth being exposed in front and easily dusted and cleaned. The brackets have a smooth movement up and down, from the fact that they are steadied both at top and bottom of their vertical arms, as the shoulder c'' need never be withdrawn entirely from between the flanges in moving the brackets, this shoulder being of such length that the catches may be disengaged from the ratchet-teeth without so withdrawing it.

What I claim is—

1. In bracket-shelving, the combination, with the upright bracket-supports composed of the bars B, having outwardly-projecting side pieces provided with the flanges *b*, projecting toward each other, and each of said flanges having ratchet-teeth formed on its outer surface, of the brackets composed of the arms C, each having a contracted shank or neck, c', fitting between the edges of the flanges and terminating in the cross-head *c*, which takes behind said flanges, and the downwardly-extending arm provided with catches to engage both the toothed flanges, substantially as described.

2. The combination, with the uprights consisting of bars B, having outwardly-projecting side pieces provided with the ratchet-flanges *b*, projecting toward each other, of the brackets, each composed of a horizontal arm, C, provided with the contracted shank or neck c', terminating in a cross-head, *c*, and the downwardly-projecting arm provided with catches to engage both of said ratcheted flanges, and near its lower end having the shoulder c'' arranged to enter between said flanges, substantially as described, and for the purpose set forth.

3. The combination, with the brackets provided with the holes or sockets, as described, of the shelves provided with the cleats or ears to engage in said holes or sockets, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

CARLOSS EGGELSTON.

Witnesses:
WILLIAM FORBES,
JOSEPH R. FORBES.