No. 679,003. Patented July 23, 1901.

W. S. McRAY.

DISPLAY RACK OR STAND.

(Application filed Jan. 4, 1901.)

(No Model.)

Fig. 1.

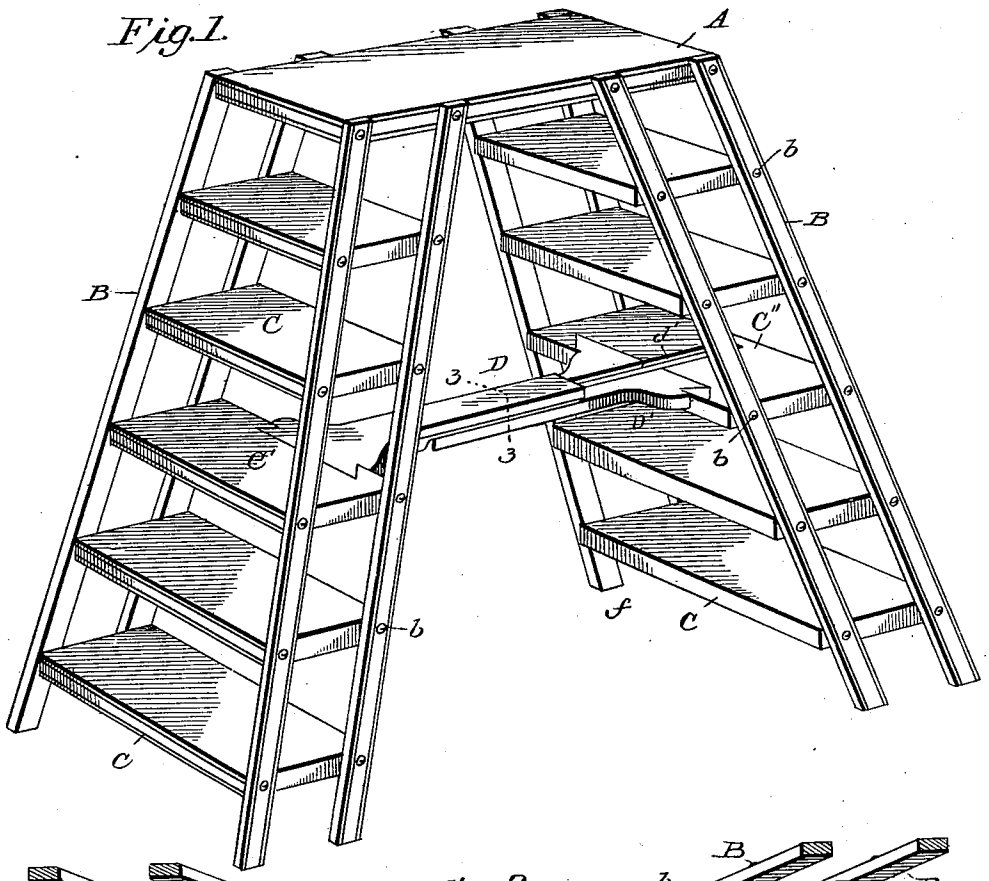


Fig. 2.

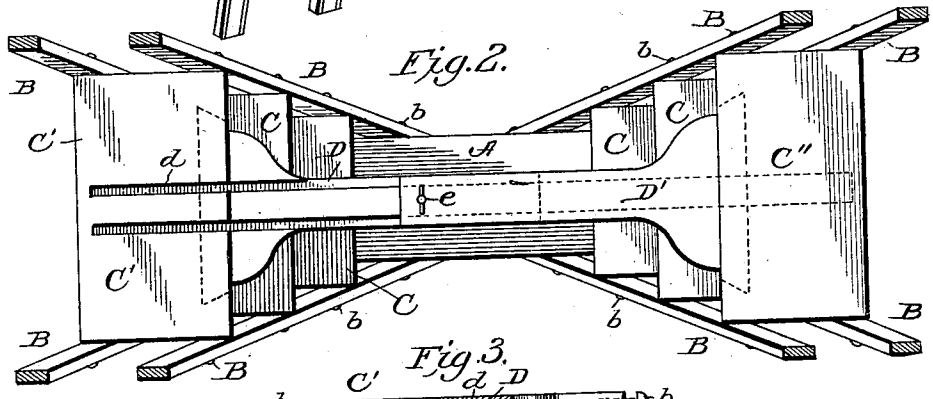
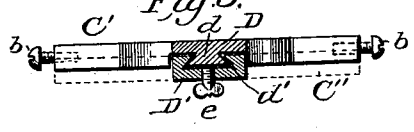


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM S. McRAY, OF COSMOPOLIS, WASHINGTON.

DISPLAY RACK OR STAND.

SPECIFICATION forming part of Letters Patent No. 679,003, dated July 23, 1901.

Application filed January 4, 1901. Serial No. 42,072. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. McRAY, a citizen of the United States, residing at Cosmopolis, in the county of Chehalis and State of Washington, have invented new and useful Improvements in Display Racks or Stands, of which the following is a specification.

This invention relates to certain new and useful improvements in display racks or shelves, one object being to provide a rack or stand with shelves which are arranged on opposite sides of a top, said shelves being connected to supporting bars or legs in such a manner that the elevation of the shelves may be varied and at all times will be maintained parallel with the top, to which the supporting-legs are secured.

A further object is to provide means whereby the side sections will be maintained at the same angle with respect to the top, which means includes a two-part locking-brace which coöperates with the sections to maintain the shelves horizontal or parallel with the top piece.

The invention consists in the construction and organization of the parts, as will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of a display-rack with shelves constructed in accord with my invention. Fig. 2 is an inverted plan view, partly in section, the section being taken through the legs beneath the shelves to which the brace is attached; and Fig. 3 is a detail sectional view on the line 3 3 of Fig. 1.

The upper or top shelf A is rectangular, and to the longer edges there are pivoted the upper ends of the supporting-bars B B, there being four similar bars on each side. To the supporting-bars at equal distance from each other are attached, by means of bolts or screws *b b*, shelves C, which shelves increase in length from the top one downward, so that the supporting-bars which are attached to the shelves will converge from their lower ends to the top. It will be noted that on each side of the transverse center of the top the supporting-bars and shelves are of like construction and that when the inclination of the supporting-bars is changed the shelves will be kept parallel with the top or horizontal, if the floor is level. In such structures there is nothing to prevent the legs or supporting-bars being placed at different angles, which would cause an inclination of the top and shelves. To overcome such objection, I attach to the intermediate shelves C′ C″ locking bars or braces D D′, one of the bars having a dovetailed tenon *d* and the other one a dovetailed recess *d′*, the tenon and recess extending to points near the outer edges of the shelves C′ C″, so that the ends of the slide-bars may abut against the ends of the mortise and tenon. The slide-bars D D′ are held in frictional contact with each other and operate to keep the side sections at the same inclination, as well as preventing them from spreading. The construction is such that as soon as the parallelism of the shelves is varied the bars lock and prevent one section moving irrespective of the other. The rack can be extended or closed by applying pressure thereto on the same horizontal plane. One of the slide-bars may be provided with a set-screw *e* for increasing the friction between the bars or for positively locking them when desired, and if a movable rack or frame is wanted casters can be attached to the lower ends of the legs or supporting-bars.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A display-rack comprising a top shelf, side sections consisting of shelves and diverging bars to which the shelves are pivoted, the upper ends of the bars of each side section being pivoted to the top shelf on opposite sides of the transverse center of said shelf, and bars which are in sliding engagement one with the other to be maintained in line with each other, the sliding bars being rigidly attached to corresponding shelves of the opposite side sections, substantially as shown.

2. In adjustable shelves, in combination with a top or rectangular upper shelf, of two similarly-constructed side sections each section having parallel supporting-legs which are pivoted at their upper ends to the upper shelf, shelves which are pivoted to the legs, and slide-bars which engage one with the other, said slide-bars being rigidly attached

to opposite shelves, to insure a corresponding inclination of each section, substantially as shown.

3. A display-rack comprising side sections having parallel side bars and shelves which are pivoted to their respective side bars, a top shelf to which the side bars are pivoted, slide-bars rigidly attached to opposite shelves to be maintained in alinement one with the other, one of the shelves and the slide-bar attached thereto having a dovetailed recess, the other shelf and its slide-bar on its opposite side having a dovetailed tenon, and a clamping means carried by one of the bars to engage the other one, substantially as shown and for the purpose set forth.

4. In adjustable shelves, similar side sections consisting of movable shelves and supporting-bars, a top piece to which both of the side sections are attached, an intermediate shelf of each section carrying a bar, one of said bars and the shelf to which it is attached having a dovetailed recess the opposite shelf and bar having a dovetailed tenon, for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM S. McRAY.

Witnesses:
LEWIS M. ROSER,
W. S. McLAUGHLIN.