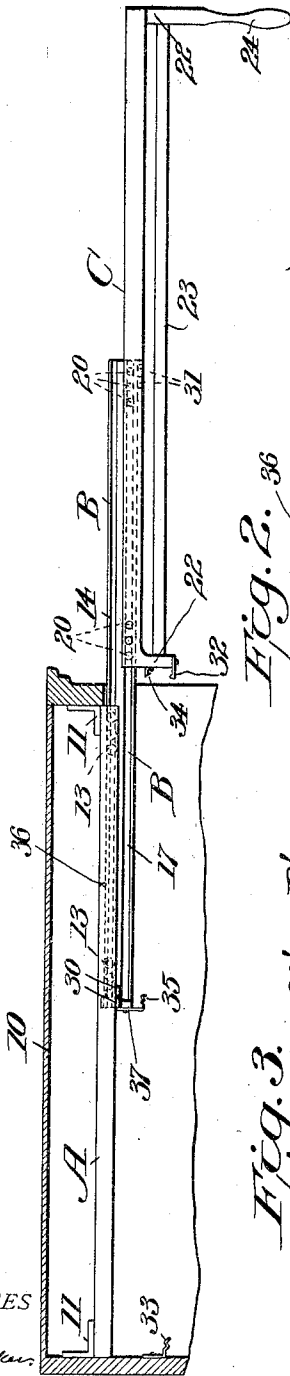


1,005,055.

Patented Oct. 3, 1911.

Fig. 1.



WITNESSES

C. M. Macken
Elmer King

Fig. 4.

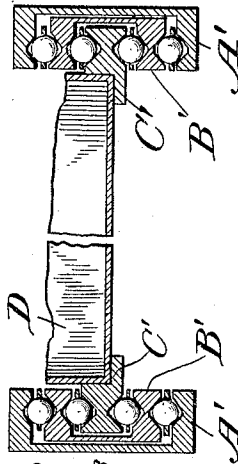


Fig. 2.

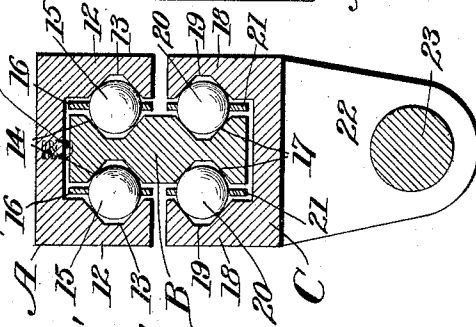
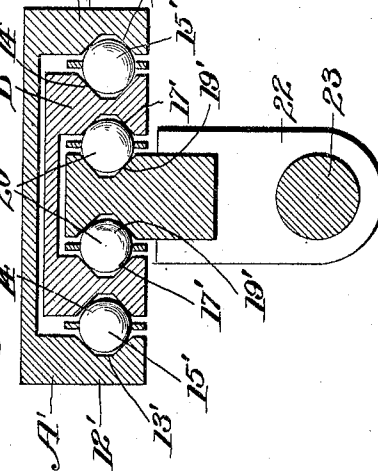


Fig. 3.



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SUPPORTING-GUIDE.

1,005,055.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed June 13, 1911. Serial No. 632,975.

To all whom it may concern:

Be it known that I, ANDREW E. MILLER, a subject of the King of Great Britain, residing at Baltimore city and State of Maryland, have invented new and useful Improvements in Supporting-Guides, of which the following is a specification.

This invention relates to certain new and useful improvements in supporting guides, and pertains more particularly to that class of guides employed in display racks for supporting the goods to be displayed, although I do not desire to limit myself to this specific use.

One of the objects of the invention is to provide an improved telescoping supporting guide so constructed that the weight is equally distributed as the various telescoping members are moved inwardly and outwardly, whereby the parts will move smoothly and without sticking, requiring but little power to move them in either direction even when heavily laden with garments, or other articles.

A further object is to provide improved means for so connecting the several telescoping members that they move in unison until each successive member reaches the limit of its movement, and for arresting the movement of the successive members without interfering with the movement of the remaining members.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawing:—Figure 1 is a partial sectional view of a display case illustrating my invention as applied to a clothes rack. Fig. 2 is a cross sectional view illustrating the rack in closed position. Fig. 3 is a similar sectional view illustrating a slight modification. Fig. 4 is a view illustrating my improved supporting guide employed as a drawer guide.

Referring to the drawing, 10 designates a case, such as is commonly employed in clothing stores for the storage and display of ready made clothing, the same being of any suitable or preferred construction.

I have illustrated in Fig. 1, a guide comprising three telescoping members A, B and C. The member A comprises a strip of metal, or other suitable material of approximately inverted U-shape rigidly secured at each end to the walls of the case 10 by means of brackets or other supports 11.

The depending walls 12 of the member A are provided with internal grooves 13 which cooperate with similar grooves 14 formed in the outer faces of the member B to form ball races. Antifriction balls 15 engaged by suitable cages 16 are located in said ball races and tend to reduce the friction of the parts when they are moved relative to each other. The member B consists of a solid bar, approximately rectangular in cross section, and in addition to the grooves 14 is provided with similar grooves 17 in its outer face. The member C is U-shape in cross section, the side members thereof, indicated at 18, being provided with longitudinal grooves 19 which cooperate with the grooves 17 to form races for the balls 20, which are also engaged by cages 21. The member C is provided at each end with a depending bracket portion 22 supporting a rod 23 upon which garment hangers are usually placed, a handle 24 being provided to move said member back and forth with relation to the case 10.

The outward movement of member B with relation to the member A is limited by complementary stops 30, and similar stops 31 are provided to limit the outward movement of member C with relation to member B. The inner end of member C is provided with a spring catch 32 which engages a complementary member 33 secured to the rear wall of the case 10. The rear end of member C is also provided with a second catch 34 which engages a complementary member 35 on the rear or inner end of member B. The catch 34, however, is somewhat stronger than the catch 32 so that more force is required to disengage the former from its complementary member, than would be required to disengage the latter catch.

In operation, garments are suspended from the rod 23 in the usual manner, and when it is desired to display them to a customer the handle 24 is grasped and the member C drawn out. The catch 34 being stronger than the catch 32, the latter is disengaged from its member 33, and the member B moves outward with the member C. When the stops 30 come in contact, however, outward movement of the member B is arrested and the catch 34 will then be disengaged from member 35, whereupon the member C will continue to move out until the stops 31 come in contact. By moving the members B and C together, the weight of the

parts or elements to be supported is evenly distributed throughout the members A, B and C, and hence the members will slide outwardly with perfect smoothness and without sticking or binding in any manner. The antifriction balls also serve to so reduce the friction of the parts that but little power is required to move said members. When the member B reaches the outer limit of its movement it is engaged by a spring catch 36 strong enough to resist the frictional pressure of member B caused by the inward movement of the member C. As the member C moves inward the inner end thereof engages a stop 37 carried by member B, whereupon sufficient force may be exerted against member B to move the latter inward. As the members move inward the catches 32 and 34 engage their complementary members and the parts of the slide are retained within the case against accidental withdrawal.

In Fig. 3 I have shown a slight modification in which the member C' is in the form of a bar approximately rectangular in cross section, and the members A', B' are each in the form of inverted U-shape bars. The depending walls 12' of the member A are provided with internal longitudinal grooves 13' cooperating with external longitudinal grooves 14' in the member B'. The side walls of the member B' are provided with internal grooves 17' which cooperate with grooves 19' in member C. Said grooves form races for balls 15' and 20'. The operation is substantially the same as in the form illustrated in connection with Fig. 1.

In Fig. 4 I have illustrated a construction similar to that illustrated in Fig. 3 in connection with a drawer. In lieu of providing the member C with a rod to support garment hangers, the body of the drawer D is rigidly secured to the member C', there being one guide on each side of the drawer.

Having thus explained the nature of my invention and described an operative manner of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the forms of its use, what I claim is:—

1. A supporting guide comprising supporting, intermediate, and outer members in sliding telescopic arrangement, stops for limiting the relative outward movement of the intermediate and outer members, and

means for interlocking the intermediate and outer members until the intermediate member reaches the outer limit of its movement, said interlocking means being constructed to permit continued movement of said outer member after the intermediate member reaches the outer limit of its movement.

2. A supporting guide comprising supporting, intermediate, and outer members in sliding telescopic relation, means for interlocking the intermediate and outer members until the intermediate member reaches the outer limit of its movement, and means for preventing inward movement of said intermediate member until the latter is interlocked with the outer member.

3. A supporting guide comprising supporting, intermediate, and outer members in sliding telescopic relation, complementary catch members carried by the inner ends of said intermediate and outer members, whereby said members are interlocked until the intermediate member reaches the outer limit of its movement, and complementary stops carried by said members for effecting disengagement of said catch members, whereby continued movement of outer member is permitted after the intermediate member reaches the outer limit of its movement.

4. In a supporting guide, the combination with a case, of a supporting member mounted in said case, intermediate and outer members in telescopic relation with said supporting member and with each other, complementary catch members carried by the inner end of the outer member and the rear wall of said case, additional complementary catch members carried by the inner ends of said intermediate and outer members, the last mentioned catch members being stronger than the first mentioned catch members, and complementary stops carried by said members for effecting disengagement of the complementary catch members carried by the intermediate and outer members.

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

ANDREW E. MILLER.

Witnesses:

MARY M. WIMMER,
ROBERT H. CARR.