

May 12, 1942.

A. VANDERVELD
GARMENT SUPPORTING RACK

2,282,836

Filed March 25, 1941

2 Sheets-Sheet 1

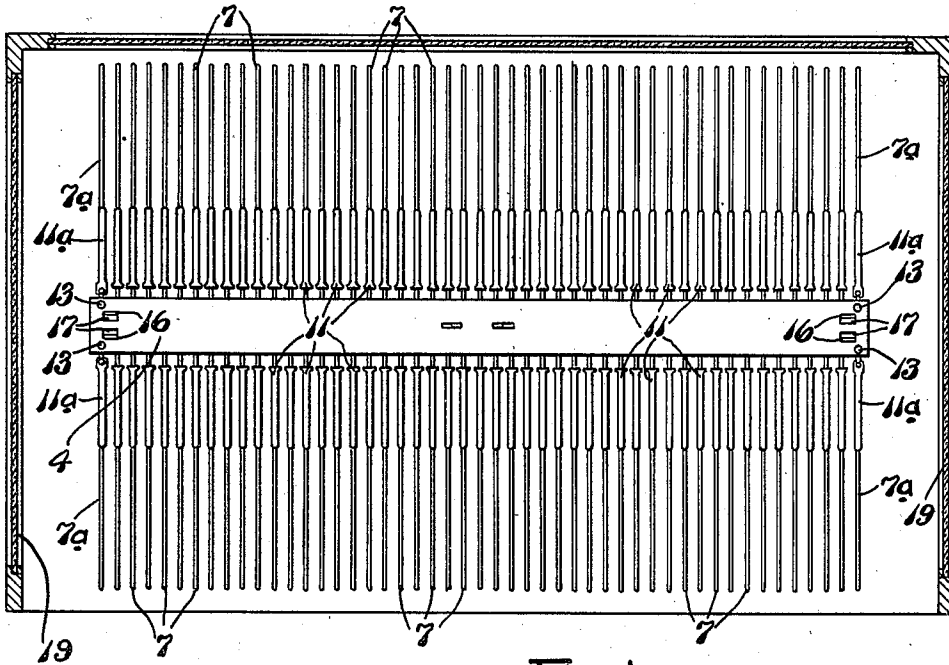


Fig. 1.

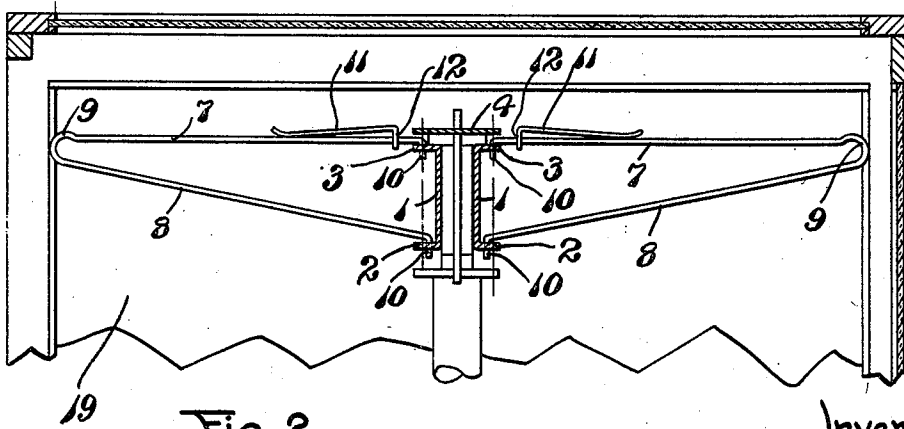


Fig. 2.

Inventor
Anthony Vanderveld
By S. Liverance and
Van Antwerp
Attorneys

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2 Sheets-Sheet 2

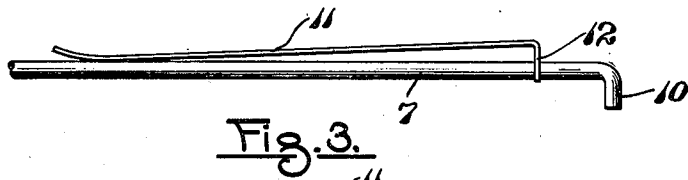


Fig. 3.

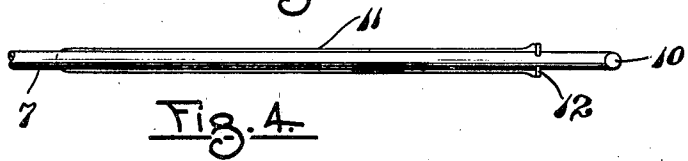


Fig. 4.

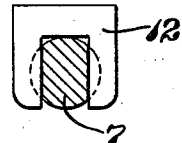


Fig. 5.

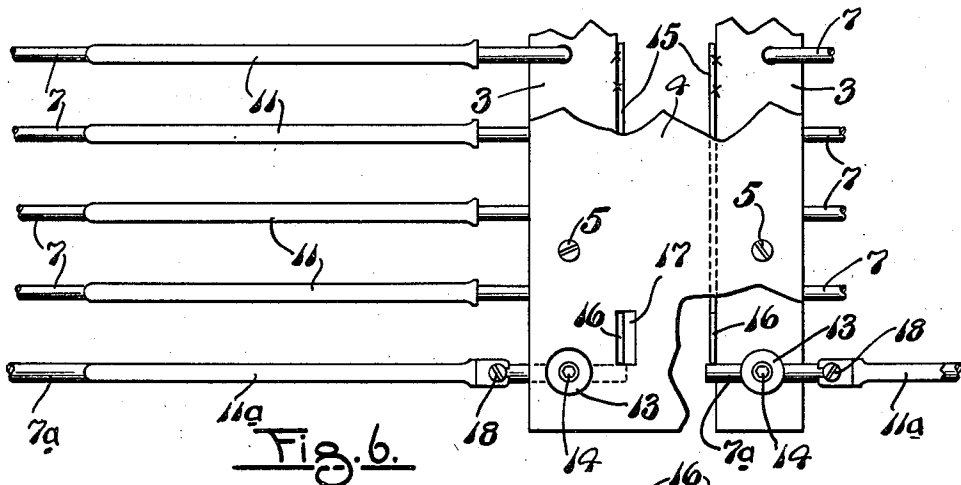


Fig. 6.

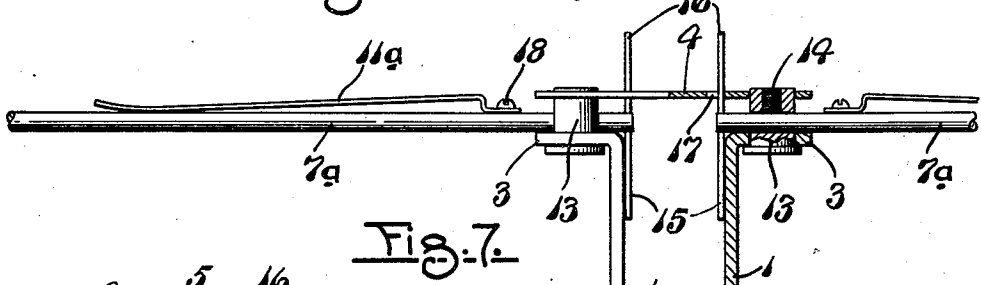


Fig. 7.

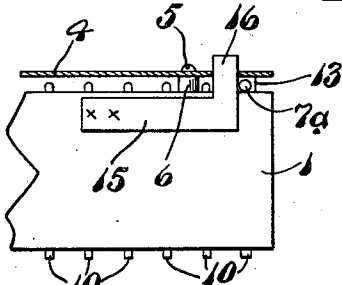


Fig. 8.

Inventor
Anthony Vanderveld
By Lucas and Van Antwerp
Attorneys

UNITED STATES PATENT OFFICE

2,282,836

GARMENT SUPPORTING RACK

Anthony Vanderveld, Grand Rapids, Mich., assignor to Grand Rapids Store Equipment Company, Grand Rapids, Mich., a corporation of Michigan

Application March 25, 1941, Serial No. 335,102

5 Claims. (Cl. 211-168)

This invention relates to racks adapted to be mounted in cases or cabinets for bodily forward and rearward movement, the racks having a plurality of spaced garment holding arms or brackets which are mounted for swinging movement about vertical axes on a supporting member extending longitudinally of the case or cabinet. One form of such type of rack is shown in my application, Serial No. 382,034, filed March 6, 1941.

The present invention is concerned with a novel construction for controlling the movements of the end garment supporting arms or brackets to maintain them against a lateral swinging movement which would engage with the ends of the case or cabinet in which the rack is movable and which holds the garment brackets or arms against such movement, said holding means being releasable to permit the swinging movement thereof when the rack has been projected outward from the case to allow the spaced and closely adjacent garment supporting arms to swing open or spread for access to the garments for inspection or removal. When the rack is retracted into the case or cabinet however said end arms or brackets are held against movement toward the ends of the case or cabinet beyond a position at least in which they are substantially parallel thereto.

Further objects and purposes of the invention are to provide simple, novel and practical means for effectively and economically attaining the ends stated.

An understanding of the invention may be had from the following description taken in connection with the accompanying drawings, in which,

Fig. 1 is a plan view of a garment holding rack to which my invention has been applied showing it located within a show case having parallel vertical ends.

Fig. 2 is a fragmentary vertical section from front to rear of the rack and show case.

Figs. 3 and 4 are respectively side elevations and under plan views of the upper horizontal section of each of the intermediate garment supporting brackets.

Fig. 5 is an enlarged transverse section illustrating the manner in which a spring holding clip is mounted on each of said arms.

Fig. 6 is a fragmentary enlarged plan view of one end of the garment holding rack of Fig. 1 with certain parts broken away for better disclosure.

Fig. 7 is a fragmentary end elevation of the

rack with certain parts broken away and in section, and

Fig. 8 is a fragmentary elevation at one end of the rack showing the releasable latch for holding the end garment holding brackets in desired position.

Like reference characters refer to like parts in the different figures of the drawings.

The rack is of the type shown in my previously mentioned application in which the rack is not only bodily movable inward and outward with respect to the show case but is rotatable at its forward position. The rack mounted at the upper portion of the show case includes two spaced channel bars having parallel vertical webs 1, lower flanges 2 and upper flanges 3, the flanges 2 and 3 on the two channel bars extending oppositely from each other. These bars are secured together in any suitable manner as shown in my prior application by connection to the upper end of a revolvable shaft. Over the upper channels 3 an elongated thin horizontal plate 4 is mounted and permanently secured in spaced relation thereto by means of screws or bolts 5 passing downwardly therethrough and through spacing sleeves 6 (Fig. 8).

A large number of garment supporting brackets are pivotally mounted on the flanges 2 and 3 of the bars. Said garment supporting brackets are made from a length of wire rod formed with an upper horizontal section 7 and a lower downwardly and inwardly inclined section 8, said sections being integrally connected at their outer ends by a bend at 9. The lower sections 8 on all of the brackets are provided with downturned fingers 10 to pass through openings in the lower flanges 2 of the main supporting channels. Similarly all of the sections 7 of the garment supporting brackets except those at the ends are formed with downturned fingers 10 to pass through similar vertical openings in the upper flanges 3. The garment supporting brackets therefore are pivotally mounted and may have swinging movements about vertical axes. The upper fingers 10 are set forward a short distance ahead of the lower fingers of the intermediate brackets, whereby such intermediate brackets will tend to stay at right angles to the channel bar mounting therefor, and will return to such positions after being moved away therefrom.

The garments, such as pants or the like, are adapted to be folded over the upper sections 7 and retained thereon by spring clips 11, each at its inner end having a downwardly turned bifurcated end section 12 which straddles the part

7 of its respective brackets and is received in narrow slots cut in opposite sides thereof as shown in Fig. 5.

The end supporting brackets made from heavier wire rod have upper sections 7a which are not provided with the downturned fingers 10 at their free ends but instead are continued to pass over the upper side of flanges 3. A headed interiorly screw threaded bushing 13 at each end of each flange 3 is inserted upwardly through an opening therein, and the inner portions of the parts 7a pass through horizontal openings made through the bushings and are locked to said bushings by set screws 14 screwed into the upper open parts of the bushings as shown in Fig. 7. The vertical axes of the bushings 13 are coincident with the axes of the vertical fingers 10 on the lower sections 8 of the end garment supporting brackets.

At the inner side of and at each end of each web 1 of the channel bar supports spring latches made from flat spring metal are attached, each including a horizontal arm 15 and a vertically extending finger 16. The latch members are welded to associated channel webs 1 at the ends thereof opposite the fingers 16, said fingers 16 extend upwardly through openings 17 in the plate 4. The openings 17 are wider than the thicknesses of the metal from which the latches are made whereby the fingers may be pulled or sprung toward each other. The free ends of the upper sections 7a of the garment holding brackets or arms normally pass by the outer edges of the fingers 16 so that said arms cannot be swung outwardly because of stops interposed by said fingers 16. When the latches are manually operated to move said fingers 16 toward each other and thereupon disengage them from the ends of the parts 7a outward swinging movement of the garment supporting members is permitted. The spring retaining clips 11a similar to the clips 11 on the other garment supporting arms or brackets are connected by means of screws 18 instead of using the divided downwardly turned end 12 of the other clips 11.

The rack shown in Figs. 1 and 2, as described in my pending application above mentioned, is bodily movable inward and outward with respect to the show case in which it is mounted. Said show case has vertical ends 19. During such bodily movement the end garment supporting members or brackets are held against swinging outward and are maintained in a position such that they cannot interfere with or engage against the ends of the show case or against doors which may be retracted into the show case. But when the rack has been moved to its forward position and it is desired to spread the garment holding members the latch fingers at 16 for the front garment supports at each end of the rack are pushed rearwardly, releasing the end garment supporting brackets for such spreading purpose. While the invention is shown in conjunction with a rotatable rack, on which there are two of the supporting channels and two series of garment supporting brackets or arms, it is evident that a single garment supporting channel bar with one series of garment supporting brackets or arms thereon may be mounted in a case for inward and outward bodily movement, and that the invention is not restricted in use to rotating racks but it adaptable for use primarily on racks which are bodily movable inwardly and outwardly with respect to an enclosing case or cabinet.

This invention has proven practical and successful commercially. It is strong, durable and efficient, and economical to produce.

The invention is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

1. A rack construction comprising, an elongated channel bar having a vertical web and upper and lower horizontal flanges, a plurality of brackets pivotally mounted on the flanges of said channel bar and normally extending at right angles thereto, said brackets including two end brackets, one at each end of the bar, spring latches secured one at each end and at the upper portion and at the side of the channel bar opposite the upper flange thereof, said latches being manually movable away from the channel bar, and each of said end brackets having a part normally extending to and engaging against an edge of its associated latch, thereby holding the end brackets against swinging movement in a direction beyond the ends of the channel bar, said spring latches when manually moved away from the channel bar to thereby disengage from said end brackets to permit said swinging movement.

2. A rack comprising, an elongated channel bar adapted to be disposed lengthwise of the case or cabinet having a vertical web and upper and lower horizontal flanges, end brackets having lower pivot fingers passing through the lower flange of said channel bar and having upper horizontal portions above and extending across the upper flange and to a short distance back of the rear side of the web of the channel bar, means pivotally connecting said upper portion of the bracket to said upper flange, and a member of spring material secured adjacent one of its ends to the rear side of the channel bar at a distance from each end bracket and extending to and coming against a side of said upper portion of the bracket to hold it against pivotal movement in a direction beyond the adjacent end of the channel bar, said spring members being manually movable at their free end portions away from the channel bar to release their associated end brackets.

3. In a construction of the class described, a horizontal channel bar having a vertical web and horizontal flanges, an end bracket at each end of the channel bar made from wire rod having an upper horizontal section and an inclined lower section, said sections being connected together at their outer ends, said horizontal section lying across and extending over said channel bar, an integral downturned finger at the inner end of the lower section passing through an opening in the lower flange of the channel bar, a headed bushing extending through the upper flange of the channel bar having a horizontal opening therethrough through which the rear portion of the upper section of the bracket passes, means for securing the bushing and said upper section of the bracket in adjustable relation to each other, whereby the rear end of the upper section may be adjusted to extend a short distance back of the rear side of the channel bar, and a flat member of thin spring material permanently secured to the rear side of the channel bar web at a distance from said upper section of the bracket, and extending to and engaging against a side and at the rear end thereof, said member being yieldable upon pressure against its forward side for

rearward movement to a position back of the rear end of the upper section of the bracket.

4. A rack construction comprising two spaced apart connected horizontal bars, a series of brackets pivotally mounted on each of the bars and extending normally at right angles therefrom, the series of brackets on each of the bars each including two end brackets, each of which has a horizontal portion extending over the upper side of its associated bar, a horizontal plate mounted above and spaced a short distance from the upper sides of said bars, said plate having openings therethrough, and yieldable manually operable latches connected to said bars in operative holding relation to the end brackets having portions extending upwardly through openings in the plate for manual engagement, whereby the

latches may be moved to release them from said end brackets, the latches when engaged with the end brackets holding said brackets against swinging movement in a direction beyond the ends of the bars.

5. A rack comprising, a horizontal bar, a plurality of bracket arms extending outwardly therefrom to support garments thereon, a straight slot adjacent the inner end of each bracket on each opposite side thereof, and a spring clip, the inner end of said clip being bent downwardly and bifurcated and received in said slots, the inner side walls of the bifurcated portions being straight and the remainder of the clip adapted to retain garments on said brackets.

ANTHONY VANDERVELD.