ABSTRACT OF THE DISCLOSURE

The present invention relates broadly to supporting assemblies and more specifically to adjustable height clothes racks and like articles.

There have been many different types of clothes racks designed and used in the past, with most of them being of fixed height construction, and many not rigidly braced to solidly hold varying quantities of items such as suits, coats, and dresses, and especially so when there is a need for adjustable height racks to ideally hold either short or long items on clothes hangers. It was a recognition of this problem and the need of a commercial solution to same which led to the conception and development of the present invention.

Accordingly, among the objects of the present invention is the provision of an improved, stable, adjustable height rack for clothes and the like.

Another object is to provide a clothes rack of simplified construction permitting same to be readily adjusted in vertical height by two persons, simultaneously working with one at each end of same.

Another object is to provide an adjustable clothes rack having upper and lower main portions with the upper portion having downwardly extending tubular members telescopically and adjustably fitting upwardly extending tubular members of the lower portion which is adapted to rest on the floor.

A further object is to provide a clothes rack having upper and lower telescoping main portions, with the lower or floor contacting portion being of braced construction to substantially overcome both endwise and sidewise swaying without interfering with the height adjustability of the assembly.

A further object is to provide the telescoping tubular members of the rack assembly with latching means permitting uniform height adjustment of the overall assembly.

Still further objects and advantages of the invention will appear as the description proceeds.

To the accomplishment of the foregoing and related ends, the invention, then, consists of the adjustable height rack means and features hereinafter fully described and particularly pointed out in the claims, the annexed drawings and the following description setting forth in detail certain illustrative embodiments of the improved rack of the present invention, such disclosed embodiments illustrating, however, but one of various ways in which the principle of the invention may be used.

In the annexed drawings:

FIGURE 1 is a front elevation view of the rack assembly shown in FIGURE 1.

FIGURE 3 is an end elevation view of the lower portion of the rack assembly of the present invention.

FIGURE 4 is a fragmentary sectional view of one of the latching members of the rack assembly, as taken along line IV—IV of FIGURE 2, looking in the direction of the arrows.

FIGURE 5 is a fragmentary sectional view of one of the latching members of the rack assembly, as taken along line V—V of FIGURE 2, looking in the direction of the arrows.

FIGURE 6 is a partially sectioned view of the rack assembly, as taken along line VI—VI of FIGURE 2, looking in the direction of the arrows.

FIGURE 7 is a partially sectioned view of the rack assembly as taken along line VII—VII of FIGURE 2, looking in the direction of the arrows.

FIGURE 8 is a perspective view of the rack assembly of the present invention, on a reduced scale.

Referring more particularly to FIGURES 1, 2 and 8 of the drawings, it will be noted that the rack assembly utilizes two main sub-assemblies with one being the lower frame assembly 11 and the other being the upper frame assembly 12, the ends of which telescopically and adjustably fit each other.

The lower frame assembly 11 has four parallel, preferably tubular, upright corner legs 13 with a pair of same at each end of said frame assembly. The lower end of each of the legs 13 is preferably provided with a caster 14, which, for stability and yet ready movability, is preferably of the sliding type. Rigidly joining the lower end portion of each end pair of the legs 13 is a lower crossbar 15, and likewise rigidly joining the upper ends of the same pair of legs 13 is an upper crossbar 16. These rigidly joined upper and lower crossbars 15 and 16 stabilize the lower frame assembly 11 against forward and back sway. The upper crossbars 16, substantially mid-length of same, are joined by a connecting bar 17, FIGURES 1 and 8, which extends full length of said lower frame assembly 11, and is preferably rigidly joined to said upper crossbars 16, as by welding. Substantially mid-length of same, are joined by a connecting bar 17, FIGURES 1 and 8, which extends full length of said lower frame assembly 11, and is preferably rigidly joined to said upper crossbars 16, as by welding. Substantially mid-length of same, are joined by a connecting bar 17, FIGURES 1 and 8, which extends full length of said lower frame assembly 11, and is preferably rigidly joined to said upper crossbars 16, as by welding. Substantially mid-length of same, are joined by a connecting bar 17, FIGURES 1 and 8, which extends full length of said lower frame assembly 11, and is preferably rigidly joined to said upper crossbars 16, as by welding. Substantially mid-length of same, are joined by a connecting bar 17, FIGURES 1 and 8, which extends full length of said lower frame assembly 11, and is preferably rigidly joined to said upper crossbars 16, as by welding. Substantially mid-length of same, are joined by a connecting bar 17, FIGURES 1 and 8, which extends full length of said lower frame assembly 11, and is preferably rigidly joined to said upper crossbars 16, as by welding.
extending parallel legs 23 connected to the ends of same. These legs 23 telescopically and slidably fit corner legs 13 of the lower frame assembly 11. The adjacent side faces of each pair of legs 23 are preferably provided with the aforementioned slots, FIGURES 4, 5 and 6, for slidably receiving the ends 19, FIGURE 3, of upper crossbar 16 to permit adjustment of the height of the overall rack assembly 10.

Now referring to FIGURES 2, 4 and 5, it will be noted that the downwardly extending legs 23 are each provided symmetrically with each other with a uniformly spaced, symmetrically parallel series of holes 24 for use in adjustment of the height of the rack assembly 10 as will be now described. As shown in FIGURES 4 and 5, corner legs 13 of the lower frame assembly 11 are provided, near the upper end of same, with a hole 25 adapted to be aligned with any one of the series of holes 24 in the corresponding legs 23. Projecting through this hole 25 is a rounded end cylindrical member 26, projected outwardly by a mild compression leaf spring 27, to which member 26 is conventionally fastened. Said cylindrical member 26 and leaf spring 27 form a so-called "bullet" catch assembly 28 which can be readily depressed to facilitate adjusting the height of rack assembly 10.

Adjacent the ends of crossbar 22, FIGURES 1, 2 and 8, the downwardly extending legs 23 are provided with a pair of supporting bars 29 extending full length of upper assembly 12 for use in supporting clothes hangers (not shown) or the like. It is thus to be seen that crossbars 15 and 16 rigidly fastened to corner legs 13 brace the assembly against forward and back sway, while connecting bar 17 and brace members 18 in combination with lower and upper crossbars 15 and 16 brace the assembly against endwise sway all without interfering with the height adjustability of the overall rack assembly 10.

To adjust the height of the rack assembly 10, a person stands at each end of same with both hands grasping the opposite side legs 23 of the upper frame assembly 12 at the points having the bullet catch assembly 28. With both persons simultaneously doing this they depress the cylindrical members 26 on all four legs, and if the rack is to be raised, both then move the upper frame assembly 12 upward. During this movement the outer end of cylindrical member 26 of the bullet catch assembly 28 slides along the inner face of the corresponding outer leg 23 and stops into the next hole 24 when it is reached. If the holes 24 are three inches apart then the rack top will have been raised three inches, and should this not be enough elevation of the top of the rack, then the same procedure is followed again until the desired height is attained. The same plan is also followed in reducing the rack height except that the upper frame assembly 12 is lowered instead of being raised when the cylindrical members 26 are depressed.

It will be seen from the above that a simple and relatively inexpensive yet practical and durable rack means has been disclosed for attaining the desired ends. Attention shall be given to the possibility of making variations to the specific construction illustrated, all within the spirit and scope of the invention set forth. Also directional terms such as "upper," "lower," et cetera, have been used to facilitate describing and explaining the stability and adjustability of the rack in the position shown in the drawings and are not to be considered as limiting the invention.

Other modes of applying the principle of my invention may be employed, instead of the one explained in detail, change being made as regards the rack and combinations herein disclosed, provided the means and features stated in any of the following claims or the equivalent of such stated means and features be employed.

I therefore particularly point out and distinctly claim as my invention:

1. An adjustable height garment rack and the like, which has garment hanger supporting means at its top portion and which comprises in combination a lower frame assembly; an upper frame assembly; two pairs of upright supporting legs forming part of said lower frame assembly; means for bracing said lower frame assembly, including crossbars fastening together the legs of said pairs; said upper frame assembly having tubular legs forming part of same, said legs being concentric with said lower frame legs, telescopically fitting over same, and depending below said lower frame crossbars; means for sliding said depending legs past said crossbars as said depending legs are adjusted upwardly and downwardly, thereby latching means adjusly connecting said upper and lower frame assembly legs for use in varying the overall height of said rack.

2. A rack as set forth in claim 1, wherein said lower frame assembly pairs of upright legs are in spaced apart substantially parallel relationship and include both lower and upper crossbars fastening together said pairs, said bracing means of said lower frame assembly being connected to said lower and upper crossbars of both pairs of legs.

3. A rack as set forth in claim 2, wherein said bracing means of said lower frame assembly also includes a connecting bar joining together said upper crossbars of said two pairs of upright legs, and a pair of upwardly and angularly extending braces being connected to said upper and lower crossbars, the second of said upwardly and angularly extending braces being fastened substantially centrally of said lower crossbar of the other pair of upright legs and the other end of said brace being connected substantially centrally of the connecting bar extending between said upper crossbars, the second of said upwardly and angularly extending braces being fastened substantially centrally of the lower crossbar of the other pair of upright legs and the other end of said second angularly extending brace being connected substantially centrally of said connecting bar extending between said upper crossbars.

4. An adjustable height garment rack and the like, which has garment hanger supporting means at its top portion and which comprises in combination a lower frame assembly; an upper frame assembly; two pairs of upright supporting legs forming part of said lower frame assembly; said upper frame assembly having depending tubular legs forming part of same; said upper frame assembly legs being concentric with said lower frame legs and telescopically fitting over same; latching means adjusly connecting said upper and lower frame assembly legs for use in varying the overall height of said rack; said pairs of legs being in spaced apart substantially parallel relationship; lower and upper crossbars fastening the legs of each pair together; bracing means for said lower frame assembly connected to said lower and upper crossbars of both pairs of legs; said depending legs of said upper frame assembly which telescopically fit each of said upright legs of said lower frame assembly having a slot on their angular sides in which the end portions of said upper crossbar of said lower frame assembly can freely move lengthwise of said slots, said latching means cooperating with symmetrically located openings in said legs, so that by simultaneously operating said latching means on all of said legs, the height of the overall assembly may be varied.

5. A rack as set forth in claim 4, wherein said bracing means of said lower frame assembly also includes a connecting bar joining together said upper crossbars of said two pairs of upright legs, and a pair of upwardly and angularly extending braces with the lower end of one of said braces fastened substantially centrally of said lower crossbar of said two pairs of upright legs and the other end of said brace being connected substantially centrally of the connecting bar extending between said upper crossbars, the second of said upwardly and angularly extending braces being fastened substantially centrally of the lower crossbar of the other pair of upright legs and the other end of said second angularly extending brace being connected substantially centrally of said connecting bar extending between said upper crossbars.
of the lower crossbar of the other pair of upright legs and the other end of said second angularly extending brace being connected substantially centrally of said connecting bar extending between said upper crossbars.

6. A rack as set forth in claim 5, wherein said corner legs of said upper frame assembly are of substantially rectangular tubular form with each one provided with a series of symmetrically located and spaced holes extending in a row lengthwise of the side of same adjacent said slot and on the face forming an outer end of said rack, each of said corner legs of said lower frame assembly also being of substantially rectangular form and having a hole in alignment with said holes in said upper frame assembly corner legs, said holes in said legs of said lower frame assembly being near the top of same and substantially equally spaced from the bottom of said legs, said latching means having a cylindrical member of a size to fit said hole in the inner frame leg and one of the holes in said upper frame leg when in alignment, and a mild spring means within said inner leg and fastened to said cylindrical member to project said cylind-
UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,508,666 Dated April 28, 1970

Inventor(s) Erich O. Schwengel

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 2, line 45, cancel "bar, 15," and insert --bar 15--; line 54, cancel "same, are joined by a connecting bar 17, FIG." and insert --each of the lower crossbars 15 there is joined--.

(SEAL)
Attest:
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