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S. B. BAYLINSON

3,257,933

MOVABLE AND DETACHABLE SUPPORT MEANS FOR AIR CONDITIONERS

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FIG. 1.

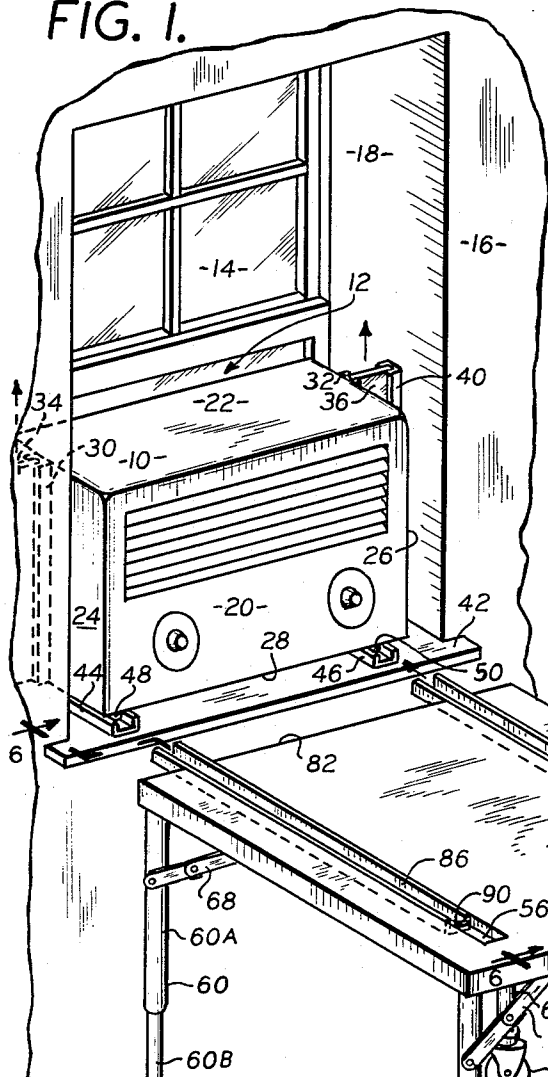


FIG. 2.

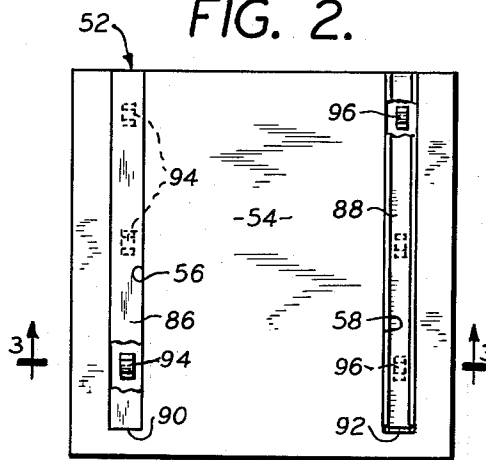


FIG. 3.

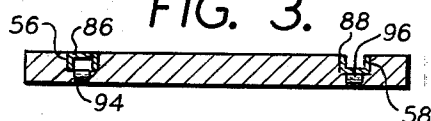


FIG. 4.

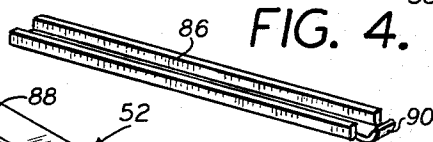


FIG. 5.

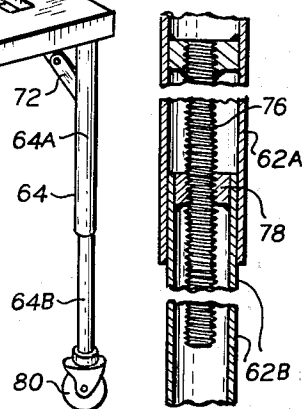
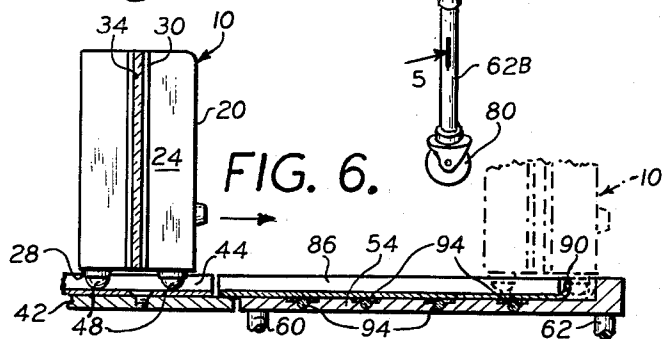


FIG. 6.



INVENTOR
S. BRIAN BAYLINSON
BY *Hubbell, Cohen & Stiefel*
ATTORNEYS.

1

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MOVABLE AND DETACHABLE SUPPORT MEANS FOR AIR CONDITIONERS

S. Brian Baylinson, 225 W. 86th St., New York, N.Y.

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7 Claims. (Cl. 98—94)

This invention relates to an air conditioner support means and particularly to a means for temporarily supporting an air conditioner so that the window through which the air conditioner operates may be washed or otherwise worked on.

In the vast majority of installations of window air conditioners, once the air conditioner has been installed, the window through which it operates cannot be washed or repaired in whole or at least in part. This is due to the fact that access cannot be gained to the outside of the window for washing or repairing it due to the obstruction provided by the air conditioner itself. A partial solution to this problem is provided by certain forms of air conditions which are permanently mounted on portable stands so that the air conditioner can be brought into registry with a window and moved away therefrom when desired. However, such prior art arrangements have not been wholly satisfactory due to the additional cost required by a stand for each air conditioner and, further, due to the fact that the stand and air conditioner occupy a substantial amount of space within the room which, quite naturally, is undesirable.

It is therefore the main object of the present invention to provide apparatus to cooperate with an air conditioner to provide for removably mounting it in a window and for providing support for the air conditioner when it is removed from the window, whereby to provide access to the window for cleaning or other work.

Another object of the present invention is the provision of a new and improved portable support means for an air conditioner, which support means may be completely withdrawn from the air conditioner when the air conditioner is disposed in operating relation with a window so that the support means may be folded and stored away or be used to provide temporary support for another air conditioner.

Yet a further object of the present invention is the provision of a novel support table for an air conditioner, which support table may be employed in connection with a plurality of separate air conditioners.

A still further object of the present invention is the provision of a new and improved support table for an air conditioner, which table has provision for having a planar upper surface to enable it to be employed for other uses as well.

The above and other objects, characteristics and features of the present invention will be more fully understood from the following description taken in connection with the accompanying illustrative drawing.

In the drawing:

FIG. 1 is a perspective view of an air conditioner mounted for operation in register with a window opening, and having disposed in receiving relation therewith a support table embodying the present invention;

FIG. 2 is a top view of the air conditioner support table showing one of its tracks and air conditioner receiving means and one of its tracks in flush relation with the table surface;

FIG. 3 is a sectional view taken along the line 3—3 of FIG. 2;

FIG. 4 is a perspective view of a track employed in connection with the table;

FIG. 5 is a sectional view taken along the line 5—5 of FIG. 1; and

FIG. 6 is a sectional view taken along the line 6—6 in FIG. 1.

2

Referring now to the drawing in detail, a movably mounted air conditioner is designated by the reference numeral 10. The air conditioner 10 is disposed within a window opening 12 of a window 14 in a wall 16, some form of framing or casement 18 defining the aperture in the wall accommodating the window. The air conditioner 10 is shown having a front panel 20, a top panel 22, side panels 24 and 26 and a bottom 28. Fixed to the sides 24 and 26 are channels 30 and 32 adapted to slidably receive sealing panels 34 and 36, respectively, the other edges of which are disposed in complementary channels 38 (not shown) and 40 fixed to the casement 18 in opposed relation with the channels 30 and 32, respectively. Sealing panels 34 and 36 serve to block air transfer from the room to the out-of-doors except through the air conditioner mechanism itself. Underlying the bottom 28 of the air conditioner 10 is the windowsill 42 on which are disposed a pair of channel-shaped tracks 44 and 46 which support within them series of two or more sets of roller means such as ball bearings or rollers 48 and 50, respectively. The series of ball bearings or rollers 48 and 50 serve as movable supports for the air conditioner and are mounted on the bottom 28 thereof. When the sealing panels 34 and 36 are slidably removed from their channels 30—38 and 32—40, respectively, as indicated by the upwardly directed arrows in FIG. 1 and the lower sash raised the air conditioner is free to be moved towards and away from the window 14 by the ball bearings or rollers and their supporting tracks.

The temporary support table is designated by the reference numeral 52. The table 52 comprises an upper planar support surface 54 having a pair of parallel grooves 56 and 58 cut in the top thereof. The support surface 54 is supported by four legs 60, 62, 64 and 66, here shown to be both foldable and adjustable in length. The legs are made foldable by hingedly mounting them at their top to the bottom of the planar support surface 54 (which hinge is not shown) and bracing them by collapsible toggle braces 68, 70, 72 and 74 (not shown), respectively, which are connected at one end to the respective legs and at the other end of the bottom of the planar support surface 54. While many conventional mechanisms may be employed for yielding legs of adjustable length or height, as is presently preferred, the legs are made of two telescoping cylindrical tubular portions, the upper portion of each of which bears the numerical designation of its associated leg with the suffix "A" and the lower portion of which bears the numerical designation of its associated leg with the suffix "B." Each of the legs is constructed substantially identically and for the purpose of brevity only the means for adjusting the length of leg 62 is illustrated in FIG. 5. As shown in FIG. 5, each of the portions 62A and 62B are hollow tubes which are adapted to telescope within one another. Fixed to the lower part of upper leg portion 62A is a downwardly extending threaded rod 76 which is adapted to extend within the hollow lower leg portion 62B. Fixed to the upper end of lower portion 62B in threaded relation with rod 76 is a nut 78. By rotating portion 62B it will be obvious that the portion 62B will move up and down in accordance with the pitch of the threads on the rod 76 and the nut 78. Preferably, although not necessarily, to render the table 52 more portable, swivel-type wheels 80 are fixed to the bottoms of each of the legs.

As previously noted, the upper support surface 54 is provided with two parallel grooves 56 and 58 which extend from the edge 82 of the table 52 into a point just short of the opposite edge 84. Disposed within the grooves 56 and 58 are tracks 86 and 88, respectively, which are channel-shaped throughout their entire length excepting the endmost positions adjacent the edge 84 of the table 52 which end portions are provided with a turned

3

up part 90 and 92, respectively, which, as will be understood more fully hereinafter, serve as stop means for the air conditioner 10 when it is disposed over the tracks 86 and 88.

It will be recognized that the grooves 56 and 58, and, accordingly, the tracks 86 and 88, are spaced apart a like distance as are the tracks 48 and 50 on the windowsill 42. Accordingly, with the tracks in their operative position as shown in FIG. 1, by adjusting the length of the legs, the tracks can be brought into registry with their corresponding tracks 48 and 50. The table edge 82 is then brought into substantially abutting relation with the edge of the sill 42 and then the tracks 86 and 88 are manually slid in their receiving slots 56 and 58 until the left hand ends of the tracks 86 and 88, as viewed in FIG. 1, are in abutting relation with the exposed ends of the tracks 48 and 50 whereby to provide what would appear to be almost a single continuous pair of tracks. With the sealing panels 34 and 36 removed as previously described, the window 14 open to provide clearance at the top of the air conditioner, the air conditioner can be grasped and moved with relatively little resistance along the tracks 48 and 50 and thence on to the tracks 86 and 88 due to the substantially frictionless support the air conditioner has from the series of ball bearings or rollers 48 and 50. It will be seen that each series of ball bearings or rollers includes at least two rollers or spaced apart ball bearings so that there will be stability against twisting of the air conditioner as it moves along the tracks. The air conditioner will then move first partly and then entirely out of the tracks 44 and 46 and on to the corresponding tracks 86 and 88 until the forwardmost ball bearings or rollers 48 strike the end stop members 90 and 92. When this occurs there will be bodily movement of the track members 86 and 88 along the grooves 56 and 58, respectively, until the stop members abut against the ends of the grooves at which point all motion will stop. By so moving the air conditioner it is now fully supported by the table 52 which can be rolled away from the window to thereby give a window cleaner access to the complete window to clean it. After the window has been cleaned the table 52 can be rolled back into position so that the tracks 86 and 88 once again register with tracks 44 and 46 but are spaced therefrom. Thereafter the air conditioner may be slid towards the window into its operating position. By moving the air conditioner 10 back onto the sill and off the table 52, the table 52 is freed for use with another similar air conditioner, whereby to permit one table to service a large plurality of air conditioners mounted on windows as is the air conditioner 10.

After completion of use of the table 52 as previously described, the tracks 83 and 86 can be reversed in position whereby to cause them to assume the position shown for the track 86 in FIGS. 2 and 3 in which they are flush with the upper surface of the table top 54. With the tracks so positioned, the table top 54 can be employed for other uses such as dining, bridge, or a work table, as may be desired. To further facilitate the use of the table 52 for other applications when it is not being used as a temporary air conditioner support, suitable brake means may be provided for the swivel rollers 80 to prevent their movement, as may be desired.

To facilitate the sliding of the tracks 86 and 88 relative to the grooves 56 and 58 as previously described, the bottoms of the grooves may be provided with suitable rollers as are designated by the reference numerals 94 and 96.

Further, the bottoms of the channel-shaped tracks 86 and 88 in their operating position may also be provided with a string of rollers or ball bearings to further reduce friction between rollers or ball bearings 48 and 50 and tracks 86 and 88 to facilitate ready movement of the air conditioner 10 in these tracks.

While I have herein shown and described the preferred form of the present invention and have suggested modi-

4

fications therein, other changes and modifications may be made therein within the scope of the appended claims without departing from the spirit and scope of this invention.

What I claim is:

1. In combination, a window air conditioner, two sets of spaced apart roller means on the bottom of said air conditioner, each set of roller means including at least two longitudinally spaced roller means, a pair of channel shaped spaced apart track means fixed to the sill of the window and supporting said two sets of roller means, and a temporary support for said air conditioner; said temporary support comprising a table top having a pair of longitudinally extending grooves therein, said grooves being spaced apart a like distance as said track means on said sill, a second pair of channel shaped track means disposed within said grooves, four foldable legs of adjustable length fixed to said table top, and floor engaging means on said legs for movably mounting said temporary support on said floor.

2. The combination defined in claim 1, wherein said second pair of channel shaped track means are movably disposed within said grooves.

3. The combination defined in claim 1, further comprising roller means disposed in the bottoms of said grooves for engaging the webs of said channel shaped tracks when the flanges of said tracks are upwardly directed for movably mounting said second pair of tracks in said grooves.

4. The combination defined in claim 1, said second pair of channel shaped tracks and said grooves being proportioned so that the tracks are positioned in said grooves with their flanges extending downwardly from the webs, said webs are substantially flush with the upper surface of said table top.

5. The combination defined in claim 1, further comprising roller means disposed in the bottoms of said grooves for engaging the webs of said channel shaped tracks when the flanges of said tracks are upwardly directed for movably mounting said second pair of tracks in said grooves, said second pair of channel shaped tracks and said grooves being proportioned so that the tracks are positioned in said grooves with their flanges extending downward from the webs, said webs are substantially flush with the upper surface of said table top.

6. In combination with a window having a window frame and sill, an air conditioner, two sets of spaced apart roller means on the bottom of said air conditioner, each set of roller means including at least two longitudinally spaced roller means, a pair of channel shaped spaced apart track means fixed to the sill of the window and supporting said two sets of roller means, removable sealing means extending between said air conditioner and said window frame, and a temporary support for said air conditioner; said temporary support comprising a table top having a pair of longitudinally extending grooves therein, said grooves being spaced apart a like distance as said track means on said sill, a second pair of channel shaped track means disposed within said grooves, roller means disposed in the bottoms of said grooves for engaging the webs of said channel shaped tracks when the flanges of said tracks are upwardly directed for movably mounting said second pair of tracks in said grooves, said second pair of channel shaped tracks and said grooves being proportioned so that the tracks are positioned in said grooves with their flanges extending downward from the webs, said webs are substantially flush with the upper surface of said table top, four foldable legs of adjustable length fixed to said table top, and floor engaging means on said legs for movably mounting said temporary support on said floor.

7. A temporary support for a window air conditioner having two sets of spaced apart roller means secured to the bottom thereof, said temporary support comprising a table top having a pair of longitudinally extending grooves therein, said grooves being spaced apart a like

5

distance as said two sets of roller means, a pair of channel shaped track means disposed in said grooves for receiving said two sets of roller means, additional roller means disposed in the bottoms of said grooves for engaging the webs of said channel shaped tracks when the flanges of said tracks are upwardly directed for movably mounting said pair of tracks in said grooves, said pair of channel shaped tracks and said grooves being proportioned so that the tracks are positioned in said grooves with their flanges extending downward from the webs, said webs are substantially flush with the upper surface of said table top and four foldable legs of adjustable length fixed to said table top, and floor engaging means on said legs

for movably mounting said temporary support on said floor.

6

References Cited by the Examiner

UNITED STATES PATENTS

2,064,096	12/1936	Whalen	312—342
2,680,957	6/1954	Adams	98—6 X
2,702,175	2/1955	Hanin	98—94
3,095,173	6/1963	Paruolo	98—94

JOHN F. O'CONNOR, *Primary Examiner.*

WILLIAM F. O'DEA, *Examiner.*