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W. R. DIEDRICH
SUPPORT TRAY ASSEMBLY

3,366,430

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2 Sheets-Sheet 1

FIG. 1.

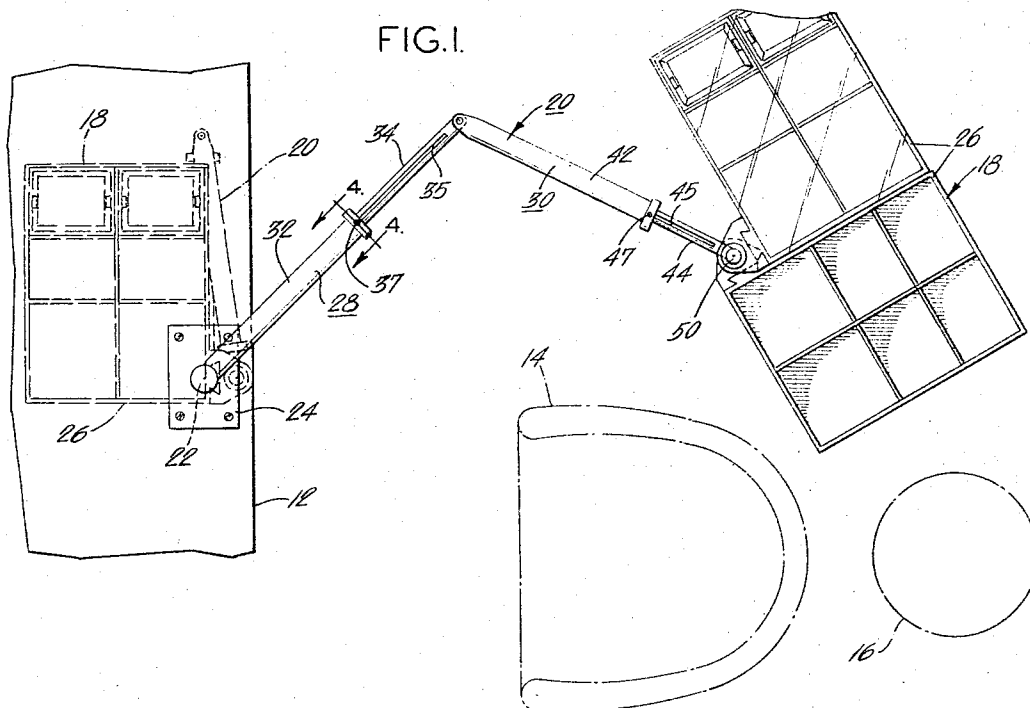


FIG. 2.

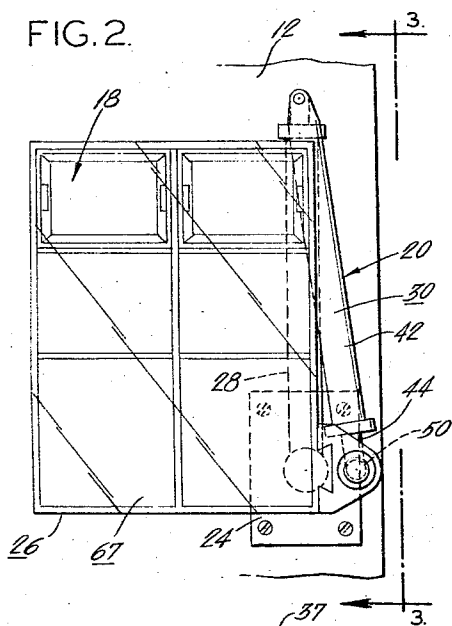


FIG. 4.

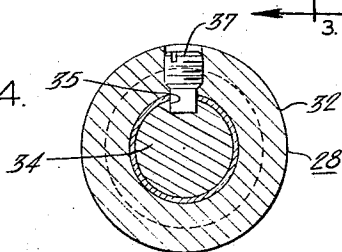
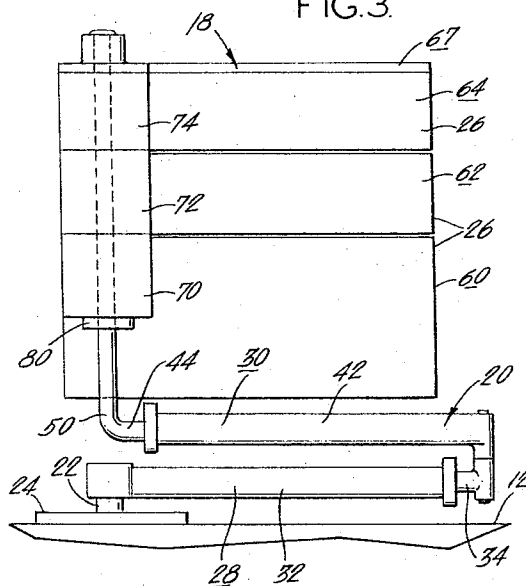


FIG. 3.



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SUPPORT TRAY ASSEMBLY
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ABSTRACT OF THE DISCLOSURE

A tray assembly adapted to be pivotally mounted on a support comprising a linkage including at least one pair of pivotally connected arm members, the terminal end of one of the arm members being pivotally connected to the support and having a post projecting from the terminal end of the other arm member. A plurality of containers adapted to hold items used, for example by hairdressers, is mounted on the post and means is provided for pivotally and detachably mounting the containers on the post so that a selected one of the containers may be removed therefrom when desired. This attachment means comprises a block for each of the containers pivotally mounted on the post having a downwardly converging dovetail slot. Each of the containers has a downwardly converging dovetail projection having tapered sidewalls adapted to seat in the dovetail slot of its respective block.

The present invention relates generally to trays or containers and more particularly to a pivotally mounted tray assembly.

Even though the pivotally mounted tray assembly of the present invention has particular application in beauty parlors or the like to hold items used by the hairdresser, it is to be understood that the tray assembly has other useful applications. Most beauty parlors are divided into several sections where various tasks are performed. For example, in one section having a series of sinks and chairs, hair is washed and/or dyed, in another section hair is set combed and/or styled and in still another section having a series of dryers, hair is dried. The combing and setting section usually includes a series of chairs aligned in front of a mirror and a counter or the like having cabinets within which are stored various items used by the hairdresser to set, comb and/or style hair. These items include curlers, pins, nets, combs, brushes, hair spray, and others. Since the chair in which the client is seated is spaced a distance from the counter and the cabinets, it is necessary for the hairdresser to make frequent trips from the vicinity of the chair to the cabinet to pick up these various items for use on the client.

The many trips that the hairdresser has to make between the chair and the storage cabinets during setting of a client's hair and also for removal of pins, curlers, etc., after drying take a considerable amount of time. Hence, it is readily appreciated that since a large cost factor in the operation of a beauty parlor is the salary of hairdressers, the cost to the client of various operations or treatments at the beauty parlor may be reduced considerably if some of this time were conserved. Moreover, often pins, combs, curlers and other items are dropped by the hairdresser in the vicinity of the chair, obviously creating an untidy atmosphere.

In some instances portable wheeled trays or the like have been used to support the hairdresser's equipment which may be moved about by the hairdresser within convenient reach. It has been observed that hair accumulation on the floor tends to foul up and jam the wheels of these portable trays, in some instances, causing them to stick and tip over.

The present invention provides a solution to some of the problems noted above. In accordance with the present

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invention there is provided a pivotally mounted tray assembly comprising a pair of telescoping pivotally connected extensible arm members, one of which may be secured at its free end to the counter and the other arm member having an upright post on which is rotatably supported a plurality of tray supporting blocks.

A container or tray is adapted to be detachably secured to each of the blocks, the containers or trays cumulatively holding all of the equipment such as the items noted above. By this arrangement, the containers may be pivoted to a position overlying the counter in a neat stack when not in use, and when the hairdresser needs the equipment, the extensible arm members are merely pivoted outwardly to position the stack of trays within reach adjacent the chair. Since the blocks are freely pivotable on the post, each of a plurality of trays may be fanned out so that the hairdresser may have all of the items in each of the trays at his ready disposal. Further, since the trays or containers are readily removable from the blocks, a selected tray may be removed when necessary to replace items therein from a central storage location.

With the foregoing in mind, an object of the present invention is to provide a support tray assembly of the type discussed above which is comprised of comparatively few parts and which is easy and economical to manufacture.

A further object of the present invention is to provide a support tray including a pair of extensible arm members and a plurality of containers which may be detached selectively from the assembly and which are adapted to be stacked in a neat array one on top of the other when out of use and which may be fanned out so that the contents of each of the containers are accessible.

These and other objects of the present invention and various features and details thereof are hereinafter more fully set forth with reference to the accompanying drawings, wherein:

FIG. 1 is a plan view of a typical setting for a support tray assembly in accordance with the present invention shown in the stacked position in broken lines and a partially fanned out position in solid lines;

FIG. 2 is an enlarged plan view of the assembly in the stacked position;

FIG. 3 is a side elevation view of the assembly in a stacked position as viewed along lines 3-3 of FIG. 2;

FIG. 4 is an enlarged sectional view taken along lines 4-4 of FIG. 1;

FIG. 5 is an enlarged perspective view of the assembly in the fanned out position;

FIG. 6 is a fragmentary plan view showing the means for detachably securing the containers to the locks on the pivot post;

FIG. 7 is a fragmentary side elevational view of the containers; and

FIG. 8 is an exploded perspective view of a corner of a container and a pivot block.

Referring now to the drawings, and particularly to FIG. 1 thereof, there is illustrated a portion of a typical floor plan of a beauty parlor where hair is set and/or styled. In this area, there is usually provided at least one chair 14 facing a counter 12, a mirror behind the counter and a stool 16 for the hairdresser. In accordance with the present invention there is provided a container assembly for storing items used by the hairdresser to set and style hair. The container assembly of the present invention which is generally designated by the numeral 18 is adapted for pivotal movement between a stacked position (broken lines) overlying the countertop 12 and extended position (solid lines) when the hairdresser is working on the client. It is noted that in lieu of mounting the container assem-

bly on the countertop, it may be mounted on the wall or floor if desired.

The support tray assembly comprises a linkage generally designated by the numeral 20 pivotally supported as at 22 on a bracket 24 fastened to the countertop 12 and which carries at its opposite end a plurality of trays or containers 26. More specifically, the linkage 20 comprises a pair of telescoping arm members 28 and 30, the arm member 28 consisting of a hollow tubular section 32 and a rod section 34 adapted for sliding movement in the hollow tubular section 32.

The arm 30 of the linkage also comprises an elongated hollow tubular section 42 and a rod section 44 which telescopes in the tubular section 42. The rod section 34 of the arm 28 is pivotally connected to the outer end of the tubular section 42 to provide a scissor-like linkage and the rod section 44 of the arm 30 has at its outer terminal end an upstanding vertically disposed post 50 which, in the present instance, is formed integrally with the rod section 44 upon which the trays or containers are mounted. Each arm of the linkage is extensible and may be selectively lengthened or shortened and set in a desired position to provide a desired length so that trays may be positioned near the hairdresser. To this end, the rod sections 34 and 44 are provided with axially extending grooves 35 and 45 respectively and a set screw 37 and 47 is provided in the collar of each tubular section having a head portion which engages in the groove. By this arrangement the set screw is simply loosened when it is desired to adjust the length of the arms and then tightened when the desired extension has been reached.

As best illustrated in FIG. 5, the support tray assembly includes, in the present instance, a bottom container 60, a middle container 62 and a top container 64 which are pivotally supported on the post 50 so that they may be selectively oriented between a stacked position (see FIG. 2) and a fanned out position (see FIG. 5) to provide easy access to the contents of the containers.

In the present instance the containers are of rectangular form and are provided with partitions or dividers subdividing each of the containers into a plurality of compartments. The bottom container has a single partition 61 dividing it into two compartments, the middle container has a web-like partition 63 dividing it into six equal compartments and the top container also has a web-like divider dividing the interior of the container 64 into six equal compartments. In the present instance the upper container has a pair of removable bowls or trays 65 for holding solutions such as hair dye or rinses that are mixed at another location in the beauty parlor. Also in the present instance a generally rectangular top cover 67 is provided which may be made of a plastic material.

Means is provided for pivotally mounting the containers on the post 50 in such a manner that they may be individually detached when desired. To this end there is provided three pivot blocks 70, 72, and 74 for each of the containers 60, 62, and 64. These pivot blocks are rotatably supported on the post 50 and are adapted to seat on a stop 80 mounted on the post. Each of the pivot blocks as best illustrated in FIG. 8 has a downwardly converging dovetail slot 76 and each of the containers is provided with a downwardly converging dovetail projection 78 having tapered sidewalls so that they may be slideably received in the dovetail slot 76 from the top thereof. By this arrangement, each of the containers may be removed from the stack simply, in the case of the top container, by pivoting the cover back out of the way and lifting the container upwardly. The middle and lower containers may also be removed by pivoting a selected container out of the stack as shown in FIG. 6 and then just lifting it outwardly. This is an extremely useful feature

especially in beauty parlors if the hairdresser needs to fill the compartments with additional items and the items are located in a different area of the shop.

Consider now the use of the support tray assembly in a beauty parlor. As shown in FIG. 1, when the chair 14 is not in use, the containers are simply pivoted to the broken line position overlying the counter 12. Now when the chair 14 is in use and the hairdresser requires items in the containers, the entire assembly is simply pivoted outwardly to the solid line position shown in FIG. 1. The containers may then be fanned out so that the hairdresser has access to all of the compartments in all of the trays. If, in the extended position, the trays are not in the desired location for the hairdresser, one or both of the arms of the linkage 20 may be extended simply by backing off the set screw and extending the rod members. It is noted however that usually this setting is fixed for a given location of the chair 14. Now if some of the containers are empty, removal of the container to fill it with items located in a different location in the shop may be done simply by removing one or more of the containers, filling it and replacing it on its pivot block.

While a particular embodiment of the present invention has been illustrated and described herein, it is not intended to limit the invention to such disclosure and changes and modifications may be made therein within the scope of the following claims.

I claim:

1. A tray assembly adapted to be pivotally mounted on a support comprising a linkage including at least one pair of pivotally connected arm members, the terminal end of one of the arm members adapted to be pivotally connected to the support, a post projecting from the terminal end of the other arm member, a plurality of containers mounted on the post, means pivotally and detachably mounting the containers on the post so that a selected one of the containers may be removed from the post when desired, said means including a block for each of said containers pivotally mounted on the post having a downwardly converging dovetail slot therein, each of said containers having a downwardly converging dovetail projection having tapered sidewalls which is adapted to seat in the dovetail slot.

2. A tray assembly as claimed in claim 1 wherein said arm members are extensible.

3. A tray assembly as claimed in claim 2 wherein each of said extensible arm members comprises an elongated hollow tubular member and a rod engageable in said tubular member for axial movement relative thereto.

4. A tray assembly as claimed in claim 3 including locking means for securing the tubular member and rod of each arm in a predetermined position relative to one another.

5. A tray assembly as claimed in claim 4 wherein said locking means includes an elongated axially extending groove on the face of the rod and a locking screw engageable through the tubular member having a tip portion seating in said groove.

References Cited

UNITED STATES PATENTS

533,445	2/1895	Denison	312—235
1,719,966	7/1929	Burns	312—201 X
1,783,708	12/1930	Gracia	248—282
2,164,390	7/1939	Dickerson	248—282
3,047,688	7/1962	Small	248—279 X
3,236,561	2/1966	Sedlock	248—279 X
3,269,683	8/1966	Shinarer	248—224 X

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