CHAIR ATTACHED BEAUTICIANS TRAY

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ABSTRACT
An adjustable and rotatable chair structure of a type currently used in beauty salons and a self-contained attachment therefor comprising a multipurpose tray, an L-shaped arm or an equivalent elevating and supporting arm for the tray having a vertical upper end portion atop which the tray is mounted, and a horizontal lower end portion, means by which way of which the lower end portion is operatively connected with a suitable predetermined part of said chair, for example, the usual pedestal.

5 Claims, 4 Drawing Figures
CHAIR ATTACHED BEAUTICIANS TRAY

This invention relates to a readily accessible multipurpose beauticians tray and improved arm means for supporting and elevating the tray for serviceable and feasible use and complements means through the medium of which a lower end of the arm means is operatively connected with a component part of a hydraulic chair structure such as is in widespread use in beauty salons and equivalent establishments.

Plastic and equivalent dished trays which are popularly in use in beauty salons are supportively perched atop the upper end of a vertical standard which is a component part of a tripod-type stand, that is, a stand whose outer leg-ends are provided with casters or the like, whereby the tray equipped stand can be pushed and shoved around atop the floor, often in limited and crowded quarters. These trays are used, as is known, for supporting utensils, implements, hair rollers and other accessories which are selectively usable by the beautician. However, and as repeated experience has shown, loose hair gets caught and tangled in the rollable wheels of the stand in a manner that the stand is not freely mobile. The floor space available to the beautician has to be ample and in the course of daily activities, it is not unusual for the stand to be accidentally toppled over. If follows that it is an object of the present concept, generally stated, to attach, that is, movably mount the tray on a convenient and accessible part of the hydraulic or other type chair and to be able to utilize it in the available space with freedom and certainty. Experience has shown that the improved tray and supporting and mounting means enables the user to expeditiously and conveniently cope with and overcome spillage problems, to minimize the hair entanglement difficulties, to arrange the tray so that it is always within reach of the worker and to be able to move the tray to an out-of-the-way position when it is not being used.

Briefly the invention, construed from a ready-to-use combination standpoint, has to do with a chair structure of a type such as is in widespread and common use in beautician salons and customer serving establishments, more particularly, a chair embodying a vertical pedestal with a holddown and floor mounting base at the bottom and an elevated suitably designed chair at the top. The tray used may be, and preferably is similar to deep dished trays which are commonly used for diversified articles and implements. The tray holder is characterized by a elevating and supporting arm, that is, an arm which has an upper end portion and a lower end portion. The tray is accessibly supported on the terminal end of the upper end portion. Adapter means is operatively mounted on the lower end portion of the arm and also operatively mounted, usually rotatably, on a convenient part for example, the pedestal, of the chair structure.

More specifically, the holder is characterized by a tubular or an equivalent arm of requisite strength and height, that is, an arm which is substantially L-shaped in side elevation and has a lower horizontal end portion and an upper vertical portion, the latter supporting the tray. The lower horizontal end portion is connected to adapter means which is cooperatively supported on a part of the chair structure, and said lower end portion is radial as a general rule, to the vertical axis of the pedestal or standard. The upper end portion assumes an outwardly offset locale in a manner to swing freely in an orbital path around and free of collision with any part of the chair. It follows that this type of a holder or arm functions to support and swing the tray and enables one to position it in an out-of-the-way place when not in use and conveniently swung in a restricted path or working space, whereby it is available for feasible and convenient use by the beautician.

In carrying out a feasible and practical embodiment of the invention the adapter means comprises an inner annulus or ring which is channel-shaped in cross-section with the open side of the channel facing outwardly and providing a raceway. This inner ring is surrounded by a coplanar outer ring which is also channel-shaped in cross-section and whose inner peripheral portion is provided with circumferentially spaced anti-friction rollers. The raceway provides a track and the rollers are confined and movable around in the track whereby the outer ring can be aptly and successfully used for angling the lower end of the L-shaped tray positioning arm.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a view in perspective showing a beauty salon-type chair or chair structure, an elevated movably mounted article tray, the elevating and supporting arm for the tray and the adapter means operatively joining the arm to the chair structure;

FIG. 2 is an enlarged detail view taken on the plane of the horizontal section line 2—2 of FIG. 1, looking in the direction of the arrows and with parts appearing in section and elevation;

FIG. 3 is a sectional view taken approximately on the plane of the irregular section line 3—3 of FIG. 2; and

FIG. 4 is a view similar to FIG. 3 showing a modified form of the concept wherein the inner ring is secured by Z-shaped or equivalent brackets to the base of the pedestal.

It will be evident from FIG. 1 that the chair structure of the construction shown is denoted generally by the numeral 6 and is exemplary of a generally well known hydraulic type beauty salon chair. The support means for the chair comprises a base 8 which is circular and fastened on the floor 10 and which is axially provided with a vertically and swivelly adjustable structure which is here referred to as an adjustable pedestal 12 comprising a hydraulic cylinder 14 mounted on the base, a piston 16 and an appropriate chair 18 which is mounted atop the piston. Other details are illustrated but need not be dwelled upon here.

The multi-purpose instrument and article tray is of appropriate construction and it is denoted by the numeral 20. The invention can be made as a part of the original chair at the time of sale or can be characterized as an attachment which is susceptible of installation on chairs which are currently being used. The elevating support and holder for the tray is denoted at 22, and, more specifically, comprises a tubular or an equivalent arm which can be set forth as substantially L-shaped in side elevation. The median bend or bent portion 24
serves to interconnect a horizontal lower end portion 26 with a substantially vertical upper end portion 28 to which a component part 30 of the tray is connected. The terminal of the end portion is connected to a component part of the chair 6 by way of novel means. The means which has been successfully adopted for the result desired is characterized by an assembly of coating component parts. In the adaptation shown in FIGS. 1–3 inclusive, there is an inner ring 32 and a companion concentric encompassing outer ring 34. The inner ring is made up of a bottom annulus 36 (FIG. 3), a top annulus 38 and an intervening annular web 40 and in actual practice the upper and lower edges of the web can be provided with lugs which are fitted into holes provided therefor and welded or otherwise anchored in place as indicated generally at 41 in FIG. 2. These upper and lower annular members 38 and 36 have offset portions 42 which coact in providing a circular raceway for the anti-friction freely rotatable bearings or rollers 44. These rollers are carried by a web portion 46 of the outer ring 34 which is likewise in the form of an outwardly opening channel. More specifically, the axles 48 of the wheels or rollers 42 are swivelly mounted on the web of the channel, as is evident in FIGS. 2 and 3 in particular, and thus the assembly comprises an inner channel or ring 32 and a concentric encompassing outer channel ring 34, the inner ring having an endless raceway or track for the wheels or rollers on the web of the outer ring 34. The inner ring 32 can be made of half-sections which are butted together as designated at 50 in FIG. 2. The outer ring is also made up of semi-circular half-sections which have abutting flanges 52 which are bolted or otherwise connected at 54. By making the rings in half-sections they can be assembled and fastened into place expeditiously.

Two ways are shown whereby the inner ring can be attached to the coating column of the pedestal. One arrangement comprises substantially U-shaped brackets 56 (FIG. 2), these brackets being circumferentially spaced and provided with setscrews 58. This is to say, the web 60 of each bracket is provided with upper and lower setscrews which are secured to the outer peripheral surface of the pedestal in the manner shown for instance in FIG. 3. The arm portions of the brackets 56 are welded into place between the upper and lower annular members 36 and 38 as is evident from FIG. 3. A U-shaped bracket or anchor member 62 is provided for fastening the cooperating terminal end portion 64 of the lower arm portion 26 to the channel of the outer ring 34 as brought out in FIGS. 1–3. More specifically the terminal end portion 64 is bolted or otherwise secured at 65 to the bracket at 65 and the bracket is suitably anchored between the flanges in the channel (FIG. 3).

Another way whereby the inner ring can be mounted and which omits the use of the U-brackets 56 is shown in FIG. 4. This modification comprises circumferentially spaced substantially Z-shaped brackets 66. One end portion 68 is secured in place on the base as at 70 and the upper end portion 72 is welded or otherwise connected to the lower annular member of the inner ring 32 and the intermediate portion 74 provides an elevating and spacing member for the dual ring assembly. Inasmuch as the rings are the same as already described they are referred to by like reference characters.

The purpose in showing two ways of attaching the rings is to bring out the fact that the arm adapter means can be constructed in ways other than illustrated and can be anchored and mounted in place in keeping with the requirements of manufacturers and users.

It is submitted that the views of the drawings clearly show the overall attachment and the component parts thereof which have been found satisfactory for practical and successful use. Inasmuch as the features and advantages have been set forth and the mode of mounting and use is substantially self evident a more extended description is deemed unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed as new is as follows:

1. In combination, a chair construction such as is commonly used in a beautician's salon or establishment, said chair construction embodying a vertical pedestal with a hold-down and floor mounting base at the bottom and an elevated chair at the top, a tray for diversified articles and implements such as are needed and customarily used by a beautician, a one-piece tray elevating and supporting arm having upper and lower end portions, said tray being accessibly supported on said upper end portion, and means operatively and rotatably mounting the lower end portion of said arm on a lower portion of said pedestal, said arm being substantially L-shaped side elevation, the lower end portion of said arm being disposed in a horizontal plane above but adjacent to the level of said base and projecting radially outwardly from the peripheral surface of said pedestal, the upper end portion being positioned in a vertical plane and offset in a manner to swing freely in an orbital path around and free of collision with any part of said chair construction, whereby to function in an out-of-the-way manner within the limited working space of the beautician and which is also available for feasible and convenient use of the tray by said beautician, said means embodying an outer ring surrounding said pedestal and complementary supporting and retaining means interposed between said outer ring and pedestal and oriented and coating with said pedestal, and a U-shaped arm positioning and anchoring bracket carried by an outward peripheral surface of said outer ring, the terminal of the lower end portion of said arm being joined to and securely fastened to said anchoring bracket.

2. In combination, a chair construction such as is commonly used in a beautician's salon or establishment, said chair construction embodying a vertical pedestal with a hold-down and floor mounting base at the bottom and an elevated chair at the top, a tray for diversified articles and implements such as are needed and customarily used by a beautician, a one-piece tray elevating and supporting arm having upper and lower end portions, said tray being accessibly supported on said upper end portion, and means operatively and rotatably mounting the lower end portion of said arm on a lower portion of said pedestal, said means embodying an inner fixedly supported ring surrounding
the lower end portion of said pedestal, said inner ring being channel-shaped in cross-section and providing an outwardly opening raceway, an outer ring concentrically surrounding, spaced from and coplanar with said inner ring, said outer ring having an annulus encircling and opposed to said outwardly opening raceway and provided with circumferentially spaced swivelly attached anti-friction rollers which are operatively confined and freely rollable in said raceway, the lower terminal end of said arm being secured to a predetermined part of said outer ring in a manner to travel in a circular path around the pedestal in conjunction with said outer ring.

3. The combination defined in and according to claim 2, and, in combination a plurality of circumferentially spaced U-shaped adapter brackets affixed to said inner ring and interposed between said inner ring and a peripheral surface of said pedestal, said brackets having web portions provided with adjustably attached setscrews, said setscrews being retentively clamped and bound against said pedestal.

4. The combination defined in and according to claim 2, and, in combination, a plurality of circumferentially spaced substantially Z-shaped adapter brackets interposed between and secured to said inner ring and said base, respectively, whereby to position and hold said inner ring in a stationary operating locale.

5. A utility attachment for a chair structure of a type currently being used for the customers of a beauty salon or similar establishment and which is characterized by a base-supported pedestal with a chair operatively mounted atop the pedestal, said attachment comprising a rigid L-shaped tray elevating, supporting and positioning arm having a vertical upper end portion and a horizontal lower end portion, a multipurpose tray operatively mounted atop said upper end portion, and means carried by the lower end portion and functioning to operatively mount the arm on a part of the chair structure and permitting the tray to assume a position for expedient use, the means for mounting said lower end portion on a lower portion of said pedestal comprising an inner ring which is channel-shaped and cross-section with the channel thereof opening outwardly and with the outer marginal portion fashioned into and providing an endless raceway, a coplanar outer ring concentrically encompassing and spaced from the raceway and also correspondingly channel-shaped in cross-section and having a web, said web provided with circumferentially spaced freely rotatable anti-friction rollers confined for operation in said raceway, means for assembling and maintaining said inner and outer rings in a given operating position and relationship, said means comprising individual circumferentially spaced U-shaped adapter brackets, said adapter brackets being secured to said inner ring and having web portions provided with setscrews and said setscrews being adapted to be clampingly engaged with coacting surface portions of said pedestal.

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