May 4, 1954 A. O. WALDO, SR 2,677,587

DUAL PURPOSE EXTENSIBLE TABLE

Filed April 2, 1952

Fig. 1.

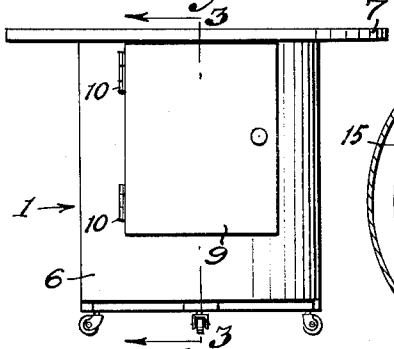


Fig. 2.

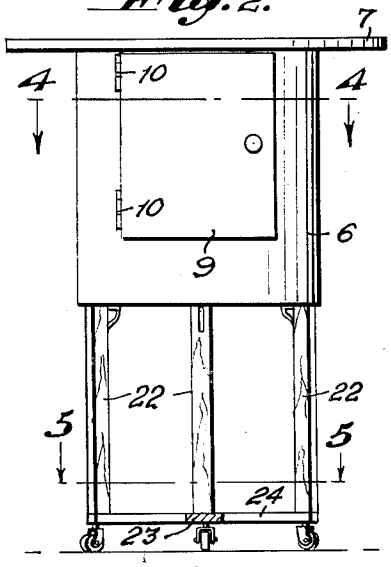


Fig. 3.

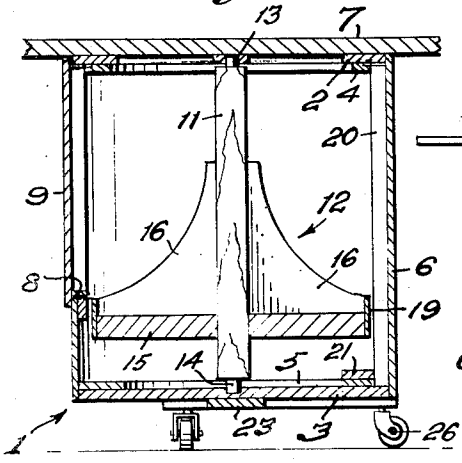


Fig. 4.

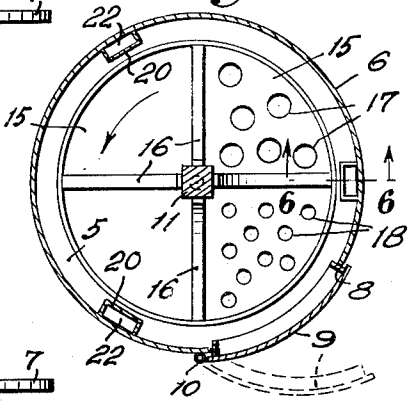


Fig. 5.

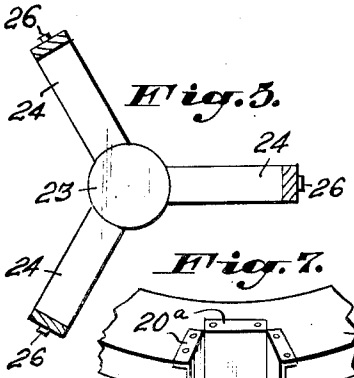


Fig. 6.

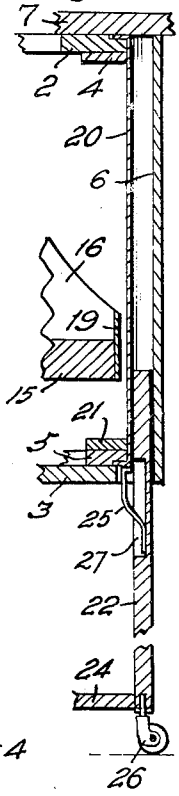


Fig. 7.

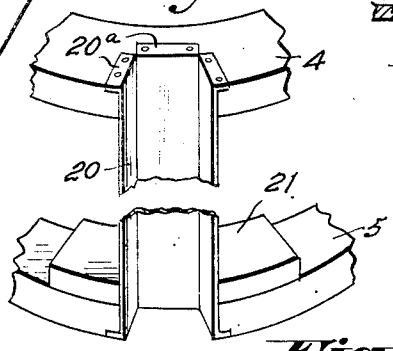


Fig. 8.

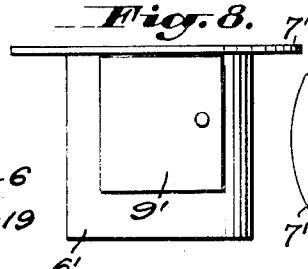
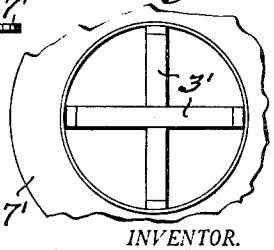


Fig. 9.



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DUAL PURPOSE EXTENSIBLE TABLE

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Application April 2, 1952, Serial No. 280,031

4 Claims. (Cl. 312—249)

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This invention relates to tables and, more particularly to a dual purpose table having a readily adjustable height and storage facilities for articles commonly used thereon.

It is a purpose of the invention to provide a table having an enclosed space or compartment with means giving access to a rotatable storage shelf therewithin.

Another object is to provide a table of adjustable height, capable of use as a coffee, cocktail, or serving table.

Another object is to provide a table which may be elevated to normal height for serving, games, study or writing.

A still further object is to provide a table which may be quickly and easily adjusted from one height to another.

Still another object is to provide a table of the type aforesaid, wherein the rotatable shelf has compartments for various articles commonly used on the table, which shelf is easily rotated into positions giving access in succession to each compartment.

Other objects and advantages of the invention will become apparent after a study of the following description in connection with the accompanying drawings.

In these drawings:

Figure 1 is a front elevation of the table with legs collapsed or telescoped within the table.

Figure 2 is an elevation corresponding to Figure 1 but showing the legs extended and the table elevated to its full height.

Figure 3 is a vertical cross section, to an enlarged scale, in a plane identified by the line 3—3, Figure 1.

Figure 4 is a cross sectional view taken in a plane identified by the line 4—4, Figure 2.

Figure 5 is a sectional detail view identified by line 5—5, Figure 2, looking in the direction of the arrows.

Figure 6 is a sectional detail to an enlarged scale on line 6—6, Figure 4, showing the manner in which the legs are mounted for telescoping within the table and locked or secured in extended position.

Figure 7 is a detail perspective view showing one of the guide channels for the extensible legs.

Figure 8 is an elevational view of a form of the table with legs omitted, and

Figure 9 is a bottom view of the form of the invention of Figure 8.

Referring in detail to the figures of the drawing wherein like reference numerals identify corresponding parts throughout, the numeral 1 identifies my table generally. An upper frame 2 and a lower frame 3 may be substantially identical in construction and each is shown to consist of a pair of mutually perpendicular cross pieces connected by a half-lap joint at their center portions and having their ends shaped to collectively define a circle. The ends of these cross pieces are rigidly connected by arcuate sections of wood or other material secured thereto, as indicated at 4, Figures 6 and 7, for the top frame, and at 5, for the bottom frame. Sections 4 and 5 extend continuously through 360° and thus define two complete circles which give cylindrical or tubular form to an outer sheathing 6 of sheet metal or thin plywood or veneer, secured to the sections in any suitable manner as by screws or adhesive at its top and bottom edges.

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The top and bottom sections are thus rigidly united by sheathing 6 into a unitary frame, while the sections give positive form and rigidity to the sheathing. A top 7, shown as circular, but which may be of any other desired shape, is secured to the top cross pieces 2. One section of sheathing 6 forming the side wall of the table, is cut away as at 8, Figures 3 and 4, to provide an opening for a door 9. This door may consist of a generally rectangular frame having arcuate top and bottom pieces conforming to the curvature of sheathing 6 and connected and rigidified by a panel of the same material as sheathing 6 and of a size a little larger than the door opening, to provide a slight overlap, say one-quarter inch, all around. Hinges 10, which may be of the concealed type, pivot the door along one side edge, to the adjacent edge of sheathing 6.

As best shown at Figure 3, the overlapping central portions of the top and bottom frames 3 and 4, are provided with bores forming confronting bearings for a central shaft 11 of a rotary shelf, generally identified at 12. Shaft 11 is shown, square in cross section. It is conveniently formed of wood, with aligned pivots 13 and 14 at its top and bottom journaled in the respective aforesaid bores or bearings. A circular base or shelf 15 of somewhat less diameter than the inside diameter of sheath or side wall 6, has a central aperture to receive shaft 11. The shelf is secured to, and supported near the lower end of the shaft and four generally triangular partitions 16 rigidly unite the shelf and shaft as will be clear from inspection of Figure 3. From Figure 4 it is noted that the partitions have an equiangular 90° relation to form compartments.

In Figure 4, the shelf within one compartment is shown with apertures 17 to receive large glasses.

Within another compartment are smaller apertures 18 to receive smaller glasses. The other two compartments may be utilized for bottles, games, or other articles. Referring to Figure 3, a flexible strip of metal, veneer, or thin plywood 19, is secured about the periphery of shelf 15 and the truncated ends of the partitions to form an upstanding rim which prevents accidental displacement of articles from the shelf. As will be obvious, with door 9 open the shelf may be rotated to bring the several compartments successively into position for depositing articles thereon or removing them therefrom. If desired one or more lamps (not shown) may be provided within the compartments, with a switch, closed by and in response to opening of the door.

A frame comprising three interconnected legs is provided; and these legs are slidably associated with the table so as to be moved from a first position telescoped within the table, to a second or extended position. The table is thus adaptable for conversion from a relatively low coffee table, to one of standard height for cocktail table or a table for games, sewing, etc., Figure 1 shows the table at low level, while Figure 2 shows it elevated.

Referring more particularly to Figure 7, it will be noted that the top and bottom frame sections 4 and 5 have vertically-aligned rectangular notches cut in their outer peripheries to form a pair. There are thus three equi-angularly-spaced pairs of notches of generally U form, and each pair receives and supports the ends of a sheet metal channel 20 rigidly attached thereto. A convenient method of doing this is shown upon Figure 7 where it will be noted that the ends of the channel have outwardly-turned flanges 20a secured by nails or screws to the respective brace sections. If desired reinforcements 21 may be secured to the top surface of lower frame section 5, to give added support and rigidity to the respective channels.

Each of these channels, in conjunction with the contiguous portion of sheathing 6, forms a guideway for legs 22 having a cross section to afford a smooth sliding fit within the respective channels. The legs have a length such that they are completely concealed within the table when the latter is in lowermost position, as illustrated in Figure 1.

The legs 22 are connected at their lower ends by a spider comprising a hub 23 and radiating arms 24, each secured at one end to the hub and at the other end to a respective leg, whereby all of the legs are constrained to movement in unison. As clearly shown upon Figure 6, each of the legs has a recess 27 formed in its inner face, for the reception of a resilient latch 25 which has one end secured to the leg within the recess. Each latch is urged by its own resilience into the position shown in Figure 6. The relation of the parts is such that the free end of the latch will snap outwardly of recess 24 beneath the adjacent section 5, when the table is lifted or elevated to full height. Castors 26 are provided on the lower end of each leg.

The operation will be clear from the foregoing description and may be briefly resumed as follows: When it is desired to place articles on, or to remove them from the shelf, it is merely necessary to open door 9 and grasp an adjacent partition 16, to rotate the shelf to bring the desired section opposite the door. Articles upon the shelf are thus readily available at all times while, at the same time, being concealed from view when the door is closed.

When it is desired to use the table for games, lunch, etc., it is merely necessary to lift top 7 and all parts attached thereto. Whereupon legs 22 slide downwardly as a unit until, when the desired height has been obtained, the free ends of latches 25 snap outwardly beneath the sections 5, to secure the legs in extended position and the table elevated. To lower the table, it is merely necessary to press the latches inwardly to free them from the sections 5, whereupon the table descends by its own weight to lowered position.

It is contemplated that, as an alternative construction spring latches may be fixed to sections 5, with a pin adapted to enter any one of a series of holes in the corresponding leg, whereby the height of the table may be varied over a range determined by the number and spacing of the holes.

Figures 8 and 9 show a modified construction wherein the extensible legs are omitted, as well as channels 20. As the table of this species is substantially the same as that of Figures 1–7, it is sufficient merely to identify sheathing 6', top 7', door 9', and lower frame 3'. This modification will be provided where a coffee or cocktail table is desired. The cocktail table of course being larger and of a greater height than the coffee table. If desired to add greater strength, sheathing 6 may be made of metal or other suitable material.

It will thus be seen that I have provided a table which has divers uses and adjustments and satisfies a wide range of needs. My table is convenient to use, relatively simple and inexpensive to build, and its dual purpose, together with storage facilities saves the cost of and space taken up by, the several tables otherwise required for its range of usefulness.

While I have shown the form of the invention now preferred by me, various modifications will readily occur to those skilled in the art, after a study of the present disclosure. Hence I desire that the disclosure be taken in an illustrative, rather than a limiting sense; and it is my desire and intention to reserve all modifications falling within the scope of the subjoined claims.

In the claims, the term "normally" refers to the position of the parts when in actual use.

Having now fully disclosed the invention, what I desire to secure by Letters Patent is:

1. In a table, vertically spaced upper and lower frames, each said frame comprising a pair of mutually normal crossed elements interconnected at their overlapping central portions and a plurality of arcuate segments secured to and interconnecting the distal ends of said elements to form a complete ring, the rings of both said frames having the same diameter, a sheet of flexible, thin sheathing having its upper and lower edges secured to and about said rings to rigidly interconnect said frames and define a cylindrical compartment, a top secured to and over said upper frame, confronting bearings carried by the overlapping portions of said elements, within said compartment, a shaft journaled at its ends in said bearings, respectively, to extend axially in and along said compartment, a shelf having a central aperture receiving said shaft, brackets secured to said shaft radially thereof and fixedly mounting said shelf to the lower end of said shaft for rotation therewith in said compartment, a door hinged to said sheathing to close an opening therein giving access to said shelf, at least

three channel members each secured at its ends within respective notches in the outer periphery of said rings and in equiangularly-spaced vertical relation thereabout, each said channel member defining with the contiguous overlying portion of said sheathing a guideway, a leg slidably mounted in each said guideway for extension downwardly therefrom, means rigidly interconnecting all said legs for extension as a unit, and means releasably securing all said legs in predetermined extended position whereby the height of said top may be varied.

2. A table comprising first and second circular, generally horizontal, vertically-spaced upper and lower frames, a sheet of thin flexible sheathing secured at its top and bottom edges to and about said frames, respectively, to define a cylindrical compartment, a flat top secured to and over said upper frame to cover the same, a vertical shaft journaled by and between said frames within said compartment, a horizontal circular shelf centrally secured to said shaft for rotation therewith, at least three vertical equiangularly-spaced channel members each secured in a pair of vertically aligned peripheral notches in said upper and lower frames, each said channel member forming a guideway with the overlying portion of said sheathing, a leg slidably fitting each said guideway for longitudinal translation therealong from a first position substantially confined in said guideway to a second position extended downwardly therefrom, means rigidly uniting all said legs for vertical movement as a unit between said first and second positions, and means carried by the upper end of a respective leg to releasably hold said legs in their said second positions.

3. A general purpose table comprising superposed vertically spaced upper and lower frames having circular peripheries, there being at least three equiangularly-spaced U notches in the peripheries of each said frame, each notch of said upper frame forming a pair with a corresponding notch positioned vertically therebelow, of said lower frame, at least three channel members each secured at its ends within and fitting, the notches of a corresponding pair, flexible thin-walled sheathing secured at its top and bottom edges to and about the peripheries of said upper and lower frames, respectively, to rigidly unite said frames, and form therewith a compartment, said sheathing extending over and across each outwardly facing channel member to form therewith a closed guideway, a leg slidably fitting each

said guideway for longitudinal guided translation therewithin, means uniting all said legs at their lower ends for movement as a unit, and means operable automatically in response to predetermined equal extension of said legs to releasably hold the same extended, a shaft journaled centrally by and between said frames within said compartment, a normally horizontal generally circular shelf secured centrally to the lower end of said shaft within said compartment, a plurality of equiangularly-spaced radial partitions secured to said shaft and shelf and defining sectors within said compartment, a door hinged contiguous one vertical edge of an opening in said sheathing to give access to each sector in succession as said shelf, shaft and partitions are rotated as a unit, and a top of greater diameter than said upper frame and secured centrally to and over said upper frame.

4. In a table of the type described, upper and lower frames having peripheries defining like geometrical figures, there being at least three equiangularly-spaced notches in the periphery of each said frame, each notch of said upper frame being in normally vertical alignment over a corresponding notch of said lower frame to form therewith a pair, a plurality of outwardly-opening channel members each secured at its ends in, and fitting, the notches of a respective pair, to thereby unite said frames in vertically-spaced parallel relation, a sheet of flexible sheathing having its opposite parallel edges secured to and about the peripheries of respective frames, said sheathing extending over and across each said channel member and forming therewith a continuous guideway between frames while simultaneously rigidly uniting said frames, a shaft journaled by and between said frames, a shelf secured centrally to the lower end of said shaft within the compartment defined by said sheathing, and a plurality of supporting legs each slidably mounted within a respective one of said guideways for extension therefrom.

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