

Nov. 4, 1958

I. BOTNICK

2,859,080

COLLAPSIBLE TABLE HAVING A ROTATING TOP

Filed Oct. 21, 1957

FIG. 1

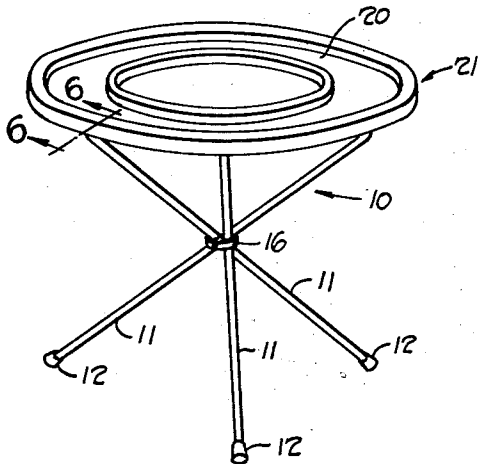


FIG. 2

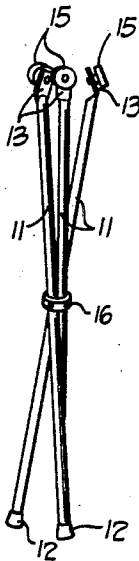
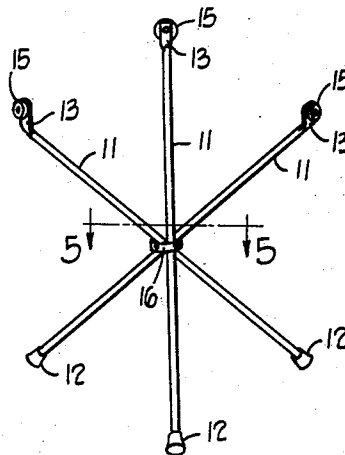


FIG. 3

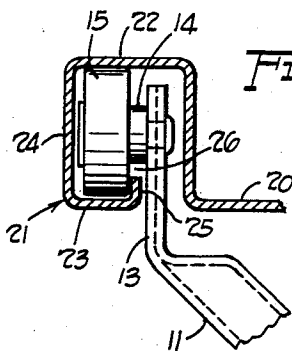


FIG. 4

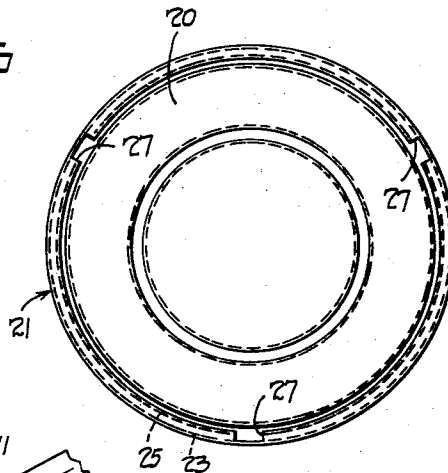


FIG. 5

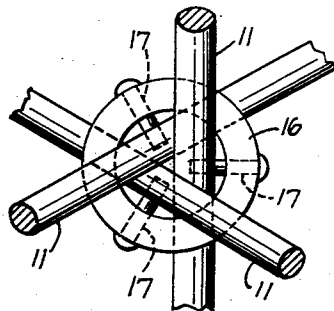


FIG. 6

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COLLAPSIBLE TABLE HAVING A ROTATING TOP

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2 Claims. (Cl. 311—83)

This invention relates to a table and particularly to a collapsible table having a rotating top.

The primary object of the invention is to provide a collapsible table having a rotating top which is simple, lightweight, and durable in construction and also easy to manipulate to collapsed or set up position.

Another object is to provide a device of the type stated whose revolving top is securely attached to its supporting legs when in its set up condition, but is easily separated therefrom when desired to collapse it for storage or transportation from place to place.

A further object is to provide a device of the type stated which is composed of a minimum of parts, and, therefore, relatively inexpensive to manufacture, and which is constructed so as to be resistant to wear even after extended periods of use.

These and other objects of the invention will become apparent from a reading of the following specification and claims, together with the accompanying drawing, wherein:

Figure 1 is a perspective view of the collapsible table with revolving top, that is the subject of this invention;

Figure 2 is a perspective view of the set up legs with revolving top removed;

Figure 3 is a perspective view of the legs in their collapsed condition;

Figure 4 is a bottom plan view of the table top with the legs removed;

Figure 5 is a top plan view of the cylindrical collar taken along the line and in the direction of the arrows 5—5 of Figure 2; and

Figure 6 is a vertical sectional view taken along the line and in the direction of the arrows 6—6 of Figure 1.

Referring more particularly to the drawing there is seen in Figure 1 the collapsible table having a rotating top that is the subject of this invention, broadly indicated by reference numeral 10.

Reference numeral 11 indicates 3 tubular legs upon which the top is supported and free to rotate. These legs are preferably made of hollow tubular stock for the sake of lightness, although they could be made of solid rod if desired.

The legs 11 have feet 12 at their lower ends and are flattened at their upper ends 13 to provide anchoring surfaces for axles 14 as seen most clearly in Figure 6.

The legs 11 are of like size and shape and are arranged in clustered relation within a cylindrical collar 16 positioned at their approximate center points. The collar 16 has three pivot pins 17 immovably moved thereon. Each pin 17 is fitted into a socket in one of the legs 11, and the legs are free to pivot on said stationary pins 17, as seen in Figure 6.

The outward or end limit of the pivotal movement of each leg 11 is defined by double point contacts between each leg 11 and the top and bottom inner peripheries of the cylindrical collar 16. Figure 2 illustrates the legs in such end limit condition.

In this condition it will be noted that the axle anchoring surfaces 13 are perpendicular to the floor on which the set-up legs are resting, and that the axles 14 extend lateral thereof, parallel to the floor. Each axle 14 has a roller 15 mounted thereon, preferably with a ball-bearing surface. The three rollers 15 face outward and are arranged in a circular path due to the natural pivotal movement of the three legs 11.

Reference numeral 20 indicates a circular table top having a peripheral hollow track or channel 21. The top may be made of any suitable material, but is preferably made of sheet metal for ease of manufacture. If made of sheet material the track 21 may be formed integral with the table edge as seen in Figures 4 and 6.

The track has top wall 22, a bottom wall 23, an outer wall 24 and an inner wall 25. These several walls define a hollow channel for receiving the rollers 15, as explained hereinafter. The inner wall 25 stops short of the top wall 22 to define a circumferential slot therearound, identified by reference numeral 26.

Reference numeral 27 indicates three spaced openings cut in the bottom and inner walls 23 and 25 respectively, as seen in Figure 4. The width of openings 27 is a little more than that of the diameter of the rollers 15, so that the rollers 15 will fit therethrough.

With the legs 11 in their set-up position, as seen in Figure 2 the table top 20 is placed over the rollers 15 with the openings 27 aligned with the rollers 15. The top is then dropped upon the rollers 15, which pass through the openings 27, until they bear against the top wall 22 of the track 21, as seen in Figure 6. In this condition the roller axles 14 will pass through the slot 26 and the rollers 15 will be entirely within the hollow track 21, and will support the top 20 in rolling engagement with the top wall 22 of the track 21. The top may then be freely rotated on the rollers 15 with the axis of the collar 16 as its center of rotation.

As soon as the openings 27 have rotated out of alignment with the rollers 15 the top 20 is locked against disengagement with the legs 11 by the rollers 15 which restrain the top against lateral or vertical movement by reason of the restraining surfaces of the track walls 22, 23, 24 and 25 as seen in Figure 6. The table 10 can be picked up by the top 20 without separating from the legs 11. When the legs are resting on the floor the top 20 can be freely rotated without possibility of lateral disengagement.

To collapse the table 10 it is only necessary to align the top openings 27 with the rollers 15, in which position the top 20 can be easily lifted off the rollers 15. The table will then be in the condition illustrated in Figure 2. The legs can then be pivoted toward one another in the collar 16 to take the collapsed position illustrated in Figure 3. The table top 20 and legs 11 can then be stored in a small space.

It will now be clear that there is provided a device which accomplishes the objectives heretofore set forth. While the invention has been disclosed in its preferred form; it is to be understood that the specific embodiment thereof as described and illustrated herein is not to be considered in a limited sense as there may be other forms or modifications of the invention which should also be construed to come within the scope of the appended claims.

I claim:

1. A collapsible table having a rotating top, comprising in combination, a plurality of support leg elements arranged in clustered relation within a cylindrical collar positioned intermediate the ends of said legs and adapted to hold said legs in either expanded or collapsed positions, each of said legs having a roller mounted at the upper

end thereof, and a circular table top bounded by a peripheral track, engageable by said rollers when the legs are in their expanded position, the so engaged table top being free to rotate on the rollers with the center of the track as its axis of rotation.

2. A collapsible table having a rotating top, comprising in combination, a plurality of support leg elements arranged in clustered relation within a cylindrical collar positioned intermediate the ends of said legs and adapted to hold said legs in either expanded or collapsed positions, each of said legs having a laterally extending axle mounted at its upper end, a roller mounted on each of said axles spaced outwardly of each of said legs, and a circular table top having a peripheral hollow track, defining upper, outer, lower and inner walls, said inner wall having a circumferential slot therearound, the bottom and inner walls of said track having spaced openings therein, equal

in width to the diameter of the rollers, and positioned to receive the rollers therethrough when the legs are in their expanded position, the said rollers being engageable through said openings with the interior of the hollow track with their axles extending through the circumferential slot thereof, the so engaged top being free to rotate on the rollers with the center of the track as its axis of rotation, but being locked against lateral and vertical movement relative to said legs by the track walls when the track openings are out of register with the rollers.

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