

Jan. 7, 1930.

J. FOLLMER

1,742,904

TABLE

Filed April 21, 1926

2 Sheets-Sheet 1

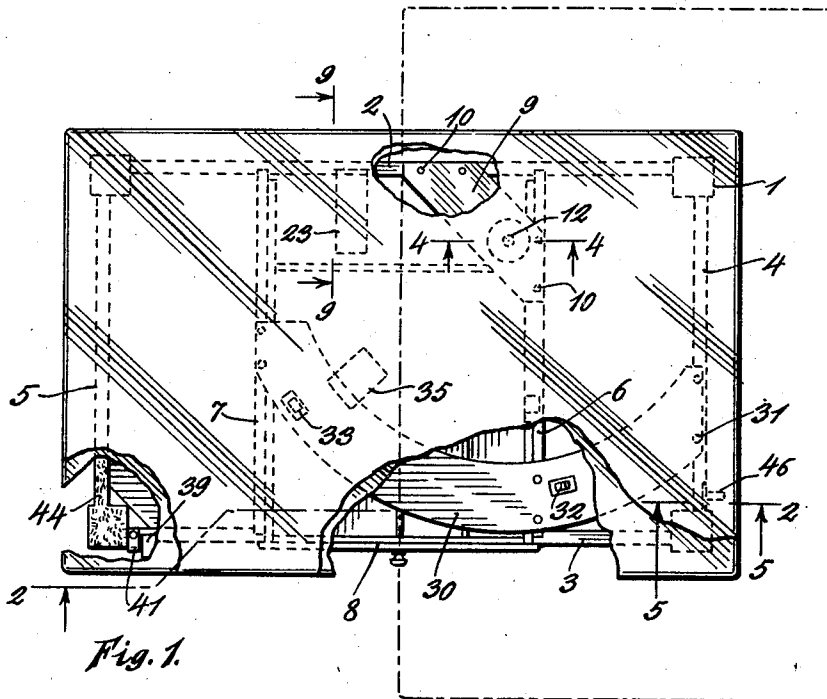


Fig. 1.

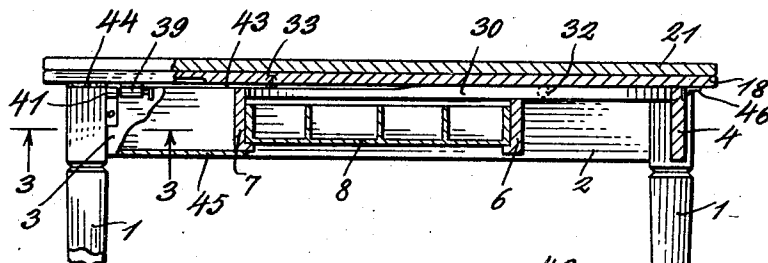


Fig. 2.

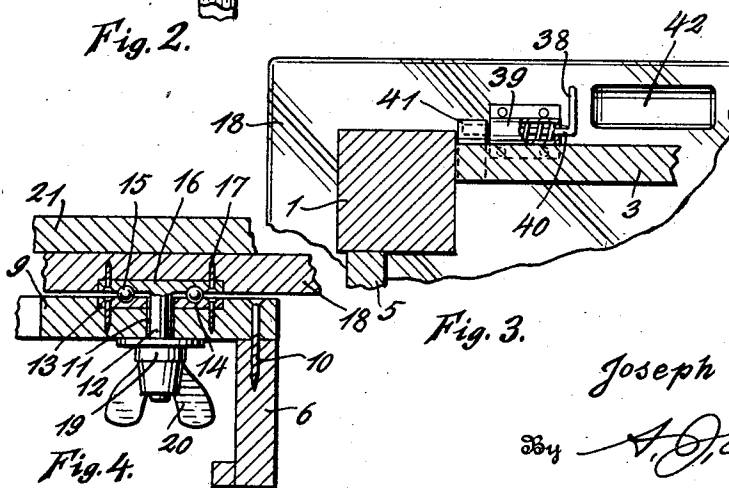


Fig. 3.

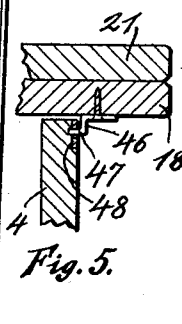


Fig. 4.

Inventor

Joseph Follmer.

By *A. O'Brien*

Attorney

Jan. 7, 1930.

J. FOLLMER

1,742,904

TABLE

Filed April 21, 1926

2 Sheets-Sheet 2

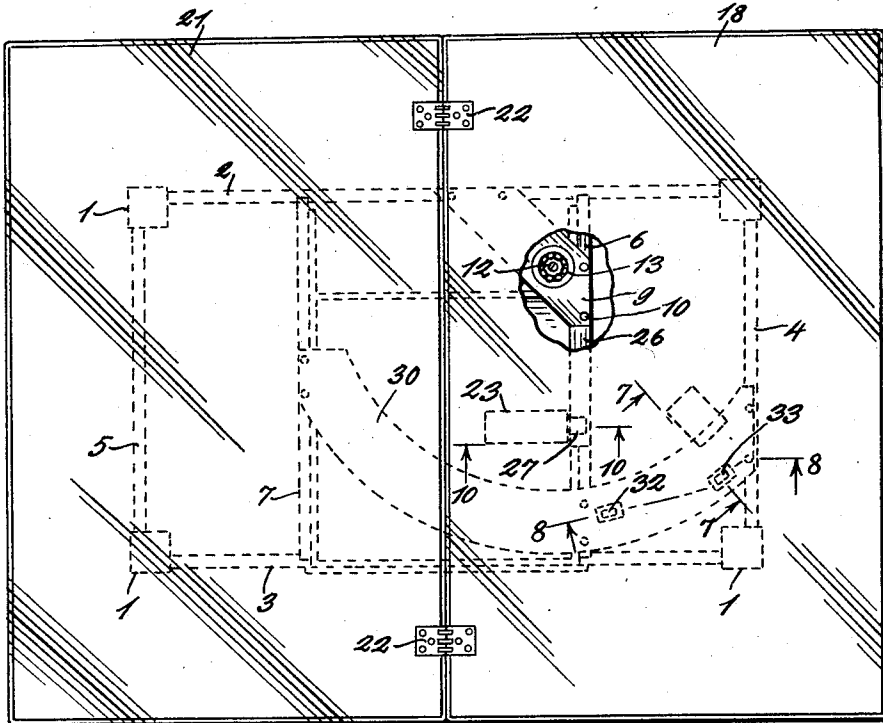


Fig. 6.

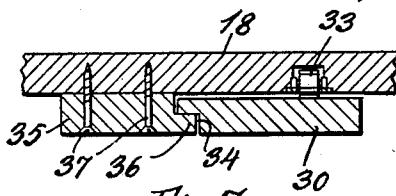


Fig. 7.

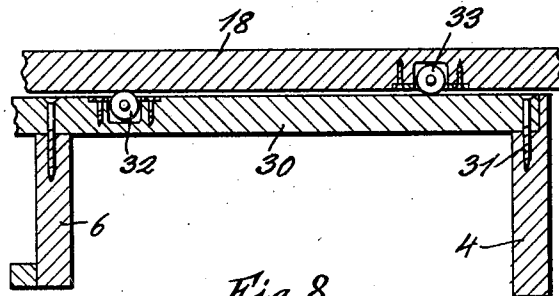


Fig. 8.

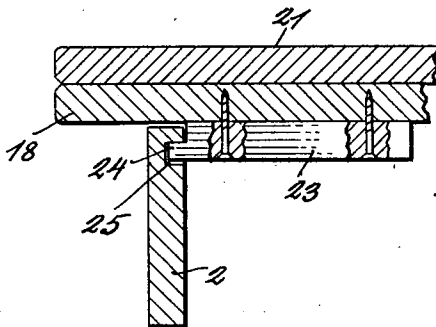


Fig. 9.

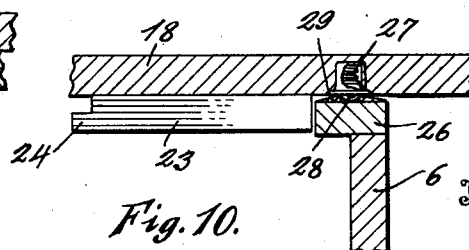


Fig. 10.

Joseph Follmer.

By

A. O'Brien

Attorney

UNITED STATES PATENT OFFICE

JOSEPH FOLLMER, OF DENVER, COLORADO

TABLE

Application filed April 21, 1926. Serial No. 103,480.

This invention relates to improvements in tables and relates more particularly to tables having tops that can be folded and unfolded.

It is the object of this invention to produce a table of a simple and substantial construction that can be readily made and which can be easily operated and which, in addition, shall be strong, substantial and of good appearance.

My invention can be best described and will be most readily understood when reference is had to the accompanying drawings in which the preferred construction has been illustrated and in which:

Figure 1 is a plan view looking down upon the top of the table when in folded position, portions being broken away to better disclose the construction;

Figure 2 is a section taken on line 2—2, Figure 1;

Figure 3 is a section taken on line 3—3, Figure 2 and shows the lock by which the table is held from opening;

Figure 4 is a section taken on line 4—4 Figure 1 and shows the pivot about which the table top turns;

Figure 5 is a section taken on line 5—5, Figure 1 and shows a detent by means of which the table top is held firmly attached to the base of the table when the top is in folded position;

Figure 6 is a plan view looking down upon the table when it is in unfolded or extended position;

Figure 7 is a section taken on line 7—7, Figure 6 and shows the interlock between the table top and the arcuate track;

Figure 8 is a section along line 8—8, Figure 6, and shows the anti-friction rollers that are provided in the track and in the table top;

Figure 9 is a section taken on line 9—9, Figure 1, and shows the manner of interlocking the table top and the base when the top is in full position; and

Figure 10 is a section taken on line 10—10, Figure 6 and shows the stop which limits the rotary movement of the table top when it is moved to unfolding position, a detent also being shown for holding the top against return movement.

The base of the table is constructed somewhat like that of an ordinary table and has four legs which have been indicated by numeral 1. These legs are connected by strips 2, 3, 4 and 5. In the illustration shown the strips 2 and 3 are the longest and form the sides of the table support, while strips 4 and 5 form the ends. Connecting strips 2 and 3 are short connecting members 6 and 7 which form the guides for a drawer that has been indicated as a whole by numeral 8. This drawer may be omitted, if desired, as it has nothing to do with the invention, but is merely shown to illustrate how it can be built into the table, if its presence is desired. Connecting the side member 2 with the transverse member 6 is a cleat 9 that extends diagonally in the manner shown in Figure 1. This cleat is secured at its ends by means of screws 10 so that it will be held rigidly in place. The cleat 9 is provided with a hole 11 which receives the pivot pin 12 about which the table top rotates. This pivot is constructed as follows: A circular plate 13 is embedded in the upper surface of the cleat 9 to which it is secured by means of screws and is provided with a central opening that registers with the opening 11. The upper surface of plate 13 is provided with a raceway 14 for reception of the balls 15. Secured to and preferably formed integral with the upper end of the pivot pin 12, is a plate 16 that is also provided with a circular raceway like that indicated by numeral 14 in member 13. Screws 17 serve to hold the plate 16 firmly attached to the table top member 18. It is now evident that when the table top is rotated it has to rotate about the axis of the pivot 12. In order to keep the pivot pin from being withdrawn from the hole 11, I have provided it with a nut 19 that is adjusted to the proper position and then locked by means of the winged lock nut 20. The part of the table top indicated by reference numeral 18 is of a size slightly larger than the outside dimensions of the supporting frame work so that when the parts are in the position shown in Figure 1, it will have the proper size for the regular table top. The table top, when in the position shown in Figures 1 and 2 is com-

posed of two members 18 and 21 that are hinged together by means of hinges 22. When the parts are in the position shown in Figures 1 and 2, it is desirable that the top shall be firmly attached to the base of the table so that the whole table can be readily carried by engaging the edges of the table top. It is also desirable that the table top shall be positively locked in the position shown in Figure 1. I have therefore secured to the underside of the table top 18, a cleat 23 which is provided with a projecting tongue 24 that, when the parts are in the position shown in Figure 1, projects into a notch 25 in the inner surface of strip 2, all in the manner shown quite clearly in Figure 9. When the table top is rotated through an angle of ninety degrees, the cleat 23 will form a stop by engaging the strip 26 that is secured to the upper edge of the transverse member 6 in the manner shown in Figure 10. A spring detent 27 of a well known construction is embedded in the under surface of the table top member 18 and the ball 28 of this detent engages an opening in the plate 29 when the parts are in the position shown in Figure 6 and serves to produce a force that resists any effort to move the parts back to folded position.

Since the table top is to be rotated about the axis of the pivot pin 12, and since it is highly desirable that this movement shall be easily accomplished, I have provided a track which has been indicated by reference numeral 30 and which is curved in the arc of a circle whose center of curvature coincides with the axis of the pivot pin 12. One end of this arcuate track is secured to the end member 4 by means of screws 31 and passes over the top of the transverse member 6 and has its other end secured to the transverse member 7 in the manner shown quite clearly in Figure 1. Embedded in the upper surface of the track 30 is an anti-friction roller 32, whose upper edge projects slightly above the upper surface of the track and serves as a support for the under surface of the table top member 18. Secured to the under surface of the table top member 18 is another friction roller which has been indicated by reference numeral 33. This roller rests upon the upper surface of the track 30 and serves as a support for the table top, while it is rotated from the position shown in full lines in Figure 1 to that shown in dot and dash lines. It is evident that since the table top is rotated ninety degrees the track 30 must subtend an angle of at least ninety degrees and has been shown as being somewhat larger than this.

Referring now to Figure 7, which is a cross section taken through the track 30 and through a portion of the top 18, it will be noticed that the concave side of the track 30 is provided with a notch or rabbet 34 and

that the under side of the table member 18 has attached to it a cleat 35 which is provided at one end with a projecting tongue 36 that extends into the rabbet 34. This cleat is secured to the table top 18 by means of screws 37 and its function is to lock the table top against upward movement so that if the operator attempts to lift the table by engaging the top, no undue strains will be put on the pivot pin.

Let us now assume that it is desired to increase the area of the table top from that shown in full lines in Figure 1, to what is shown in Figure 6. This is accomplished by grasping the handle 38 of the lock 39 (Figure 3) and moving the same towards the right until the bolt 40 is withdrawn from the loop 41. The operator then places his fingers in the cut-out notch 42 and rotates the table top to the position shown in dot and dash lines in Figure 1. Further motion in this direction will be prevented by the cleat 23 which forms a stop when it engages the edge of the part 26, all as shown in Figure 10. The upper part of the table top which has been designated by numeral 21 is now folded about its hinges and laid down into the plane of the member 18 whereby a table top of exactly twice the original area is formed and which is shown in extended position in Figure 6. Since the surface of the table top member 21, which is at the top when the parts are in folded position, is highly polished and as this surface becomes the under surface when the table is extended, it is, of course, desirable that precaution shall be taken which will prevent the polished surface from becoming scratched. For this purpose the upper edge of the side strips 1 and 2 have been cut down for one-half of their length so as to form a space 43 between the lower surface of the table top and the upper edge of these strips, and thick pieces 44 of felt are secured to the upper end of the corner posts and to the upper edge of the transverse strip 5 and serve as a support for the member 21 when in its unfolded position.

In this way the polished surface of the part 21 can only come in contact with the felt strips and all possibility of scratching the surface is thereby removed. The felt strips 44 also serve as a support for the under surface of the table top member 18 when the parts are in the position shown in Figures 1 and 2. In Figs. 4, 5, 8, 9 and 10 I have shown the manner in which the lower part 18 of the top is supported so as to space it from the upper edge of the frame. This prevents scratching and reduces the resistance to rotation about the pivot. When the table top is rotated to the dot and dash line position in Figure 1, it is, of course, apparent that the left half of the table support will be exposed until the member 21 is folded to the position shown in Figure 6. I have taken

advantage of this to prepare a drawer which is formed by securing a bottom member 45 to the under side of strips 5 and 7 and where the drawer 8 is not used, this bottom 45 may extend to the center line of the table so as to form a receptacle whose inner area is one-half the total area between the strips 2, 3, 4 and 5. The receptacle thus formed can be used for storing tablecloths, napkins, silver or for any other purpose. In order to more securely attach the table top to the under side or support of the table I have provided a metal member 46 that is secured to the under side of the table top 18 and has its end 47 offset in the manner shown in Figure 5 and I have secured a slitted metal member 48 to the outer surface of the strip 4 in such a position that when the parts are in the position shown in Figure 1, the end 47 will engage the slot in member 48 and thereby lock the top against upward movement.

From the above it will be apparent that I have provided a table of a simple and substantial construction that can be readily moved from folded position to unfolded position and back again and which is adapted to have the upper surface increased to twice the normal area. The construction of the table is such that it is adapted for the manufacture of my table for parlor or dining room use or for a kitchen table which can be unfolded whenever it is used for dining purposes and which can be folded into a smaller space when otherwise employed.

Having now described my invention, what I claim as new is:

1. A table having an extensible top, comprising, in combination, a rectangular frame member, having a cleat and a track member secured to the upper part of the frame, a table top consisting of two hingedly connected members pivoted to the cleat at a point spaced from the center of the frame, means for permitting the top member to be rotated about said pivot through an angle of ninety degrees, an anti-friction roller secured to the underside of the pivoted top member and adapted to cooperate with the track and an anti-friction roller secured to the track and adapted to engage the under surface of the table.

2. A table comprising, in combination, a rectangular supporting frame, having a cleat secured thereto and flush with the upper surface thereof, a rectangular table top consisting of two top members of rectangular shape, and of a size somewhat greater than the size of the frame, hingedly connected along one edge, the under member of said table top being pivoted to said cleat at a point spaced from the center point of said frame, an arcuate track member whose upper surface is parallel with the plane of the under surface of the top member, an anti-friction roller

secured to the track member and projecting upwardly above the surface thereof, said roller being adapted to contact with and form a support for the table top while it is rotated about its pivot, means for interlocking the top and the track so as to prevent relative movement of the top and the frame in the direction of the axis of rotation and a locking means for locking the table top against rotation in one direction.

3. A table comprising a supporting frame, a foldable table top pivotally connected thereto, an arcuate track concentric with the pivot, means for separating the underside of the top from the upper side of the track, said means comprising an anti-friction roller carried by the table top for engaging the track, another roller carried by the track for engaging the table top and means carried by the table top for engaging underneath the track for the purpose of preventing the top and the track from becoming separated.

4. A table comprising, in combination, a rectangular frame, a table top formed of two hingedly connected members which can be folded so as to lie in the same plane or in parallel planes, means for pivotally connecting one of said top members with the frame the upper edge of one end and the adjacent portions of the side members being in a plane parallel to but spaced from the plane of the corresponding portions of the other end of the frame and a piece of felt secured to the upper edge of the end piece whose upper edge lies in the lower plane.

5. A table comprising, in combination, a frame, a table top formed from two hingedly connected members which can be folded so as to lie in the same plane or in parallel planes, a support secured to the frame, means for pivotally connecting the top to the support so that it may be rotated about the pivot through an angle of ninety degrees, means for spacing the underside of the top from the upper edge of the frame so that the surface of the top will not come into contact with the hard material of the frame, a felt strip secured to a portion of the upper edge of the frame for spacing the under surface of the table from the hard frame material, an arcuate track secured to the frame so as to be concentric with the pivot and a spacer secured to the underside of the table, said spacer being adapted to contact with the track so as to steady the table top.

6. A table comprising, in combination, a frame, a table top formed from two hingedly connected members which can be folded so as to lie in the same plane or in parallel planes, a support secured to the frame, means for pivotally connecting the top to the support so that it may be rotated about the pivot through an angle of ninety degrees, means for spacing the underside of the top from the upper edge of the frame so that the

surface of the top will not come into contact
with the hard material of the frame, a felt
strip secured to a portion of the upper edge of
the frame for spacing the under surface of
the table from the hard frame material, an
5 arcuate track secured to the frame in concen-
tric relation to the pivot, a spacer secured to
the underside of the table, said spacer being
adapted to contact with the track so as to
10 steady the table top and means for latching
the table top in its two extreme positions.

In testimony whereof I affix my signature.

JOSEPH FOLLMER.

15

20

25

30

35

40

45

50

55

60

65