

Sept. 6, 1938.

J. C. ALLRED

2,129,041

TABLE DEVICE

Filed Sept. 30, 1937

4 Sheets-Sheet 1

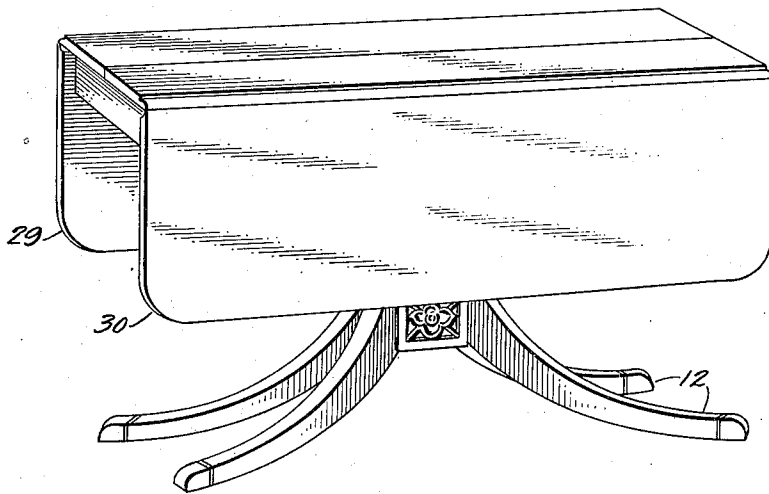


Fig. 1.

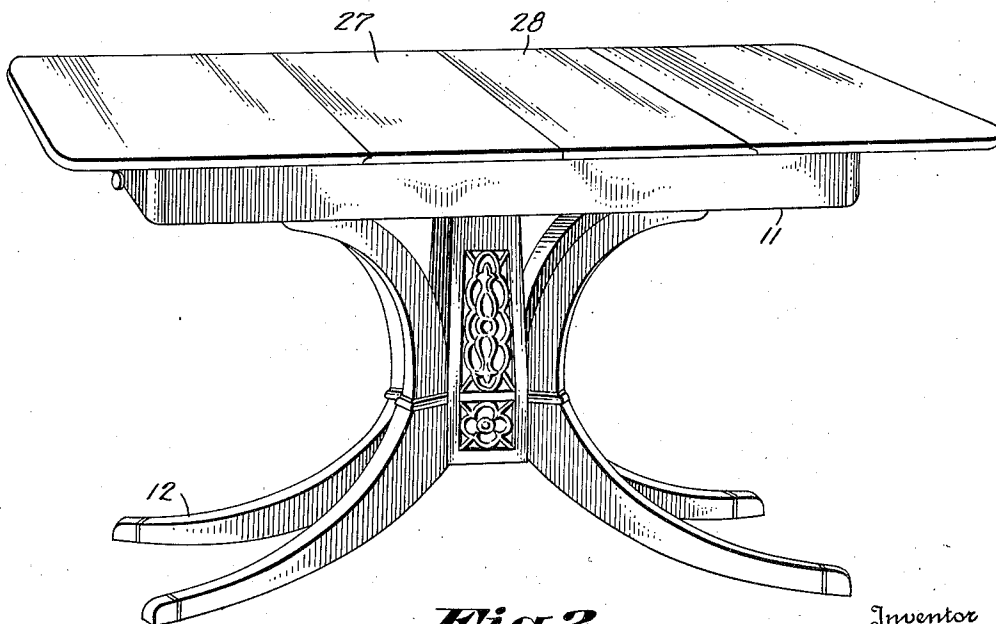


Fig. 2.

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4 Sheets-Sheet 2

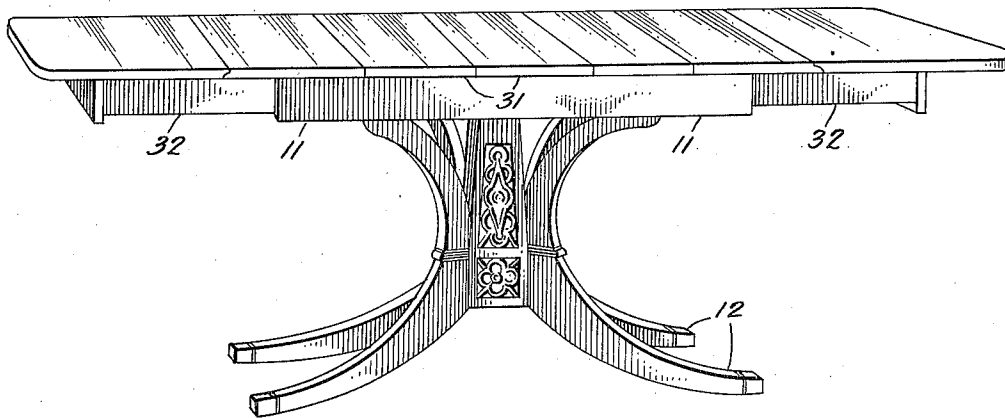


Fig. 3.

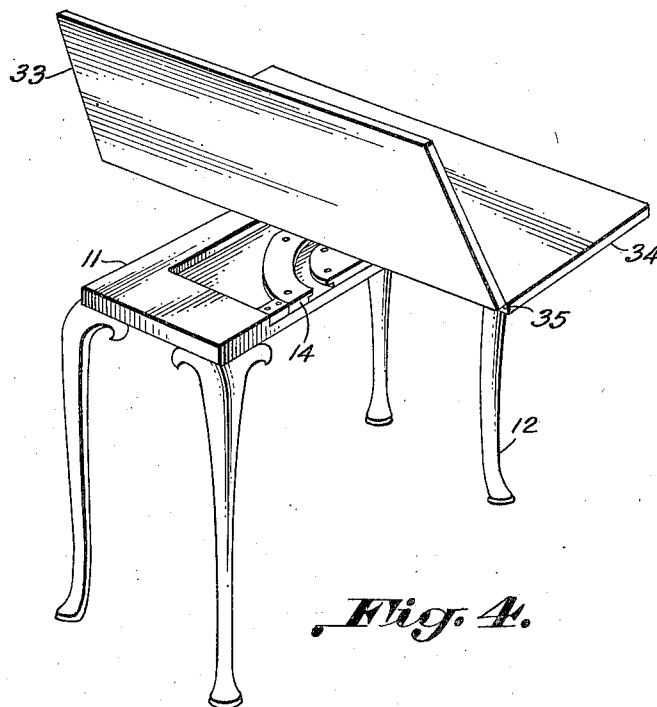


Fig. 4.

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4 Sheets-Sheet 3

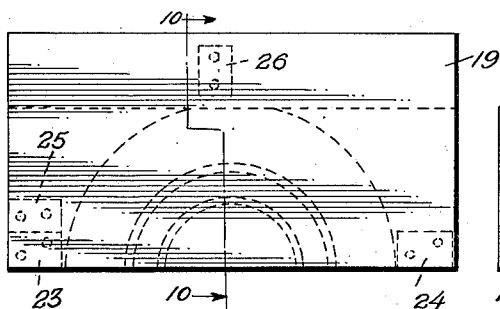


Fig. 5.

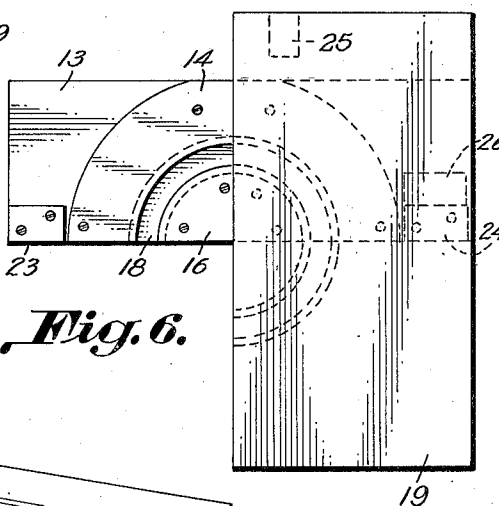


Fig. 6.

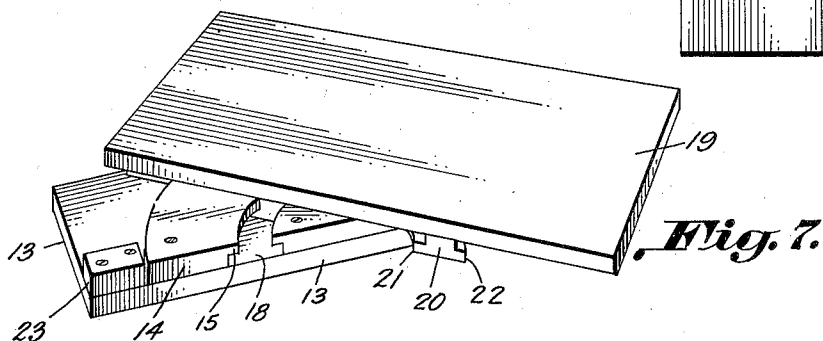


Fig. 7.

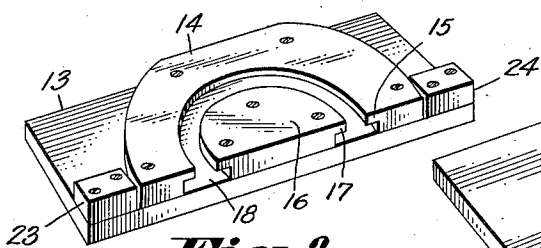


Fig. 8.

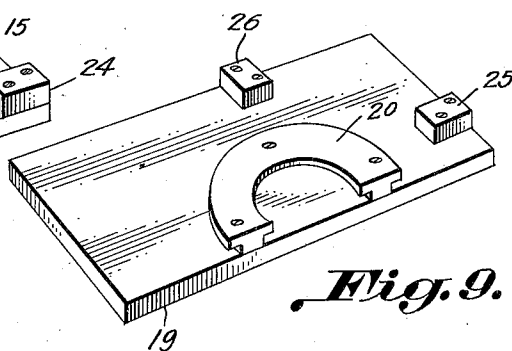


Fig. 9.

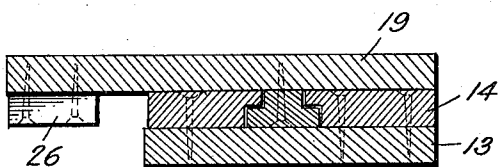


Fig. 10.

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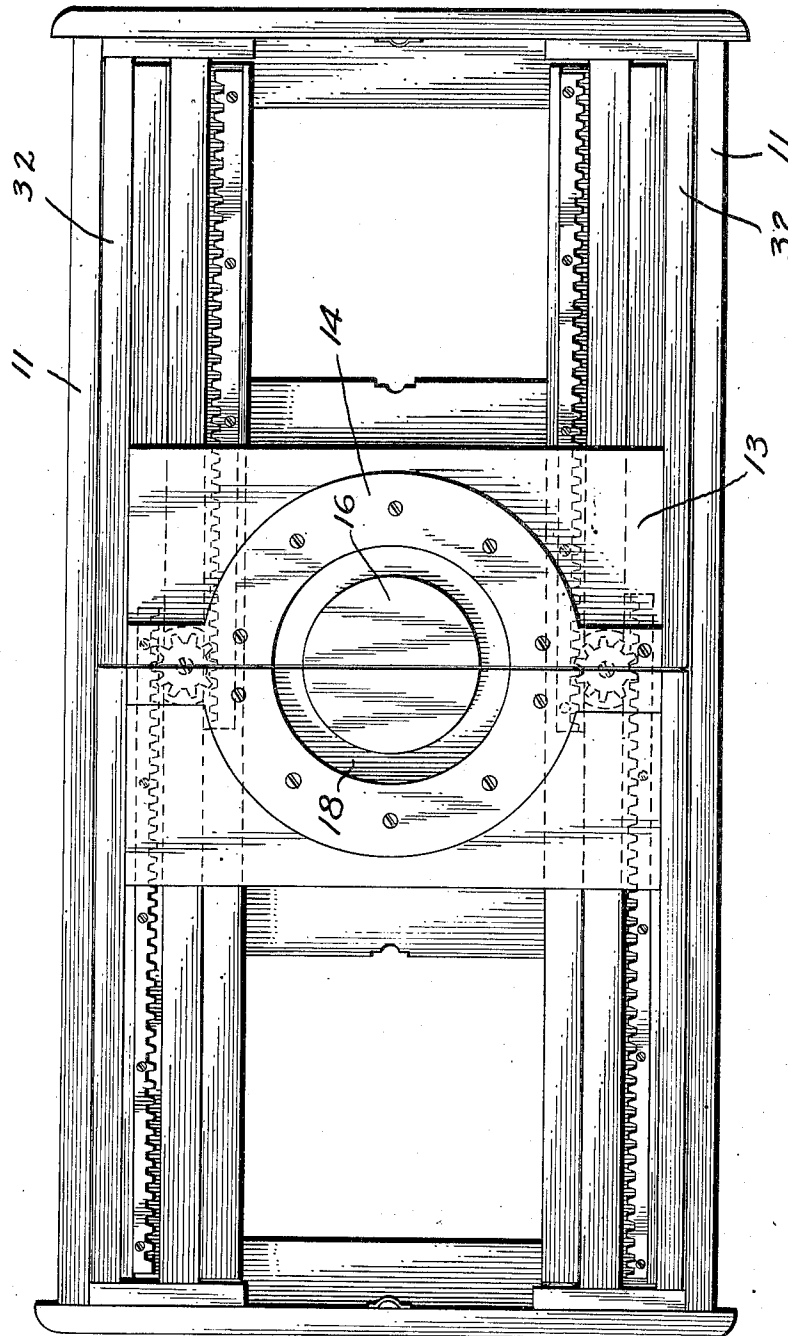
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2,129,041

TABLE DEVICE

Filed Sept. 30, 1937

4 Sheets-Sheet 4



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Fig. 11.

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UNITED STATES PATENT OFFICE

2,129,041

TABLE DEVICE

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Application September 30, 1937, Serial No. 166,630

2 Claims. (Cl. 311—42)

The present invention is concerned with a new and improved table construction. It is an object of the invention to provide a swivel means between the table top and the body thereof whereby the top may be rotated through an angle of ninety degrees (90°). This may be applied to the type of table known in the trade as the "flip top", wherein the table top is divided into halves which are hinged together. The construction also readily lends itself to a drop leaf table in which when the top is pivoted the drop leaves are supported in the same horizontal plane as the remainder of the top. If desired, the construction may also be applied to drop leaf extension tables, wherein, after rotating the top and supporting the drop leaves the original halves of the top may be separated and extra leaves inserted so as to make the table of any desired size.

It is an object of the invention to provide a swivel means which is standard and may be used in any of the above types of tables.

It is an object of the invention to devise a standard swivel device of low cost which may be readily installed and will not easily get out of order and which may be used in even the most expensive type of table.

It is an object of the invention to provide sturdy and rugged swivel means which is simple in construction and assembly and eliminates the faulty and unreliable features of previous devices.

It is an object of the invention to provide a device which will not come loose or bind and is of adequate strength to withstand severe abuse. Other objects of the invention will appear in the accompanying specification.

The invention can be better understood in detail by reference to the drawings which set forth the preferred constructions and improvements thereof. In the drawings like numbers refer to like parts. It is stated, however, that the specification and drawings are merely representative of the concept of the invention and are not intended to be restrictive in any sense as various modifications may be made in the form and specific arrangements of the elements illustrated or described without departing from the spirit or basic concept of the invention.

In the drawings:

Fig. 1 is a perspective view of a drop leaf table embodying a form of the invention.

Fig. 2 is a perspective view of the table shown in Fig. 1 with the top rotated and the drop leaves supported by the under members of the table.

Fig. 3 is a perspective view of a drop leaf ex-

tension table, extended with extra leaves inserted.

Fig. 4 is a perspective view of a "flip top" table with one of the leaves raised to show part of the pivoting mechanism.

Fig. 5 is a plan view of the pivoting mechanism of the table.

Fig. 6 is a plan view of the mechanism shown in Fig. 5 but with the upper part rotated through ninety degrees.

Fig. 7 is a perspective view of the mechanism shown in Figs. 5 and 6 partly rotated so that the working parts can be seen.

Figs. 8 and 9 are perspective views of the separate parts of the pivoting mechanism.

Fig. 10 is a sectional view of the pivoting mechanism taken along line 10—10 in Fig. 5.

Fig. 11 is a plan view of the drop leaf extension table shown in Figs. 1, 2 and 3 with the top leaves removed together with the top pivot member.

The tables comprise a base 11 which is supported by legs 12. Base 11 may have mounted thereon a bottom member 13 or the bottom member may be made a part thereof as shown in Fig. 4. Bottom member 13 is provided with a semi-circular member 14 having a flange extension 15 on the upper portion of its inner part. The member 14 may be screwed, glued or otherwise attached to bottom member 13. A semi-circular piece 16 is likewise mounted on bottom member 13 and fits within the annular member 14. Circular member 16 likewise has a projecting flange 17 on its upper outer portion. Said flange 17 is of the same size and height as flange 15 on annular member 14. Members 14 and 16 together with their flanges 15 and 17 cooperate with bottom member 13 to form a T shaped slot 18, the purpose of which will be later described.

A top member 19 is provided having thereon an annular member 20. Annular member 20 is provided with two flanges 21 and 22, flange 21 being on its inner portion and flange 22 on its outer portion. Member 20 together with its flanges 21 and 22 is T shaped in cross section and so proportioned as to fit slot 18 and move smoothly therein. Annular member 20 is attached to top member 19 by screws, glue or both.

Bottom member 13 is provided with two stop blocks 23 and 24 which are firmly attached thereto in such a manner that repeated jarring will not loosen them. These blocks 23 and 24 are located one on each side of annular member 14. Top member 19 is rectangular in shape and is provided with a block 25 at one end and another

block 26 at one side. These blocks are likewise attached to the top member 19 in a very firm manner so as to permit of a large amount of jarring without becoming loose.

5 Since the constructions in Fig. 5 through 10 inclusive are made of wood and intended to fit together, it is recommended that they be constructed of ply wood so as to avoid shrinking and warping as much as possible. This not only makes
10 for a stronger construction but insures the smooth, free operation of element 20 in slot 18. The said annular member 20 and slot 18 may be made so nice that a central pivot pin or the like may be entirely dispensed with.

15 In assembly, Figs. 8 and 9, the pivot elements may be fitted together and blocks 25 and 26 subsequently attached when the members 13 and 19 are in the position shown in Figs. 6 and 5 respectively. It will be noted from an inspection of
20 Figs. 5, 6 and 7 that the operation of the swivel or pivot means is to permit top member 19 to rotate through ninety degrees with respect to bottom member 13 at which time stop 26 contacts stop 24 as shown in Fig. 6. When it is desired to return the mechanism to its normal position,
25 top member 19 is rotated counter-clockwise with respect to bottom member 13 until stop 25 contacts stop 23 as shown in Fig. 5.

30 With the type of table shown in Fig. 4, the swivel mechanism shown in Fig. 7 may be employed, as disclosed in tables of the type shown in Fig. 1 through 3 inclusive, however, it may be desirable to provide a member such as shown in Fig. 5 through 7 inclusive for each of the central
35 leaves 27 and 28 in Fig. 2. In use, a table such as shown in Fig. 1 may be placed in a dining room where it occupies a minimum of space. Where more table space is desired, the drop leaves 29 and 30 are raised into the plane of central leaves
40 27 and 28 and the entire top rotated through 90° to the position shown in Fig. 2 wherein drop leaves 29 and 30 are held in position by support 11. During this turning of the table top the pivot means changes position from Fig. 6 to that
45 shown in Fig. 5. A transition stage is shown in Fig. 7.

It is understood of course that if desired, top member 19 may constitute one of the top leaves 27 or 28 or it may be a separate member fastened thereto.

50 The table shown in Fig. 3 is of the drop leaf extension type and goes through the same positions as the drop leaf table shown in Figs. 1 and 2. When however a larger table is required the drop leaves and center leaves are merely separated and additional leaves 31 inserted. Of course,
55 during the separating step, arms 32 are extended from base 11 by means well known and conventional in the art, as shown in the Patents 101,545 to Tilton; 1,969,875 to Charak; British Patent 14,414 of 1913 to Pratt et al. and Patent 1,165,718 to Schultz.

60 The above structure includes two pairs of sliding rails 32, 32 as shown in Fig. 3. These pairs of sliding rails are fastened at their ends by op-

posite bridging members as shown in Fig. 3. Their inner ends are held together by other bridging members not shown in position but shown separately in Fig. 5 through 10 inclusive.

The bottom member 13 is a wide bridging member which joins the inner ends of one pair of sliding rails 32. A like member joins the inner ends of the other pair of sliding rails 32. These wide bridge members 13 form the base upon which the T-shape trackway 14, 15, 16, 17 and 18
10 is constructed. The inverted T-shape track 20 is mounted on member 19 and rides in inverted T-shape trackway 18.

Fig. 11 clearly shows such structure.

Fig. 4 discloses the "flip top" type of table in 15 which half 33 of the top is merely folded back onto the other half 34 which it normally overlies. Halves 33 and 34 are hinged along one edge as at 35. When it is desired to use this table the top is rotated through 90°, the pivoting mechanism 20
20 operated as shown in Figs. 5 and 7 inclusive. Half 33 is then rotated about hinge 35 into the plane of half 34 where it is supported by base member 11.

The following combinations are claimed and 25 desired to be covered by Letters Patent:

1. In an extension table, supporting legs, two pairs of sliding rails supported by said legs, a relatively wide bridge member connecting each pair of sliding rails, said bridge members having
30 an upstanding semi-circular trackway secured thereto, said trackway being of inverted T-shape cross-section and of relatively large radius, a pair of main leaves each having a hinged extension leaf attached to one edge thereof, a semi-
35 circular track of inverted T-shape cross section mounted on the under surface of each of said main leaves, said track being of a size and shape complementary to said trackway so as to smoothly rotate relative to, but interlock vertically and laterally with, said semi-circular trackway,
40 the centers of curvature of said tracks and trackways being at the meeting edges of said main leaves, whereby a complete circular trackway is formed which fully encloses the circular track
45 also formed when the main leaves are in abutting position.

2. In a table top revolving means, a base, a semi-circular trackway of inverted T-shape cross-section formed on said base, said trackway
50 having a large radius of curvature the center of which curvature is adjacent an edge of the base, a main leaf having an extension leaf hinged thereto, a semi-circular track of inverted T-shape cross-section formed on the under side of
55 said main leaf, said track being of a size and shape complementary to said trackway so as to smoothly rotate relative to, but interlock vertically and laterally with, said semi-circular trackway, whereby a complete trackway of substantial length is formed which fully encloses the semi-circular track when the table is unextended.

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