United States Patent

Linton

[15] 3,636,892

[45] Jan. 25, 1972

[54]	CONVERTIBLE TABLE				
[72]	Inventor:	Thomas W. Linton, Bellville, Ohio			
[73]	Assignee:	The Snyder Trailer Company, Butler Ohio			
[22]	Filed:	Aug. 8, 1969			
[21]	Appl. No.:	848,438			
[52]	U.S. Cl	108/79, 108/112, 108/48,			
[51]	Int. Cl	5/3 A47b 1/04			
[58]	Field of Search				
		297/159; 5/3			
[56]		References Cited			
UNITED STATES PATENTS					
265,010 9/18		82 Blakeslee108/78			

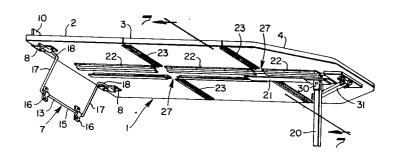
1 470 555			
1,472,575	10/1923	Anderson	108/79
1,623,850	4/1927	Patenaude	108/79
1,976,083	10/1934	Miller	108/70
2,257,425	9/1941	Mezzetti	108/11
3,063,064	11/1962	Mace	108/112 ¥
3,267,879	8/1966	Jackson	100/112 /
3,427,667	2/1969	Ratcliff	5/3

Primary Examiner—Francis K. Zugel Attorney—Oberlin, Maky, Donnelly & Renner

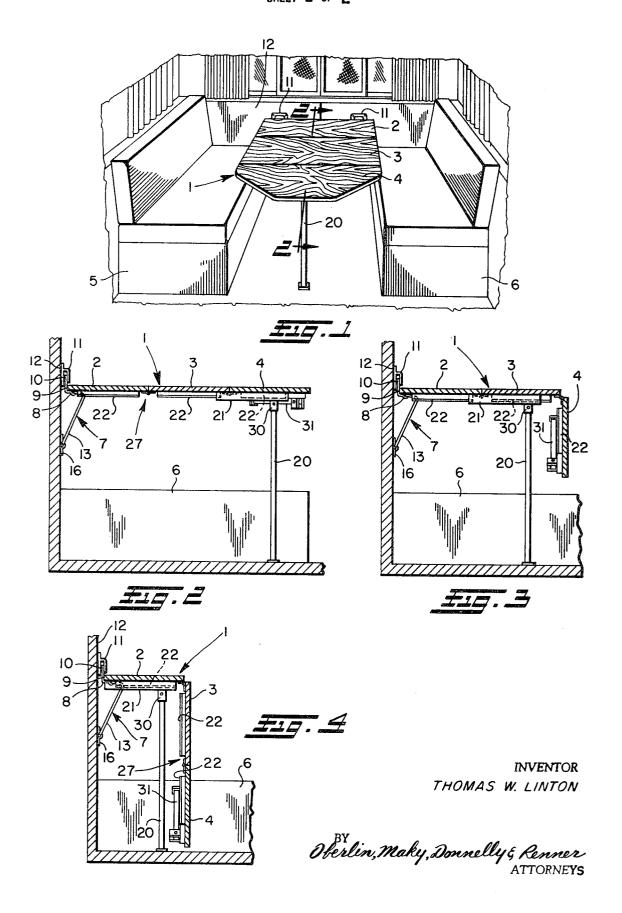
57] ABSTRACT

Convertible table comprises two or more table sections hinged together and having a main support leg freely slidable in guide tracks along the underneath side of the table from one table section to another for supporting the table either in the fully extended position or with one or more table sections folded downwardly in dropleaf position.

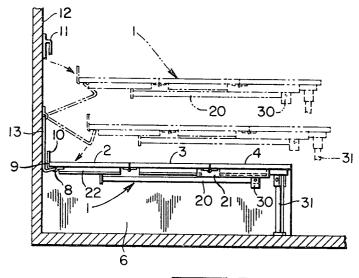
5 Claims, 7 Drawing Figures

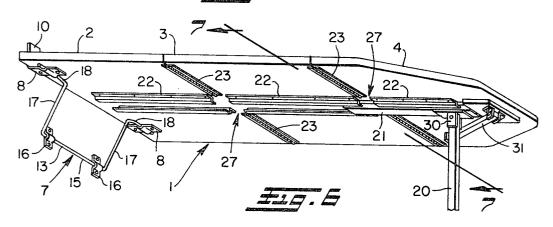


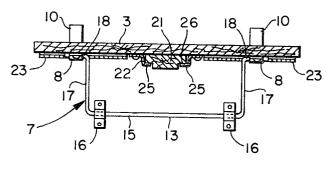
SHEET 1 OF 2



SHEET 2 OF 2







#10.7

INVENTOR
THOMAS W. LINTON

CONVERTIBLE TABLE BACKGROUND OF THE INVENTION

The present invention relates to a convertible table of rela-

tively simple construction consisting of one or more foldable table sections which provides for variations in the usable amount of living and dining space, depending on needs.

In dwelling having limited floor space such as found in trailers, boats, small apartments and the like, convertible tables are often used in the kitchen or dining areas to permit changes in the size of the table so that a sufficiently large table may be provided for dining and other such uses, and the table may be folded out of the way at other times to make additional room. A portion of the table may be left unfolded for use as an 15 end table on which lamps and other objects may be placed, and the table when fully extended may also be lowered for use in combination with bench seats as a bed, particularly in trailers and boats.

However, the main support leg which is used to support the 20 table when in the fully extended position at normal table height must ordinarily be folded out of the way before the foldable table section can be dropped, which makes it somewhat cumbersome to convert the table from one size to another. Additional support means must also be provided for 25 taken on the plane of the line 7-7. supporting the table when the foldable table section is in the dropleaf position, and the foldable table section is usually made longer than the main support leg to accommodate it in the folded position, thus necessitating the lifting up or raising of the table during folding of the foldable table section to permit swinging in of the foldable table section to an inclined position where it will not interfere with the remainder of the table from remaining level after folding.

SUMMARY OF THE INVENTION

With the foregoing in mind, it is a principal object of this invention to provide a convertible table having one or more foldable table sections and a main support leg for supporting the table both when in the fully extended position and when 40 one or more foldable table sections are folded to the dropleaf position.

Another object is to provide a convertible table in which the main support leg is of a length greater than the combined length of the foldable table sections, whereby when the folda- 45 ble table sections are lowered to the dropleaf position, they will be supported in a vertical condition by the main support

These and other objects of the present invention may be achieved by providing a convertible table in which the main 50 support leg therefor is free to slide in aligned track sections on the underneath side of the table sections for movement from one table section to another to provide support for the table at various positions along its length as required, depending on the folded condition of the table. When the table is fully extended, the main support leg is positioned beneath the outermost table section, and a simple sliding movement of the main support leg inwardly of one or more of the foldable table sections will permit such foldable table sections to be swung downwardly to the dropleaf position. The main support leg may also be folded beneath the table when fully extended and the table lowered between a pair of bench seats and the like and supported by a shorter auxiliary leg to provide in combination with the bench seats a bed if desired.

To the accomplishment of the foregoing and related ends, the invention, then, comprises the features hereinafter fully described and particularly pointed out in the claims, the following description and the annexed drawings setting forth in detail a certain illustrative embodiment of the invention, this 70 being indicative, however, of but one of the various ways in which the principle of the invention may be employed.

BRIEF DESCRIPTION OF THE DRAWINGS

In the annexed drawings:

FIG. 1 is a perspective view of a preferred form of convertible table constructed in accordance with this invention as seen from the outer end thereof, such table being shown in the fully extended, raised position between a pair of bench seats such as may be found in a house trailer and the like;

FIG. 2 is a longitudinal section through the table of FIG. 1, taken on the plane of the line 2-2;

FIG. 3 is a longitudinal section similar to FIG. 2, but showing the outermost table section in the dropleaf position with the main support leg positioned beneath the adjacent table section:

FIG. 4 is a longitudinal section also similar to FIG. 2 but showing the two outermost table sections in the dropleaf position, with the main support leg located beneath the innermost table section;

FIG. 5 is a longitudinal section showing the convertible table fully extended, but with the main support leg folded beneath the table and a shorter auxiliary support leg in position for supporting the table in a lower position at bench seat height to provide with the bench seats a bed;

FIG. 6 is an isometric view of the underneath side of the table: and

FIG. 7 is a transverse section through the table of FIG. 6,

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now in detail to the drawing, a preferred form of convertible table in accordance with this invention is generally indicated by the reference numeral 1, and comprises a plurality of table sections 2, 3 and 4, each hinged together to permit folding of one or more of the table sections in dropleaf fashion, in a manner to be subsequently fully explained. While three such table sections 2, 3 and 4 are shown, it will be apparent that as few as two and more than three table sections may be provided, depending upon the length of the table sections and vertical height between the floor and table when in the fully raised position.

In FIG. 1 the convertible table 1 is shown disposed between a pair of bench seats 5 and 6 such as are used in trailers, boats, and other such dwellings where space is limited. The innermost table section 2 is shown suitably supported at normal table height as by means of a wall mount 7 consisting of a pair of brackets 8 secured to the table section 2 adjacent the back edge 9 and having vertically extending portions 10 which are adapted to be received in sockets 11 suitably fastened to the adjacent wall surface 12 at the desired height for latching the table in the raised position. A generally U-shaped hinge member 13 is also used to support the table section 2 when in the raised position shown in FIGS. 1 through 4, 6 and 7, and when the vertically extending portions 10 of the brackets 8 are disengaged from the sockets 11, the table is free to swing about the hinge member 13 from the raised position to a lower position shown in FIG. 5 where the inner end of the table is still supported by the hinge member. As perhaps best seen in FIGS. 6 and 7, the cross element 15 of the hinge member 13 is pivotally secured to the adjacent wall surface 12 by a pair of brackets 16, whereas the legs 17 of the hinge member 13 have out-turned ends 18 pivotally secured to the underneath side of the table section 2 by the brackets 8.

Support for the outer end of the table 1 when in the fully upright position is provided by a main support leg 20 which is attached to a slide member 21 received in a sectioned track 22 extending longitudinally along the underneath side of the table. As clearly shown in FIG. 6, there is an individual section of track 22 secured to each of the table sections 2, 3 and 4 in longitudinal alignment with each other, and each section of track terminates adjacent the ends of the table sections so as not to interfere with folding of one table section relative to another. Moreover, the piano hinges 23 which pivotally connect the table sections together to permit downward folding of the outermost table sections relative to the innermost table 75 section are located outwardly of the sections of track 22 so as

not to interfere with longitudinal movement of the slide 21 along the track sections from one table section to another. Preferably, the track sections 22 have inturned flanges 25 which overlie longitudinally extending shoulders 26 on opposite sides of the slide 21 for retaining the slide 21 within the track sections, and the slide 21 is of a length greater that the gap 27 between adjacent track sections so as to prevent removal of the slide 21 from the track sections when passing from one track section to another. However, the slide 21 is of course shorter than the length of the innermost table section 2 10 so as to be accommodated thereby when it is desired to drop both of the outermost table sections 3 and 4.

With the table in the fully raised position, all of the table sections 2, 3 and 4 are retained in the fully extended position by sliding the main support leg 20 outwardly along the track sections 22 until the slide 21 is beneath the outermost table section 4, as illustrated in FIGS. 1, 2 and 6. If a table of shorter length is desired, it is a simple matter to lift the forward end of the table up slightly and push the main support leg 20 back along the track sections 22 until the slide 21 clears the outermost table section 4 and the outermost table section is free to be pivoted downwardly to the dropleaf position illustrated in FIG. 3. Continued rearward movement of the slide 21 and main support leg 20 beyond the second outermost table section 3 will also permit dropping of the second table section 3 as shown in FIG. 4, leaving only the innermost table section 2 in the fully raised, level position to provide an end table or the like on which may be placed a lamp or other objects. As evident from FIG. 4, the combined length of the dropleaf table sections 3 and 4 is somewhat less than the vertical height of the main support leg 20, whereby the main support leg still provides support the the table when the foldable table sections 3 and 4 are dropped. A stop or catch may be placed on the floor in vertical alignment with the folded outermost table section 4 to latch the table sections in the folded condition, or spring hinges may be provided for that purpose, if desired.

The main support leg 20 is shown pivotally mounted to the slide 21 at 30 to permit folding of the support leg up against the bottom of the table and lowering of the table from the 40 raised position to the lower position illustrated in FIG. 5. Before the main support leg 20 may be folded, however, the table sections 3 and 4 must be fully extended and the main support leg 20 pulled outwardly to the position shown in FIG. 2 thus to provide sufficient room beneath the table for the main support 45 leg. After folding, the outer end of the table may be lifted slightly to disengage the vertically extending portions 10 of the brackets 8 from the sockets 11, and the table swung downwardly about the hinge member 13 in the manner illustrated in phantom lines in FIG. 5 to the solid line position 50 whereat the innermost end of the table continues to be supported by the hinge member 13. A shorter auxiliary leg 31 may be pivotally mounted to the outermost table section 4 and swung downwardly into position for supporting the outer end of the table in the lower position, as further shown in FIG. 5.

From the foregoing, it can now be seen that the convertible table of the present invention includes a novel support leg which not only supports the table in the raised position when the various table sections are fully extended, but also when one or more of the table sections are folded downwardly to the 60 dropleaf position because of the sliding connection between the table and support leg which permits movement of the support leg from one table section to another without interfering with desired folding movements of the table sections.

invention:

1. A convertible table comprising a plurality of table sections hinged together to permit downward folding of one or more of said table sections and return, and support means for said table slidably connected to the underneath side of said 70 table for selective positioning beneath any one of said table selections depending on the desired position of said one or

more foldable table sections, said support means for said table comprising a slide member, a main support leg secured to said slide member, and means mounting said slide member for longitudinal movement along the underneath side of said table from one table section to another, said slide member having longitudinally extending shoulders on opposite sides, and individual track sections secured to the underneath side of each of said table sections in longitudinal alignment with each other, said track sections having inturned flanges overlying said shoulders for retaining said slide member within said track sections, and hinge means for mounting one end of said table for swinging movement of said table between a raised position in which said table is supported by said support means and a lower position, said main support leg being pivotally mounted to said slide member to permit folding of said support leg up against the bottom of said table prior to swinging movement of said table to the lower position, and means for supporting said table in the lower position, said last-mentioned means comprising an auxiliary leg substantially shorter than said main support leg pivotally connected to the other end of said table.

2. A convertible table comprising a first table section, means for supporting one end of said first table section, a second table section having one end hinged to the other end of said first table section to permit downward folding of said second table section relative to said first table section and return, a third table section having one end hinged to the other end of said second section to permit downward folding of said third table section relative to said first and second table sec-30 tions and return, and support means slidably connected to the underneath side of said table for selectively positioning said support means beneath said third table section for supporting all three table sections in a horizOntally extending position, beneath said second table section for supporting said first and 35 second table sections in the horizontally extending position with said third table section folded downwardly, and beneath said first table section for supporting said first table section in the horizontally extending position with said second and third table sections folded downwardly, said means for supporting said one end of said first table section comprising hinge means for mounting said one end of said first table section for swinging movement of said table between a raised position in which said table is supported by said support means and a lower position, said support means comprising a slide member, a main support leg secured to said slide member, and means mounting said slide member for longitudinal movement along the undemeath side of said table from one table section to another, said main support leg being shorter than the combined length of said first, second, and third table sections and being pivotally mounted to said slide member to permit folding of said main support leg up against the bottom of said table when said slide member is disposed beneath said third table section prior to swinging movement of said table to the lower position as aforesaid, and means for supporting said table in the lower 55 position.

3. The table of claim 2 wherein the vertical height of said support means is greater than the combined length of said second and third table sections to provide support for said first table section when disposed therebeneath with said second and third table sections hanging straight down from the other end of said first table section.

4. The table of claim 2 wherein said slide member has longitudinally extending shoulders on opposite sides, and individual track sections secured to the underneath side of each I, therefore, particularly point out and distinctly claim as my 65 of said table sections in longitudinal alignments with each other, said track sections having inturned flanges overlying said shoulders for retaining said slide member within said track sections.

> 5. The table of claim 2 further comprising latch means for releasably latching said one end of said first table section in the raised position.