

Jan. 5, 1954

J. PUCCI

2,665,181

FOLDING PAIRED LEGS FOR TABLES

Filed April 2, 1952

2 Sheets-Sheet 1

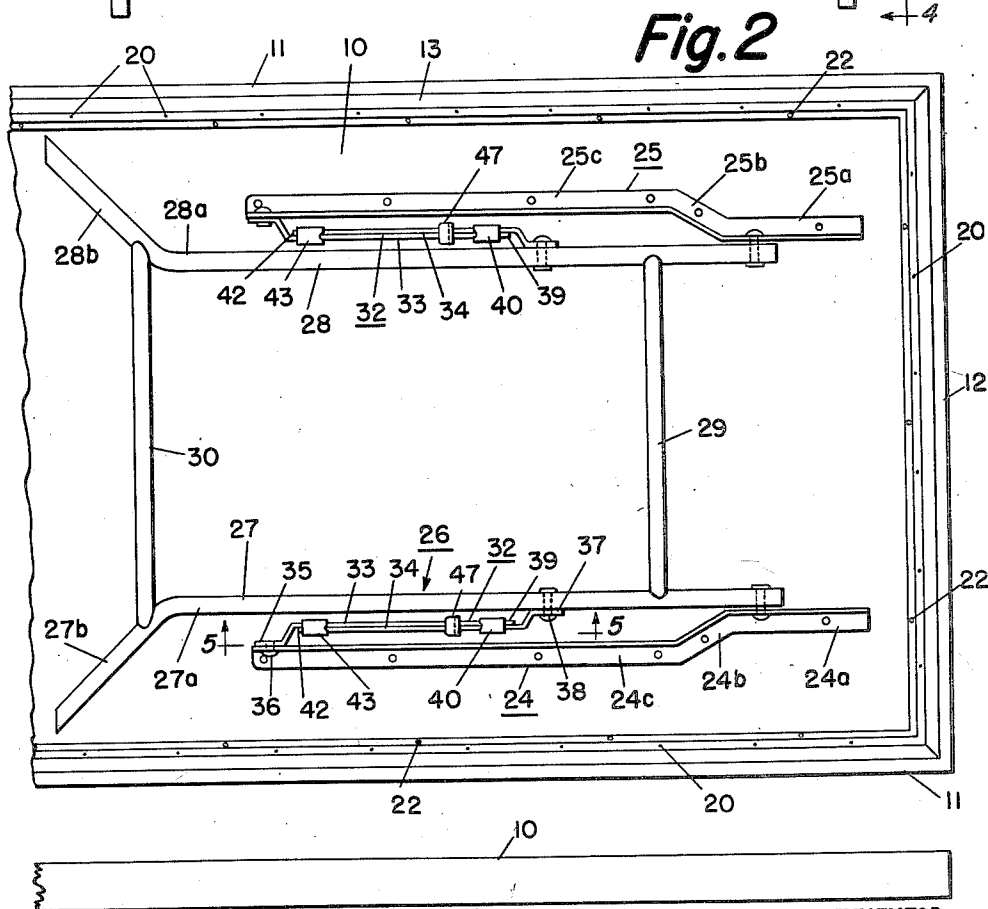
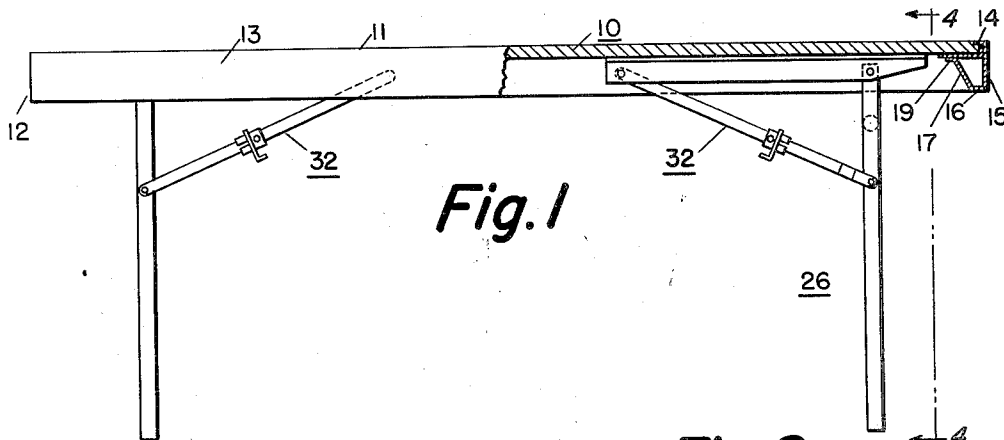


Fig. 3

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Fig. 4

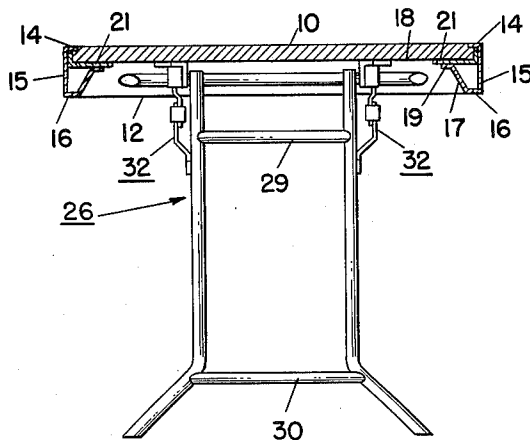


Fig. 5

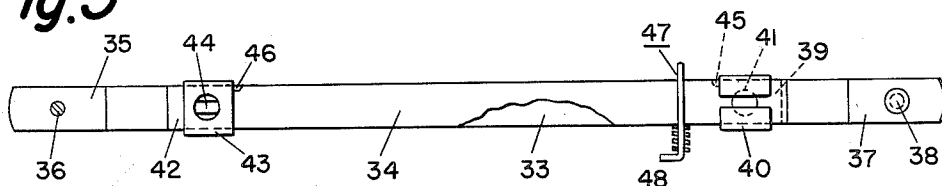


Fig. 6

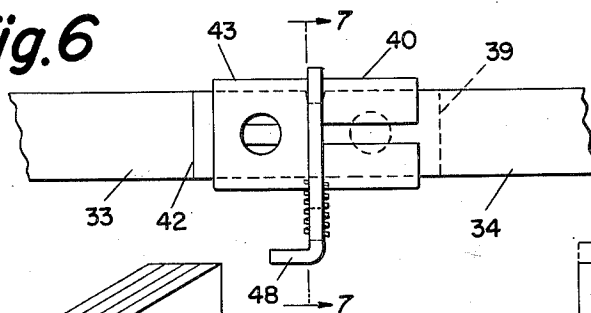


Fig. 8

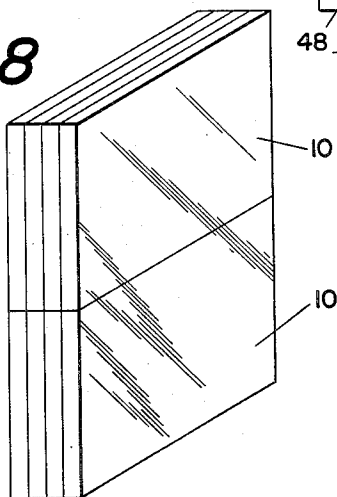
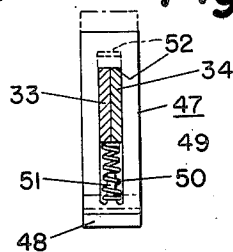


Fig. 7



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2,665,181

FOLDING PAIRED LEGS FOR TABLES

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Application April 2, 1952, Serial No. 280,044

3 Claims. (Cl. 311-87)

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The present invention relates generally to tables and more particularly to so-called banquet tables, used by caterers and the like, and having foldable legs to facilitate transportation and storage.

An object of the present invention is to provide a banquet table or the like having a top provided with a depending peripheral apron and at least two novel leg-members pivotally mounted on the underside of the top, each leg-member comprising a pair of connected, divergently-bent tubular legs and being foldable into the confines of the apron thereby permitting a large number of tables to be stored compactly in abutting side-by-side relationship and also in tier-on-tier relationship.

Other objects and advantages of the present invention are apparent in the following detailed description, appended claims and accompanying drawings.

For the purpose of illustrating the invention, there is shown in the accompanying drawings one form thereof which is presently preferred and which has been found in practice to give satisfactory results. It is to be understood, however, that the invention is not limited to the precise arrangements and instrumentalities shown, and that the several parts and elements can be variously arranged and organized, without departing from the spirit or essential attributes of the invention.

Referring to the accompanying drawings in which like reference characters indicate like parts throughout:

Figure 1 is a side elevational view of a banquet table embodying the present invention, as it appears in use, parts being broken away better to reveal the construction thereof.

Figure 2 is a bottom plan view of half the table of Fig. 1, on an enlarged scale, as it appears with the legs folded up.

Figure 3 is an elevational view, looking from the side of Fig. 2.

Figure 4 is a vertical cross-sectional view, taken generally along the line 4-4 of Fig. 1.

Figure 5 is an elevational view, on an enlarged scale, of the extensible brace mechanism in the legs-folded position, taken generally along the line 5-5 of Fig. 2.

Figure 6 is an elevational view, on a further enlarged scale, of the extensible brace mechanism, shown in legs-open locked position.

Figure 7 is a cross-sectional view, taken generally along the line 7-7 of Fig. 6.

Figure 8 is a fragmentary perspective view

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showing a number of tables stored in side-by-side and also tiered relationship.

In Figs. 1-7, I have shown a banquet table forming one embodiment of the present invention and including a one-piece top 10 of wood or other suitable material, which is generally rectangular in configuration, with relatively long side edges 11 and relatively shorter end edges 12.

The top 10 is provided with a peripheral apron of sheet metal or the like, indicated generally by the reference character 13 and extending continuously along the edges 11 and 12. The apron 13 includes an uppermost horizontal flange 14 which overlies the rabbeted upper peripheral edge of the wood panel so as to present a generally flush surface, coplanar with the main part of the upper wood surface. Extending vertically downward from the flange 14 is a wall 15, disposed in abutting relationship to the edges of the wood top 10 but extending downward appreciably therebeyond. For example, the top 10 may be of $\frac{5}{8}$ " plywood, with the wall 15 having a vertical dimension of about $2\frac{1}{2}$ " to provide a space of almost two inches beneath the top 10 and within the apron 13, as indicated in Figs. 1 and 4. At the lower edge of the apron wall 15, is a small, horizontal, inwardly-extending wall 16, from the inner edge of which, an inclined wall 17 extends inwardly and upwardly to the underside 18 of the top 10. The upper edge of the inclined wall 17 is provided with an integrally formed horizontal flange 19, which is spot-welded, as at 20, to a thin L-shaped sheet metal strip 21 extending around the periphery of the underside 18 and fastened thereto by a plurality of small, spaced screws 22. The walls 14, 15, 16, 17 and 19 of the apron 13 are preferably integrally formed of a single strip of sheet metal suitably bent and folded into the above-described shape. For ease of assembly, the apron 13 may be formed initially in four sections (one for each of the edges 11 and 12) which can be fitted onto the edges of the wood top 10 and thereafter welded or otherwise connected at their ends to provide a more or less continuous peripheral structure.

Fastened to the underside 18 of the top 10 by screws 23 or the like, adjacent each end of the table, is a pair of opposed, longitudinally extending, transversely spaced leg supports 24 and 25, of steel or the like, generally L-shaped in cross-section with an uppermost horizontal flange abutting the underside 18 and a depending vertical portion terminating somewhat above the lower edge of the apron 13. The supports 24 and 25 are formed in three sections, namely end-

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most parallel sections 24-a and 25-a; angular diverging intermediate sections 24-b and 25-b; and centermost parallel sections 24-c and 25-c, spaced further apart transversely than the endmost sections 24-a and 25-a.

Each pair of opposed leg supports 24 and 25 is adapted pivotally to support a novel leg-member, indicated generally by the reference character 26 and made up of separate tubular legs 27 and 28, bent at 27-a and 28-a respectively (at an angle of approximately 45 degrees) to provide lowermost transversely-diverging foot-portions 27-b and 28-b respectively. As shown particularly in Figs. 2 and 4, upper and lower tubular connectors 29 and 30 are welded or otherwise suitably fastened to the legs and extend horizontally transversely therebetween. The upper connector 29 is disposed somewhat below the upper ends of the legs 27 and 28, while the lower connector 30 is disposed slightly below the bends 27-a and 28-a.

I have found that positioning the lower connector below the bends 27-a and 28-a is particularly important and advantageous in that it eliminates the tendency for the legs to bend further when placed under compression (i. e., when they are in open position supporting the weight of the top 10, as shown in Figs. 1 and 4) and thereby provides an extremely rigid and firm support for the table. The bent configuration of the legs is important since it permits the major part of the legs to be placed relatively close together (and out of the way of the knees of the persons seated at the open table) while enabling the lowermost foot-portions to be nearly as far apart as the width of the top 10 so as to provide maximum stability.

The upper ends of the legs 27 and 28 are hingedly connected to the endmost sections 24-a and 25-a of the leg supports 24 and 25 by pivot-pins, to enable the leg-member 26 to be positioned either vertically (as in Figs. 1 and 4) or horizontally (as in Fig. 2). In the horizontal closed position of the leg-member 26, the upper ends of the legs 27 and 28 are disposed in adjoining, parallel relationship to the endmost sections 24-a and 25-a, with the legs extending longitudinally and inwardly of the top 10; the bends 27-a and 28-a and the diverging foot-portions 27-b and 28-b being located inwardly of the inner ends of the centermost sections 24-c and 25-c.

Since the sections 24-c and 25-c are spaced further apart than the sections 24-a and 25-a, as described above, clearance is provided between the leg 27 and the section 24-c and also between the leg 28 and the section 25-c, for a pair of sliding extensible links or braces 32, which are the subject of my co-pending application Serial No. 280,043, filed April 2, 1952, and which will be described hereinbelow.

Each of the extensible braces 32 includes a pair of arms 33 and 34, the elongated main portions of which are disposed in side-by-side relationship to each other. One end 35 of the arm 33 is off-set and is hingedly connected to the centermost leg support section (24-c or 25-c) by a pin 36. The opposite end 37 of the other arm 34 is oppositely off-set and is hingedly connected to the leg (27 or 28) by a pin 38 at a point intermediate the upper tubular connector 29 and the bend (27-a or 28-a). The other end 39 of the arm 33 is provided with a C-shaped collar or clip 40 connected thereto by a rivet 41 and bent to overlie and enclose the adjoining portion of

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the arm 34. The other end 42 of the arm 34 is provided with a similar C-shaped collar or clip 43 connected thereto by a rivet 44 and bent to overlie and enclose the adjoining portion of the arm 33.

The collars 40 and 43 serve to interconnect the arms 33 and 34 in side-by-side sliding extensible or telescopic relationship, the extended position of the arms being shown in Figs. 1, 4 and 6, and the contracted position being shown in Figs. 2 and 5.

A notch 45 is provided in the upper edge of the arm 33 adjoining the inner edge of the collar 40, while a similar notch 46 is provided in the upper edge of the arm 34 adjoining the inner edge of the collar 43, as best shown in Fig. 5. The inner vertical wall of each notch is tapered so that the notch becomes slightly narrower as it becomes deeper.

Encircling the arms 33 and 34, intermediate the collars 40 and 43, is a locking-member 47 consisting of a metal plate extending vertically beyond the arms 33 and 34 and bent at its lower end to provide a shoulder or push surface 48. An elongated opening 49 is formed in the plate, the arms 33 and 34 being adapted to extend therethrough with a snug sliding fit laterally, but with a substantial vertical clearance. A helical spring 50 is positioned within the lower part of the opening 49, with its lower end seated on a small projection 51 and with its upper end bearing against the lower edges of the arms 33 and 34, so as to tension the locking-member downwardly relative to the arms 33 and 34 with the upper horizontal edge 52 of the opening 49 resiliently urged against the upper edges of the arms.

When the leg-member 26 is moved manually from the closed horizontal position of Fig. 2 to the open vertical position of Figs. 1 and 4, it is apparent that the pin 38 moves downwardly and outwardly away from the pin 36, and that the brace 32 is shifted to extended position; the arm 34 moving longitudinally relative to the arm 33, with the collar 43 approaching the collar 40.

The moving collar 43 contacts the locking-member 47, which is thereafter carried along with the collar 43, from the position shown in Fig. 5 to that shown in Fig. 6 wherein it abuts the collar 40. In the latter position, the two notches 45 and 46 come into alignment and permit the locking-member to move downward, under the action of its spring 50, from the dash-dot line position to the solid-line position of Fig. 7, wherein the edge 52 extends within the aligned notches 45 and 46 and thereby securely locks the arms in the extended position of Figs. 1 and 4, which corresponds to the vertical open position of the leg-member 26. The above referred to taper of the notches compensates for any wearing away of the edge 52, which simply seats itself securely at a somewhat lower and slightly narrower zone of the aligned notches.

When it is desired to close the leg-member 26, the surface 48 of each locking-member 47 is pushed upward to shift the locking-member back to the elevated position shown in dash-dot lines in Fig. 7 (wherein the edge 52 is above the notches) and the leg-member is manually tilted about the pivot pins 36 and 38; which, at the same time, shifts the brace arms 33 and 34 back to the contracted position of Figs. 2 and 5.

As can be seen in Fig. 3, the leg-members and leg supports are completely contained within the apron 13 when the leg-members are in the folded up, closed position. This permits a large num-

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ber of tables to be stored compactly in a relatively small space, by arranging the tables on their side edges, in abutting relationship to each other and also stacking them in tiers as shown in Fig. 8.

It is apparent that the top 10, instead of being made of a solid piece of wood or plywood, could be constructed of sheet metal or of molded synthetic resin, and that stiffening or reinforcing members or elements could be incorporated if desired, in a manner obvious to those skilled in the art.

The present invention may be embodied in other specific forms and, accordingly, the foregoing embodiment is to be considered merely as illustrative, and not restrictive, reference being made to the appended claims, rather than to the above specification, as indicative of the scope of the invention.

I claim as my invention and desire to protect by Letters Patent:

1. A table comprising a top having a continuous peripheral apron depending an appreciable distance therefrom and a pair of leg-members mounted on the underside of the top, said leg-members having releasable braces for locking them securely in generally vertical open position and being foldable upward to closed position wherein they lie substantially parallel to and closely adjacent the underside of the top and are disposed entirely within the confines of the apron, each of said leg-members including a pair of laterally spaced tubular legs, the major upper portions of which parallel each other and are spaced inward appreciably from the lateral edges of the top, the legs of each pair being oppositely bent, somewhat above their lower ends, to provide lowermost laterally-diverging generally straight foot-portions, each of said leg-members also including at least two rigid transverse tubular connectors welded to and extending laterally intermediate the legs, one of said connectors being disposed substantially above the bends and one appreciably below the bends, whereby said leg-members remain rigid under the weight of the top, without any appreciable tendency to bend further or buckle at the bends.

2. A construction according to claim 1 wherein the top is generally elongated and rectangular in configuration; and wherein two pairs of laterally spaced leg-supports are secured to the underside of the top adjacent the ends of the top and extending generally longitudinally thereof, the endmost portions of the leg-supports of each

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pair being somewhat closer together than the remainder thereof; and wherein the upper ends of the legs are pivotally connected to the aforesaid endmost portions of the leg-supports; and wherein each leg-member is provided with a pair of extensible self-locking braces, each brace being pivotally connected at one end to the centermost portion of one of the leg-supports and being pivotally connected at its other end to one of the legs at a point intermediate the upper connector and the bend thereof.

3. A table comprising a top, laterally spaced leg-supports secured to the underside of the top, a pair of longitudinally-spaced leg-members disposed on the underside of the top, each of said leg-members including a pair of laterally spaced tubular legs, the major upper portions of which parallel each other and are spaced inward appreciably from the lateral edges of the top, the legs of each pair being oppositely bent, somewhat above their lower ends, to provide lowermost laterally-diverging foot-portions, each of said leg-members also including at least two rigid transverse tubular connectors welded to and extending laterally intermediate the legs, one of said connectors being disposed substantially above the bends and one appreciably below the bends, whereby said leg-members remain rigid under the weight of the top without any appreciable tendency to bend further or buckle at the bends, the upper ends of the legs being pivotally connected to said leg-supports with the upper connector disposed somewhat below the leg pivots, and a releasable brace for each leg-member, said brace being pivotally connected at one end to a leg-support at a point spaced from the leg pivot and being pivotally connected at the other end to one of the legs at a point intermediate the upper connector and the bend of the leg.

JOSEPH PUCCI.

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