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2,075,778

FOLDING TABLE

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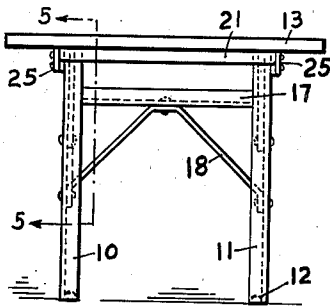


Fig. 1.

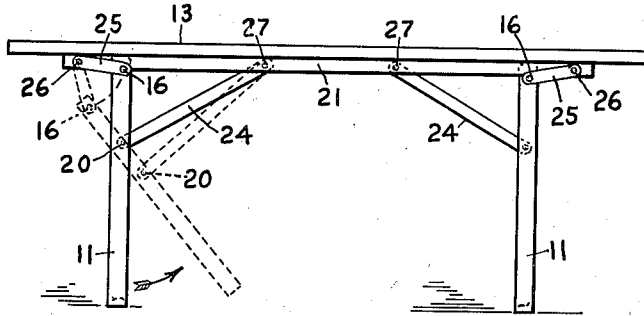


Fig. 2.

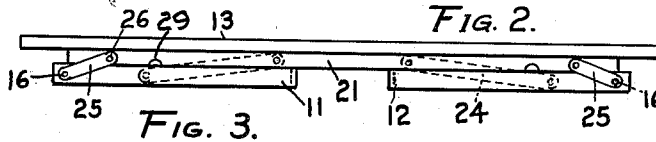


Fig. 3.

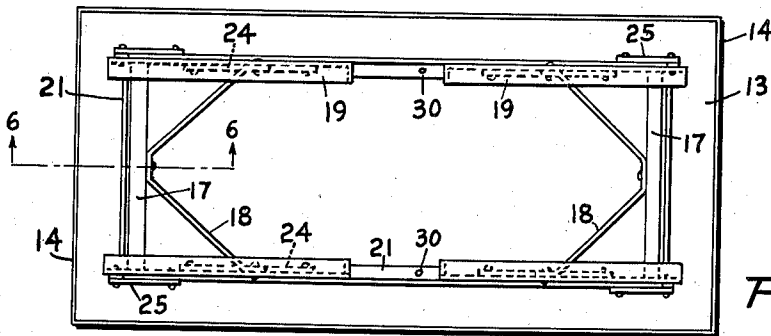


Fig. 4.

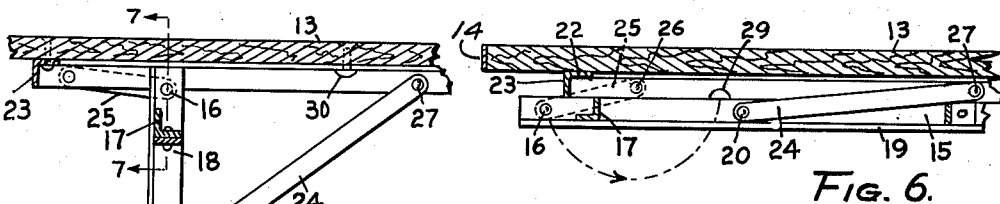


Fig. 5.

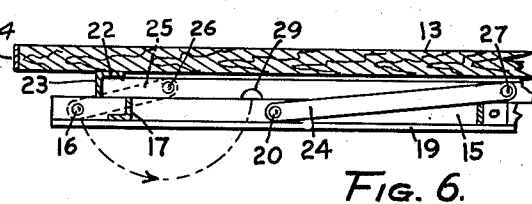


Fig. 6.

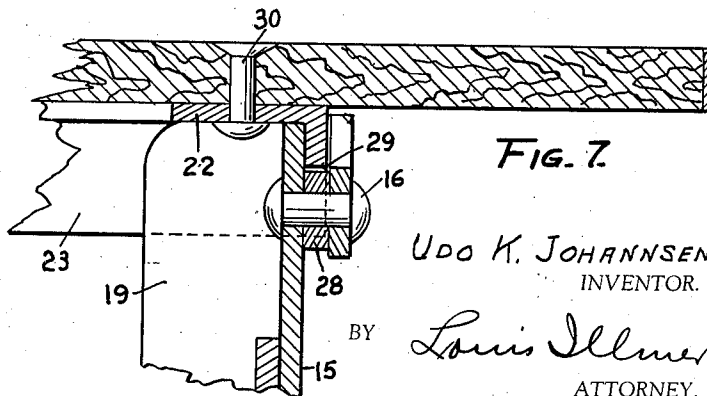


Fig. 7.

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FOLDING TABLE

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2 Claims. (Cl. 311—84)

My invention broadly relates to portable folding tables, and is more particularly directed to a collapsible banqueting board of the four-legged metal understructure type in which the legs are operable in pairs and adapted to compactly in-

fold flatwise about their respective pivots against the table board when not extended for use. Each such latticed leg pair is pivotally linked to opposed ends of a skeletonized framework whose overall size is kept inset with respect to the marginal edge of the table top and this framework is herein securely attached to a laminated board so as to laterally stiffen the same against superficial warpage. When my manipulative legs are collapsed, they fall within the marginal confines of the board and present a substantially even stacking surface. In erected table position, the legs are positively locked against inadvertent collapse.

A group of folded tables of the kind herein contemplated, may be compactly stored away when not in use and are especially intended to serve hotel banqueting purposes and the like occasional needs. A series of my erected tables may be set end to end to build up any desired table length. The leg structure of each such component table is kept extremely simple but effective in order to reduce its manufacturing cost to a minimum. Being fabricated from angle irons, my understructure provides for the maximum of rigidity while keeping the table light in weight so as not to prove burdensome when bodily carried about. Such table is also capable of safely withstanding a comparatively heavy loading upon its erected leg structure.

The object of the present invention is to provide for a sturdy but inherently light weight table assembly of the character indicated and whose foldable understructure shall be suited for rapid production on an extensive scale at a low fabrication cost.

Embodied herein are also other novel features of organization such as a unitary framework that materially facilitates the assembly of manufactured leg parts. Reference is had to the accompanying one drawing sheet which is illustrative of a certain preferred exemplification, and in which drawing:

Fig. 1 represents an elevational end view of an erected table equipped with my improved folding legs, and Fig. 2 is a side view thereof.

Figs. 3 and 4 respectively show a side and a bottom view of the table understructure in its fully collapsed position.

Figs. 5 and 6 detail in enlarged scale, certain

structural aspects of my pivotally linked legs as respectively seen from the sectional lines 5—5 and 6—6 of Figs. 1 and 4.

Fig. 7 shows a sectional view along line 7—7 of Fig. 5.

Referring more specifically to the drawing, 10 and 11 respectively designate one pair of inter-braced complementary legs as fabricated to length from relatively thin angle irons, of which the respective floor contacting ends are upset at 12 to provide for a flat footing. When erected, the flange intersection of each such cross-sectionally angle shaped leg is placed cornerwise with respect to the oblong table top 13. Said top may be of plywood or the like laminated board material and have a metal perimeter trim strip 14 tacked around the marginal edge thereof. The respective leg side flanges 15 are each apertured contiguous to the upper leg ends to receive a guide pivot 16 therethrough. A cross-sectionally angle shaped rung piece 17 may be welded interiorly across the upper region of each such pair of legs. Additional lateral rigidity may be imparted by an inherently stiff V brace strut 18 of which the apex is welded to said rung and with the divergent strut ends respectively welded to a side flange 15 of a pair of complementary table legs, as shown. Such interconnecting truss not only steadies leg movement but permits one of a pair of legs to be actuated by the manipulation of a companion leg. Each side flange of the several legs is further provided with a brace link pivot 20 located between the guide pivot 16 and its leg foot.

A skeletonized framework 21 is firmly secured beneath the top 13 by flat headed rivets such as 30 which reenforcingly tie the framework to my relatively thin ply board and serve to materially stiffen the same at the minimum of weight requirements. Said framework preferably comprises intersecting pairs of angle iron side and end rails formed into a hollow quadrilateral shape of which the planiform flange 22 is disposed to lie flatwise against the board and the endless complementary or depending flange 23 extends outwardly from the top board in an inset relationship to the perimeter trim strip 14. These parallel side rails are herein rigidly interconnected by stationary end rails. The overall spacing of the erected legs is purposely confined well within the width dimension given to the table board and arranged to comfortably clear the knees of persons when closely seated around my table.

Referring now to the preferred mode of pivotally attaching each upper end of my foldable legs to said framework, this is herein accomplished by

the use of cooperative links such as a relatively long brace link 24 and a relatively shorter guide link 25. The depending flange of each side rail of my framework is provided with complementary pairs of link pivots of which the guide link pivots 26 are located in close proximity to the respective ends of such side rails. The companion brace link pivots such as 27 are spacedly interposed between said pivots 26. In erected table position, the guide links 25 respectively extend inwardly toward the medial board region from their pivots 26 to the corresponding upper leg pivot 16 so as to fall into substantial alignment with the adjoining framework rail.

Each guide link when riveted to the rail by the pivot 26 may be kept away from its contiguous leg end by the use of a cylindrical spacer agency such as 28. The depending rail flange 23 is shown notched at 29 for the reception of said spacer which allows the erected upper leg end to abut upon the planiform flange 22 and make direct contact therewith. It will be observed that the guide links are all pivotally mounted exteriorly of the rail flange 23 while the corresponding brace links are interiorly disposed, also that a notch 29 is located between the pivotal frame attachment of the mated links 24 and 25.

The unitary assembly of my foldable understructure is such that its component framework parts purposely include a pair of side rails that are rigidly interconnected by stationary end rails such that all table legs may be pivotally associated prior to applying the top to such framework. My independently operative understructure when collapsed, may be compactly shipped in lots to distant dealers and upon delivery have thin top boards attached thereto with the assurance that all foldable legs will properly function without pivotal binding effects because of the rigidly fixed spacing given to the side rails of my framework.

When the leg pairs are collapsed, the several guide links extend outwardly away from their respective pivots 26 in the fashion represented in Fig. 3 and the leg side flanges 15 then fall in registry upon an outstanding rail edge of the endless frame flange 23. Such collapsed table components may be compactly stacked away for storage or lot shipment without distorting the free leg ends.

When the table is to be extended for use, each latticed leg pair is separately infolded into erected position and swings through the intermediary dotted position shown in Fig. 2, in which the upper leg end is guided by the links 24 and 25 in quadrilateral linkage fashion. When the legs are fully erected, each spacer agency 28 is made to enter into a contiguous rail notch 29 to securely lock the respective legs against tilt about the brace link pivot 20. By pulling an erected top leg end outwardly from its abutting planiform flange 22, the corresponding spacer 28 becomes disengaged, which thereupon allows

each leg pair to be freely folded into collapsed position. When folded, all legs together with their links may be kept confined wholly within the overall dimension of my table top, which in turn, allows a relatively long oblong board to be slid on its longitudinal edge without link collision.

Other advantages inherent in the fabrication and assembly of my all-metal understructure for a collapsible table are believed apparent to those skilled in this art, it being obvious that modifications in the details thereof may readily be resorted to in likewise carrying out the same underlying structural principle, all without departing from the spirit and scope of my invention heretofore described and more particularly pointed out in the appended claims.

I claim:

1. A collapsible table or the like adapted to unfold into erected position, said table comprising a top board, a metal framework provided with a pair of cross-sectionally angle shaped side rails each including a depending flange having complementary notches between the ends thereof and a planiform flange fixedly secured to one face of the board in an inset relation to its marginal edge, a foldable leg located at each end region of said side rails, and a guide link and a mated brace link pivotally attached to one end region of each such leg and which mated guide and brace links are respectively pivoted upon opposite faces of a depending flange portion contiguous thereto to swing into substantial alignment outwardly away from their respective flange pivots when a corresponding leg is collapsed inwardly upon the top board, all of said guide links being reversed toward an associated brace link when the several legs are brought into erected position and the respective rail notches being disposed to interlock with the swinging end portion of a guide link contiguous thereto.

2. A collapsible table or the like adapted to unfold into erected position, said table comprising a table top, a metal framework provided with a pair of cross-sectionally angle shaped side rails each including a notched depending flange and a planiform flange which latter flanges are fixedly secured to one face of the board and inset in substantial parallelism relative to the marginal confines of said board, a foldable leg located at each end region of said side rails, a relatively short guide link and a mated relatively longer brace link both pivotally attached to one end region of each such leg and also to a depending flange portion contiguous thereto with a flange notch disposed intermediate certain of such guide and brace link pivots, and a spacer member for said certain guide link pivots, each such guide link and its mated brace link being arranged to swing inwardly toward the other around their respective flange pivots and which spacer member is link guided to fall into a corresponding flange notch.

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