

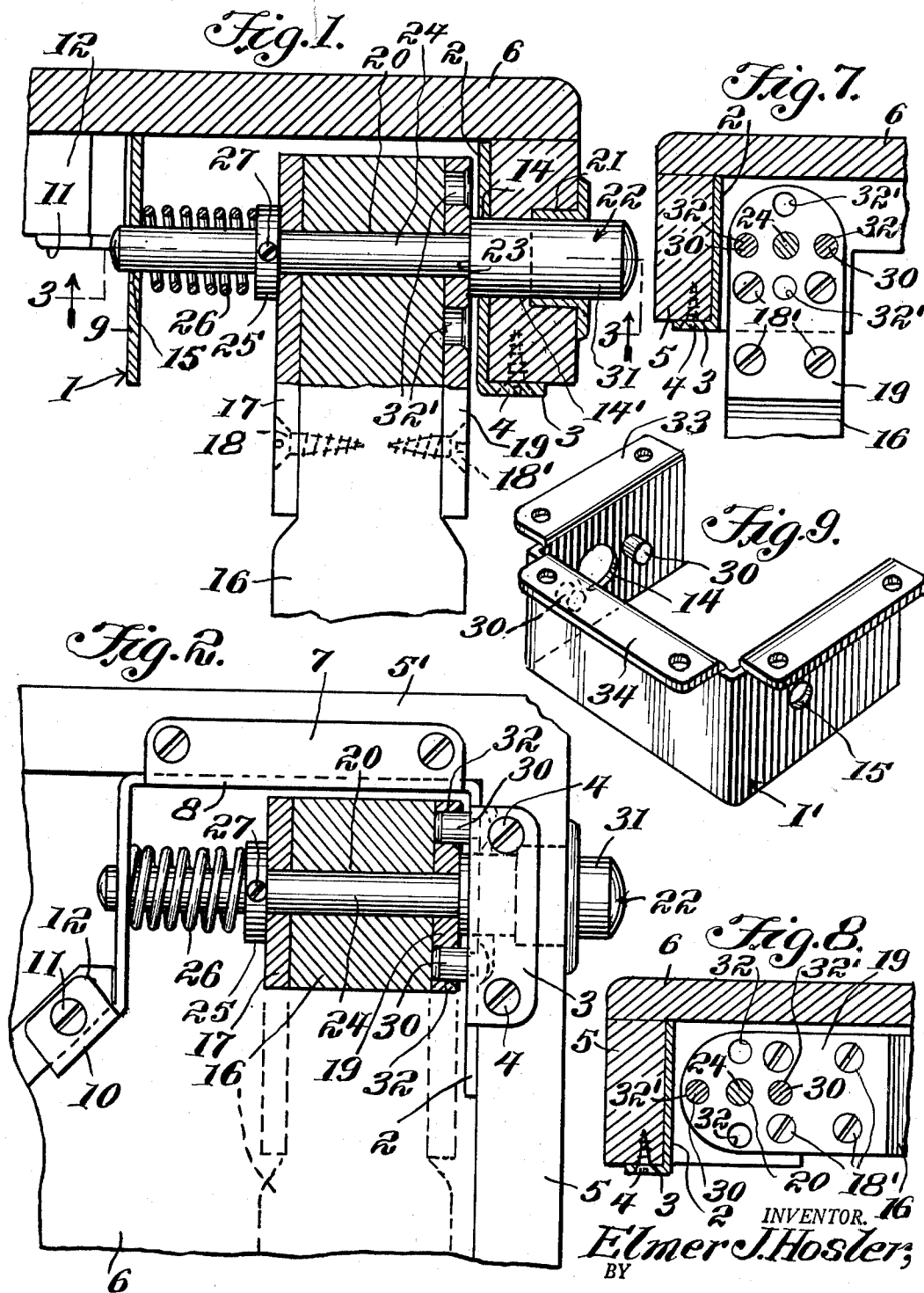
Aug. 2, 1955

E. J. HOSLER  
FIXTURE BRACKETS WITH LEG SUPPORT  
AND LOCK ASSEMBLY FOR TABLES

2,714,543

Filed June 22, 1954

2 Sheets-Sheet 1



McMorrow, Bermann & Davidson  
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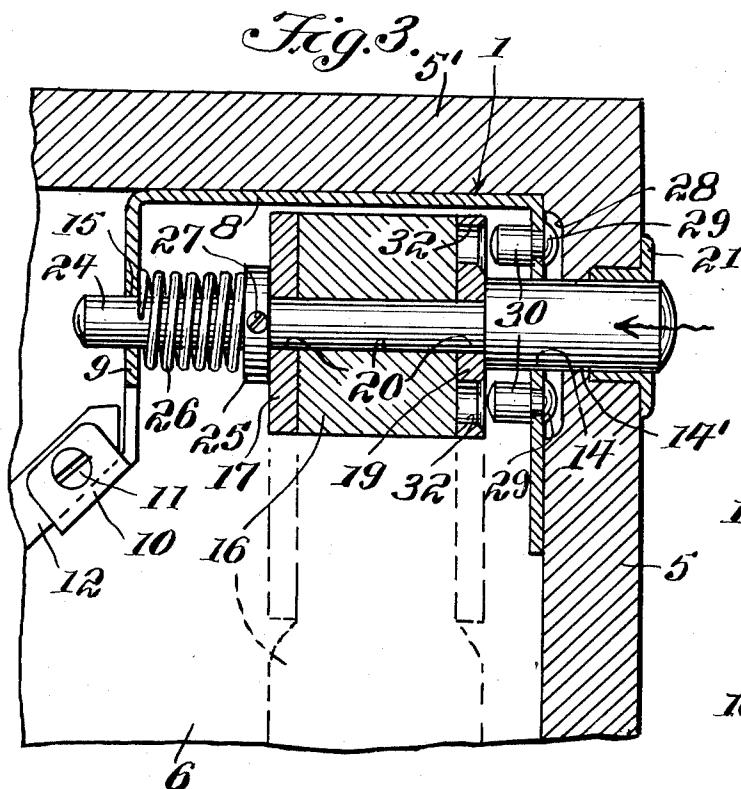
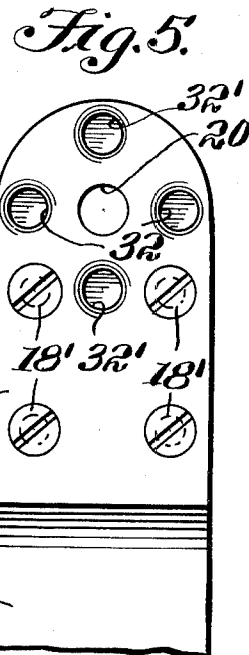
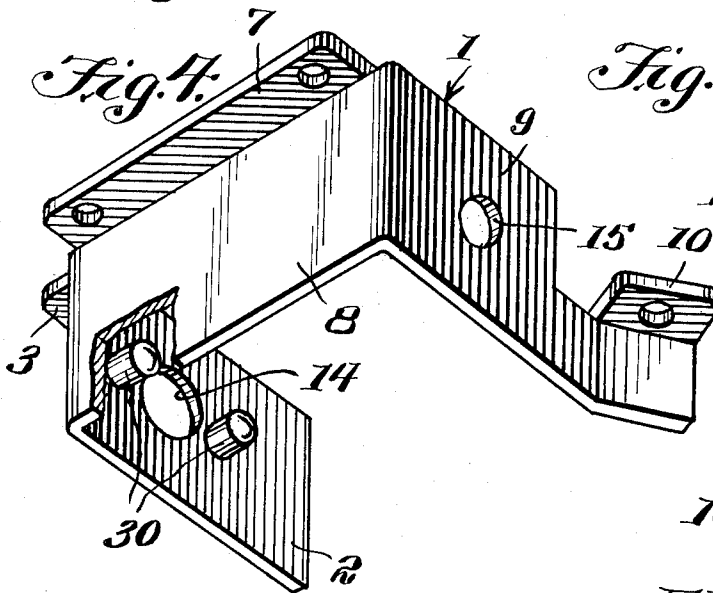
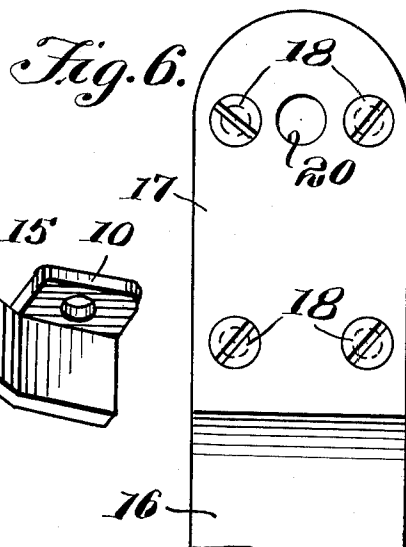
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## FIXTURE BRACKETS WITH LEG SUPPORT AND LOCK ASSEMBLY FOR TABLES

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7 Claims. (Cl. 311—99)

This invention relates to, and is in connection with, a novel structure of folding leg for tables. The tables in general, to which the invention may be most usefully applied, are light tables, one example of which is card tables, square or rectangular in outline with four corners, at each of which a supporting leg is mounted which, when the table is in use extends vertically in a downward direction from the table top, and when not in use and is to be put away, the legs are folded against the underside of the top and usually within the border frame members of the table.

This invention is directed to and has for its particular object and purpose the provision of a rigid, sturdy, positively, and easily operable leg assembly at each corner, at which each leg may be unlocked simply by pressing inwardly on the head of a latching shaft so that the table leg may be pivoted on such shaft from locked upright to locked folded position when the table is to be put away, or from locked folded to locked upright position when the table is to be put in use. As a part of this object and purpose this invention considers the provision of such a leg assembly which may be easily and accurately assembled to various modifications of tables.

Further objects and purposes of this invention are the provision of a folding leg structure which may be easily fabricated of flat metal plate and easily assembled to the table, with latching parts of simple construction and requiring a minimum of working elements.

An understanding of the invention, and of the further objects and purposes thereof, may be had from the following description, taken in connection with the accompanying drawings in which:

Figure 1 is an elevation, part in section, of one modification of the invention, showing table leg locked in upright position to table.

Figure 2 is a bottom view, part in section, of the modification shown in Figure 1 showing table leg locked in folded position to table.

Figure 3 is a bottom view, part in section, taken along line 3—3 of Figure 1, showing table leg unlocked from table.

Figure 4 is a perspective view of the corner and leg support bracket of the modification shown in Figures 1—3, such bracket being employed with tables having side rails.

Figure 5 is an elevation, taken along line 5—5 of Figure 1, showing outer leg and bearing plate.

Figure 6 is an elevation, taken along line 6—6 of Figure 1, showing inner leg and bearing plate.

Figure 7 is an elevation at a corner, part in section, showing the outer leg and bearing plate with leg locked in upright position.

Figure 8 is an elevation, part in section, of the corner shown in Figure 7, showing the outer leg and bearing plate with leg locked in folded position.

Figure 9 is a perspective view of a modified corner and leg support bracket, employed with tables not having side rails.

Referring particularly to the drawings in which like reference characters refer to like parts in the different views, the bracket 1 as shown in Figure 1, and obviously made in lefts and rights, has an outer wall 2 which has a flange 3 extending horizontally therefrom and connected by screw 4 to a side rail 5 of a table 6. As can be seen in Figure 2, a flange 7 extends from a side wall 8 of the bracket for connection to the side rail 5' which extends at right angles to the side rail 5. Extending from the side wall 8 and at right angles thereto and consequently parallel to the outer wall 2 the bracket has an inner wall 9. A foot 10 extends angularly from the inner wall 9 for connection by means of screw 11 to the end of a diagonally extending cross-brace 12 which braces beneath the table 6 as a supporting element.

The outer wall 2 has a bore 14 therethrough and coaxially aligned therewith there is a smaller diameter bore 15 in the inner wall 9. At each corner a table leg 16 is provided which has an inner side plate 17 connected to the inner face at the top of such leg as by screws 18. Opposite the side plate 17 the side plate 19 is installed on such leg by means of screws 18'. A bore 20 of diameter corresponding to bore 15 extends through the side plates and the table leg 16. A bore 14' is provided in the side wall 5 in alignment with the bore 14 and such bore 14' may be counterbored to receive a flanged bushing 21.

In assembly a shaft 22 having head 31, is inserted through the bushing 21 with shoulder 23 to bear upon the outer side plate 19, and with shank portion 24 thereof to extend through the bore 20 and the aligned bore 15. Such shank 24, prior to being extended into the bore 15, is extended through a collar 25 and spring 26 which are positioned previously between the leg side plate 17 and the inner wall 9. A set screw 27 is then installed on the collar 25 to effectively lock it to the shank 24 and thus the shaft 22 is locked to the leg 16 against axial movement with relation thereto while the spring 26 bears against the collar 25 to force it against the leg assembly and thereby to force the leg 16 outwardly.

As may best be seen in Figure 3 the side rail 5 is relieved at 28 to receive heads 29 of locking pins 30 which are riveted to the outer wall 2 of the bracket 1, such pins 30 being in horizontal alignment on opposite sides of the shaft head 31. In the side plate 19 equally radially spaced from the bore 20 are provided recesses 32, in horizontal alignment when the table leg is upright and in vertical alignment when the table leg is folded with the table in a flat position. At 90° to the recesses 32 the recesses 32' are provided in the side plate 19 and equally radially spaced from the bore 20 in the side plate. It can thus be seen that it is only necessary to force inwardly on the shaft head 31 to move the leg 16 inwardly to the position of Figure 3, thereby disengaging the locking pins 30 from the recesses 32. The leg 16 may then be pivoted upon the shank 24 to the folded position indicated by the dotted lines in Figure 3. Then, upon releasing the pressure upon the head 31, the spring 26 will urge the leg assembly outwardly so that the locking pins 31 may recess in the recesses 32' to latch the leg 16 in folded position.

In the case of tables not having side rails the bracket 1' shown in Figure 9 is provided for direct connection of the flanges 33 and 34 to intersecting edges of the table 6 and on the under surface of the table. In this modification of bracket the bores 14 and 15 are in coaxial alignment and the locking pins 30 are in horizontal alignment on opposite sides of the bore 14 as shown in Figure 9. For employment of this type of bracket, obviously made in lefts and rights, with the leg and locking shaft assembly, no variation in construction is required for the leg assembly or locking shaft assembly shown and hereinabove described.

It is obvious that the invention hereinabove described amounts to a substantial contribution in its field, especially in regard to facility of leg locking and in sturdiness of construction. The invention is not limited as a consequence to the modifications hereinabove described, but other modifications and variations are claimed to fall within the broad spirit of such invention and within the broad scope of interpretation claimed and merited for the appended claims.

What is claimed is:

1. In a folding leg table, at each corner the combination of a bracket adapted for connection to said table and including a first wall extending below said table adjacent said corner and having a large hole therethrough and a second wall spaced from said first wall and having a small hole therethrough co-axial with said large hole, plates connected to opposed sides of the top of the table leg, a third hole provided through said plates and said leg of the size of said small hole, a shaft having a head to extend through said large hole to shoulder on the outer of said plates and a shank to extend through said third hole and said small hole, a collar on said shank to bear upon the inner of said plates, a spring surrounding said shank to bear at one end upon said second wall and at the other against said collar to urge said collar against said inner plate, recesses in said outer plate radially spaced from said third hole on lines intersecting said third hole center at right angles when said table leg is upright, a pair of pins extending inwardly from said first wall and radially spaced from said large hole on opposite sides thereof and on a line therethrough to be received in one pair of said recesses when said table leg is upright and in the other pair of recesses when said table leg is folded.

2. In a folding leg table, at each corner the combination of a bracket adapted for connection to said table and having an outer wall below the top of said table parallel to an edge and an opposed wall spaced therefrom, a shaft having a head and a smaller diameter shank, said outer wall providing a hole to receive said head therethrough to shoulder against one side of the top of a table leg, a smaller hole through said side and table leg and said inner wall to receive said shank, means between said inner wall and said table leg to yieldably urge said table leg outwardly, said table leg side providing recess means therein radially spaced from said smaller hole on lines intersecting said smaller hole center, pin means extending inwardly from said inner wall and spaced from said larger hole to seat in said recess means of one intersecting line when said table is upright and to seat in said recess means of the other intersecting line when said table leg is folded.

3. In a folding leg table, at each corner the combination of a wall below said table top parallel to an edge thereof, an opposed inner wall spaced therefrom, a shaft having a head and a smaller diameter shank, said outer wall providing a hole to receive said head therethrough to shoulder against one side of the top of a table leg, a smaller hole through said side and table leg and said inner wall to receive said shank, means between said inner wall and said table leg to yieldably urge said table leg outwardly, said table leg side providing recess means therein radially spaced from said smaller hole on lines intersecting said smaller hole center, pin means extending inwardly from said inner wall and spaced from said larger hole to seat in said recess means of one intersecting line when said table leg is upright and to seat in said recess means of the other intersecting line when said table leg is folded.

4. In a folding leg table with top having side rails, at each corner the combination of a bracket adapted for connection to each of the two side rails intersecting at the corner and having an outer wall below the top of said table parallel to an edge and an opposed inner wall spaced therefrom, a shaft having a head and a smaller

diameter shank, said outer wall providing a hole to receive said head therethrough to shoulder against one side of the top of a table leg, a smaller hole through said side and table leg and said inner wall to receive said shank, means between said inner wall and said table leg to yieldably urge said table leg outwardly, said table leg side providing recess means therein radially spaced from said smaller hole on lines intersecting said smaller hole center, pin means extending inwardly from said inner wall and spaced from said larger hole to seat in said recess means of one intersecting line when said table leg is upright and to seat in said recess means of the other intersecting line when said table leg is folded.

5. In a folding leg table without side rails, at each corner the combination of a bracket adapted for connection to the underside of the table top along spaced apart parallel lines of connection and along a line of connection at a right angle to said parallel lines, said bracket having an outer wall below the top of said table parallel to an edge and an opposed inner wall spaced therefrom, a shaft having a head and a smaller diameter shank, said outer wall providing a hole to receive said head therethrough to shoulder against one side of the top of a table leg, a smaller hole through said side and table leg and said inner wall to receive said shank, means between said inner wall and said table leg to yieldably urge said table leg outwardly, said table leg side providing recess means therein radially spaced from said smaller hole on lines intersecting said smaller hole center, pin means extending inwardly from said inner wall and spaced from said larger hole to seat in said recess means of one intersecting line when said table leg is upright and to seat in said recess means of the other intersecting line when said table leg is folded.

6. In a folding leg table having intersecting cross-braces on the underside of the table top, at each corner the combination of a bracket adapted for connection to said table top and including an outer wall below the top of said table parallel to an edge and an opposed inner wall spaced therefrom, a wing extending from said inner wall for support connection to the cross-brace end adjacent thereto, a shaft having a head and a smaller diameter shank, said outer wall providing a hole to receive said head therethrough to shoulder against one side of the top of a table leg, a smaller hole through said side and table leg and said inner wall to receive said shank, means between said inner wall and said table leg to yieldably urge said table leg outwardly, said table leg side providing recess means therein radially spaced from said smaller hole on lines intersecting said smaller hole center, pin means extending inwardly from said inner wall and spaced from said larger hole to seat in said recess means of one intersecting line when said table leg is upright and to seat in said recess means of the other intersecting line when said table leg is folded.

7. In a folding leg table, at each corner a shaft mounted to supply a pivot for the table leg thereat and connected thereto against axial movement, resilient means mounted to urge said leg outwardly, and means to lock said leg to said table in folded and upright position, said locking means being disengaged by inward thrust upon said shaft against the force of said resilient means whereby said leg may be pivoted about said shaft and positioned in locked folded and locked upright position.

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