

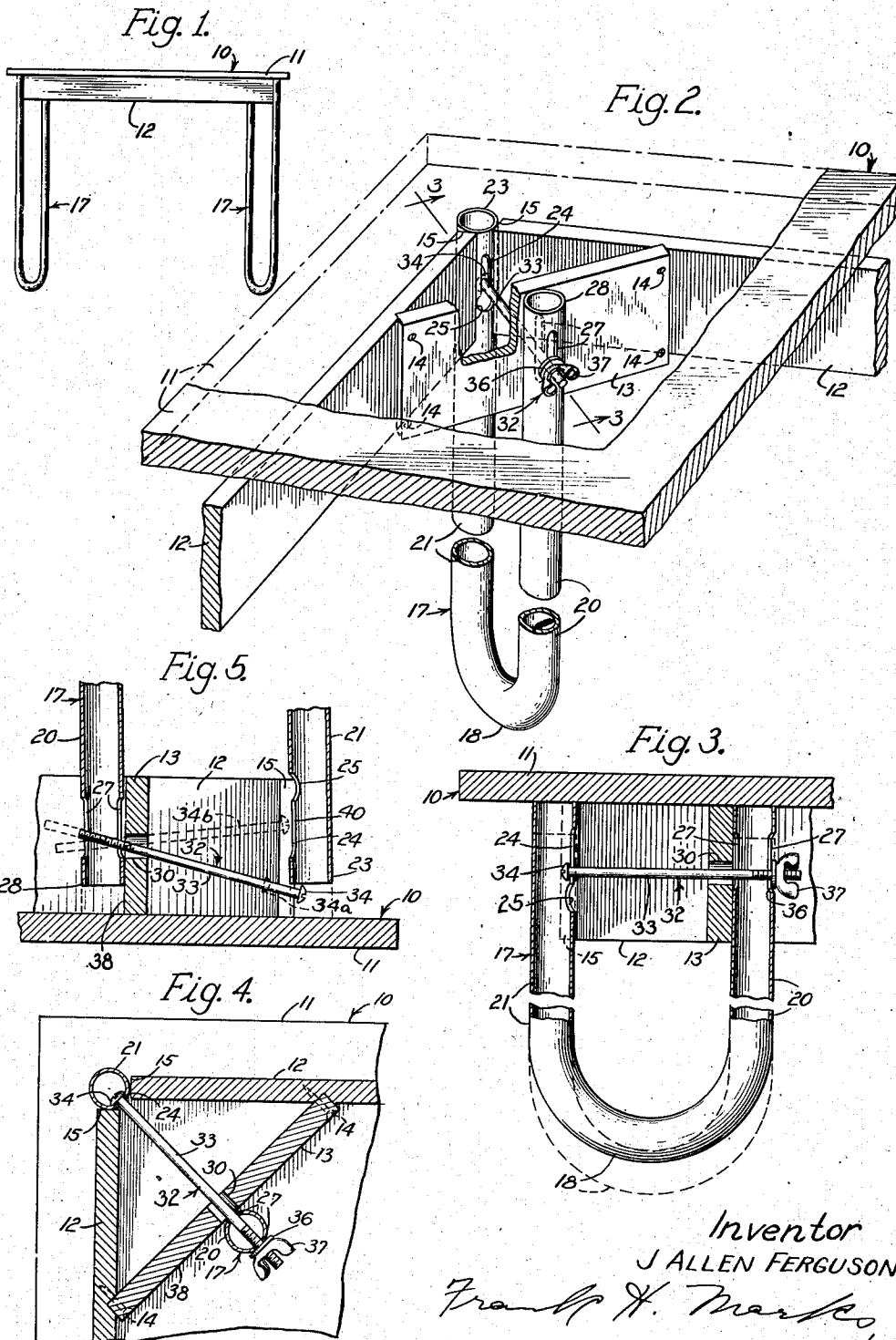
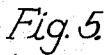
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FURNITURE LEG MOUNTING

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FURNITURE LEG MOUNTING

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This invention relates to leg mountings for furniture or the like and is concerned more particularly with a construction enabling a leg to be adjustably and detachably assembled with a table top or other article to be supported.

It is an object of my invention to provide a leg structure which may be readily assembled with and disassembled from a table top or the like so that the article of furniture may be shipped and stored in knock-down condition and may be readily assembled for service by an unskilled person.

A further object resides in the provision of a leg mounting including fastening means which is completely concealed.

It is another object to provide a leg mounting employing fastening means which may be readily assembled with and disassembled from the leg and the furniture part supported thereby.

It is also an object to provide a leg structure and mounting whereby the leg is securely held in the desired position of adjustment and in such manner as to assist in fastening parts of the table or other supported member together.

Further objects and advantages of the invention will appear as the description proceeds.

The invention will be better understood upon reference to the following description and the accompanying drawing in which:

Fig. 1 is a side elevation of a knock-down table constructed in accordance with one form of my invention.

Fig. 2 is an enlarged broken isometric view showing details of my invention.

Fig. 3 is a fragmentary sectional view taken as indicated by the line 3—3 in Fig. 2.

Fig. 4 is a fragmentary sectional view looking upward, taken substantially through the axis of the bolt in Fig. 2.

Fig. 5 is an inverted fragmentary sectional view showing how the parts are assembled.

Referring now more particularly to the drawing, I have illustrated my invention as applied to a table top 10, although it will be appreciated that the invention is applicable to any supported article. The table top 10 may comprise a top or service portion 11 having depending bars 12 reinforced by corner braces or ties 13, of which one is shown, attached as at 14, the bars 12 terminating preferably in spaced relation to each other as shown at 15. In accordance with the illustrated form of the invention, I provide a tubular steel or other metallic leg 17 in the form preferably of a U, the bight 18 being adapted to rest on a floor or other support and the leg

disposed in the plane substantially diagonal to the bars 12. Thus one branch 20 of the leg may be disposed inwardly relative to the other branch 21. The branches 20 and 21 are preferably spaced apart a distance which enables them to be slipped into straddling position relative to the juncture of the bars 12 and the strut or brace 13, as shown, and they are capable of being flexed about the bight 18 into closer relation.

The outer branch 21 of the leg 17 is provided near the top 23 thereof with a key-hole slot 24 whose enlarged portion 25 is lowermost, said slot being disposed at the inner side of said arm. The other branch 20 of the leg 17 has registering slots 27 adjacent the upper end 28 thereof, all of said slots being substantially aligned. The brace 13 has an opening 30 which is registered with the slots when the leg is properly assembled with the table top, as shown in Figs. 2, 3 and 4. The assembly of the leg with the table structure is accomplished very simply in accordance with my invention, as by bolt means 32, comprising a bolt 33 having a head 34, a washer 36 and a wing nut 37.

The parts may be assembled as follows: The table top is inverted as shown in Fig. 5, as is also the leg 17, and the leg is slipped down so that its branch 21 is disposed between the adjacent ends 15 of the angularly related bars 12 and the other branch 20 is disposed inwardly thereof adjacent the face 38 of the brace 13. The leg 17 may be slightly cantled as shown in Fig. 5. The leg 17 is held with the ends 23 and 28 of its branches spaced sufficiently from the table top portion 11 to align the holes 27 of the branch 20 with the opening 30 in the brace 13 and yet enable the bolt 33 to be slipped below the end 23 inward between the ends 15 of the bars 12 and through the opening 30 in the brace 13 and through the openings 27 in the leg branch 20. The parts are so dimensioned that the bolt head 34 is passable through the space between the bar ends 15. The bolt is progressed until its head 34 is substantially in the position shown in dotted lines at 34a in Fig. 5. In this connection it will be observed that the opening 30 in the brace 13 is made sufficiently large to enable the bolt shank to pass therethrough notwithstanding the inclination of the bolt shank. After the head has reached a position such as that shown at 34a, the shank is grasped and pulled upward to substantially the position shown at 34b in Fig. 5. Thereupon the leg is lowered until the enlargement 25 of the key-hole slot in the arm 21 is aligned with the

bolt head, and then the bolt head is slipped through the enlargement 25. The shank of the bolt then slides down in the restricted portion 40 of the key-hole slot 24. Now the washer 36 and nut 37 are applied to the protruding threaded end of the shank.

As stated, the members 20 and 21 are preferably normally spaced apart sufficiently to enable them to be readily slipped in the positions shown in full lines in Fig. 5. After the parts have been assembled as just described, the nut 37 is tightened on the bolt in such manner as to spring the members 20 and 21 toward each other to bring the member 20 into tight clamping engagement with the face 28 of the brace 13 and to bring the member 21 into tight clamping relation with the ends 15 of the bars 12, as shown in Fig. 4. There is ample space to enable the hand to operate the nut 37, and, in view of the distance of the ends of the members 20 and 21 from the bight of the leg, the exertion required to spring the ends of these members toward each other and into clamping relation with the parts 12 and 13 is not excessive. The clamping may be made as tight as desired, and when it is complete the leg is locked against transverse movement by reason of the engagement of the member 21 thereof with the bar ends 15, which form in effect a vertical groove, and the engagement of the member 20 with that portion of the block face 38 which is nearest to the member 21. The leg is held from vertical movement by the tightness of the clamping action. To adjust the leg vertically relative to the table top, it is necessary merely to back off the nut 37, shift the leg up or down as may be desired, and then tighten the nut.

To disassemble the leg from the remainder of the structure, it is necessary merely to reverse the procedure followed in assembling the parts. In both assembling and disassembling, which it is obvious from the foregoing requires a minimum of skill, effort and time, a substantial portion of the outer member 21 may be positioned between the bar ends 15 so that said ends assist in holding the leg in position during assembly and disassembly of the parts. Ample space is afforded to render the nut easily accessible at all times, and to enable the parts to be readily assembled and disassembled.

It will be observed that in addition to an extremely efficient leg mounting, I have provided one in which the connecting means is completely shielded from view when the article is in service.

The branches 20 and 21 could of course be independent of each other. With the assembly illustrated, it is preferred that the ends of the branches 20 and 21 be open so that if the bolt should happen to fall into either branch when the parts are disassembled, the bolt may be retrieved simply by inverting the branch, when the bolt will fall out of the open end of the branch.

Various modifications may suggest themselves to those skilled in the art without departing from the spirit of my invention, and, hence, I do not wish to be restricted to the specific form shown or uses mentioned, except to the extent indicated in the appended claims.

I claim:

1. A knock-down table or the like, comprising a table top, a pair of angularly related apron members depending from said top and having adjacent spaced ends, a cross piece spaced from said ends and bridging said members and having

an opening closed at the bottom thereof and aligned with the space between said ends, an elongated integral leg formed of a single weldless piece of metal tubing bent into an elongated U and disposed below said top with its bight rounded and lowermost and having upstanding resiliently relatively movable outer and inner branches between which said ends and cross piece are disposed, the outer wall of said outer branch being imperforate, said outer branch adjacent its upper end having in the inner wall thereof a keyhole extending longitudinally of said branch with the enlarged portion of said hole lowermost, the restricted portion of said hole being elongated, the inner branch having elongated holes through the opposite walls thereof aligned with said keyhole, and a bolt whose head is passable transversely through said enlarged portion but only whose shank is passable through said restricted portion, said head being disposed in the outer branch inwardly of said restriction, said shank extending through said openings in said branches and cross piece and having a free end inwardly beyond said inner branch, and a nut threaded on the free end of said shank and clamping said cross piece and members between said branches, said head being shielded from the outside by said outer branch, said head being passable through the space between said ends of said angularly related members, and said opening in said cross piece being substantially larger in cross-section than said shank to afford clearance for angular movement of said shank to enable said leg to be attached and detached, all of said holes being closed at the top by the material of said tubing whereby said leg cannot become detached if said bolt becomes loose, sufficient space being afforded on opposite sides of said cross piece to enable said bolt and nut to be readily manipulated for attachment and detachment and adjustment of said leg.

2. An article of furniture comprising a leg-supported member having a polygonal frame dependent therefrom, a reinforcing bar bridging the sides of said frame adjacent each corner thereof, providing with said sides a substantially triangular formation at said corner, a leg at each corner, each pair of juxtaposed ends of said sides providing angularly related surfaces extending in general parallelism with said leg, each leg comprising branches relatively movable transversely, said branches having substantially registering lateral openings, one of said branches being engaged with said surfaces, the other of said branches being engaged with that surface of the associated bar which faces away from the adjacent corner, and a bolt detachably connected to said branches and extending through said openings and associated bar, said openings being elongated longitudinally of said branches to enable said bolt to clamp said branches in different adjusted positions relative to all of said surfaces, said bar being provided with means underlying said bolt, said bolt being engaged with only the inner side of the branch engaging said angularly related surfaces, said triangular formation being of such size as to enable a person's hand to project therewithin and manipulate said bolt for connecting said bolt to said branches while said leg is in the desired adjustment relative to said leg-supported member.

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