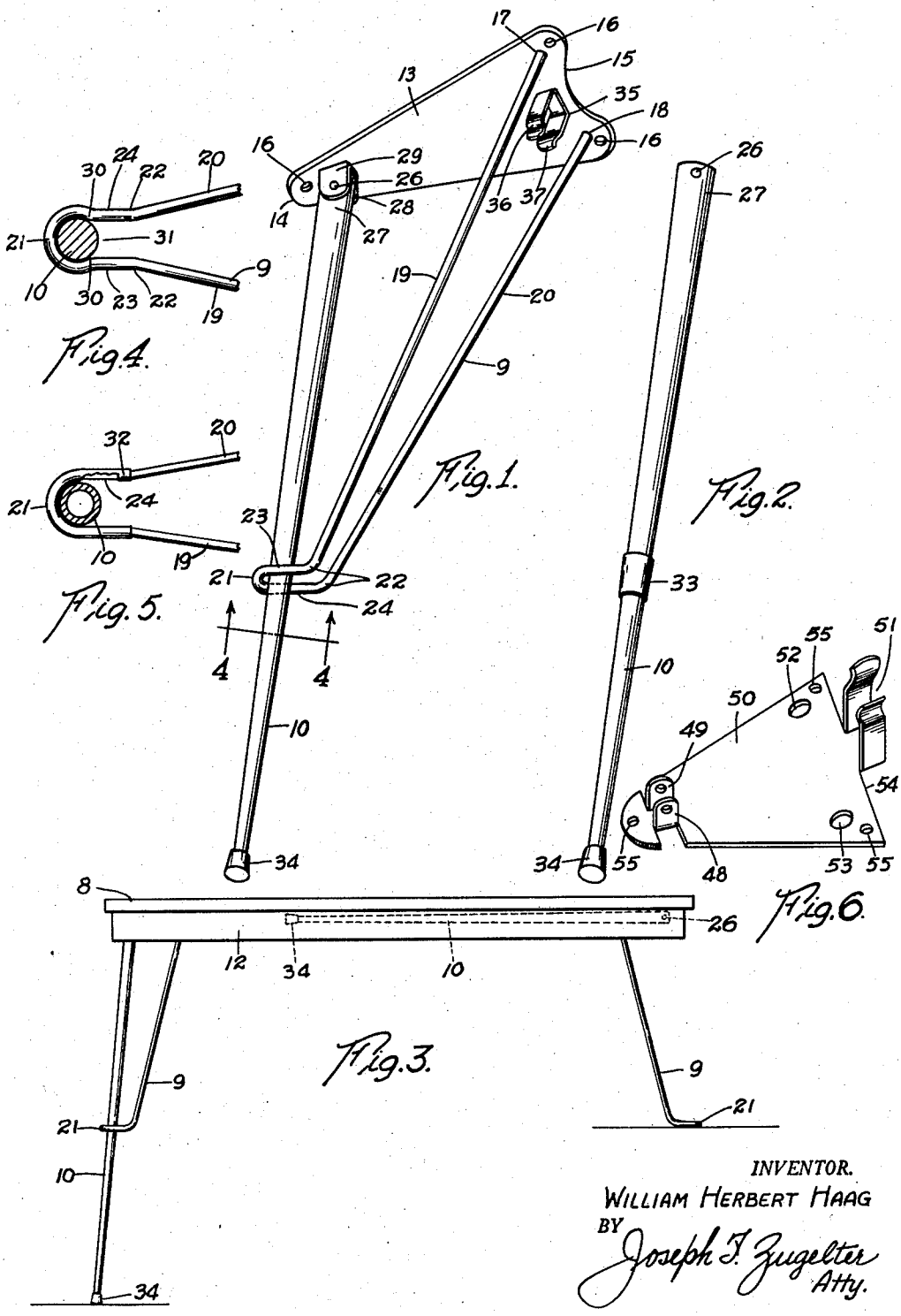
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LEG STRUCTURE

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LEG STRUCTURE

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This invention relates to a leg structure for tables, stands, and the like, to be supported at two different elevations upon a surface such as a floor.

An object of the invention is to provide a leg structure for application to a table top, whereby with ease and dispatch the table top may selectively be disposed at two different elevations for alternative uses.

Another object of the invention is to provide a simple and inexpensive unitary leg structure for the purposes stated, which easily may be applied to a table top with the use of a screw-driver as the only tool required.

Another object is to provide a double-purpose leg structure of the type mentioned above, which is constituted of simple parts inexpensively assembled at the factory in readiness for immediate application to a table top without the exercise of mechanical skill.

The foregoing and other objects are attained by the means described herein and illustrated upon the accompanying drawing, in which:

Fig. 1 is a perspective view of the improved leg structure embodying the present invention.

Fig. 2 is a perspective view of a movable leg for the assembly, in slightly modified form.

Fig. 3 is a side elevational view of a table or stand equipped with the device of the invention, and showing the movable and stationary legs in various positions.

Fig. 4 is a fragmentary cross-sectional view on an enlarged scale, taken on line 4—4 of Fig. 1.

Fig. 5 is a view similar to Fig. 4, showing a modification thereof.

Fig. 6 is a perspective view of a mounting plate for the leg structure, alternative to the mounting plate of Fig. 1.

In accordance with the present invention, a table top or slab such as 8 may be provided with a plurality of leg units like that of Fig. 1, which permits support of the table top selectively upon short legs 9, or long legs 10, depending upon the nature of the service required of the table. For example, if the table is to be used as a game table or for other purposes requiring the use of chairs, it will rest upon the long legs 10. When used as a coffee table or as one accessible to persons seated upon the floor, it will preferably rest upon the shorter legs 9. The arrangement of legs is such that for each short leg there is a corresponding long leg substitutable therefor. Depending upon the shape and size of the table top, the leg units may number three, four, or more, it being usual to furnish one leg unit near each corner of a rectangular table top, as will be understood. Shown by way of example in Fig. 3 is a rectangular table, with a leg at each corner thereof. The character 12 indicates a drop board or peripheral frame depending from the underside of the slab top 8, in accordance with common practice. The table may be constructed omitting the element 12, if desired.

Referring to Figs. 1 and 4, 13 indicates a substantially flat base or mounting plate of metal or other suitable material, having a forward end 14 and a rear end 15, the ends being preferably furnished with apertures 16 to receive screws or other fasteners for securing the plate flatwise upon the under face of a table top or slab such as 8. Near the rear end of the plate, and preferably adjacent to the rearmost apertures 16, are anchored the ends 17 and 18 of a stationary inclined leg 9 constituted of heavy wire or rod stock, bent to substantial hair-pin shape to provide spaced divergent struts 19 and 20 meeting to form a loop 21. The loop portion may be bent at the locations 22 to project in substantial parallelism with mounting plate 13, thereby to provide a foot which may flatly contact a floor or other supporting surface.

The arms 23 and 24 of the loop are spaced apart to provide a throat between the bends 22, into which throat may be directed the movable leg 10 as the leg is swung downwardly and outwardly about its pivotal mounting 26 upon the plate 13, as illustrated by Fig. 1. The pivot 26 may be in the form of a pin or shaft passing transversely through the upper end portion 27 of leg 10, and having its opposite ends journalled in the spaced parallel depending lugs 28 and 29, which are perforated to receive the pivot pin. Lugs 28 and 29 may be formed from a metal strap bent to inverted U-shape, and having its intermediate base portion welded, riveted, or otherwise securely fixed to the mounting plate 13 near the forward end 14 thereof. The lugs might, in an alternative construction, be formed integrally from the material of the mounting plate as suggested by Fig. 6, wherein such lugs are numbered 48 and 49.

At the locations 17 and 18, the metallic inclined struts forming the leg 9 are to be securely fixed to the mounting plate in any suitable manner, as by welding, peening, or any known process common in the art. The leg 9 therefore is a stationary leg, and the plane of its struts 19 and 20 may form an acute angle with the major portion of the mounting plate, such that the foot 23—24 underlies the forward end 14 of the mounting plate or projects slightly beyond it and the pivot 26. When the movable leg 10 is swung to the operative position of Fig. 1, the leg 10 should be either vertical, or inclined slightly in the general direction of inclination of the leg 9, by preference. As will readily be understood, the inclination of leg 9 might more closely approach the inclination of leg 10, if desired.

Leg 10 is adapted to frictionally engage the loop arms 23 and 24 when disposed in the operative or extended position of Fig. 1, to preclude accidental collapse of the leg structure. To achieve the desired frictional gripping of leg 10, the arms 23 and 24, or one of them, may be provided with an inwardly projecting slight bend or hump 30 serving to constrict the loop entrance or throat 31, so that the leg 10 when advanced toward home position within the loop confines, will slightly spread the arms 23 and 24 before seating within the base of the loop. As will be understood, the loop arms are resilient to the extent required for thusly binding the leg 10 within the loop.

In the modified form of loop illustrated by Fig. 5, the arms forming the loop may carry a frictional coating or covering 32, preferably of plastic or rubber-like substance, to frictionally engage the leg 10 and thereby hold it in the operative or extended position. As an alternative, the leg itself may carry a band of plastic or rubber-like substance 33, as shown in Fig. 2, to increase the frictional grip between the leg 10 and the loop 21 when said leg is fully extended. If desired, both the leg 10 and the loop 21 may be so coated or covered with a suitable friction material. Similar results may be achieved by knurling or roughening the contacting surfaces of the legs, if desired.

In all the drawing views, the character **34** indicates a tip for the leg **10**, made of plastic or rubber, to preclude damage to the floor or supporting surface upon which the leg stands. Leg **10** may be either solid or tubular, as suggested by Figs. 4 and 5, respectively.

A suitable clip or catch **35** depending from the under face of the mounting plate, near the rear end **15** thereof, serves to hold the leg **10** in the inoperative or retracted position when the leg is swung inwardly and upwardly to a position of substantial parallelism with the mounting plate. The clip or catch may comprise a pair of resilient arms **36** and **37** properly spaced and shaped to accommodate and frictionally retain the leg **10** in the inoperative position. Fig. 3 shows in dotted lines the inoperative position of leg **10**, with relation to the table top **8**. Fig. 3 shows also, at the left, the extended or operative position of the leg. As will be understood, folding of all the legs **10** to inoperative position results in formation of a low table supported upon the stationary short legs **9**.

Fig. 6 illustrates in perspective a mounting plate **50**, constructed of a single sheet of metal, wherein the pivot lugs **48** and **49** as well as the clip or catch **51**, are formed integrally from the material of the plate. The characters **52** and **53** indicate openings near the rear end of the plate, in which the struts of leg **9** may be anchored by welding, peening, or other method, to produce a rigid connection. Other openings **55** are adapted to receive screws or other fasteners whereby the mounting plate may be fixed to the under face of a table top as was explained previously. The plate of Fig. 6 is substitutable for that of Fig. 1, and will bear the same relationship to the legs **9** and **10** as was explained in the disclosure of Fig. 1.

With reference to Fig. 3, it may be noted that both of the long legs **10** may be folded compactly against the underside of the table, without interference with one another, by so positioning their respective mounting plates as to dispose the legs alongside one another in the horizontal plane. The legs may lie in substantial parallelism with the drop member **12**, or if preferred, the legs when folded may extend diagonally of the table top.

In conclusion, it is to be understood that various modifications and changes in structural details of the device may be resorted to, within the scope of the appended claims, without departing from the spirit of the invention.

What I claim is:

1. A unitary leg structure for tables and the like, comprising in combination, a base plate having forward and rear ends, a movable long leg having an upper end pivoted upon the base plate near the forward end of said plate, for swinging movement of said leg from an upright operative position to an inoperative position in substantial parallelism with the base plate, a short leg constituted of a metallic rod having opposite ends, the rod being bent intermediate its ends to hairpin shape for providing a pair of spaced struts and a loop forming a foot for the short leg, means fixing the corresponding free ends of the struts to the base plate at spaced points near the rear end of the base plate, the struts being inclined at an angle to the base plate for disposing the foot loop in underlying relationship to the forward end of the base plate, the loop having a throat and a seat portion dimensioned to accommodate an intermediate portion of the long leg when the latter is swung to the operative upright position.

2. The combination as set forth in claim 1, wherein is included means on the base plate to releasably latch the long leg in the inoperative position at which said leg rests in substantial parallelism with the base plate.

3. A unitary leg structure for tables and the like, comprising in combination, a base plate having forward and rear ends, a movable long leg having an upper and a lower end, means pivoting the upper end of said leg upon the base plate near the forward end of the latter, for swinging movement of said leg from an upright operative position to an inoperative position in substantial parallelism with the base plate, a short leg constituted of a metallic rod having opposite ends, the rod being bent intermediate its ends to hair-pin shape for providing a pair of spaced struts and a loop portion forming a foot for the short leg, the loop portion being bent at an angle to the struts for disposing the loop portion in a plane substantially parallel to the base plate, means fixing the corresponding free ends of the struts to the base plate at spaced points near the rear end of the base plate, the struts being inclined at an angle to the base plate for disposing the foot loop in underlying relationship to the pivot means of the movable long leg, the loop having a throat and a seat portion dimensioned to accommodate an intermediate portion of the long leg when the latter is swung to the operative upright position.

4. The combination as set forth in claim 3, wherein are provided friction means on the loop and on the base plate, for releasably holding the movable long leg in the operative and inoperative positions, respectively.

5. A unitary leg structure for tables and the like, comprising in combination, a base plate having forward and rear ends, a movable long leg having an upper and a lower end, means pivoting the upper end of said leg upon the base plate near the forward end of the latter, for swinging movement of said leg from an upright operative position to an inoperative position in substantial parallelism with the base plate, a short leg constituted of a metallic resilient rod having opposite ends, the rod being bent intermediate its ends to hair-pin shape for providing a pair of spaced struts and a resilient loop portion forming a foot for the short leg, the loop portion being bent at an angle to the struts for disposing the loop portion in substantial parallelism with the base plate, means fixing the corresponding free ends of the struts to the base plate at spaced points near the rear end of the base plate, the struts being inclined at an angle to the base plate for disposing the foot loop in underlying relationship to the pivot means of the movable long leg, the loop having a seat portion and an adjacent constricted entrance throat receptive of an intermediate portion of the long leg when the latter is swung to the operative upright position, said throat by reason of the resiliency of the loop material, serving to releasably hold the long leg within the seat portion of the loop.

6. The combination as set forth in claim 5, wherein is included means on the base plate to grip and releasably hold the movable long leg in the inoperative position aforesaid.

7. A unitary leg structure for tables and the like, comprising in combination, a base plate having forward and rear ends, a movable long leg having upper and lower ends, means pivoting the upper end of said leg upon the base plate near the forward end of the latter, for swinging movement of said leg from an operative upright position to an inoperative position in substantial parallelism with the base plate, a short leg constituted of a metallic rod having opposite ends, the rod being bent intermediate its ends to hair-pin shape for providing a pair of spaced struts and a loop forming a foot for the short leg, means fixing the corresponding free ends of the struts to the base plate at spaced points near the rear end of the base plate, the struts being inclined at an angle to the base plate for disposing the foot loop in underlying relationship to the pivot means of the long leg, the loop having a throat and a seat portion receptive of an intermediate portion of the long leg when the latter is swung to the operative upright position, and friction means carried by the loop for restraining and releasably holding the long leg within the loop.

8. A unitary leg structure for tables and the like, com-

prising in combination, a base plate having forward and rear ends, a movable long leg having upper and lower ends, means pivotally mounting the upper end of said leg upon the base plate near the forward end of the latter, for swinging movement of said leg from an upright operative position to an inoperative position in substantial parallelism with the base plate, a short leg constituted of a metallic rod having opposite ends, the rod being bent intermediate its ends to hair-pin shape for providing a pair of spaced struts and a loop forming a foot for the short leg, means fixing the corresponding free ends of the struts to the base plate at spaced points near the rear end of the base plate, the struts being inclined at an angle to the base plate for disposing the foot loop in underlying relationship to the pivot means of the long leg, the loop having a throat and a seat portion receptive of an intermediate portion of the long leg when the latter is swung to the operative upright position, and friction means carried by the intermediate portion of the long leg where said leg contacts the loop, for frictionally restraining the long leg against displacement from the loop.

9. A unitary leg structure for tables and the like, comprising in combination, a base plate, a movable long leg having upper and lower ends, and means pivoting the upper end of said leg upon the base plate for swinging movement of said leg from an operative upright position to an inoperative position in substantial parallelism with the base plate, a short leg stationarily fixed to the base plate in depending relationship, said short leg having a foot portion to contact a supporting surface, and means on the foot portion of the stationary short leg aligned with the path of movement of the pivoted long leg when swung to the operative position, for releasably holding the long leg in the operative upright position.

10. The combination as set forth in claim 9, wherein is included a latch on the base plate for releasably holding the long leg in the inoperative position when said long leg is swung to substantial parallelism with the base plate.

11. A unitary leg structure for tables and the like, comprising in combination, a base plate, a movable long leg having upper and lower ends, and means pivoting the upper end of said leg upon the base plate for swinging

movement of said leg from an upright operative position to an inoperative position in substantial parallelism with the base plate, a short leg stationarily fixed to the base plate in depending relationship, and holding means on said short leg aligned with the path of movement of the pivoted long leg when swung to the operative upright position, for releasably connecting the movable long leg to the stationary short leg in the operative upright position of the long leg.

12. A unitary leg structure for tables and the like, comprising in combination, a base plate, a movable long leg having upper and lower ends, and means pivoting the upper end of said leg upon the base plate for swinging movement of said leg from an upright operative position to an inoperative position in substantial parallelism with the base plate, a short leg stationarily fixed to the base plate in depending relationship, a foot portion on the short leg to contact a support surface, said foot portion including a loop having an open throat in alignment with the path of movement of the long leg when swung to operative position, said loop being snugly receptive of a portion of the long leg for releasably restraining same against displacement from the loop.

13. The combination as set forth in claim 12, wherein means are provided on the base plate for releasably holding the pivoted long leg when said long leg is swung to the inoperative position aforesaid.

14. The combination as set forth in claim 12, wherein the foot portion of the stationary short leg carries a coating of friction material to contact and restrain the pivoted long leg against movement relative to the stationary short leg when the long leg is disposed in operative position.

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