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W. C. BAILEY

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FURNITURE LEG ATTACHMENT CONSTRUCTION

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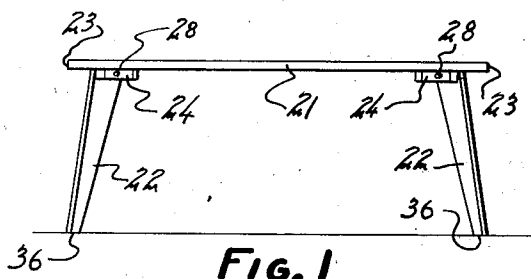


FIG. 1

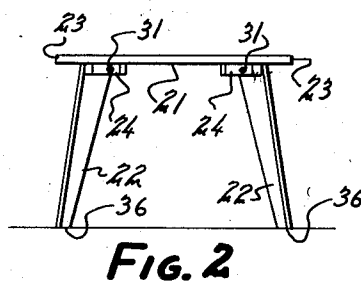


FIG. 2

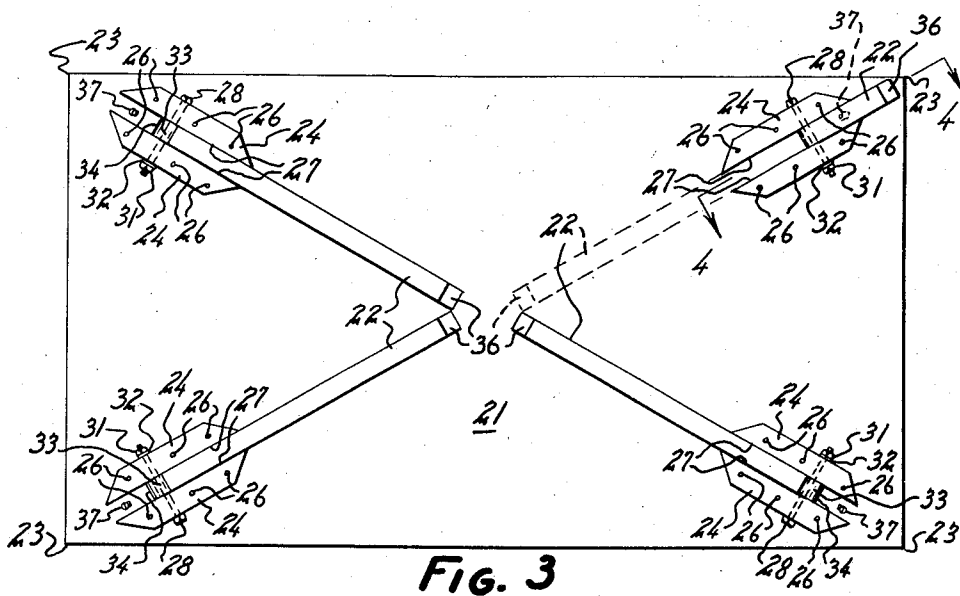


FIG. 3

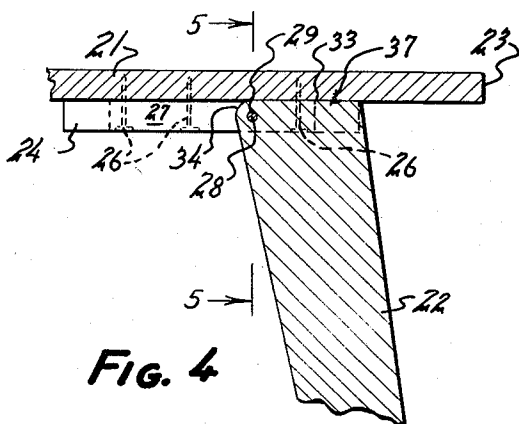


FIG. 4

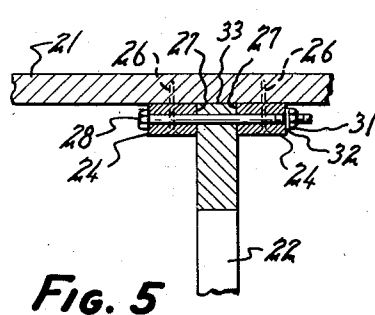


FIG. 5

INVENTOR.
WALTER C. BAILEY
BY *Julian Caplan*
ATTORNEY

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FURNITURE LEG ATTACHMENT CONSTRUCTION

Walter C. Bailey, Hillsborough, Calif.

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4 Claims. (Cl. 311-77)

This invention relates to a new and improved furniture leg construction characterized by the fact that the leg may be folded and unfolded.

One of the principal features and advantages of the invention is the fact that the leg may be conveniently moved from the folded to extended position.

Still another feature of the invention is the fact that normally it is not necessary to latch or unlatch locking elements in order to move the leg, as is the case in most folding leg constructions. Nevertheless, means is provided in accordance with the present invention for tightening the leg, either in folded or extended position, as desired.

One of the principal features and advantages of the invention is the simplicity of the structure, the small number of parts required, and particularly the few hardware parts employed in the construction. As a result, the device is extremely inexpensive to manufacture.

Still another feature of the invention is the ease with which the leg may be assembled and disassembled, which has the further advantage of facilitating transportation of the furniture in collapsed condition.

Yet another feature of the invention is the adaptability of the leg construction to furniture of simple lines characteristic of modern design, and the absence of bracing and other parts which interfere with the use of the furniture by obstructing the underside of the furniture piece to which the legs are attached.

Still another feature of the invention is the fact that when the leg is in extended position, the application of load serves more securely to hold the leg in place. As hereinafter described in the detailed description of this invention, an outwardly slanted leg is pivotally attached to the underside of the piece of furniture at the inner corner of the upper end of the leg. Accordingly, the force of the load is applied downwardly on the outer top corner of the leg and this results in a more firm engagement of the leg to the table, or other piece to which it is hinged.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views.

In the drawings:

Fig. 1 is a side elevation of a table to which the leg construction is applied;

Fig. 2 is an end elevation thereof;

Fig. 3 is an enlarged bottom plan of the table showing three legs in folded position and one leg in solid lines in extended position and in dotted lines in folded position;

Fig. 4 is an enlarged sectional view through the leg taken substantially along line 4-4 of Fig. 3; and

Fig. 5 is a sectional view taken substantially along the line 5-5 of Fig. 4.

The leg construction which is the subject of this invention is applicable to various pieces of furniture

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wherein a folded leg is desirable. In the accompanying drawing the invention is shown applied to a table 21, but it will be understood that the invention is adaptable to other folding furniture. A principal use of the invention is in folding outdoor furniture, such as patio tables, wherein it is desirable with the changes of season to collapse the furniture for storage and subsequently assemble the same. Accordingly, in the accompanying drawing there is shown a table top 21 of plain rectangular shape, it being understood that the details of construction of the table top 21 form no part of the present invention. The table top is supported by four legs 22, one adjacent each corner 23 of top 21. The upper ends of legs 24 are mounted spaced inwardly from the corners of top 21 and the legs slant diagonally outwardly downwardly so that their lower ends are substantially in alignment with corners 23 of top 21. It will be understood, however, that the last described feature of the invention is subject to considerable modification. Moreover, the present invention has considerable utility in furniture of simple lines, which is characteristic of modern design wherein legs slanting in the manner described are desirable.

At the point of attachment of the legs to the table there is provided a pair of guide blocks 24 secured to the underside of the table 21 by means of nails 26 or other fastening elements. Guide blocks 24 have inwardly facing, flat parallel guide surfaces 27 perpendicular to table top 21, the length of guide surfaces 27 being substantially greater than the width of the upper end of leg 22 so that guide surfaces 27 guide the pivotal movement of the upper end of the leg from folded to extended position, as hereinafter appears. Machine bolt 28 extends through guide blocks 24 and through an aperture 29 in the upper inner corner of leg 22. Bolt 28 is secured in place by means of nut 31 and washer 32. It will be seen that the upper surface 33 of leg 22 is beveled so that when the upper surface 33 engages the underside of table top 21, leg 22 extends outwardly in the desired angle. Inner corner 34 of leg 22 is rounded to provide clearance for pivotal folding movement of leg 22 about bolt 28 as a center. The outer end 36 of leg 22 is beveled so that in the extended position of the leg end 36 is parallel to table top 21. In such extended position, when a load is applied to table 21, the point 37 at which the force is applied to upper surface 33 is spaced outwardly relative to bolt 28. Accordingly, the greater the load applied, the more firmly the leg is held in extended position. Nevertheless, when it is desired to fold the leg, the leg need only be grasped and pivoted inwardly about the bolt 28. Both in the extended position and in the folded position and during the folding operation guide surfaces 27 maintain leg 22 in proper alignment, this object being accomplished by reason of the extended length of guide surfaces 27 as compared with the width of upper surface 33.

If it is desired to secure leg 22 in either extended or folded position, bolt 28 and nut 31 may be tightened sufficiently to deform guide surface 27 inwardly into engagement with the upper end of leg 22, thereby frictionally preventing pivotal movement. However, if it is desired frequently to fold and unfold the leg, the tightening of the bolt and nut may be eliminated. It will be further seen that if it is desired to demount leg 22 from table top 21, bolt 28 may be removed.

Although the foregoing invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be practiced within the spirit of the invention and scope of the appended claims.

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I claim:

1. In an article of furniture, an elongated, substantially horizontal member, at least one leg for said horizontal member disposed in position of use slanted downwardly-outwardly relative to said horizontal member, and attachment means to attach said leg and horizontal member together, said leg having its upper end cut at an angle to its length and the cut end being positioned to bear against the underside of said horizontal member throughout substantially the entire area of said cut end, said attachment means comprising a first guide block on the underside of said horizontal member and having a first surface bearing against a first side of the upper end of said leg, a second guide block on the underside of said horizontal member and having a second surface bearing against a second side of the upper end of said leg opposite said first side, said guide blocks being independent of each other, means independently fastening said guide blocks to the underside of said horizontal member, and a hinge pin passing through said guide blocks and the upper inner corner of said leg.

2. An article of furniture according to claim 1, in which said leg has alternatively a position of use and a folded position and wherein in said folded position said leg extends in proximity to the underside of said horizontal

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member for substantially its entire length and wherein said guide blocks are of extended length and positioned to bear against said first and second surfaces in both the folded position of said leg and in the position of use.

3. An article of furniture according to claim 1, wherein the load is transmitted to said leg centered at a point on the cut end of said leg spaced outwardly relative to said hinge pin, whereby said load tends to hold said leg more securely in extended position.

4. An article of furniture according to claim 1, which further comprises manually adjustable means associated with said hinge pin to deform said guide blocks inwardly into frictional locking engagement with said first and second surfaces to lock said leg in position.

References Cited in the file of this patent

UNITED STATES PATENTS

538,748	Schroder et al.	May 7, 1895
1,405,362	Etten	Jan. 31, 1922
1,529,482	Hall	Mar. 10, 1925
1,978,827	Vinding	Oct. 30, 1934
1,995,543	Kaser	Mar. 26, 1935
2,541,722	Shackelford	Feb. 13, 1951
2,666,673	Hughes	Jan. 19, 1954
2,708,145	Anderson et al.	May 10, 1955