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COLLAPSIBLE FURNITURE LEG

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Fig. 1

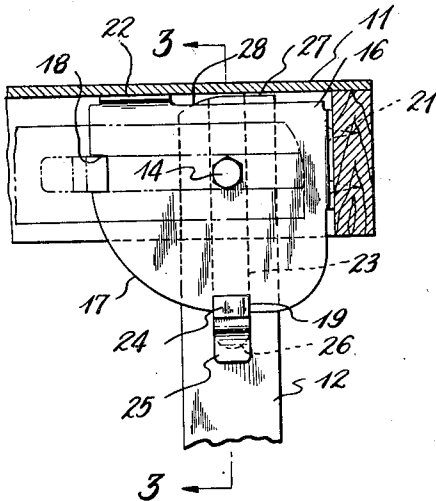
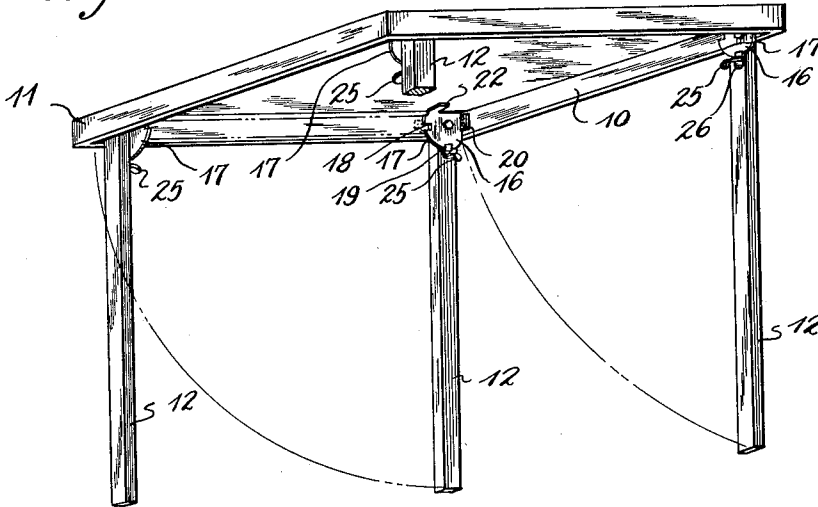


Fig. 2

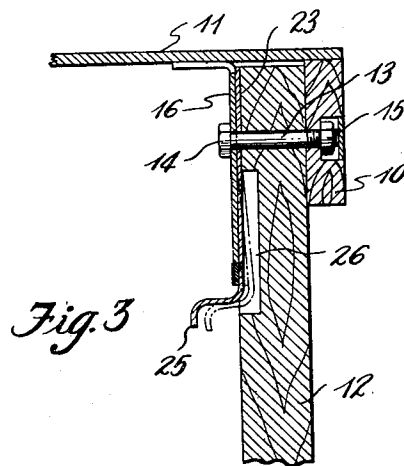


Fig. 3

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COLLAPSIBLE FURNITURE LEG

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3 Claims. (Cl. 311—99)

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This invention relates to collapsible or foldable furniture legs, such as collapsible table legs and like devices wherein any arm or pivotally mounted member may be adjusted to any position about its axis of swinging movement or held in such adjusted position.

An object of the invention is to provide an improved construction which will enable a table leg or like pivotally mounted member to be turned about its axis of rotation into either of a plurality of positions and readily locked therein by a relatively simple and sturdy construction which will facilitate unlocking of the leg or member to permit of its turning.

Another object of the invention is to provide a construction of the above-described type wherein there is a leg or member pivotally mounted by a pivot bolt or the equivalent which extends through a stationary quadrant and to provide a keeper that is interposed between the leg or member and the quadrant that is normally urged to engage the quadrant but which may be disengaged therefrom to unlock the leg or member by forcing it into a recess accommodating it that is disposed in the leg or member.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

Figure 1 is a perspective view illustrating the underside of a card table and illustrating the construction embodying the present invention as having been applied thereto;

Fig. 2 is a partial view in vertical section through a portion of the card table illustrated in Fig. 1; and

Fig. 3 is a vertical section taken substantially upon the line 3—3 upon Fig. 2.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, the invention has been illustrated as having been applied to a card table although it will be readily understood that it may be employed on any other article of furniture where it is desirable to collapse or fold a leg. The card table illustrated consists of side rails 10 suitably connected together at their ends and supporting a table top 11. Legs 12 support the table where the rails 10, which are angularly arranged with respect to each other, are joined together. The legs are pivotally connected to their respective rails such as by bolts 13 the heads of which indicated at 14 are disposed inwardly

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and the nuts of which indicated at 15 may be recessed in the outer sides of the rails, and covered over by a covering or plug not shown.

Against the inner face of the leg there is positioned a metal quadrant 16 having an arcuate edge 17 in which there are formed rectangular notches 18 and 19 90° apart. At one end of this quadrant there is provided a laterally bent ear 20 adapted to receive screws 21 to attach the quadrant to the adjacent rail. A lug 22 may be bent laterally from the top edge of the quadrant and bear against the under surface of the table top 11. A keeper 23 is provided the upper portion of which is recessed in the face of the leg between the leg and the quadrant. The bolt or pivot pin 13 extends through the keeper. The lower portion of the keeper is provided with a locking block 24 that is receivable in either of the notches 18 or 19. The keeper possesses inherent resiliency and is thus normally biased to exercise a portion bearing against the face of the quadrant wherein the locking block 24 is urged outwardly into a notch. The bottom of the keeper is bent laterally to provide a handle 25 by which it may be depressed into the dotted line position shown in Fig. 3. The leg 12 is recessed as indicated at 26 to accommodate this depressing movement of the keeper.

When the leg is in its upright position the locking block 24 of the keeper fits the lower notch 19 and locks the leg against collapse. When it is desired to fold or collapse the leg the handle 25 is merely depressed to disengage the locking block from the notch 19. The leg may then be pivoted on the bolt 13 and swung into the dotted line position indicated on Figs. 1 and 2. During this swinging movement if the handle 25 is released the keeper merely urges the locking block 24 against the face of the quadrant, frictionally resisting the folding movement of the leg to a slight extent. When the leg reaches the dotted line position the keeper snaps the locking block 24 into the notch 18 to lock the leg in collapsed position. To thereafter extend the leg the reverse of the operations above described is caused to take place. In the preferred form of construction the top of the leg indicated at 27 is so positioned as to abut the undersurface of the table top when the leg is in its upright position. This top may be trimmed such as at 28 to enable collapse.

From the above-described construction it will be appreciated that the improved collapsible leg is of relatively simple yet highly durable design. The keeper and the quadrant may be easily con-

structed and assembled together with the legs and are easily mounted on the frame of the table. When it is desired to collapse or extend the leg this may be easily accomplished by merely depressing the handle 25 and when the leg reaches either of its two extreme positions it is automatically locked therein by the locking block 24 being snapped into the corresponding peripheral notch.

While the invention has been described in conjunction with a collapsible table leg it will be readily understood that it is equally applicable to any other type of device wherein a leg or arm is pivotally mounted with respect to an adjacent structure to which the quadrant may be attached and relatively to which the leg or arm is adapted to pivot.

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. A collapsible leg construction including two rails angularly arranged, a leg, a single quadrant for the leg construction comprising a substantially flat plate having an arcuate edge, pivot means extending through one of the rails and the leg and the quadrant to hold the parts together preventing axial movement thereof, the pivot means positioning one side of the leg directly against said one rail and the opposite side of the leg directly against the quadrant, means for fastening the quadrant to the other rail, the arcuate edge of the quadrant having its center of curvature substantially at the pivotal axis of the leg, the quadrant having at least two notches along its arcuate edge spaced approximately 90° from one another, a keeper for the quadrant comprising a strip-like member positioned between the quadrant and the leg and through which pivot means extends, the keeper being disposed longitudinally of the leg and being biased to engage the quadrant, means on the leg for carrying the keeper with the leg when the leg is pivoted, the leg being recessed adjacent the edge of the quadrant to accommodate the keeper when the keeper is depressed, the keeper having a locking portion to fit in the notches whereby the keeper may optionally engage the quadrant to lock the leg in collapsed or erect position.

2. A collapsible leg construction comprising two rails angularly arranged, a leg, a single quadrant for the leg construction comprising a substantially flat plate having an arcuate edge, pivot means extending through one of the rails and the leg and the quadrant to hold the above mentioned parts together preventing axial movement of any of the parts, the pivot means positioning one side of the leg directly against said one rail and the opposite side of the leg directly against the quadrant, means for fastening the quadrant to the other rail, the arcuate edge of the quadrant having its center of curvature substantially at the pivotal axis of the leg, the quadrant having at least two notches along its arcuate edge spaced approximately 90° from one another, a strip-like keeper for the quadrant disposed longitudinally of the leg and having the

pivot means extending therethrough, the leg having a recess in the side wall thereof on which the quadrant is positioned located intermediate the edges of said side wall, the keeper fitting in the recess, the portions of said side wall of the leg bounding the edges of the keeper serving to carry the keeper with the leg when the leg is pivoted, the keeper being biased to engage the quadrant, the leg being further recessed adjacent the edge of the quadrant to accommodate the keeper when the keeper is depressed, the keeper having a locking portion to fit in the notches whereby the keeper may optionally engage the quadrant to lock the leg in collapsed or erect position.

3. A collapsible leg construction comprising two rails angularly arranged, a leg, a single quadrant for the leg construction comprising a substantially flat plate having an arcuate edge, a pivot pin extending through one of the rails and the leg and the quadrant, means on the pivot pin for holding the above-mentioned parts together preventing axial movement of any of the parts, the leg being sandwiched between the quadrant and said one rail, means for fastening the quadrant to the other rail, the arcuate edge of the quadrant having its center of curvature substantially at the pivotal axis of the leg, the quadrant having at least two notches spaced approximately 90° from one another along its arcuate edge, a strip-like keeper for the quadrant disposed longitudinally of the leg, means preventing longitudinal movement of the keeper relative to the leg, the leg having a recess in the side wall thereof on which the quadrant is positioned located intermediate the edges of the side wall, the keeper fitting in the recess, the portions of said side wall of the leg bounding the edges of the keeper serving to carry the keeper with the leg when the leg is pivoted, said keeper being biased to engage the quadrant, the leg being further recessed adjacent the edge of the quadrant to accommodate the keeper when the keeper is depressed whereby, when the keeper is in one of the notches the leg is held in one position whereupon the keeper may be depressed to release the leg and the leg swung approximately 90° where the keeper will engage the other notch to lock the keeper in a second position.

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