TABLE LEG LOCKING MECHANISM

Filed Feb. 25, 1957

FIG. 1

FIG. 5

FIG. 4

INVENTOR.

JOHN B. ADLER

BY

ATTORNEYS
This invention relates to an improved table leg locking device.

It is an object of this invention to provide a device which will permit the legs of a table to be folded against the table top to facilitate storage of the table.

It is a further object of this invention to provide a leg locking device which will hold the legs in the extended position when folded away from the table top.

It is still another object of this invention to provide locking means which eliminate use of special fastening or release mechanism.

Other objects and advantages of this invention will be readily apparent from the following description.

In the drawings:

Figure 1 is a perspective view of a card table embodying this invention.

Figure 2 is a perspective of the locking device with the leg partially broken away in an extended position.

Figure 3 is a view similar to Figure 2 with the leg in the folded or nested position.

Figure 4 is a view taken along line 4--4 of Figure 3.

Figure 5 is a view taken along line 5--5 of Figure 2.

Figure 6 is a view taken along line 6--6 of Figure 5.

The card table illustrated has a top 10 and four depending legs 12 which may be extended as seen in Figure 1 or folded to a nested position adjacent top 10 to facilitate storage of the table. Since the four legs are identical only one of the locking devices is illustrated and will be described.

A bracket 14 is triangular in shape adapted to fit into a corner of the table and has depending flanges 16 on the sides fitting into the table corner. These flanges have depressions 18 formed therein which depressions have a bore therethrough to receive an extremity 20 of the pivoting support rods 22. Each rod has one extremity 20 bent at right angles to enter the bore in depressions 18 and the opposite extremities 24 likewise bent at right angles and inserted into suitable holes in the tubular leg 12. In this manner the leg is pivotally suspended from rods 22, which in turn are pivotally suspended from bracket 14.

A channel 26 has a tongue 28 which projects through a suitable slot in bracket 14 and is bent over. Rivet 30 passes through channel 26 and bracket 14 and completes the mounting of the channel in the bracket. The channel has a pair of opposed slots 32 which receive pin 34 carried at the upper extremity of leg 12. When the leg is in the extended position (see Figures 2 and 5) pin 34 is at the innermost extremity of slots 32 and engagement of the pin with channel 26 limits further pivoting of the leg.

When the leg 12 is folded to the nested position (see Figures 3 and 4) the pin 34 is at the outermost extremity of slots 32 and engagement of the pin with channel 26 limits further pivoting of the leg.

The slots 32 are of sufficient length so that leg 12 may pivot from the nested position beyond the vertical to a position wherein the legs are inclined somewhat outwardly from the table as seen in Figure 1.

With the legs in this position any downward force upon the table tends to pivot the legs further so that the tendency is for the legs to remain in the extended position. Also friction between pin 34 and the sides of slot 32 resists pivoting of legs 12 toward the nested position.

In this manner the legs are held in their extended position without use of special fasteners or the like and will not pivot to the nested position unless manually moved past the vertical position.

While what has been described is the preferred embodiment of this invention, it is readily apparent that alterations and modifications may be resorted to without departing from the scope. This invention and such alterations and modifications are intended to be included within the scope of the following claims.

I claim:

1. A locking mechanism for a pivoting table leg comprising means for pivotally mounting a leg upon a table, means for guiding pivoting of said leg from a nested position to an extended position beyond a position normal to said table, said guide means being inclined with respect to the table surface so that its outermost portion is a furthermost distance from the table surface whereby any downward force upon said table tends to hold said leg in the extended position.

2. A locking mechanism for a pivoting table leg comprising a bracket attached to a corner of a table, a table leg, means for pivotally mounting said leg to said bracket, guide means upon said bracket, and means on said leg engaging said guide means permitting pivoting of said leg from a nested position to an extended position beyond a position normal to said table, said guide means being inclined with respect to the table surface so that its outermost portion is a furthermost distance from the table surface whereby any downward force upon said table tends to hold said leg in the extended position.

3. A locking mechanism for a pivoting table leg comprising a bracket attached to a corner of a table, a table leg, a pair of rods pivotally secured to said bracket and to said leg, guide means upon said bracket, and means on said leg engaging said guide means permitting pivoting of said leg from a nested position to an extended position beyond a position normal to said table, said guide means being inclined with respect to the table surface so that its outermost portion is a furthermost distance from the table surface whereby any downward force upon said table tends to hold said leg in the extended position.

4. A locking mechanism for a pivoting table leg comprising a bracket attached to a corner of a table, a table leg, a pair of rods having the extremities thereof bent one to enter said bracket the other said leg to pivotally mount said leg to said bracket, guide means upon said bracket, and means on said leg engaging said guide means permitting pivoting of said leg from a nested position to an extended position beyond a position normal to said table, said guide means being inclined with respect to the table surface so that its outermost portion is a furthermost distance from the table surface whereby any downward force upon said table tends to hold said leg in the extended position.

5. A locking mechanism for a pivoting table leg comprising a bracket attached to a corner of a table, a table leg, means for pivotally mounting said leg to said bracket, a channel upon said bracket having a slotway therein, a pin upon said leg fitting into said slotway, the engaging pivoting of said leg from a nested position to an extended position beyond a position normal to said table, said slotway being inclined with respect to the table surface so that the outermost portion thereof is a furthermost distance from the table surface whereby any downward force
upon said table tends to hold said leg in the extended position.

6. A locking mechanism for a pivoting table leg comprising a bracket attached to a corner of a table, a table leg, a pair of rods pivotally secured to said bracket and to said leg, a channel upon said bracket having a slotway therein, a pin upon said leg fitting into said slotway, said slotway being inclined with respect to the table surface so that the outermost portion thereof is a further distance from the table surface whereby any downward force upon said table tends to hold said leg in the extended position.

7. A locking mechanism for a pivoting table leg comprising a bracket attached to a corner of a table, a table leg, a pair of rods having the extremities thereof bent one to enter said bracket the other said leg to pivotally mount said leg to said bracket, a channel upon said bracket having a slotway therein, a pin upon said leg fitting into said slotway, said slotway being inclined with respect to the table surface so that the outermost portion thereof is a further distance from the table surface whereby any downward force upon said table tends to hold said leg in the extended position.

References Cited in the file of this patent

UNITED STATES PATENTS

493,021 Franks ------------ Mar. 7, 1893
1,063,642 Birdsell ------------ June 3, 1913
2,077,414 Hunting ------------ Apr. 20, 1939
2,202,624 De Saussure -------- May 28, 1940
2,326,461 Howe -------------- Aug. 10, 1943
2,726,127 Mun -------------- Dec. 6, 1955