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J. B. O'CONNOR ET AL

1,979,568

FOLDING TABLE

Filed March 14, 1931

FIG. 1.

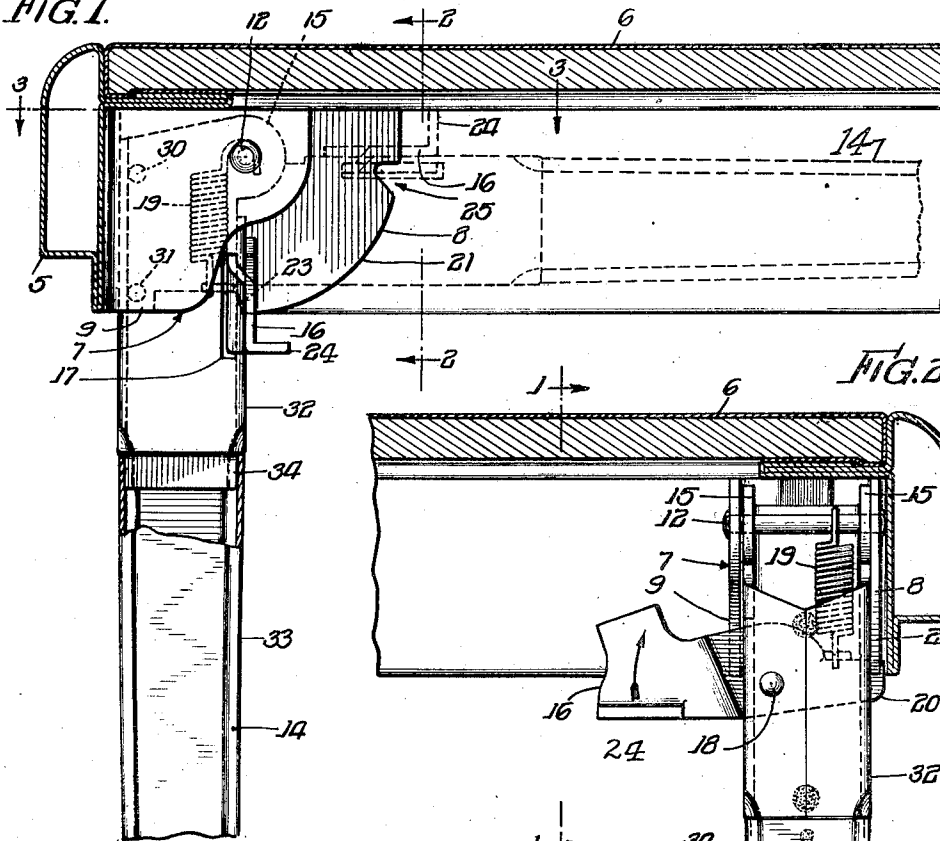


FIG. 2.

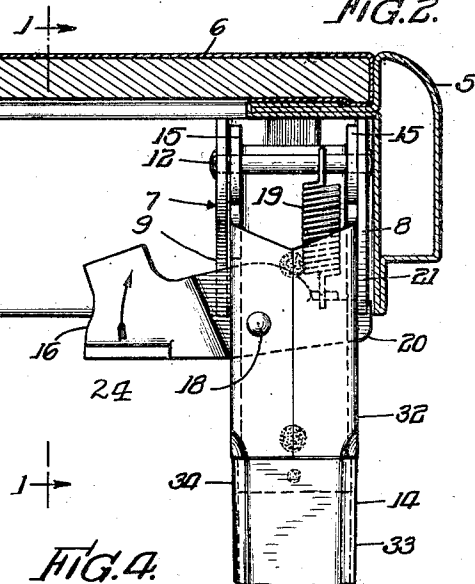


FIG. 3.

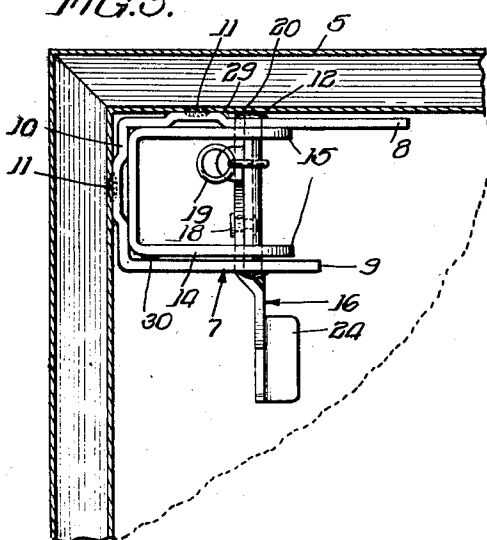
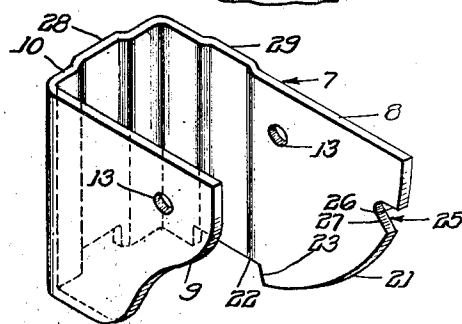


FIG. 4.



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UNITED STATES PATENT OFFICE

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FOLDING TABLE

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Application March 14, 1931, Serial No. 522,556

2 Claims. (Cl. 45—11)

This invention relates to tables and particularly to means for locking a pivoted table leg in extended or collapsed position.

The primary object of the invention is to provide a table leg locking device which is strong and durable in construction, which is efficient in operation and which can be readily and economically manufactured.

Another object is to provide an improved leg locking structure which is composed of few parts assembled in a particular and novel arrangement, and which provides simple and improved means for locking the table in either extended or folded position.

Numerous other objects and advantages will appear throughout the progress of the following specification.

The invention is an improvement of the application filed June 30, 1928, by John B. O'Connor, Serial No. 250,462, for Folding table, said application finally maturing into Reissue Patent No. 18,883, dated June 27, 1933.

The invention comprises in general a yoke or brace which is fastened rigidly to the table top or rim. The legs of the yoke are connected by a pin which keeps the yoke or brace properly spaced and which also acts as a pivot support for the table leg. A lever is pivotally attached to one side of the table leg by a pin which passes through the outside of the table leg and through the lever and has one end extending inside of the table leg. A spring is connected to the pivot support and to the lever and normally urges the locking end of the lever toward the pivot axis. One leg of the yoke or brace has a rounded portion and acts as a cam against which the latching end of the lever engages. This cam is provided with cutouts to form shoulders against which the latching end of the lever engages. When the leg is extended in one position the latching end of the lever will engage one of the shoulders to hold the leg in extended position. Two sides of the leg engage the two legs of the brace, and another side of the leg engages the rear end of the brace. The latch lever engages the shoulder in the cam, thereby forming a four-point support for the leg, when the leg is in extended position. When the leg is in collapsed position, the latch falls into a notch in the cam and holds the leg in collapsed position. The leg is operated from collapsed to extended position or vice versa by pressure being exerted on the lever. The leg is also provided with protuberances which engage the legs of the

brace to provide friction between the brace and the leg when the leg is in extended position.

In the aforementioned copending case Serial No. 250,462, the leg is provided with an extended portion to form a lateral flange lying in the plane of one of the sides of the leg. The construction shown in that case provides a substantially long hinge for the leg which prevents the leg from wobbling in the plane of the axis of the hinge. However, in the present case a much lighter and more economical construction is provided with a four-point support for the legs, the latch and the three-sided yoke or brace providing a light but very rigid construction. Also, a table of the present type can be made more economically than that shown in the aforesaid copending application.

The accompanying drawing illustrates a selected embodiment of the invention and the views therein are as follows:

Fig. 1 is a detail sectional view through the improved table and on the line 1—1 of Fig. 2.

Fig. 2 is a similar view at right angles to Fig. 1 and on the line 2—2 of Fig. 1.

Fig. 3 is a detail plan section on the line 3—3 of Fig. 1.

Fig. 4 is a detail perspective view of the brace or yoke.

Referring to the drawing, 5 designates a peripheral metal rim to which a top 6 is attached. A three-sided bracket or yoke 7, Fig. 4, having outwardly extending legs 8 and 9 which are integrally connected by an end portion 10, may be fixed to the top in any convenient and substantial manner such as by welding the bracket to the inside of the peripheral rim as indicated at 11, Fig. 3.

A pin 12 extends through the holes 13 in the bracket and prevents spreading of the legs.

A table leg 14 is provided with upstanding ears 15 which are arranged between the legs 8 and 9 of the bracket and which pivotally engage the pin 12. The pin 12, therefore, is the pivot axis of the leg and also keeps the bracket from spreading.

A latch lever 16 extends through slots 17 in the leg and is pivotally connected directly to the leg in any convenient manner such as by a rivet 18, Fig. 2. This rivet extends through one side of the leg and through the latch lever, being provided with a head on the inside against the lever body and is clamped on the outside of the leg to pivotally support the lever 16 directly to the leg 14.

A spring 19 is connected to the axis pin 12 and to an end of the latch lever 16 to urge the latching end 20 of the latch lever toward the pivot axis 12.

5 The leg 8 of the brace 7 is provided with a rounded or cam portion 21 against which the latching end 20 of the latch lever 16 engages. This cam is cut away at 22 to provide a shoulder 23 against which a side of the latching
10 end 20 bears when the leg is in extended position. The disengagement of the latch lever from the shoulder 23 permits the leg 14 to be collapsed, by pressure exerted on the thumb
15 piece 24 which is formed integral with the latch lever. When pressure is applied to the thumb piece 24 in the direction of the arrow shown in Fig. 2, the latch lever will swing on its pivot
20 of the latch lever to ride on the cam 21. The cam 21 is also provided with a notch 25 which has a relatively straight side 26 and an inclined side 27. The latch end 20 falls into the notch when the leg is being folded or collapsed and holds the leg in that position. However when
25 it is desired to swing the leg to extended position, it is not necessary to operate the latch lever as the inclined surface 27 of the notch 25 permits the latching end 20 to ride up over the inclined edge 27 and onto the cam 21. When
30 the leg is in normal extended position, the latching end 20 will engage the shoulder 23 and hold the leg in extended position.

The yoke 7 is provided with bends on its connecting end 10 and on its leg 8 to provide attaching portions 28 and 29. These attaching
35 portions extend outwardly from the normal body of the bracket and slightly space the bracket from the peripheral rim 5. This construction tends to add rigidity to the bracket, and the attaching member 29 spaces the bracket leg 8
40 from the rim so that the latching end 20 of the latch lever will not strike the side of the rim.

The upper end of the leg may also be provided with protuberances 30 and 31, Fig. 1,
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which provide frictional engagement between the leg and the bracket when the leg is in extended position. This frictional engagement steadies the leg and prevents it from wobbling.

The leg 14 may be made in two parts, its upper part 32 being made of heavier material and recessed in the lower part 33 of the leg as indicated at 34, Figs. 1 and 2. 80

The invention provides a novel leg lock which supports the leg on all four sides to make the leg rigid and prevent it from wobbling. The latch construction permits the leg to be locked in either extended or folded position and is easily operated. The entire leg locking device is rigid and durable in construction, efficient in operation and it can be readily and economically manufactured. 85 90

Changes may be made in the form, construction, and arrangement of the parts without departing from the spirit of the invention or sacrificing any of the advantages thereof, and the right is hereby reserved to make all such changes as fairly fall within the scope of the following claims. 95

The invention is hereby claimed as follows: 100

1. A table comprising a leg, a relatively springy metal supporting bracket having a pair of arms fastened to the table, a leg pivoted between said arms, and protuberances on said leg and engaging one of said arms for providing friction between the leg and said bracket for stabilizing the leg when in extended position. 105

2. A table comprising a top, bracket members on said top, leg members, said leg members being pivoted to said bracket members and adapted to be folded along the sides of the top and underneath thereof, and means integral on one of said members and engageable with the other of said members for providing friction means for preventing wobbling of said leg members relative to the bracket members. 110 115

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