Jan. 15, 1935. W. M. BOENNING 1,987,770

TABLE LEG BRACE

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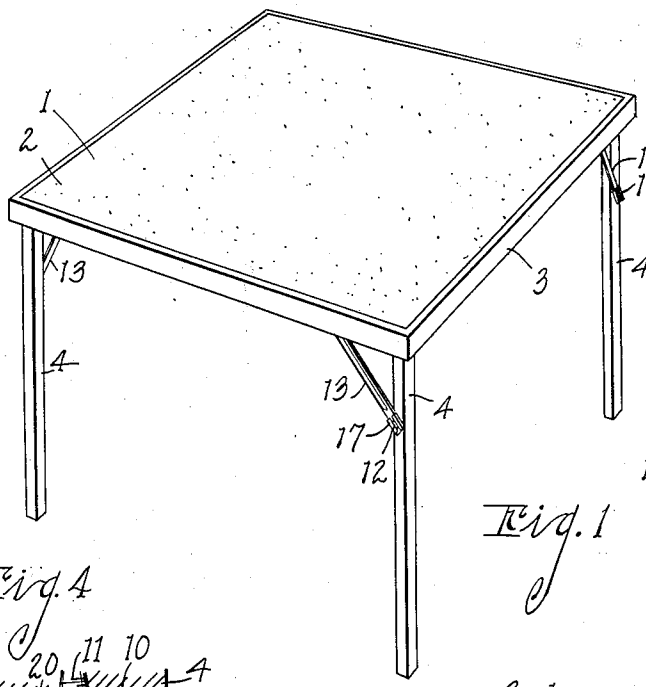


Fig. 1

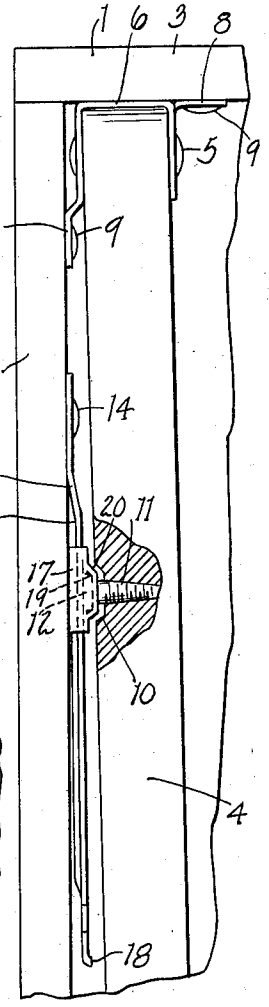


Fig. 3

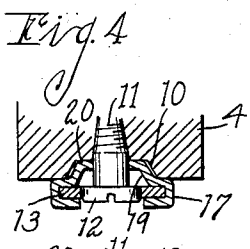


Fig. 4

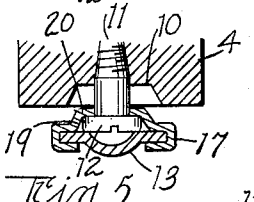


Fig. 5

Fig. 2

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TABLE LEG BRACE

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Application January 29, 1934, Serial No. 708,855

6 Claims. (Cl. 311—98)

The main objects of this invention are:

First, to produce an improved brace for pivoted folding legs for card tables or the like.

Second, to produce such a brace that is simple in construction and which may be cheaply manufactured and installed with a minimum of operations.

Third, to produce such a brace that braces the table leg rigidly and at the same time lies close to the table leg and is so constructed that there are practically no obstructions on which to tear clothing.

Objects relating to details and economies of my invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of a table having my brace thereon.

Fig. 2 is a detail elevational view partially in section showing my brace installed on a table with the leg in open position.

Fig. 3 is a bottom plan view of a portion of a table showing the leg in folded position.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2, showing the brace and guide therefor in latched position.

Fig. 5 is a similar view showing the brace and guide in unlatched position to allow the leg to be folded.

Referring to the drawing, 1 is a card table of the ordinary type having a top 2 with side rails 3 and legs 4. The legs are pivoted on the pivots 5 which are part of the corner construction of the table which consists of a U-shaped metal member 6 having an ear 7 extending therefrom and an ear 8 struck from the bottom of the U-shaped portion to form attaching members through which are inserted screws 9. At a point spaced from the pivot of the leg and on the outside thereof is a recess 10 from which extends a stud 11 having a head 12. This stud may be a screw or any suitable member.

A brace 13 is pivoted to the side rails 3 at a point spaced from the pivot of the leg by means of a screw or rivet 14. The distance between the pivot 14 and the pivot 5 is less than the distance from the recess 10 to the pivot 5 to permit the brace to fold as is shown in dotted lines in Fig. 2 as the leg is folded.

The brace 13 is preferably a strip of spring steel and in the preferred construction, has its upper or fixed end slightly offset as at 15 to permit the leg and guide to fold inside the table as shown in Fig. 3. The brace is so arranged that it exerts spring pressure in the direction of the side of the leg to assist in the latching of the brace as will be explained later. The free end of the brace is apertured as at 16, the aperture being of a size to embrace or receive the head 12 of the stud 11.

17 is a guide member provided with an aperture through which the stud 11 extends to form a pivot for the brace. The guide is a channeled sheet metal member that embraces the brace 13 and acts as a slide and guide therefor. The free end of the brace 13 is bent down as at 18 to form a stop to engage the guide 17 to keep the brace from sliding out of the guide as the table leg is swung to open position.

The inner surface of the guide 17 is countersunk as at 19 to form a recess that will receive the head 12 of the stud 11 so that it may be retracted therein to leave the guide unobstructed for the sliding of the brace 13 therethrough. The piece being formed of sheet metal, the countersunk portion is formed so that it leaves a projection 20 on the outer side of the piece and the recess 10 is of a size to receive this countersunk portion and leave the brace 13 and guide 17 lying close to the table leg when the brace is latched. It will be seen that by means of this construction the brace and guide project a very small distance when the leg is open and form a smooth unobstructed slight projection that will not catch on clothing.

As the table leg is moved to open position, the brace 13 slides in the guide member, as shown in dotted lines in Fig. 2, until the position shown in full lines in Fig. 2 is reached. The spring action of the brace against the side of the leg at the open position causes the aperture 16 to engage the stud head 12 when the stud and aperture are in register. This forces the guide member 17 and the brace 13 to the position shown in Fig. 4. To fold the leg, the brace 13 and guide 17 are moved outwardly to the position of Fig. 5 leaving the guide 17 unobstructed for the sliding of the brace 13 therein.

It will be appreciated that the parts may all be metal stampings and that they are few in number. Stock screws may be used and the construction can be assembled and fastened on the leg in two operations, the stud serving as the latching member as well as the pivot for the guide. When the table is opened, a very firm bracing is effected.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. The combination of a table top, a leg pivoted thereon having at a point spaced from its pivot, a recess with a headed stud extending therefrom, a brace pivoted to said table top at a point spaced from said leg and exerting a spring pressure toward the side of said leg and apertured at the free end to receive the head of said stud, and a sheet metal channeled guide member closely embracing said brace and slidably and pivotally mounted on said stud by means of an aperature having a countersunk portion therearound formed by shaping said sheet metal to form a recess within the guide to receive the head of said stud and to form a lateral projection externally of the guide whereby the spring action of said brace moves said guide and brace toward the leg of the table to engage the stud head in the aperture of the brace to latch the brace when the stud head and aperture are in register and to force the lateral projection of the brace into the recess of the leg to cause the guide and brace to lie close to the leg when the brace is latched and whereby the brace and guide may be moved away from the leg to retract the stud head into said countersunk portion to unlatch the brace to permit it to slide freely in said guide, said brace being bent over at its free end to form a stop to engage said guide to keep said brace from sliding from said guide.

2. The combination of a table top, a leg pivoted thereon having at a point spaced from its pivot, a recess with a headed stud extending therefrom, a brace pivoted to said table top at a point spaced from said leg and exerting a spring pressure toward the side of said leg and apertured at the free end to receive the head of said stud, and a sheet metal channeled guide member closely embracing said brace and slidably and pivotally mounted on said stud by means of an aperture having a countersunk portion therearound formed by shaping said sheet metal to form a recess within the guide to receive the head of said stud and to form a lateral projection externally of the guide whereby the spring action of said brace moves said guide and brace toward the leg of the table to engage the stud head in the aperture of the brace to latch the brace when the stud head and aperture are in register and to force the lateral projection of the brace into the recess of the leg to cause the guide and brace to lie close to the leg when the brace is latched and whereby the brace and guide may be moved away from the leg to retract the stud head into said countersunk portion to unlatch the brace to permit it to slide freely in said guide.

3. The combination of a table top, a leg pivoted thereon having, at a point spaced from its pivot, a recess with a headed stud extending therefrom, a brace pivoted to said table top at a point spaced from said leg and apertured at the free end to receive the head of said stud, and a sheet metal channeled guide member closely embracing said brace and slidably and pivotally mounted on said stud by means of an aperture having a countersunk portion therearound formed by shaping said sheet metal to form a recess within the guide to receive the head of said stud and to form a lateral projection externally of the guide whereby said brace and said guide may be moved toward the leg of the table to engage the stud head in the aperture of the brace to latch the brace when the stud head and aperture are in register and to force the lateral projection of the brace into the recess of the leg to cause the guide and brace to lie close to the leg when the brace is latched and whereby the brace and guide may be moved away from the leg to retract the stud head into said countersunk portion to unlatch the brace to permit it to slide freely in said guide.

4. The combination of a table top, a leg pivoted thereon and having a headed stud thereon at a point spaced from the pivot, a brace pivoted to said table at a point spaced from the pivot of said leg and exerting spring pressure toward the side of said leg and apertured at the free end to receive the head of said stud, and a channeled guide member closely embracing said brace and slidably and pivotally mounted on said stud by means of an aperture therein which is countersunk to form a recess within the said guide to receive the head of said stud, whereby the spring action of said brace moves said brace toward said table leg to engage said stud head in the aperture of the brace to latch the brace when the stud head and aperture are in register and whereby the brace may be moved away from the leg to retract the stud head into the countersunk recess of the guide to unlatch the brace to permit it to slide freely in said guide.

5. The combination of a table top, a leg pivoted thereon and having a headed stud thereon at a point spaced from the pivot, a brace pivoted to said table top at a point spaced from the pivot of said leg and apertured at the free end to receive the head of said stud, and a channeled guide member closely embracing said brace and slidably and pivotally mounted on said stud by means of an aperture therein which is countersunk to form a recess within the said guide to receive the head of said stud, whereby said brace may be moved toward said table leg to engage said stud head in the aperture of the brace to latch the brace when the stud head and aperture are in register and whereby the brace may be moved away from the leg to retract the stud head into the countersunk recess of the guide to unlatch the brace to permit it to slide freely in said guide, said brace being bent over its free end to form a stop to engage said guide to keep said brace from sliding from said guide.

6. The combination of a table top, a leg pivoted thereon and having a headed stud thereon at a point spaced from the pivot, a brace pivoted to said table top at a point spaced from the pivot of said leg and apertured at the free end to receive the head of said stud, and a channeled guide member closely embracing said brace and slidably and pivotally mounted on said stud by means of an aperture therein which is countersunk to form a recess within the said guide to receive the head of said stud, whereby said brace may be moved toward said table leg to engage said stud head in the aperture of the brace to latch the brace when the stud head and aperture are in register and whereby the brace may be moved away from the leg to retract the stud head into the countersunk recess of the guide to unlatch the brace to permit it to slide freely in said guide.

WILLIAM M. BOENNING.