July 14, 1936. A. L. SINCLAIR 2,047,389

TABLE

Original Filed Sept. 14, 1933

FIG. 1

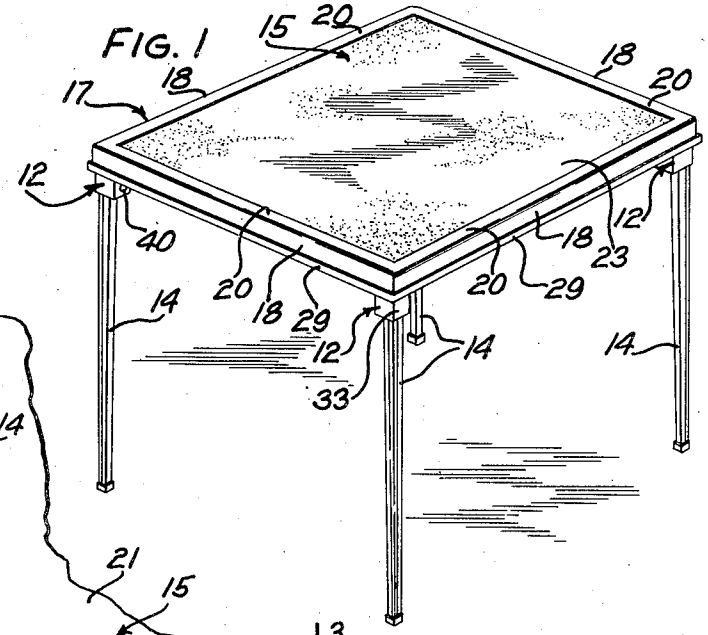


FIG. 2

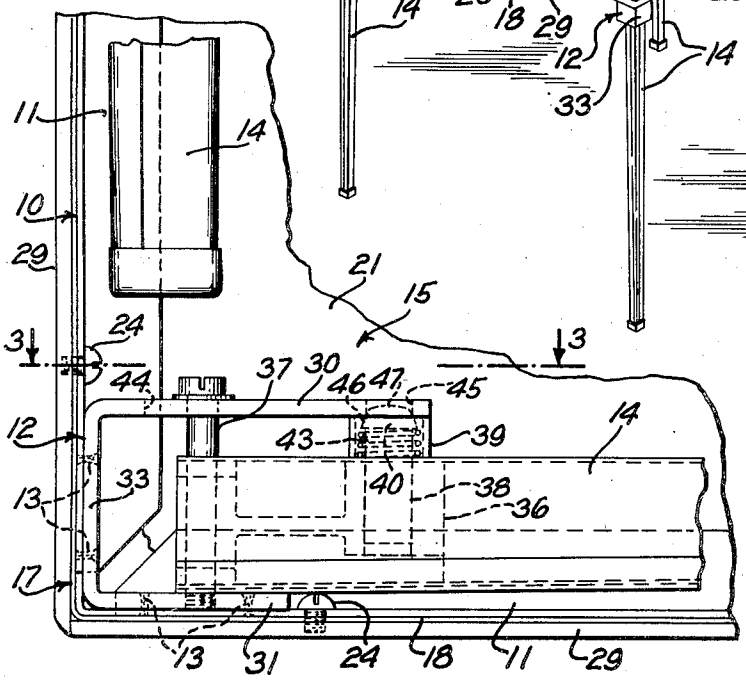


FIG. 3

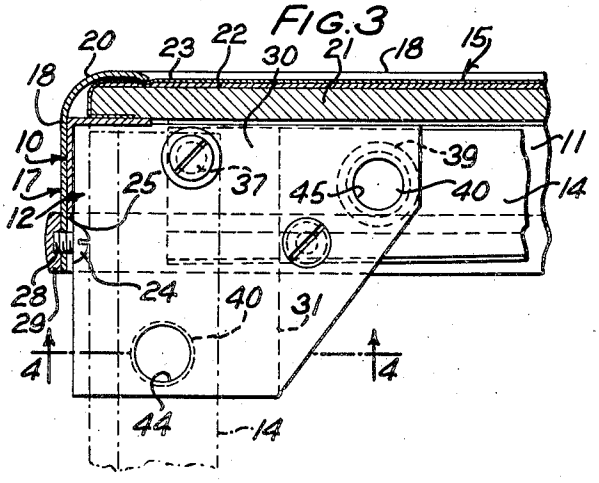
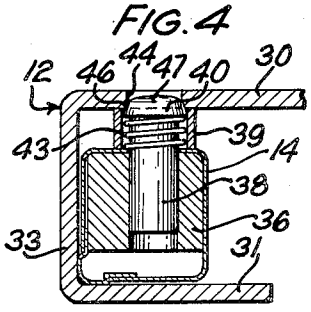


FIG. 4



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TABLE

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Original application September 14, 1933, Serial No. 689,364. Divided and this application April 10, 1935, Serial No. 15,527

3 Claims. (Cl. 311—99)

This invention relates to tables, and more particularly to tables having folding legs, and is a division of my copending application, Serial No. 689,364, filed September 14, 1933.

The primary object of this invention is to provide a simple, durable and generally improved table construction.

One form of table construction embodying the features of the invention is particularly applicable to a card table having folding legs and comprises a four piece angle steel inner frame having the adjacent ends of the frame pieces spaced and united at each corner of the table by a leg supporting bracket spanning the spaced frame pieces and welded thereto to simultaneously unite the frame pieces and to secure the brackets thereon. The brackets are positioned relative to each other so that they may support pivotal legs thereon in non-interfering relation, each of the legs being foldable against the underside of a table top and retained thereat or in an erected position when the table is in use by a spring pressed latching device carried by the leg and movable into recesses formed in its supporting bracket when the leg is moved from one position to the other.

The invention will be more clearly understood by referring to the following detailed description, read in conjunction with the accompanying drawing forming a part thereof, in which

Fig. 1 is a perspective view of one form of table construction embodying the features of this invention;

Fig. 2 is an enlarged fragmentary bottom plan view of the table with the legs folded;

Fig. 3 is a vertical section taken on the line 3—3 of Fig. 2, and

Fig. 4 is a detail section taken on the line 4—4 of Fig. 3 showing the leg latched in a table supporting position.

Referring now to the drawing, and particularly to Figs. 2 and 3, the numeral 10 indicates a square inner supporting table frame, comprising four similar right angle steel pieces 11 having their adjacent ends beveled and spaced from each other at the corners of the table. The pieces 11 are united to each other to form the frame 10 by four leg supporting brackets 12 welded thereto, as indicated at 13 (Fig. 2), the brackets spanning the spaced ends of the pieces and in position to support pivotal legs 14 thereon in non-interfering relation, the legs being foldable against the underside of a table top 15. Surrounding and abutting the inner frame 10 is a square outer frame or apron 17 comprising four similar right angle sheet steel pieces 18 united to each other at their adjacent ends or corners of the table as by welding. The upper portion of the outer frame 17 is curved inwardly and downwardly, as indicated at 20 (Fig. 3), to form a rounded corner extending around the table. A baked enamel coating (not indicated) is provided on the outer surface of the frame 17 for appearance and to give a smooth finish. Between the horizontal arms of the angle pieces 11 and 18 comprising the inner and outer frames 10 and 17 is the table top 15 comprising a sheet of ply board 21 or other suitable sheet material having a padding 22 laid on its upper surface and covered with cloth, leather or other suitable material 23 (Fig. 2), which extends over the edges of the board 21 and is tacked to the bottom thereof.

The table top 15 is clamped in position between the referred to horizontal arms of the frames 10 and 17 simultaneously with the uniting of the frames to each other by means of a series of screws 24 which extend freely through vertical slots 25 (Fig. 3) formed in the vertical arms of the angle pieces 11 comprising the inner frame 10 and openings in the abutting similar arms of the pieces 18 comprising the outer frame 17 and then threaded into holes 28 formed in outer chromium plated binding and ornamentation strips 29 which extend around the outer frame 17. In the uniting of the frames 10 and 17, in the manner described, the table top 15 is positioned between the frames which may be moved relatively to each other to clamp the top therebetween and while under variable clamping pressure the screws 24, already in position, but loose, are tightened. It will be apparent that by providing the vertical slots 25 in the inner frame 10 the referred to movement of the frames 10 and 17 may be effected with the screws in position. The same result may be obtained by making the slots 25 or the openings in the outer frame somewhat oversize, that is, in the form of oversize circular openings rather than definitely in the form of slots and openings. Also, if desired, the ornamental strips 29 may be omitted and the inner and outer frames united by any desired fastening means.

Since each of the leg supporting brackets 12 and the means for pivoting the legs 14 thereon, together with the means for latching the legs in either an open or closed position are all identical, the following description will apply to each. The construction of the legs 14 will not be described herein in detail, since the same is fully illustrated and described in a copending application of K. A. Weston, Serial No. 689,363, filed September 14,

1933, and is not essential to a complete understanding of the present invention.

The leg supporting bracket 12 (Figs. 2 and 3) which as before described is welded to the inner frame pieces 11 at the corner of the table, consists of a U-shaped sheet steel member having arms 30 and 31 extending horizontally from an interconnecting vertically arranged base portion 33 toward the bracket 12 at the opposite corner of the frame 10. The leg 14 which is of tube construction has tightly fitted in its upper end, when the table is in a table supporting position (Fig. 1), or in its left end, as viewed in Fig. 2, with the leg in a folded position, a casting 36. A screw 37 for pivoting the leg 14 on the bracket 12 freely extends through alined openings in the bracket arm 30, the rear and front walls of the leg 14 and the fitted casting 36 and is threaded into the bracket arm 31.

For retaining or latching the leg 14 either in an erected position to support the table as shown in Fig. 1, or in a folded position, wherein it lies against the underside of the table top 15, the latter position of the leg being illustrated in Figs. 2 and 3, there is provided a spring pressed plunger or latch member 38, which slides in alined openings formed in the casting 36, fitted in the leg 14, and the rear wall of the leg. As clearly shown in Fig. 2 the bracket arm 30 is spaced from the rear wall of the leg 14 and a sleeve 39 is freely interposed between the opposed surfaces of the bracket arm 30 and the leg, the inner diameter of the sleeve being such that a round head 40 of the plunger 38 may freely slide therein. A compression spring 43 surrounds the plunger 38 with opposite ends of the spring engaging the rear wall of the leg 14 and an annular surface on the plunger head 40, the spring constantly urging the plunger toward the bracket arm 30.

Formed in the bracket arm 30, as clearly shown in Fig. 3, are two circular openings or recesses 44 and 45 into one or the other of which the plunger head 40 moves when the leg 14 is rocked about its pivot 37 from one position to the other. The plunger head 40 is formed with an inwardly tapered peripheral surface 46 beginning at its inner end which terminates in a rounded surface 47 at the outer end of the head. In the folded position of the leg 14 (Figs. 2 and 3) the rounded end surface 47 of the plunger head 40 alone is seated in the opening 45, due to the latter's particular diameter, and while this is sufficient to prevent the leg from being moved accidentally from its folded position, it does not provide such a retaining effect on the plunger 38 that it will not readily yield and slide out of the opening 45 upon a lateral movement of the plunger head 40 when the leg is grasped at its free end and rocked to its table supporting position (Figs. 1 and 4). In the latter position of the leg 14 the surface 46 of the plunger head 40 is seated in the opening 44 which has a slightly greater diameter than the opening 45 and therefore the rounded outer end surface 47 of the plunger head 40 will project slightly further into the opening. The inwardly tapered peripheral surface 46 of the plunger head 38 coacting with the opening 44 provides a positive retaining effect on the plunger 38, the action being such that a lateral movement of the head 40 will not cause the head to yield and slide out of the opening 44. This prevents the leg 14 from being accidentally unlatched when the table is being used.

To fold the leg 14 to its closed position, shown in Figs. 2 and 3, it is first necessary to press inwardly on the rounded outer end surface 47 of plunger head 40 (Fig. 4) which is accessible through the opening 44 of the bracket arm 30, after which the leg may be freely rocked about its pivot 37. The sleeve 39 surrounding the spring 43 and the plunger 38 and abutting at opposite ends the inside surface of the bracket arm 30 and the adjacent wall of the leg 14 serves to hold the leg snugly between the bracket arms 30 and 31 and thereby prevents any lateral movement thereof tending to strain its pivot connection 37 with the bracket 12 and also firmly holds the leg when in its table supporting position at right angles to the plane of the table top.

The described construction provides a very rigid and practical table construction with folding latchable legs which is light in weight, economical to manufacture, and has a neat and pleasing appearance.

Although the invention as herein illustrated and described is particularly well adapted to card tables, it is to be understood that the novel features thereof are capable of many other applications and that modifications may be made without departing from the spirit and scope of the appended claims.

What is claimed is:

1. In a table having folded legs and depending peripheral side members, a member fixed to the table side members having parallel vertical portions, means for pivotally connecting a table leg between the parallel member portions adjacent the upper ends thereof with one side of the leg spaced from one of the member portions which is extended below the side members, a latch member carried by the leg, movable relative thereto and extending therefrom across the mentioned space with its outer end engageable in a latch opening formed below the side members in the adjacent member portion when the leg is in a table supporting position, means operatively associated with said latch member within the mentioned space for normally holding the latch member in engagement with the latch opening, and means for maintaining the leg in a fixed spaced relation from one of the member portions in all positions of the leg.

2. In a table having folding legs and depending peripheral side members, a member fixed to the table side members and having parallel portions, means for pivotally connecting a table leg between the parallel portions of said member adjacent the upper ends thereof, the leg at one side abutting the inner surface of one of the parallel member portions and at its opposite side spaced from the inner surface of the other parallel member portion which is extended below the table side members, a plunger type latch member carried by the leg and extending therefrom across the mentioned space with its outer end engageable in a latch opening formed below the side members in the adjacent member portion when the leg is in a table supporting position, a spring operatively associated with said latch member within the mentioned space for normally holding the latch member in engagement with the latch opening, and means for maintaining the leg in a fixed spaced relation from the member portion in all positions of the leg.

3. In a table, a table top having depending peripheral side members, a U-shaped member having one portion connected to one side member and another portion connected to another adjacent side member, a leg pivotally connected

to said U-shaped member adjacent its upper end between parallel portions thereof, a latch member carried by the leg and having a rounded outer head surface, one parallel portion of said U-shaped member extending below the side members and having a latch opening therein below the side members so that the head of the latch member will engage in the opening when the leg is in a table supporting position, said opening being readily accessible for applying pressure by a thumb or finger to release the latch, and means for normally holding said latch member in engagement with the latch opening.

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