July 14, 1936. A. L. SINCLAIR 2,047,388

TABLE

Filed Sept. 14, 1933

FIG. 1

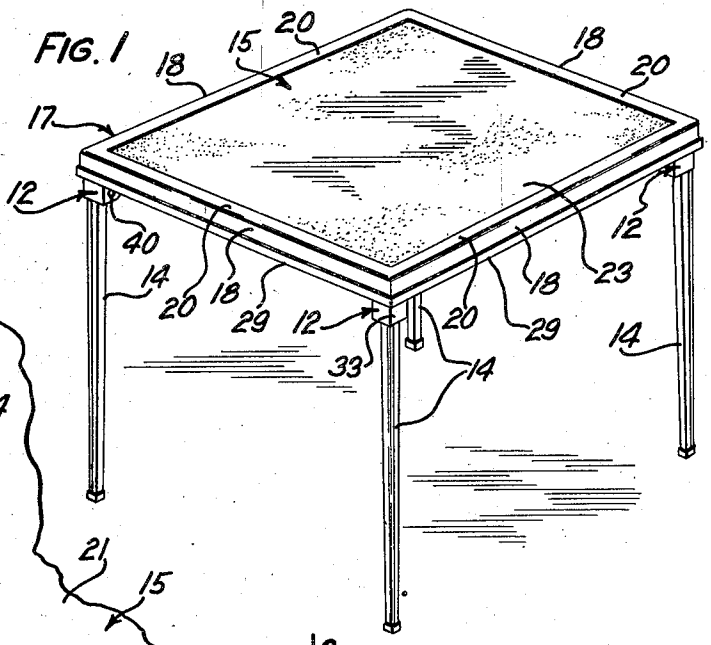


FIG. 2

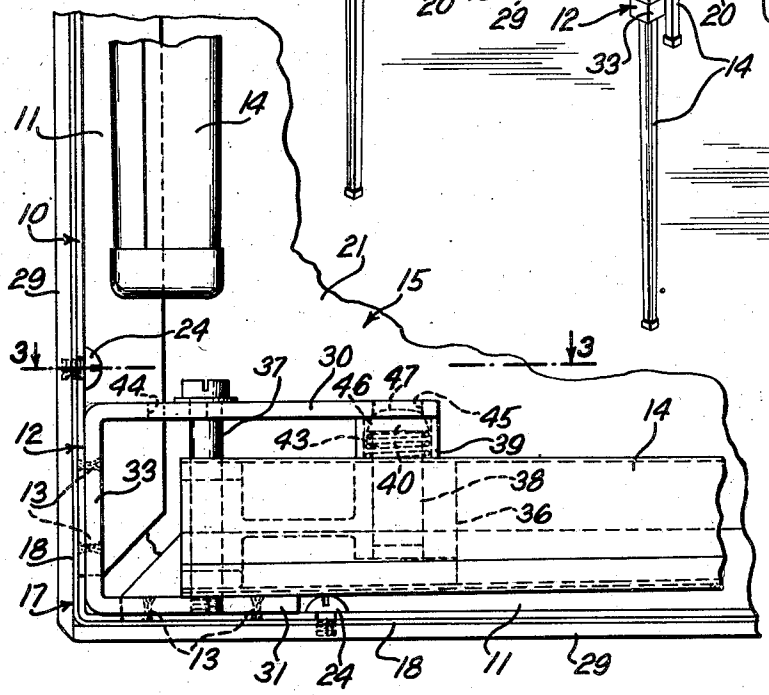


FIG. 3

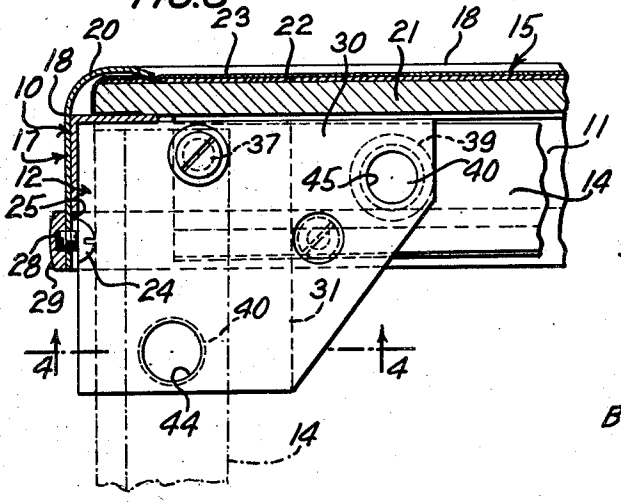
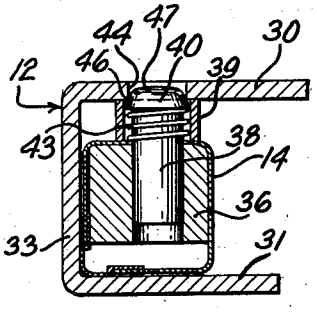


FIG. 4



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UNITED STATES PATENT OFFICE

2,047,388

TABLE

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Application September 14, 1933, Serial No. 689,364

4 Claims. (Cl. 311—107)

This invention relates to tables, and more particularly to tables having a removable top and folding legs.

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

One form of table construction particularly applicable to a card table having folding legs embodying the features of the invention 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. A sheet steel frame surrounding and abutting the inner frame and curved to fit over the top of the table serves to clamp the top to the inner frame, the two frames being united by a series of screws extending through vertical slots in the inner frame and openings in the abutting outer frame and threaded into depressions in binding and ornamentation strips surrounding the outer frame.

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 baker enamel coating (not indicated) is provided on the outer surface of the frame 17 for appearance and to give a smooth finish. In a horizontal channel formed between the horizontal arms of the angle pieces 11 and 18 having an L-shaped cross-section and 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 1, 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 accidently 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 plnuger 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 accidently 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 which is light in weight, economical to manufacture, and has a neat and pleasing appearance.

When the surface covering of the table top has become discolored or worn out, the top may be removed readily for changing the covering, by unscrewing the fastening screws 24 and lifting the outer frame 17 bodily from the table.

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. A table top construction comprising inner and outer frames having vertical peripheral portions and inwardly extending spaced peripheral portions providing a horizontal channel, a top sheet between the latter frame portions, the vertical portions of one of said frames provided with a series of openings and the vertical portions of said other frame having vertical slots alined with the frame openings, and means including elements extending through the frame slots and openings for securing said frames together and clamping said top sheet therebetween, said elements being capable of being loosened to permit vertical adjustment of said frames relative to each other.

2. A table top construction comprising inner and outer frames having vertical abutting peripheral portions and inwardly extending portions, a top sheet between the latter frame portions, the vertical portions of one of said frames provided with a series of openings and the vertical portions of said other frame having vertical slots centrally alined with the frame openings, a binding strip extending around the outer frame having threaded holes alined with the frame openings, and threaded means extending through the frame slots and openings and threaded into the holes of said strip for securing said frame together while said top sheet is under clamping pressure therebetween.

3. A table top construction comprising inner and outer frames having vertical peripheral portions, the inner frame having inwardly extending horizontal portions and the outer frame having inwardly and downwardly curved portions, a top sheet bewteen the latter portions of both frames, the vertical portions of said outer frame provided with a series of openings and the vertical portions of said inner frame having vertical slots alined with the outer frame openings, an outer binding strip extending around the outer frame having threaded holes alined with the openings thereof, and screws extending through the frame slots and openings and threaded into

the holes of said strip for securing said frames together while said top sheet is under clamping pressure therebetween.

4. A table top construction comprising inner and outer frames having downwardly extending peripheral portions and inwardly extending peripheral portions, said frames having an L-shaped cross-section, the inwardly extending peripheral portion being spaced to provide a horizontal channel, a top sheet between the latter frame portions, and means for securing said downwardly extending portions together to clamp said top sheet in position, said means being capable of being loosened to permit vertical adjustment of said frames relative to each other.

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