

April 17, 1934.

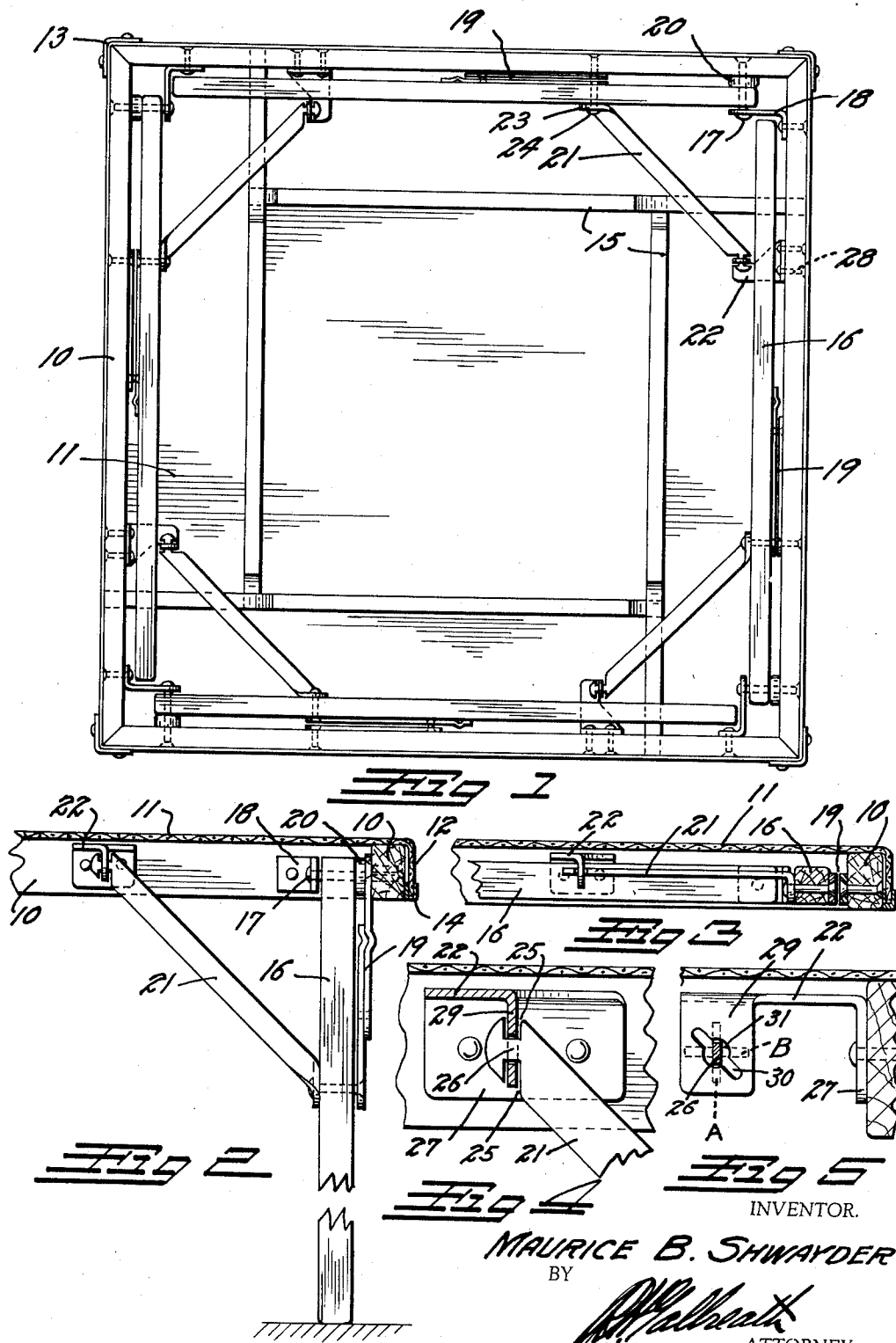
M. B. SHWAYDER

1,955,151

FOLDING TABLE

Filed Jan. 19, 1933

3 Sheets-Sheet 1



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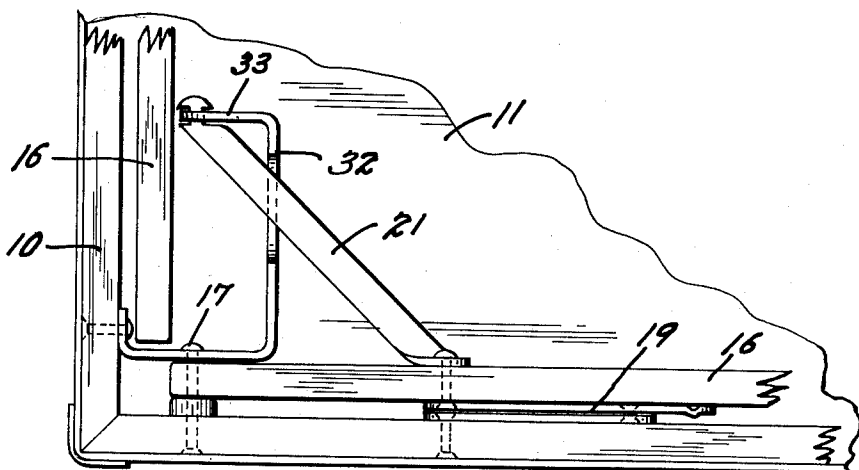
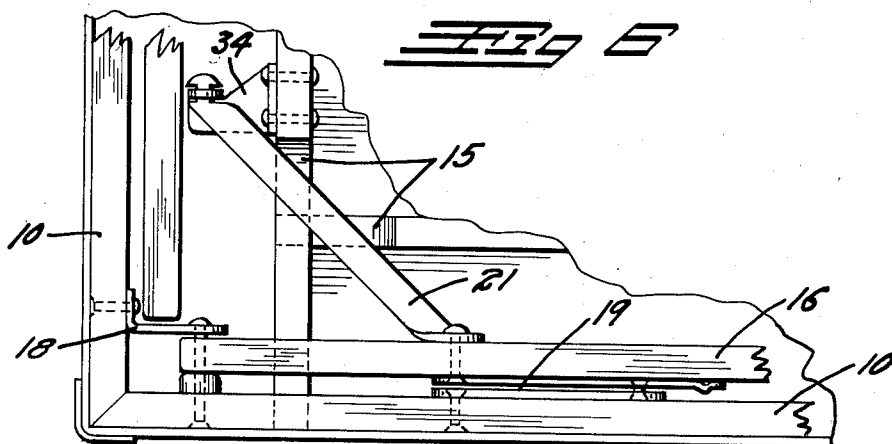
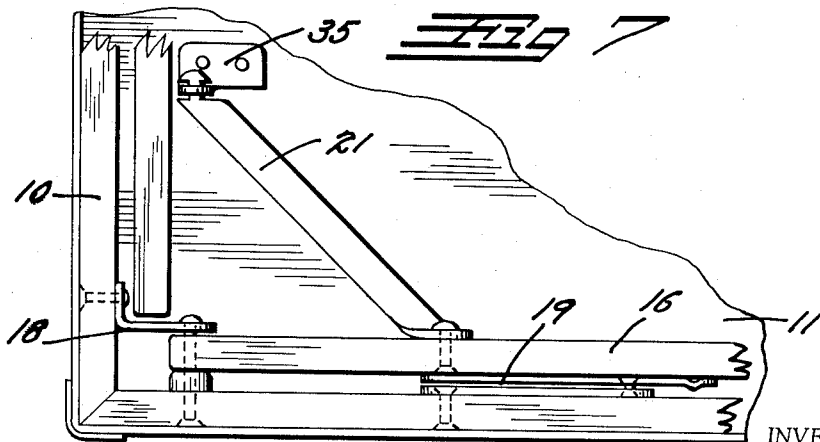
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FIG. 8

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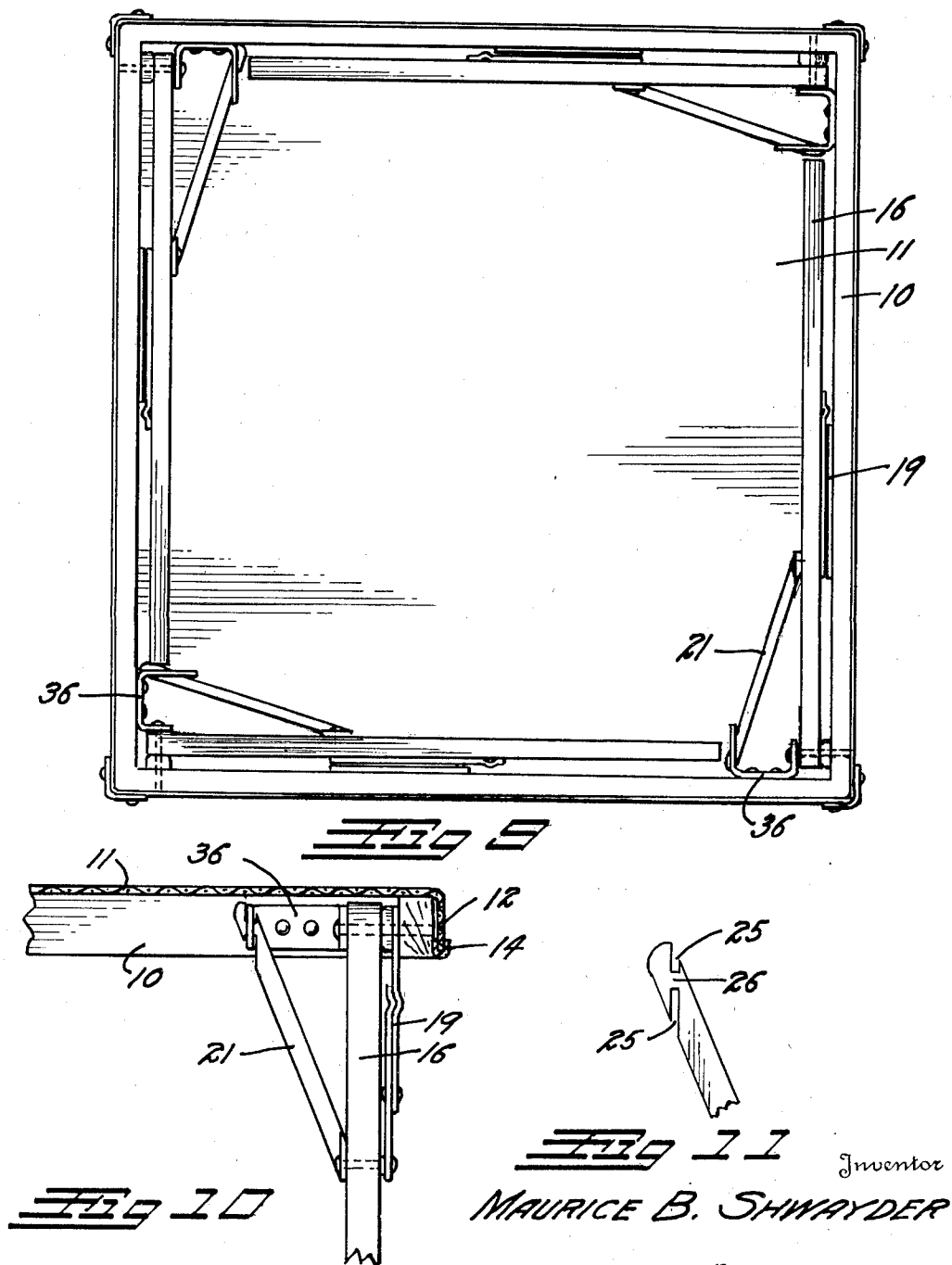
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3 Sheets-Sheet 3



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FOLDING TABLE

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4 Claims. (Cl. 45—11)

This invention relates to a folding table, more particularly to the type of table known as card tables, and has for its principal object the provision of a structure which will be economical to manufacture and which will brace the extended table legs from all directions.

Another object is to provide a pivot structure for the leg braces which will avoid the necessity of pivot rivets, or bolts.

A still further object is to provide a double brace for each leg which will not interfere in anyway with the folding of the legs and yet which will be highly efficient in bracing the latter.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawings which form a part hereof. Like numerals refer to like parts in all views of the drawings and throughout the description.

In the drawings:

Fig. 1 is a bottom view of a typical card table with the legs thereof in the folded position illustrating the invention applied thereto.

Fig. 2 is a cross section through one edge of the table illustrating a leg thereof in the extended position.

Fig. 3 is a similar cross section illustrating the leg in the folded position.

Figs. 4 and 5 are detail views of the brace pivot structure.

Figs. 6, 7 and 8 are bottom views of table corners illustrating alternate arrangements of the invention.

Fig. 9 is a bottom view of a folded table illustrating still another alternate arrangement of the invention.

Fig. 10 is an enlarged section through a corner of a table of Fig. 9 illustrating the leg in the open position.

Fig. 11 is a detail view of the extremity of the rigid brace employed in Fig. 9.

The table comprises a top frame 10 supporting a table top 11 of fabrikoid or any other suitable material. The sides of the top material are folded downwardly to cover the outer faces of the top frame 10 as shown at 12. The split corners of the turned down top material are covered and secured in place by means of corner guards 13. The entire lower edge of the turned down top material is bound in a metallic binder 14.

With this construction the entire table top and sides are of the same material and the top frame 10 is entirely concealed. The top material 11 is stiffened and supported by means of a suitable under frame 15.

A leg 16 is mounted at each corner of the table top 11 upon a suitable hinge pin 17 which is supported at its inner extremity by means of a bracket 18 extending from the top frame 10. Each leg is provided with a foldable brace 19. A suitable spacing washer 20 is positioned about each hinge pin 17 to provide folding space between the top frame 10 and the leg 16 for the foldable brace 19.

Each leg is further provided with a rigid brace 21. The table extremities of the rigid braces 21 are pivotally secured to inwardly extending bracket members 22. In one form of the invention, the bracket members 22 are secured to the inner face of the top frame 10, as illustrated in Fig. 1. It will be noted that the axes of the pivots on the bracket members 22 are in alignment with the axes of the hinge pins 17 so that each leg may be freely swung to the extended position. When extended the two braces 19 and 21 will project from the leg 16 at 90° from each other so that the leg will be double braced and cannot move in any direction.

The bracket members 22 may be placed in any desired position, preferably so that the leg may be folded into the top frame 10 parallel with the table top 11.

It is desired to call particular attention to the construction of the bracket members 22 and the pivot points of the braces 21. These braces are each formed of a strip of flat material of sufficient rigidity to form a suitable brace. One extremity of the strip is angularly turned as shown at 23 so as to lie flat against a leg to receive an attachment rivet 24. The other extremity is provided with two notches 25 which extend into the strip from opposite edges thereof on an angle of substantially 45°. These notches do not extend entirely through the strip so that a central pivot portion 26 is left in the strip.

Each bracket member 22 is formed with a downwardly depending extremity 27 designed to be secured against the inner face of the top frame 10 by means of suitable rivets 28. The inner extremity of the bracket member 22 is formed with a depending portion 29 which lies in a plane at right angles to the portion 27. The depending portion 29 is formed with a key-hole-like slot 30 positioned at an angle to the perpendicular.

The slot 30 is provided with an enlarged central hole 31.

In assembling the table the keyhole slot 30 is slipped over the notched extremity of the brace 21, and the bracket member is attached to the top frame 10. When the legs are in the vertical position, the brace is vertical as shown by the position "A", Fig. 5. When the legs are folded, the brace occupies the position "B" of Fig. 5. The pivot portion 26 rotates in the hole 31 of the slot 30 between the positions "A" and "B". At no time can the brace reach a position in alignment with the slot so that it always remains locked to the bracket 22. This construction absolutely avoids the necessity for a rivet or bolt at this point and provides a very rigid and solid construction which can be quickly and easily assembled.

In the form of Fig. 1, a bracket member 22 is attached to the inner face of the top frame 10. A pivot support for the rigid brace may be provided in other ways. Several such alternate forms are shown in Figs. 6, 7, and 8.

In Fig. 6 a unitary bracket member 32 is provided which serves to support both a leg pivot 17 and provide a pivot for the fixed brace 21. In this construction the extremity of the member 32 is angularly turned as shown at 33 and provided with a keyhole slot similar to that illustrated in Fig. 5.

In Fig. 7 another method of mounting the fixed brace pivot is illustrated. In this method, a bracket 34, which may if desired be similar to the previously described bracket member 22, is secured directly to the under frame 15. In Fig. 8 still another form is illustrated in which a bracket member 35 is secured directly to the under side of the table top and provided with a keyhole slot for receiving the extremity of the rigid brace.

In Fig. 9 still another method of pivoting the rigid brace is illustrated. In this form a U-shaped bracket 36 is secured to the inner face of the frame 10. One arm of this bracket extends inwardly and supports the inner extremity of the leg pivot as illustrated. The other arm extends inwardly and is provided with a keyhole slot of the type previously described to receive the notched extremity of the rigid brace 21. In this form the table legs are preferably, but not necessarily, shortened so that they will fold into the frame 10 without contacting the bracket 35.

All rigid braces heretofore used were of necessity bent at their table extremity to a position parallel with the leg so that they could swing on their pivots in parallel relation thereto. It is desired to call attention to the fact that in the present invention, however, there is no necessity for a bend in the rigid brace in the table extremity. Therefor any push or pull upon the brace is communicated directly to the bracket and not through a flexible bend in the brace. This feature greatly increases the rigidity of the extended legs.

While a specific form of the improvement has been described and illustrated herein, it is de-

sired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:—

1. A card table comprising: a top frame; a top covering over said frame; a leg pivoted at each corner of said top frame; a rigid brace extending from each leg; a bracket member secured to the inner face of said top frame and pivotally connected with said rigid brace; and a foldable brace connecting each leg with said top frame and extending at an angle of 90° from said rigid brace when said legs are extended; said bracket member comprising: a first downwardly turned portion secured to said top frame; and a second downwardly turned portion positioned in a plane at right angles to said first downwardly turned portion, said second downwardly turned portion being provided with an opening to receive the extremity of said rigid brace, said opening consisting of an angularly positioned slot with an enlarged hole intermediate its extremities, the extremity of said rigid brace being provided with an angularly positioned notch in each of its edges coacting to provide a narrowed mid-portion which acts as a pivot in said enlarged hole.

2. A pivot structure for a rigid angle leg brace on a foldable table comprising: a bracket member; an elongated slot formed in said bracket member, said slot having an enlarged central portion to provide a pivot bearing, said brace being provided with oppositely positioned, inwardly extending notches in its edges, said notches entering said brace at an angle similar to the angle of angularity of said brace; a pivot portion separating said notches and rotatably mounted in the enlarged central portion of said slot.

3. A pivot structure for a leg brace on a foldable table comprising: a bracket member having an elongated slot formed therein, (the axis of said slot lying 45° from the perpendicular when said table is erected), said slot having an enlarged central portion to provide a pivot bearing, said brace being provided with inwardly extending notches, said base being provided with oppositely positioned, inwardly extending notches in its edges; pivot portion separating said notches and rotatably mounted in the enlarged central portion of said slot.

4. In a card table, a leg; a pivot for said leg; a rigid brace member, said rigid brace member comprising a relatively long flat metallic strip secured to said leg at its one extremity and provided with inwardly extending notches in its edges at its other extremity; and a bracket member secured to said table and provided with an elongated slot for the receipt of the extremity of said strip, said notches allowing said strip to rotate in said slot and providing means for locking said strip to said bracket member when the latter is turned in said slot.

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