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J. SILVERMAN

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FOLDING TABLE

Filed June 20, 1929

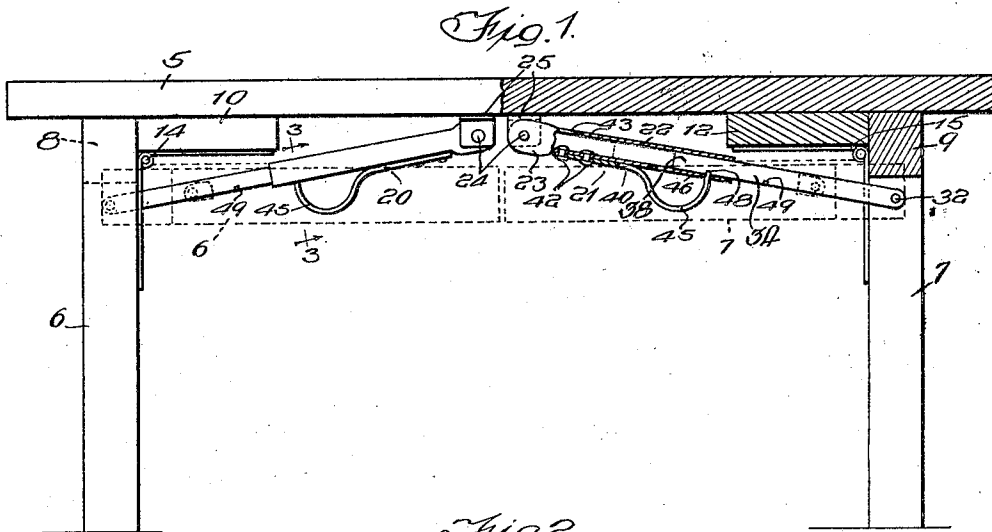
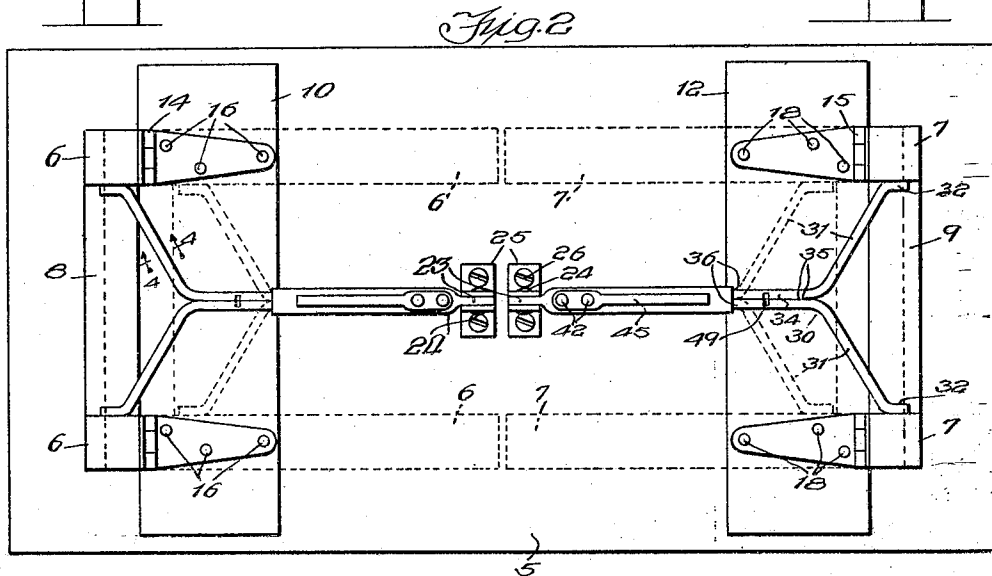


Fig. 3.

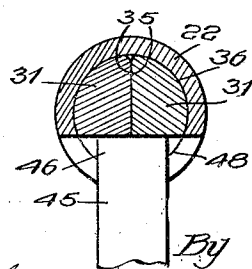
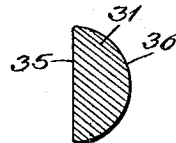


Fig. 4.



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FOLDING TABLE

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This invention relates to folding tables and its object is the provision of a generally improved and simplified construction that may be economically produced, conveniently folded and unfolded and which is sturdy when unfolded for use. The folding parts fold compactly and are held firmly in folded and unfolded relation.

The present invention provides a generally improved and simplified bracing linkage between the top of the table and the folding legs and generally improved latch means in connection with this linkage for latching the legs in folded position, as well as in unfolded or open position for use.

Further objects and advantages of the invention will appear from the following detailed description, taken in connection with the accompanying drawing, in which:

Figure 1 is a side elevational view of a table embodying the present invention, partially broken away and in section;

Figure 2 is a bottom plan view of the table;

Figure 3 is a detail section taken on the line 3—3 of Figure 1; and

Figure 4 is a detail section taken on the line 4—4 of Figure 2.

Referring to the drawing, the table shown comprises a table top 5 preferably of wood, which may be finished or covered as desired. It is to be understood, of course, that where I refer to the materials of the table, these materials are with reference to the particular embodiment selected for illustration and may be varied, as desired, within the scope of the invention. The particular top 5 shown is of generally rectangular configuration, but this may vary.

The leg structure comprises two pairs of legs 6, 6 and 7, 7. The legs 6 and 7 may be of square section, as shown, or of any other suitable or preferred form. The upper ends of the legs 6 are rigidly joined by a rail member 8 and the legs 7 are similarly rigidly joined at their upper ends by a rail member 9. The rail members 8 and 9 are also preferably of wood, as are the legs 6 and 7, and the legs may be secured to the opposite ends of the respective rail members by mortised and tenon joints and gluing or otherwise, as desired.

Suitably secured transversely across the bottom of the table top 5 one adjacent each pair of legs 6 and 7 are boards 10 and 12, respectively. The legs 6 are hinged to the top 5 by hinges 14 and the other pair of legs 7 are similarly hinged to the top 5 by hinges 15. One leaf of each of the hinges 14 is secured at 16 to the board 10 and the other leaf is secured to the adjacent leg 6. One leaf of each of the hinges 15 is similarly secured at 18 to the board 12 and the other leaf of each hinge 15 is secured to the adjacent leg 7. The legs 6 and 7 are shown in open or unfolded position for use in full lines in Figures 1 and 2. The folded positions of the legs are shown in dotted lines in the same figures.

The linkage connections between the top 5 and the respective pairs of legs are indicated at 20 and 21, respectively. These connections are similar, so that a description of one will suffice for both. Each of these connections comprises a length of tubing 22 flattened together at one end at 23 and open at the opposite end. The flattened end 23 is pivoted at 24 between the depending flanges of a pair of angle brackets 25 secured at 26 to the bottom of the top 5.

A generally Y-shaped brace 30 has the free ends of its diverging arms 31 secured pivotally or swingably at 32 to the adjacent legs 5 or 6, as the case may be, and the leg 34 of this generally Y-shaped brace has sliding telescopic fit in the tube 22. The arms 31 are preferably formed of separate pieces of stock of half-round section, with the flat sides 35 presented inwardly for flat engagement, one upon the other, along the leg 34.

The outer rounded sides 36 give the leg 34 a generally circular contour externally and this generally circular contour corresponds with the internal contour of the tube 22 for sliding engagement therein. Alternatively, the brace 30 may be made up of a single length of half-round stock folded centrally between its ends to form the inner end 38 of the leg 34 with the flat sides 35 in engagement and the free ends spread at 31 and connected at 32 to the respective legs. The connections 32 are, as already brought out,

pivotal connections, at least to the extent that they permit the relative angular motion between the bracing linkage and the adjacent legs, which accompanies the swinging movement of the legs.

For the purpose of latching the legs in folded and unfolded position, each of the tubular links 22 is provided with a spring arm 40. The arm 40 is secured at one end to one wall of the tube 22, as by means of rivets 42, which may be inserted through openings 43, through the wall of the tube 22 diametrically opposite their engagement with the arm 40. The opposite free end of the arm 40 is bowed at 45 with the free end of the bowed portion 45 engaging at 46 through a slot in the wall of the tube 22 for engagement with notches 48 and 49 in the leg 34 in the generally Y-shaped brace part. With the bowed end of the spring arm 40 engaged with the notch 48, the legs are held firmly in open position and are adequately braced by the arms 31. In order to fold the legs, the latch 40 may be released by simply engaging the finger in the bowed part 45 and withdrawing the end 46 from the notch 48, whereupon the legs are folded with an accompanying sliding movement of the brace leg 34 in the tube 22.

The outer notch 49 reaches the end 46 of the latch spring 40, as the legs assume folded position and this end of the spring snaps by its own resiliency into the notch 49 and latches the legs in folded position. In order to unfold the legs, the latch is released in the manner already described in connection with swinging the legs to folded position and, as the legs reach full open position, the end 46 of the latch arm 40 snaps into the notch 48 and latches the legs in this position.

While two separate pairs of angle members 25 are shown for the bracing linkage connections 20 and 21, between the legs and the top of the table, it is to be understood that one pair of such brackets or some other common anchoring provision for both linkage connections may be provided.

I claim:

1. A folding table comprising in combination, a table top, a leg structure pivoted to said top for folding relative thereto and comprising a pair of leg members and a brace structure comprising a tubular member pivoted to the table top and a generally Y-shaped brace formed by a pair of separate members each having a leg in sliding telescopic engagement with said tubular member and held together thereby, and a pair of diverging arms connected to the legs of the table.

2. A folding table comprising in combination, a table top, a leg structure pivoted to said top for folding relative thereto and comprising a pair of leg members and a brace structure comprising a tubular mem-

ber pivoted to the table top and a brace member in sliding telescopic engagement with said tubular member and comprising a pair of flat sided generally semi-circular sections with the flat side of one upon the flat side of the other along the telescopic engagement with said tubular member, the outer ends of said sections being spread apart and pivotally connected to the legs of the table.

3. A folding table comprising in combination, a table top, a leg structure pivoted to said top for folding relative thereto and comprising a pair of leg members, a brace structure comprising a tubular member pivoted to the top, a brace member in sliding telescopic engagement with said tubular member and connected to the legs of the table, said tubular member having a slot therethrough and said brace member having a pair of notches one registerable with said slot in the open position of the legs and the other registerable with said slot in the folded position of said legs, and a latch member comprising a spring arm secured to the tubular member and bowed for the dual purpose of forming a finger piece and disposing the end of the spring arm generally normal the tubular member for engagement through said slot and directly with said notches to latch the legs in folded and open positions.

4. A folding table comprising in combination, a table top, a leg structure pivoted to said top for folding relative thereto and comprising a pair of leg members, a brace structure comprising a tubular member pivoted to the top of the table, a brace member in sliding telescopic engagement with said tubular member and comprising a pair of flat sided generally semi-circular sections with the flat side of one upon the flat side of the other along the sliding telescopic engagement with said tubular member, the outer ends of said sections being spread apart and pivotally connected to the legs of the table, said generally semi-circular sections being notched along the telescopic engagement with said tubular member and said tubular member having a slot therethrough, and a latch member comprising a spring arm secured to the tubular member and having a bowed end engageable through said slot and with said notch to latch the legs relative the top of the table.

5. The combination, with a folding structure, comprising a pair of parts one pivoted to the other, of a brace structure comprising a tubular member pivoted to one of said parts, and a pair of brace members, one of said brace members having a portion disposed against the portion of the other and both said portions being in telescopic engagement with the tubular member, the ends

of said brace members being spread out and pivoted to the other part.

6. The combination, with a folding structure comprising a pair of parts one pivoted
5 to the other, of a brace structure comprising a tubular member pivoted to one of said parts, a pair of brace members having one end of one disposed against one end of the other and with both said ends in telescopic
10 engagement with the tubular member, the opposite ends of said brace members being spread out and pivoted to the other part, the brace members having registering notches along the portions telescopically en-
15 gaging with said tubular member, said tubular member having an opening there-through, and a spring arm secured to the tubular member and having a bowed end engageable through said opening and with
20 said registering notches to latch one of the parts in predetermined position with respect to the other part.

In witness whereof, I hereunto subscribe my name this 17 day of June, 1929.

JOSEPH SILVERMAN.