May 12, 1942. C. H. McCASLIN 2,282,665

COLLAPSIBLE TABLE

Filed March 9, 1940

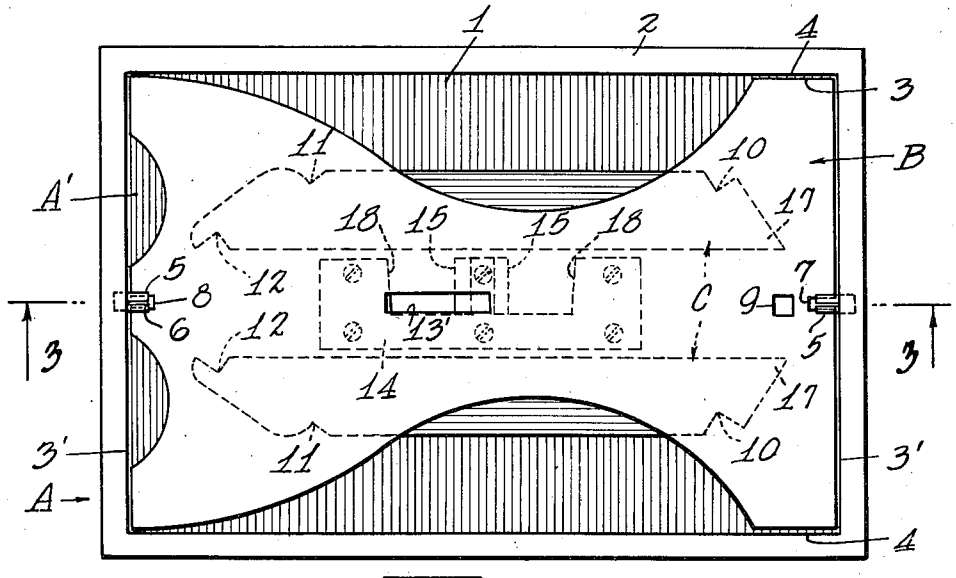


FIG. 1

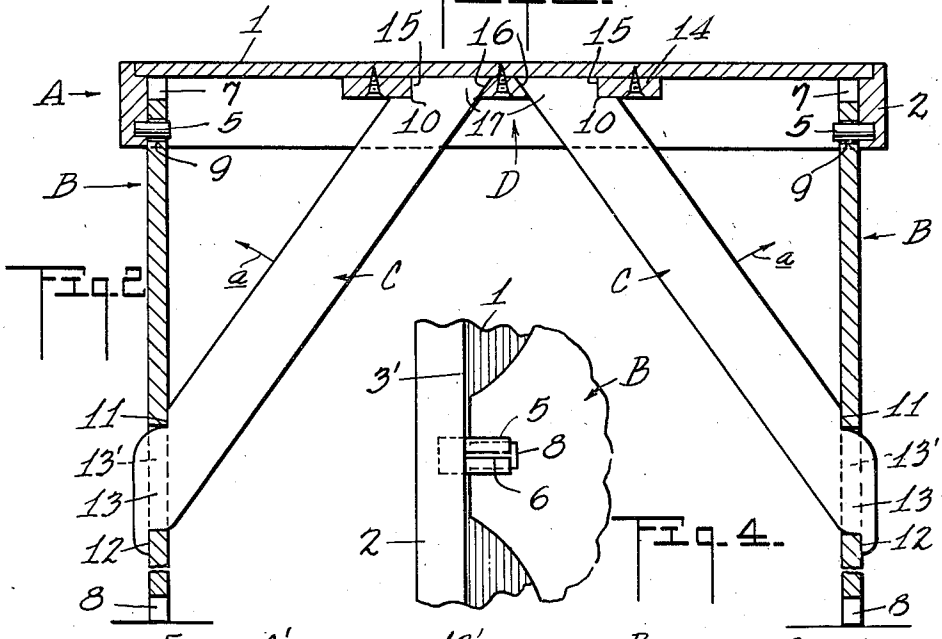


FIG. 2

FIG. 4

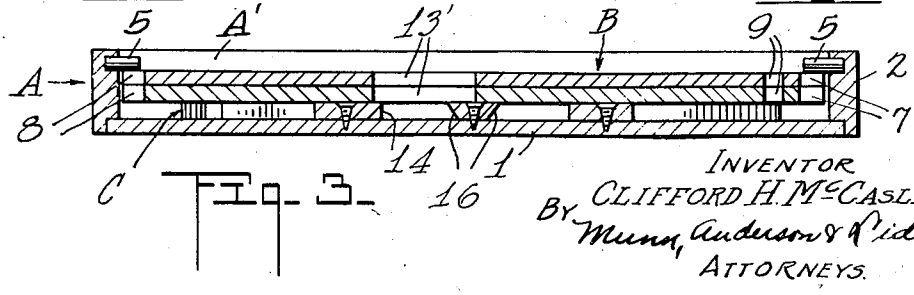


FIG. 3

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COLLAPSIBLE TABLE

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11 Claims. (Cl. 311—1)

My invention relates to improvements in a collapsible table, and it consists of the combinations, constructions and arrangements hereinafter described and claimed.

An object of my invention is to provide an improvement over the collapsible table shown in my co-pending application Serial No. 238,271, filed November 1, 1938. In the co-pending case, I show table legs having a width coextensive with the width of the table and these legs are held against the end walls of the apron by a central bracing member. Cooperating means is used between the legs and the apron for removably securing the legs to the table top when the legs are held in spaced relation by the bracing member.

It is proposed in the present invention to eliminate the central bracing member as previously used, and to provide struts for holding the legs relative to the table top. A strut is provided for each leg and is removably connected thereto without the need of any extraneous fastening means. The free ends of the struts are removably secured to the table top by anchoring means hereinafter described. The legs are fashioned with openings for receiving the struts when the table is formed or completed. Upon collapsing the table, the legs and struts are accommodated in a compartment formed by the table top and an apron extending around the latter. The legs keep the struts within the compartment when the table is collapsed.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing, forming part of this application, in which:

Figure 1 is a bottom plan view of the table with the parts thereof in collapsed or nested position;

Figure 2 is a longitudinal sectional view taken through the central part of the table when the latter is assembled and ready for use;

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

Figure 4 is an enlarged view of the left-hand central portion of Figure 1.

In carrying out my invention, I provide a table top indicated generally at A and consisting of a top piece 1 and an apron 2 that extends around the four sides of the top. Legs B are shaped as shown in Figure 1 and are dimensioned to be received in a compartment A' formed by the top 1 and the apron 2. The legs correspond substantially in length and width with the compartment A'. The side edges 3 of the legs will substantially fit against the inner walls of the sides 4 of the apron, while the tops and bottom of the legs will rest against the inner walls 3' of the ends parts of the apron.

It will be noted from the drawing that the ends 3' of the apron have pins 5 projecting therefrom toward each other, and these pins are slotted lengthwise as at 6 in order that the pins may yield slightly during the placing of the legs B in the compartment A' or when the legs are removed therefrom. The legs have slots 7 and 8 formed in the upper and lower edges thereof, respectively. These slots are located to register with the pins 5 when the legs are nested within the compartment A'. When the legs are inserted into the compartment A', the two projecting ends of the pins 5 will yield slightly due to the slotted portion 6 of the pins and the slots 7 and 8 of the legs allow the latter to be moved into a position beneath the pins.

Referring now to Figures 1 and 4, it will be seen that the pins 5, in their normal positions, are slightly wider than the widths of the slots 7 and 8. The pins, therefore, will retain the legs B within the compartment A', but will yield and allow the legs to be withdrawn when the table is to be assembled.

In assembling the table, the legs B are removed from the compartment A' and are placed against the inner end walls 3' of the apron 2 in the manner shown in Figure 2. The pins 5 project loosely through openings 9 which are formed in the upper parts of the legs. Struts C, which are normally housed in the compartment A' when the table is collapsed, are provided for holding the legs in operative position as will be apparent by reference to Figure 2.

Each strut C is notched at 10 in the upper or free end of the strut and two shoulders 11 and 12 are fashioned in the lower end of the strut. The shoulders 11 and 12 are arranged on opposite sides of the strut. The legs B are disposed in spaced and parallel relation with respect to each other when the table is assembled, and the shoulders 11 bear against the inner confronting surfaces of the legs B, while the shoulders 12 engage with the outer or opposing surfaces of the two legs. A neck portion 13 joins the two shoulders 11 and 12 and the struts C pass through openings 13' in the legs when the struts are operatively engaged with the legs.

The upper or free ends of the struts C are re-

movably secured to the table top by anchoring means indicated generally at D. The anchorage includes a block 14, which is disposed on the undersurface of the top piece 1 and fastened thereto. This block is formed with two recesses 15 for receiving the upper ends of the struts C with a wedging action. The central part of the block 14 is undercut at 16 (see Figure 2) for receiving the corner portions 17 of the struts. The edges 18 of the block recesses taper slightly from the outer edges of the recesses to the bottoms thereof so that the upper ends of the struts C will become wedged in the recesses 15 when the table is fitted together or fully assembled.

Figure 1 shows the table collapsed with the legs and struts placed in the compartment A'. The struts C are disposed on opposite sides of the block 14 and the two legs B are placed over the struts. The pins 5 yieldingly hold the legs in the position shown in Figure 1. In removing the legs B from the compartment A', the pins 5 will yield due to the slotted portions 6 of the pins. The legs B are removed from the table compartment A' when the table is to be assembled and are placed against the inner walls 3' of the end walls of the apron 2 in the manner previously described. The pins 5 extend through the openings 9 in the legs.

The struts C are now connected to the table legs by inserting the neck portions 13 through the openings 13' in the legs. The shoulders 11 and 12 bear against the inner confronting surfaces of the two spaced legs and the outer or opposing surfaces thereof, respectively. The upper ends of the struts C will be slightly out of alignment at this time with respect to the block recesses 15. The struts C are forced in the direction of the arrows *a* in Figure 2 until the corners 17 of the struts will enter the undercut portions 16 of the block 14 and the notches 10 register with the outer edges 18 of the recesses 15. The struts C are thereupon forced into the recesses 15. The tapered edges 18 will hold the struts in place relative to the block 14. In collapsing the table, the reverse steps are followed and the parts are stored or nested within the table compartment A'.

In the event that the table legs should become bowed due to forcing the struts in place, the legs may be turned around and the bow will gradually disappear.

While I have shown only one form of my table it should be clearly understood that various changes or modifications may be made within the scope of the appended claims without departing from the spirit of my invention.

I claim:

1. In a collapsible table, a table top having leg-contacting members, legs for supporting the top and bearing against the members, struts connected to the legs at points removed from where the legs contact with said members, said struts extending toward the table top, said struts being so connected to the legs as to swing the leg tops toward the members when the inner ends of the struts are moved toward the table ends, whereby the legs will be slightly bowed, and means for securing the inner ends of the struts against movement for holding the legs in a bowed condition.

2. A collapsible table comprising a table top with an apron for providing a compartment, legs receivable in the compartment when the table is collapsed, said legs having recesses, and retaining members carried by the apron and arranged to register with the leg recesses, the retaining members being made to yield in response to pressure of the table legs to allow passage of the table legs into the compartment beneath the retaining members, and to thereupon return to normal for holding the legs in the compartment.

3. In a collapsible table, a strut having leg-engaging shoulders formed in opposite sides of one end thereof and a notch fashioned in the other end of the strut, the side of the strut opposite the notch and at the same end of the strut being wedge-shaped.

4. In a collapsible table, a table top having leg-contacting members, legs bearing against the members and having openings therein, struts having their ends extending through the openings and provided with shoulders bearing against both outer surfaces of the legs, the struts extending at an angle to the legs and having their inner ends terminating at the table top, the shoulders on the struts being so arranged that a movement of the inner strut ends toward the leg contacting members, will force the leg tops against the members and bow the legs, and means for securing the struts against movement when the legs are slightly bowed.

5. A collapsible table comprising a top having leg-positioning members, legs having their upper ends bearing against the members, struts removably secured to the legs at points removed from where the legs contact with said members, each strut bearing against opposite sides of the leg and swinging the top of the leg against its member when the free end of the strut is moved toward the leg to which it is connected, whereby the leg will be slightly bowed and will be held in contact with the member by friction, and means for securing the struts in a position where the legs will be held in a slightly bowed condition.

6. A collapsible table comprising a table top having leg positioning members, legs having slots therein, struts having neck portions insertable in the slots and shoulders for bearing against opposite sides of the legs, and means for securing the ends of the struts disposed opposite to the necks to the table top in such a position as to urge the leg tops against the members and to bow the legs to a degree sufficient to hold the legs against the member by friction.

7. A collapsible table comprising a table top having leg-positioning members, legs for supporting the top and having slots therein, struts having ends insertible in the slots and provided with shoulders bearing against opposite surfaces of the legs, the opposite ends of the struts having notches therein, and means carried by the table top and being engageable with the notches and the struts for holding the struts in position, said means being so positioned as to cause the struts when connected thereto to bow the legs and move the leg tops against the members for holding the table in rigid position.

8. A collapsible table comprising a table top having leg-positioning members, legs for supporting the top and having slots therein, struts having ends insertible in the slots and provided with shoulders bearing against opposite surfaces of the legs, the opposite ends of the struts having notches therein, and means carried by the table top and being engageable with the notches and the struts for holding the struts in position, and said means being so positioned as to cause the struts when connected thereto to bow the legs and move the legs against the members for hold-

ing the table in rigid position, the said means being made to removably engage with the upper ends of the struts with a wedging action.

9. In a collapsible table, a table top with an apron, a leg having a strut-receiving slot therein, a strut passed through the slot and engaging with opposite sides of the leg, the top of the leg bearing against the apron, and means for securing the free end of the strut to the table top and arranged for flexing the leg and forcing the top of the leg against the apron while maintaining the leg in a bowed condition.

10. In a collapsible table, a table top, leg-positioning members, legs, struts secured thereto and having shoulders bearing against both leg surfaces, and wedge means connected to the free ends of the struts for connecting them to the top and for bowing the legs for causing them to contact with the members.

11. In a collapsible table, a table top having an apron defining a compartment and also having portions acting as leg positioning members, legs for supporting the top and having openings and slots therein, pins carried by the apron and receivable in the leg openings when the legs are in operative position and abut said apron portions, struts having their ends engageable with the legs, cooperating means between the struts and table top for frictionally holding the legs against the apron, said legs when disassembled being received in the compartment, said pins bearing against the walls of the slots for removably holding the legs in the compartment.

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