Aug. 22, 1933.

B. SMITH

1,923,281

COLLAPSIBLE TABLE

Original Filed April 6, 1931 2 Sheets-Sheet 1

Fig. 1.

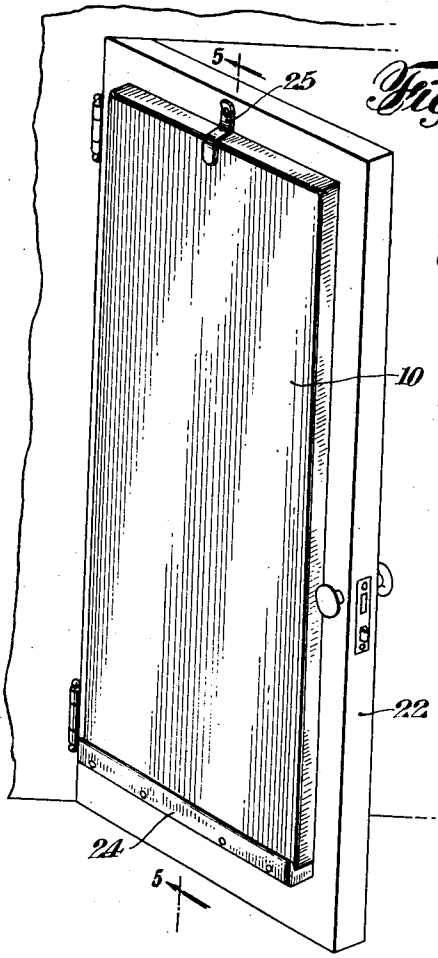


Fig. 9.

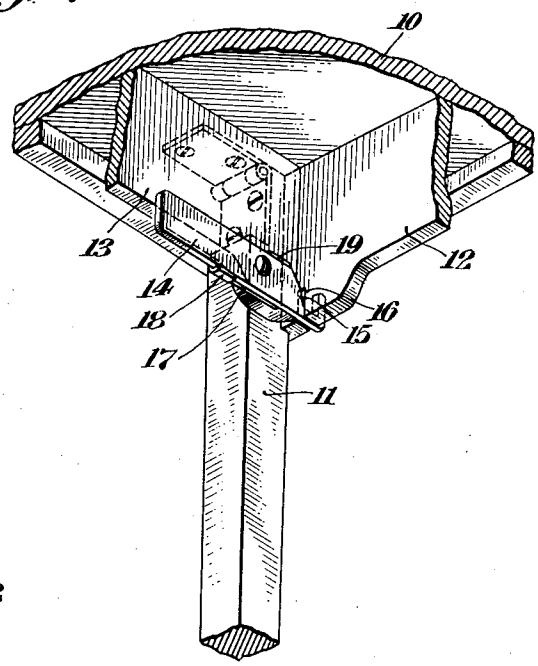
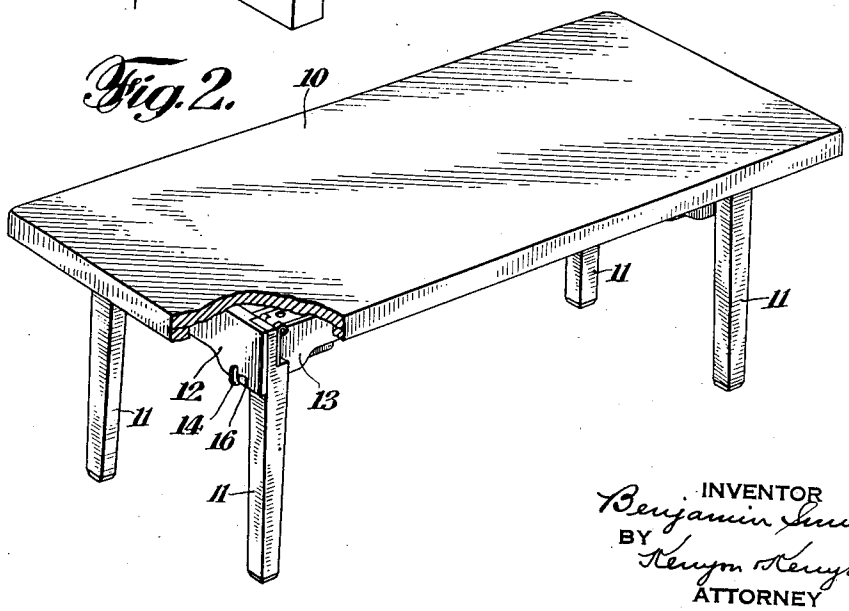


Fig. 2.



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COLLAPSIBLE TABLE

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Fig. 3.

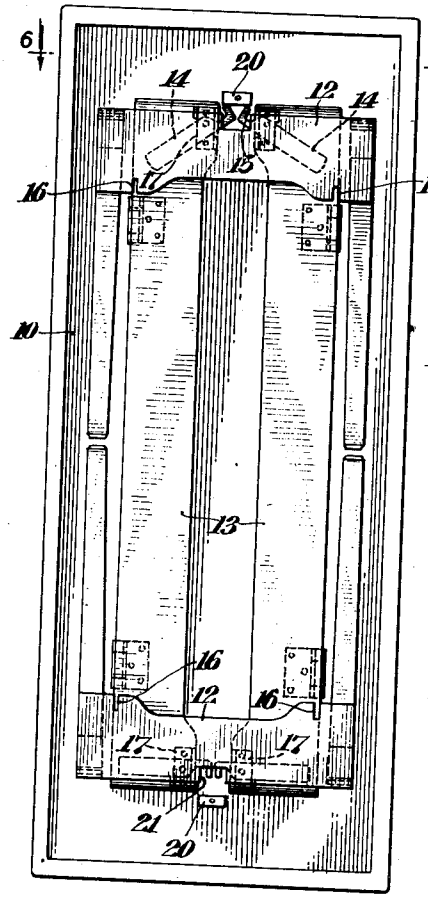


Fig. 4.

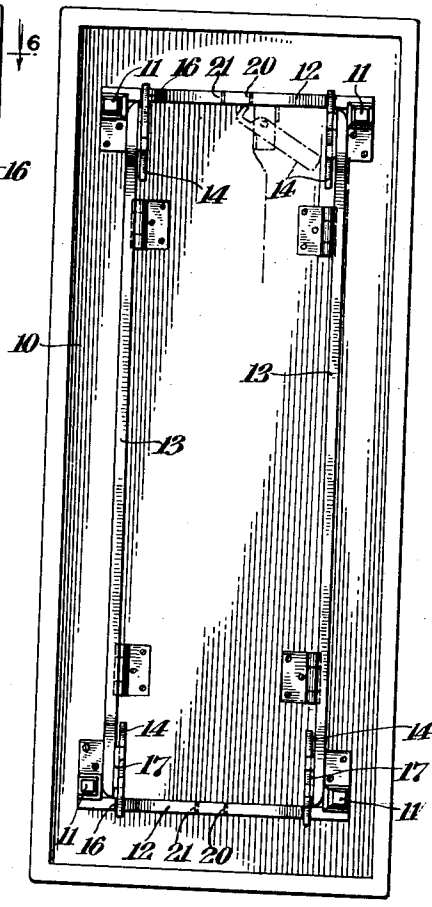


Fig. 5.

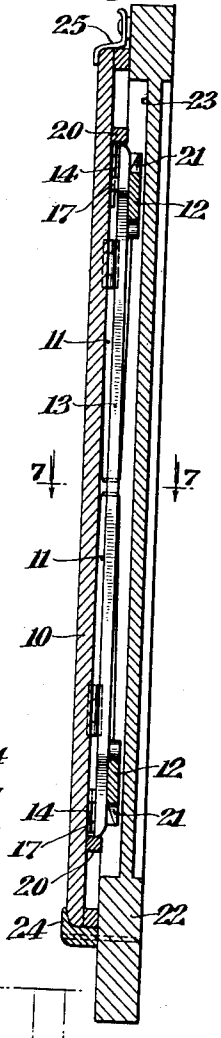


Fig. 6



Fig. 7.

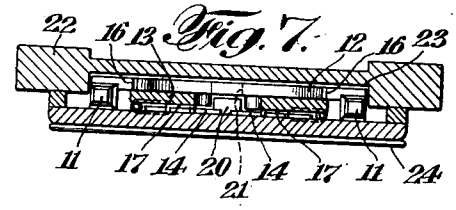
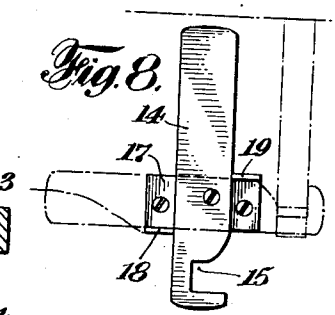


Fig. 8.



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UNITED STATES PATENT OFFICE

1,923,281

COLLAPSIBLE TABLE

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Application April 6, 1931, Serial No. 528,009, Renewed January 17, 1933

8 Claims. (Cl. 45—11)

This invention relates to tables and has for an object a collapsible table of the folding leg type in combination with a door having means for supporting the table with the folding leg received in a recess in the door.

A collapsible table embodying the invention comprises a rectangular top at each end of which are pivoted legs which are connected by cross rails. A pair of brackets hinged to the table top have their ends arranged to engage said cross rails when both are in open position and detents are pivoted to the brackets for engagement with the cross rails to hold the same against the ends of the brackets. The door is provided with a cleat upon which one end of the table top rests and with a pivoted latch which engages the opposite end of the table and with a recess of suitable depth to receive the projecting portions of the legs.

This arrangement permits the table to be located out of the way when not in use and to be readily available when it is desired to use the same.

Other objects, novel features and advantages of this invention will be apparent from the following specification and accompanying drawings, wherein:

Fig. 1 illustrates a door with the table attached.

Fig. 2 is a perspective view of the table in open position.

Fig. 3 is a bottom view of the table in closed position;

Fig. 4 is a bottom view of the table in open position;

Fig. 5 is a section on the line 5—5 of Fig. 1.

Fig. 6 is a section on the line 6—6 of Fig. 3,

Fig. 7 is a section on the line 7—7 of Fig. 5;

Fig. 8 is a detail of the detent, and

Fig. 9 is an enlarged fragmentary perspective view.

The table comprises a rectangular top 10 at each end of which are hinged legs 11 connected by cross rails 12. A pair of brackets 13 extends longitudinally of the table between the cross rails and are also hinged to the table top. A gravity actuated detent or latch 14 is pivoted to each end of a bracket adjacent its lower edge. This detent consists of a metal bar having a notch 15 in one end in which a cross rail is received, the other end being sufficiently extended or weighted to maintain the detent in operative position. Each cross rail 12 is provided with a slot 16 into which the notched end of the detent projects. The notch 15 has its rear wall curved to facilitate movement of the latch into and out of operative position. Each detent or latch 14 is pivoted to a plate 17 having upturned lugs 18 and 19 which limit swinging movement of the latch. Stops 20 are provided at the ends of the table top and are arranged to be received in recesses 21 in the upper edges of the cross rails when the legs are in open position. Preferably, these stops comprise blocks of wood cut out from the cross rails to form the recesses 21 and their faces are in alignment with the faces of the cross rails when the legs are in open position. The stops are so arranged as to be engageable by the notched ends of the latches when the brackets are folded against the table top.

When the legs are in their open position, the detents are in the position shown in Fig. 7, with their notched ends extending into the slots 16 and receiving the cross rails to hold the same in engagement with the ends of the brackets 13. The long ends of the detents are engaged with the lugs 18 and the notched ends are engaged with the lugs 19, the detents being maintained in such position by gravity. When it is desired to close the table, one end of the table top may be rested on the floor and the bottom pair of detents rotated to disengage the notched ends 15 from the cross rails 12, thus rotating the long ends of the latches into engagement with the lugs 19 and the notched ends into engagement with lugs 18. These detents will remain in this position under the influence of gravity. The upper pair of detents may then be rotated sufficiently to disengage the notched ends from the upper cross rail and then while the detents are held in this position, the brackets are swung until the notched ends of the detents underlie the cross rail when the detents may be released and the brackets swung into engagement with the table top. The legs may now be folded into engagement with the table top and the stop 20 will prevent rotation of the detents to project the notched ends thereof into the space between the cross rail and the table top.

In opening the table, the legs are first swung out into open position with one end of the table resting on the floor and then the brackets are swung into position to locate the detents in alignment with the slots 16, whereupon the upper pair of latches will be rotated by gravity into operative position with the notched ends extending into the slots 17. The lower pair of detents may then be manually moved into operative position or the table into upright position whereupon said detents which, by reason of the arrangement

of the stops 18 and 19 are unbalanced, will be moved into operative position by gravity with the notched ends extending into the slots 16.

The door 22 is provided with a recess 23 of the same configuration as the table top, but of slightly smaller dimensions. A cleat 24 is fastened to the lower portion of the door and is grooved to receive the lower edge of the table top 10. A latch 25 is pivoted to the bottom in proper position to engage the upper edge of the table top 10. After the table legs have been folded as just described, the table is arranged on the door with one edge resting on the cleat 24 and the upper edge being engaged by the latch 25, while the projecting portions of the legs extend into the recess 23. The table may easily be dismounted from the door merely by turning the latch 25 and lifting the table off the cleat 26.

I claim:

1. A collapsible table comprising a top, a pair of legs hinged to each end of the table, a cross rail connecting each pair of legs, a pair of brackets hinged to said table top and having their ends arranged to engage said cross rails when in open position and detents pivoted to said brackets to engage the cross rails to hold the same against the ends of the brackets.

2. A collapsible table comprising a top, a pair of legs hinged to each end of the table, a cross rail connecting each pair of legs, a pair of brackets hinged to said table top and having their ends arranged to engage said cross rails when in open position, and gravity actuated detents pivoted to said brackets to engage the cross rails to hold the same against the ends of the brackets.

3. A collapsible table comprising a top, a pair of legs hinged to each end of the table, a cross rail connecting each pair of legs, a pair of brackets hinged to said table top and having their ends arranged to engage said cross rails when in open position, and detents pivoted to said brackets to engage the cross rails to hold the same against the ends of the brackets, said cross rails having slots to receive said detents.

4. A collapsible table comprising a top, a pair of legs hinged to each end of the table, a cross rail connecting each pair of legs, a pair of brackets hinged to said table top and having their ends arranged to engage said cross rails when in open position, and gravity actuated detents pivoted to said brackets to engage the cross rails to hold the same against the ends of the brackets, said cross rails having slots to receive said detents.

5. A collapsible table comprising a top, two pairs of legs hinged thereto, a cross rail connected to each pair of legs, a pair of brackets hinged to said top and extending between said cross rails, slots in said cross rails, unbalanced levers pivoted to said brackets and having notched ends extending into said slots and overlying the cross rails to hold the same against the ends of the bracket.

6. A collapsible table comprising a top, two pairs of legs hinged thereto, a cross rail connected to each pair of legs, a pair of brackets hinged to said top and extending between said cross rails, slots in said cross rails, unbalanced levers pivoted to said brackets and having notched ends extending into said slots and overlying the cross rails to hold the same against the ends of the brackets, stops carried by said table top and brackets to limit movement of said levers.

7. A collapsible table comprising a top, two pairs of legs hinged thereto, a cross rail connecting each pair of legs, a pair of brackets hinged to said top and extending between said cross rails, gravity actuated notched latches carried by said brackets and being adapted to engage the cross rails to hold the same against the ends of the brackets, and a plate to which each latch is pivoted and having lugs engageable by said latch to limit movement thereof.

8. A collapsible table comprising a top, two pairs of legs hinged thereto, a cross rail connecting each pair of legs, a pair of brackets hinged to said top and extending between said cross rails, gravity actuated notched latches carried by said brackets and being adapted to engage the cross rails to hold the same against the ends of the brackets, a plate to which each latch is pivoted and having lugs engageable by said latch to limit movement thereof, and blocks carried by said table top and being arranged between the inner edges of the brackets when folded and being received within recesses in the cross rails when the table legs are in open position.

BENJAMIN SMITH.