

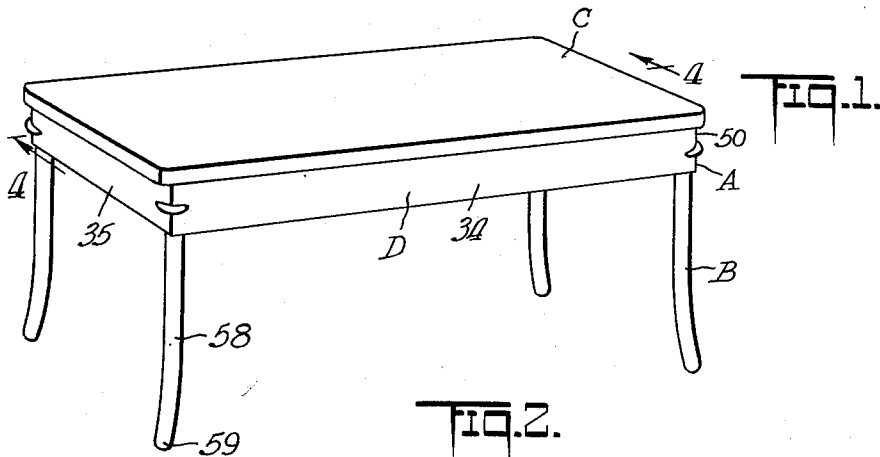
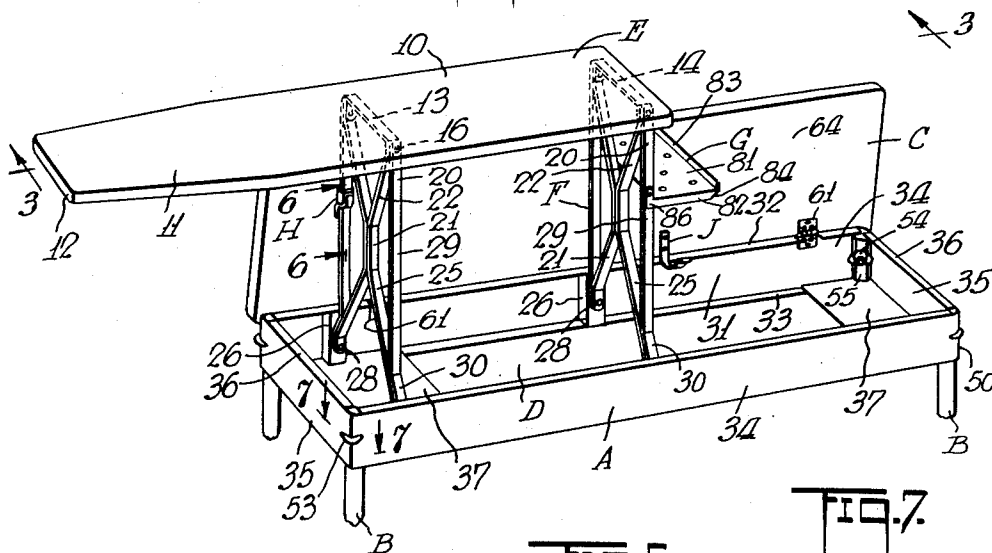
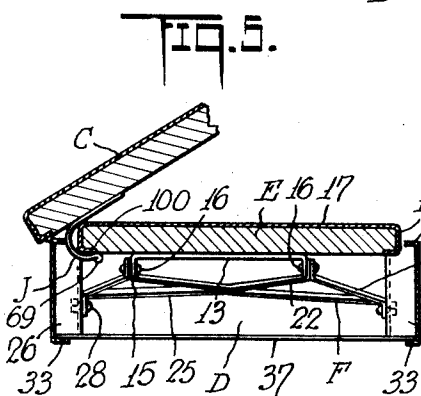
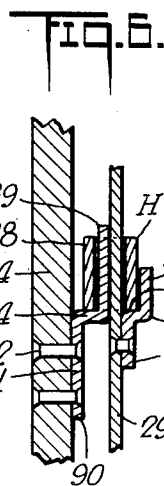
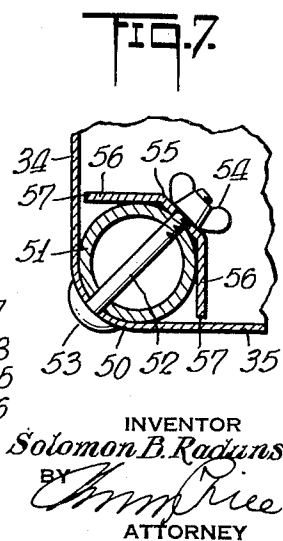
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COLLAPSIBLE IRONING BOARD TO BE ELEVATED
FROM A RECEPTACLE IN A BENCH

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COLLAPSIBLE IRONING BOARD TO BE ELEVATED FROM A RECEPTACLE IN A BENCH

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The present invention relates to a collapsible ironing board and it particularly relates to a collapsible ironing board to be included in a seat or bench or other convenient article of household furniture.

Although not specifically limited thereto, the present invention will be particularly described in its application to collapsible ironing boards utilized in connection with benches or similar household furnishing articles.

It is among the objects of the present invention to provide a simple, readily manufactured, durable, collapsible ironing board construction which may be readily lowered into a compartment in a seat, bench, table or chair and which may be manipulated and locked in extended position by the housewife and without requiring any great amount of mechanical skill.

Another object is to provide a simple ironing board bench combination in which the ironing board may be readily concealed and collapsed into the bench and readily elevated therefrom when required for usage.

Still further objects and advantages will appear in the more detailed description set forth below, it being understood, however, this more detailed description is given by way of illustration and explanation only and not by way of limitation, since various changes therein may be made by those skilled in the art without departing from the scope and spirit of the present invention.

In accomplishing the above objects, it has been found most satisfactory to provide a pantograph hinging arrangement to be mounted in the cabinet or receptacle portion of a bench or chair, by which the ironing board may be elevated into ironing position when the top of the seat is lifted, or depressed into the cabinet so that the top of the seat may be closed thereover.

In the preferred construction, an extension from the hinging arrangement may be incorporated with a latching means on the bottom of the elevated seat to lock the ironing board in its elevated position.

At the same time the hinging construction may carry a collapsible rest for the iron itself, desirably elevated with the ironing board out of the recess or compartment in the top of the bench.

An elevator device may be provided on the bottom of the seat to engage the bottom of the ironing board and partly to lift it when the cover of the bench or seat is elevated, with the balance of the lifting being manually accomplished.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Fig. 1 is a top perspective view of one form of combination bench and ironing board with the ironing board concealed inside the top portion of the bench.

Fig. 2 is a side perspective view, similar to Fig. 1, of the top of the structure with the ironing board elevated out of the bench.

Fig. 3 is a transverse vertical sectional view taken upon the line 3—3 of Fig. 2 with the ironing board in extended position upon an enlarged scale as compared to Fig. 2.

Fig. 4 is a transverse vertical sectional view taken

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upon line 4—4 of Fig. 1, with the ironing board in collapsible position upon an enlarged scale as compared to Fig. 1.

Fig. 5 is a fragmentary transverse vertical sectional view taken upon the line 5—5 of Fig. 4, with the seat being partly elevated and showing how the elevation of the ironing board is initiated.

Fig. 6 is a fragmentary sectional view taken upon the line 6—6 of Fig. 2, showing the locking arrangement for holding the board in elevated position upon an enlarged scale.

Fig. 7 is a fragmentary transverse sectional vertical view taken upon the line 7—7 of Fig. 2, showing the corner construction upon an enlarged scale.

Referring to Figs. 1 to 7, there is shown a bench or seat A having the legs B, a hinged top or cover C and an upper compartment, cabinet or enclosure D.

Within the upper compartment or enclosure D is an ironing board E having a hinge construction F. The ironing board E is provided with a swinging hinged iron support G and a latching arrangement H and also an elevational hook J.

The ironing board itself may consist of an elongated piece of wood, aluminum, plastic or other material covered with fabric and having a relatively parallel-sided portion 10 and a portion of decreasing width 11 and terminating at 12 substantially beyond the end of the bench A, when in elevated position.

Attached to the bottom of the portion 10 are the transverse brackets 13 and 14. The ends of the brackets are turned down at the ends thereof, as indicated at 15 in Fig. 5, and they receive the pivot studs or rivets 16 which connect to the upper ends of the X-shaped structures 21 forming part of the pantograph hinge arrangement F. The pantograph arrangement consists of a lower fixed horizontal element, namely the bottom of the compartment D, the upper horizontal element, namely the ironing board E, and the side swinging lever elements or frame structures 21. These lever elements or frame structures are of X-shape, as shown best in Fig. 2.

The upper ends of the X-shaped structure 21 fit inside of the down-turned ends 15 and extend inwardly as indicated at 22, until they meet at 23 where they are riveted together at 24.

Below the rivets 24 the legs extend apart as indicated at 25 and they extend downwardly to the blocks 26 upon which they are pivotally mounted at their lower ends 27 by the bolts or rivets 28.

The outside arms 29 extend upwardly to and are pivoted on the outside of the ends 15 and they also swing on the pivotal bolts 16. At their lower ends, as indicated at 30, they turn outwardly and connect to the pivots 28 on the blocks 26.

The blocks 26 are fitted on the interior 31 between the upper flange 32 and the lower flange 33 of the longitudinal front and back side walls or members 34 of the compartment D. The compartment D is made up of longitudinal members 34 and side walls or members 35. The end members 35 have the intumed flanges 36 at their upper ends and the intumed shelves, platforms or ledges 37 at the lower ends. These shelves extend over the intumed flanges 33 of the outside longitudinal members 34.

The corners of the bench are rounded as indicated at 50 (see Fig. 7) around the tubular leg members 51 forming the legs B and are held in position thereon by the bolts 52 having the external decorative heads 53 and the inside wing nuts 54.

The wing nuts 54 on the interior side of the tubular leg 51 clamp against the plate 55. The plate 55 has out-turned flanges, intumed flanges 56 terminating just short at 57 of the longitudinal members 34 of the end members 35. The legs B extend downwardly, as indicated at 58, and have out-turned portions 59 resting upon the floor.

The hinged top or cover C of the bench is provided with the hinges 61 (see Fig. 3) having a section 62 mounted at 63 upon the inside face 64 of the seat and another section 65 mounted by the screws or rivets 66 on the longitudinal member 34. The bottom 64 of the

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hinged top or cover C is also provided with the extension 67 held in position by the rivets or screws 68 of the lifting hook element 69.

The iron support G (see Fig. 3) consists of a flat plate 80 with bosses 81 and downwardly extending flanges 82 and with an upturned flange 83. The end of the plate 80 is cut obliquely as indicated at 84 so that it will cam against the shelf, platform or ledge 37 when the board E is lowered in the direction indicated by the arrow 85 of Fig. 3.

The inside edge of the iron support G has the upturned end portions 86 which are pivotally mounted at 87 on the side elements 29.

To lock the ironing board in the elevated position as shown in Figs. 2 and 3, one of the legs 29, as shown in Fig. 6, is provided with a sliding loop or sleeve 88 which is designed to engage the upturned end 89 of the S-member 90.

The S-member 90 has a lower flange 91 riveted at 92 to the bottom 64 of the bench or seat A. The member 90 also has an out-turned portion 94 which, when the cover or top C is elevated and the ironing board is lifted, is directly against the leg 29.

In this position the sleeve 88 will engage the tongue 89 and hold the ironing board E in elevated position. The sleeve 88 is prevented from sliding too far down by the stop member 95 having a down-turned flange 96 riveted to leg or arm 29 and an upturned offset part 97 forming a pocket 98 in which the sleeve 88 will be received at its lowermost position.

The hook J, as shown best in Fig. 5, upon lifting of the cover or top C will engage the bottom of the ironing board E at the position 100 and partly elevate it above the cabinet D, so that it may be readily grasped and elevated the remaining distance by the user. Then the sleeve 88 when the cover or top C and the ironing board E have been fully elevated may be held downwardly to latch over the tongue 89 and lock the ironing board in the elevated position.

The ironing board E may then be locked into the position as shown in Figs. 2 and 3 by the latch H engaging member 90.

To lower the ironing board into the position of Figs. 1 and 4, the sleeve 88 is elevated and the ironing board E is then moved downwardly. The oblique edge portion 84 will cam against the shelf, platform or ledge 37 into the position as shown in Fig. 4 and when the ironing board is placed into cabinet D, as shown in Fig. 4, the top C may be lowered.

Where there has been herein described a preferred form of the invention, it should be understood that the same may be altered in details and in relative arrangement of parts within the scope of the appended claims.

Having now particularly described and ascertained the nature of the invention, and in what manner the same is to be performed, what is claimed is:

1. A combination bench and collapsible ironing board construction comprising a top cabinet provided with front, back and end side walls and with a hinged top cover having hinge connections to the back wall of the cabinet, an ironing board positioned in said cabinet, said board being adapted to be elevated out of said cabinet when the cover is lifted and a lever arrangement consisting of two spaced-apart swinging rectangular lever frames each having legs, the opposite ends of the legs being pivotally attached to the bottom of said ironing board and to the front and back walls of the cabinet respectively, said board, cabinet and frames forming a pantograph arrangement.

2. A combination bench and collapsible ironing board construction comprising a top cabinet provided with front, back and end side walls and with a hinged top cover having hinge connections to the back wall of the cabinet, an ironing board positioned in said cabinet, said board being adapted to be elevated out of said cabinet when the cover is lifted and a lever arrangement consisting of two spaced-apart swinging rectangular lever frames each having legs, the opposite ends of the legs being pivotally attached to the bottom of said ironing board and to the front and back walls of the cabinet respectively, said board, cabinet and frames forming a pantograph arrangement, and means initially to lift the ironing board consisting of a hook mounted on the underside of the cover adjacent the hinge of the cover to engage the underside of the ironing board when the cover

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is lifted and latch means having cooperating parts on the lever frames and on the underside of the hinged cover to latch the ironing board in elevated position.

3. A collapsible ironing board construction comprising a cabinet, a cover therefor, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, an ironing board, the bottom of said cabinet forming a lower element, said ironing board forming a top element and two side swinging lever elements consisting of two spaced parallel lever frames pivotally connected at their upper ends to the underside of the ironing board and at their lower ends to said side walls of the cabinet, said top, lower and side swinging lever elements constituting a pantograph arrangement, said arrangement serving to enable the ironing board to be lifted from and lowered into said cabinet, and means initially to lift the ironing board consisting of a hook mounted on the underside of the cover adjacent the hinge of the cover to engage the underside of the ironing board when the cover is lifted and latch means having cooperating parts on the side swinging lever elements and on the underside of the hinged cover to latch the ironing board in elevated position.

4. A collapsible ironing board construction comprising a cabinet, a cover therefor, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, an ironing board, the bottom of said cabinet forming a lower element, said ironing board forming a top element and two side swinging lever elements consisting of two spaced parallel lever frames pivotally connected at their upper ends to the underside of the ironing board and at their lower ends to said side walls of the cabinet, said top, lower and side swinging lever elements constituting a pantograph arrangement, said arrangement serving to enable the ironing board to be lifted from and lowered into said cabinet and an iron support carried on the side elements of one of said lever frames of said pantograph arrangement, and means initially to lift the ironing board consisting of a hook mounted on the underside of the cover adjacent the hinge of the cover to engage the underside of the ironing board when the cover is lifted and latch means having cooperating parts on the side swinging lever elements and on the underside of the hinged cover to latch the ironing board in elevated position.

5. A collapsible ironing board construction comprising a cabinet, a cover therefor, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, an ironing board, the bottom of said cabinet forming a lower element, said ironing board forming a top element, and two side swinging lever elements consisting of two spaced parallel lever frames pivotally connected at their upper ends to the underside of the ironing board and at their lower ends to said side walls of the cabinet, said top, lower and side swinging lever elements constituting a pantograph arrangement, said arrangement serving to enable the ironing board to be lifted from and lowered into said cabinet and tongue means positioned on the bottom of the cover to hook said ironing board in elevated position and a sleeve on one of the swinging lever elements of said pantograph arrangement to engage said tongue means.

6. A collapsible ironing board construction comprising a cabinet, a cover therefor, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, said cabinet forming a lower element, said ironing board forming a top element and two side swinging lever elements consisting of two spaced parallel lever frames pivotally connected at their upper ends to the underside of the ironing board and at their lower ends to said side walls of the cabinet, said top, lower and side swinging lever elements constituting a pantograph arrangement, said arrangement serving to enable the ironing board to be lifted from and lowered into said cabinet and hook means positioned on the bottom of the cover adjacent the hinge of the cover and carried by said cover to initiate lifting of said ironing board.

7. In a collapsible ironing board construction, a bench having a top cabinet with a hinged cover, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, an ironing board in said cabinet, a pantograph lever arrangement mounted in said cabinet and to said ironing board, said pantograph including the bottom of the cabinet and the ironing board as bottom and top elements respectively and serving to

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move said ironing board up out of or down into said cabinet, said pantograph also including two spaced-apart side swinging lever frames each having spaced side legs and the opposite ends of the legs of each frame being provided with pivotal connections to the bottom of said ironing board and to said side walls of the cabinet respectively, and means initially to lift the ironing board consisting of a hook mounted on the underside of the cover adjacent the hinge of the cover to engage the underside of the ironing board when the cover is lifted and latch means having cooperating parts on the side swinging lever frames and on the underside of the hinged cover to latch the ironing board in elevated position.

8. In a collapsible ironing board construction, a bench having a top cabinet with a hinged cover, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, an ironing board in said cabinet, a pantograph lever arrangement mounted in said cabinet and to said ironing board, said pantograph including the bottom of the cabinet and the ironing board as bottom and top elements respectively and serving to move said ironing board up out of or down into said cabinet, said pantograph also including two spaced-apart side swinging lever frames each having spaced side legs and the opposite ends of the legs of each frame being provided with pivotal connections to the bottom of said ironing board and to said side walls of the cabinet respectively, and an iron support carried by one of the lever frames of the pantograph and means associated with said cabinet to close said iron support against said lever frame of the pantograph when said board is depressed into said cabinet, and means initially to lift the ironing board consisting of a hook mounted on the underside of the cover adjacent the hinge of the cover to engage the underside of the ironing board when the cover is lifted and latch means having cooperating parts on the other of said lever frames and on the underside of the hinged cover to latch the ironing board in elevated position.

9. In a collapsible ironing board construction, a bench having a top cabinet with a hinged cover, said cabinet having longitudinal side walls, said cover having hinge

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connections to one of said side walls, an ironing board in said cabinet, a pantograph lever arrangement mounted in said cabinet and to said ironing board, said pantograph including the bottom of the cabinet and the ironing board as bottom and top elements respectively and serving to move said ironing board up out of or down into said cabinet, said pantograph also including two spaced-apart side swinging lever frames each having spaced side legs and the opposite ends of the legs of each frame being provided with pivotal connections to the bottom of said ironing board and to said side walls of the cabinet respectively, and means positioned on the bottom of the cover cooperating with means on one of said lever frames to lock said ironing board in elevated position.

10. In a collapsible ironing board construction, a bench having a top cabinet with a hinged cover, said cabinet having longitudinal side walls, said cover having hinge connections to one of said side walls, an ironing board in said cabinet, a pantograph lever arrangement mounted in said cabinet and to said ironing board, said pantograph including the bottom of the cabinet and the ironing board as bottom and top elements respectively and serving to move said ironing board up out of or down into said cabinet, said pantograph also including two spaced-apart side swinging lever frames each having spaced side legs and the opposite ends of the legs of each frame being provided with pivotal connections to the bottom of said ironing board and to said side walls of the cabinet respectively, and means positioned on the bottom of said cover adjacent the hinge of the cover to initiate lifting of said board.

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