April 10, 1951 E. CONDAK 2,548,099

COLLAPSIBLE IRONING BOARD

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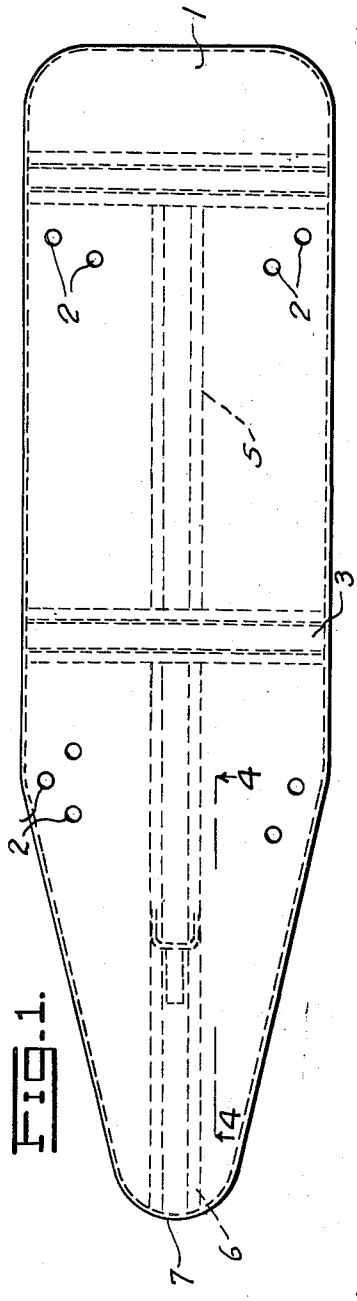

Fig. 1.

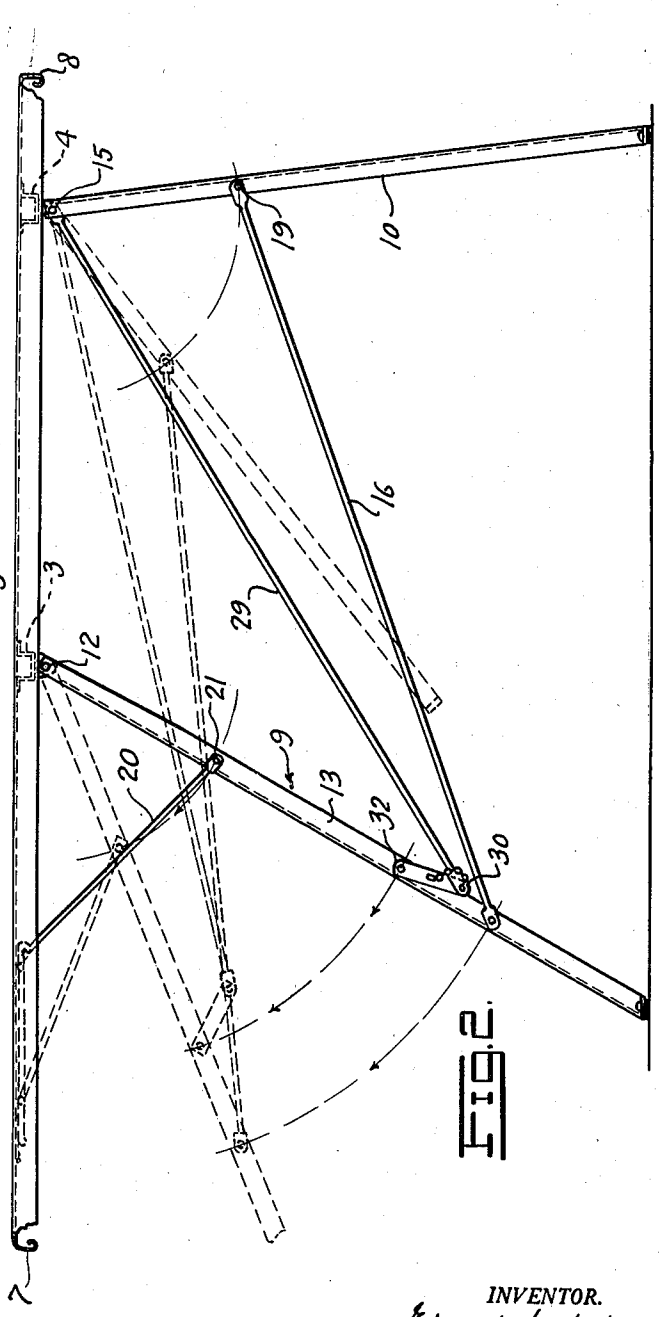

Fig. 2.

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Fig. 3.

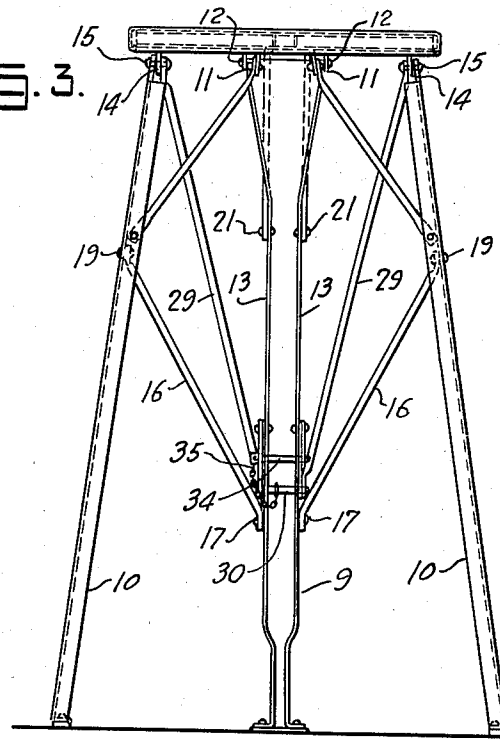


Fig. 5.

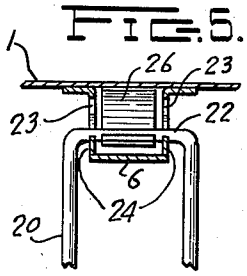
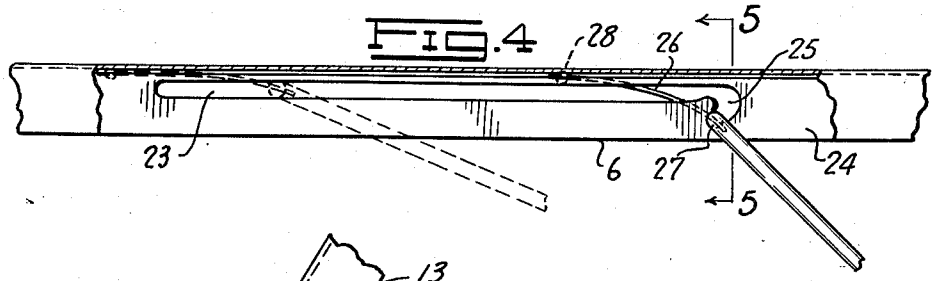


Fig. 4



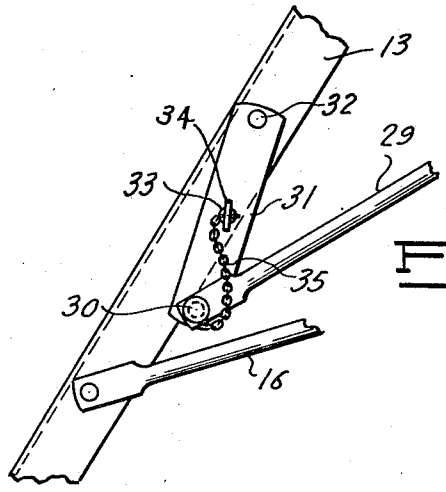


Fig. 6.

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UNITED STATES PATENT OFFICE

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COLLAPSIBLE IRONING BOARD

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Application July 12, 1948, Serial No. 38,239

6 Claims. (Cl. 38—117)

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This invention relates to an ironing board and more particularly to an ironing board of the collapsible type.

This invention contemplates an ironing board of the type wherein the support legs can be readily folded up against the ironing board when the board is not in use and stored away and which legs can be readily unfolded and securely locked in set up position so that the board is stable and will not collapse during use.

Fig. 1 is a top plan view showing my board.

Fig. 2 is a side elevation thereof.

Fig. 3 is an end view looking from the right of Fig. 2.

Fig. 4 is a section along the line 4—4 of Fig. 1.

Fig. 5 is a section along the line 5—5 of Fig. 4.

Fig. 6 is a detail of the safety bolt for locking the board in open or set up position.

My ironing board can be made from any suitable material such as metal or wood but is preferably made of steel with all the moving parts pivoted together by rivets.

My ironing board comprises a sheet steel top 1 provided with a multiplicity of perforations 2 which provide for the escape of steam during the ironing operation. Transverse channel reinforcements 3 and 4 are welded to the under face of top 1 and top 1 is reinforced also by longitudinal channel reinforcements 5 and 6 which are welded or otherwise affixed to the under face of top 1, the one channel reinforcement 5 extending between transverse channels 3 and 4 and the other extending from transverse channel 3 forward to the narrow end 7 of the top. Top 1 is provided with a circumferential reinforcing flange 8 with a round bead at the end of the flange. Top 1 is supported by a single front leg 9 and two rear legs 10. Leg 9 is of channel section, legs 10 are of L section.

Leg 9 is pivotally supported on tabs 11, struck out of the bottom wall of channel 3, by means of rivets 12 which pass through the side walls 13 of leg 9. Legs 10 are pivotally secured to tabs 14 struck out of the bottom wall of channel 4 by rivets 15. Braces 16 are pivotally secured at their forward ends by rivets 17 to the side walls 13 of leg 9 and the rear ends of braces 16 are pivotally secured to legs 10 by rivets 19.

A locking brace 20 in the form of a U rod has its ends pivoted to the side walls 13 of leg 9 by rivets 21 and the bight portion 22 of locking brace 20 passes through parallel similar slots 23 in the side walls 24 of longitudinal channel 6. Each slot 23 comprises an elongate straight portion terminating in a notch 25 at its end nearest cross

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brace 3. Notch 25 is inclined downwardly and toward narrow end 7 of top 1. A leaf or wire spring 26 has one end fixed in the bight portion 22 of brace 20 as at 27. Spring 26 is under tension at all times and tends to move or bias bight portion 22 of brace 20 downwardly away from top 1 and toward the bottom of channel 6. The free end 28 of spring 26 slides in channel 6 against the under face of top 1.

A pair of links 29 are each pivoted at one end by rivets 15 to the inside face of tabs 14, legs 10 being pivoted to the outer faces of tabs 14. The other end of links 29 are pivotally secured by a pin 30 to the free ends of links 31 which are pivoted by rivets 32 to the opposite side walls 13 of channel leg 9. Links 31 and the side walls 13 of leg 9 are provided with holes 33 which are aligned when the ironing board is set up so that a locking bolt 34 can be passed through the holes 33 to positively lock links 31 to side walls 13 thereby preventing any pivoting of links 31 on rivets 32 and positively locking the legs in set up or open position. Locking bolt 34 can be secured by chain 35 to pin 30.

As shown in the full lines, Figs. 2, 3 and 5, the board is set up or in open position. At this time the bight portion 22 of brace 20 is held in interlocked engagement with notches 25 by spring 26 and lock bolt 30 has interlocked braced links 31 and leg 9 so that the board cannot collapse.

To collapse the board, safety bolt 30 is withdrawn from openings 33 in side walls 13 and links 31 and the bight portion 22 of brace 20 is drawn upwardly toward the under face of board 1 and out of notch 25 so that leg 9 can be swung clockwise, Fig. 2, upwardly through the dotted line position and against the underside of board 1. As leg 9 is drawn up against the underside of board 1, braces 16 simultaneously draw legs 10 upwardly against the underside of board 1 and the bight portion 22 slides along the straightaway portion of slots 23 and the spring 26 slides along the underside of board 1 within channel 6.

It will be noted that the length of link 29, that is, the distance between pivots 15 and 30, plus the distance between pivots 30 and 32 is equal to the distance between pivots 12 and 15 plus the distance between pivots 12 and 32. This relationship between the pivots is necessary to permit collapsing of leg 9 and links 29 and 31 upwardly against the underside of top 1.

I claim:

1. A collapsible ironing board comprising a top, a front leg pivotally attached to the top to swing about a transverse axis located between

the ends of the top, a pair of rear legs pivotally attached to the top for swinging about a transverse axis adjacent one end of the top, said last mentioned axis being spaced from the first mentioned axis a greater distance than from said end of the top, a pair of braces pivoted to the front leg and to the rear legs, a brace pivoted to the front leg and extending upwardly toward the top, guide means secured to the underside of the top between said first mentioned axis and the other end of the top, said guide means having a guideway therein extending longitudinally of the top and terminating in a downwardly extending notch at the end of the guideway closest to the pivot for the front leg, said brace having a transverse portion which slides in said guideway and interengages the notch to hold the legs in open position, and spring means cooperating with said brace for biasing the same into interengagement with said notch.

2. The ironing board claimed in claim 1 wherein the spring means comprises a longitudinally flexible spring fixed at one end to the transverse portion of the brace and the other end of which slides along the underside of said top.

3. The ironing board claimed in claim 2 wherein the guide means comprises a channel fixed to the underside of the top and extending longitudinally thereof and having an elongate slot in a side wall thereof in which the transverse portion of the brace slides, the spring being mounted between the channel and the underside of the top, said downwardly extending notch being inclined away from the pivot for the front leg in a direction substantially perpendicular to said brace when engaged in said notch.

4. A collapsible ironing board comprising a top, a pair of front and rear parallel transverse channel reinforcements fixed to the under face of said board and a longitudinally extending channel reinforcement secured to the underside of the board and extending between the front end of the board and said front transverse reinforcement, a front leg pivotally attached to the front transverse reinforcement to swing about a transverse axis located between the ends of the top, a pair of rear legs pivotally attached to the rear transverse reinforcement for swinging about a transverse axis positioned adjacent the rear end of the top, a pair of braces pivoted to the front leg and to the rear legs, a brace pivoted to the front leg and extending upwardly toward the top, said longitudinal channel reinforcement having an elongated slot in at least one of its side walls extending substantially parallel to the top and terminating in a downwardly extending notch at the end of the slot closest to the pivot for the front leg, said brace having a transverse portion which slides in said slot and interengages the notch to hold the legs in open position, and spring means cooperating with said brace for biasing the same into engagement with said notch, said downwardly extending notch being inclined away from the pivot for the front leg in a direction substantially perpendicular to said brace when engaged in said notch.

5. The ironing board claimed in claim 4 wherein the spring means comprises a longitudinally flexible spring slidably positioned within the longitudinal channel and having one end fixed to the bight portion of the brace and biasing said bight portion downwardly toward said notches.

6. The ironing board claimed in claim 5 including a short and a long link, the long link being pivoted at one end to the short link and at the other end to the rear transverse channel, the short link being pivoted at one end to the long link and at the other end to the front leg, the total length of the said pair of links between their points of pivoting being equal to the sum of the distances between the points of pivoting of the front and rear legs and between the pivot for the front leg and the pivot for the short link whereby the links can fold along with the legs to a position along the underside of said top, said short link and front leg being provided with openings which coincide when the legs are unfolded to the open position, and a bolt for interengaging said short link and front leg in said openings to positively lock the same against collapsing.

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