June 7, 1932. C. W. SADENWATER 1,861,613

FOLDABLE BRACE FOR IRONING TABLES AND THE LIKE

Filed Dec. 10, 1930

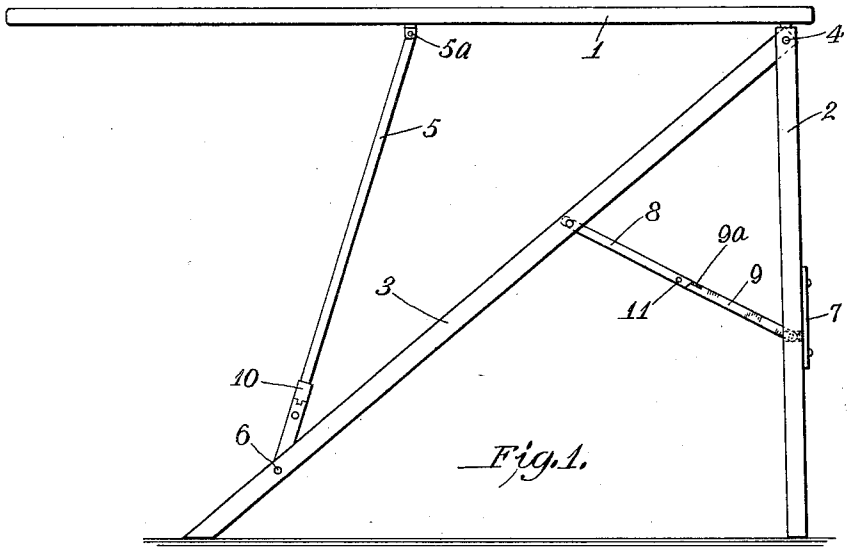


Fig. 1.

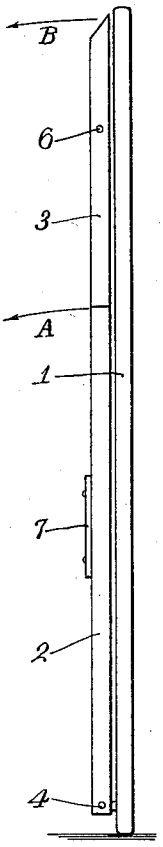


Fig. 2.

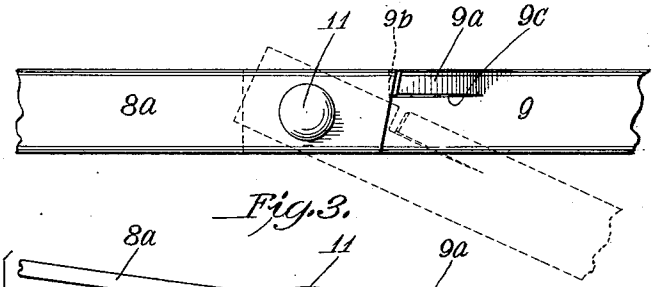


Fig. 3.

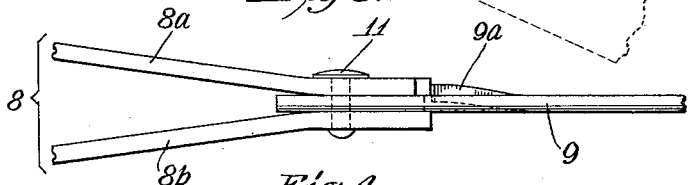


Fig. 4.

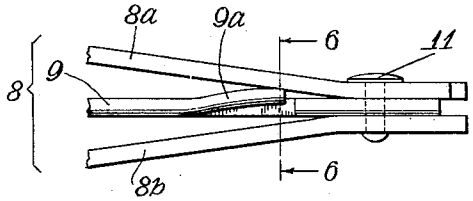


Fig. 5.

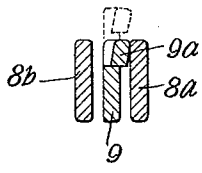


Fig. 6.

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UNITED STATES PATENT OFFICE

CHARLES W. SADENWATER, OF SAGINAW, MICHIGAN, ASSIGNOR TO SAGINAW MANUFACTURING CO., OF SAGINAW, MICHIGAN, A CORPORATION OF MICHIGAN

FOLDABLE BRACE FOR IRONING TABLES AND THE LIKE

Application filed December 10, 1930. Serial No. 501,334.

This invention relates to folding ironing tables of the type in which an ironing board is supported by legs that can be folded against it and the legs are held in their extended or working position by foldable diagonal braces.

For purposes of description I have illustrated a table comprising foldable elements wherein the board is supported at one end by two legs pivoted to the rear corner of the board and by a diagonal leg consisting of two bars spaced apart at their upper ends and pivoted to the table and connected together at their lower ends to form a single foot that rests on the floor when the table is in use. A foldable brace holds the rear and diagonal legs in correct position. The middle of the board is supported by another upright foldable brace, the lower end of which is pivoted to the lower part of the diagonal leg. This general type of foldable table is known and is here used merely to indicate one of the various applications of the structure in which my present claimed invention may be embodied.

An object of the invention is to provide a simple, inexpensive, non-rattling, self-tightening joint for the members of the foldable brace that connects the rear legs to the diagonal leg. The said joint is fashioned to possess the usual capability of keeping the foldable members of the brace in alinement when they are in extended position. A further object is to so construct the joint of the brace that it will perform the additional function of releasably holding the said brace members together in their jack-knifed or folded position when the diagonal leg, the rear leg and the braces are all laid flat against the board.

With this joint construction the foldable parts connected by said brace will remain folded under all conditions of normal handling to which ironing boards when folded are subjected, as for example, when the table is being moved out for use, or is being put away, and also when the board is stood up endwise on the floor preparatory to unfolding the table for use.

With the foregoing and certain other objects in view, which will appear later in the specification, my invention comprises the devices described and claimed and the equivalents thereof.

In the drawing Fig. 1 is a side view of a folding ironing table embodying my improvement.

Fig. 2 is an edge view of the table folded and stood upright on the floor, being the position in which the improved joint structure prevents the back legs from falling out of their folded position.

Fig. 3 is a side view of the joint.

Fig. 4 is a view of the parts shown in Fig. 3, when seen from above.

Fig. 5 is a similar view, showing the joint folded.

Fig. 6 is a cross section on line 6—6 of Fig. 5.

As is clearly shown in the drawing the board 1 is supported at one end on rear legs 2 and diagonal leg 3, the latter being bifurcated, its two side members or bars converging forwardly and downwardly from pintles 4 located near the corners of the board at its rear end. The board is supported near its middle by a foldable front brace 5 pivoted at 5*a* to the board and secured at its lower end by pivot 6 to the lower part of leg 3, all in known manner.

The present improvement pertains, as above stated, to the foldable brace structure that connects the panel 7 on rear legs 2 with leg 3.

Such being the general arrangement of the table, reference will now be made to the joint structure shown in Figs. 3 to 6 by which the stated objects are attained.

The primary brace members 8 and 9 are secured together by a pivot pin 11, the member 9 consisting of a bar which is received between two members 8*a*, 8*b* that constitute the diverging member 8. In Fig. 3 the manner in which the brace 9 is moved for folding is indicated by dotted lines. The end of brace member 8*a* is preferably cut off diagonally, as shown in Fig. 3, and an offset tongue-like stop or abutment member 9*a* is formed on bar 9 by cutting a transverse slit 9*b* part way across the bar and a longitudinal slit 9*c* lengthwise, as shown in Fig. 3. The end of

the tongue so formed is offset to provide the stop 9*a*, as shown in Fig. 4.

The claimed subject matter resides in the construction and mode of operation of the tongue-like abutment member 9*a*, whereby it is made to perform not only the usual locking function above described, but also is adapted to hold the pivoted joint 11 tight and prevent its rattling when the brace members 8 and 9 are folded, as shown in Fig. 5.

The tongue member or stop 9*a* is also arranged so that when the bars 8*a* and 9 are folded upon each other, as shown in Figs. 5 and 6, the outwardly offset side wall of the tongue 9*a* will engage and wedge against the side wall of bar 8*a* and by frictionally engaging 8*a* in the manner shown, the brace members 8*a*, 9, 8*b* are firmly, but releasably held in their folded position. When extended the bars interlock in the usual manner by the end of tongue 9*a* engaging the beveled end of bar 8*a*, and when folded the stop member 9*a*, by its novel wedging effect against 8*a*, tightens the pivoted joint 11 and holds the legs and braces in their folded position. The table can then be carried about or stood in the upright position shown in Fig. 2 without any likelihood of the legs falling outward. They can, however, be easily unfolded in the manner that will now be described.

To open the table from the folded position, Fig. 2, to the working position, Fig. 1, it is only necessary to pull the free ends of the leg 2 outwardly as indicated by arrow A, and away from the board and thus overcome the normal holding action of frictionally engaged tongue 9*a* and bar 8*a*. First the brace members 8 and 9 unfold and become alined and locked. Then, continuing the downward movement of legs 2, the brace, 8, 9, pulls the free end of diagonal leg 3 away from the board and downward, as indicated by arrow B, until the front brace 5 has completely unfolded and straightened. The upper end of the now opened table is then tipped to the left in Fig. 2 and the table rises on its rear legs 3 and assumes the position of Fig. 1. Thereupon the gravitational sliding sleeve latch 10 of the front brace slips down into its working position, locking that brace in its extended form.

While I have shown and described the improvement as applied to the brace that connects the rear legs with the diagonal leg of the table it may, if desired, be applied to the folding brace that connects the diagonal leg with the board, or, if desired may be used in both structures.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A foldable brace comprising bars pivoted together, one of said bars formed on one edge near its end with a tongue whose free end is laterally offset from the face of the bar and is positioned to present a stop that abuts against an end of the complemental bar when the bars are extended, the offset part of said tongue being located so that when the bars are folded upon each other the side wall of the tongue engages by outward wedging action against a side wall of the complemental bar.

2. A foldable brace comprising bars pivoted together, one of said bars formed near its end with a tongue laterally offset from the face of the bar and positioned to present a stop that abuts against the complemental bar when the bars are extended, the said offset tongue being operatively positioned so that when the bars are folded upon each other the side wall of the tongue engages by sidewise wedging action against the complemental bar.

In testimony whereof, I affix my signature.

CHARLES W. SADENWATER.