W. N. MILLER.

FOLDING IRONING BOARD.

APPLICATION FILED MAR. 27, 1918.

1,300,993.

Patented Apr. 15, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

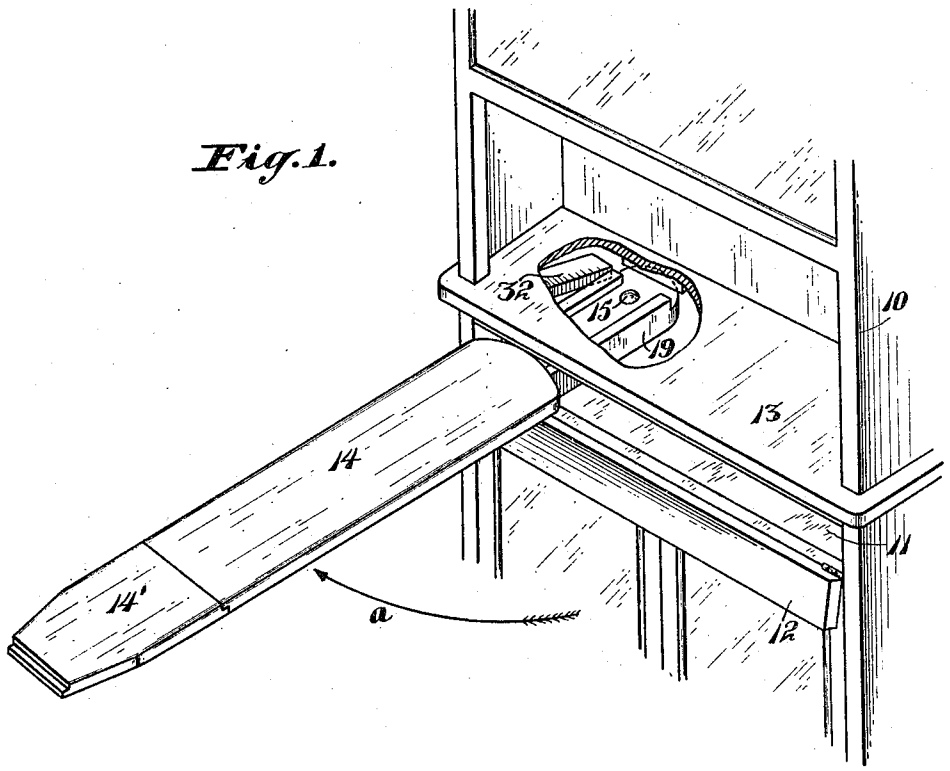
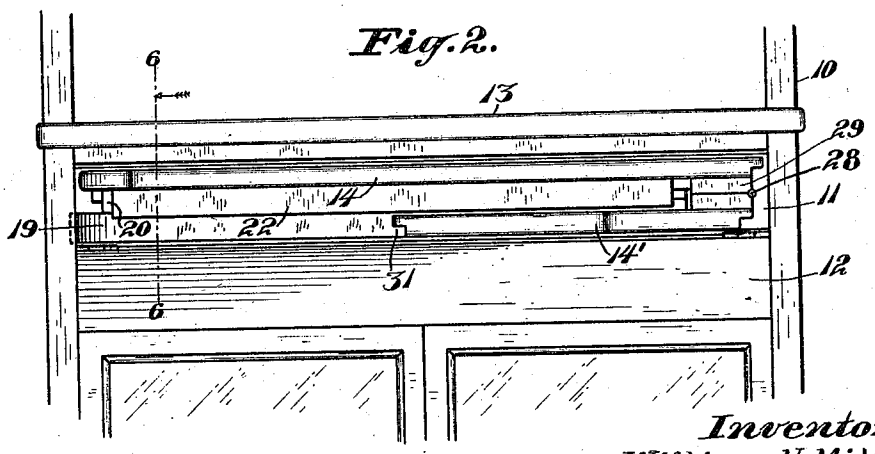


Fig. 2.



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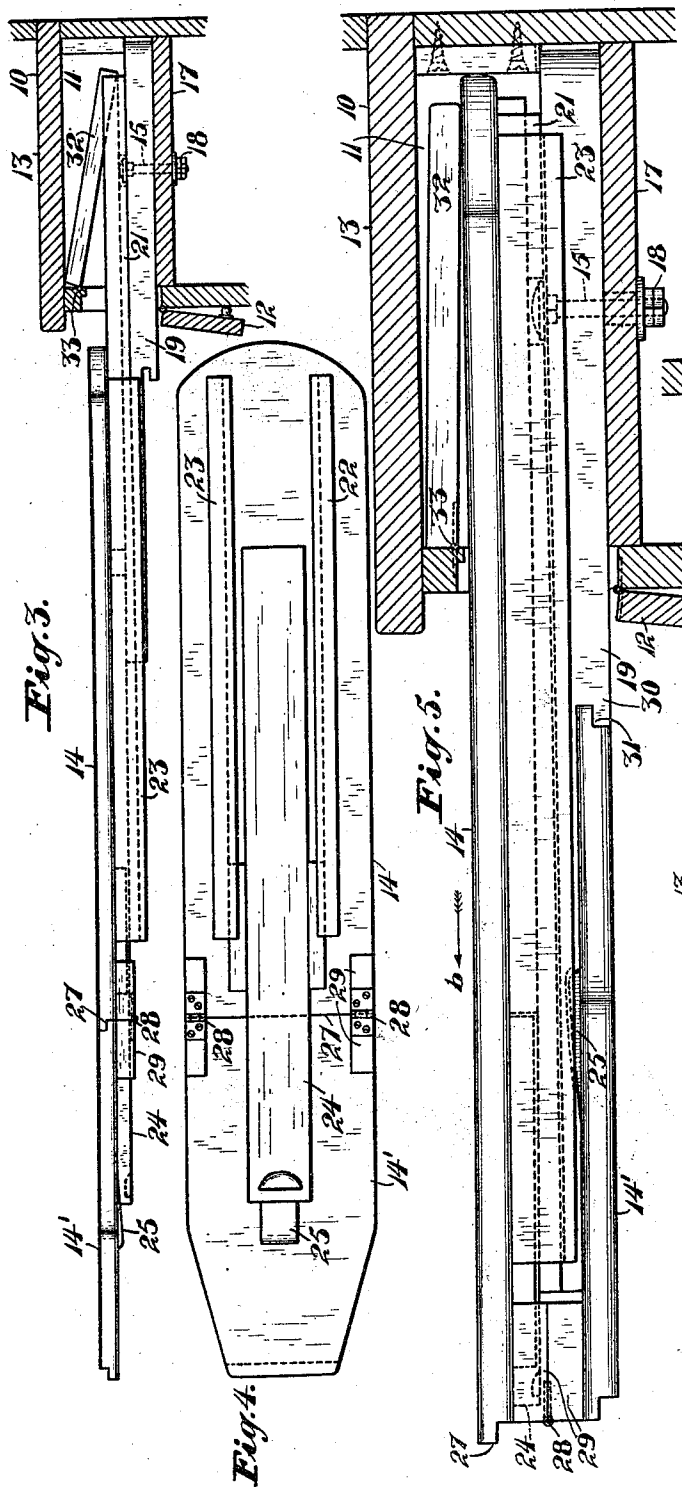


Fig. 3.

Fig. 5.

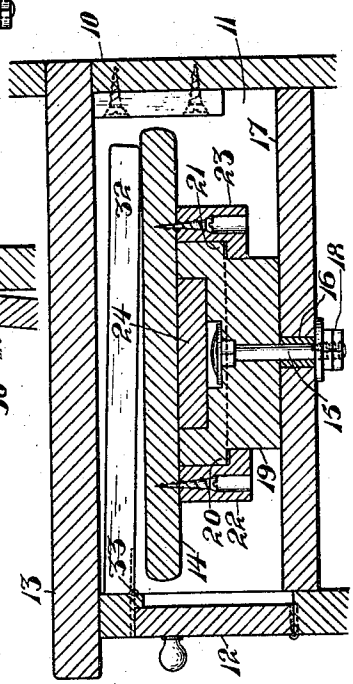


Fig. 6.

Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM N. MILLER, OF OAKLAND, CALIFORNIA.

FOLDING IRONING-BOARD.

1,300,993. Specification of Letters Patent. Patented Apr. 15, 1919.

Application filed March 27, 1918. Serial No. 225,031.

To all whom it may concern:

Be it known that I, WILLIAM N. MILLER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Folding Ironing-Boards, of which the following is a specification.

This invention relates to an ironing board, and particularly pertains to a board of the folding type.

It is the principal object of this invention to provide an ironing board which may be concealed within a compartment of limited dimensions and unfolded therefrom in a manner to provide a board of greater length than the compartment within which it is concealed, and to further construct said board in a manner to eliminate the use of supporting legs, thus insuring that the board will extend outwardly from its compartment and will sustain considerable weight without the interference of supporting legs or brackets.

Another object of this invention is to provide an ironing board of the above class which is decidedly simple in its construction, may be readily manufactured without the use of expensive metal fittings, and may be easily operated to be moved to or from its extended position.

Further objects will hereinafter appear.

The invention is illustrated by way of example in the accompanying drawings, in which—

Figure 1 is a view in perspective, illustrating the board as extended from its compartment and with the upper wall of the compartment broken away to more clearly disclose the position of the supporting and locking elements therebeneath.

Fig. 2 is a view in front elevation, illustrating the compartment and the board as folded and disposed therein.

Fig. 3 is a view in section and side elevation, disclosing in detail the structural design and arrangement of the parts of the board and its support.

Fig. 4 is a view in plan, disclosing the underneath side of the board as extended.

Fig. 5 is an enlarged view in section and elevation, illustrating the board as in its intermediate position and folded to be swung into the compartment.

Fig. 6 is a view in vertical section taken on the line 6—6 of Fig. 2 as viewed in the direction of the arrows.

10 indicates an article of furniture commonly built into the wall of a residence, as would be the case with a sideboard or cabinet, and incorporated within the cabinet structure is a narrow horizontally extending compartment 11, normally closed by a vertically swinging panel 12. This compartment occurs directly beneath the counter or table shelf 13 and would, therefore, be at approximately the height of a table. The compartment 11 is provided to receive an ironing board 14 with which the present invention is particularly concerned.

As shown in Fig. 6, a vertically extending pivot bolt 15 is positioned through a bushing 16 in the bottom wall 17 of the compartment. This bolt is there secured by lock nuts 18. The head of the bolt is enlarged and has a subjacent square shank which positively engages the wall of the board through which the bolt extends. This bolt is provided to pivotally secure a supporting beam 19 within the compartment; the beam being formed with oppositely and horizontally extending shoulders 20 and 21 which are engaged by angle-shaped strips 22 and 23. These strips are secured to the underneath side of the ironing board 14 and coöperate to form a guideway for the beam 19. The upper face of the beam 19 is recessed to receive an extension supporting arm 24.

The arm 24 is adapted to be moved horizontally along the longitudinal axis of the ironing board and to be drawn outwardly beneath a hinged extension end 14′ of the board. The under face of this extension is formed with a wedge block 25, along which the outer end of the extension arm 24 is drawn and by which the extension portion of the ironing board is caused to rigidly lock with the main portion of the board at this joint 27. Due to this construction the board may be moved longitudinally along the beam 19 and may be unfolded and locked to form a continuous board at any point along its travel.

As particularly shown in Fig. 5, the shoulders 20 and 21 of the beam are beveled longitudinally so that the board will become rigidly bound to the beam as it is drawn to its extreme outward position. The hinges 28, by which the ironing board por-

tions are connected, are mounted upon hinge blocks 29 which are of a combined thickness equal to the thickness of the beam beneath the board. These allow the extension 14′ of the board to swing beneath the beam and lie horizontal and parallel with the main board. The free end of the extension 14′ is formed with a tongue which engages a similar tongue upon a bottom filler block 30 of the beam, as indicated by the numeral 31. When so engaged all the members of the board are held in fixed relation to each other and will allow the board to be swung into or out of its compartment as a unit.

When the board is in its outermost position it may be temporarily and automatically locked. This is accomplished by a lock arm 32 which is mounted upon a hinge 33, securing it within the compartment and at the end adjacent to the pivotal mounting of the board the hinge is provided with a spring which normally swings the rear end of the lock arm downwardly and will cause it to fall alongside of the supporting beam when the beam stands at right angles to the length of the compartment. A wedge-shaped face is formed along the adjacent face of the beam and will elevate the locking arm as the beam is swung into the compartment. This insures that the lock arm will hold the unfolded ironing board in its outwardly extended position and also provides a means for guarding the structure when folded within the compartment as the lock arm falls down at the end of the beam when folded to retard the outwardly swinging movement thereof.

In operation, the board is positioned within the compartment, as indicated in Fig. 2. The panel 12 may be swung downwardly to open the compartment, after which the board may swing outwardly in the direction of the arrow *a* as drawn by its free end. When the board reaches a position at right angles to the face of the cabinet it will appear as shown in Fig. 5. It may then be drawn forwardly in the direction of arrow *b* and will slide along the beam 19 guided by the side strips 22 and 23. As the board moves outwardly the tongued end of the extension 14 moves from engagement at the joint 31 and may be swung outwardly and upwardly to assume a position in the same plane as the main portion of the board. The supporting bar 24 may then be drawn outwardly beneath the extension 14′ and caused to wedge against the block 26, thus making a continuous, rigid board.

It will be observed that as the board was drawn from within the cabinet it moved from beneath the lock arm 32 and allowed this arm to fall alongside of the beam, as particularly shown in Fig. 3. Thus the board will be rigidly locked in its operative position.

When the board is to be folded, the board 24 is moved inwardly, after which the extension 14 is swung upwardly beneath the board and the entire structure then moved inwardly along the beam until the joint 31 is formed between the block 30 of the beam and the extension 14′ of the board. As the board is moved inwardly it forces its way beneath the lock arm 32 and raises it. The board may then be swung inwardly to its original position within the compartment.

It will thus be seen that the structure here provided is simple in its construction, may be easily operated, and will afford a rigidly supported folding ironing board which may be swung into and out of a compartment of smaller length than the length of the board. While I have shown the preferred form of my invention, it will be understood that various changes in the construction, arrangement and combination of parts may be made by those skilled in the art without departing from the spirit of the present invention as disclosed in the appended claims.

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

1. An ironing board structure, comprising a compartment, a horizontally swinging supporting beam pivoted within said compartment and adapted to swing therefrom, an ironing board carried by said beam, and means whereby the beam may be temporarily and automatically locked in its outstanding position.

2. An ironing board structure, comprising a compartment, a horizontally swinging supporting beam pivoted within said compartment and adapted to swing therefrom, an ironing board carried by said beam, means whereby said board may have sliding movement in relation to the beam, whereby it may be entirely drawn from the compartment without losing the support of said beam, and wedge means for binding the board to the beam as it reaches the extreme outer point in its movement.

3. An ironing board structure comprising a horizontally swinging beam, an ironing board carried thereby, a hinged extension secured to the end of the board and adapted to fold thereunder, and a telescoping supporting arm adapted to be drawn from the end of the beam to support the hinged extension of the board when in its outermost position.

4. An ironing board structure comprising a horizontally swinging beam, an ironing board carried thereby, a hinged extension secured to the end of the board and adapted to fold thereunder, a wedge block secured to the under face of the ironing board extension, and a telescoping supporting arm mounted within the beam and adapted to be drawn outwardly beneath the board exten-

sion to engage said wedge block and rigidly secured to said extension as a continuation of the board.

5. In an ironing board structure, a horizontally swinging supporting beam, an ironing board carried thereby and slidable thereon, and a lock member coöoperating with the board, whereby its sliding movement will affect said member to lock and unlock the beam for and against swinging movement.

6. An ironing board comprising a compartment, a two-piece folded board concealed therein and having an unfolded length greater than the length of the compartment, a beam pivotally supporting said board in horizontal position and means whereby the board may be moved along the beam in sliding relation thereto when unfolded to position the parts of the board in extended relation to each other and free of the compartment.

7. An ironing board comprising a compartment, a folded board concealed therein and having an unfolded length greater than the length of the compartment, a beam pivotally supporting said board in horizontal position, means whereby the board may be moved along the beam in sliding relation thereto when extended, and means whereby the board may be moved in relation to the beam to lock the folding members thereof against movement when not extended.

8. An ironing board comprising a compartment, a folded board concealed therein and having an unfolded length greater than the length of the compartment, a beam pivotally supporting said board in horizontal position, means whereby the board may be moved along the beam in sliding relation thereto when extended, means whereby the board may be moved in relation to the beam to lock the folding members thereof against movement when not extended and a member adapted to lock the folding member of the board in fixed relation to the main body portion when unfolded.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM N. MILLER.

Witnesses:
W. W. HEALEY,
M. E. EWING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."