

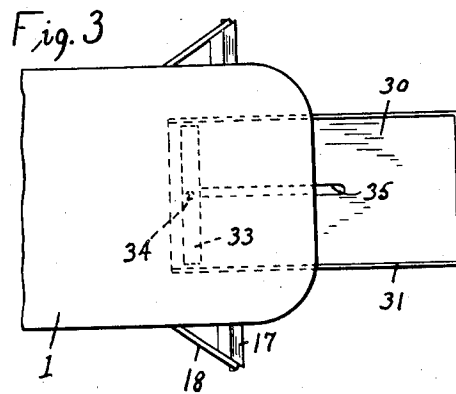
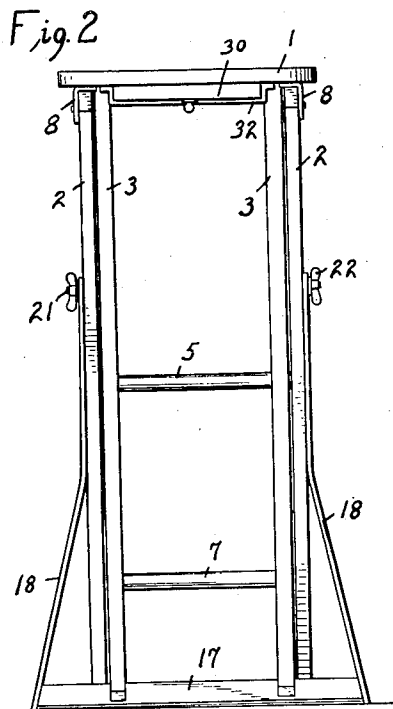
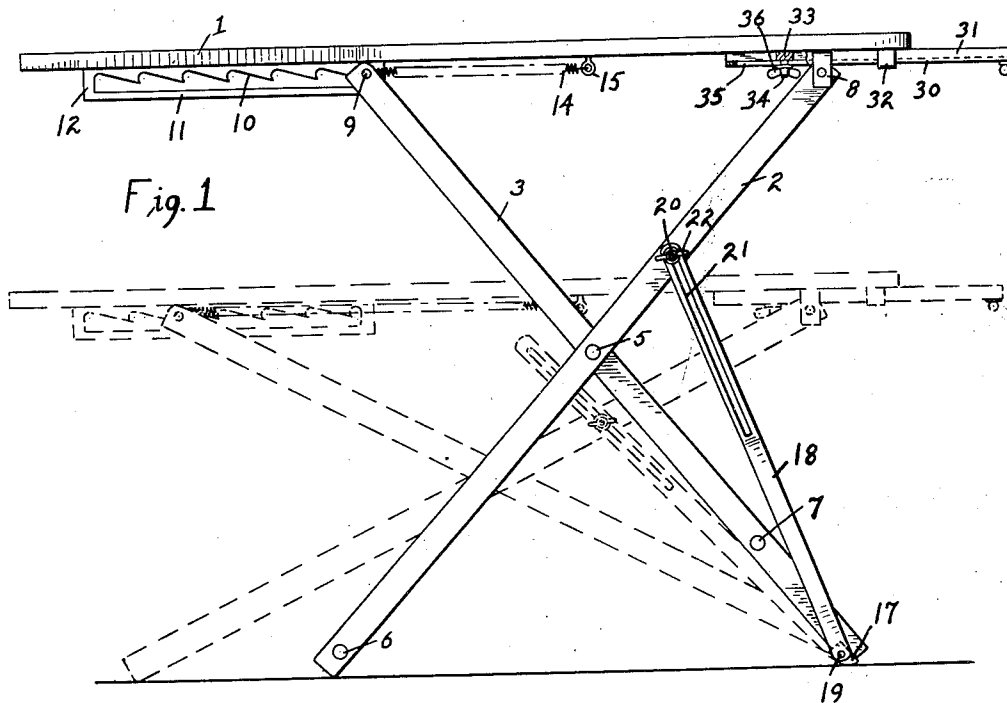
Nov. 27, 1934.

J. P. DOMAN

1,982,205

FOLDING BOARD

Filed Nov. 11, 1933



INVENTOR.

JOHN P. DOMAN

BY

R. W. Smith

ATTORNEY.

UNITED STATES PATENT OFFICE

1,982,205

FOLDING BOARD

John P. Doman, Los Angeles, Calif.

Application November 11, 1933, Serial No. 697,598

4 Claims. (Cl. 68—10)

This invention relates to folding boards such as ironing boards or tables having supporting legs medially pivoted to one another and adapted to be folded in parallel relation against the underside of the board or adapted to be unfolded in adjustable crossed relation for supporting the board at a desired height.

It is an object of the invention to lock the supporting legs in adjusted operative position so as to insure a rigid structure, and to also lock the legs in inoperative position so as to maintain a compact assembly when the legs are folded.

It is a further object of the invention to laterally brace the assembly when the legs are in operative position, and to adjustably clamp the bracing elements relative to the legs so that the bracing elements have the dual function of bracing the structure and locking it in either operative or inoperative position.

It is a still further object of the invention to provide an auxiliary supporting surface cooperating with the board and particularly applicable as a rest for an iron when the invention is embodied in an ironing board, the auxiliary surface being adapted for extension or retraction to operative or inoperative position, and adapted to be releasably secured in either of these positions.

Further objects of the invention will be readily understood from the following description of the accompanying drawing, in which:

Fig. 1 is a side elevation of the board in its operative position, showing the board adjusted to different heights by means of full lines and broken lines.

Fig. 2 is an end elevation of the board in its operative position.

Fig. 3 is a fragmentary plan view of the board in its operative position.

The invention comprises a board 1 which may be a usual ironing board, having pairs of legs 2 and 3 engaging the underside of the board and crossing medially of their length and pivotally connected by a cross rod 5. The legs of each pair are transversely spaced and the lower portions of the legs of each pair may be connected by a cross rod, the cross rod for legs 2 being shown at 6 and the cross rod for legs 3 being shown at 7.

The upper ends of the legs 2 are pivoted to the underside of the board by means of depending brackets 8, and the upper ends of the legs 3 are adapted for adjustment along the underside of board 1, as for example by a rod 9 connecting

the upper ends of the legs and engaging a ratchet 10 which extends along the underside of the board. The rod 9 is adapted for vertical play relative to the ratchet so that the rod may be disengaged from the teeth of the ratchet and moved along the ratchet for selective engagement with any desired tooth, but this play of the rod 9 is preferably limited by a bar 11 extending along the ratchet in vertically spaced relation below the teeth and connected at its ends to the ratchet as shown at 12.

The upper ends of legs 3 are thus held against complete disengagement from the underside of board 1, but may be readily adjusted along the board and held in adjusted position by the rod 9 engaging a selected tooth of the ratchet, thereby adjusting the pivotal connection between the legs 2—3 so that the board 1 may be supported at maximum height as shown by full lines at Fig. 1, or may be supported at an intermediate height as shown by broken lines at Fig. 1, or the pairs of legs may be folded parallel against the underside of the board by shifting the rod 9 to its forward limit along the cooperating ratchet.

A means is provided for yieldably shifting the rod 9 along its ratchet in the direction for supporting the board 1 at maximum height, so that the supporting legs will tend to unfold until arrested by the user engaging the rod 9 with a selected tooth of the ratchet; and this yieldable shifting means is shown as a spring 14 connected at one end to the rod 9 and fixed at its opposite end to the underside of the board 1 as shown at 15.

A means is provided for releasably locking the legs 2—3 in adjusted pivoted relation, so that when the legs are folded the locking means holds the legs against the tendency of spring 14 to unfold the same, and when the legs are unfolded for supporting the board 1 at a desired height the locking means maintains the desired adjustment so as to insure a rigid structure without relying merely upon the engagement of rod 9 with a selected tooth of the cooperating ratchet.

For this purpose the legs 2—3 are adapted to be releasably clamped in selected pivotal relation, and the clamping means preferably forms a lateral brace for the board when the legs are unfolded. As an instance of this arrangement a cross bar 17 may connect the lower ends of legs 3 and projects an appreciable distance laterally beyond the legs, and braces 18 are pivoted at one end to the outer ends of the cross bar as shown at 19, with their opposite ends pivoted

to and slidable relative to legs 2 and adapted to be clamped in adjusted position. The clamping means may comprise bolts 20 projecting from legs 2 above the pivotal connection 5, with the bolts slidable in slots 21 which extend along the braces 18, and wing nuts 22 are threaded onto the bolts for releasably clamping the braces 18 against the legs 2. By loosening the wing nuts the legs 2—3 are released for folding or unfolding by the bolts 20 sliding along and pivoting in the slots 21 as will be understood by reference to Fig. 1, and when the legs are folded or when unfolded to desired adjusted position, the nuts 22 are tightened so as to lock the legs against relative pivotal movement. When the legs are unfolded and the nuts 22 are tightened, the braces 18 and the cross bar 17 cooperate to laterally brace the structure; and when the legs are folded and the nuts 22 are tightened, the folded legs are held against the underside of board 1.

The board 1 is preferably provided with an auxiliary supporting surface, which when the board 1 forms an ironing board, may be advantageously employed as a support for an iron; and this auxiliary supporting surface is preferably adapted for projection or retraction to operative or inoperative position so that when the entire structure is folded the auxiliary supporting surface will be out of the way.

As an instance of this arrangement a shelf 30, preferably having an upturned retaining lip 31 at its sides and outer end, is slidable along the underside of board 1, preferably at the rear end of the board. The shelf may be slidably supported in a U-bracket 32 and its sliding movement may be guided by a cross bar 33 at the underside of board 1, with sliding movement of the shelf limited by a bolt 34 which depends from bar 33 and which is slidable in a slot 35 in the shelf. The shelf may be releasably locked in projected or retracted position by a wing nut 36 threaded onto the bolt 34 and adapted to clamp against the shelf.

The invention thus provides a compact and simple assembly whereby supporting legs may be folded and held against the underside of a board or may be unfolded and releasably se-

cured in adjusted crossed relation for supporting the board at a desired height, with the structure laterally braced when in its operative position. The invention also provides for retracting or projecting an auxiliary supporting surface relative to the board, and releasably securing the auxiliary supporting surface in either operative or inoperative position.

I claim:

1. In combination, a board, supports at the underside of the board pivotally connected medially of their length and adapted for pivotal adjustment in crossed relation for pivotal supporting engagement with the board, a lateral projection at the lower end of one of the supports, and a brace releasably connecting the lateral projection and the other support.

2. In combination, a board, supports at the underside of the board pivotally connected medially of their length and adapted for pivotal adjustment in crossed relation for pivotal supporting engagement with the board, a cross bar at the lower end of one of the supports projecting an appreciable distance laterally beyond the sides of the board, braces slidably and pivotally connecting the ends of the cross bar to the other support, and means for clamping the braces relative to the supports.

3. In combination, a board, supports at the underside of the board pivotally connected medially of their length and adapted for pivotal adjustment in crossed relation for pivotal supporting engagement with the board, a lateral projection at the lower end of one of the supports, and a brace adjustably connecting the lateral projection and the other support.

4. In combination, a board, supports at the underside of the board pivotally connected medially of their length and adapted for pivotal adjustment in crossed relation for pivotal supporting engagement with the board, a lateral projection at the lower end of one of the supports, a brace slidably and pivotally connecting the lateral projection and the other support, and means for clamping the brace relative to the supports.

JOHN P. DOMAN,

125

180

185

140

145

150