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54 **Ironing board.**

57 The ironing board is composed of a work table (1) supported on a base (2, 5) by means of support means (6) adapted to raise and lower the work table (1); means (12) being furthermore provided adapted to incline the work table (1).

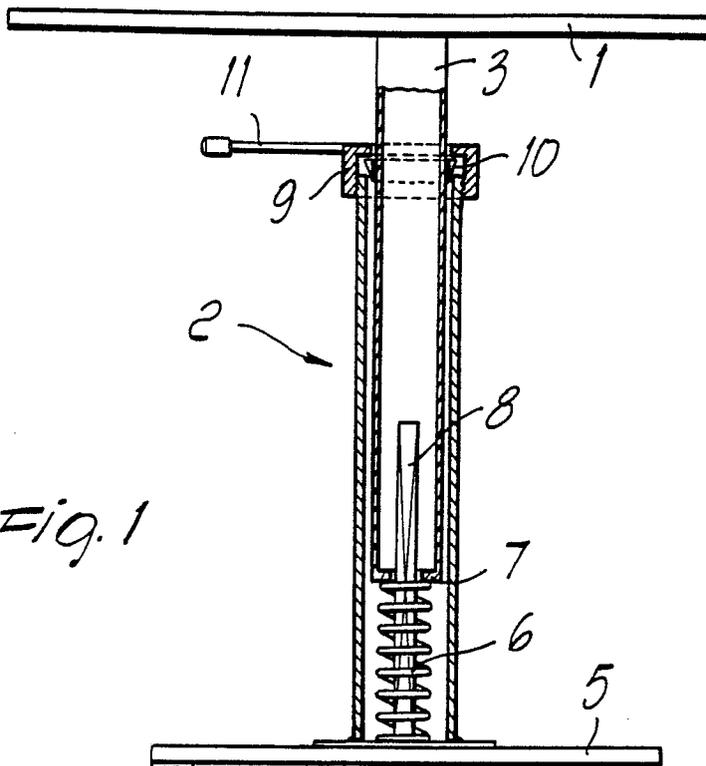


Fig. 1

EP 0 270 827 A1

IRONING BOARD

The present invention relates to an ironing board with adjustment of the height and inclination of the work table.

It is known that the ironing boards currently available on the market are constituted by a work table provided with supporting legs normally operating in a scissors-like manner, so that a greater opening thereof corresponds to a lower elevation of the table and vice versa.

In order to change the height of the working table adapting it to the height of the user, it is necessary to hold the table with the hands, operate the leg release mechanism, raise or lower the table, still holding it manually so that it does not fall, and lock the positioning mechanism again.

This operation is rather inconvenient for the user, as well as dangerous because the board, released from its locking, may fall, due to its weight, causing injuries.

It is furthermore known that the ironing boards currently available on the market allow the ironing of items of clothing only in a horizontal position.

In order to achieve better results, for example curtains (especially of the light kind) should be ironed vertically since the fibers are more easily revived if they are arranged vertically and struck by a jet of steam.

The horizontal working position of ordinary ironing boards does not allow a valid steam spraying operation, since the position of the hand, besides being inappropriate for this use, prevents the visual control of the direction of the jet of steam.

The aim of the present invention is to eliminate the above described disadvantages of the prior art by providing an ironing board which allows the adjustment of the height of the work table without having to manually hold it and which allows to press items of clothing, as well as curtains, in an optimum position with the work table inclined at a desired angle.

Within the scope of the above described aim, an important object is to provide an ironing board wherein the adjustment of the height of the table can be performed without the danger of collapsing the board.

Another important object is to provide an ironing board which facilitates the operations of ironing and steaming of items having considerable dimensions by rising the support position considerably from the floor.

Another object is to provide an ironing board which for the operations of ironing and steaming of items of clothing having considerable dimensions can alternately be provided with adapted extensions.

Still another object is to provide an ironing board having small dimensions and easy to operate, particularly for domestic use.

Not least object is to provide an ironing board which can be manufactured at a low cost with ordinary machinery. This aim, as well as these and other objects which will become apparent hereinafter, are achieved by an ironing board comprising a work table supported on a base characterized in that it comprises support means adapted to raise and lower said work table relatively to said base and means adapted to incline said work table relatively to said base.

Means are advantageously provided for the longitudinally sliding and locking said work table, as well as extension means to raise the support position relatively to the floor of the fabrics to be ironed or steamed.

Further characteristics and advantages of the invention will become apparent from the detailed description of an ironing board, according to the invention, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a longitudinal cross section view of the ironing board according to the invention and showing the support means;

Figure 2 is a partially sectioned schematic front view of an ironing board showing the hinged joint;

Figure 3 is a schematic lateral view of the ironing board of fig. 2 showing two positions of the work table;

Figure 4 is a schematic lateral view of the work table showing the longitudinal translational movement;

Figure 5 is a perspective view of an ironing board in inclined position and provided with extensions.

With reference to the above described figures, the ironing board with adjustment of the work table height and inclination, according to the present invention, comprises a work table 1 associated with a tubular support 2 substantially composed of a stem 3 slideably associated with an upright 4 which in turn is rigidly associated with a base 5.

A counteracting spring 6 is contained in the upright 4 and supports the stem 3, upwardly resting on the bottom 7 thereof, which is provided with a square hole in which a complementarily shaped anti-rotation rod 8 is slideable, its lower end being rigidly associated with the base 5.

A threaded ring 9, adapted to press on a conical ring 10 which encircles the stem 3 at the upper end of the upright 4, is screwed to the lower end of the upright 4. An operating lever 11 is

rigidly associated with the threaded ring 9.

The work table 1 can be associated with the stem 3 by means of a hinged joint 12 composed of a first element 13 and of a second element 16. The first element 13, which is substantially paral-
lelepipedal and rigidly associated with one end of the stem 3, is upwardly provided with a semicylindrical tab 14 having a cylindrical axial hole 15. The second element 16, which is similar to the preceding one, is provided with a tab 17 having a hole 18 and is rigidly associated with a bracket 19.

The two elements 13 and 16 cooperate with one another by means of a threaded pivot 20 inserted in the two holes 15, 18 arranged with coinciding axes. The pivot 20 protrudes from one of the elements 13, 16 so as to couple to a locking handwheel 21.

The bracket 19 has a U-shaped transverse cross-section, and is provided on its two vertical portions, respectively 22 and 23, with longitudinal slots 24 and 25 which act as guides for a third parallelepipedal element 26 rigidly associated with the work table 1 and downwardly shaped complementarily with respect to the inner surfaces of said bracket 19.

The coupling between the bracket 19 and the parallelepipedal element 26 is achieved by means of a threaded pivot 27 which is transversely inserted in the slots 24 and 25, and engages a handwheel 28, with a protruding end and also passes through a hole 29 of the element 26.

In figure 3, the reference numeral 30 indicates an inclined position (shown in phantom lines) for the work table 1, obtained by releasing the handwheel 21 and then locking it once the rotation has occurred in the hinged joint 12. The hinged joint 12 could also be a step hinge having a selected number of preset angular position.

In figure 4, the reference numeral 31 indicates a position (shown in phantom lines) of the work table 1 obtained from the preceding position 30 of fig. 3 by releasing the handwheel 28, by making the parallelepipedal element 26 slide along the bracket 19, and by then tightening the handwheel 28 to lock the entire assembly.

Extensions, indicated by 32 in figure 5, provided with tabs 32 perpendicular to said plane, can be furthermore applied to the work table 1 to raise the support position of the fabrics to be steamed or ironed.

The ironing board operates as follows.

In order to adjust the height from the floor of the work table 1 it is sufficient, after releasing the ring 9 by means of the operating lever 11 thus releasing the conical ring 10, to press on said table 1 at the axis of the support 2, thus compressing the counteracting spring 6.

Once the desired height has been reached, the

work table 1 is again locked by tightening the threaded ring 9, which in turn presses on the conical ring 10 inserting it between the stem 3 and the upright 4, preventing the possibility of mutual sliding.

In order to increase the height of the work table 1 it is sufficient to unscrew the threaded ring 9, allowing the spring 6 to extend.

From what has been described, it is apparent that the invention achieves the intended aim and objects, since the work table is adjustable in height, inclinable and slideable so as to optimize the execution of the ironing in any condition, as well as the steaming and ironing of curtains and the slight pressing of stored items of clothing.

The invention thus conceived is susceptible to numerous modifications and variations; in particular the mechanisms which allow the adjustment in height and the rotation of the work table, and the mechanism which allows the sliding thereof, may be obtained in various forms, all of which are within the scope of the inventive concept.

Furthermore, all the details may be replaced with other technically equivalent elements.

For example, the means adapted to produce a counteracting upwards thrust force for the work table can be hydraulic (for example a compressed-gas piston), mechanical (extendable spring or counterweight) or electric (a screw keyed to the shaft of a motor fixed to the support of the ironing board which rotates on a female thread rigidly associated with the plane of the board).

In practice, the materials employed, as well as the dimensions, may be any according to the requirements.

Claims

1. Ironing board comprising a work table (1) supported on a base (2, 5) characterized in that it comprises support means (6) adapted to raise and lower said work table (1) relatively to said base (2, 5) and means (12) adapted to incline said work table (1) relatively to said base (5).

2. Ironing board, according to claim 1, characterized in that it further comprises slide means (19, 24, 26, 27) adapted to translate said work table (1) relatively to said base (5).

3. Ironing board, according to claim 1, characterized in that it comprises extension elements (32) associable with said work table (1).

4. Ironing board, according to claim 1, characterized in that said support means comprises a spring (6) contained in an upright (4) and supporting a stem (3) slidable in said upright (4); a conical ring (10) acting between an end of said upright (4) and a surface of said stem (3), a threaded ring (9)

being associated with said end of said upright (4) and adapted to coact with said conical ring (10) for releasably locking said stem (3).

5. Ironing board, according to claim 1, characterized in that said means adapted to incline said work table (1) comprises a hinged joint (12) associated with said base (2) and with said work table (1).

6. Ironing board, according to claim 5, characterized in that said hinged joint (12) comprises a first substantially parallelepipedal element (13) rigidly associated with an end of said base (2) and upwardly provided with a semicylindrical tab (14) having a cylindrical axial hole (15), and a second element (16) having a tab (17), provided with a hole (18), rigidly associated with a bracket (19) fixed below said work table (1), said elements (13, 16) being adapted to cooperate by means of a threaded pin (20) inserted in said holes (15, 18) and protruding from one end thereof so as to engage a handwheel (21).

7. Ironing board, according to claim 1, characterized in that said means adapted to incline said work table (1) comprise a step hinge with preset angular inclination positions.

8. Ironing board, according to one or more of the preceding claims, characterized in that said slide means comprises said bracket (19) which is U-shaped in transverse cross section and is provided on its two vertical portions (22, 23) with longitudinal slots (24, 25), said bracket (19) guiding a third parallelepipedal element (26) rigidly associated with said work table (1) and downwardly complementarily shaped with respect to the inner surfaces of said bracket (19), said third parallelepipedal element (26) being provided with a hole (29), a pivot (20) being inserted in said slots (24, 25) and in said hole (29) to connect said bracket (19) to said element (26), said pivot (20) having a threaded end protruding from said slots (24, 25) and engaged by a handwheel (28).

9. Ironing board, according to one or more of the preceding claims, characterized in that said extension elements (32) comprise tabs (33) perpendicular to said work table (1).

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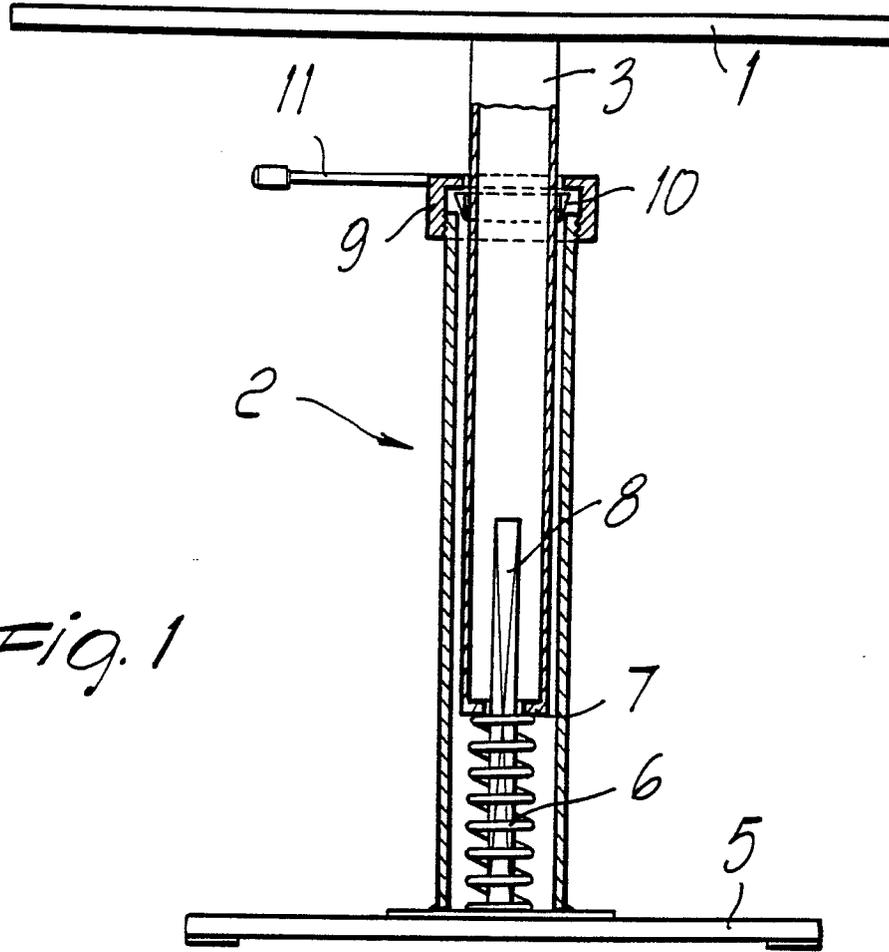


Fig. 1

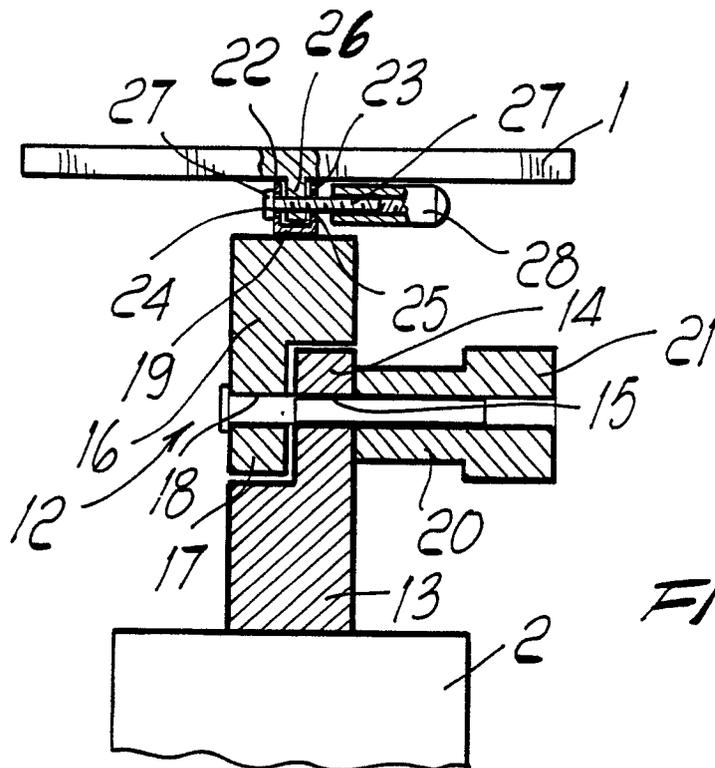


Fig. 2

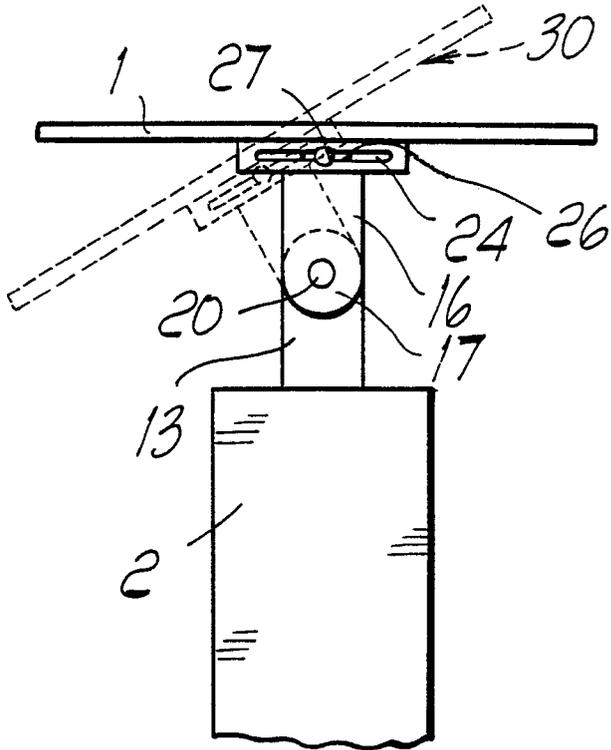


FIG. 3

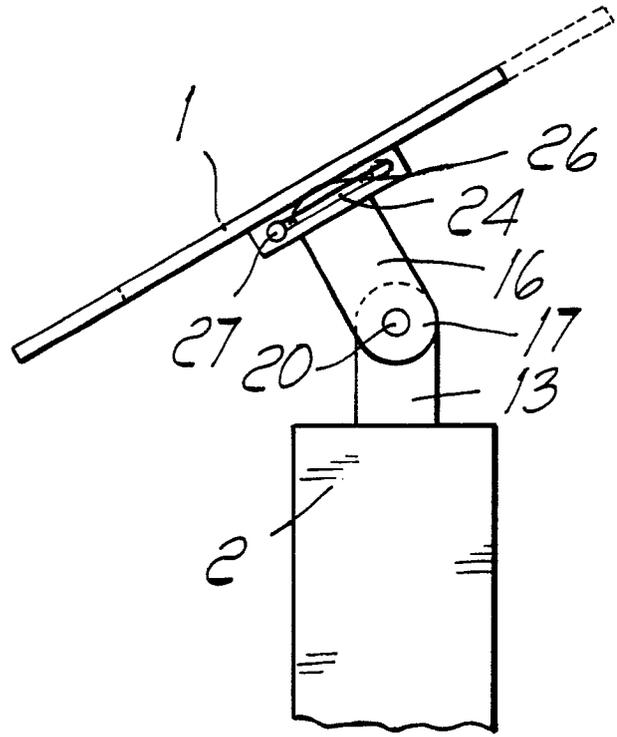


FIG. 4

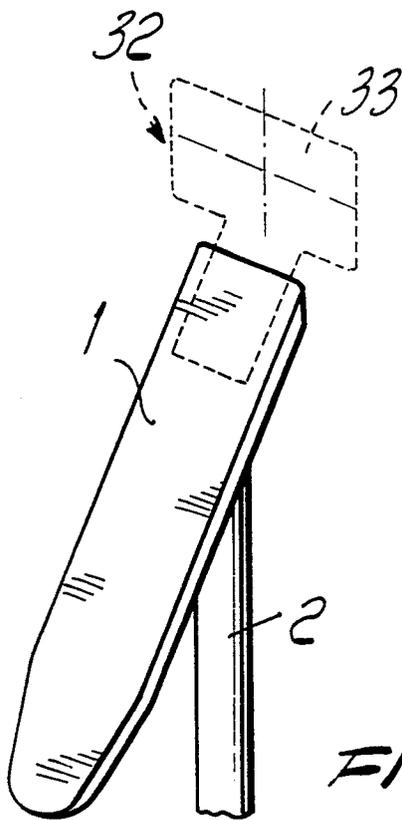


FIG. 5



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	FR-A-1 126 911 (BERGES) * Page 1, left-hand column, lines 1-12,16-22,41-43; right-hand column, lines 1-8,25-34; page 2, left-hand column, lines 8-11; figures 1-3,8,9 *	1,4-7	D 06 F 81/04
Y	---	2,3,8,9	
Y	US-A-2 011 251 (MICHELSON) * Page 1, left-hand column, line 48 - right column, line 37; claims; figures *	2,8	
Y	---		
Y	US-A-2 256 213 (NILSON) * Page 1, left-hand column, lines 1-37; claims; figures *	3,9	
A	---		
A	FR-A- 710 263 (KARLEBACH) * Figures 1,2 *	1,4-7	
A	---		
A	DE-C- 247 724 (HEER) * Claim; figures *	2,8	
A	---		
A	US-A-2 485 193 (FOGLIO) * Column 2, lines 25-35; figure 3 *	4	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A,P	---		D 06 F
A	EP-A-0 203 414 (GOLDSTÜCK)		A 47 B
A	---		
A	US-A-2 944 673 (GELUSO)		
A	---		
A	US-A-2 632 496 (WILLIS)		

The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18-02-1988	Examiner BOURSEAU A.M.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>..... & : member of the same patent family, corresponding document</p>			