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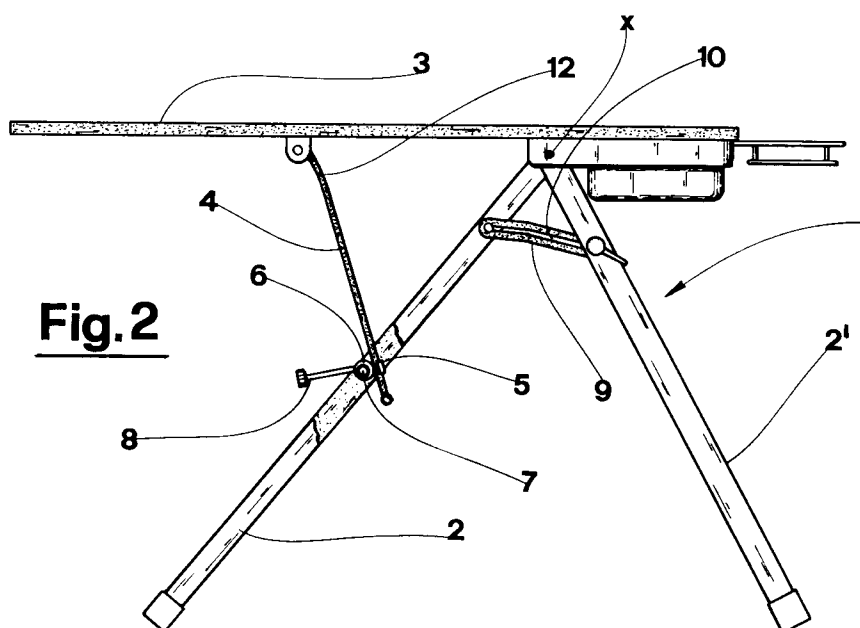
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**I-41100 Modena (IT)**(54) **A collapsible ironing board**

(57) The invention relates to a collapsible ironing board, comprising a support frame (1) provided with a first (2) and a second (2') leg, which are hinged one to another about a horizontal axis (X), and a board (3) rotatably coupled to the frame (1) about

the same axis (X). The board (3) is releasably blocked in a horizontal work position by means of a rod (4) hinged to the board (3) and slidable in a guide plate (5) constrained to the frame (1).

**Fig. 2****EP 0 686 722 A1**

The invention relates to a collapsible ironing board which can be erected and refolded particularly easily and rapidly.

Ironing boards already on the market require the operator to use both hands in the erection and refolding operations, as well as to bend down and pull or compress the board and its legs. The present invention aims to obviate the above drawback, by providing an ironing board which is extremely easy and practical to erect and refold, and which does not require the operator to bend down.

Further characteristics and advantages of the present invention will better emerge from the detailed description that follows, of a preferred but non-exclusive embodiment here illustrated in the form of a non-limiting example in the accompanying drawings, in which:

figure 1 is a schematic lateral view of the board in a partially folded configuration;

figure 2 is the lateral view of figure 1 in a different configuration;

figure 3 is a schematic frontal view in the configuration of figure 2;

figure 4 is a schematic perspective view in enlarged scale of a detail of the invention.

With reference to the figures, 1 denotes a support frame comprising a first leg 2 and a second leg 2', each provided with two uprights connected by crossbars 11.

The legs 2, 2' are connected one to another at upper ends by a pivot and are rotatable about a horizontal axis X. The rotations are at least comprised between a closed position of minimum frame 1 mass, wherein the legs 2, 2' are side-by-side, and an open position wherein the legs 2, 2' are splayed and the frame 1 can rest erect on them.

The legs 2, 2' are immobilized in the open position by two support struts 9 pivoted by one end to the uprights of the first leg 2. Each strut 9 is provided with an oblong slot 10, in which one of the crossbars 11 of the second leg 2' is free to slide internally along.

A board, constituting the ironing surface of the invention, is pivoted to the frame 1 and is rotatable about axis X; further, it is conformed such as to have its centre of gravity positioned at the axis X, so that the rotation of the board is made easier.

During rotation, the board 3 assumes at least two configurations: one in which it is folded (see figure 1) wherein it is associated with the first leg 2, and a work position (see figure 2) wherein it is horizontal.

The stability of the board in the work position is guaranteed by a rod 4 hinged to an end of the board 3 and slidable internally of a guide plate 5 mounted idle on a horizontal shaft 7 hinged by its

ends to the uprights of the first leg 2.

A cam 6 is rigidly and coaxially connected to the shaft 7 and is arranged such that it is in contact with the rod 4. A command lever 8, perpendicular to and solid with the shaft 7, enables a manually-commanded rotation of the shaft 7 and the cam 6 so that the longer-radius zone of said cam 6 presses the rod 4 against the guide plate 5, achieving an immobilization of the rod 4 at a predetermined position, which is to say a work position, in which the board 3 is horizontal.

In proximity of a hinging point, the rod 4 exhibits a bend 12 which, interacting with the cam 6, enables the rod 4 to assume a minimum-mass position, with the board 3 parallel to the first leg 2.

In a further embodiment of the invention, not shown in the enclosed figures, the rod 4 can be constrained by being hinged by one end to the frame while at another end it is constrained to a runner mobile in guides predisposed on the board.

Starting from the closed configuration, whereat the board and the second leg 2' are side-by-side with the first leg 2, the ironing board is opened as follows:

- a rotation of the second leg 2' about the first leg 2 up until the frame is open (figure 1);
- a rotation of the board 3, during which the rod 4 slides in the guide plate 5, up until the work position of the board is achieved (figure 2);
- a fixing of the board 3 in the above position by means of a command lever 8.

The ironing board is refolded by reversing the order of the above operations.

## Claims

1. A collapsible ironing board, comprising:
  - a support frame (1) comprising at least a first leg (2) and a second leg (2'), in which an upper end of the first leg (2) and an upper end of the second leg (2') are rotatably constrained one to another at a horizontal axis (X);
  - a board (3), rotatably coupled to the support frame (1) at said horizontal axis (X);
  - a rod (4), associated to the board (3) by one end and to the first leg (2) by another end; characterised in that the first leg (2) and the second leg (2') are rotatably coupled about said horizontal axis (X) such as to be able to assume a first position in which said first leg (2) and said second leg (2') are splayed apart, and a second position in which said first leg (2) and said second leg (2') are parallel and assume a flat, closed configuration; further characterised and in that the rod (4) is mobile and releasably blockable in relation to the frame (1) and the board (4) through means for

blocking and releasing the rod (4) in and from a predetermined position.

2. An ironing board as in claim 1, characterised in that the board (3) is conformed such as to have a centre of gravity on the horizontal axis (X). 5
  
3. An ironing board as in claim 1, characterised in that each of the first leg (2) and second leg (2') comprises two uprights connected by crossbars (11). 10
  
4. An ironing board as in claim 1, characterised in that the rod (4) is pivoted at an end to the board (3) and is slidable internally of a guide plate (5) constrained to the frame (1); said rod (4) being provided with a bend (12) predisposed in proximity of the end hinged to the board (3); a cam (6) being rotatably coupled to the frame (1), which cam (6) is conformed and arranged such as to compress said rod (4) against said guide plate (5) at a predetermined cam radius zone; means for manually activating the cam (6) being provided. 15  
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5. An ironing board as in claims 3 and 4, characterised in that the means for manually activating the cam (6) comprise:  
a shaft (7) rigidly supporting the cam (6), which shaft (7) has ends pivoted to the uprights of the first leg (2); said guide plate (5) being mounted idle on the shaft (7),  
a command lever (8) solid and perpendicular to the shaft (7). 30  
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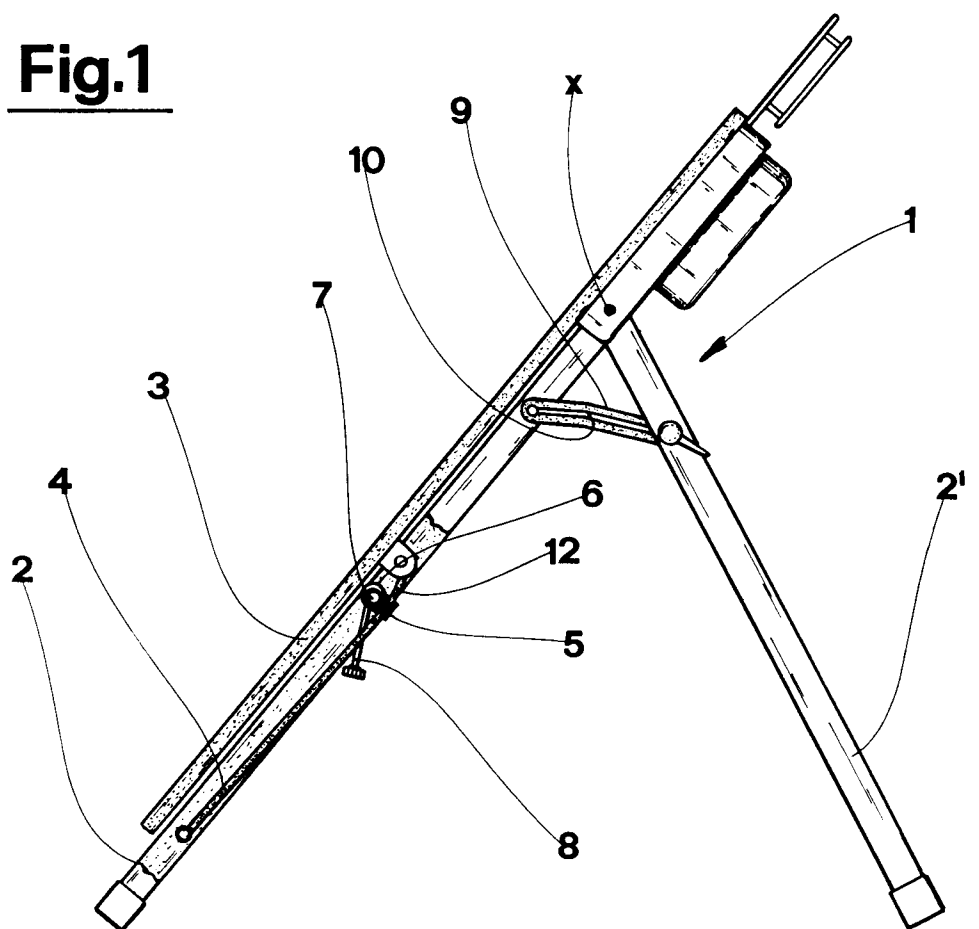
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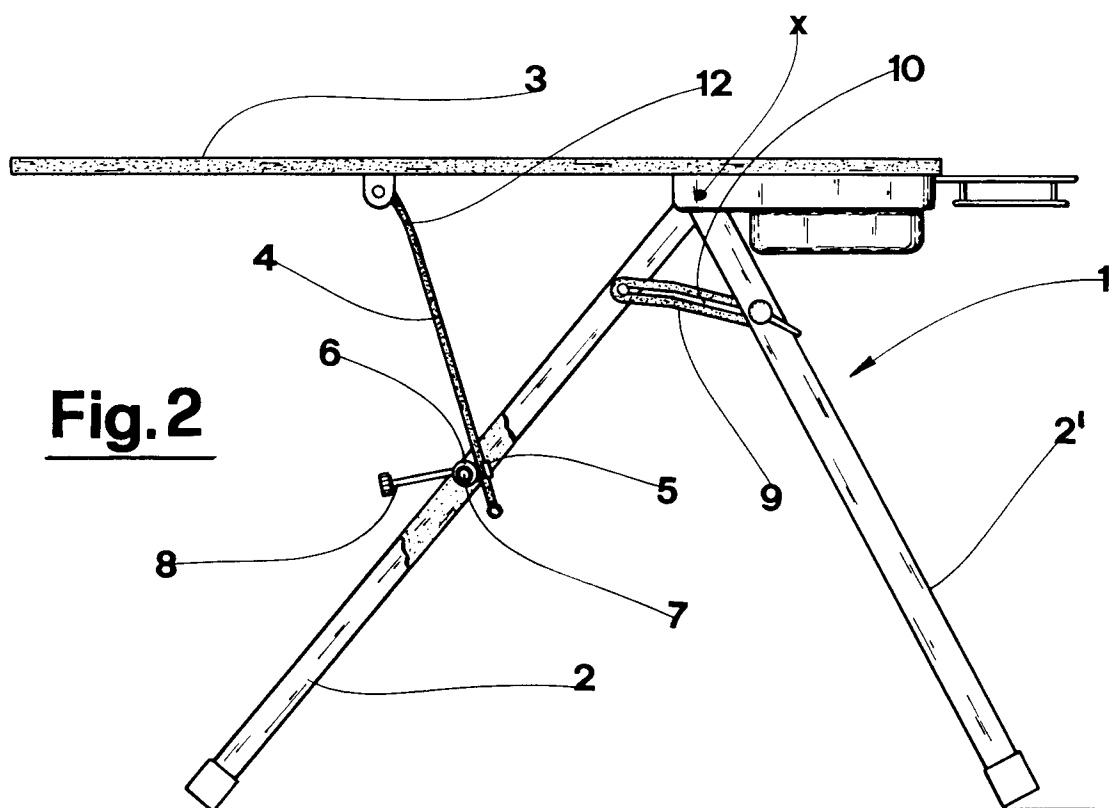
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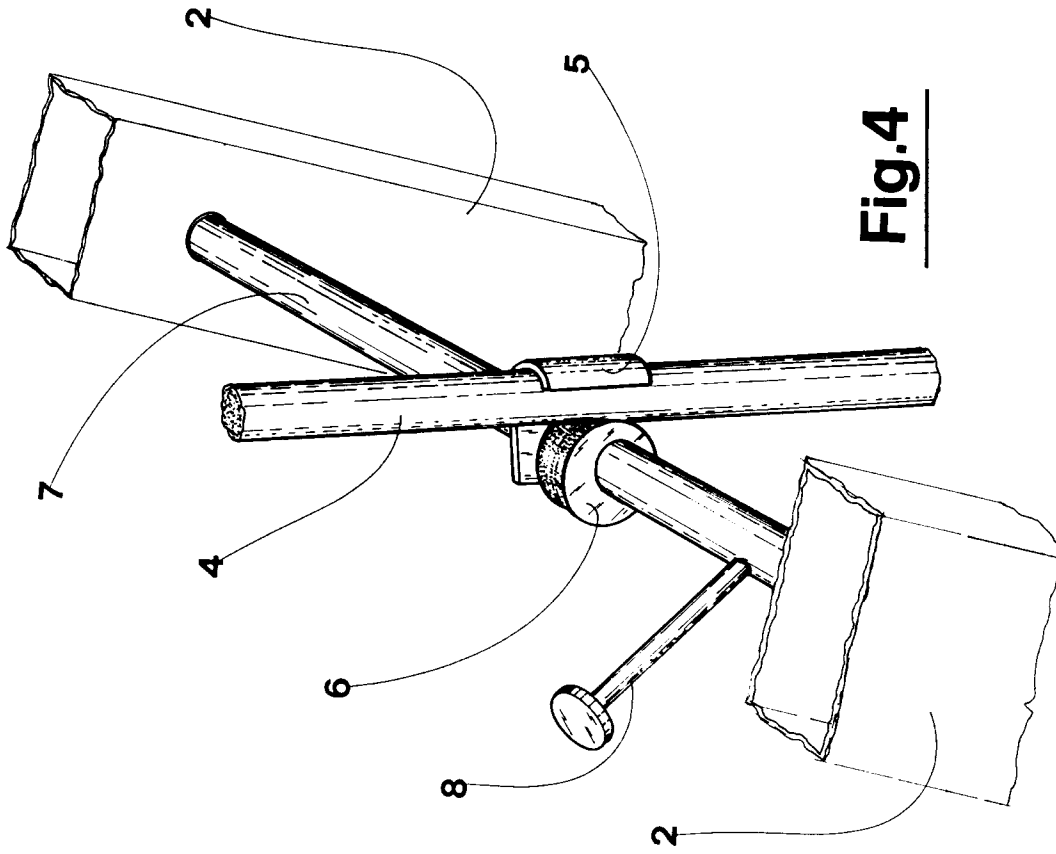
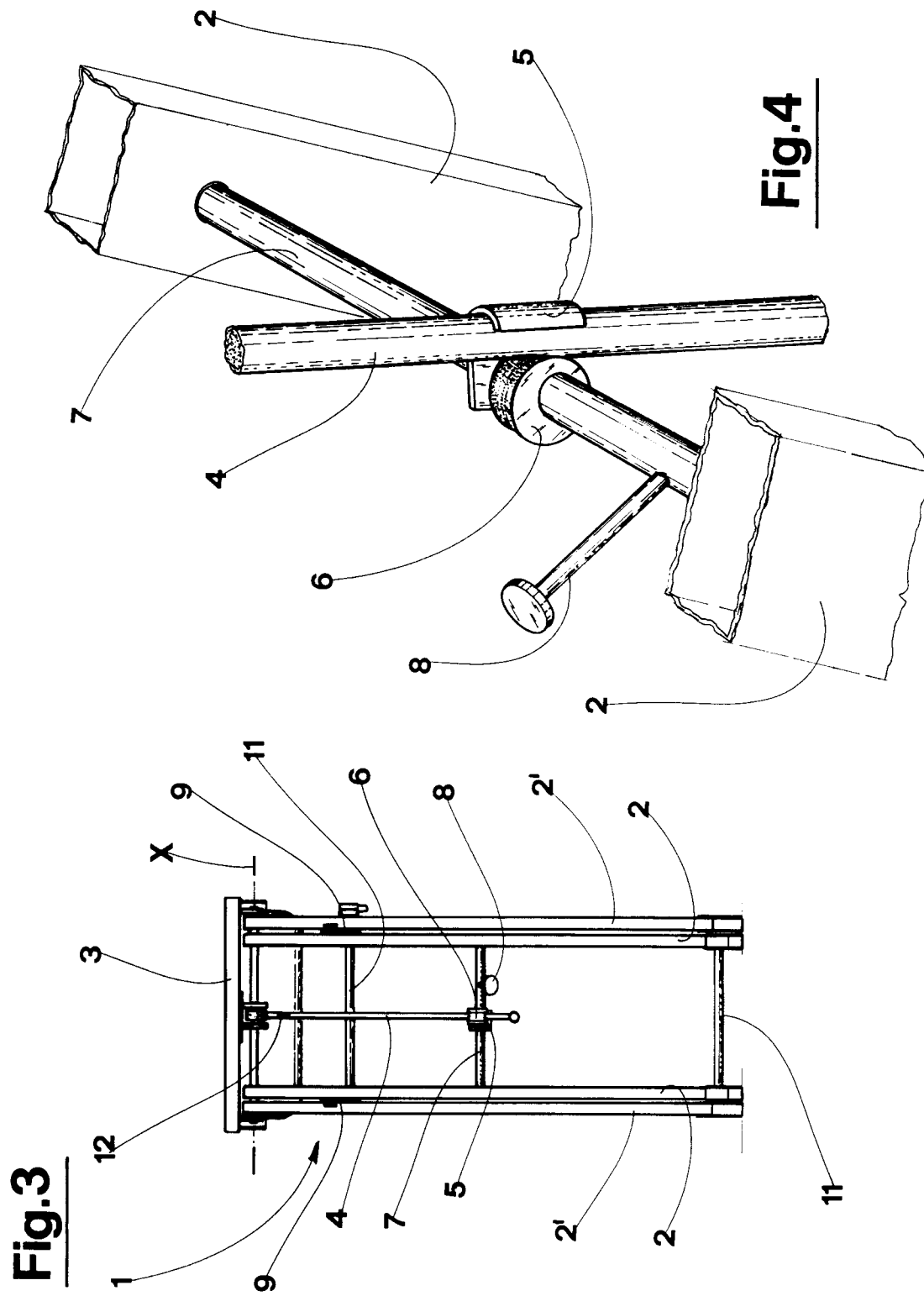
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**Fig.1**



**Fig.2**







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## EUROPEAN SEARCH REPORT

Application Number  
EP 94 83 0280

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.6)
X	US-A-2 696 686 (HARTMAN, A.L.) * the whole document *	1	D06F81/02
A	---	3	
A	CH-A-178 518 (RUEF-TRIBELHORN, E.) * the whole document *	1	
A	---		
A	US-A-3 893 401 (CASEY, J.F.) -----		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 15 November 1994	Examiner Munzer, E
<b>CATEGORY OF CITED DOCUMENTS</b> 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 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 I : document cited for other reasons & : member of the same patent family, corresponding document			