Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).
Description

[0001] The invention relates to a folding ironing board comprising:

- an ironing board table,
- a supporting frame having two legs interpivoted intermediate their ends, one of said legs having a pivot connection to the board table and the other of said legs having an upper end rectilinearly movable with respect to the ironing board in the longitudinal direction thereof, and
- an adjusting mechanism for adjusting the working height of the board table, comprising at least one stationary locking member and a locking bar which has a pivot connection with the movable upper end of one of the legs.


[0003] Ironing boards are generally used in the household, often continually by the same person, so that the ironing board needs always to be placed at the same working height. The height of the ironing board according to US-A-2,912,775 can be continuously adjusted, however it is not possible to enable a user to restore the ironing board, which has one been placed at a good working height, over and over again to the same unfolded state.

[0004] The object of the invention is to offer a solution for the problem outlined above and therefore - according to the invention - the folding ironing board according to the preamble is characterised in that the adjusting mechanism has at least one stationary locking member(s) which is adjustably connected to a locking bar at a position between the upper ends of the legs.

[0005] Upon subsequent usage, the mechanism having a stop member shall determine the adjustment position as the ironing board is unfolded, so that this consequently stands at a proper working height.

[0006] It is pointed out that NL-A-6908428 discloses an ironing board comprising an ironing board table, a supporting frame having legs pivotally mounted with respect to each other, one of said legs having a pivot connection to the board table and the other leg having an upper end being rectilinearly movably mounted with respect to the ironing board in the longitudinal direction thereof. Further the known ironing board has an adjustment mechanism for adjusting the working height of the board table and this adjusting mechanism has a set of two stop members of which one has an adjustable position as seen in the longitudinal direction of the board table, and of which one is movable with the movable upper end of the other leg. However, this known ironing board can not be collapsed to a folded position in which both legs extend parallel to the lower side of the ironing board table. The stop members are not adjustably connected to a locking bar at a position between the upper ends of the legs.

[0007] Preferably the locking bar runs through an opening in the stationary locking member and the adjustable stop member can be fastened in the locking bar.

[0008] Further the adjustable stop member may comprise a clasp which is placed along the locking bar and is displaceable along it and is provided with a screw thread, as well as a nut which interacts with the screw thread and can be manually operated by a user, for fixing said stop member in the desired adjustment position.

[0009] The invention shall now be explained in greater detail with reference to the drawing, in which:

Fig. 1 shows a perspective view of an unfolded ironing board.
Fig. 2 shows a partially perspective bottom view of the ironing board of Fig. 1,
Fig. 3 shows an exploded view of a stop member, consisting of two parts, used in the ironing board according to the previous figures,
Fig. 4 reproduces a detailed view of individual components of the ironing board.

[0010] Figures 1 and 2 show a folding ironing board 1, especially a domestic ironing board, which is provided with an ironing board table 5 mounted in an ironing board rim 3. The ironing board table is borne by a supporting frame having two leg elements 11 and 13 which are pivotable between a folded and an unfolded position. The leg elements are hinged together at 15. At the ends of the leg elements 11 and 13 there are supports having respective parts 11A, 11B and 13A, 13B. With the aid of these supports, the ironing board can be placed firmly on a floor. Interacting with one of the leg elements, namely the leg element 13, is a locking mechanism for locking in the unfolded position shown in Figure 1 and at a working height to be chosen within defined limits the position of the ironing board table 5 above a floor. The locking mechanism comprises one, in the drawn embodiment two, stationary locking element(s) 17, connected in an essentially stationary manner to the ironing board table, and two locking elements 19 which are movable relative to the said stationary locking element(s). An adjusting mechanism is present, having a stop member 21 which can be placed and fixed adjustably by a user in the adjustment position shown in Figure 2 and which interacts with one of the stationary locking elements 17, the design of which stop member is to be discussed in greater detail, primarily with reference to Figures 3 and 4. Whenever the ironing board is unfolded, this stop member limits the movement of the two movable locking elements 19 and thereby determines the working height of the ironing board 1 in dependence upon the said adjustment position.

[0011] As will be discussed in greater detail below, especially with reference to Figures 2 and 4, the stop member 21 is continuously adjustable for a continuous adjustment of the working height of the ironing board table.
The working of the locking mechanism is briefly as follows. When the ironing board is folded, the leg element 13 pivots about the hinge pin 15 and the ironing board end 23 moves according to the path 25 along the bottom edge of the ironing board. The other leg element 11 is hinged at a fixed place to the bottom edge of the ironing board. The two stationary locking elements 17 allow the locking bars 37 to pass through the openings 35 until the stop member 21 butts against the stationary locking element 17. At this point the ironing board is placed by the user onto the floor, possibly even pressed down somewhat, whereby the two locking bars 37, by virtue of the generated friction, to some extent tilt the two locking elements 17 about the axis of the bar 27, causing the two locking bars 37 to be clamped in place as the result of a sheering effect. Following ironing, the ironing board can be refolded by operating the control element 33 and thereby twisting the bar 27 over a small angle, thereby releasing the sheering effect and enabling the ironing board end 23 of the leg element 13 to return to the starting position, again via the path of transport 25. If so desired, in support of the operation of the locking elements 17 and the working thereof, a spring can be present, which pressurizes the control element 33 and hence the bar 27 towards the position shown in Figure 2.

Although the invention has been explained with reference to just a single illustrative embodiment, the invention is by no means limited thereto. Thus the stop member can have a totally different shape from that reproduced in the figures. The shown stop member 21 should only be regarded as one possible embodiment. Another simple embodiment might comprise an insert pin which is able to be inserted in an opening specially made for it in the locking bar 37. It is even possible to use a stop member which clamps itself to the movable locking element, for example in the form of a clamp which is easily operable by a user. A clamp of this type can be mounted on the locking element in such a way that it is displaceable but cannot be lost, for example. The locking element, too, can possess a totally different shape and can comprise, for example, a round rod or pipe or the like.

Claims

1. Folding ironing board comprising:
   - an ironing board table (5),
   - a supporting frame having two legs (11, 13) inter pivoted intermediate their ends, one (11) of said legs having a pivot connection to the board table (5) and the other (13) of said legs having an upper end rectilinearly movable with respect to the ironing board in the longitudinal direction thereof, and
   - an adjusting mechanism for adjusting the working height of the board table (5), comprising a
locking bar (37) which has a pivot connection with the movable upper end of one of the legs (13), and at least one stationary locking member (17) which is connected to the board table (5) in a stationary position with respect to the longitudinal direction of said board table (5) and is limitedly tiltable between a position in which it engages the locking bar and prevents moving thereof and a position in which the locking of the locking bar is perished and legs (11, 13) may be collapsed.

characterised in
that the adjusting mechanism has at least one stop member (21), which is adjustably connected to a locking bar (37) at a position between the upper ends of the legs (11, 13).

2. Folding ironing board according to claim 1, characterised in that the locking bar (37) runs through an opening (35) in the stationary stop member (17).

3. Folding ironing board according to claim 2, characterised in that the stop member (21) comprises a clasp (21A) which is placed around the locking bar (37) and is displaceable along it and is provided with a screw thread (45), as well as a nut (21B), which interacts with the screw thread (45) and can be manually operated by a user, for fixing the stop member in the desired adjustment position.

Patentansprüche

1. Klappbares Bügelbrett, das folgendes aufweist:
   - einen Bügelbrett-Tisch (5),
   - einen Abstützhaken, der zwei Beine (11, 13) aufweist, die zwischen ihren Enden gelenkig miteinander verbunden sind, wobei das eine (11) der Beine eine Schwenkverbindung mit dem Bügelbrett-Tisch (5) hat und das andere Bein (13) ein oberes Ende mit der Arbeitshöhe des Bügelbrett-Tisches (5), der eine Verriegelungsstange (37), die eine Schwenkverbindung mit dem beweglichen Oberen Ende des einen Beins (12) hat, und mindestens ein stationäres Verriegelungselement (17) aufweist, das mit dem Bügelbrett-Tisch (5) in einer stationären Position in bezug auf die Längserstreckungsrichtung des Bügelbrett-Tisches (5) verbunden ist und begrenzt kippbar ist zwischen einer Position, in der es mit der Verriegelungsstange in Eingriff tritt und eine Bewegung derselben verhindert, sowie einer Position, in der die Verriegelung der Verriegelungsstange aufgehoben ist und die Beine (11, 13) zusammengeklappt werden können,
   - einen Einstellmechanismus zum Einstellen der Arbeitshöhe des Bügelbrett-Tisches (5), der eine Verriegelungsstange (37), die eine Schwenkverbindung mit dem beweglichen Oberen Ende des einen Beins (12) hat, und mindestens ein stationäres Verriegelungselement (17) aufweist, das mit dem Bügelbrett-Tisch (5) in einer stationären Position in bezug auf die Längserstreckungsrichtung des Bügelbrett-Tisches (5) verbunden ist und begrenzt kippbar ist zwischen einer Position, in der es mit der Verriegelungsstange in Eingriff tritt und eine Bewegung derselben verhindert, sowie einer
   - der Einstellmechanismus mindestens ein Anschlagelement (21) aufweist, das mit der Verriegelungsstange (37) an einer Stelle zwischen den oberen Enden der Beine (11, 13) verstellbar verbunden ist.

2. Klappbares Bügelbrett nach Anspruch 1, dadurch gekennzeichnet, daß die Verriegelungsstange (37) sich durch eine Öffnung (35) in dem stationären Verriegelungselement (17) hindurch erstreckt.

3. Klappbares Bügelbrett nach Anspruch 2, dadurch gekennzeichnet, daß das Anschlagelement (21) eine Klammer (21A) aufweist, die um die Verriegelungsstange (37) herum angeordnet ist und entlang dieser verschiebbar ist und die mit einem Schraubgewinde (45) sowie mit einer Mutter (21B) versehen ist, die mit dem Schraubgewinde (45) zusammenwirkt und sich von einem Benutzer manuell betätigen läßt, um das Anschlagelement in der gewünschten Einstellposition festzulegen.

Revendications

1. Table à repasser pliante comprenant :
   - un plateau de table à repasser (5),
   - un cadre de support comportant deux pieds (11, 13) pivotant l'un par rapport à l'autre à mi-distance de leurs extrémités, l'un (11) desdits pieds ayant une liaison de pivotement par rapport au plateau de table (5) et l'autre (13) desdits pieds ayant une extrémité supérieure mobile de façon rectiligne par rapport à la table à repasser dans le sens longitudinal de celle-ci, et
   - un mécanisme de réglage pour régler la hauteur de travail du plateau de table (5), comprenant une barre de verrouillage (37) qui a une liaison de pivotement avec l'extrémité supérieure mobile de l'un des pieds (13) et au moins un élément de verrouillage fixe (17) qui est relié au plateau de table (5) dans une position fixe par rapport au sens longitudinal dudit plateau de table (5) et qui est inclinable de façon limitée entre une position dans laquelle il se met en prise avec la barre de verrouillage et empêche son déplacement et une position dans laquelle le verrouillage de la barre de verrouillage est supprimé et les pieds (11, 13) peuvent être re-
pliés,

caractérisée en ce que
le mécanisme d’ajustement comporte au moins un élément d’arrêt (21), qui est relié de façon ajustable à une barre de verrouillage (37) à une position entre les extrémités supérieures des pieds (11, 13).

2. Table à repasser pliante selon la revendication 1, caractérisée en ce que la barre de verrouillage (37) passe à travers une ouverture (35) dans l’élément d’arrêt fixe (17).

3. Table à repasser pliante selon la revendication 2, caractérisée en ce que l’élément d’arrêt (21) comprend un crochet (21A) qui est placé autour de la barre de verrouillage (37) et qui peut être déplacé le long de celle-ci et qui est pourvu d’un filetage (45), ainsi qu’un écrou (21B), qui interagit avec le filetage (45) et qui peut être actionné manuellement par un utilisateur, pour fixer l’élément d’arrêt dans la position d’ajustement souhaitée.