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COMBINED CONTAINER AND IRONING BOARD

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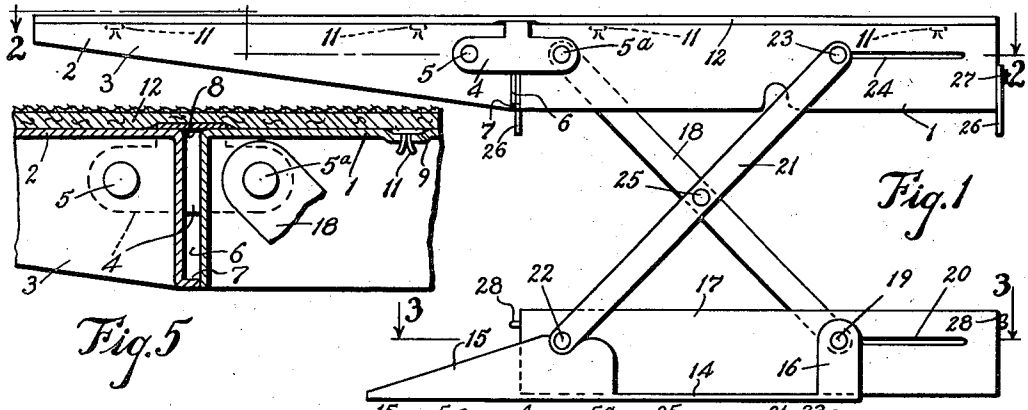


Fig. 1

Fig. 5

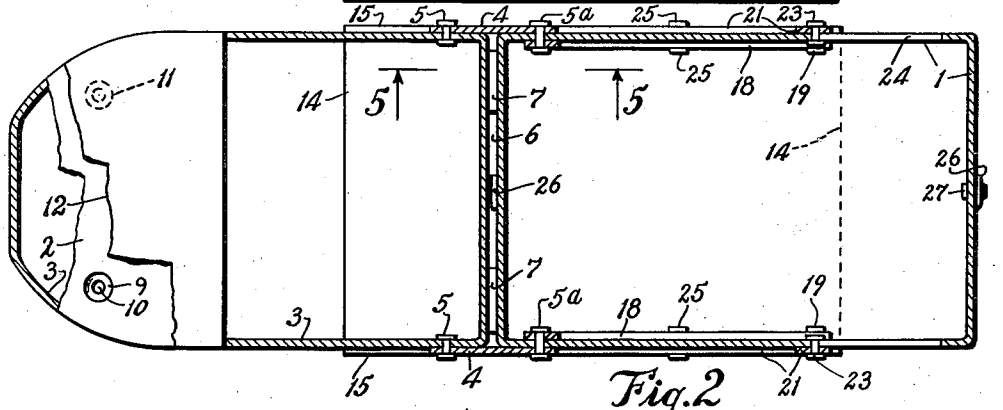


Fig. 2

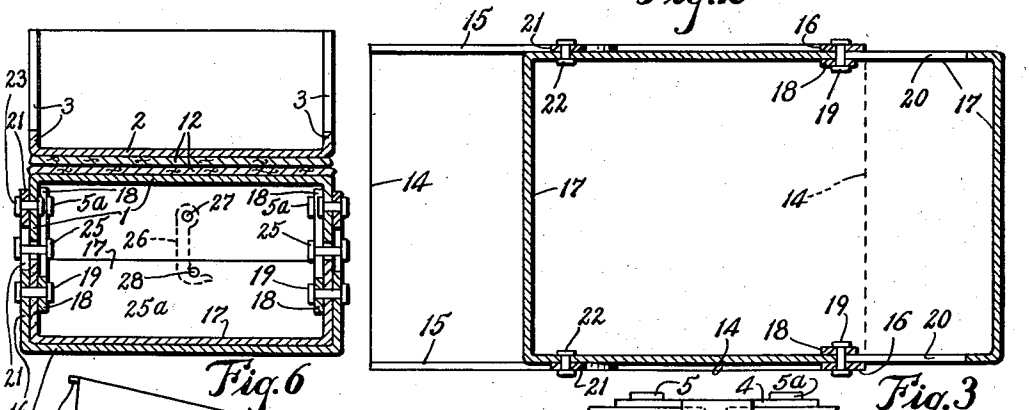


Fig. 3

Fig. 6

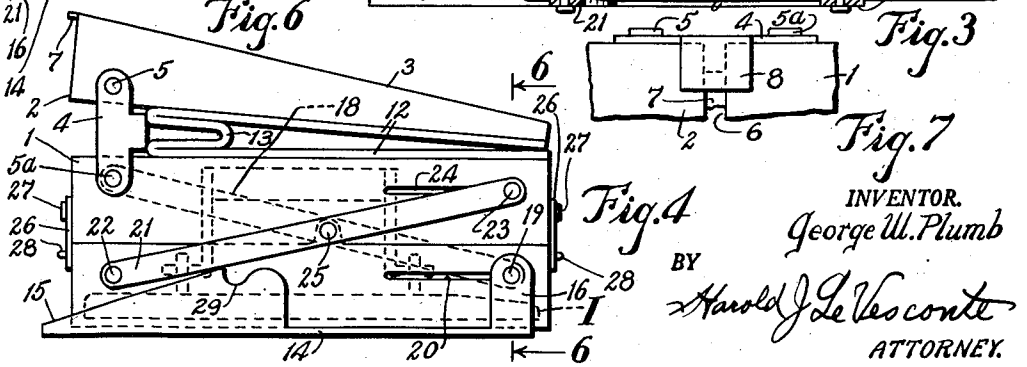


Fig. 4

Fig. 7

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COMBINED CONTAINER AND IRONING BOARD

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17 Claims. (Cl. 38—112)

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This invention relates to folding ironing boards and more particularly to a form thereof which may be folded or collapsed into a small space whereby it may be packed into small space so that it may be included in luggage to accompany a so-called "travelling iron." Heretofore, users of these travelling irons have had to use the tops of hotel dressers or tables or the bottoms of inverted dresser drawers for a "board" on which to iron articles of clothing due to the fact that there has been no satisfactory ironing board which is sufficiently light in weight and capable of being folded into sufficiently small space to warrant serious consideration as a travelling accessory.

With these considerations in mind, it is an object of the present invention to provide a folding ironing board of such light weight that it may be conveniently carried as a travelling accessory.

Another object of the invention is to provide a folding ironing board which is so constructed and arranged that when folded or collapsed, it is reduced to a relatively small space so that it may be conveniently included as a travelling accessory.

Still another object of the invention is to provide a folding ironing board which is so constructed and arranged that when folded or collapsed, it forms a container for a flatiron of the folding or so-called "travelling" type.

A still further object of the invention is to provide an ironing board having the above which is simple and sturdy in construction and which is composed as far as possible of duplicate parts with incident reduction of the cost of tooling and manufacture.

With the above objects in view, together with such other objects and advantages as may subsequently appear, the invention resides in the parts and in the combination, construction and arrangement of parts hereinafter described and claimed, and illustrated, by way of example, in the accompanying drawing, in which:

Fig. 1 is a side elevation of an ironing board embodying the principles of the invention; the board being shown unfolded for use,

Figs. 2 and 3 are top plan sectional views taken on the lines 2—2 and 3—3, respectively, of Fig. 1,

Fig. 4 is a side elevation of the ironing board shown in Fig. 1 and showing in dotted lines a flatiron contained in the cavity formed by the folding or collapsing of the ironing board,

Fig. 5 is an enlarged, fragmentary, sectional, side elevation taken on the line 5—5 of Fig. 2,

Fig. 6 is a vertical, sectional, and elevation of the folded-up ironing board taken on the line 6—6 of Fig. 4, and

Fig. 7 is a top plan view of the subject matter of Fig. 5; the ironing board cover being omitted for the purpose of clearness of illustration.

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In the illustrated mode of execution of the invention, the ironing board structure, per se, includes a main member 1 in the form of an inverted, shallow, rectangular, box-like element formed of sheet metal to the forward end of which the rear end of an extension member 2 is hingedly attached by means presently to be described in detail. When unfolded for use, the top surfaces of the members 1 and 2 lie in the same plane and the member 2 is rounded at its free end and is provided with a depending wall or skirt portion 3. The members 1 and 2 are hingedly connected by a pair of links 4—4 one end of each of which is pivotally connected by rivets 5a—5a to the forward ends of the sidewalls of the member 1 and the other ends of the links are pivotally connected by rivets 5—5 to the sidewalls at the rear end of the member 2. The length of the links 4—4 and the spacing of the points of connection with the members 1 and 2 is such that a slight clearance space 6 exists between the adjacent ends of the members 1 and 2 and the lower edge of the rear wall of the member 2 is bent to form a rearwardly extending lip 7 adapted to engage the front wall of the member 1 and to cooperate with the links 4—4 to hold the members in a common plane when the board is unfolded for use. Intermediate their ends, the links 4—4 are each provided with an upwardly and thence laterally projecting tongue 8 which overlies the adjacent ends of the members 1 and 2 and these tongues facilitate the folding of the board in a manner hereinafter to be explained.

The ironing board members are each provided with a series of circular depressions 9 in the center of each of which is an opening 10 in which suitable snap fasteners 11 attached to the under surface of an ironing pad 12 may be inserted. The depressions 9 are of such diameter and depth as to receive the head portions of the snap fasteners with the upper faces thereof in the same general plane as the faces of the members 1 and 2 thereby providing a smooth surface for the pad. It will be noted that this mode of attaching the pad to the board makes it unnecessary to provide a pad with a portion thereof extended over the edge of the board as has been the general practice heretofore.

When it is desired to fold the members 1 and 2 together, the member 2 is lifted at its free end, swinging it about the axes of the rivets 5—5 until the upper face of the member engages the edge of the tongues 8—8 of the links 4—4. Continued swinging movement imparted to the member 2 will then cause it and the links

4—4 to swing as a unit about the axes of the rivets 5a—5a until it assumes the position shown in Fig. 4 with the pad 12 assuming the fold 13 shown in that figure.

The supporting structure for the ironing board comprises a base member 14 formed of sheet metal with a flat, rectangular bottom portion and having integral, parallel, upturned side portions 15—15 adjacent its forward end and upturned arms 16—16 at each side adjacent its rear end. Slidably disposed on the bottom portion of the base member 14 and guided by the side portions 15—15 and the arms 16—16 is a lower box member 17 which is identical with the member 1 except that it is disposed with its open side uppermost. The rivets 5a—5a each additionally connect one end of each of a pair of links 18—18 to the main member 1 and the other ends of these links are pivotally connected to the arms 16—16 by rivets 19—19. The sidewalls of the lower box member 17 adjacent the rear end thereof are each provided with a slot 20 spaced from and extending parallel to the bottom of the member. Each sidewall is disposed between the adjacent faces of the link 18 and the arm 16 and the associated rivet 19 passes through the slot 20 thus securing the box member 17 to the base member 14 while preserving the capacity for relative sliding movement between them. A second pair of links 21—21 are pivotally connected by rivets 22—22 to the forward ends of the sidewalls of the box member 17 and these links extend diagonally upwardly and rearwardly outside of and adjacent to the links 18—18 and at their other ends are connected by rivets 23—23 to slots 24—24 formed in the dependent sidewalls of the main member 1 adjacent the rear end thereof. At each side of the structure the intersecting links are pivotally connected at 25 to form a lazy tongs. Since the links at their ends are in sliding engagement with the members 1 and 17, these box members may be moved toward and away from each other while being held in parallelism with each other.

When the structure is collapsed, as shown in Fig. 4, the edges of the members 1 and 17 meet to form a cavity 25a in which a flatiron I of the folding or socalled "travelling" type may be contained. A pair of hooks 26—26 secured by rivets 27—27 to the end walls of the member 1 and adapted to engage studs 28—28 carried by the end walls of the member 17 serve to retain the board in closed position.

To place the board in position for use, the hooks 26—26 are first released. Then the ironing board portion is lifted up and the weight of the iron in the cavity 25a will cause the lifting movement to separate the members 1 and 17. As the members separate, the crossed links 18 and 21 at each side of the structure tend to approach more nearly vertical positions. Since the lower ends of the links 18 are attached to the arms 16 which are integral with the base member 14 and the lower ends of the links 21 are attached to the member 17, this scissor movement of the links will cause the members 14 and 17 to be shifted relative to each other with the result that the forward end of the base member will be shifted under the member 2 to give added support during the ironing operation.

As the above-described movement reaches its end, the lower ends of the links 21—21 engage the upwardly and rearwardly inclined top edges of the base member side portions 15—15 and together with the forward end of the member 17 are lifted away from the base member 14 and just as the rivets 19—19 and 23—23 reach the end of the slots 20—20 and 24—24 the lower ends of the links 21—21 drop into notches 29—29 formed in the upper edges of the side portions 15—15 and these notches are so shaped as to prevent the links from riding up out of them when pressure is applied to the ironing board incident to ironing. When this is done, the member 2 is swung out into position and the board is ready for use. When the ironing is completed, the iron is placed in the member 17, the member 2 is folded back over the member 1, the structure is tilted up at its forward end sufficiently to allow the base member to drop free of the ends of the links 21—21 and the top is pressed down into engagement with the member 17 to enclose the iron and the hooks are locked on the studs 28—28.

All of the component parts are of simple design and it is to be noted that the members 1 and 17 are identical as are the links 4—4 and the links 18 and 21. This reduces tooling costs and makes for economical manufacture. Further, all of the parts are of such form that they may be formed from sheet metal with a minimum of waste.

The resulting structure is simple and fool proof and is quickly set up for use and as quickly folded up for storage or packing in luggage.

While I have shown and described a specific embodiment of my invention, I do not limit myself to the exact details of construction set forth, and the invention embraces such changes, modifications and equivalents of the parts and their formation and arrangement as come within the purview of the appended claims.

I claim:

1. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board.

2. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface, means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board and an ironing board extension member hingedly connected to one end of said upper box member.

3. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and means connecting said box members constructed and arranged to

permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board and an ironing pad attached to the upper surface of said upper box member.

4. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member and having an extension element hinged thereto; the upper surface of said last named box member and extension serving as an ironing board surface and means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board, an ironing pad on the upper faces of said upper box member and said extension and means connecting said pad to said faces constructed and arranged to permit said extension to be folded over on said upper box member.

5. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface, means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board and an ironing board extension member hingedly connected to one end of said upper box member, said connecting means comprising a lazy tongs unit at each side of said box members.

6. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface, means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board and an ironing board extension member hingedly connected to one end of said upper box member, said connecting means comprising a lazy tongs unit at each side of said box members, each of said units comprising a pair of links pivotally connected intermediate their ends, one end of one of said links being pivotally connected to the end of said upper box member adjacent said extension member and its other end having sliding engagement with the opposite end of the lower box member and the other of said links being pivotally connected to the end of said lower box member adjacent the end of the upper box member to which the first-named link is attached and connected for sliding engagement with the opposite end of the upper box member.

7. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member,

an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface, means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board and an ironing board extension member hingedly connected to one end of said upper box member, said connecting means comprising a lazy tongs units pivotally attached to the same ends of each of said box members and having sliding engagement with the other ends of each of said members.

8. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board, said connecting means being additionally connected to said base member and being operative upon separating said members to effect a sliding movement between said base member and the lower box member with the end of said base member being extended beneath the ironing board extension and operative upon bringing said box members together to retract said base member beneath the lower box member.

9. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board, said base member being constructed and arranged to have latching engagement with said connecting means when said box members are separated for use as an ironing board.

10. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and means connecting said box members constructed and arranged to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be separated to elevate said upper box member for use as an ironing board, said base member having side wall portions provided with notches adapted to be engaged by said means when said box members are separated and said notches being so disposed that the weight of said ironing board will maintain said connecting means in engagement with said notches until manually released.

11. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member,

an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and an ironing board extension member hingedly connected to one end of said upper box member.

12. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member, means connecting said box members for bodily movement toward and away from each other; the upper surface of said last named box member serving as an ironing board surface and an ironing board extension member hingedly connected to one end of said upper box member, said connecting means comprising a lazy tongs unit at each side of said box members.

13. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and an ironing board extension member hingedly connected to one end of said upper box member, connecting means comprising a lazy tongs unit at each side of said box members, each of said units comprising a pair of links pivotally connected intermediate their ends, one end of one of said links being pivotally connected to the end of said upper box member adjacent said extension member and its other end having sliding engagement with the opposite end of the lower box member and the other of said links being pivotally connected to the end of said lower box member adjacent the end of the upper box member to which the first-named link is attached and connected for sliding engagement with the opposite end of the upper box member.

14. A combined container and ironing board comprising, a base member, an open-top box member slidably mounted on said base member, an upper, open-bottom box member disposed above said first-named box member; the upper surface of said last named box member serving as an ironing board surface and an ironing board extension member hingedly connected to one end of said upper box member, connecting means comprising a lazy tongs units pivotally attached to the same ends of each of said box members and having sliding engagement with the other ends of each of said members.

15. A combined container and ironing board comprising, a lower open top box member, an upper, open bottom box member disposed above said first-named box member; the upper surface of said upper box member serving as an ironing board surface, and lazy tongs devices connecting said box members at opposite sides thereof constructed and arranged to be collapsed with said box members positioned with their edges in juxtaposition and resultant formation of an iron-containing cavity or to be locked in extended position with resultant elevation of said upper box member for use as an ironing board; each of said lazy tongs devices comprising a first member having one end pivotally connected to the outer face of one side of said lower box member and adjacent to one end thereof and having its opposite end slidingly connected to the outer face of the upper box member adjacent the opposite end thereof, a second lazy tongs member correspondingly but oppositely interconnecting the sides of said box members and attached to the inner faces of said sides, and a hinge pin interconnecting said lazy tongs members at their mid length.

16. A combined container and ironing board comprising, a lower, open top box member, an upper, open bottom box member disposed above said first-named box member, lazy tongs devices permanently interconnecting said box members at opposite sides thereof constructed and arranged to be collapsed with said box members positioned with their edges in juxtaposition and resultant formation of an iron-containing cavity or to be locked in extended position with resultant elevation of said upper box member to permit access to said cavity, an extension element, and devices hingedly connecting said upper box member and said element constructed and arranged to permit said element to be positioned in end to end relation with said upper box member or to be positioned in overlying relation thereto; the upper surfaces of said upper box member and said extension element when arranged in said end to end relation constituting an ironing board surface; each of said lazy tongs devices comprising a first member having one end pivotally connected to the outer face of one side of said lower box member and adjacent to one end thereof and having its opposite end slidingly connected to the outer face of the upper box member adjacent the opposite end thereof, a second lazy tongs member correspondingly but oppositely interconnecting the sides of said box members and attached to the inner faces of said sides, and a hinge pin interconnecting said lazy tongs members at their mid length.

17. A combined container and ironing board comprising a lower, open top box member, an upper, open bottom box member disposed above said lower box member, means including a pair of lazy tongs devices each interconnecting opposite parallel sides of said box members and operable to permit said box members to be positioned with their edges in juxtaposition with resultant formation of an iron-containing cavity or to be spread apart with resultant elevation of said upper box member for use as an ironing board and devices associated with said lazy tongs devices and with said box members, respectively, operable to lock said box members in said spread apart and juxtaposed positions; each of said lazy tongs devices comprising a first member having one end pivotally connected to the outer face of one side of said lower box member and adjacent to one end thereof and having its opposite end slidingly connected to the outer face of the upper box member adjacent the opposite end thereof, a second lazy tongs member correspondingly but oppositely interconnecting the sides of said box members and attached to the inner faces of said sides, and a hinge pin interconnecting said lazy tongs members at their mid length.

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