D. CALARCO.

CONVERTIBLE IRONING BOARD, STEPLADDER, AND SLED.

APPLICATION FILED OCT. 22, 1918.

1,335,652. **Patented Mar. 30, 1920.**

2 SHEETS—SHEET 1.

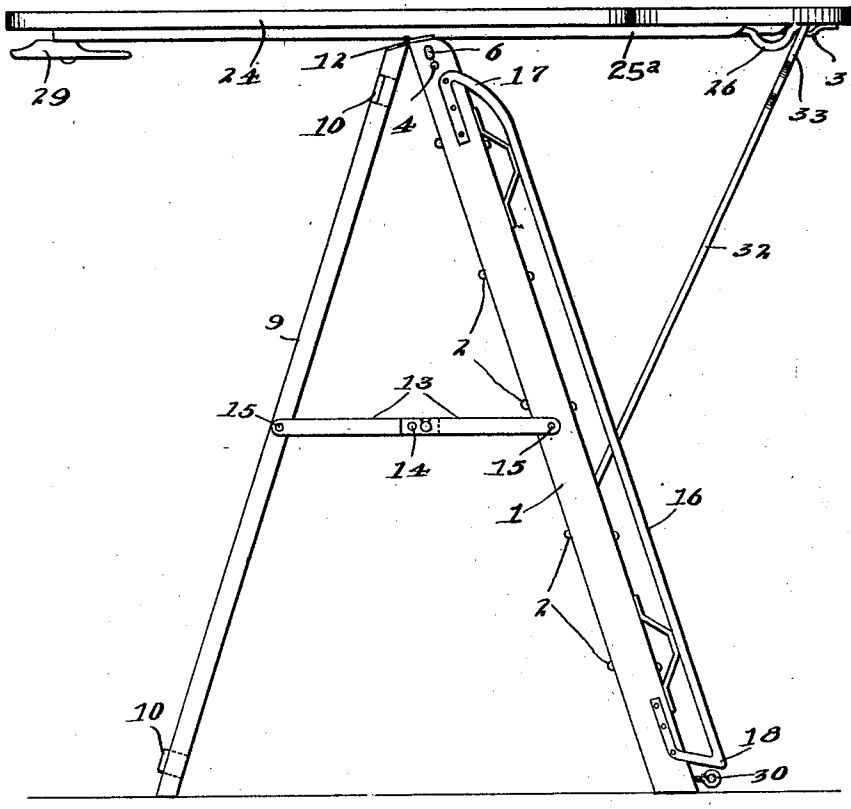


Fig. 1.

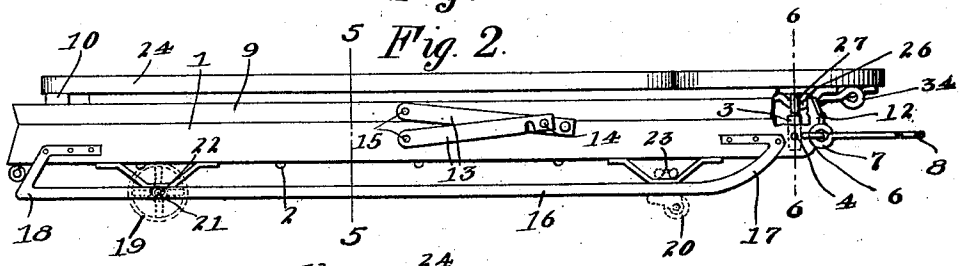


Fig. 2.

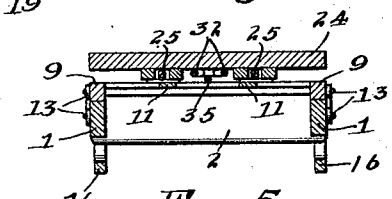


Fig. 5

Witnesses
R. A. Thomas

Inventor
Domenico Calarco

By Victor J. Evans
Attorney

D. CALARCO.

CONVERTIBLE IRONING BOARD, STEPLADDER, AND SLED.

APPLICATION FILED OCT. 22, 1918.

1,335,652. **Patented Mar. 30, 1920.**

2 SHEETS—SHEET 2.

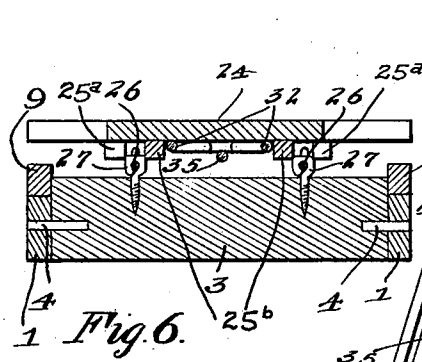


Fig. 6.

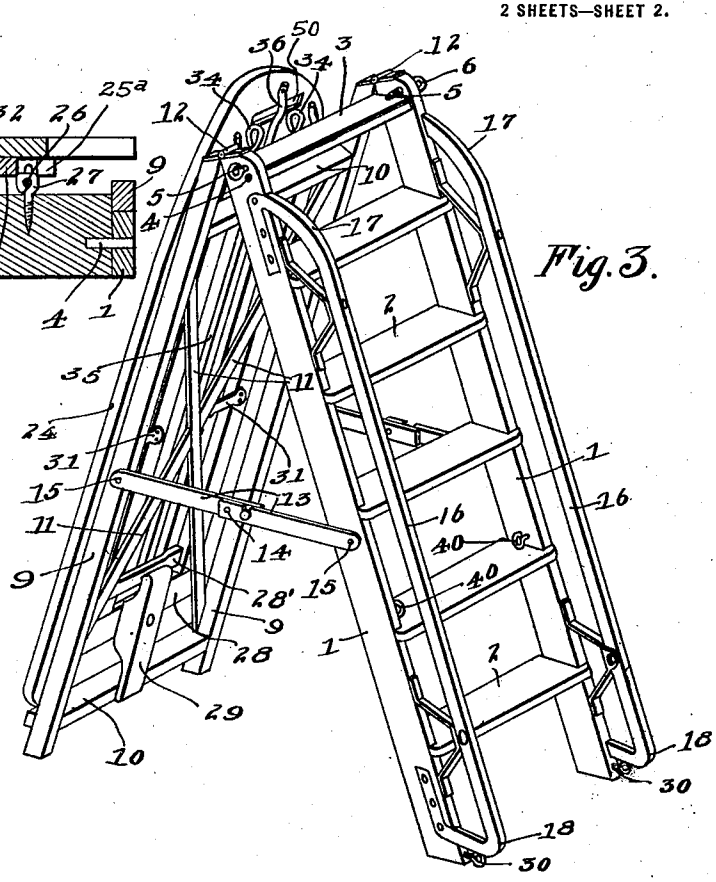


Fig. 3.

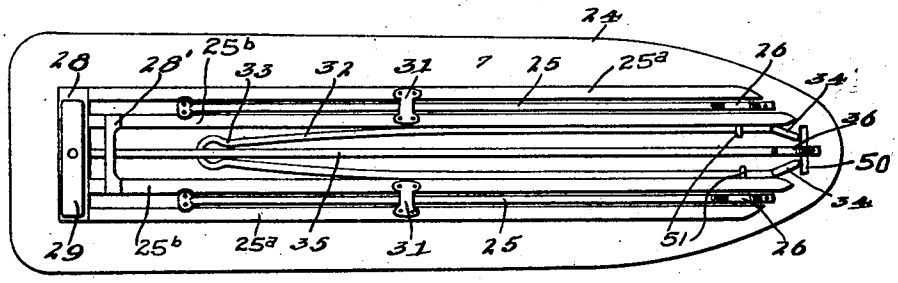


Fig. 4.

Witnesses

M. A. Thomas

Inventor

Domenico Calarco

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

DOMENICO CALARCO, OF BURLINGTON, VERMONT.

CONVERTIBLE IRONING-BOARD, STEPLADDER, AND SLED.

1,335,652. Specification of Letters Patent. Patented Mar. 30, 1920.

Application filed October 22, 1918. Serial No. 259,188.

To all whom it may concern:

Be it known that I, DOMENICO CALARCO, a subject of the King of Italy, residing at Burlington, in the county of Chittenden and State of Vermont, have invented new and useful Improvements in Convertible Ironing-Boards, Stepladders, and Sleds, of which the following is a specification.

This invention is an improved convertible ironing board, step ladder and sled which may be also provided with wheels for use as a wagon, the object of the invention being to provide an improved device of this kind which is simple in construction and which can be readily arranged for any of such uses.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings:—

Figure 1 is a side elevation of my improved convertible ironing board, step ladder and sled, showing the same arranged for use as an ironing board.

Fig. 2 is a similar view of the same as arranged for use as a sled, and also indicating supporting wheels in dotted lines with their axles mounted on the runners of the sled.

Fig. 3 is a perspective view showing the device arranged for use as a step ladder.

Fig. 4 is a detail bottom plan of the ironing board and its connections.

Fig. 5 is a transverse sectional view, taken on the plane indicated by the line 5—5 of Fig. 2.

Fig. 6 is a transverse section on the line 6—6 of Fig. 2.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

The side bars 1 of the step ladder are connected together by steps 2. A top step 3 is also provided which has its ends pivotally connected to the side bars by trunnions 4, Fig. 6, so that said top step can be arranged either in a horizontal position, as when the device is in use, or at an angle other than a right angle with respect to the side bars, as when the article is folded. Transverse screws 5 are also provided to secure the said top step in adjusted position. Said screws are provided at their outer ends with eyes 6, to which the hook ends 7 of a bail 8 may be attached. A cord may be attached to the bail and used in connection therewith for drawing the device when the same is folded and arranged for use as a toy wagon. The prop bars 9 of the ladder are connected together by crossed bars 10 and also by cross braces 11. At their upper ends the prop bars are pivotally connected to the upper ends of the bars 1 as at 12. Links 13 connect the bars 1 and 9, the said links being foldable and each comprising a pair of members which are pivotally connected together as at 14 and are also pivotally connected to the bars 1 and 9 as at 15. Hence the step ladder is adapted to be folded, as will be understood.

Runners 16 are also provided which are preferably constructed as here shown and which have their upturned ends 17—18 secured to the outer sides of the bars 1 at the ends of said bars, the said runners being arranged on the front side of the said bars. The runners adapt the device for use as a sled. To enable the device to also be used as a small wagon, I provide for the rear end of the article wheels 19 and caster wheels 20 for the front end thereof. The said wheels 19 are mounted on axle bolts 21 which are detachably secured in transverse openings with which the runners are provided, the said bolts having clamping nuts 22. Bolts 23 serve as pivots to detachably and pivotally mount the frame of the caster wheels under the front portion of the runners as shown, the said bolts being vertically arranged and passing through openings with which the runners are provided. When the device is set up for use as a step ladder the runners form hand rails.

The ironing board 24 is provided on the underside with a pair of longitudinally arranged rods 25 which have their ends attached thereto and their intermediate portions spaced therefrom, each of said rods having an offset 26 near that end of the ironing board which is the upper end when the article is arranged for use as step ladder. Screw eyes 27 are attached to the upper step 3 of the ladder, Fig. 6, said screw eyes projecting from one edge of said step, and the rods 25 pass through and are slidable in the eyes of said screws so that said screw eyes and said rods serve to connect the ironing board slidably and pivotally to the upper step 3 and hence the board can be folded against the prop bars 9 of the step ladder or can be arranged in a horizontal

position on the upper end of the step ladder, as will be understood, and as shown.

The rods 25 are arranged between pairs of spaced longitudinally arranged guard strips 25ª and 25ᵇ, Figs. 4 and 6 which are secured on the under side of the ironing board. Said guard strips are connected together at a point near the lower end of the ironing board by a cross strip 28, and the inner guard strips 25ᵇ are also connected together at a point near the cross strip 28 by a cross bar 28′. A turn button 29 is pivotally mounted on the center of the cross strip 28 and may be turned to engage at one end against the lower cross bar 10 of the prop bars 9 of the ladder and to engage at the opposite end on the cross bar 28′, Fig. 3, when the ironing board is folded against the said prop bars 9, to secure the ironing board and the prop bars firmly together. A suitable fastening pin may be inserted in alined openings in the turn button and in the said bars 10 and 28′ to secure the turn button, if desired.

Clamping screws 30 are provided near the lower ends of the ladder bars 1 to receive a rope or other cable for binding the prop bars 9 and the ladder bars 1 together. The adjacent bars or guard strips 25ª and 25ᵇ are connected together by cross plates 31 which are arranged about midway between the ends of the ironing board and which serve as stops and to bear against the screw eyes 27 to maintain the ironing board in substantially balanced position when the same is arranged for use and on the upper end of the step ladder as shown in Fig. 1.

To hold the ironing board when thus arranged for use, I provide a brace loop 32 which has an open eye 33 at its bight and eyes 34 at its ends. The said brace loop is slidably arranged on the lower side of the ironing board, between the inner strips 25ᵇ and between the bottom of the board and a longitudinal rod 35, said rod having its ends attached to the ironing board so that its intermediate portion is spaced from the board, and said rod also having an offset portion 36 near its upper end for engagement by the eye 33 of the loop 32, so that the said brace rod is slidably and loosely or pivotally connected to the ironing board. When the article is folded the brace rod can be arranged on the bottom of the ironing board, entirely out of the way and between the pairs of guard strips 28. When the article is set up for use as an ironing board the said brace rod 32 is drawn longitudinally out from the upper end of the ironing board, its open eye 33 is engaged with the offset 36 of the rod 35 and is seated in the opening 50 of the ironing board and the loops 34 of said brace rod are slipped or engaged over screw eyes 40, which screw eyes are secured and arranged on the inner sides of the side bars 1, at a suitable point, as shown.

As shown in Fig. 4, the side bars of the brace loop 32 are adapted to be interposed between lugs 51 on the strips 25ᵇ and the under side of the board 24, when the said loop 32 is not in use. These lugs 51, however, will not interfere with the adjustment of the loop 32 to the working position shown in Fig. 1.

While I have herein shown and described a preferred embodiment of my invention, I would have it understood that changes may be made in the form, proportion and construction of the several parts without departing from the spirit of my invention and within the scope of the appended claims.

Having thus described my invention, I claim:—

1. A foldable step ladder having a member comprising side bars, and combined hand rails and runners extending substantially throughout the length of the side bars and spaced therefrom and having rigid turned end portions fixedly connected to the side bars.

2. In combination with a step ladder and hinged prop means complementary thereto, a board, slidably and pivotally connected to the upper end of the step ladder so that the board can be folded against the ladder or arranged horizontally at an intermediate point of its length on the upper end thereof when the ladder is set up, and a brace for the ironing board, said brace being detachably connected to the ladder and slidably and pivotally connected to the board.

3. In combination with a foldable step ladder, a board having longitudinally arranged rods on its under side, and means at the upper end of the ladder with which certain of said rods are slidably and pivotally engaged so that the board is slidably and pivotally connected to the ladder and a brace slidably and pivotally connected with the remaining rod and provided with means for its detachable connection to the ladder; the board being provided with means for the interlocking thereto of the upper end of the brace when said brace is in working position.

In testimony whereof I affix my signature.

DOMENICO CALARCO.