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SUPPORT DEVICE FOR A STEPLADDER

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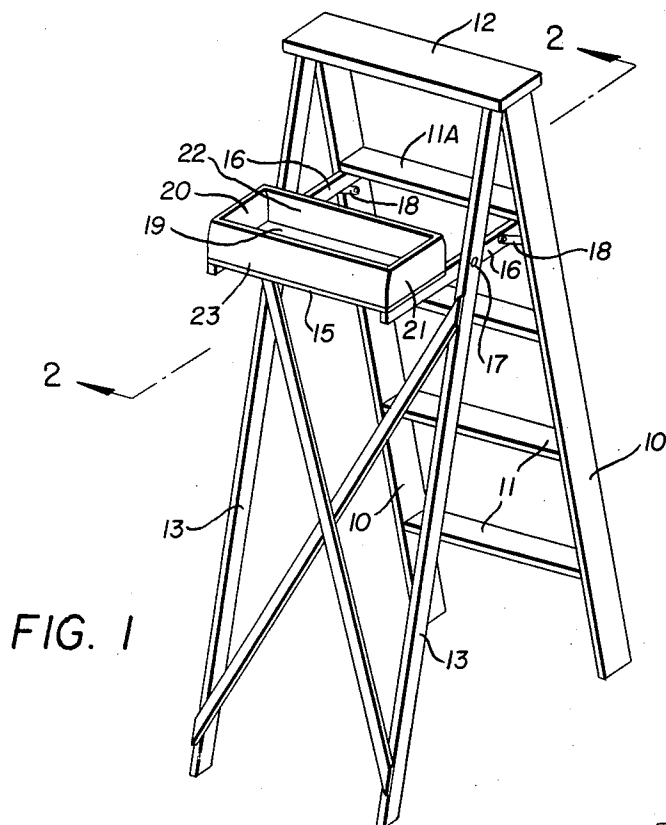


FIG. 1

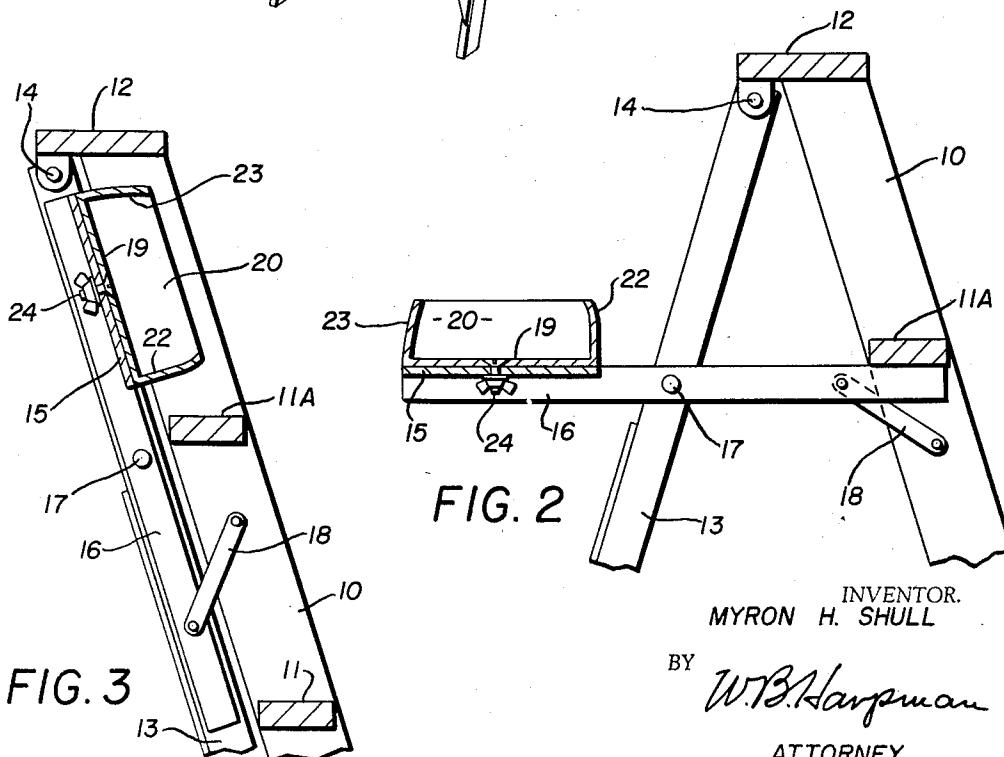


FIG. 2

FIG. 3

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SUPPORT DEVICE FOR A STEPLADDER

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1 Claim. (Cl. 228—17)

This invention relates to a stepladder and more particularly to a support device attachable to a stepladder.

The principal object of the invention is the provision of a support device attachable to the folding shelf of a stepladder so as to be foldable into the stepladder therein.

A further object of the invention is the provision of a support device comprising a rectangular tray attachable to the folding shelf of a stepladder, the tray being so devised that it can be folded up into the area underlying the top platform of the stepladder and the top step thereof while in position on said folding shelf.

A still further object of the invention is the provision of a support device for a stepladder comprising a rectangular tray, the front and back walls of which incline inwardly to permit nesting between the top step and the top platform of a stepladder and to facilitate retaining objects therein.

The support device for a stepladder disclosed herein comprises an improvement which, in combination with a stepladder having a folding shelf thereon, holds various articles which could not otherwise be positioned securely thereon.

Of equal importance is the ability of the support device, when attached to the folding shelf of the stepladder, to be folded into the area underlying the top platform of the stepladder and above the top step thereof. The stepladder thus retains its usefulness as a straight ladder as the top step can be used despite the presence of the support device. More importantly, the support device is so positioned when in folded relation on the folding shelf that objects in the support device are held against accidental displacement therefrom.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being the intention to cover all changes and modifications of the example of the invention herein chosen for purposes of the disclosure, which do not constitute departures from the spirit and scope of the invention.

The invention is illustrated in the accompanying drawing, wherein:

Figure 1 is a perspective view of a stepladder equipped with the support device.

Figure 2 is an enlarged detail of the upper portion of a stepladder taken in vertical section as on line 2—2 of Figure 1.

Figure 3 is an enlarged detail of the upper portion of a stepladder taken in vertical section and showing the same in folded position.

By referring to the drawing and Figure 1 in particular, it will be seen that a stepladder has been disclosed which comprises a ladder portion including rails 10—10 and

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steps 11—11, the uppermost step being indicated by the numeral 11A. The top of the rails 10—10 support a platform 12 and a pair of legs 13—13 are pivoted to the platform 12 by means of pivots 14—14, as known in the art and as best shown in Figures 2 and 3 of the drawing.

The stepladder is provided with a folding shelf 15 which is supported on a pair of arms 16—16 which in turn are pivoted as at 17—17 to the legs 13—13 of the stepladder. The opposite ends of the secondary arms 16—16 are of a length sufficient to extend to a point in under the upper step 11A, as best seen in Figure 2 of the drawing. Links 18—18 are pivotally connected to the rails 10—10 and the arms 16—16 so that at such time as the folding shelf 15 is closed, the legs 13—13 will move into position adjacent to and parallel with the rails 10—10, all as known in the art.

The present invention comprises the addition of a support device comprising a bottom member 19 having end walls 20 and 21 and front and back walls 22 and 23, respectively. The front and back walls 22 and 23 are curved inwardly so that they partially overlie the bottom 19 of the support device thereby enabling the support device to retain objects placed therein while it is both in horizontal position as shown in Figures 1 and 2 of the drawing and in near vertical position as shown in Figure 3.

More importantly, the inwardly curving form of the front and back walls 22 and 23 permits the support device to move into position immediately beneath the upper platform 12 on the upper ends of the rails 10 and thereby permit the shelf to fold up into fold position when the ladder is folded, as shown in Figure 3 of the drawing. The inwardly curving front wall 22 of the support device permits a person to climb the ladder when in folded position, as in Figure 3 of the drawing, as it permits the top step 11A to be used in a normal manner.

The support device is detachably secured to the shelf 15 by a fastener such as by a bolt and butterfly nut assembly 24 positioned through the bottom 19 and the shelf 15. Alternate fastening means will occur to those skilled in the art and the fastener is in the nature of an example only.

It will thus be seen that the support device for a stepladder meets the several objects of the invention and that it is particularly useful when the stepladder is used for painting or wall washing as the paint buckets or water buckets may be positioned in the support device and held securely thereby.

It will also be seen that tools and other objects may be securely held in readily available position on the stepladder either in open or folded position.

Having thus described my invention, what I claim is:

The combination with a step ladder having a pair of parallel rails interconnected by a plurality of steps and at their upper ends by a platform, a pair of rigidly interconnected legs pivotally secured at their upper ends to the underside of said platform whereby the ladder is collapsible for storing, a folding shelf including a pair of parallel arms pivotally secured to respective ones of said legs intermediate the ends of said arms such that one end of each arm underlies the uppermost step when the ladder is opened for use, the opposite ends of said arms being interconnected by a shelf, and there being links pivotally secured at one end to said rails and at their other ends to said arms to actuate said arms between horizontal and vertical positions when the ladder is opened and closed and constraining said arms to swing upwardly to a nested position between and parallel to said legs when the ladder is folded; of a tray removably attached to said shelf and

swingable therewith into said nested position, said tray including a bottom wall co-extensive in area with and resting upon said shelf and removably secured thereto, and spaced side walls and spaced front and back walls, said front and back walls being upwardly and inwardly arcuated so as to retain articles therewithin and to clear the underside of said platform when the assembly is moved into the nested position.

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